

Cat. No. 12-251

OWNER'S MANUAL

Please read before using this equipment.

Weatheradio

with Alert



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.

The graphical symbols with supplemental markings are located on the bottom of the product.

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used by Tandy Corporation.

FCC DECLARATION OF CONFORMITY

This device complies with Part 15 of the *FCC Rules*. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Product:	Weatheradio with Alert
Model:	12-251
Responsible Party:	RadioShack 100 Throckmorton Fort Worth, TX 76102
Phone:	817-415-3200

THE FCC WANTS YOU TO KNOW

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in

accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local RadioShack store or an experienced radio/TV technician for help.
- If you cannot eliminate the interference, the FCC requires that you stop using your Weatheradio.

Changes or modifications not expressly approved by RadioShack may cause interference and void the user's authority to operate the equipment.



FEATURES

Your RadioShack Weatheradio with Alert is the next generation of weather alert technology. Your Weatheradio uses SAME (Specific Area Message Encoding) circuitry to provide more complete information about weather conditions in your immediate area, letting you avoid hearing alerts for geographical areas that do not interest you.

Your Weatheradio's features include:

SAME Operation — lets you program as many as two different geographical codes into the Weatheradio's memory, so the Weatheradio sounds an alert only when a weather emergency is declared in any of those locations.

Audible Alert — the Weatheradio sounds a built-in siren when it detects emergency weather situations.

7 Weather Channels — let you select the frequency for your local National Oceanic and Atmospheric Administration (NOAA) weather broadcasts.

Selectable Alert Function — lets you set the Weatheradio so it sounds an alert then automatically sounds the accompanying NOAA broadcast when it receives a weather emergency broadcast. You can also set the Weatheradio so it sounds only the alert, letting you manually tune the NOAA broadcast.

Alert Indicator Lights — the Weatheradio's display clearly shows whether a received alert is a statement, watch, warning, or emergency.

Battery Backup — the Weatheradio uses a 9-volt battery (not supplied) for backup power if AC power fails or is temporarily disconnected.

Alert Volume Control — lets you adjust the volume of the siren so you will be sure to hear it.

We recommend you record your Weatheradio's serial number here. The number is on the bottom of the radio.

Serial Number: _____

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HOW YOUR RADIO WORKS

Traditional weather radios simply receive NOAA's weather broadcast (usually within a 50-mile radius) then sound an alarm if any emergency code was transmitted along with the broadcast. This means that people who live outside an affected area are often alerted even when their area is not affected, causing many of them to ignore potentially real weather warnings that can save lives.

In 1994, the National Oceanic and Atmospheric Administration (NOAA) began broadcasting coded signals called FIPS (Federal Information Processing System) codes along with their standard weather broadcasts from stations in your area. These codes identify the type of emergency and the specific geographic area (such as a county) affected by the emergency. Your Weatheradio receives, interprets, and displays information about the codes so you can determine if the emergency might affect your area. **Only SAME-compatible weather radios (such as this Weatheradio) are able to take advantage of this new technology.**

Each FIPS code identifies a specific geographic area (defined by the National Weather Service), so your Weatheradio sounds an alert only when a weather emergency is declared in that area. This helps you more efficiently track the weather conditions in and around your area.

WHEN A WEATHER ALERT OCCURS

When the Weatheradio receives a weather alert:

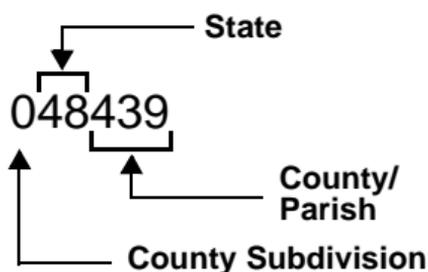
- it sounds the built-in siren
- an indicator on the front of the Weatheradio lights

Warning: The NWS uses sophisticated weather models to determine an alert's effective time. However, the end of an alert does not necessarily mean that the related weather emergency is over.

UNDERSTANDING FIPS CODES

For the purpose of broadcasting weather information, the NWS has divided the United States into regions by state and county (or parish, where applicable) then assigned a 6-digit FIPS code to identify each county or parish. For example, the code for Tarrant County, Texas, is 048439.

The first digit in a FIPS code identifies the county subdivision, the next two digits identify the state, and the last three digits identify the county or parish.



Note: Most FIPS codes begin with 0, which means the code represents an entire county. The NWS, however, plans to eventually subdivide some large counties. When that happens, each subdivision will be assigned a digit from 1–9, resulting in codes such as 148439, 248439, and so on.

Your Weatheradio can receive all SAME alert signals broadcast within about a 50-mile radius of where you installed it. To receive SAME alerts and broadcasts about weather occurring only in particular counties within that area, you can program up to two FIPS codes into the Weatheradio's memory. For example, this lets you avoid hearing an alert that applies to an area within a 50-mile radius but not necessarily to your county or parish.

Obtaining Your Area's FIPS Code(s)

To obtain the FIPS code for the location where you installed your Weatheradio, contact your local RadioShack store or call the NWS toll free at 1-888-NWR-SAME (1-888-697-7263). If you call the NWS, follow the instructions you hear.

Note: If you are close to a county or parish line, you might want to obtain the codes for the nearby counties or parishes.

Hint: Since you can program up to two FIPS codes into the Weatheradio's memory, you might want to obtain the code for another local area that you frequently travel through (as long as both areas are within a 50 mile radius of your location and within an area covered by your local NWS broadcast station). That way, you can program the code into the Weatheradio and receive broadcasts covering that location, too.

PREPARATION

POWERING THE WEATHERADIO

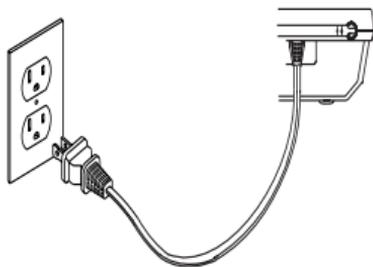
Your Weatheradio uses standard AC power for normal operation and requires one 9-volt battery (not supplied) for backup power when AC power fails or is temporarily disconnected. For the best performance and longest life, we recommend a RadioShack alkaline battery.

Cautions:

- Use only a fresh battery of the required size and recommended type.
- Do not use a rechargeable battery in your Weatheradio.

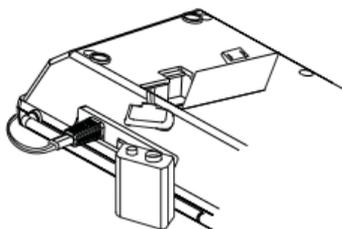
Connecting AC Power

If the Weatheradio's display is on, rotate **VOLUME** toward **OFF** until it clicks to turn off the Weatheradio. Then plug the Weatheradio's power cord into a standard AC outlet.



Caution: Your Weatheradio's power cord has a polarized plug (one blade is wider than the other). If you have difficulty inserting the plug into the outlet, do not force it! Turn the plug over and try again.

Installing the Backup Battery



1. If the Weatheradio's display is on, rotate **VOLUME** toward **OFF** until it clicks to turn off the Weatheradio.
2. Press the tab on the battery compartment cover, then lift up the cover to remove it.
3. Snap a 9V battery onto the battery terminals inside the compartment, then place the battery inside.
4. Replace the cover.

When the LOW BATT indicator on the front of the Weatheradio lights, replace the battery.

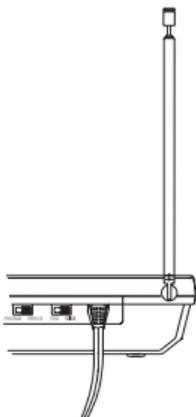
Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Caution: If you do not plan to use the Weatheradio for several months, remove the battery. Batteries can leak chemicals that can destroy electronic parts.

Note: The Weatheradio maintains all settings for up to (please add) minutes if the battery is removed or dead and AC power is disconnected. If power is removed for a longer period of time, you must re-enter all settings.

USING THE BUILT-IN ANTENNA

The Weatheradio's built-in telescoping antenna lets you receive strong local signals. To use the built-in antenna, lift it up so it is vertical, then fully extend it.



CHOOSING A LOCATION FOR THE WEATHERADIO

You can set your Weatheradio on a flat surface (such as a shelf or counter top).

For the best reception, place your Weatheradio where:

- it can receive alert signals (see “When a Test or Demo Alert Occurs” on Page 26)
- you can hear its alert tone (see “Setting the Alert Volume” on Page 24)

Once you determine a location that meets these two conditions, leave the Weatheradio there for the best protection.

Note: Make sure the Weatheradio is away from obstructions such as metal cabinets or bookshelves. (Higher frequencies are noticeably affected by obstructions.) Do not place the Weatheradio near any metal surface such as a refrigerator, a metal door or wall, or a water pipe hidden behind a wall. This greatly reduces the Weatheradio’s ability to receive signals.

PROGRAMMING THE WEATHERADIO

Your Weatheradio is preprogrammed to receive broadcasts for all FIPS codes, and is preprogrammed with the seven national NOAA broadcast frequencies (Channels 1–7).

The first time you use your Weatheradio, it is automatically set to use the NOAA weather broadcast frequency 162.400 MHz (Channel 1) and receive all SAME alert signals broadcast within a 50-mile radius of where you installed it.

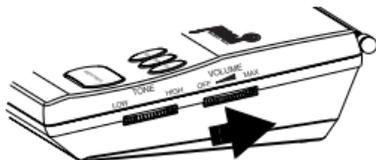
Depending on your location, you might need to select a different channel and enter one or two FIPS codes into the Weatheradio.

Notes:

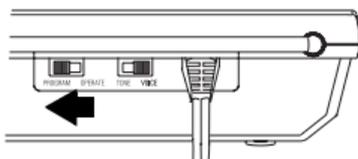
- To stop programming the Weatheradio at any time during the steps described in this section, set **PROGRAM/OPERATE** to **OPERATE**. The Weatheradio saves any valid entries you made.
- The Weatheradio will not receive a weather alert while you program it.

Selecting a Broadcast Frequency

1. To turn on the Weatheradio, turn **VOLUME** to the right until it clicks.



2. Set **PROGRAM/OPERATE** to **PROGRAM**. **C** and the current radio channel setting flash.



3. Repeatedly press **SCROLL** to select the channel you want, then rotate **VOLUME** as needed so you can hear the current weather broadcast as you make your selections. As you press **SCROLL**, the currently selected weather broadcast channel (**1** through **7**) lights.

Repeat this step until you find the channel broadcasting in your area..

Channel	Frequency (MHz)
1	162.400
2	162.425

Channel	Frequency (MHz)
3	162.450
4	162.475
5	162.500
6	162.525
7	162.550

Note: If you receive a NOAA broadcast on more than one channel, the one with the best reception *might not* be the one broadcasting information for your location. Contact your local RadioShack store or the NWS to find out which frequency NOAA is using to broadcast from the station nearest your location, then select that channel.

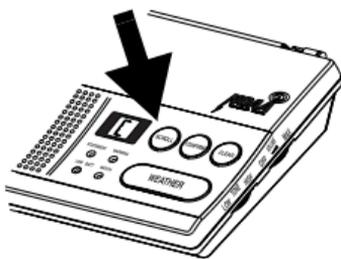
4. When you hear the channel you want, press **CONFIRM**. The weather broadcast stops, the Weatheradio beeps, and **L**, **1**, **-**, and the FIPS code stored in the first memory location flash.
5. Set **PROGRAM/OPERATE** to **OPERATE**.

Note: If you do not press a button for 45 seconds, the Weatheradio automatically switches to operate mode. Set **PROGRAM/OPERATE** back to **OPERATE** and start over at Step 2.

Storing/Changing FIPS Codes

You can store or change FIPS codes in the Weatheradio's memory (to narrow the area for which you receive SAME alerts). Your Weatheradio has two memory locations for FIPS codes.

1. Follow Steps 1–4 under “Selecting a Broadcast Frequency” on Page 17.
2. To change the FIPS code in the first memory location, press **SCROLL**. The first digit of the first FIPS code stored in the Weatheradio appears.



Or, hold down **CONFIRM** for about 2 seconds to skip the FIPS code in the first memory location, then skip to Step 5.

3. Repeatedly press or hold down **SCROLL** until the first digit of the FIPS code changes to the one you want, then press **CONFIRM**. A dash (–) appears.

If you enter the wrong digit, press **CLEAR** to clear it.

-
4. Repeat Step 3 to change each digit of the FIPS code. When you have entered the last digit of the FIPS code, the Weatheradio sounds a confirmation tone and saves the new FIPS code.
 5. If you just saved the FIPS code in the first memory location, **L 2**, –, and the FIPS code stored in the second memory location flash. If necessary, repeat Steps 2–4 to enter a FIPS code in the second memory location.
 6. When you have stored both FIPS codes, the Weatheradio sounds a confirmation tone. Then, codes appear that confirm the Weatheradio's current settings.

For example, if you previously set the Weatheradio to use Channel 4 and stored a FIPS code of 413540 in the first memory location and a FIPS code of 425763 in the second memory location, the following characters appear in sequence:

C 4 L 1 – 4 1 3 5 4 0 L 2 – 4 2 5 7 6 3

When you finish, set **PROGRAM/OPERATE** to **OPERATE**.

TESTING THE WEATHERADIO

For your Weatheradio to be effective, you must place it where it can receive an emergency alert broadcast and where you can hear its alert tone.

In the United States, the NWS broadcasts a test alert every week on Wednesday between 11 AM and 1 PM. To find out the specific test schedule in your area, contact your local NOAA or NWS office. These offices are usually listed in the telephone book under “US Government, Department of Commerce.”

Important: The fact that you get clear reception of a weather broadcast signal does *not* guarantee that an emergency alert broadcast will trigger your Weatheradio’s alert function. Be sure you choose the proper location for the Weatheradio (see “Choosing a Location for the Weatheradio” on Page 15) and regularly check the Weatheradio to be sure it is operating properly (see “When a Test or Demo Alert Occurs” on Page 26).

OPERATION

To turn on the Weatheradio, turn **VOLUME** to the right until it clicks.

Note: **VOLUME** also controls the Weatheradio's audio broadcast volume. To set the alert volume, see "Setting the Alert Volume" on Page 24.

To listen to a weather broadcast, see "Listening to a Weather Broadcast."

To adjust the tone you hear when the Weatheradio sounds an alert, see "Setting the Alert Volume" on Page 24.

To change the way in which the Weatheradio responds to an alert, see "Changing/Checking the Alert Pattern" on Page 24.

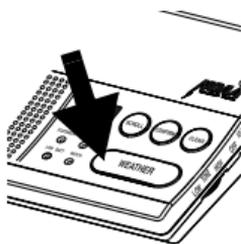
To turn off the Weatheradio, rotate **VOLUME** to the left until it clicks.

LISTENING TO A WEATHER BROADCAST

Your Weatheradio is preprogrammed with the seven NOAA weather broadcast frequencies (Channels 1–7). To select a frequency broadcast in your area, fol-

low the steps in “Selecting a Broadcast Frequency” on Page 17.

To listen to a weather broadcast, make sure **PROGRAM/OPERATE** is set to **OPERATE**, press **WEATHER**, then adjust **VOLUME** to the desired listening level. To turn off the weather broadcast, press **WEATHER** again.



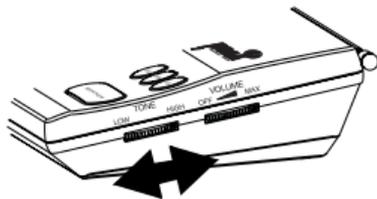
USING THE ALERT FUNCTION

When the NWS broadcasts a warning, watch, or statement, the Weatheradio sounds an alert tone, and the **STATEMENT** (if the broadcast is a statement), **WATCH** (if the broadcast is a watch), or **WARNING** (if the broadcast is a warning or emergency) indicators light.

Warning: If severe weather threatens, do not wait for an alert tone; turn on the weather broadcast and monitor the weather information.

Setting the Alert Volume

To set your Weatheradio's alert volume, rotate **TONE** toward **HIGH** to increase the volume or toward **LOW** to decrease it.



We recommend you set the alert volume to the highest volume setting, then decrease it as needed.

Changing/Checking the Alert Pattern

You can set **TONE/VOICE** (on the back) to have the Weatheradio respond to an NWS alert broadcast in one of two ways.

VOICE — the Weatheradio sounds an alert for about 8 seconds, then automatically turns on the weather (voice) broadcast for 5 minutes or until the NWS transmits an ending sequence, whichever comes first. An alert could be in effect for several hours.

To turn off the alert and continue to listen to the NWS broadcast, press **WEATHER**.

TONE — the Weatheradio sounds an alert. To turn off the alert and turn on the NWS broadcast, press **WEATHER**.

Notes:

- The **STATEMENT**, **WATCH**, or **WARNING** indicators on the front of the Weatheradio light in either alert pattern setting.
- See “Setting the Alert Volume” on Page 24 for more information about adjusting the Weatheradio’s alert tone.

Using the Weatheradio’s ‘All Signals’ Code

Your Weatheradio is preset to use a default “all signals” code of 99, which lets it receive any weather alert broadcast within the Weatheradio’s reception range (about a 50-mile radius in most locations).

This code is preset in the Weatheradio’s first memory location.

To set the Weatheradio to respond only to specific NWS FIPS codes you select, choose the codes (as many as two) you want to program (see “Understanding FIPS Codes” on Page 9 and “Obtaining Your Area’s FIPS Code(s)” on Page 11), then pro-

gram those codes into the first and second memory locations (see “Storing/Changing FIPS Codes” on Page 19).

When a Test or Demo Alert Occurs

The NWS sends out weekly test signals you can use to confirm that your Weatheradio is working properly. To find out the specific test schedule in your area, contact your local NOAA or NWS office. Those offices are usually listed in the telephone book under *US Government, Department of Commerce*.

When the Weatheradio’s alert function is turned on and the Weatheradio receives a test broadcast for a FIPS code you programmed into its memory, it responds in one of these ways.

NWS Alert Type	You Hear
Demo Message (sent at random times)	No sound
Required Weekly SAME Test	Beeps
Required Monthly SAME Test	Beeps

Note: The Weatheradio does not turn on an indicator during a test/demo broadcast.

If your Weatheradio is turned on and properly set but it does not respond to a test broadcast, see “Troubleshooting” on Page 28.

TROUBLESHOOTING

If your Weatheradio is not working as it should, these suggestions might help you eliminate the problem. If the Weatheradio still does not operate properly, take it to your local RadioShack store for assistance.

Problems	Suggestions
No power.	Make sure the Weatheradio is connected to AC power and (if AC power has failed) a backup battery is installed. See "Powering the Weatheradio" on Page 12.
No sound.	Adjust VOLUME or TONE . See "Setting the Alert Volume" on Page 24.
One or more FIPS codes are stored in memory, but the radio responds to weather alert broadcasts for areas <i>not</i> covered by those codes.	Make sure the Weatheradio's all-signals code (99) is not stored in memory. See "Using the Weatheradio's 'All Signals' Code" on Page 25.

Problems	Suggestions
The radio is not responding properly to NWS weather alert broadcasts.	Make sure you programmed the correct FIPS code(s) into the Weatheradio's memory. See "Programming the Weatheradio" on Page 16.
	Make sure PROGRAM/OPERATE is set to OPERATE .
No weather broadcast when you press WEATHER .	Make sure the telescoping antenna is fully extended. See "Using the Built-In Antenna" on Page 14.
	Make sure the Weatheradio is set to the NOAA channel that is being broadcast in your area. See "Programming the Weatheradio" on Page 16.

Problems	Suggestions
<p>C-OP (check operation) appears.</p>	<p>The Weatheradio has not received any type of SAME alert signal (including test or demo signals) for about 192 hours. Make sure the FIPS code(s) stored in memory are correct. See “Programming the Weatheradio” on Page 16.</p>
	<p>Make sure the telescoping antenna is fully extended. See “Using the Built-In Antenna” on Page 14.</p>

CARE

To enjoy your Weatheradio for a long time:

- Keep the Weatheradio dry. If it gets wet, wipe it dry immediately.
- Use and store the Weatheradio only in normal temperature environments.
- Handle the Weatheradio gently and carefully. Don't drop it.
- Keep the Weatheradio away from dust and dirt.
- Wipe the Weatheradio with a damp cloth occasionally to keep it looking new.

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

SPECIFICATIONS

Frequency Coverage (MHz):

Channel 1	162.400
Channel 2	162.425
Channel 3	162.450
Channel 4	162.475
Channel 5	162.500
Channel 6	162.525
Channel 7	162.550

Receiving Sensitivity (at 12 dB SINAD) 0.3 μ V

FIPS Code Sensitivity

@ \pm 3 kHz Deviation/90% Success Rate 0.3 μ V

Signal to Noise Ratio 40 dB

Dual Tone Detection Range 1.2 to 2.4 kHz

Channel Selectivity \pm 25 kHz, 60 dB

Power Output (Maximum) 250 mW

Power Supply 120 Volts, 60 Hz, 5 Watts AC

Battery Backup One 9-Volt Battery

Antenna Telescoping Rod Antenna

Dimensions (HWD) $7^{1/5} \times 5^{1/2} \times 1^{4/5}$ Inches
(183 \times 140 \times 46 mm)

Weight 18.3 oz
(520 g)

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

NOTES



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.

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

We Service What We Sell

04/99