



Cat. No. 14-1107A

OWNER'S MANUAL

Please read before using this equipment.

CTR-94

DC Portable Cassette Tape Recorder



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FEATURES

Your Radio Shack CTR-94 DC Portable Cassette Tape Recorder is reliable, easy-to-use, and very handy at home, in your office, in your vehicle, or anywhere you go.

Its features include:

Automatic Stop — protects the tape and tape handling parts by automatically stopping the tape when it reaches the end.

Automatic Level Control (ALC) Circuit — ensures quality recording by automatically setting the proper recording level.

Record/Battery Indicator — flikers during recording and lights steadily when the batteries need replacing.

Built-in Condenser Microphone — gives you high-sensitivity for recording conferences or lectures.

Supplied Earphone — let you listen in privacy.

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Auxiliary Input Jack — lets you connect a radio, tape deck, or CD player so you can record from these external audio sources.

External Microphone Jack — lets you connect an external microphone so you can record an individual but exclude the surrounding noise

Remote Control Jack — lets you connect an external microphone with an on/off switch so you can control the CTR-94 from your microphone.

Erasing Plug — plugs into the external microphone jack so you can erase a cassette tape by recording silence.

Retractable Handle — lets you easily carry the CTR-94.

Three Power Sources — let you power the CTR-94 from four C batteries (not supplied), standard AC power (with an optional AC adapter), or vehicle DC power (with an optional DC adapter).

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PREPARATION

CONNECTING POWER

You can power your CTR-94 from any of these power sources:

- Internal batteries
- Standard AC power (with an optional AC adapter)
- Vehicle battery power (with an optional DC auto adapter)

Note: Connecting an adapter disconnects the internal batteries.

Using Internal Batteries

You can power your CTR-94 from four C batteries (not supplied). For the best performance, we recommend alkaline batteries, such as Cat. No. 23-551.

1. Press down on the battery compartment cover's grooves and slide it off in the direction of the arrow.

Cautions:

- Always dispose of old batteries promptly and properly.
- Never leave dead, old, or weak batteries in the CTR-94.
 Batteries can leak chemicals and corrode or damage electronic circuits.
- If you do not plan to use batteries in the CTR-94 for a month or more, remove the batteries to protect the CTR-94 from possible battery leakage.
- Install the batteries as indicated by the polarity symbols (+ and –) marked inside the battery compartment.

Cautions:

- Use only fresh batteries of the required size and type.
- Never mix fresh and old batteries, or different battery types.
- 4. Replace the cover.

Remove the old batteries (if necessary).

Checking the Battery Condition

To check the battery's condition, press **PLAY**, **REWIND**, or **FAST-F**. If the RECORD/BATTERY indicator lights steadily, the batteries need replacing.

(illus)

 Always plug the adapter into the CTR-94 before you plug it into the AC outlet, and always unplug the adapter from the AC outlet before you unplug it from the CTR-94.

Note: The recorder automatically disconnects internal batteries when you connect an AC adapter.

1. Set the adapter's voltage switch to 6V.

(illus)

Using AC Power

You can also power the CTR-94 from standard AC power using an AC adapter, such as Radio Shack Cat. No. 273-1662 (not supplied).

Cautions:

- The recommended adapter supplies 6 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the CTR-94's **DC 6V** jack. Using an adapter that does not meet these specifications could seriously damage the CTR-94 or the adapter.
- 2. Insert the adapter's green-tipped barrel plug into the adapter's cord so it reads TIP-NEG.

(illus)

 Plug the adapter's barrel plug into the DC 6V jack on the left side of the CTR-94.



4. Plug the other end of the adapter into a standard AC outlet.

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Using Vehicle Battery Power

You can also power the CTR-94 from your vehicle's battery using an auto DC adapter (such as Radio Shack Cat. No. 14-844, not supplied) that connects to your vehicle's cigarettelighter socket.

Cautions:

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- The recommended DC adapter supplies 6 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the recorder's DC 6V jack. Using an adapter that does not meet these specifications could seriously damage the recorder or the adapter.
- Always plug the adapter into the recorder before you plug it into the cigarette-lighter socket, and always unplug the adapter from the cigarette-lighter socket before you unplug it from the recorder.
- 1. Set the DC adapter's voltage switch to 6V.

(illus)

2. Insert the DC adapter's blacktipped barrel plug into the adapter's cord so it reads TIP-NEG.

(illus)

3. Insert the adapter's barrel plug into the CTR-94's **DC 6V** jack.



 Plug the adapter's larger plug into the vehicle's cigarette lighter socket.

CONNECTING AN EARPHONE

For private listening, you can use the supplied earphone. Insert the earphone's $\frac{1}{8}$ -inch plug into the EAR jack.



Note: Connecting the earphone automatically disconnects the built-in 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 the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- 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 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.

OPERATION

LOADING A CASSETTE

1. Take up any slack in the tape by turning one of the cassette's hubs with a pencil.

(illus)

PLAYING A TAPE

Warning: To protect your hearing, set **VOLUME** to its lowest setting before you begin playing a cassette tape.



- 1. Load a prerecorded cassette tape into the compartment.
- Press PLAY. The cassette plays until it reaches the end of the side, then it automatically stops and PLAY releases.



Notes:

- Press PAUSE to temporarily stop playback. To resume playback, press PAUSE again.
- Press FAST-F or REWIND to rapidly wind the tape forward or backward. To resume play, press STOP/EJECT then PLAY.
- The cassette automatically stops when the tape reaches the end only in the PLAY or RECORD modes, and not in the FAST-F or REWIND modes.



Caution: If you do not remove

excess slack, the tape might get

tangled in the record/playback

3. Load the cassette with its open edge toward the controls, the desired side facing up, and its full reel on the left.

(illus)

4. Close the door.

- 3. Adjust **VOLUME** to the desired listening level.
- 4. Press **STOP/EJECT** to completely stop playback before it automatically stops. Press **STOP/EJECT** again to open the cassette compartment and remove the cassette.

RECORDING

Notes:

- Before you load a cassette tape for recording, be sure the cassette's erase-protection tabs are in place (see "Preventing Accidental Erasure").
- The CTR-94's Automatic Level Control (ALC) circuit automatically adjusts the recording level.
 VOLUME has no effect on recording.

Using the Built-In Microphone

The built-in condenser microphone is a high-sensitivity microphone that easily picks up sounds, near or far. This is handy for recording conferences or lectures.

- Load a blank cassette tape, or one you want to record over, into the cassette compartment.
- 2. Place the recorder 2 or 3 feet from the recording source.

 Press RECORD to begin recording. Both PLAY and RECORD lock down.



4. Speak into MIC.



Note: To temporarily stop recording, press **PAUSE**. To resume recording, press **PAUSE** again.

Press STOP/EJECT to stop recording.

Using an External Microphone

You can connect an external microphone with a $1/_8$ -inch plug to the recorder. This is handy for when you want to record only an individual's voice and exclude all other sounds in the surrounding area. Your local Radio Shack store carries a wide variety of external microphones.

Note: Connecting an external microphone automatically disconnects the built-in condenser microphone.



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- Load a blank cassette tape, or one you want to record over, into the cassette compartment.
- 2. If the external microphone has only a ¹/₈-inch plug, insert it into the recorder's **MIC** jack.

					$\equiv D$
EAR	AUX	REM	MIC	MIN – VOLUME – MAX	
0	0	0	0		

If the external microphone has two plugs and an on/off switch, you can remotely control the CTR-94 from your microphone. Insert the microphone's ¹/₈-inch plug into the recorder's **MIC** jack, and the smaller plug into the **REM** jack.

3. Press **RECORD** to begin recording. Both **PLAY** and **RECORD** lock down.

Note: To temporarily stop recording, press **PAUSE** on the recorder (or **OFF** on the microphone). To resume recording, press **PAUSE** again on the recorder (or **ON** on the microphone).

- 4. Speak into the external microphone.
- 5. Press **STOP/EJECT** to stop recording.

Recording from an External Audio Source

You can record directly from an external audio source, such as a radio, tape deck, or CD player, using a suitable patch cord (not supplied) with a 1/8-inch plug.

Note: Before you connect an external audio source to the recorder, be sure the source's and the recorder's volume controls are set to their minimum setting.

- Load a blank cassette tape, or one you want to record over, into the cassette compartment.
- 2. If you connected an external microphone, disconnect it.
- Connect your external audio source to the AUX jack, using an optional patch cord with a ¹/₈inch plug at one end and the appropriate plug at the other end that matches your audio source's output jack.



 Start the sound source and set its volume to a normal listening level.

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Note: During recording, the speaker is muted. If you want to monitor the recording, use the supplied earphone.

5. Press **RECORD** to begin recording. Both **PLAY** and **RECORD** lock down.

Note: To temporarily stop recording, press **PAUSE**. To resume recording, press **PAUSE** again.

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

Important: Most material on prerecorded tapes is copyrighted. Unauthorized duplication of copyrighted material is a violation of the copyright laws of most countries and such duplication may result in fines and/or imprisonment. Note, however, that in the United States, it is not a violation of U.S. copyright laws for a consumer to use an audio recording device to duplicate musical recordings for noncommercial (personal) use.

TAPE TIPS

Recommended Tapes

Tape quality greatly affects the quality of the recording. We recommend extended-range or low noise Type 1 regular length (60- or 90-minute) normal-bias cassette tapes. We do not recommend long-play cassette tapes such as C-120s because they are thin and easily tangle.

Erasing a Cassette Tape

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

To erase a cassette tape, insert the supplied erasing plug into the **MIC** jack and press **RECORD**.



Note: Be sure you have not connected anything to the **AUX** jack.

If you need to erase an entire cassette, you might prefer using a bulk tape eraser, which is available at your local Radio Shack store.

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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 protect a recording from being accidentally recorded over or erased, use a screwdriver to remove one or both of the cassette tape's eraseprotection tabs. This prevents **RECORD** from being pressed.

(illus)

If you later decide to record on a tape side after you have removed the erase-protection tab for that side, 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.

(illus)

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

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.



MAINTENANCE

Your Radio Shack CTR-94 DC Portable Cassette Tape Recorder is an example of superior design and craftsmanship. The following suggestions will help you care for your CTR-94 so you can enjoy it for years.



Keep the CTR-94 dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Handle the CTR-94 gently and carefully. Dropping it can damage circuit boards and cases and can cause the CTR-94 to work improperly.



Use and store the CTR-94 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.



Keep the CTR-94 away from dust and dirt, which can cause premature wear of parts.



Wipe the CTR-94 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CTR-94.

Modifying or tampering with the CTR-94's internal components can cause a malfunction and might invalidate your CTR-94's warranty. If your CTR-94 is not performing as it should, take it to your local Radio Shack store for assistance.



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CLEANING THE TAPE-HANDLING PARTS

Dirt, dust, or particles of the tape's coating can accumulate on the tape heads and other parts the tape touches. This can greatly reduce the cassette recorder's performance.

To prevent noise and poor high-frequency response, clean the cassette recorder's tape-handling parts after every 20 hours of use.

Note: Your local Radio Shack store carries a complete line of cassette cleaning supplies.

- 1. Remove the batteries and disconnect any other power source.
- 2. Open the cassette compartment cover.
- 3. Press **PLAY** to expose the tapehandling parts.

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4. tape head cleaning solution or denatured alcohol to gently clean the capstan, pinch roller, tape head, and tape guides.

(illus)

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

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CASSETTE PLAYER

Track System	2-Track Monaural
Tape Speed	4.76 cm/sec
Recording System	Magnetic Erase, AC Bias
Frequency Response	125–6.3 kHz ±6 dB
Signal-to-Noise Ratio	55 dB
Wow and Flutter	0.35%

GENERAL

Power Requirements	DC 6V
	Four C Batteries (Cat. No. 23-551/651)
	AC Adapter (Cat. No. 273-1662)
	DC Auto Adapter (Cat. No. 14-844)
Dimensions (HWD)	
	(45 ¥ 145 ¥ 245 mm)
Weight (without batteries)	1.75 lb.
	(794 g)

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

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RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 90 days from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

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

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