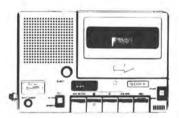
SONY



CASSETTE-CORDER

# TC-150



# **Operating Instructions**

- Before operating the set, please read this manual thoroughly.
- This manual should be retained for future reference.

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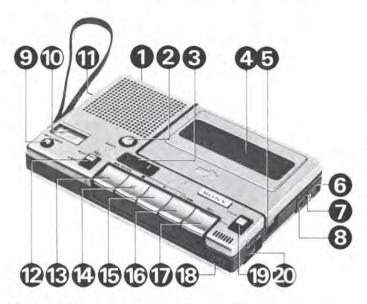
#### **FEATURES**

- Ultimate recording simplicity—merely insert a cassette and depress a single button.
- Automatic shut-off mechanism in the record and playback mode.
- · Recording level can be controlled automatically.
- Cue and review function to quickly locate any desired portion of the tape.
- Counter-inertial flywheels for stable tape speed.
- Instant tape stop switch.
- Built-in Electret Condenser Microphone.
- Four-way power source operation: batteries, ac power with Sony AC Power Adaptor (supplied), Sony Rechargeable Battery Pack BP-28 (optional), or 12 V car battery with Sony Car Battery Cord DCC-127H (optional).

#### **PRECAUTIONS**

- Do not open the cabinet. Refer servicing to qualified personnel only.
- Operate the set only on 6 V dc. For operation from house current, use the ac power adaptor supplied with this set. For car battery operation, use the car battery cord recommended for this set. Do not use any other ac power adaptor or car battery cord.
- Disconnect the ac power adaptor from the ac wall outlet when the set is not to be used for an extended period of time.
- When the set is not to be used for a long period of time or is operated for long periods on other power sources, remove the batteries to avoid set damage from battery leakage.
- Do not install the set in a location near heat sources such as radiators or airducts, or in a place subject to direct sunlight, excessive dust, moisture, rain or mechanical shock.
- Should any liquid or solid object fall into the mechanism, remove the batteries and disconnect the ac power adaptor, and have the set checked by qualified personnel before operating it any further.
- Keeping the tape heads in a clean condition is essential to the proper operation of the recorder. For cleaning information, refer to page 16.
- The REC button cannot be depressed in the following cases.
   Never depress the button forcibly.
- · No cassette in the cassette compartment.
- · The cassette inserted has had the tabs removed.
- The ►, ►► or ◄◄ button has been depressed.
- If you have any question or problem concerning your set that is not covered in this booklet, please consult the nearest Sony Service Station authorized to service tape recorders (in U.S.A.) or the nearest Sony Factory Service Station (in CANADA).

# LOCATION AND FUNCTION OF CONTROLS



Battery Compartment (rear): See page 6.

@ EJECT Button: Depress to pop up the cassette, after opening the lid.

Tape Counter and Reset Button: Use the counter for indexing the tape contents. Before recording, set the counter to 000 by pushing the Reset Button. The figures of the counter change as the tape passes. Make a note of the figures and the program being recorded. Later on, the desired program can be rapidly located by using the ▶ or ◄ button.

Gassette Compartment Lid and Catch: Open the lid by lifting the Catch.

 EARPHONE Jack: For private listening with an earphone or connecting to another tape recorder.

• REMOTE Control Jack: For remote stop/start operation during recording or playback by connecting the Sony Remote Control RM-15 (optional), Foot Switch FS-6 (optional), or a Sony two-pin plug microphone.

 To stop the tape for an extended time, use the ■ button on the recorder.

Microphone Input Jack MIC: For recording with an external microphone, or from a TV, radio, telephone or another tape recorder.

Battery Check Button [BATT CHECK]: While recording depress
the button and observe the REC/BATT meter to check the battery
condition. See page 7.

n Record/Battery Meter [REC/BATT]: While recording, the pointer swings to indicate the input sound signal. In the other modes, it shows the battery condition.

 $\textcircled{\textbf{0}}$  External Power Input Jack [DC IN 6 V]: For operation from an external power source.

P Record Music Speech Selector REC MUSIC SPEECH

MUSIC: use for music recordings. This switch position partially retains the dynamic range of musical sounds.

SPEECH: use for recording conversation or telephone recordings. This position keeps loud and quiet sounding voices at nearly the same level.

Rewind/Review Button [ ◄ REVIEW]: Depress to rewind the tape. For review function, refer to page 11.

Stop Button =: Depress to stop the tape and to release the locked buttons.

Playback Button >: Depress to play back the tape.

⊕ Fast Forward Cue Button CUE ►► : Depress to rapidly advance the tape. For cue function, refer to page 11.

@ Record Button REC Depress to record.

 It is possible to record with the REC button and ► button locked, but this is not necessary with the single-button recording system of the TC-150.

Built-in Microphone

Instant Stop Switch START STOP: For instant tape stop during playback or recording.

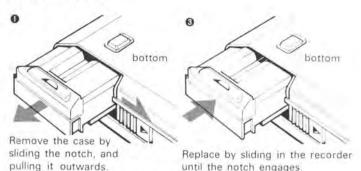
 $\bullet$  To stop the tape for an extended time, use the  $\blacksquare$  button on the recorder.

When using a microphone with a remote tape stop start capability or a remote control switch, the Instant Stop Switch is not operative.

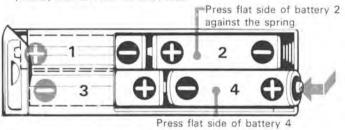
@ Playback Volume Control PB VOL \_\_\_: Turn in the arrow direction for more volume during playback.

#### POWER SOURCES

# Batteries Battery installation:



Insert four batteries size AA in the case with correct polarity and in order as illustrated.



 Make sure that the ac power adaptor and optional car battery cord are disconnected from the recorder. If not, the set cannot be operated on the internal batteries.

against the battery 3.

 When the set is not to be used for a long period of time or is to be operated extensively on other power sources, remove the batteries to avoid set damage caused by battery leakage and corrosion. Battery life: About 2.5 hours of continuous recording from the Built-in Microphone is possible using Sony Super Batteries size AA. Intermittent use will prolong the useful battery life.

To check battery condition: During recording, observe the REC/BATT meter deflection by depressing the BATT CHECK button. During the other modes, observe the meter deflection while depressing the ▶, ▶▶, or ◄ button. If the pointer of the meter stays out of the green zone, replace all the batteries with new ones.

 Before critical recordings, checking the batteries in recording mode is recommended.



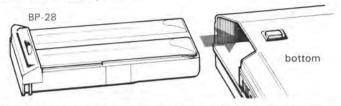
#### House Current

Insert the supplied AC Power Adaptor into the recorder DC IN 6 V jack, and connect the other end to a wall outlet (120 V). When the ac power adaptor is connected to the DC IN 6 V jack, the internal batteries are automatically disconnected.



# Rechargeable Battery Pack

Install the Sony Rechargeable Battery Pack BP-28 (optional) instead of the Battery Case.



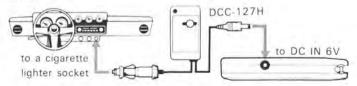
The fully charged BP-28 allows approx. 3.5 hours of continuous recording from the Built-in Microphone.

Before using, charge the battery pack as follows:

- 1 Install the BP-28 in the Battery Compartment,
- a Connect the supplied AC Power Adaptor to the recorder DC IN 6 V jack and to a suitable outlet. Charging will begin.
- Charging time is about 4.5 hours.
- The recorder can be operated while charging, although more charging time will be needed.
- When charging is completed, remove the ac power adaptor to avoid overcharging the battery pack.
- While the voltage of the rechargeable battery pack can be checked in the same way as for regular batteries, this is not a reliable index of the remaining operating life, since a nickel-cadmium battery will furnish a nearly constant voltage up to the end of its capacity, and then drop quickly to a low value. Keeping a record of the time in actual use is the most reliable measure of remaining battery life when using nickel-cadmium batteries.

#### 12 V Car Battery

Using the Sony Car Battery Cord DCC-127H (optional), connect the recorder DC IN 6 V jack to the cigarette lighter socket of a car. For further details, refer to the instruction manual of the DCC-127H.

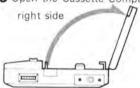


#### CASSETTE INSERTION

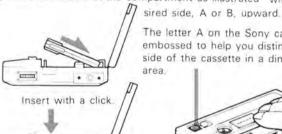


Before inserting a cassette, take up any slack in the tape by inserting a thick pencil into the hub of the cassette and turning it a few times.

1 Open the Cassette Compartment Lid by lifting the Catch.



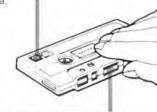
2 Place a cassette in the compartment as illustrated with the de-

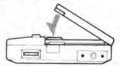


The letter A on the Sony cassette is embossed to help you distinguish that side of the cassette in a dimly lighted



O Close the lid

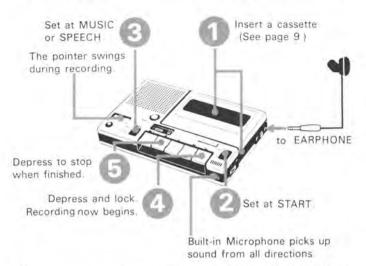




Avoid touching the tape surfaces.

- · Make sure that the portion of the tape to be played back or recorded is wound onto the left reel. If not, depress the ◀◀ button to rewind the tape and stop the tape with the button.
- To take out the cassette, open the lid and press the EJECT button.

#### RECORDING FROM THE BUILT-IN MICROPHONE



- No recording level adjustment is necessary with the automtic recording level control system.
- The sound to be recorded can be heard through the earphone. The sound volume and tone quality are fixed.
- At end-of-tape, the tape motion stops automatically and the locked button is released.
- If you use the Tape Counter for indexing tape contents, set the counter to 000 before recording.
- If the recording is not completed by the end of one side, press the **b**utton, take out the cassette, turn the cassette over and repeat the recording procedures.
- To hear the just recorded program, press the → button to rewind the tape, stop with the ■ button and depress the ➤ button.

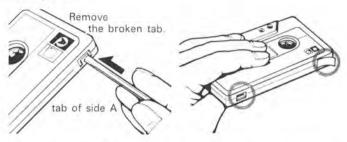
To prevent accidental erasure: When the recorder is operated in the record mode, previous recordings are automatically erased. For this reason cassettes incorporate a convenient safety device to prevent accidental erasure. When the small tabs at the rear of a cassette are broken out, a safety device on the recorder will be activated, preventing recording.

To protect side A recording, break out the tab on that side. For the protection of side B, break out the tab of side B.

When the cassette is inserted with the tabs broken out, the REC button cannot be depressed.

To reuse a cassette for recording after the tabs have been removed, simply cover each slot with a small piece of cellophane or vinyl tape.

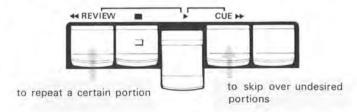
 Do not stick any material on any part of the cassette except the circled portion.



Automatic shut-off mechanism: In record or playback mode, tape motion stops automatically at end-of-tape and the locked buttons will return to their original position.

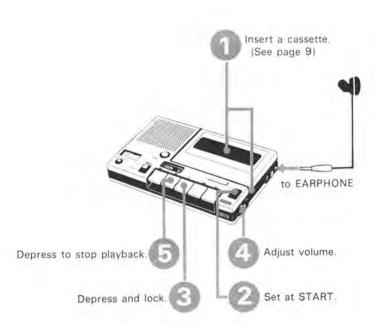
● In fast forward or rewind mode, you must depress the ■ button at end-of-tape to stop the mechanism.

CUE and REVIEW functions: It is possible to advance the tape rapidly or to rewind during playback without releasing the locked button.



The tape will move rapidly with a chattering sound from the recorded part. At the desired portion, release the CUE ➤ or ◄ REVIEW button and the recorder will revert to the playback mode.

#### PLAYBACK



- At end-of-tape during playback, the tape motion stops automatically and the locked button is released.
- For private listening, plug the earphone into the EARPHONE jack. The speaker is automatically disconnected.

#### RECORDING FROM VARIOUS SOUND SOURCES



right side of the TC-150

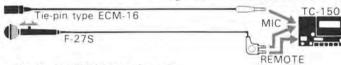
Various sound sources can be connected to the proper TC-150 jack on the right side by using an appropriate optional connecting cord. Before proceeding with

the recording, check the following points and illustrations. If your radio, TV, etc. is not a Sony product, refer to the instruction manual of that set.

• The sound to be recorded can be heard through the earphone.

#### Recording with an external microphone:

Plug into MIC or MIC and REMOTE



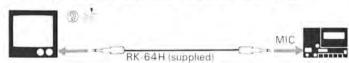
Set the TC-150 in record mode.

• The Built-in Microphone is disconnected automatically.

 A dual-pin plug microphone provides a remote tape stop/start facility.

 The REMOTE jack is flexibly mounted in order to allow easier insertion of the plug.

# Recording from a TV equipped with an earphone jack:



- Tune in the desired TV program and adjust it to a normal listening level.
- Set the TC-150 in record mode.

#### Recording from a radio or TV equipped with a recording jack:



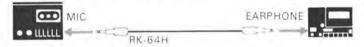
- Tune in your desired radio or TV program. Its volume or tone control has no effect on the recording.
- Set the TC-150 in record mode.

# Duplicating from another tape recorder:



- Set another tape recorder in playback mode and adjust it to a normal listening level.
- Set the TC-150 in record mode.

#### Duplicating to another tape recorder:



- Set the TC-150 in playback mode and adjust it to a normal listening level.
- Set the other tape recorder in record mode.

#### Recording telephone conversation:



- Locate a position on the telephone base where recording is loudest and attach the TP-5S\* there.
- Keep magnetized objects away from the TP-5S.
- Set the REC MUSIC/SPEECH selector to SPEECH.
- Set the TC-150 in record mode.

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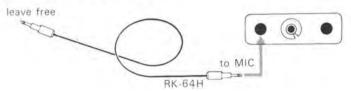
\* The TP-5S is not available in Canada.

#### **ERASING WITHOUT RECORDING**

A cassette can be erased without adding a new recording as follows:

- Insert the cassette with the side to be erased up.

  If the tab on the cassette is removed, cover the slot of the side to be erased.
- Insert the plug of the Connecting Cord RK-64H (supplied) in the
   MIC tack. The other plug of the cord should be left free.
- @ Depress and lock the REC button. Erasing now begins.
- When erasure is completed, depress the button.
- After erasing, be sure to disconnect the cord plug.
- For quick and easy erasing of entire cassettes, without unnecessary wear on the recorder, the Sony Cassette Eraser BE-7H is available as an optional accessary.

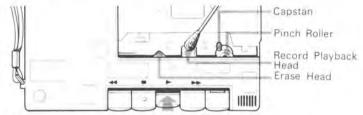


#### MAINTENANCE

#### Cleaning the Heads

Keeping the tape heads in a clean condition is essential to the proper operation of the recorder. Accumulation of dust and tape oxides on the heads will result in sound drop-outs, a loss of high frequencies and excessive tape wear.

- Open the Cassette Compartment Lid. Remove the cassette, if present.
- ② Depress the ► button to move the heads out for easier access.
- Moisten the Head Cleaning Tip (supplied) or a soft cloth with denatured alcohol, and gently wipe the heads, Capstan and Pinch Roller over which the tape travels.
- Avoid catching the cotton between the Pinch Roller and Capstan.
- Depress the button to release the ► button.
- Do not insert a cassette if the heads are protruding.
- Do not insert a cassette before the alcohol drys on the cleaned parts.



#### Demagnetizing the Head

Accidental contact with a piece of magnetized steel (screwdriver, scissors, etc.) will magnetize the Record/Playback Head causing an increase in tape noise. In such an event, demagnetize the head using a commercially available head demagnetizer.

- When demagnetizing, remove the batteries and disconnect the ac power adaptor.
- Be careful not to demagnetize the Erase Head.

#### Cleaning the Cabinet

Clean the cabinet with a soft cloth moistened with water or a mild detergent solution. Do not use solvents such as alcohol, benzine, or thinner as they may mar the finish of the cabinet.

#### SPECIFICATIONS

Power requirements 120 V ac, 60 Hz with the Sony AC Power

Adaptor AC-9W (supplied with USA model) or AC-9 (supplied with Canadian model) 6 V dc, four batteries size AA (IEC Designa-

tion R 6)

Rechargeable Battery Pack BP-28 (optional) or 12 V car battery with Sony Car Battery

Cord DCC-127H (optional)

Power consumption 6 W ac (60 Hz)

(with the ac power adaptor)

Power output 360 mW (max.) dc
Speaker 5 cm (234 inches) dia.
Recording system 2-track 1-channel monaural

Tape speed 4.8 cm/s (17/8 ips)

Fast winding time Approx. 1 min. 50 sec. with Sony Cassette

C-60

Frequency response 90 - 10,000 Hz

Input Microphone input.....1 (minijack)

sensitivity 0.2 mV (-72 dB) for low impedance microphone

Output Earphone output.....1 (minijack)

8-ohm earphone or load impedance

10 kilohms or higher

Other jack Remote control jack.....1

Battery life Approx. 2.5 hours of continuous recording

from the built-in microphone with Sony Su-

per Batteries, size AA

Dimensions Approx.  $174 \times 29.5 \times 113 \text{ mm (w/h/d)}$ 

(67/8×13/16×41/2 inches)

(not incl. projecting parts and controls)

Weight Approx. 760 g (1 lb 11 oz)

Accessories supplied Demonstration cassette, AC Power Adaptor

AC-9W (for USA model), AC-9 (for Canadian model), Earphone ME-21, Connecting Cord RK-64H, Head Cleaning Tip (1 set),

Carrying Case

Design and specifications subject to change without notice.

#### **OPTIONAL ACCESSORIES**

AC Power Adaptor AC-9W (for USA model)
AC-9 (for Canadian model)

Rechargeable Battery Pack BP-28

Car Battery Cord DCC-127H

Dynamic Microphone F-27, F-27S (S type has a remote stop start switch)

Electret Condenser Microphone ECM-16, ECM-200, ECM-200S

Remote Control RM-15

Foot Switch FS-6

Telephone Pickup TP-5S (not available in Canada)

Connecting Cord RK-64H

Connecting Cord RK-69H

Cassette Eraser BE-7H

Continued trouble-free operation of any tape recorder is dependent on the quality of the cassettes used in conjuction with it. The use of Sony cassettes is recommended for high quality recordings and trouble-free operation.

#### TROUBLESHOOTING GUIDE

Should any trouble occur with the TC-150, make the following simple tests to determine whether or not servicing is required. If the trouble persists after you have made these tests, consult the nearest Sony dealer for further information.

#### Cassette cannot be inserted.

- Cassette is being inserted improperly. See page 9.
- The ► button is depressed.

# The REC button cannot be depressed.

- No cassette in the Cassette Compartment.
- The protective tabs have been removed from the cassette. See page 11.
- The ▶, ▶▶. or ◄◄ button is depressed.

#### The REC or ▶ button cannot be locked.

The tape is completely wound onto the right reel.

#### The tape does not move.

- Incorrect polarity of batteries.
- · Weak batteries.
- The ac power adaptor is not connected (on ac operation).
- The ac power adaptor is connected to the set (on battery operation).
- . The Instant Stop Switch is set to STOP.
- The external microphone is connected with the remote switch on the microphone OFF.

#### No sound from the speaker.

- The earphone is plugged in.
- The PB VOL control is turned down completely.

#### Weak or distorted sound.

Weak batteries.

#### Sound drop-outs or excessive noise.

- Dirty heads. See page 16.
- Magnetized head, See page 16.

# Tape speed is too slow.

Weak batteries.

#### Recording cannot be made or is unsatisfactory.

- Improper procedure or connection. See page 13.
- Weak batteries.
- Dirty Record/Playback Head. See page 16,

# Unsatisfactory erasing.

• Dirty Erase Head. See page 16.

# TAPE

# TALK



- A-B TEST....Direct comparison of sound quality between hi-fi components accomplished by switching from one to another.
- ACOUSTIC FEEDBACK.... The howling caused when a microphone picks up vibrations from its own speaker system.
- AMPLIFY.... To increase levels, as with a volume control.
- ATTENUATE.... To decrease levels, as with a volume control.
- **AUTOMATIC SHUT-OFF....** A special switch on a tape recorder which automatically stops the machine when the tape breaks or runs out.
- AZIMUTH ADJUSTMENT.... The adjustment to position the head gap exactly perpendicular to the horizontal base of the tape.
- **BAFFLE....**The panel to which most speakers are mounted, usually the front panel of an enclosure.
- BIAS.... A high frequency alternating current fed into the recording circuit and used as a carrier of the audio signals to the record head, as well as current to the erase head.
- channel recorded is heard only through one ear.

  (Channel 1—left ear, and Channel 2—right ear.)

- **BINAURAL MONITOR JACK....** Output jack of tape recorder wired to accept binaural earphones.
- **BULK ERASER....** A strong alternating electro-magnetic device used to erase the magnetic patterns on tape while still wound on a reel, or in bulk form.
- capstan....The rotating shaft which engages the tape and pulls it across the heads at constant speed.
- cathode follower....The type of electronic circuit used in an output stage of a recorder to permit the use of longer interconnecting cables without the loss of high frequency. Usually not necessary in a normal installation.
- CHANNEL....Complete sound or signal path of a sound system.
- CHASSIS....The metal base of frame which carries the electrical or mechanical assemblies.
- CPS....Cycles per second.
- channels. (sound) leakage between two
- intensity. One dB is the smallest change in sound volume that the human ear can detect.
- **DISTORTION...** Any difference between the original sound and the recorded and reproduced sound.

- **DUAL TRACK RECORDER....**Type of monophonic recorder which records or plays back half of a standard 1/4" tape in one direction and the other half in the opposite direction.
- DUBBING.... The art of duplicating on tape.
- **DYNAMIC MICROPHONE**....An electro-magnetic type which employs a moving coil in the magnetic field.
- **DYNAMIC RANGE....** The ratio between the softest and loudest sounds a tape recorder can reproduce without distortion.
- **EDITING....**Selection of certain sections of tape recordings and the deletion of unwanted portions and then splicing them together in the desired sequence.
- **EQUALIZATION**....The manipulation of frequencies that are required to meet the recognized standards of recording and reproducing techniques.
- **ERASE HEAD....** The magnetic assembly on a tape recorder over which the tape passes to remove previously recorded signals.
- FAST FORWARD....Provision in a tape recorder to run tape rapidly forward through the machine for quick selection of desired portion.
- **FEED REEL....**The reel on a tape recorder which supplies the tape.

- FLAT RESPONSE.... Any audio system is specified as having an essentially flat frequency response if it is rated plus or minus 3 db from 50 to 14,000 cps.
- FLUTTER.... Very short and rapid variations in tape speed.
- **FOOT SWITCH....** A mechanical foot pedal for stopping and starting a tape recorder without the use of hands.
- FREQUENCY....The rate of repetition in cycles per second (cps) of musical pitch, as well as of electrical signals. Low frequencies refer to bass tone, high frequencies to treble tone.
- FREQUENCY RESPONSE.... (See Flat Response.)
- FM "Frequency Modulation"....FM broadcasting is characterized by wide range audio response and a great deal of freedom from noise.
- FM STEREO....Also known as multiplexing. A form of FM broadcasting in which two channels of audio signals are transmitted on the same carrier, offering a signal similar to the stereo available from stereo records and tapes.
- **GAIN....**The increase in signal provided by an amplifier between input level and output level.
- **GAP....**The tiny distance between the poles of tape heads usually measured in microns.

- GROUND....A point in any electrical system that has zero voltage, usually the chassis of any electrical component.
- **HEAD....**An electro-magnetic device across which the tape is drawn and which magnetizes the iron oxide coating of tape.
- **HEAD ALIGNMENT....** In tape recorders, the correct position of the tape head and gap, with respect to the magnetic tape.
- **HEADPHONES....** Small sound reproducers in a suitable frame for wearing about the head. Close coupled to the ears for private listening.
- **HUM....**Low frequency noise in an audio component usually induced from the power line or stray magnetic fields.
- Hz .... Hertz: cycles per second.
- IHF.... The Institute of High Fidelity, the official association of the manufacturers and certain related organizations in the high fidelity field.
- IMPEDANCE.... Measured in ohms, it is the AC resistance of any electrical system. Generally referred to as either "high" or "low" impedance. For best results in connecting two components, output and input impedances must match.

- IN-LINE HEADS.... Arrangement of stereophonic heads on a tape recorder in which the head gaps are mounted one directly above the other. Also called "stacked heads".
- **INPUT....** The receptacle or jack through which a signal is fed into an amplifier.
- IPS.... Abbreviation for tape speed in inches per second.
- INVERTER....A device to change one type of electrical current to another. Frequently used to obtain 110 volts alternating current for operation of a tape recorder in an automobile.
- JACK....Receptacle or plug connector leading to the input or output circuit of a tape recorder or other component.
- ing is being made and serves as a warning against under recording or over recording. It may be in the form of a neon bulb, "Magic Eye" or a VU meter.
- LOUDNESS CONTROL....Sometimes known as "contour".

  Compensates for loss of tones at the extreme end of the audio range when listening at soft volumes or through small speakers. A typical control of this sort will usually boost the bass.

- MAGNETIC TAPE.... Usually 1/4" plastic tape which has been coated with an emulsion of iron oxide particles. Used on tape recorders as the recording media and is the highest fidelity of reproduction possible today.
- MIL....1/1,000 of an inch. Tape thickness is usually measured in mils.
- MIXER.... A device by which signals from two or more sources can be combined and fed simultaneously into a tape recorder at the proper level and balance.
- **MIXING....**The blending of two or more signals for special effects.
- MONITOR HEAD.... The head on a tape recorder which, when connected to the proper circuitry, makes it possible to listen to the material directly off the tape while the recording is being made.
- **MONOPHONIC RECORDER....** Sometimes incorrectly called monaural recorder. It is capable of only one channel recording.
- MULTIPLEX . . . . (see FM Stereo.)
- NAB CURVE....Standard playback equalization curve set by the National Association of Broadcasters.

- oscilloscope.... A device which forms a graphic representation of an electrical signal on a screen (cathode ray tube). Used for testing and measuring of electrical and electronic equipment (tape recorders).
- OUTPUT....The signal voltage coming from components, such as pre-amplifiers and amplifiers. In tape recorders, there are line outputs, speaker outputs and monitor outputs.
- OXIDE.... As used in magnetic tape—a microscopic ferrous oxide.
- PATCH CORD.... A short cable with a plug at either end used to interconnect equipment, such as tape recorders and amplifiers.
- PHASING....The proper polarity orientation of the two speakers used in stereo playback; proper phasing would be, for example, the ground connection being common to both speakers.
- PINCH ROLLER (Pressure Roller)....A rubber roller which engages the capstan and pulls the tape with constant speed and prevents slippage.
- **PLAYBACK....**Reproduction of the sound previously recorded on the tape.
- **PLAYBACK HEAD....**The magnetic head which picks up signals from tape for playback.

- PLUG.... A form of mechanical interconnector used for quick and easy connection of components, such as phone plug, phono plug and AC plug.
- **POWER AMPLIFIER....** An amplifier designed to operate a speaker system.
- POWER CORD....Cable used to connect a tape recorder to AC current.
- PRE-AMPLIFIER....An amplifier that boosts extremely weak signal voltages, such as those from microphones, magnetic playback heads or phonograph pickups, to a level that is usable by power amplifiers, and at the same time accomplishes the necessary equalization for industry standards.
- **PRE-RECORDED TAPES....**Recordings on tape that are commercially available.
- PRESSURE PADS....Felt pads mounted on arms which hold the magnetic tape in close contact with the heads. Mostly always used in "one-motor" tape recorders.
- SIGNAL-TO-NOISE RATIO.... The ratio, measured in dB's, between the pure sound and the noise induced by the recording system itself.
- sound-on-sound....A method in which previously recorded material on one track may be re-recorded

- on another track while simultaneously adding new material.
- **SPLICING TAPE....** A special pressure sensitive non-magnetic tape used for splicing magnetic tape.
- STACKED HEADS . . . (See In-Line Heads.)
- stereophonic sound.... 'Dimensional' sound reproduction achieved through the use of two or more sound tracks recorded through microphones so placed as to provide separation of sounds and heard simultaneously through speakers arranged somewhat apart from each other, according to the size of the room in which it is played.
- TAKE-UP REEL....The reel located on the right side of the tape recorder which accumulates the tape as it is recorded or played.
- TAPE DECK....A tape recorder designed for use in built-in high fidelity music systems. It is encased in a metal cage rather than a carrying case. The electronics usually consist of record amplifiers and playback pre-amplifier.
- **TAPE GUIDES....**Grooved metal posts located on either side of the head assembly to keep the tape tracking properly across the heads.
- TAPE INDEX COUNTER.... A digital counter used mostly to aid in referring to a particular portion of tape.

- TAPE SPEED.... The speed at which tape moves past the heads and measured in inches per second.
- **TAPE SPLICER....** A semi-automatic or automatic device used for splicing tape.
- TAPE TRANSPORT....The mechanical portion of the tape recorder mounted with motors, reel spindles, heads and controls. It does not include pre-amplifiers, power amplifiers, speakers or carrying case.
- **TONE CONTROL....** Used to vary bass and treble response to achieve individually desired balance of tone.
- **VU METER....** A volume unit meter which indicates the relative levels of sounds being recorded.
- WOW....Repetitive slow variations in tape speed.