

Cat. No. 43-273

OWNER'S MANUAL

Please read before using this equipment.

**TCR-100**

Telephone Cassette Recorder

**Radio Shack®**

# FEATURES

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Your Radio Shack TCR-100 Telephone Cassette Recorder is perfect for your home or office. It can record telephone conversations when you make or receive calls. You can also use it as a tape recorder to record dictation or conversation during a meeting.

It is easy to use and includes these features:

## **Voice-Actuated Recording (VOX)**

**Setting** – records only when it receives sound so you can save power and prevent blank sections on the tape.

**Normal Recording Setting** – records dictation or conversation at the touch of a button.

**Handset Adapter** – lets you record directly from the phone you talk on.

**Monitor** – lets you listen to a conversation through the cassette recorder's speaker as it is being recorded.

**Automatic Stop** – stops the cassette recorder when a cassette tape reaches its end while playing and recording.

**The Built-In Microphone** – lets you record without connecting an external microphone.

**Cue/Review Function** – advances or rewinds the tape during play to help you find a specific section on the tape.

**Two Power Sources** – you can power the cassette recorder with AC power or 4 AA batteries.

**Earphone Jack** – lets you connect an earphone with a 1/8 -inch plug for private listening.

**Note:** It is illegal in some states to record a conversation without the consent of all parties to the conversation, including the phone company. Check the laws in your area before using the telephone cassette recorder.

For your records, we suggest you write your cassette recorder's serial number in the space below. The serial number is shown on the bottom of the cassette recorder.

Serial Number: \_\_\_\_\_

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## READ THIS BEFORE INSTALLATION

Each device that you connect to the phone line draws power from the phone line. We refer to this power draw as the device's *Ringer Equivalence Number*, or REN. The REN is shown on the bottom of your cassette recorder.

If you are using more than one device on the line, add up all the RENs. If the total is more than five, your phone might not ring and your cassette recorder might not answer. In rural areas, a total REN of three might impair ringer operation.

**Note:** You must not connect your telephone cassette recorder to

- Coin-operated systems
- Party-line systems
- Most electronic key phone systems

## FCC STATEMENT

Your telephone cassette recorder complies with Part 68 of *FCC Rules*. You must, upon request, provide the FCC registration number and the REN to your phone company. Both numbers are shown on the bottom of your cassette recorder.

This cassette recorder has been tested and found to comply with applicable UL standards.

**WARNING:** To prevent fire or shock hazard, do not expose this appliance to rain or moisture.



**CAUTION**  
RISK OF ELECTRIC SHOCK. DO NOT OPEN.



**CAUTION:** TO REDUCE THE RISK OF ELECTRICAL SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might constitute a risk of electric shock.



This symbol is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the owner's manual.

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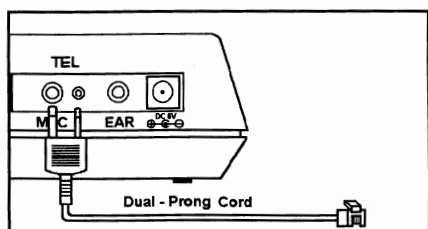
# INSTALLATION

Select a location for your cassette recorder that is out of the way of normal activities. You can connect the cassette recorder directly to the phone line or to the same phone you talk on.

## CONNECTING DIRECTLY TO THE PHONE LINE

Follow these steps to connect the cassette recorder to the phone line.

1. Plug the supplied dual-prong cord into the cassette recorder's **MIC** and **TEL** jacks.



2. Insert the modular plug into a modular phone line jack.

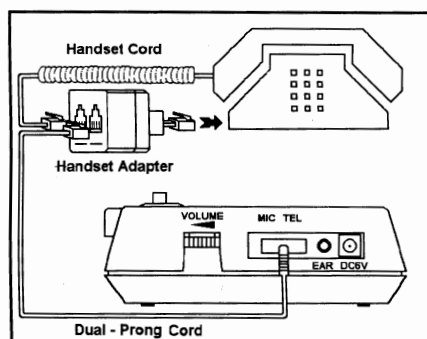
**Note:** If the phone line jack is not a modular jack, you must update the wiring. You can convert the wiring yourself, using jacks and adapters available at your local Radio Shack store. Or, you can let the phone company update the wiring for you. The phone company will charge you for the installation of necessary jacks. The USOC number of the jack to be installed is RJ11C.

## CONNECTING TO THE PHONE

You can use the supplied handset adapter to connect the cassette recorder to the same phone you plan to talk on.

1. Plug the supplied dual-prong cord into the cassette recorder's **MIC** and **TEL** jacks.
2. Plug the cord's modular plug and the handset's cord into the handset adapter.

**Note:** Plug the cassette recorder's plug into the right modular jack and the handset's plug into the left jack.



3. Plug the handset adapter into the telephone's base.

## CONNECTING TO POWER

You can power your cassette recorder using either AC power (with an optional AC adapter) or 4 AA batteries.

### Using AC Power

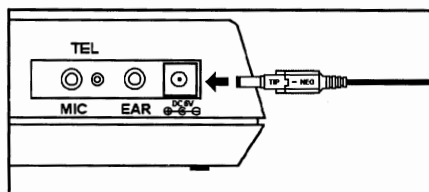
Your recorder can be powered by an optional AC adapter that provides 6 volts, such as Cat. No. 273-1650.

**Caution:** You must use a Class II, 120V AC/6V DC adapter that delivers at least 300 milliamps. Its plug must correctly fit the cassette recorder's DC 6V jack with the tip set to negative. Using an adapter that does not meet these requirements could damage the cassette recorder or the adapter.

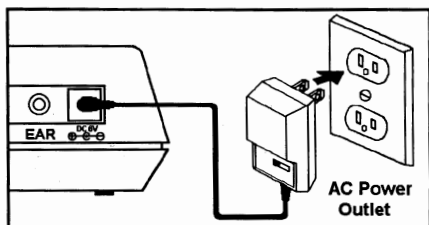
Follow these steps to connect your cassette recorder to AC power.

1. Set the AC adapter's voltage switch to 6V.
2. Insert the green-tipped barrel plug's black end into the adapter's cord to read TIP NEG.
3. Insert the green plug into the cassette recorder's DC 6V jack.

**Note:** Connecting AC power automatically disconnects battery power.



4. Plug the adapter into a standard AC power outlet.

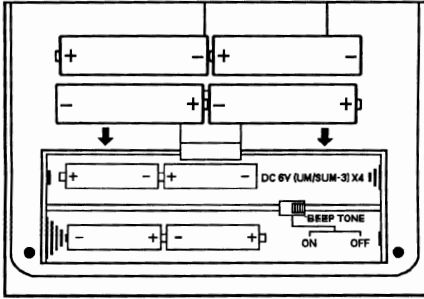


### Using Battery Power

Your cassette recorder can be powered by 4 AA batteries. For the longest life, we recommend alkaline batteries (such as Radio Shack Cat. No. 23-552).

Follow these steps to install or replace the batteries.

1. Press the battery compartment cover's tab and lift off the cover.
2. Insert the batteries into the compartment, as indicated by the polarity symbols (+ and -) marked inside the compartment.



3. Replace the cover.

**Notes:**

- Replace the batteries when the **REC/LEVEL** indicator dims.
- Do not mix old batteries with new ones, and do not mix different types of batteries (standard and alkaline, for example).
- Always remove old batteries. Even leak-proof batteries can leak and damage the cassette recorder.

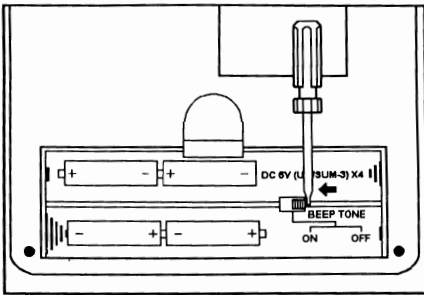
# PREPARATION

## SETTING THE BEEP TONE

You can set the cassette recorder to beep every 15 seconds during recording.

**Note:** You might be required to set **BEEP TONE** to **ON** so all parties know the conversation is being recorded. Check the laws in your area.

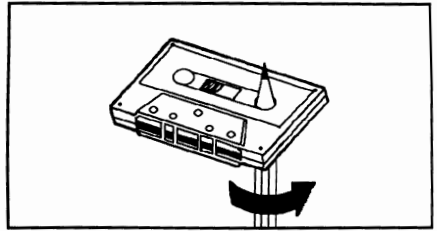
1. Remove the battery compartment cover and remove the batteries if they were previously installed.
2. Use a screwdriver to set **BEEP TONE ON/OFF** to **ON**.



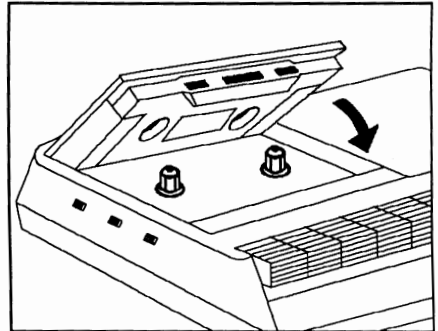
3. Replace the batteries, if necessary, and the cover.

## INSERTING A CASSETTE TAPE

1. Turn the cassette's hub with a pencil to take up any tape slack.



2. Press **STOP/EJECT** to open the cassette compartment door. Install the cassette into the compartment with the open edge of the cassette facing you and the full reel on the left.



3. Close the door.

### Notes:

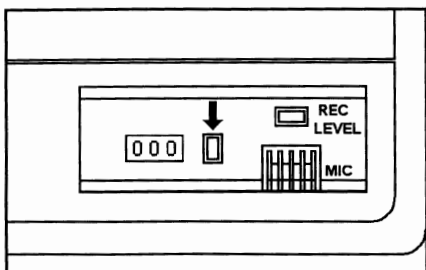
- You can buy cassettes of varying lengths at your local Radio Shack store.
- Replace the tape at least once a year, or more often if used heavily.



# OPERATION

## USING THE TAPE COUNTER

You can use the tape counter to mark relative positions on a cassette tape during recording or playback. As the cassette tape moves, the counter advances. Before you play a cassette tape, rewind the cassette tape and press the button to the right of the tape counter to set it to 000.



## RECORDING A PHONE CONVERSATION

You can record both sides of a conversation on any phone connected to the same phone line as the cassette recorder.

1. Set **RECORD MODE**, **SPEED**, and **MONITOR** to the desired setting. (See "Setting RECORD MODE", "Setting SPEED", and "Setting MONITOR".)

**Note:** If you set **RECORD MODE** to **VOX**, when both parties become silent for about 5 seconds, the cassette deck stops until someone starts speaking again.

2. Press **RECORD** down. Both **RECORD** and **PLAY** lock down.

When **RECORD** is pressed down, every call made or received is recorded.

### Notes:

- The **VOLUME** setting does not affect the recording level.
  - Conversation will be recorded from any extension phone that is connected to the same line.
  - The **REC/LEVEL** indicator flashes during recording.
  - If the tape reaches the end while the cassette recorder is recording, it automatically releases **RECORD** and **PLAY** and stops.
  - To temporarily stop recording, press **PAUSE**. To resume recording, press **PAUSE** again.
3. To stop recording, press **STOP /EJECT**.

## REGULAR RECORDING

You can use your cassette recorder as a regular cassette recorder for dictation or conversation.

**Note:** Disconnect the dual-prong cord before regular recording.

Press **RECORD** down. Both **RECORD** and **PLAY** buttons lock. Then speak into the built-in **MIC** from a distance of about 12 inches.

### Notes:

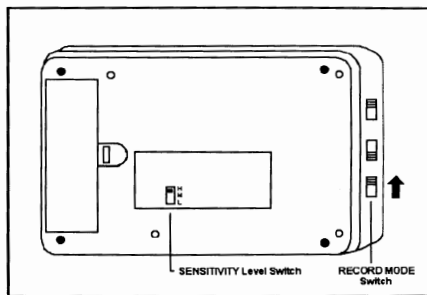
- You can set **RECORD MODE** to **NORMAL** for continuous recording. If you set **RECORD MODE** to **VOX**, the cassette recorder starts recording when you begin to speak or the recorder picks up the sound. When there is silence for about 5 seconds, the cassette recorder stops.
- Press **PAUSE** to temporarily stop the tape while you are playing it. Press **PAUSE** again to resume playing.
- The **REC/LEVEL** indicator flashes during recording.

To stop recording, press **STOP/EJECT**.

## SETTING RECORD MODE

When **RECORD MODE** is set to **VOX**, it begins recording when the microphone or phone line receives sound, and stops recording when it receives no sound for about 5 seconds.

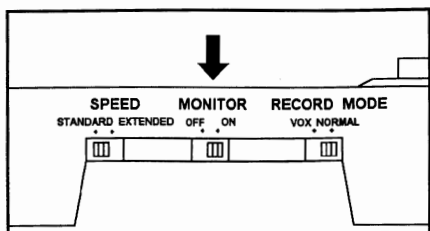
When you set **RECORD MODE** to **VOX**, you must set the sensitivity level. **H** (high) is the most sensitive setting and requires only a soft sound to begin recording. If the tape does not stop after about 5 seconds of silence, set the switch to **M** (medium) or **L** (low).



**Note:** **L** is the least sensitive setting and requires a louder sound to begin recording.

Set record mode to **NORMAL** to record continuously and use the cassette recorder's functions.

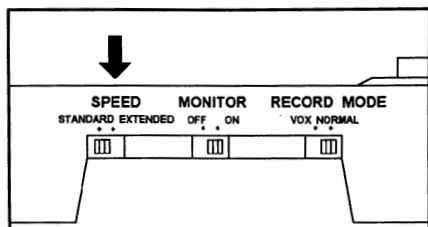
## SETTING MONITOR



Set **MONITOR ON/OFF** to **ON** to listen to a conversation through the cassette recorder's speaker as it is being recorded. Rotate **VOLUME** to a comfortable listening level.

**Note:** If you are recording your own phone conversation, set **MONITOR ON/OFF** to **OFF**. Otherwise, it might cause audio feedback through your telephone handset or through the cassette recorder's speaker.

## SETTING SPEED

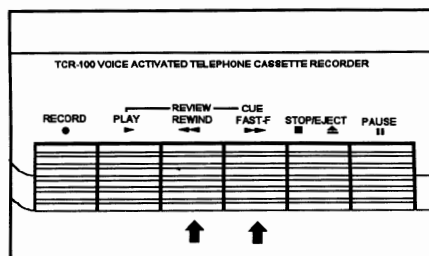


The **SPEED** switch allows you to record at regular speed or at a slower speed. **EXTENDED** records twice as long as the regular speed and at a lower quality. Tapes recorded with **SPEED** set to **EXTENDED** must be

played back with the cassette recorder set to **EXTENDED**.

Set **SPEED** to **STANDARD** to record at regular speed. You can play back the tape on this cassette recorder (with **SPEED** set to **STANDARD**), or any other cassette tape player.

## FAST-FORWARD AND REWIND



Press **CUE/FAST-F** or **REVIEW/REWIND** when the cassette recorder is stopped to wind the tape rapidly forward or backward. The cassette tape winds forward or backward until you press **STOP/EJECT**.

Press and hold down **CUE/FAST-F** or **REVIEW/REWIND** during **PLAY** to fast-forward or review at a high speed. When you release the button, the cassette recorder returns to normal play.

**Note:** When the tape is fully wound to either reel, press **STOP/EJECT** to release **FAST-F** or **REWIND**.

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## PLAYING BACK

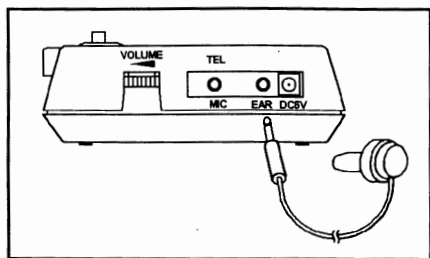
1. Set **RECORD MODE** to **NORMAL**.
2. Press **FAST-F** or **REWIND** as necessary to position the tape.
3. Press **PLAY** to begin tape playback.
4. Adjust **VOLUME** to a comfortable listening level.
5. Press **STOP/EJECT** to stop play. If the cassette tape plays to the end, the cassette deck automatically releases **PLAY** and stops.

**Note:** Press **PAUSE** to temporarily stop the tape while you are playing it. Press **PAUSE** again to resume playing.

## USING AN EARPHONE

To connect earphone's (not supplied), insert the earphone's 1/8-inch plug into the **EAR** jack on the side of the cassette recorder. Set **MONITOR OFF/ON** to **ON**.

You will find a wide selection of earphones at your local Radio Shack store.



**Note:** The speaker automatically disconnects when you plug in an earphone.

## Listening Safely

To protect your hearing, follow these guidelines, especially when you use an earphone.

- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Set the volume to its lowest level before you begin listening. After you put on the earphone, adjust the volume to a comfortable listening level.
- Do not increase the volume once you have established a comfortable listening level. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

## Traffic Safety

Do not wear an earphone while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and is illegal in some areas.

Even though some earphones are designed to let you hear some outside sounds when listening at normal volume levels, they still present a traffic hazard.

# CARE AND MAINTENANCE

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Your TCR-100 Telephone Cassette Recorder is an example of superior design and craftsmanship. The following suggestions will help you care for your cassette recorder so you can enjoy it for years.



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



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



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



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



Use only fresh batteries of the recommended size and type. Always remove old or weak batteries. They can leak chemicals that can destroy electronic circuits.



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

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

## TAPE TIPS AND TECHNIQUES

The following tips can help you get the best performance and the longest life from your cassette recorder.

**Note:** Do not use endless or C-120 cassette tapes. C-120 tape is very thin and tangles easily.

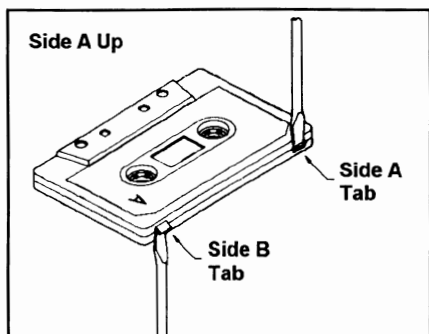
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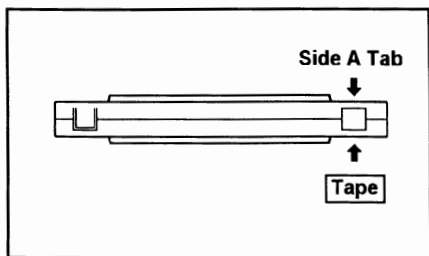
## Erase-Protection Tabs

Most cassette tapes have two erase-protection tabs – one for each side of the tape. When a tab is in place, you can erase or record on that tape side. When the tab is not in place, you cannot erase or record on that side.

To prevent your recordings from being accidentally erased or recorded over, carefully break off the erase-protection tabs, using a screwdriver or similar tool.



If you later decide to erase or record over the tape, you can place a piece of tape over the holes.



**Note:** When covering the holes, cover only the position that was originally protected by the plastic tab.

## Restoring Tape Tension and Sound Quality

After you play a cassette tape several times, the tape might become tightly wound on the cassette reels. This can cause playback sound quality to deteriorate.

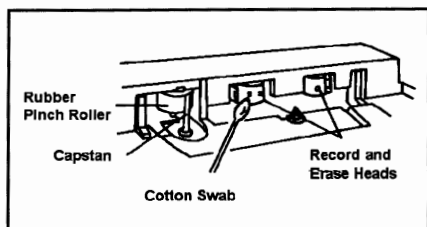
To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely rewind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

**Note:** Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.

## Cleaning the Tape-handling Parts

Dirt, dust, or particles of the tape's coating can accumulate on the tape heads and other parts that the tape touches. This can greatly reduce the performance of the cassette recorder. Use the following cleaning procedure after about every 20 hours of tape player operation.

1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door.
3. Press **PLAY** to expose the tape-handling parts.
4. Use a cotton swab dipped in tape head cleaning solution or denatured alcohol to gently clean the pinch roller, capstan, and record and erase heads.



## THE FCC WANTS YOU TO KNOW

In the unlikely event that your cassette recorder causes problems on the phone line, the phone company can disconnect your service. The phone company attempts to notify you in advance. If advance notice is not practical, the phone company notifies you of your right to file a complaint with the FCC.

Also, the phone company can make changes to its lines, equipment, operations, or procedures that could affect the operation of your recorder. The phone company notifies you of these changes in advance, so you can take steps to prevent interruption of your phone service.

5. When you finish cleaning, press **STOP** and close the compartment.

Radio Shack carries a complete line of cleaning accessories.

## LIGHTNING

Your cassette recorder has built-in protection circuits to reduce the risk of damage from surges in phone and power line current. These protection circuits meet or exceed FCC requirements. However, lightning striking the phone line or power lines can damage your cassette recorder.

Lightning damage is not common. Nevertheless, if you live in an area that has frequent electrical storms, we suggest that you unplug your cassette recorder during storms to reduce the possibility of damage.

# SPECIFICATIONS

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Power Supply .....	AC/DC Power Adapter: Input 120V AC 60 Hz Output 6V DC 300 mA 6VDC, 4 AA Batteries
Power Consumption (Maximum) .....	3.0 Watts
Telephone Modular Jack .....	RJ11C
Tape Speed .....	1 <sup>7</sup> / <sub>8</sub> ips and <sup>15</sup> / <sub>16</sub> ips
Tape System.....	Two Track, Monaural
Recording System.....	AC Bias
Erasing System.....	DC Erase
Rewind Time (MC-60) .....	120 Seconds
Safety Standards .....	FCC Part 68 and UL-1459
Speaker .....	Dynamic, 3 <sup>1</sup> / <sub>2</sub> Inches
Dimensions .....	.1 <sup>15</sup> / <sub>16</sub> x 8 <sup>1</sup> / <sub>16</sub> x 5 <sup>5</sup> / <sub>16</sub> Inches (HWD)
Weight .....	1 lb 8 oz (Without Batteries)

Specifications are typical; individual units may vary. Specifications are subject to change without notice.

## Operating Parameters

This information is supplied to assist you in answering technical questions from your phone company.

Interface .....	Loop Start
Modular Jack USOC Number .....	RJ11C









### **RADIO SHACK LIMITED WARRANTY**

This telephone product is warranted against manufacturing defects in material and workmanship for one (1) year from the date of purchase from Radio Shack company owned stores and authorized Radio Shack franchisees and dealers. Within this period Radio Shack will repair the telephone product without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof-of-purchase date to any Radio Shack store.

This warranty does not cover damage or failure caused by or attributable to Acts of God, abuse, misuse, improper or abnormal usage, faulty installation, improper maintenance, lightning or other incidence of excess voltage, or any repairs other than those provided by a Radio Shack Authorized Service Facility, or transportation costs.

**Radio Shack is not responsible or liable for indirect, special, or consequential damages arising out of or in connection with the use or performance of the product or other damages with respect to loss of property, loss of revenues or profit, or costs of removal, installation or reinstallation.**

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO EXPRESS WARRANTIES, AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN ITS DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES SET FORTH HEREIN. Some states do not allow the limitation or exclusion of incidental or consequential damages and some states do not allow limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

There will be charges rendered for repairs to the product made after the expiration of the aforesaid one (1) year warranty period.

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

*We Service What We Sell*

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**RADIO SHACK**  
**A Division of Tandy Corporation**  
**Fort Worth, Texas 76102**