

Cat. No. 43-476

OWNER'S MANUAL

Please read before using this equipment.

TRC-300

**Voice Activated
Microcassette Tele-Recorder**



RadioShack®

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.		

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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.

FEATURES

Your RadioShack TRC-300 Voice Activated Microcassette Tele-Recorder is perfect for your home or office. It records telephone calls you make or receive from a telephone. You can also use it as a convenient tape recorder to record other events such as lectures, interviews, and meetings.

The recorder includes these features:

Connects Directly to the Telephone — to let you easily record and play back telephone conversations.

Two Tape Speeds — let you record and play back tape at a slower speed which provides twice the recording/playback time or at normal speed for maximum sound quality.

Voice Activated Recording (VOX) — records only when it receives sound, to eliminate blank sections on the tape and save battery power.

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

Manual Recording — lets you record dictation or conversations at the touch of a button.

Pause Switch — lets you easily stop and restart the tape to avoid recording unwanted sound.

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

Built-In Microphone — lets you record without connecting an external microphone.

Cue/Review Function — lets you advance or rewind the tape during play to find a specific section on the tape.

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

Earphone Jack — lets you connect an earphone with a $\frac{1}{8}$ -inch (3.5-mm) plug for private listening.

Automatic Level Control — automatically adjusts the recording level.

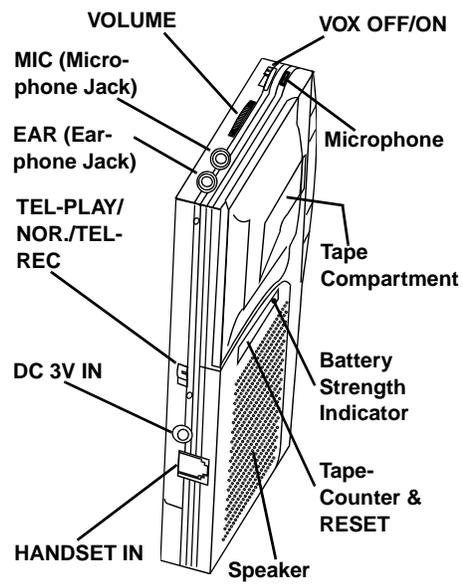
Note: You need at least one 30-minute microcassette tape. If you use a leaderless incoming message tape, recording starts immediately. You also need either two AA batteries or an AC or DC adapter.

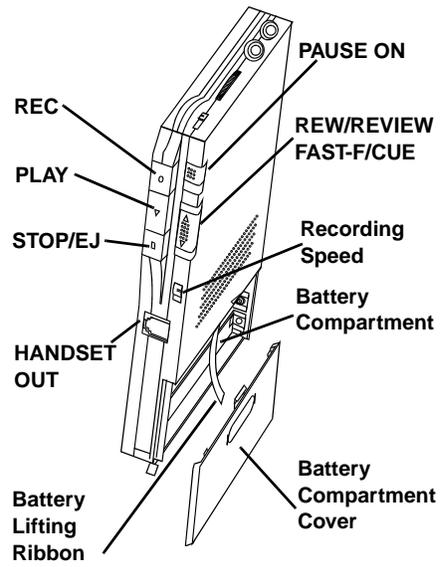
Important: Every state has different regulations governing the recording of conversations over the telephone. Be sure to check your local, state and federal laws before using this product to record any telephone conversation in order to determine that your use is in compliance with such laws or guidelines.

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CONTROL LOCATIONS





PREPARATION

Connecting Power

Using AC Power

You can operate your recorder from AC power using an optional AC adapter, such as Cat. No. 273-1654B.



Caution: You must use a Class 2 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 TRC-300's **DC 3V** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the recorder or the adapter.

Follow these steps to connect your recorder to AC power.

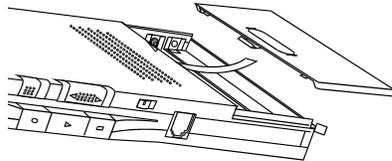
1. Set the AC adapter's voltage switch to 3V.
2. Insert the 3.4 mm outer diameter/1.3 mm inner diameter adapter plug into the adapter's socket to read TIP+.
3. Insert the plug into the recorder's **DC 3V** jack.
4. Plug the adapter into a standard AC outlet.

Using Battery Power

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

Caution: Do not mix old and new batteries, or different types of batteries (standard or alkaline). Follow these steps to install the batteries.

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1. Press the battery compartment cover's tab and slide the cover in the direction of the arrow.



2. Insert the batteries into the compartment, as indicated by the polarity symbols (+ and -) marked inside.
3. Replace the cover.

Replace the batteries when the **BATTERY** indicator dims or does not light.

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

Caution: If you do not plan to use the recorder with batteries for a few weeks, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

Using Vehicle Battery Power

You can power your recorder 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 TRC-300's **DC 3V** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the TRC-300 or the adapter.
- Always plug the adapter into the recorder before plugging it into the cigarette-lighter socket. Unplug the adapter from the cigarette-lighter socket before unplugging it from the recorder.

Follow these steps to power the recorder from your vehicle's battery.

1. Set the adapter's voltage switch to 3V.
2. Insert the 3.4 mm outer diameter/1.3 mm inner diameter adapter into the adapter's socket to read TIP+.
3. Insert the adapter's barrel plug into the recorder's **DC 3V** jack. Insert the adapter's large plug into the vehicle's cigarette-lighter or 12VDC socket

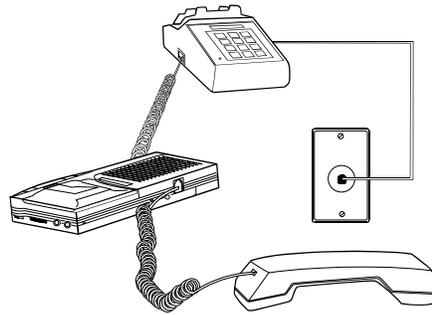
INSTALLATION

You can connect the recorder directly to a single line, a multi-line, or a digital telephone system using a telephone that is connected to that line. To avoid damage to the recorder, select a location that is out of the way of normal activity.

CONNECTING TO A PHONE

Use the supplied handset cord to connect the recorder to the same phone you plan to talk on. This lets you record the phone conversations on that phone.

Follow these steps to connect your recorder to a telephone.



1. Disconnect the handset and its coiled cord from the handset jack on your phone.
2. Plug the end of the handset cord into the recorder's **HANDSET IN** jack.

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3. Plug one end of the supplied short coiled cord into the recorder's **HANDSET OUT** jack. Plug the other end of the short coiled cord into the telephone's handset jack

USING AN EARPHONE

To connect an earphone (not supplied), insert the earphone's $\frac{1}{8}$ -inch (3.5-mm) plug into the **EAR** jack on the back of the recorder. You can find a wide selection of earphones at your local RadioShack store.

Note: Connecting an earphone disconnects the recorder's internal speaker.

Listening Safely

To protect your hearing, follow these guidelines 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.

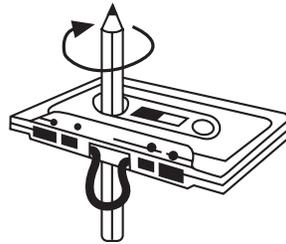
Traffic Safety

- Do not wear an earphone or headphones 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/headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

OPERATION

LOADING A CASSETTE TAPE

1. Turn the microcassette's supply hub with a pencil to take up any tape slack. Avoid touching the tape.



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2. Press **STOP/EJ** to open the cassette compartment door. Insert the micro-cassette into the compartment with the side you want to use facing up against the cover and the full reel on the left.
 3. Close the door.

RECORDING

Notes:

- MC-60 (1-hour) and MC-90 (1½-hours) microcassettes are available at your local RadioShack store. We suggest that you do not use MC-120 tapes as they are very thin and prone to stretching resulting in poor audio quality.

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- Replace any tape at least once a year, or more often if it is used heavily.
 - Do not change the tape speed while recording.

Voice Activated Telephone Recording (VOX)

1. Load a microcassette tape and set **VOX** to **ON**.
2. Set **TEL-PLAY/NOR/TEL-REC** to **TEL-REC**
3. Set **TAPE SPEED** to the desired recording speed. Set it to **1.2cm** to double the tape's recording time, or to **2.4cm** for higher quality sound.

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4. Press **REC**. Both **REC** and **PLAY** lock down, and recording begins.

Caution: Do not force down the **REC** button when an erase protection tab is removed or you will damage the recorder. (See "Preventing Accidental Erasure" on Page 41.)

5. Adjust **VOLUME** until the telephone conversation's sound level activates the recorder.

Notes:

- The **VOLUME** 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.

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- The built-in automatic level control 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.
6. Recording stops when the tape reaches the end of the cassette. To stop it sooner, press **STOP/EJ**.

Voice Activated Recording Using the Internal Microphone

1. Load a tape and set **VOX** to **ON**.
2. Set **TEL-PLAY/NOR/TEL-REC** to **NOR**.

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3. Set **TAPE SPEED** to the desired recording speed.
 4. Press **REC** to begin recording.
 5. Adjust **VOLUME** until the sound source starts the recorder.

Notes:

- The built-in automatic level control automatically sets the recording level once recording starts.
 - When the recorder detects no sound for up to 6 seconds, the recorder stops recording until it picks up sound again.
6. Recording stops when the tape reaches the end of the cassette. To stop it sooner, press **STOP/EJ**.

Manual Telephone Recording

1. Load a tape and set **VOX** to **OFF**.
2. Set **TEL-PLAY/NOR/TEL-REC** to **TEL-REC**.
3. Set **TAPE SPEED** to the desired recording speed. Set it to **1.2cm** to double the tape's recording time, or to **2.4cm** for higher quality sound.
4. Press **REC**. Both **REC** and **PLAY** lock down. When you press **REC** down, recording starts and continues until you press **STOP/EJ**.

Caution: Do not force down the **REC** button when an erase protection tab is removed or you will damage the recorder. (See "Preventing Accidental Erasure" on Page 41.)

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5. Rotate **VOLUME** to adjust the recording volume.

Note: To temporarily stop recording, slide **PAUSE** to **ON**. To resume recording, slide **PAUSE** in the opposite direction.

6. Recording stops when the tape reaches the end of the cassette. To stop it sooner, press **STOP/EJ**.

Manual Recording Using the Internal Microphone

1. Load a microcassette tape and set **VOX** to **OFF**.
2. Set **TEL-PLAY/NOR/TEL-REC** to **NOR**.

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3. Set **TAPE SPEED** to the desired recording speed.
 4. Press **REC** to begin recording.
 5. Adjust **VOLUME** between the minimum and mid-range positions for dictation and between the mid-range and maximum positions for recording conferences.

Notes:

- To temporarily stop recording, slide **PAUSE** to **ON**. To resume recording, slide in the opposite direction.
- Place the recorder as close as possible to the sound source. Avoid a position so that large objects are between the sound source and the recorder mic.

6. Press **STOP/EJ** to stop recording.

Recording with an External Microphone

You can use an external microphone to make high-quality recordings. Plug an optional external microphone, available at your local RadioShack store, into the **MIC** jack. The built-in microphone automatically disconnects. Then see "Recording" starting on Page 25.

PLAYING A TAPE

Playing a Phone Conversation Tape

1. Load the tape and set **TEL-PLAY/NOR/TEL-REC** to **TEL-PLAY**.
2. Set **TAPE SPEED** to the speed used to record the microcassette tape.
3. Press **PLAY**. Playback only through the handset begins.

Notes:

- To playback through the speaker, set **TEL-PLAY/NOR/TEL-REC** to **NOR** or **TEL-REC**.
- To temporarily stop play, slide **PAUSE** to **ON**. Move **PAUSE** in the opposite direction to resume play.

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- To go directly from playback to recording, press **REC** then move **TEL-PLAY/NOR./TEL-REC** to **TEL-REC**. Tape play stops and recording starts immediately.
4. Adjust **VOLUME** to a comfortable listening level.
 5. To play the other side of the tape, press **STOP/EJ**, remove and turn over the tape, and re-insert it. Then press **PLAY** again.
 6. Press **STOP/EJ** to stop playback.

Playing a Prerecorded Tape

1. Load a prerecorded tape then set **TEL-PLAY/NOR/TEL-REC** to **NOR** or **TEL-PLAY**.
2. Follow steps 2–6 under “Playing a Phone Conversation Tape” on Page 34.

Using Fast-Forward and Rewind

With the tape stopped, slide **REW/REVIEW** **FAST F/CUE** toward **FAST F/CUE** to wind the tape rapidly forward or toward **REW/REVIEW** to wind the tape backward.

When the microcassette tape reaches the end, press **STOP/EJ** to release **FAST F/CUE** or **REW/REVIEW**.

To quickly locate desired sections of a tape during play, slide the switch towards **FAST F/CUE** or **REW/REVIEW** to hear playback as the tape fast-forwards or rewinds. When you release the switch, normal play resumes. Note the counter position(s) at any point(s) you might want to return to later.

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 **RESET** to set the counter to **000**. As the tape moves, the counter advances.

CARE

To enjoy your RadioShack TRC-300 Voice Activated Microcassette Tele-Recorder for a long time:

- Keep the TRC-300 dry. If it gets wet, wipe it dry immediately.
- Use and store the TRC-300 only in normal temperature environments.
- Handle the TRC-300 gently and carefully. Don't drop it.
- Keep the TRC-300 away from dust and dirt.
- Wipe the TRC-300 with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the TRC-300's internal components can cause a malfunction and invalidate its warranty. If your TRC-300 is not performing as it should, take it to your local RadioShack store for assistance.

TAPE TIPS

Restoring Tape Tension and Sound Quality

After you play a cassette tape several times, the tape might become tightly wound on the 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.

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

Erasing Tapes

To record over a cassette 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 bulk tape eraser (Cat. No. 44-232).

Note: If you use metal or high-bias type tape, the recorded sound might not be erased properly.

Preventing Accidental Erasure

Cassette 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 cassette tape.

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 recorder's performance.

Use the following cleaning procedure after about every 20 hours of operation.

1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door.
3. Use a pointed object to gently push the erase protection tab sensor to the left, then press **REC** to expose the tape-handling parts.
4. Use a swab dipped in tape head cleaning solution or denatured alcohol to gently clean the tape-handling parts. For easier cleaning, use an microcassette cleaner kit which includes a special cleaning cassette.
5. When you finish cleaning, press **STOP/EJ** and close the compartment.

SPECIFICATIONS

Tape System	2 Track Monaural Microcassette
Tape Speed	2.4 cm/sec or 1.2 cm/sec
Recording Time (Total Both Sides)	
MC-60	60 min @ 2.4 cm/sec 120 min @ 1.2 cm/sec
MC-90	90 min @ 2.4 cm/sec 180 min @ 1.2 cm/sec
Wow & Flutter	Less than 0.3% @ 2.4 cm/sec
Erase System	Permanent Magnet
Record System	DC Bias
Power Requirements ...	2 AA Batteries, or AC 120V, 60Hz (with optional AC adapter), or 3 VDC (with optional DC adapter)
Battery Life	
Alkaline Batteries	12 Hours
Dimensions (HWD) ...	5 ¹ / ₂ × 1 ¹ / ₂ × 2 Inches (140 × 38 × 51 mm)

Weight..... 5.8 oz.
(164 g)

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

NOTES

Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year 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. *(Continued)*

(Continued) 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 St.,
6th Floor, Fort Worth, TX 76102

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