

Owner's Manual

COMPUTER PROGRAM DATA RECORDER AC/DC



IMPORTANT INFORMATION REQUIRED BY FEDERAL COMMUNICATIONS COMMISSION CONCERNING RADIO FREQUENCY INTERFERENCE

Home computers and peripheral equipment generate and use radio frequency (RF) energy. If not installed and used properly (as outlined in the instructions provided by Emerson Radio and the manufacturer of your computer), this equipment may cause interference to radio and television reception.

This equipment has been type-tested and found to comply with the limits for a class B computing device in accordance with the specifications in subpart J of part 15 of FCC rules. These rules are designed to provide reasonable protection against radio and television interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception (which you can determine by turning the equipment off and on), try to correct the interference by one or more of the following measures:

- * Reorient the receiving antenna (that is, the antenna for the radio or television that is 'RECEIVING' the interference).
- * Change the position of the computer with respect to the radio or television equipment that is receiving interference.
- * Move the computer away from the equipment that is receiving interference.
- * Plug the computer into a different wall outlet so that the computer and the equipment receiving interference are on different branch circuits.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also the Federal Communications Commission has prepared a helpful booklet: 'HOW TO IDENTIFY AND RESOLVE RADIO TV INTERFERENCE PROBLEMS'. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Please specify stock number 004-000-00345-4 when ordering copies.

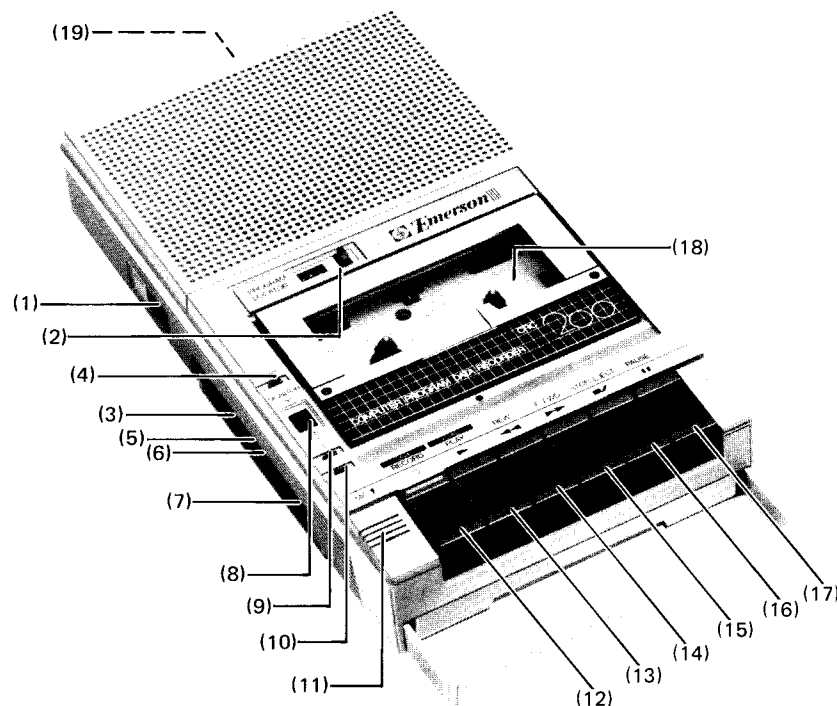


Emerson®

MODEL CRC-200

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

LOCATION OF THE CONTROLS



- (1) AC INPUT JACK
- (2) HIGH SPEED PROGRAM LOCATER (counter)
- (3) EARPHONE (LOAD OUTPUT) JACK
- (4) PLAY (GREEN) LED INDICATOR
- (5) EXTERNAL MICROPHONE (SAVE INPUT) JACK
- (6) ON/OFF REMOTE SWITCH JACK
- (7) VOLUME CONTROL WITH INDEXING NUMBERS
- (8) MONITOR SWITCH
- (9) MONITOR (GREEN) LED INDICATOR
- (10) RECORD (RED) LED INDICATOR
- (11) BUILT-IN MICROPHONE
- (12) RECORD/SAVE BUTTON
- (13) PLAY/LOAD BUTTON
- (14) REWIND BUTTON
- (15) FAST-FORWARD BUTTON
- (16) STOP/EJECT BUTTON
- (17) PAUSE BUTTON
- (18) CASSETTE DOOR
- (19) BATTERY COMPARTMENT
(located on the bottom/rear of the unit)

Before operating this high quality unit, please read the Operating Manual thoroughly so that you can obtain the maximum enjoyment from it. This manual should be retained for future reference and used to answer your operational questions as they arise.

MODEL # _____ SERIAL NUMBER # _____

CAUTION: To avoid possible damage to the components, do not leave the unit exposed to direct sunlight or close to heat, places subject to constant vibration or humid or moist places.
Do not open the casing. Refer to qualified personnel only.

FEATURES

REMOTE CONTROL JACK

To plug a cable with 2.5 mm plug (not included) to a computer with AUTO/START features to stop the motor at loading/saving modes. Can also be used to plug an external Dynamic microphone with built-in ON/OFF REMOTE switch to record voices.

VOLUME CONTROL

This control is used to adjust the overall sound level and the output level for loading program data to a Computer.

Indexing numbers for easy adjustment of the output signal to load program data.

NOTE: When loading signal to a computer, start by indexing number 5 of this control. Adjust the Volume control until the computer loads the program, and note this number for future loading.

MONITOR SWITCH

The monitoring and the ALC (automatic level control) are activated and deactivated by sliding the MONITOR switch as noted in the chart:

Position of switch	Monitoring sound	ALC
on	activated	deactivated
off	deactivated	activated

NOTES: 1) When saving program, set the MONITOR switch to ON position.

2) When loading program data, the signal tone is heard if the MONITOR switch is in ON position to easily locate program data.

HIGH SPEED PROGRAM LOCATOR (TAPE COUNTER)

For indexing or locating program data at loading or saving operation.

After fully rewinding the tape, press the RESET button to set the LOCATOR to 000 reading. At saving program data, take note of the number at the beginning of each number. At loading, press the FAST-FORWARD button until the noted number appears on the LOCATOR (counter) window.

EXTERNAL MIC JACK

To plug a cable having a 3.5 mm plug to save program data from a Computer (not included). Can also be used to plug a Dynamic microphone (not included) to record voices. The Built-in Microphone is disconnected automatically when a plug is inserted into this jack.

AUTOMATIC LEVEL CONTROL (ALC)

This Program Data Recorder has built into its circuitry an automatic level control (ALC) for recording, which is electronically adjusted when the MONITOR is set at OFF position.

EARPHONE JACK

To plug a cable having a 3.5 mm plug to load program data into a computer (not included). Can also be used to plug an Earphone (not included) for private listening when playing back music or voices.

REMOTE CONTROL JACK

To plug a cable having a 2.5 mm plug (not included) to a computer with auto STOP/START feature to control the motor at loading or saving mode.

Can also be used for an external microphone with built-in Power Switch to record voices.

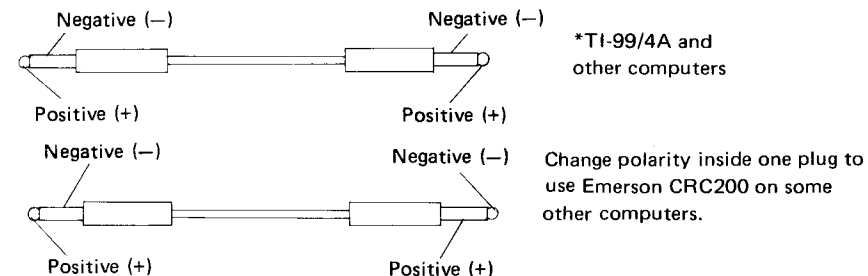
NOTE: The polarity of the REMOTE POWER JACK is (—)⊙(+) (positive center pin, negative outside).

If a computer with a built-in START/STOP cassette feature is used, check the Owner's Manual for the correct polarity of the Output jack.

It may be necessary to change the polarity of the Remote Power cable as shown below.

NOTE: Computer *TI-99 (TEXAS INSTRUMENT) with built-in START/STOP feature does not necessitate such a change, since this computer has the same polarity as EMERSON CRC-200.

The Cassette Interface cable used on *TI-99 computer is available separately.



RECORD/SAVE BUTTON

To save program data from a computer.

PLAY/LOAD BUTTON

To load program data into a computer.

REWIND BUTTON

To rapidly wind tape backward.

FAST-FORWARD BUTTON

To rapidly advance tape forward.

STOP/EJECT BUTTON

To stop tape at loading or saving mode and open cassette door compartment or eject cassette tape.

PAUSE BUTTON

To stop tape momentarily at loading or saving program data. Press it again to continue the operation.

*TI-99 is a TRADEMARK OF TEXAS INSTRUMENT CORP.

INSTALLATION

This unit is designed to be operated from two different type power sources as listed below:

A) BATTERY

Uses four type "C" batteries. (not included)

NOTE: Be sure the AC CORD (described below) is not plugged into the EXTERNAL AC JACK because it activates a special switch which disconnects the battery from the unit.

TO INSTALL THE BATTERIES. (Use of heavy duty batteries is recommended)

Open the Battery compartment, located on the bottom of the unit, by pressing the latch in the direction of the arrow.

Insert four (4) "C" size batteries by following the shape of the batteries printed on the bottom of the unit.

B) HOUSEHOLD AC CURRENT

Connect one side of the cord set (included) into the closest household outlet having a 120 Volts 60 Hz source. Plug in the other end of the cord into the AC Jack located on left side of the cabinet.

NOTE: Battery power will automatically be disconnected when the AC cord is plugged into the AC Jack.

CAUTION: WEAK OR DEAD BATTERIES MAY LEAK AND CORRODE THE UNIT. WHEN THIS UNIT IS NOT USED FOR LONG PERIODS OF TIME. REMOVE THE BATTERIES AND DISCONNECT THE UNIT FROM THE AC OUTLET.

TO LOAD THE CASSETTE COMPARTMENT

Open the Cassette Compartment by pressing the STOP/EJECT button (see Fig. 5).

Insert the Cassette Tape into the Compartment, with the open surface side facing outward and the emptiest reel to the side pointed by the arrow printed on the Compartment Door (see Fig. 1).

Gently close the compartment door.

OPERATION

TO SAVE PROGRAM DATA FROM A COMPUTER

Plug in a cable having a 3.5 mm plug into the MIC/SAVE JACK to the output jack on the computer.

Load the CASSETTE DOOR with a blank cassette tape (use cassette tape recommended by computer manufacturer), rewind the tape if necessary, and press the HIGH SPEED PROGRAM LOCATOR button to reset 000 reading.

Press PAUSE button (see Fig. 2), if computer does not have automatic START/STOP feature.

Press RECORD/SAVE and PLAY/LOAD buttons simultaneously until both keys remain engaged. The RECORD and PLAY LED's will glow (see Fig. 3).

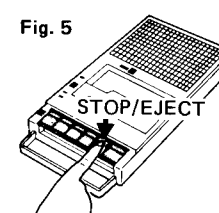
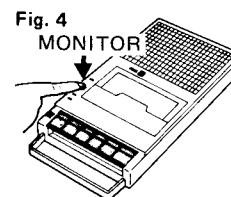
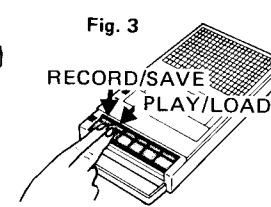
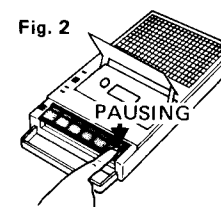
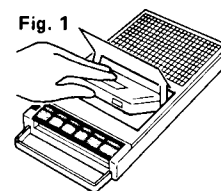
Set MONITOR switch to ON position. When saving signal from a computer, start by indexing number 5 on the volume control.

Adjust the control until the CRC-200 saves the program data, and note this number for future saving.

The unit is ready to save program data from your computer.

Press PAUSE button again to start saving Program data and proceed to operate your Computer by following the manufacture's operations.

To stop saving Program Data before the tape reaches the end, press the STOP/EJECT button.



TO LOAD PROGRAM DATA INTO YOUR COMPUTER

Plug in a cable with a 3.5 mm plug into the EARPHONE/LOAD JACK to the input jack on your computer (not included).

Load the cassette door with a pre-programmed tape, rewind the tape if necessary, and press the HIGH SPEED PROGRAM LOCATOR button to reset it at 000 reading. Set the volume control by indexing number 5 to start loading program data. Adjust the control until the program data is loaded into the computer and note this number for future loading. Press PAUSE button, if it is necessary.

Press PLAY/LOAD button, the PLAY LED will light up (see Fig. 3).

Press PAUSE button again to start loading program data.

To stop loading before the tape reaches the end or computer end loads the program data, press the STOP/EJECT button (see Fig. 5).

TO RECORD VOICES OR LIVE PROGRAMS

To record voices thru the Condenser mic, remove all plug(s) from the unit and proceed as is instructed in TO SAVE PROGRAM DATA SECTION (set MONITOR switch to OFF position).

Talk toward the unit from a distance approx. 18" (45 cm).

To play back the voices recorded, proceed as is instructed in TO LOAD PROGRAM DATA.

Adjust the VOLUME control to a desired level.

NOTE: When recording voices from built-in mic with the MONITOR switch at ON position, a squeal sound may be heard. To prevent this, set the MONITOR Switch to OFF position, or use an external microphone.

ERASURE OF RECORDED PROGRAM DATA

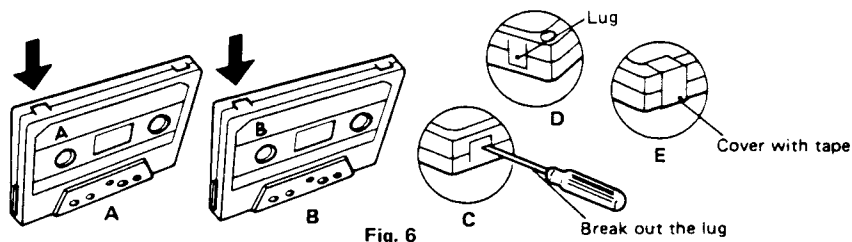
When new program data is recorded, any material previously saved on that portion of the tape is automatically erased, and only the new recording remains.

SAFEGUARD AGAINST ACCIDENTAL ERASING

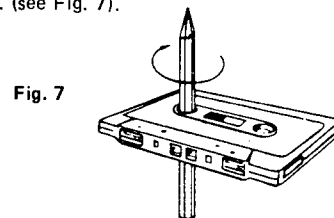
To prevent valuable recorded program data from being erased accidentally, the cassette tape and recorder are equipped with a special device. On the back of the cassette tape on either side are two lugs. To avoid erasing saved program data, break out these lugs with a screwdriver or a knife etc. (see Figs. 6 C and D).

If only a track is to be protected, break out the lug on the left side of the side "A" or "B" of the cassette tape (see Figs. 6 A and B).

When the lug is broken out the RECORD/SAVE button cannot be depressed.
To save program data on a cassette tape in which the lugs have been broken, place a piece of adhesive tape over that area (see Fig. 6 E).



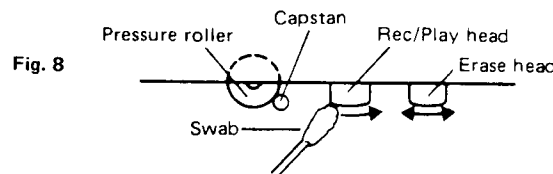
If there is any slackness of tape in the cartridge, this should be removed before inserting the cassette tape. To do so, insert a pen or pencil in one of the hubs, rotate toward the outside of the cartridge until all slack is taken out. (see Fig. 7).



CARE AND MAINTENANCE

Keep this unit away from excessive Heat, Dust, Humidity and/or Shocks.
To clean the case use a cloth dampened with soapy water. Do not use chemical fluid, like benzine, thinner etc.
Periodic cleaning of the Heads and capstan is necessary to maintain good recording and playing sound. The buildup of iron oxide particles which is often even more severe with inferior tapes, will reduce the performance of the tape. It is recommended that after every 100 hours of use or more often if recording or playing has deteriorated.
To clean the heads and capstan, use a cotton swab moistened with Head Cleaner solution or alcohol, then wipe dry (see Fig. 8), or use a Cassette Tape Cleaner, available in Record Shops.

CAUTION: Never use any metal object on or near the tape heads.
Do not allow any cleaning material to fall into the Tape Mechanism.



SHOULD THIS UNIT EXHIBIT A TROUBLE SYMPTOM, CHECK THE FOLLOWING BEFORE SEEKING SERVICE

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Does not save program data from computer.	Plug not connected in proper jack. Cable open. Volume control or monitor switch not in proper setting.	Recheck plug connection and cable. Check position of volume control or monitor switch.
LOADING PROGRAM DATA TV set does not display program data.	Plug not connected in proper jack. Volume control at minimum position. No recorded program data on tape. Improper recording level.	Recheck plug connection and jack. Check indexing or volume control. Check pre-saved tape. Adjust volume control.
RECORDING VOICES Squeal sound when recording from built-in condenser mic. No recording voices thru condenser mic.	Monitor switch is at ON position. Plug plugged into the ext mic jack.	Monitor switch should be at OFF position, or use external microphone remove plug.
PLAY BACK PRE-RECORDED VOICES No sound.	Plug plugged into earphone jack. Volume control at minimum position. No recording on tape.	Recheck earphone jack, and volume control setting. Try another tape.
GENERAL Tape does not run.	Battery weak or installed improperly. Plug plugged into the REMOTE JACK. AC cord not connected to either AC jack or AC outlet. Automatic stop feature on computer activated.	Check batteries remove plug from remote jack. Recheck AC cord connections. Check computer owner's manual.

*****CONSUMER LIMITED WARRANTY POLICY*****

Emerson Radio Corp. warrants this product to be free from defects in material and workmanship under normal use and conditions for a period of 90 days from the date of original purchase.

Should service be necessary for any reason due to manufacturing defect or malfunction during the warranty period Emerson Radio Corp. will repair or replace at its discretion, the defective merchandise at no charge (except for a small charge for handling, packing, return postage and insurance), upon delivery of this product to the Factory Service Center with a copy of proof of purchase date.

Before returning the merchandise for service, verify that the batteries (if unit is DC operated) are in proper operating condition. Weak or defective batteries are common causes of problems encountered. Should service still be required:

- a) Remove the batteries (if applicable) and carefully pack the unit along with all its accessories in a suitable well padded corrugated box.
- b) Enclose copy of proof of date of purchase.
- c) Enclose your check or money order payable to Emerson Radio Corp. for the sum of \$3.50.
- d) Ship the unit via UPS or Parcel Post Insured to the Factory Service center (listed below).

NOTE: This warranty does not cover: —

- a) Units that have been misused or damaged by accident.
- b) Units that have been repaired or altered by persons other than Emerson Radio Corp. Factory Service Center.
- c) Damages caused by leaking batteries.
- d) Tape Head cleaning or damaged Tape Cartridges.

This warranty is valid only in the United States of America and does not extend to owners of the products subsequent to the original purchaser. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of 90 days from the date of original purchase at retail and no warranties, whether expressed or implied, shall apply to this product thereafter. Under no circumstances shall Emerson Radio Corp. be liable by any loss or damage, direct or consequential arising out of the use of or inability to use this product. (Some states do not allow limitation or implied warranties or exclusion of consequential damage, therefore these restrictions may not apply to you).

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

Emerson Radio Corp.
Service Department
10465 Arminta Street
Sun Valley, Calif. 91352
213-875-2332

Emerson Radio Corp.
Service Division
One Emerson Lane
Secaucus, N.J. 07094
201-865-4343
