

 **RadioShack®**

Cat. No. 23-419



5-Hour Ni-Cd/Ni-MH Universal Battery Charger

Your RadioShack 5-Hour Ni-Cd/Ni-MH Universal Battery Charger can fully charge up to five different sizes of nickel-cadmium and nickel-Metal Hydride batteries in only 5 hours. It can charge AAA, AA, C, D and 9V batteries.

Your charger's features include:

Multiple Charging Circuits — allow you to charge up to four AAA, AA, C, or D size Nickel-Cadmium or Nickel-Metal Hydride batteries, and one or two 9-volt batteries.

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

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

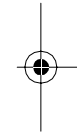
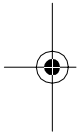
Safety Timer Shut-Off — turns off the charger to prevent overcharging AAA, AA, C, or D batteries.

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

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

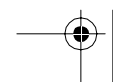
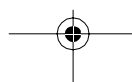
Charging/Discharging Indicators — light when the batteries are charging/discharging.

Overcurrent Protection — keeps the current constant.





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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-SERVICEABLE 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.

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 nickel-cadmium and Ni-MH batteries with this charger. Other types of batteries might burst, causing personal injury and damage.

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- 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 try to charge batteries other than those listed in this manual, or use procedures other than those described in this manual.

Discharging/Charging Batteries

*illus of charger with
compartment open and
switch/LED markings
visible*

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

1. Insert up to 4 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 barrel 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 12 volts and delivers at least 600 mA, and its plug fits the charger's **AC 12V 600 mA** jack. Using an adapter that does not meet these specifications could damage the charger or the adapter.

3. 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 pairs of AAA, AA, C or D batteries while the other chambers are empty. You cannot discharge/charge different types of batteries (AA and D, for example) at the same time.

- You cannot discharge 9V batteries.
4. 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 6, or the batteries' capacity could be reduced.

5. 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

Type	Capacity (mAh)	Maximum Charging Time (Hrs)
Ni-Cd		
C	1600	4
D	1600	4
AA	650	1.6
AAA	180	2
9V	Not Applicable	
Ni-MH		
C	1800	4.5
D	1800	4.5
AA	1100	2.7
AAA	450	1.1
9V	Not Applicable	

Charging Time

Type	Capacity (mAh)	Maximum Charging Time (Hrs)
Ni-Cd		
C	1600	4.5
D	1600	4.5
AA	650	3
AAA	180	2
9V	75	4.5
Ni-MH		
C	1800	5
D	1800	5
AA	1100	5
AAA	450	5
9V	150	9

SPECIFICATIONS

Power Transformer:

Input 120 VAC, 60 Hz, 10 W

Output 12 VAC, 0.6 A

Average Charging Current (Ni-MH/Ni-Cd Type):

AAA 126 mA

AA 308 mA

C/D 504 mA

9V 23 mA

Safety Guard Protection Timer 8.0–8.5 Hours

Safety Standard UL

Dimensions $9 \times 6\frac{1}{16} \times 2\frac{13}{16}$ Inches
($228 \times 154.3 \times 71$ mm)

Weight (w/o Adapter) 19.8 oz (560 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

Limited Ninety-Day Warranty

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 MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, 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 RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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We Service What We Sell

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