







# Ni-Cd/Ni-MH Universal Battery Charger

OWNER'S MANUAL — Please read before using this equipment.

Your RadioShack Ni-Cd/Ni-MH Universal Battery Charger can fully charge up to five different sizes of nickel-cadmium and nickelmetal hydride batteries. It can charge AAA, AA, C, D and 9V batteries with different capacities in different bays.

Your charger's features include:

Multiple Charging Circuits — allow you to charge two or four AAA, AA, C, or D size nickel-cadmium or nickel-metal hydride batteries, or one or two 9-volt batteries.

Automatic Charging Current Selection selects the best charging current for each battery size.

Automatic Shut-off — special circuit senses when the battery is fully charged and automatically terminates the charging.

Reverse Polarity Protection — protects the charger and batteries against incorrectly installed batteries.

Safety Timer Shut-Off — turns off the charger to prevent overcharging AAA, AA, C, or D batteries.

Short Circuit Protection — protects the charger and batteries against shorting.

Battery Conditioner — lets you discharge AAA, AA, C, or D batteries before recharging them, keeping them completely fresh.

Charging/Discharging Indicators — light when the batteries are charging/discharging.

Overcurrent Protection — protects the charger when charging defective or shorted batteries.

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.



#### **CAUTION**

RISK OF ELECTRIC SHOCK. DO NOT OPEN.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICE-ABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

# IMPORTANT SAFETY INSTRUCTIONS

### Save These Instructions!

Danger: To reduce the risk of fire or electric shock, carefully follow these instructions.



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This manual contains important safety and operating instructions for your charger. Before using the battery charger, read all the instructions and cautionary markings in this manual and on the battery charger, on the batteries to be charged, and on the products that use the batteries.

Warning: To reduce the risk of injury:

- · Charge only Ni-Cd and Ni-MH batteries with this charger. Other types of batteries might burst, causing personal injury and damage.
- · Unplug the charger from the AC outlet before attempting any maintenance or cleaning.
- · Do not disassemble the charger; take it to a qualified service technician when service or repair is required. Improper reassembly may result in a risk of electric shock or fire.
- · Do not use an attachment not recommended or sold by RadioShack as this could result in a risk of fire, electric shock, or injury to persons.

Caution: To reduce the risk of damage:

- · Do not expose the charger to rain or excessive moisture.
- · Do not operate the charger if it has received a sharp blow, or been dropped or damaged in any way. Take it to a qualified service technician for repair.
- To reduce the risk of damage to the AC plug and cord, disconnect the charger by pulling the plug rather than the cord.
- · Do not use an extension cord. Its use could result in fire or electric shock.
- · Do not operate the charger if the cord or plug is damaged. Have the charger repaired. Never alter the provided AC cord or plug. If it does not fit into the AC

outlet, have a qualified service technician install the proper outlet. Improper connection can result in an electric shock.

· Never use the charger as a DC power source for any electrical equipment.

### **OPERATION**

### **General Charging Hints**

- · It is normal for the batteries to become warm while charging.
- · Charge batteries in an area between 60.8° and 86°F (16° and 30°C). Cold batteries cannot charge fully. If the area is too warm, the batteries can permanently lose their ability to charge.
- · Do not charge batteries other than those listed in this manual, or use procedures other than those described in this manual.

## **Discharging/Charging Batteries**



Note: If the red indicator flashes during these steps, at least one of the batteries is bad (needs to be replaced).

1. Press **OPEN** to open the cover and insert two or four AAA, AA, C, or D batteries into the battery chambers, as indicated by the polarity symbols (+ and -) marked inside each chamber.

To insert a 9-volt battery, connect it to the terminals inside the chamber.















2. Plug the supplied adapter's 3-pin power plug into the jack on the back of the charger. Plug the other end of the adapter into a standard AC outlet.

Caution: The supplied AC adapter supplies 11 volts AC at 0.1 A and 5 volts AC at 2A, and its plug fits the charger's AC 11V 0.1A and 5V 2A jack. Using an adapter that does not meet these specifications could damage the charger or the adapter.

 To discharge AAA, AA, C, or D batteries, set CHARGE/DISCHARGE to DISCHARGE. The green indicator(s) light. When the batteries are fully discharged, the green indicator(s) turn off.

#### Notes:

- You can discharge/charge a pair of AAA, AA, C or D batteries while the 9volt battery chambers are empty. You can discharge/charge different types of batteries (AA and D, for example) in the left and right chambers, as long as both batteries in each chamber are the same type.
- You cannot discharge 9V batteries.
- To charge the inserted batteries, set CHARGE/DISCHARGE to CHARGE. The red indicator(s) light. When AAA, AA, C, or D batteries are fully charged, the red indicator(s) turn off.

The 9-volt charging channel has no automatic turn off feature. Be sure you do not exceed the times listed in "Charging Time" on Page 4, or the batteries' capacities could be reduced.

When you finish, unplug the AC adapter from the AC outlet, then remove the batteries from the charger.

Warning: To prevent damage to your charger and the risk of shock, always unplug the AC

adapter from the AC outlet before unplugging it from the charger.

### **Discharging Time**

Туре	Discharging Current (mA)	Capacity (mAh)	Estimated Discharging Time (Hrs)						
Ni-Cd									
C/D	400	4500	12.4						
		3000	8.2						
		2500	7						
		1800	4.5						
		1600	4						
		1400	3.5						
AA		1000	2.5						
		800	2						
		600	1.5						
AAA		300	8.0						
		250	0.7						
		180	0.5						
9V	Not Applicable								
Ni-MH									
C/D	400	7000	19.2						
		4500	12.4						
		3000	8.2						
		2200	6						
AA		1600	4						
		1500	3.8						
		1300	3.3						
		1100	2.8						
AAA		650	1.7						
		550	1.4						
		450	1.2						
9V	Not Applicable								



















Туре	Charging Current (mA)	Capacity (mAh)	Estimated Charging Time (Hrs)	Туре	Charging Current (mA)	Capacity (mAh)	Estimated Charging Time (Hrs)
Ni-Cd				Ni-MH			
C/D	900	4500	7	C/D	900	7000	10
		3000	4.6			4500	7
		2500	3.9			3000	4.6
		1800	2.8			2200	3.4
		1600	2.49	AA	600	1600	3.7
		1400	2.17			1500	3.5
AA	600	1000	2.3			1300	3
		800	1.8			1100	2.2
		600	1.2	AAA	250	650	3.6
AAA	250	300	1.6			550	3
		250	1.2			450	2.5
		180	0.8	9V	23	130	8
9V	23	120	7.3		•		

# **SPECIFICATIONS**

RadioShack Corporation

Fort Worth, Texas 76102

Power Transformer:

Average Charging Current (Ni-MH/Ni-Cd Type): Automatic Shut-Off ...... Negative Delta V and Zero Slope Detection Safety Standard ...... ETL Dimensions ......  $9 \times 6^1/_{16} \times 2^{13}/_{16}$  Inches ( $228 \times 154.3 \times 71$  mm) Specifications are typical; individual units might vary. Specifications are subject to change and improvement

#### Limited Ninety-Day Warranty

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This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MARES NO EXPRESS WARRANTIES AND ANY IMPLED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED iN DURATION TO THE DURATION OF THE WITTEN LIMITED WARRANTIES. CONTAINED HEREIN, EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIBBLITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIBBLITY. LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES. SOme states do not allow limitations on how long an implied warranty pairod, take the product and the RadioShack Assists receipt as proof of purchase date to any RadioShack store, RadioShack was provided by a living a control of the defect by product repair without change for parts and bloor, (b) replace the products with one of the same or similar design, or (o) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. Was or reconditioned parts and products and warranty perior of the original warranty perior. On will be charged for repair or replaced parts and products, and products on which a refund is made, become the property of RadioShack. Was or reconditioned parts and products, and products on which a refund is made, become the property of RadioShack. Was or reconditioned parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products, and products on which a refund is made, become the property of Warranty perior. On will be charged for repair or replaced parts and products, and products and warranty perior of the

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