POWERTECH PIUS

Fast Ni-MH Battery Charger User Manual

Features:

- Recharges 1 piece to 4 pieces AA or AAA Ni-MH batteries at a time.
- 4 Individual charging channels.
- Powered by the supplied AC Adaptor (Universal input voltage 100-240V AC 50/60Hz for worldwide use) when using at indoor or by the supplied DC Car Adaptor when using in a vehicle.
- Microprocessor Controlled Batteries life well protected by –dV detection and timer protection.
- Unique design with an adjustable battery contact plate that makes a good & solid contact with AA & AAA batteries.
- Defective and Non-rechargeable battery detection.
- Automatic charging current selection for size AA and AAA batteries.
- 4 x LEDs indicate the battery charging status.

 Blue LED rapid charge;

 Blue LED turn off. Batteries act fully charged as

Blue LED turn off – Batteries get fully charged and ready for use; Flashing Blue LED – Cells are not suitable for charging.

 Designed with an USB charge port (5V DC 2,1A) which can be used to power up or charging your USB device, i.e. iPhone, iPad, iPod, smartphones, tablet PC, mobile phone, MP3/ MP4 player, Bluetooth...etc. (You can charge your USB device and the AA/AAA batteries at the same time!)

Safety Features:

- Negative delta V cut -off function
- Safety timer to prevent over charge
- Thermal cut off
- Reverse-polarity protection
- Bad cell Detection

Specifications:

Power supply :	100-240VAC, 50/60 Hz	
	International Compatible	
Charge rate:	rge rate : AA size - 2000mA / 1000mA	
(Ni-MH)	AAA size - 850mA	
USB output:	5V DC 2,1A	

Charging your digital device:

${\it Important: Check for voltage compatibility with your USB device first}$

- Before using, please check your digital device's input voltage and the output voltage of this unit's USB charge port if they can match. Make sure the total loading does not exceed the rated output current of this unit.
- 2. This Charger is able to power up/ charging all USB-powered electronic devices such as iPhone, iPad, iPod, smartphones, tablet PC, mobile phone, MP3/ MP4 player, Bluetooth...etc..
- 3. Connect the USB charge port of this unit and your USB device with a suitable USB cables which may come you're your digital devices
- 4. Plug the AC adaptor into household electric outlet (100-240V AC). The switching power supply will adjust automatically and your digital device should indicate it is now in charging mode.
- You can charge your USB device and the AA/AAA batteries at the same time! **remark: the charging time of AA batteries will become longer (see the charging time table)

Charging Instructions:

- Insert 1 to 4 pieces of AA/AAA rechargeable Ni-MH batteries into the battery compartment.
- Make correct contact for polarity (+ and); according to the sign in the battery compartment.
- 3. For charging of AAA battery, pull down the adjustable battery contact plate first and then insert the AAA batteries into the compartment. Now the AAA batteries will be hold firmly inside the compartment. The charger will adjust the suitable charging current for AAA battery automatically.

4. When using at 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, when using overseas a poplar plug adaptor must be required (not supplied) any available 100-240VAC.

Caution: The supplied AC adaptor supplies 12VDC and delivers 1,8A, 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.

When using in a vehicle

Connect the supplied DC car adaptor's barrel plug into the charger's **DC input jack**. Plug the large end of the cord into the 12V car lighter power port.

- The Blue LED will glow to indicate the proper charging. After the batteries are fully charged, the Blue LED will turn off to indicate the charged batteries are ready for use.
- 6. Unplug the charger and remove the batteries from the charger when not in use.
- 7. Begin again at Step 1 to charge the next set of batteries.

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 battery is unsuitable for charging. i.e. short circuit or reversed polarity, the status Blue LED will flash. The damage cell(s) should be properly disposed of.

Charging Time:

Charging Nickel Metal				
Size	current	Hydride		
AA	2A	2000mAh	60 minutes	
	2A	2200mAh	66 minutes	
	2A	2400mAh	72 minutes	
	2A	2600mAh	78 minutes	
	2A	2800mAh	84 minutes	
AA	1A	2000mAh	120 minutes	
*when charging your	1A	2200mAh	132 minutes	
USB device and	1A	2400mAh	144 minutes	
batteries at the same	1A	2600mAh	156 minutes	
time	1A	2800mAh	168 minutes	
AAA	0.85A	600mAh	40 minutes	
	0.85A	700mAh	47 minutes	
	0.85A	800mAh	54 minutes	
	0.85A	900mAh	61 minutes	
	0.85A	1000mAh	68 minutes	
	0.85A	1100mAh	75 minutes	
	0.85A	1200mAh	82 minutes	

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

Important Safety Instructions

- 1. Before charging, read instruction.
- 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.
- 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.
- 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. The appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- This power unit is intended to be correctly orientated in a vertical or floor mount position.
- 12. Before scrapping your charger, remove the batteries from the unit and they are disposed of safety.

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