

TEXAS INSTRUMENTS **COMPACT
PROGRAM
RECORDER
USER'S GUIDE**



Introduction

The versatility of your Compact Computer 40^{PLUS} can be greatly expanded by adding a device that enables you to store and retrieve data (programs, numerical data, etc.). The TI Compact Program Recorder is one of the most economical ways to equip your CC-40^{PLUS} for program storage and

file processing. This booklet explains the features and care of your Compact Program Recorder. For information and examples on how to use your recorder with your CC-40^{PLUS}, refer to Appendix L of the *Compact Computer 40^{PLUS} User's Guide*.

By recording programs and data on the TI Compact Program Recorder, model CPR-001, you are saving them as a permanent record. Later you can load the data from the cassette tape into the computer's memory and use that information again. Many preprogrammed software packages enable you to store and retrieve data you have used or developed while using them.

The Compact Program Recorder can also be used as a standard cassette recorder. The built-in condenser microphone enables you to record music, voice, or other sound as you desire. You can play your own recordings or prerecorded tapes using the control buttons while the computer is not attached.

The TI Compact Program Recorder's features include:

- Reliable loading, storage, and retrieval of data on audio cassette tapes
- Variable volume control with preferred setting indicator
- Digital counter with reset for program location
- Power source flexibility—AC adapter (included) or four "AA" batteries (not included)

The Compact Program Recorder can be powered by an AC adapter or batteries. Your CC-40^{PLUS} does not supply power to run the recorder. Connect the AC adapter to the recorder to operate it from household outlets, or install four "AA" batteries to operate it from battery power.

AC Adapter Operation

1. Plug the 9404 AC adapter into the "DC 6V" jack on the left side of the unit.
2. Plug the opposite end into a standard 110-120 V outlet. Battery power is automatically shut off when the AC adapter is plugged into the recorder.
Note: The AC adapter does not recharge the batteries.

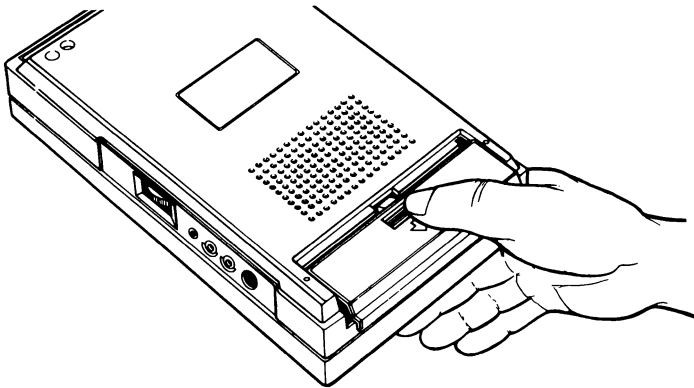
Battery Operation

Note: For battery-powered operation, the adapter must be disconnected from the recorder.

Important: Remove the batteries when storing the recorder for more than a few weeks at a time. Battery leakage can severely damage the unit.

1. Locate the battery door on the back of the unit.
2. Place your thumb in the recess on the door and press in the direction indicated by the arrow until the door is released.
3. Insert four "AA" carbon zinc or alkaline batteries (not included) into the battery compartment. Be sure that the positive (+) or cap ends of each battery are oriented as shown inside the battery compartment.
4. Replace the battery door.

Note: If the tape reels turn very slowly or not at all, or if the CC-40^{PLUS} develops problems reading or loading data, check the system with a new set of batteries or with a new cassette tape.



Control Buttons

1. **STOP/EJECT**—Press the STOP/EJECT button lightly to stop a record, play, fast forward, or rewind operation. To open the cassette compartment door for insertion or removal of the cassette tape, press the STOP/EJECT button lightly to stop any recorder operations, release the button, and then press it all the way down.

Note: Always push the STOP/EJECT button before storing the recorder to relieve pressure on certain parts in the recorder that can be damaged if left under constant pressure for long periods of time.

2. **RECORD**—Press the RECORD button to record data or a program. The PLAY button moves automatically when the RECORD button is pressed.
3. **PLAY**—Press the PLAY button to load data into the computer's memory.
4. **REW/REVIEW**—Press the REW/REVIEW button to rewind the tape to the beginning of a program or to the beginning of the tape. When the desired position is reached, press the STOP/EJECT button lightly.

5. **FF/CUE**—Press the FF/CUE button to skip quickly over portions of the tape. When the desired position is reached, press the STOP/EJECT button lightly.

6. **PAUSE**—Press the PAUSE button to stop the tape in the record or the play mode. To continue operation, press the button again. The PAUSE button is used to stop the tape temporarily when the recorder is in these modes. **Note:** Make sure that the PAUSE button is in its upper position while loading or saving data.

Cassette Tape Insertion

To insert a cassette into your recorder, follow these simple steps:

1. Press the STOP/EJECT button completely down to open the cassette compartment door.
2. Turn the cassette so that the full reel of tape is on your left and the exposed tape is facing you (tape movement for normal record and play functions is from left to right). Insert the cassette into the tabs on each side of the door.
3. Close the cassette compartment door.

Volume Setting

For most computer operations, adjust the volume control to the middle of its range. This is the preferred setting for proper data transmission.

Digital Counter

The digital counter indicates relative position on a tape. To use the digital counter most effectively, ensure that the counter begins incrementing at the beginning of the tape. Each time you insert a tape, rewind it to the beginning and depress the small reset button next to the digital counter to set the counter to zero. Then use the FF button to wind the tape to the desired position as indicated by the number on the digital counter.

Built-In Condenser Microphone

The built-in condenser microphone allows you to record sound when the recorder is not attached to your CC-40^{PLUS} (the microphone is automatically disconnected when the computer is attached). Simply insert a cassette tape, position the tape to the area where you wish to record, and depress the RECORD button. Place the microphone portion of the recorder as close to the source of the sound as is convenient. The volume is automatically adjusted for optimum recording, regardless of volume setting. To stop recording, press the STOP/EJECT button lightly.

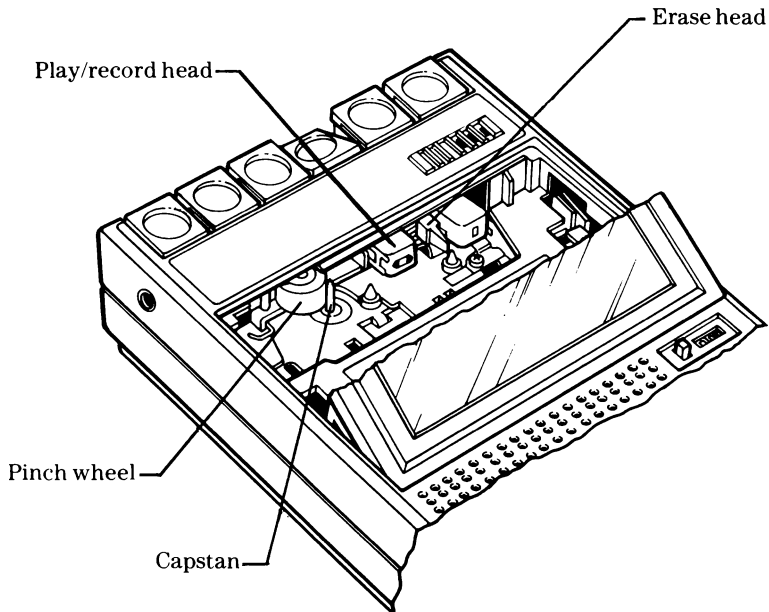
Care of the Compact Program Recorder

The Compact Program Recorder is a reliable device. You can ensure optimum performance by observing the following maintenance and care procedures.

Cleaning the Tape Heads

To ensure quality recording and playback of data, clean the play/record head and the erase head of the recorder periodically (after every 30 to 40 hours of use or more often if needed). In time, iron oxide particles build up on the parts that come in contact with the tape.

These deposits sometimes prevent automatic stop at the end of the tape. They can also cause incomplete erasure of data and distort data transfer between the CC-40^{PLUS} and the recorder.



Use the following procedure to clean the tape heads and capstan.

Caution: Unplug the recorder from the AC adapter and remove the batteries before cleaning.

1. Press STOP/EJECT to open the cassette compartment door.
2. Press the PLAY button so the play/record and erase heads project outward into the compartment.
3. Wipe the play/record and erase heads gently with a soft cloth or cotton swab moistened with rubbing alcohol. Also wipe the pinch wheel and capstan.
4. Close the cassette compartment door and press the STOP/EJECT button lightly.

General Care

1. Use the AC adapter whenever possible. This helps to lengthen battery life.
2. Regularly clean the outer case of the Compact Program Recorder with a damp cloth.
3. Do not allow liquids to spill into the recorder.
4. Do not place objects on top of the recorder.
5. Do not place tension on the AC adapter cable or the Cassette Interface Cable.

In Case of Difficulty

If the Compact Program Recorder does not appear to be working properly, check the following items.

1. **Power**—Be sure all devices are plugged in and connected properly.
2. **Cassette Interface Cable**—Check to see that the proper cable is being used. Check the cable for loose or broken leads. Check to see that the cable is properly connected.
3. **Volume Control Setting**—Verify that the volume control setting is correct. See “Volume Setting.”
4. **Cassette Tape**—Make sure that you are using high-quality tape that is in good condition. The tape should not be longer than C-60 (30 minutes per side). Make sure that the tabs on the back of the cassette are intact.
5. **Magnetic Fields**—Check to see that the Compact Program Recorder and the cassette tape are located more than two feet from a monitor, a television set, an electric motor, or any other source of strong magnetic fields (to avoid accidental erasure of your data).
6. **Location**—Make sure that the system (CC-40^{PLUS} and Compact Program Recorder) is not located on a continuous metallic surface (to minimize conducted noise).
7. **Device or Filename**—Be sure that you refer to your Compact Program Recorder as required by your CC-40^{PLUS} system when you load or save data. Refer to the *Compact Computer 40^{PLUS} User's Guide*.
8. **Tape Heads**—Verify that the tape heads are clean. See “Cleaning the Tape Heads.”
9. **PAUSE Button**—Check to see that the PAUSE button is off (in its upper position) when you are saving or loading data.

Service and Warranty Information

If You Have Questions or Need Assistance

If you have questions concerning repair of your Compact Program Recorder, or if you wish to make peripheral or software purchases and are unable to find these items locally, please call Customer Relations at (800) TI-CARES (toll free within the contiguous United States). From outside the contiguous United States, call (806) 741-4800. We regret that we cannot accept collect calls at this number.

For technical questions, such as programming information, specific applications, etc., you can call (806) 741-2663. Please note that this is not a toll-free number, and collect calls cannot be accepted at this number.

As an alternative, you can write to:

Consumer Relations
Texas Instruments Incorporated
P.O. Box 53
Lubbock, Texas 79408

Customer Service Centers (Local Service Option)

If your Compact Program Recorder requires service, instead of returning the unit to a service facility for repair or replacement, you may elect to exchange the unit for a factory-reconditioned unit of the same model (or equivalent model specified by Texas Instruments) by taking the recorder to one of the Customer Service Centers located throughout the United States. A handling fee will be charged by the Customer Service Center for in-warranty exchanges of the Compact Program Recorder. Out-of-warranty exchanges will be made at the rates in effect at the time of the exchange.

To determine if there is a Customer Service Center in your area, look for Texas Instruments Service Center in the white pages of your telephone directory, or look under one of the following two headings in the yellow pages: "Calculating & Adding Machines & Supplies" or "Computers—Service and Repair." Please call the Customer Service Center for availability and exchange fee information. You may write or call Consumer Relations for further details and the location of the nearest Customer Service Center.

Customer Service Centers (Mail-in Service Option)

You may also mail your recorder to one of the Customer Service Centers. TI recommends that you call the center to check the availability of exchange models prior to sending the unit. A mail-in service fee will be charged in addition to the exchange fee in effect at time of receipt.

Mail-in Information

The P.O. box number listed for the Lubbock Service Facility is for United States parcel post shipments only. If you desire to use another carrier, the street address is:

Texas Instruments Incorporated
2305 North University Avenue
Lubbock, Texas 79415

For your protection, the recorder should be sent insured. Texas Instruments cannot assume any responsibility for loss or damage to uninsured shipments.

Please include information concerning the difficulty experienced with the recorder, and be sure to include your return address—name, address, city, state, and zip code. The shipment should be carefully packaged and adequately protected against shock and rough handling. If you use the original packing material to ship the recorder for service, the packing material may not be returned.

Three-Month Limited Warranty

This Texas Instruments Compact Program Recorder warranty extends to the original consumer purchaser of the accessory.

Warranty Duration

This Compact Program Recorder is warranted for a period of three (3) months from the date of the original purchase by the consumer.

Warranty Coverage

This Compact Program Recorder is warranted against defective materials or workmanship. **This warranty is void if the accessory has been damaged by accident, unreasonable use, neglect, improper service or other causes not arising out of defects in materials or workmanship.**

Warranty Disclaimers

Any implied warranties arising out of this sale, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the above three-month period. Texas Instruments shall not be liable for loss of use of the hardware or other incidental or consequential costs, expenses, or damages incurred by the consumer or any other user.

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you in those states.

Legal Remedies

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

Warranty Performance

During the above three-month warranty period, your Compact Program Recorder will be repaired or replaced with a new or reconditioned unit of the same or equivalent model (at TI's option) when the unit is returned by prepaid shipment to a Texas Instruments Service Facility listed below. The repaired or replacement unit will be warranted for three months from date of repair or replacement. Other than the postage requirement, no charge will be made for the repair or replacement of in-warranty units. Out-of-warranty items are serviced for the service fee in effect at the time of repair or replacement.

Texas Instruments strongly recommends that you insure the unit for value prior to shipment.

Texas Instruments Consumer Service Facilities

U.S. Residents

Texas Instruments Service Facility
2305 North University
P.O. Box 2500
Lubbock, Texas 79408

Canadian Residents

Geophysical Services Incorporated
41 Shelley Road
Richmond Hill, Ontario, Canada
L4C5G4

Customers in California and Oregon
may contact the following Texas
Instruments offices for additional
assistance or information:

Texas Instruments Consumer Service
831 South Douglas Street
El Segundo, California 90245
(213) 643-7403

Texas Instruments Consumer Service
6700 Southwest 105th
Kristin Square, Suite 110
Beaverton, Oregon 97005
(503) 643-6758



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