Universal Battery Charger

(with LCD Display)

Owner's Manual

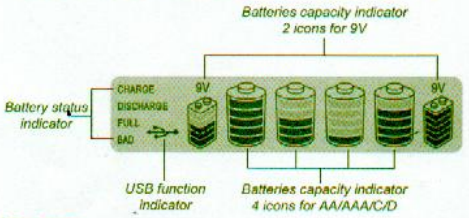
Thank you for purchasing this Charger. Read the instruction manual thoroughly before use and keep the manual for later reference. This Charger can charge all AA/AAA/C/D/9V Nickel Metal-Hydride (Ni-MH) batteries quickly and efficiently.

Warning

- Batteries (if included) are not charged as shipped. Must be charged prior to first use.
- Charge only Ni-MH type batteries on this charger.
- Batteries may leak or explode causing personal injury if inserted improperly, disposed of in fire, mixed with other battery types, or short circuit.

Features

- Specially designed with LCD Battery Indicator & discharge function.
- Discharge Function reduces memory effect and enables full discharge for longer battery life cycle.
- For Using in Indoor :
  - Powered by the supplied switch-mode adaptor (100-240V AC) for worldwide use.
- Recharges 1 pieces to 4 pieces of AA/AAA/C/D Ni-MH batteries and 1 to 2 pieces of 9V cells (Ni-MH) at a time.
- 4 individual charging channels for AA/AAA/C/D and 2 individual charging channels for 9V cells.
- Intelligent Microprocessor Controlled – Batteries life well protected by negative delta V cut-off function and timer protection.
- Defective and Non-rechargeable battery detection.
- Automatic charging current selection fro AA/AAA/C/D/9V batteries
- Built-in 5V USB output port (output: 5V DC 500mA) on the back side of the charger, designed to charge and power up your Digital device. **(**see USB function)
- Electric LCD display with Blue color backlight and designed with :
  - Battery Charging Status indication
  - Battery Discharging Status indication
- When the batteries are fully charged, the charger will change to Trickle mode automatically and the Blue color "Backlight" will turn off after 2.5 hours.
  A "Backlight button" is designed to turn on the backlight for 10 seconds during the night time.



Safety Features

- Negative delta V cut -off function for AAA/AA/C/D size batteries
- Safety timer to prevent over charge
- Short circuit protection
- Reverse-polarity protection
- Bad cell Detection



Charging Instructions

1. Insert 1 to 4 pieces of AA/AAA/C/D or 1 to 2 pieces of 9V cell rechargeable Ni-MH batteries into the battery compartment.
2. Make correct contact for polarity (+ and –) ; according to the sign in the battery compartment.
3. The charger will adjust the suitable charging current for AA/AAA/C/D/9V battery automatically.
4. ***For Using in Indoor***
   Connect the supplied AC adaptor's barrel plug into the jack on the back of the charger. Plug the AC adaptor into household electric outlet. The switching power supply will adjust automatically.

   Caution: The supplied AC adaptor supplies 12VDC and delivers 1000mA, and its plug fits into the charger's **DC input jack**. Using an adaptor that does not meet these specifications could damage the charger or the adaptor.
5. The LCD will indicate the proper charging and the wording **"Charging"** will be shown. *(The Blue backlight will light up during the charging process and turn off once the batteries are fully charged)*
6. After the batteries are fully charged, the wording **"FULL"** will indicate on the LCD screen to indicate batteries are ready for use.
7. Unplug the charger and remove the batteries from the charger when not in use.
8. Begin again at Step 1 to charge the next set of batteries.

Discharging Instructions

1. Insert 1 to 4 pieces of AA/AAA/C/D rechargeable Ni-MH batteries into the battery compartment.
2. Make correct contact for polarity (+ and –) ; according to the sign in the battery compartment.
3. ***For Using in Indoor***
   Connect the supplied AC adaptor's barrel plug into the jack on the back of the charger. Plug the AC adaptor into household electric outlet. The switching power supply will adjust automatically.

   Caution: The supplied AC adaptor supplies 12VDC and delivers 1000mA, and its plug fits into the charger's **DC input jack**. Using an adaptor that does not meet these specifications could damage the charger or the adaptor.
4. Press the "discharge button" on the left hand side of the control panel, the LCD will indicate the proper discharging and the wording **"Discharging"** will be shown. *(The Blue backlight will light up during the discharging process)*
   Noted: *The discharge process will not function when you press the "discharge button" more than 1 minute after the charging process started.*
5. The 4 battery icons will keep flashing until all the batteries have been discharged.
6. After the batteries are fully discharged, charging process will be started automatically and the wording **"Charging"** will indicate on the LCD screen to indicate the charging process started.

Bad Cell Detection

When charge process is started, the charger detects the health status of each of the cells in the battery compartment. If any batteries are unsuitable for charging, i.e. short circuit or reversed polarity, the word **"BAD"** will indicate on the LCD screen and "battery" icon will flash.

TECHNICAL DATA:

Input:	DC 12V 1000mA USE WITH AN EXTERNAL ADAPTOR	
Charge current:	Ni-MH	Charging Time
AAA size : 500mA	AAA 500-1200mAh	1.5-2.5 hours
AA size : 1300mA	AA 1300-2800mAh	1.5-2.5 hours
C size : 1300mA	C 1800-4500mAh	1.5-4 hours
D size : 1300mA	D 1800-9000mAh	1.5-7.5 hours
9V size (PP3): 30mA	150-300mAh	5-10 hours by manual
Discharge current: AA, AAA, C, D	400 mA	
Detect Method	-4V auto cut-off for AAA, AA, C, D size batteries	
For battery Type	AAA 500-1100mAh AA 1300-2700mAh C 1300-4500mAh D 1300-9000mAh 9V 150-260mAh	

*Charge time will vary depending upon the brand, capacity and condition of batteries being charged.

USB function

1. The USB socket will be ready for use only when charging is completed or there is no battery in the charger compartment.
2. The **"USB function indicator"** will be shown on the LCD screen to indicate the USB socket is ready for use.
3. Make sure the maximum loading is not exceeding 500mA for the USB socket.

Important Safety Instructions

1. Before charging, read instruction.
2. This charger is intended for use with Nickel-metal-hydride rechargeable batteries only. Attempting to charge other types of batteries may cause personal injury and damage to the charger.
3. Do not charge non-rechargeable batteries.
4. Do not expose charger to rain or moisture. For indoor use only.
5. Remove from mains when not in use.
6. Never use an extension cord or any attachment not recommended by manufacturer, otherwise this may result in a risk of fire, electric shock or injury to persons.
7. Do not operate the charger if it has been subjected to shock or damage. Take it to a qualified serviceman for repair.
8. Do not disassemble the charger. Incorrect reassemble may result in a risk of electric shock or fire.
9. Unplug the charger from outlet before attempting any maintenance of cleaning.
10. This power unit is intended to be correctly orientated in a vertical or floor mount position.
11. Before scrapping your charger, remove the batteries from the unit and they are disposed of safely.
12. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

SAVE THESE INSTRUCTIONS, DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

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