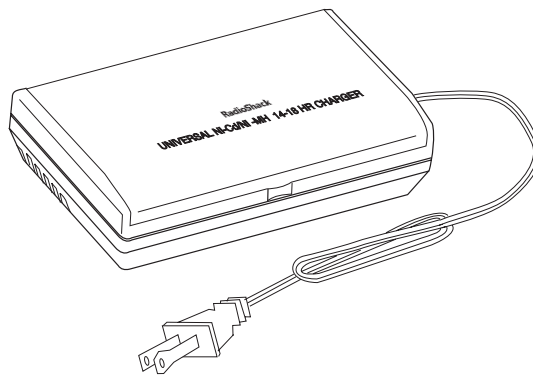


Cat. No. 23-334 **A**  
**OWNER'S MANUAL**

Please read before using this equipment.

## Universal Charger



**RadioShack®**

## FEATURES

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Your RadioShack Universal Ni-Cd/Ni-MH Charger can fully charge up to five different sizes of Ni-Cd (nickel-cadmium) and Ni-MH (nickel-Metal Hydride) batteries in only 14 or 18 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 Ni-Cd or Ni-MH batteries, and up to two 9V 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.

**Built-in Transformer** — lets you connect the charger to AC power.

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

**Two Charging Indicators** — light when the batteries are charging (one for each chamber).

**9V Battery Terminal** — let you charge up to two 9V batteries at a time.

**Ni-Cd/Ni-MH Switch** — lets you set the charger for the type of batteries you are charging.



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

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
<b>CAUTION:</b> 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.

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## IMPORTANT SAFETY INSTRUCTIONS

**SAVE THESE INSTRUCTIONS** - This manual contains important safety instructions for battery charger Cat. No. 23-334 A.

1. 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.
2. **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.
3. **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.

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- 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

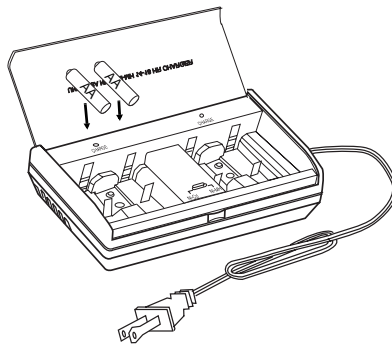
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### GENERAL CHARGING HINTS

- It is normal for the batteries to become warm while charging.
- Charge batteries in an area between 32° and 113°F (0° and 45°C). 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.

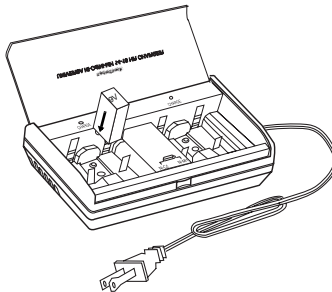
### CHARGING BATTERIES

1. Lift up the cover to open the charging chambers.
2. Set **Ni-Cd/Ni-MH** according to the type of the battery you want to charge.



3. To charge two AA, AAA, C, or D batteries of the same type (Ni-Cd or Ni-MH), place them into the left or the right chamber as indicated by the polarity symbols (+ and -) marked inside each chamber.

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- You can charge two different sizes (AA and D, for example) of batteries of the same type (Ni-Cd or Ni-MH) in the left and right chambers, as long as both batteries in each chamber are the same size.
  - You can charge four AAA, AA, C or D batteries at the same time while the 9V battery chambers are empty.
4. To charge a 9V battery, insert it into one of the terminals inside either chamber. To charge a second 9V battery at the same time, insert it into the remaining terminal.



**Note:** You can charge a 9V battery in one chamber and charge another size battery in the remaining chamber at the same time.

5. Insert the plug of the charger into a standard AC outlet. CHARGE lights for each chamber containing a battery.

When AAA, AA, C, or D batteries are fully charged, CHARGE turns off. (This is the end of the charging cycle.)

**Note:** The 9V charging channel has no automatic turn off feature. Be sure you do not exceed the times listed in "Charging Cycle Times" on Page 8, or the batteries' capacity could be reduced.

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

## CHARGING CYCLE TIMES

	Battery Type	Capacity (mAh)	Typical Charging Time (Hrs)
Ni-Cd	C, D	1200	7.3
	C, D	3000	18
	AA	600	8.4
	AAA	180	8.4
	9V	120	7.3
Ni-MH	C, D	2200	11.4
	C, D	3500	18
	AA	1100	10.3
	AAA	450	9.7
	9V	150	9.1

**Note:** To fully charge a battery with higher capacities (a Ni-Cd more than 3000 mAh, or a Ni-MH more than 3500 mAh), you must run the battery through two consecutive charging cycles.



## CARE AND MAINTENANCE

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Your RadioShack Universal Ni-Cd/Ni-MH Charger is an example of superior design and craftsmanship. The following suggestions will help you care for your charger so you can enjoy it for years.



Keep the charger dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Use and store the charger only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.



Keep the charger away from dust and dirt, which can cause premature wear of parts.



Handle the charger gently and carefully. Dropping it can damage circuit boards and cases and can cause the charger to work improperly.



Wipe the charger with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the charger.

Modifying or tampering with the charger's internal components can cause a malfunction and might invalidate its warranty. If your charger is not performing as it should, take it to your local RadioShack store for assistance.

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## SPECIFICATIONS

### Power Transformer:

Input ..... 120V AC, 60 Hz

### Average Charging Current for Ni-Cd:

AAA ..... 30 mA

AA ..... 100 mA

C, D ..... 230 mA

9V ..... 23 mA

### Average Charging Current for Ni-MH:

AAA ..... 65 mA

AA ..... 150 mA

C, D ..... 270 mA

9V ..... 23 mA

### Safety Guard

Protection Timer ..... 14-15.5 Hours (AA, AAA)  
18-20 Hours (C, D)

Safety Standard ..... ETL/CETL

Dimensions .....  $8 \frac{7}{16} \times 4 \frac{1}{8} \times 2 \frac{3}{8}$  Inches  
(215 × 105 × 61 mm)

Weight ..... 23.3 oz  
(660 g)

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

## **NOTES**

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### 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 limitations on how long an implied warranty lasts or the exclusion or limitation 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.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX  
76102

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**Fort Worth, Texas 76102**

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