

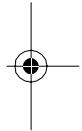
Cat. No. 14-728

OWNER'S MANUAL

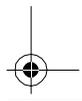
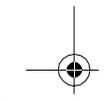
Please read before using this equipment.

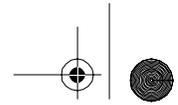


4-Band Portable Radio Cassette Recorder
with Multi-Voltage Selection



Radio Shack





FEATURES

Your Radio Shack CTR-98 4-Band Portable Radio Cassette Recorder with Multi-Voltage Selection is a versatile, easy-to-use music system with many useful features. You can enjoy the radio or cassette player's high quality sound, record from the radio, or make a live recording. Listen to shortwave broadcasts wherever you are in the world.

The CTR-98's compact design and carrying handle let you take it almost anywhere.

Its features include:

Automatic Level Control — automatically adjusts the recording level so you do not need to adjust the volume.

Automatic Stop — automatically stops the tape and turns off power when it reaches the end during playback, recording, fast-forward, or rewind to conserve power and protect the motor.

Dual-Source Recording — lets you record from the radio or use the built-in microphone to make a live recording.

Soft Cassette Tape Eject — softly opens the cassette compartment cover so the cassette does not pop out.

One-Touch Recording — lets you start recording quickly and easily.

Earphone Jack — lets you connect an optional earphone so you can listen in privacy.

Two Power Sources — let you power the CTR-98 from internal batteries or AC power.

Multi-Voltage Selector Switch — lets you use your CTR-98 virtually anywhere in the world.

Warning: To prevent fire or shock hazard, do not expose this system to rain or moisture.

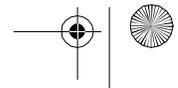
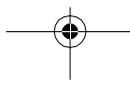
	RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		

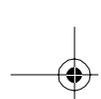


This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the system's enclosure that might be of

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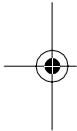




sufficient magnitude to constitute a risk of electric shock. Do not open the system's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this system.



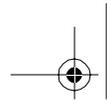


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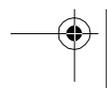
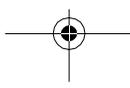
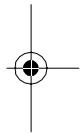
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POWER SOURCES



You can operate the CTR-98 using internal battery power or the supplied AC power cord.

INSTALLING BATTERIES

You can power the CTR-98 from four D batteries (not supplied). For the best performance, we recommend alkaline batteries, such as Radio Shack Cat. No. 23-550.

1. Press the battery compartment cover's tabs and pull out the cover to remove it.

Cautions:

- Always dispose of the old batteries promptly and properly.
- Never leave dead, old, or weak batteries in the CTR-98. They can leak chemicals and corrode or damage electronic circuits.
- If you do not plan to use batteries in the CTR-98 for a month or more, remove the batteries to protect the CTR-98 from possible battery leakage.

USING AC POWER

You can power the CTR-98 from standard AC power using the supplied AC power cord.

Use a flatblade screwdriver to set **VOLTAGE SELECTOR** 120V/OFF/230V to the correct setting (120V in North America).

2. Install the batteries as indicated by the polarity symbols (+ and -) marked above the compartment.

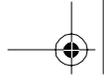
Cautions:

- Use only fresh batteries of the required size and type.
- Never mix fresh with old batteries.

3. Replace the cover.

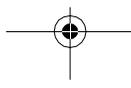
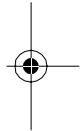
If the CTR-98 does not operate properly or if the sound weakens or distorts, replace the batteries.





Insert the AC power cord's receptacle into the AC ~ IN jack on the back of the CTR-98, then plug the AC power cord into a standard AC outlet.

Note: The internal batteries automatically disconnect when you connect the AC power cord to the CTR-98.





USING AN EARPHONE



For private listening, you can connect a monaural earphone (not supplied) with a 1/8-inch plug to the CTR-98. Your local Radio Shack store carries a wide selection of earphones.

Insert the earphone's 1/8-inch plug into the EAR jack on top of the CTR-98.

Note: Connecting an earphone automatically disconnects the built-in speaker.

LISTENING SAFELY

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

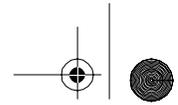
- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over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





RADIO OPERATION

Warning: To protect your hearing, set VOLUME to MIN before you turn on the radio.

1. Set FUNCTION to RADIO to turn on the radio.
2. Set BAND to FM, AM, SW1, or SW2 for the desired band.

Notes:

- The AM antenna is built in. For the best AM reception, rotate the CTR-98.
- For the best FM and SW reception, fully extend the telescoping antenna and swivel it to the position that produces the best reception.
- If you tune to a shortwave station, adjust FINE TUNING for the best reception.



Note: Select SW1 or SW2 for shortwave signals.

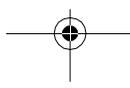
3. Adjust VOLUME to the desired listening level.

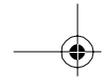
5. Adjust TONE for the desired bass/treble sound. Turn it toward LOW to enhance the bass sound, or toward HIGH to enhance the treble



4. Adjust TUNING to the desired station.

6. Set FUNCTION to RADIO OFF/TAPE to turn off the radio.





CASSETTE PLAYER OPERATION



LOADING A CASSETTE TAPE

1. Take up any slack in the tape by turning the cassette's hub with a pencil. If you do not remove excess slack, the tape might become tangled in the record/playback mechanism.
2. Press STOP/EJECT to open the cassette compartment door.



3. Load the cassette with its open edge facing up, its full reel to the right, and the side you want to play facing you.
4. Gently close the compartment door.

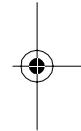
PLAYING A CASSETTE TAPE

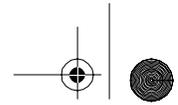
Warning: To protect your hearing, set VOLUME to MIN before you begin playing a cassette tape.

1. Set FUNCTION to RADIO OFF/TAPE.
2. Load a cassette tape.
3. Press PLAY. The cassette plays until it reaches the end of the side, then the recorder automatically stops it.

Notes:

- Press PAUSE to temporarily stop playback. Press PAUSE again to resume playback.
 - Press FAST-F or REWIND to rapidly wind the tape forward or backward. Press STOP/EJECT, then PLAY to resume play.
4. Adjust VOLUME and TONE to the desired listening levels.
 5. Press STOP/EJECT to completely stop playback before it automatically stops. Press STOP/EJECT again to open the cassette compartment and remove the cassette tape.





RECORDING

You can record from the radio, or use the built-in microphone to make a live recording.

Notes:

- Before you load a cassette tape for recording, be sure the erase-protection tabs are in place on the cassette tape you are recording onto (see "Preventing Accidental Erasure").
- The CTR-98's Automatic Level Control (ALC) automatically adjusts the recording level. The VOLUME setting has no effect on recording.

Caution: Do not force down RECORD. This can damage the record mechanism.

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

6. Press STOP/EJECT to stop recording.

RECORDING FROM THE RADIO

1. Load a blank cassette tape or one you want to record over into the cassette compartment.
2. Set FUNCTION to RADIO.
3. Set BAND to FM, AM, SW1, or SW2.
4. Adjust TUNING to the station you want to record.

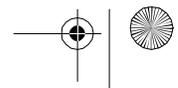
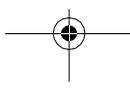
Note: Adjust FINE TUNING if you tune to a shortwave station.

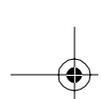
5. Press RECORD to begin recording. Both PLAY and RECORD lock down.

MAKING LIVE RECORDINGS

Follow these steps to make live recordings using the built-in microphone.

1. Set FUNCTION to RADIO OFF/TAPE.
2. Load a blank cassette tape or one you want to record over into the cassette compartment.
3. Place the CTR-98 2 or 3 feet from the recording source.



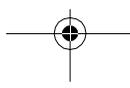
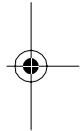


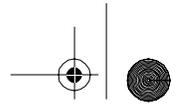
-
4. Press RECORD to begin recording. Both PLAY and RECORD lock down.

Caution: Do not force down RECORD. This can damage the record mechanism.

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

5. Press STOP/EJECT to stop recording.





CARE AND MAINTENANCE

Your Radio Shack CTR-98 4-Band Portable Radio Cassette Recorder with Multi-Voltage Selection is an example of superior design and craftsmanship. The following suggestions will help you care for your CTR-98 so you can enjoy it for years.



Keep the CTR-98 dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Handle the CTR-98 gently and carefully. Dropping it can damage circuit boards and cases and can cause the CTR-98 to work improperly.



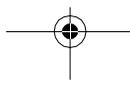
Use and store the CTR-98 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.



Keep the CTR-98 away from dust and dirt, which can cause premature wear of parts.

Wipe the CTR-98 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CTR-98.

Modifying or tampering with the CTR-98's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your CTR-98 is not performing as it should, take it to your local Radio Shack store for assistance.





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.

Notes:

- You must set **FUNCTION** to **RADIO OFF/TAPE** and the unit must be placed in a very quiet room.
- You can quickly erase both sides of a cassette tape using a bulk tape eraser such as Cat. No. 44-232, available at your local Radio Shack store.

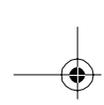
Preventing Accidental Erasure

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 **RECORD** from being pressed and protect a recording from being accidentally recorded over or erased, remove one or both of the cassette tape's erase-protection tabs.

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.





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.

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 cassette player's performance.

To prevent noise and poor high-frequency response, follow these steps to clean the cassette player's tape handling parts after 20 hours of use.

1. Set FUNCTION to RADIO OFF/TAPE.
2. Remove the batteries and disconnect the AC power cord.

3. Open the cassette compartment cover.

4. Press and hold down the erase-protection tab sensor, then press RECORD to expose the record/playback and erase heads.

5. Use a cotton swab dipped in tape head cleaning solution or denatured alcohol to gently clean the capstan, pinch roller, and tape head.

Note: Your local Radio Shack store sells a complete line of cassette cleaning kits.



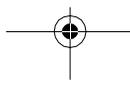
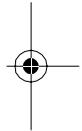


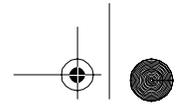
THE FCC WANTS YOU TO KNOW

This equipment complies with the limits for a Class B digital device as specified in Part 15 of FCC Rules. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause radio or TV interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the radio or TV's receiving antenna.
- Increase the distance between the CTR-98 and the radio or TV.
- Connect your CTR-98 to an AC outlet that is on a different electrical circuit from either the radio or TV's receiver.

Consult your local Radio Shack store if the problem still exists.





SPECIFICATIONS

RADIO

Frequency Range FM — 88-108 MHz

AM — 530-1710 kHz

SW1 — 2.3-7.0 MHz

SW2 — 7.0-22.0 MHz

Antenna FM/SW Telescoping

Antenna

AM Ferrite Rod

CASSETTE PLAYER

Track System 2 Track Mono Tape

Speed $1\frac{7}{8}$ inches/second

Recording System DC Bias, Magnet Erase

Frequency Response at -3 dB 125-8,000 Hz

Wow and Flutter 0.3% (WRMS)

GENERAL

Power Requirements 120 Volts AC, 60 Hz

230 Volts AC, 50 Hz

6 Volts DC (4 D Batteries)

Power Consumption 8W

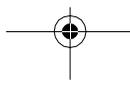
Dimensions $5\frac{9}{16}$ x $12\frac{1}{4}$ x $5\frac{1}{8}$ Inches (HWD)

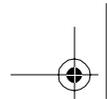
(130 x 300 x 98 mm)

Weight 4 lbs 6.5 oz.

(2 Kg)

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





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.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

~~This warranty gives you specific legal rights and you may also~~



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