



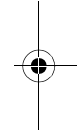
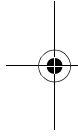
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OWNER'S MANUAL

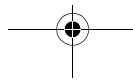
Please read before using this equipment.

Micro-41

**Micro Recorder
with Voice Zoom
and VOX**



OPTIMUS®





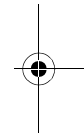
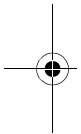
FEATURES



Your Optimus Micro-41 Micro Recorder with Voice Zoom and VOX is ideal for quick note-taking. Its ultra-small size makes it easy to slip into a pocket or briefcase. You can use it at school, at business conferences, for dictation in the office, or anywhere on the go! You can record manually or set the recorder so sound activates recording.

Your recorder includes these features:

Voice-Activated Recording (VOX) — records when it picks up sound and stops a few seconds after the sound stops.



Voice Zoom — a special circuit separates voice recordings from a noisy background adding clarity to the voices.

Index Marker — lets you mark the beginning of a recorded section.

Tape Speed Switch — lets you record and play back tape at a slower speed which provides twice the recording/playback time

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or at normal speed for maximum sound quality.

Auto Stop — stops the tape movement when the recorder reaches the end of the tape during recording or playback.

Tape Counter with Reset Button — lets you note specific points in a tape for later reference.

Quick Record — lets you instantly change from playback to recording.

Built-In Microphone and Speaker — let you record and play back notes anywhere.

External Microphone Jack — lets you use an external, wide range microphone.

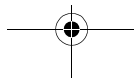
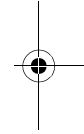
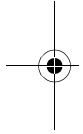
Earphone Jack — lets you use an optional earphone for private listening.

Fast Play — lets you play a tape back about 30% faster than normal speed, to save time.

Automatic Level Control (ALC) Circuit — automatically sets the recording level.



Three Power Options — you can power the recorder from standard AC power using an optional AC adapter, two AA batteries (not supplied) or a vehicle's battery using an optional DC adapter.



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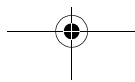
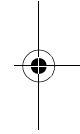
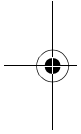
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PREPARATION



CONNECTING POWER

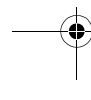
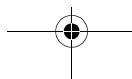
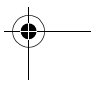
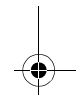
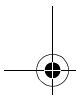
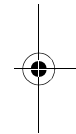
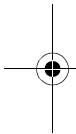
Using Batteries

You can power your recorder with two AA batteries (not supplied). For the best performance and longest life, we recommend RadioShack alkaline batteries.

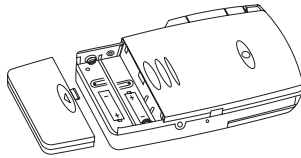
Warning: Dispose of old batteries promptly; do not bury or burn them.

Cautions:

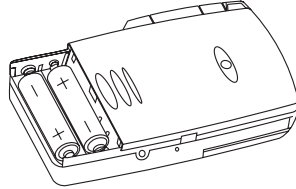
- Use only fresh batteries of the required size and recommended type.
- Never leave dead or weak batteries in the Micro-41. Batteries can leak chemicals that can destroy electronic circuits.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.



1. Slide the battery compartment cover in the direction of the arrow.



2. Insert the batteries into the compartment and on top of the attached ribbon, as indicated by the polarity symbols (+ and -) marked inside.



3. Replace the cover.

Notes:

- If the RECORD/BATTERY indicator lights dimly or does not light at all during use, replace the batteries.
- If you do not plan to use the Micro-41 for several days, or if you plan to use

only AC or vehicle battery power,
remove the batteries.

Using AC Power

You can power the Micro-41 from an AC outlet, using an AC adapter (not supplied), available at your local RadioShack store.

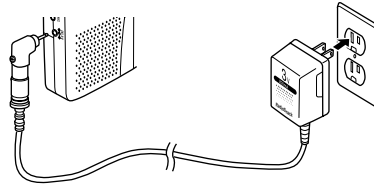
Cautions:



You must use a Class 2 power source that supplies 3V volts DC and delivers at least 300 mA. Its center tip must be set to positive and its plug must fit the Micro-41's **DC 3V** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the Micro-41 or the adapter.

- Always plug the AC adapter in to the Micro-41 before you plug it into the AC outlet, and unplug the adapter from the AC outlet before you unplug it from the Micro-41.

Follow these steps to power the Micro-41 from standard AC power.



1. Set the AC adapter's voltage switch to 3V.
 2. Insert the 3.4 mm outer diameter/1.3 mm inner diameter barrel plug into the AC adapter's cord to read TIP+.
- Note:** Inserting the barrel plug into the Micro-41's **DC 3V** jack disconnects the internal batteries.
3. Plug the adapter's other end into a standard AC outlet.

Using Vehicle Battery Power

You can power the Micro-41 from a vehicle's battery using a DC adapter (not supplied), available at your local RadioShack store.

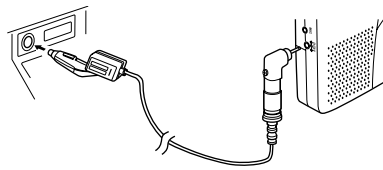
Cautions:



You must use a power source that supplies 3 volts DC and delivers at least 300 mA. Its center tip must be set to positive and its plug must fit the Micro-41's **DC 3V** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the Micro-41 or the adapter.

- Always plug the DC adapter into the Micro-41 before you plug it into the cigarette-lighter socket, and unplug the adapter from the cigarette-lighter socket before you unplug it from the Micro-41.

Follow these steps to power the Micro-41 from your vehicle's battery.



1. Set the DC adapter's voltage switch to 3V.
2. Attach the 3.4 mm outer diameter/1.3 mm inner diameter barrel plug with the tip set to positive (+).
3. Insert the barrel plug into the Micro-41's **DC 3V** jack. This disconnects any internal batteries.
4. Plug the other end of the DC adapter into the vehicle's cigarette-lighter socket.

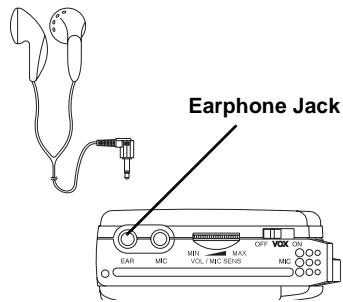
CONNECTING AN EARPHONE

You can use an optional mono earphone with a $\frac{1}{8}$ -inch (3.5mm) plug to listen to a tape privately.

Notes:

- You can also use an earphone to monitor what the recorder picks up through the internal or an external microphone.
- Your local RadioShack store carries a wide selection of earphones.

Insert the earphone's plug into the recorder's **EAR** jack. The internal speaker automatically disconnects.



Listening Safely

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

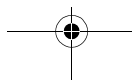
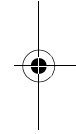
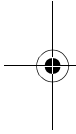
- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable listening level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.



- Once you set the volume, do not increase it. 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 could be illegal in some areas.
- Even though some earphones let you hear outside sounds when listening at normal volume levels, they still can present a traffic hazard.

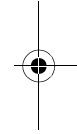
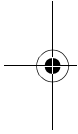




CONNECTING AN EXTERNAL MICROPHONE

You can use an optional microphone with a $\frac{1}{8}$ -inch (3.5mm) plug to extend the recording range. Your local RadioShack store carries a wide selection of microphones.

Insert the microphone's plug into the recorder's **MIC** jack. The built-in microphone automatically disconnects.



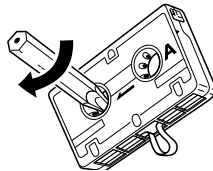
OPERATION

LOADING A MICROCASSETTE TAPE

Note: We recommend MC-60 microcassette tapes for up to 2 hours of recording/playback time, or MC-90 microcassette tapes for up to 3 hours of recording/playback time. We do not recommend long-playing microcassette tapes such as MC-120s because they are extremely thin and can easily tangle in the playback mechanism.

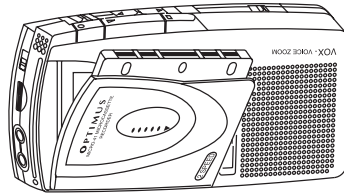
Follow these steps to load a microcassette tape.

1. Use a pencil to turn the microcassette's hub and remove any tape slack. Avoid touching the tape.



2. Press **STOP/EJECT**. The cassette compartment door opens.

3. Insert the microcassette into the door's guides with the tape's open edge facing out and the full reel positioned toward the top of the recorder.



4. Close the door.

RECORDING

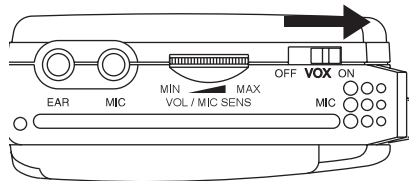
Cautions:

- Do not change the tape speed while recording.
- Do not force down **REC** when a cassette erase-protection tab is not in place (see "Preventing Accidental Erasure" on Page 26).

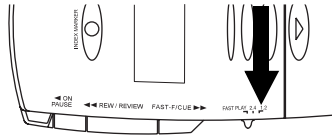
Voice Activated (VOX) Recording

Follow these steps to have the recorder start and stop recording automatically based on sound it detects.

1. Set **VOX** to **ON**.



2. Load a tape.
3. Set **TAPE SPEED** on the side of the recorder as follows:

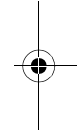
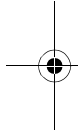


- To double the tape's recording/playback time, set **TAPE SPEED** to **1.2**. This setting allows 120 minutes of total recording/playback time on an MC-60 tape, or 180 minutes on an MC-90 tape.

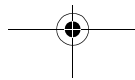


- For better sound quality, set **TAPE SPEED** to **2.4**. This setting allows 60 minutes of total recording/playback time on an MC-60 tape, or 90 minutes on an MC-90 tape.
4. Press **REC** to begin recording. Both **REC** and **PLAY** lock down, and the **RECORD/BATTERY** indicator (to the right of the tape counter) lights.

Notes:



- The **VOL/MIC SENS** setting determines the sound level that activates the VOX circuit and starts recording. At higher settings, a softer sound starts VOX recording. At lower settings, a louder sound starts VOX recording.
- The built-in automatic level control (ALC) automatically sets the recording level once recording starts.
- When you use the VOX feature, recording begins when the recorder picks up sound and stops a few seconds after the sound stops.

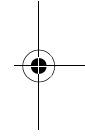
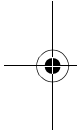




-
-
5. Recording stops when the tape reaches the end of the cassette. To stop it sooner, press **STOP/EJECT**.

Manual Recording

1. Set **VOX** to **OFF**.
2. Load a tape.
3. Set **TAPE SPEED** to **1.2** to double the recording time, or to **2.4** for better sound quality.
4. Press **REC** (**PLAY** also locks down). Recording starts, the built in automatic level control sets the recording level, and **RECORD/BATTERY** lights.
5. For maximum clarity, place the recorder as close to the sound source as possible, with nothing between the source and the recorder that might block the sound.
6. To temporarily stop recording, slide **PAUSE** to **ON**. To resume recording, slide **PAUSE** back.
7. Recording automatically stops when the tape reaches its end. To stop recording sooner, press **STOP/EJECT**.



Quick Record

During playback, you can press **REC** to begin recording without pressing **STOP/EJECT** first.

Using Voice Zoom

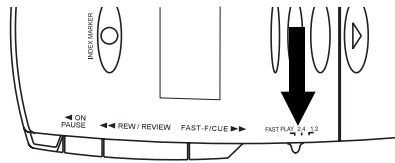
To record a speaker's voice in a noisy environment, set **VOICE ZOOM** to **ON**. Voice Zoom uses special filter circuits to enhance and separate voices from background sounds resulting in greater voice clarity during playback.

Note: The setting of **VOICE ZOOM** affects the sound *only* during recording. The switch's setting during playback has no effect.

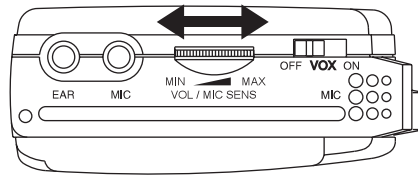
PLAYING A TAPE

1. Load the microcassette tape.
2. Set **TAPE SPEED** to the speed used when the tape was recorded.
3. To listen to the tape at normal speed, press **PLAY**. To listen to the tape at

about 30% faster than normal speed,
set **TAPE SPEED** to **FAST PLAY**.



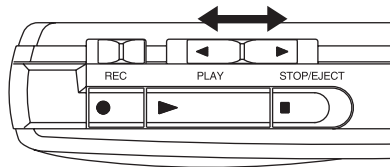
4. Adjust **VOL/MIC SENS** to a comfortable listening level.



5. Press **STOP/EJECT** to stop playback.

Rewinding/Fast-Forwarding

Slide **REW/REVIEW FAST-F/CUE** to **REW/REVIEW** to rapidly rewind a tape, or to **FAST-F/CUE** to fast-forward a tape.



Caution: To protect the tape-handling parts, press **STOP/EJECT** or slide **REW/REVIEW FAST-F/CUE** to the center when the tape reaches the end.

To hear the tape play as it fast-forwards or rewinds, slide **REW/REVIEW FAST-F/CUE** to **REW/REVIEW** or **FAST-F/CUE** during playback. When you release the switch, normal playback resumes.

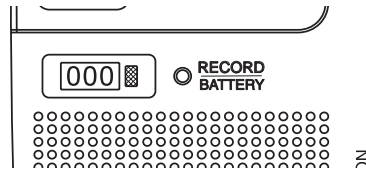
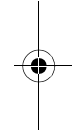
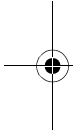


QUICK REVIEW

During recording, slide **REW/REVIEW FAST-F/CUE** to **REW/REVIEW** to hear a portion of what you have just recorded without first pressing **STOP/EJECT** then **PLAY**. Press **REC** to resume recording.

USING THE TAPE COUNTER

You can use the tape counter to note different locations on your tape during recording or playback.



Before playing or recording a tape, rewind the tape completely and press the counter reset button to set the counter to **000**. As the tape moves, the counter advances.

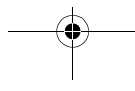
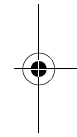
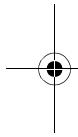




USING INDEX MARKER

Follow these steps to use **INDEX MARKER** to add a special tone to a tape so you can quickly find that point using the review controls.

1. To mark the beginning of a recorded section, press and hold down **INDEX MARKER**, on the back of the recorder, for at least 3 seconds during recording. **RECORD/BATTERY** turns off while the Micro-41 records an index marker tone on the tape starting at the moment you press **INDEX MARKER**. Repeat this step for each desired reference point.
2. Once you have completed recording, press **PLAY** to begin play.
3. Slide **REW/REVIEW FAST-F/CUE** to **REW/REVIEW** to rapidly rewind a tape, or to **FAST-F/CUE** to fast-forward a tape. As the tape moves while rewinding, you hear the tone index markers you have previously recorded, letting you stop at starting points or separator points in your tape.



TAPE TIPS

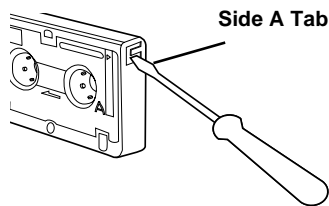
STORING CASSETTE TAPES

Do not expose microcassette tapes to high temperatures, high humidity, dust or dirt, or motors, transformers, or other sources of strong magnetic fields.

PREVENTING ACCIDENTAL ERASURE

Microcassette tapes have two erase-protection tabs — one for each side. When a tab is in place, you can record on that side.

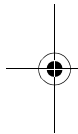
To prevent accidental erasure of a tape recording, use a screwdriver to remove one or both of the cassette tape's erase protection tabs. This prevents **REC** from being pressed.



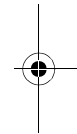


If you later decide to record on a tape side after you have removed the erase-protection tab, place a piece of strong plastic tape over that side's erase-protection hole. Be sure you cover only the hole originally covered by the erase-protection tab.

Caution: Removing the erase-protection tabs does not prevent a bulk eraser from erasing a microcassette tape.

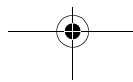


ERASING TAPES



To record over a microcassette tape, simply record as usual. The cassette deck records over the previous recording.

You can quickly erase both sides of a cassette tape using a RadioShack bulk tape eraser.



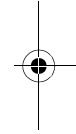
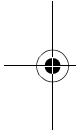


CARE

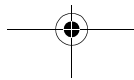


To enjoy your Your Optimus Micro-41 Micro Recorder for a long time:

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



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

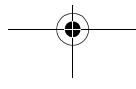
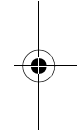
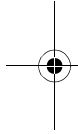




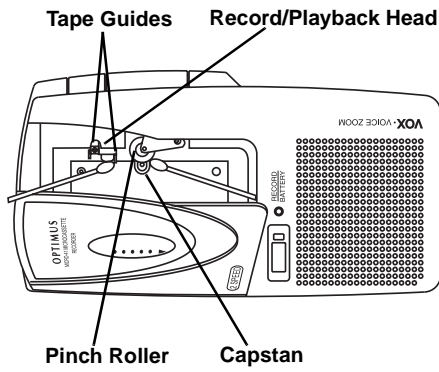
CLEANING THE TAPE-HANDLING PARTS

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 Micro-41. After every 20 hours of tape player operation, follow these steps to clean the tape-handling parts or use a RadioShack microcassette deck cleaning kit.

1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door and press **PLAY** to expose the tape-handling parts.



3. Use a cotton swab dipped in tape head cleaning solution or denatured alcohol to gently clean the record/playback head, pinch roller, capstan and tape guides.



4. Press **STOP/EJECT** to release the tape-handling parts. Then close the cassette compartment cover and reconnect power.

SPECIFICATIONS

Tape Type Microcassette
Tracks 2 Tracks, 1 Channel Monaural
Drive System Capstan Drive
Tape Speed 2.4 cm/sec. ($15/16$ ips) and
1.2 cm/sec. ($15/32$ ips)

Recording Time
(with MC-60 Microcassette):

2.4 cm/sec. 30 min. per side
1.2 cm/sec. 60 min. per side

Max. Output 270 mW

Frequency Response 400–4,000 Hz
at 2.4 cm/sec.

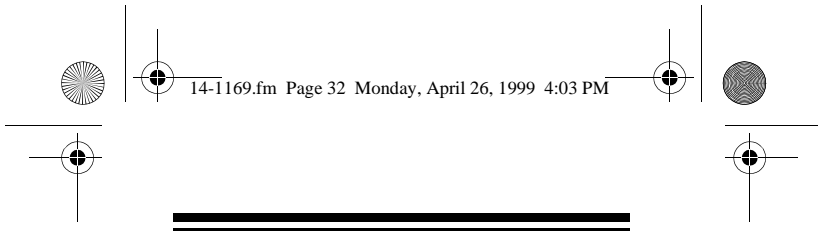
Power Sources:

Internal Batteries 3 Volts DC,
Two AA Batteries

AC Power 120V with AC Adapter

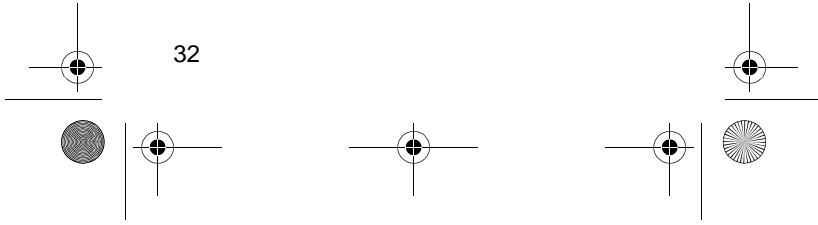
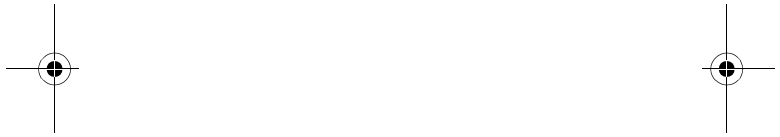
Vehicle Battery 12V with DC Adapter

Dimensions (HWD) 5.0 × 2.5 × 1.0 in.
(126 × 62 × 26 mm)



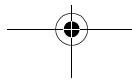
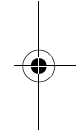
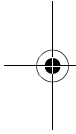
Typical Cassette Recording Time
(with Alkaline Batteries) 18 Hours
Weight (with batteries) ... 7.0 oz (198.45 g)

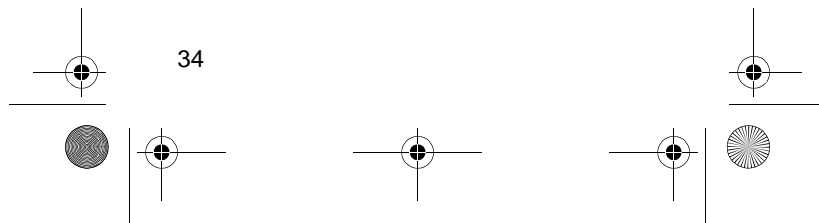
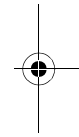
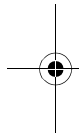
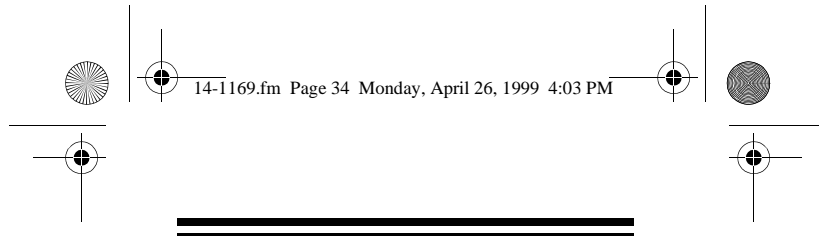
Specifications are typical; individual units
might vary. Specifications are subject to
change and improvement without notice.





NOTES







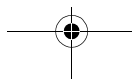
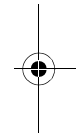
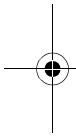
Limited Ninety-Day Warranty

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.

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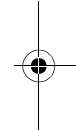
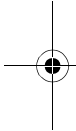
(Continued)

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 St., 6th Floor, Fort Worth, TX 76102



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Printed in Hong Kong

