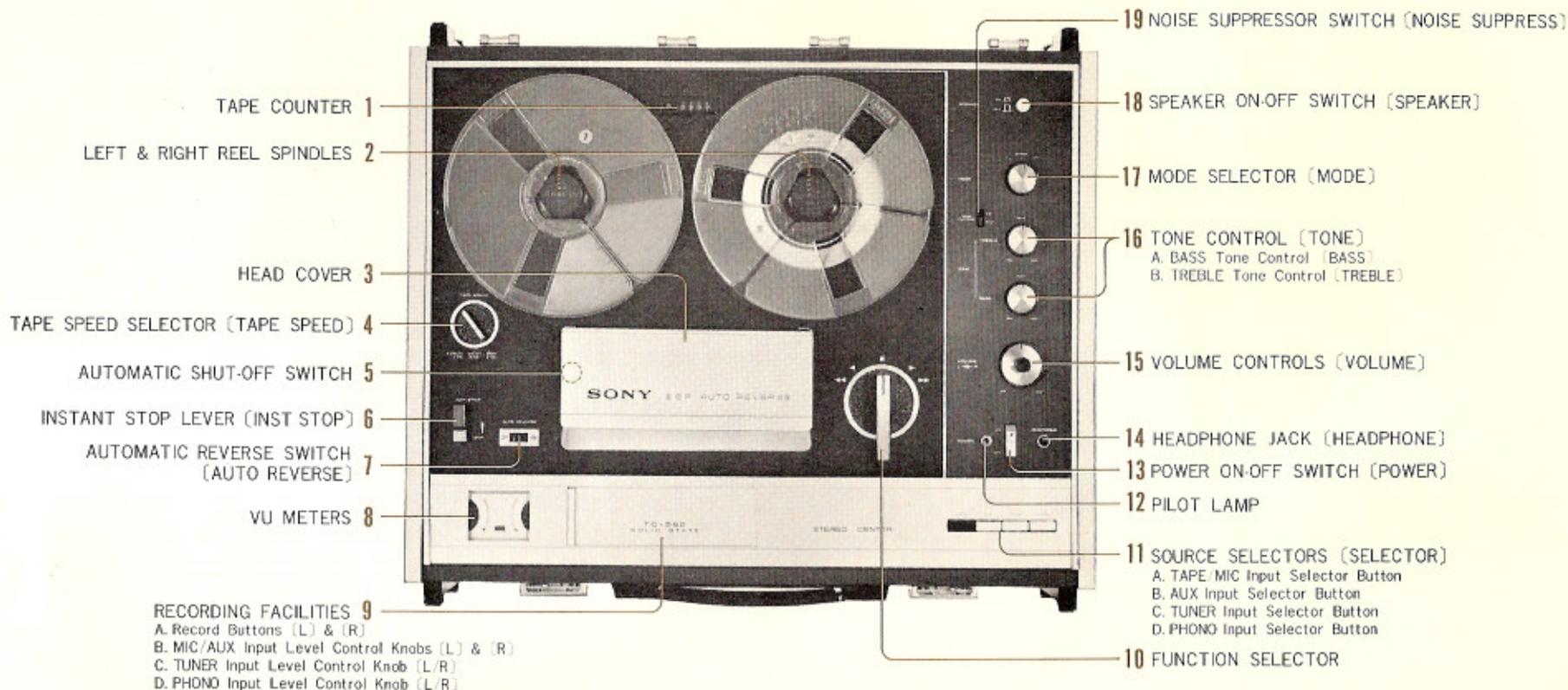
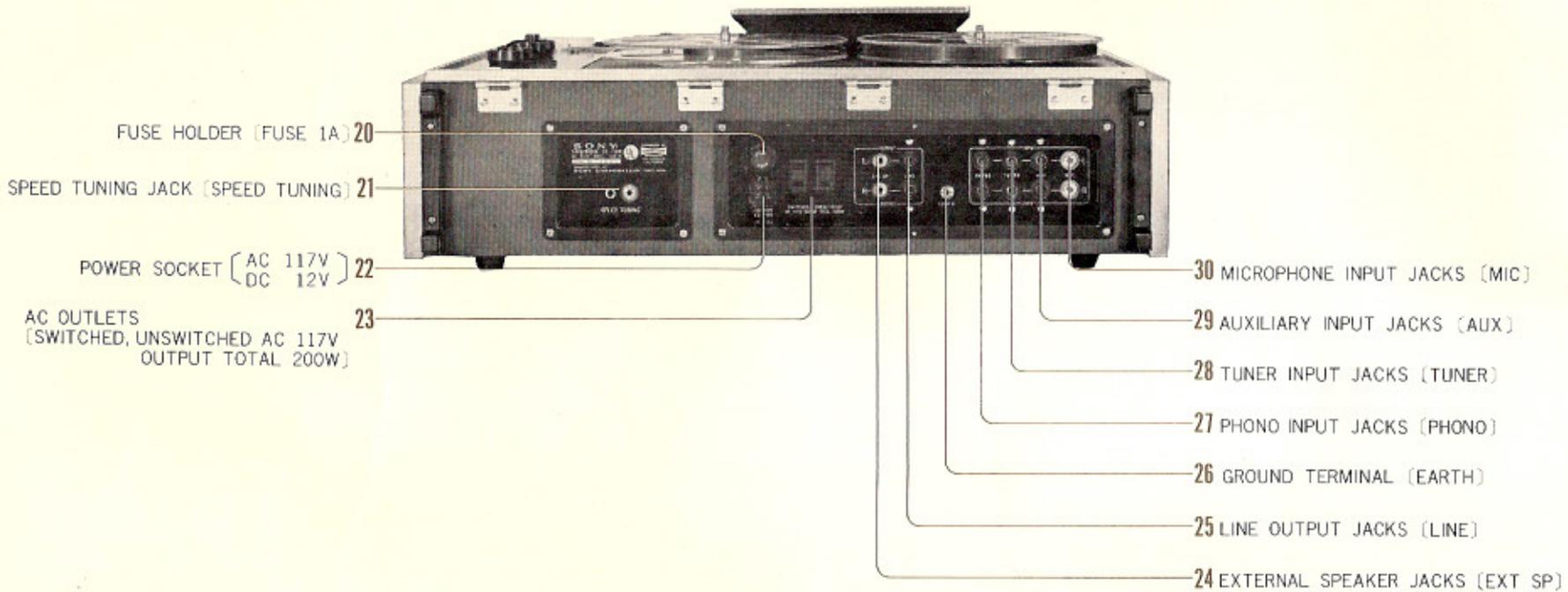


**SONY® STEREO TAPECORDER TC-560**  
OWNER'S INSTRUCTION MANUAL



## Location of Controls and Connectors





*The SONY Model TC-560 Solid State 4-track stereo tape recorder features the exclusive SONY Electronic Sensory Perceptor, a truly automatic tape reversing system which is activated by any type of recorded tape without the inconvenience of recording reversing signals or applying metallic cue strips on the tape.*

*This amazing (ESP) SONY Electronic Brain constantly scans and automatically senses the voice or music modulations on your recorded tapes.*

*When these modulations stop and your tape track is completed, this E.S.P. (ELECTRONIC SENSORY PERCEPTION) system automatically reverses tape direction within 8 seconds.*

### Special Features: Stereo Music Center

The extremely compact SONY Model 560 contains incredibly powerful stereo music control center featuring an amplifier and pre-amplifier, utilizing quality SONY silicon transistors, a precision 4-track stereo tape deck as well as a high performance speaker system....four pairs of stereo jacks: Microphone, Auxiliary, Tuner, and Phonograph that correspond to the settings of the source selector on the front panel ....Line outputs and a stereo headphone jack are provided for flexibility....

The OTL (Output Transformerless) circuits together with quality selected speakers assures superb tone quality.

### Other Features.....

Three speed operation, Professional VU meters, Automatic Sentinel Shut-off Switch, Separate Bass and Treble Controls, Pause Control, Four Digit Tape Counter, Retractable Pinch Roller for easy tape threading, Speed Tuning for controlling tape speed, Servo-controlled motor for vibration-free and flutter-free operation in either vertical or horizontal position, two-way operation either on house current or on auto battery, one motor-two capstan system, scrape flutter filter, and many more.

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## Operation of Controls and Connections

\* The paragraph numbers correspond with the numbers in the illustrations on pages 1 and 2.

### 1 TAPE COUNTER

The digital counter indicates the amount of tape used in record or playback. At the start of a tape, press the reset button; four zeros (0000) will appear in the window.

### 2 LEFT & RIGHT REEL SPINDLES

For placing a reel of tape or an empty reel on either of them.

### 3 HEAD COVER

This cover protects the heads. When cleaning the tape path, demagnetizing head or lubricating pinch roller, etc., remove the head cover by loosening the screws located on both sides of the cover.

### 4 TAPE SPEED SELECTOR [TAPE SPEED]

This selects the desired tape speed of  $7\frac{1}{2}$  ips.,  $3\frac{3}{4}$  ips. or  $1\frac{1}{4}$  ips. and automatically sets the proper recording and playback electronic characteristics for each speed.

$7\frac{1}{2}$  ips. and  $3\frac{3}{4}$  ips. are ideal when recordings of the better sound quality are desired.

$1\frac{1}{4}$  ips. is ideal when longer recording time is desired such as for speech and class room use, etc. In playback mode, set the speed to the same speed used on the prerecorded tape.

### 5 AUTOMATIC SHUT-OFF SWITCH

This switch is controlled by a wire lever located under the HEAD COVER. This wire lever is held in position by the tape. When the tape breaks

or runs out, the wire lever swings outward and the mechanism will automatically shut off. (See Fig. 1.)

### 6 INSTANT STOP LEVER [INST STOP]

This lever instantly stops tape motion by pulling the lever toward you until it locks into position while the recorder is either in record or playback mode.

To release, press the lever down, the tape will immediately pick up normal forward speed.\*

\*When the FUNCTION LEVER is switched from Forward position to Stop position, the locked lever is automatically released. In Stop mode the lever will not lock into position.

### 7 AUTOMATIC REVERSE SWITCH [AUTO REVERSE]

This slide switch turns the 'Auto Reverse' function on and off. When turned on, the recorder will automatically reverse the direction of tape motion within 10 seconds after the completion of the tape signal in playback mode. The 'Auto Reverse' functions only when a tape is being played in the left-to-right direction.

NOTE: This switch does not operate in record mode.

### 8 VU METERS

The VU METERS indicate the volume level of recording and playback.

- For playback, the VU METERS [L] & [R] are calibrated to indicate appropriate levels for normal volume.
- In record mode, they are calibrated to exact NAB standards for the best recording results, the level controls should be adjusted so that the needles do not go beyond the boundary of the red and white zones; however it is normal for transient peaks to swing the needle into the red zone.

## 9 RECORDING FACILITIES

A. Record Buttons B. MIC/AUX Input Level Control Knobs C. TUNER Input Level Control Knob D. PHONO Input Level Control Knob: all the above mentioned controls are located inside the compartment on the front panel. Slide the lid towards the right for access to these facilities: (See Fig. 2)

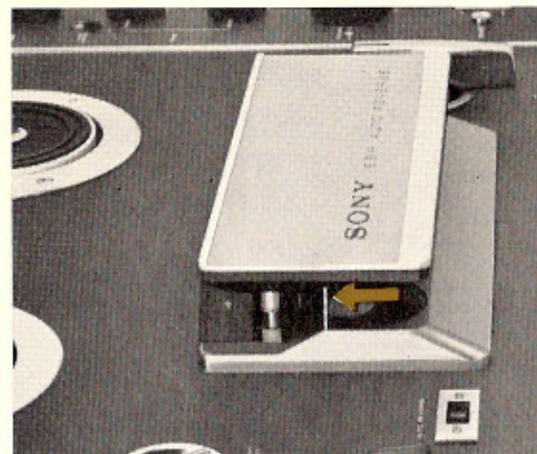


Fig. 1

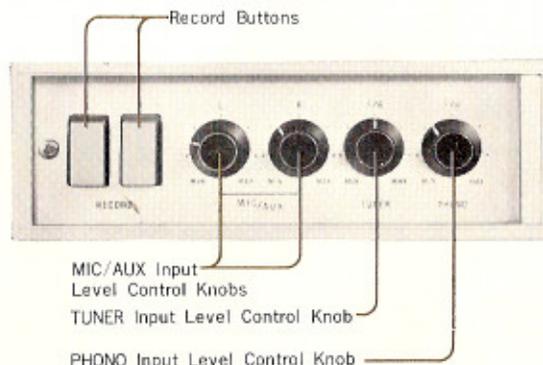


Fig. 2

- A. Record Buttons [RECORD]: two red push buttons activate the RECORD mode switch. These buttons will be locked in place when the FUNCTION SELECTOR is set in Stop position. To record, press the desired record button L (left) or R (right) for monophonic recording or both for stereophonic recording, and turn FUNCTION SELECTOR to Forward position (◀, ▶) holding one or both record button in.

#### TO RELEASE RECORD BUTTONS

When one of the buttons is down, press slightly on the other button. When both buttons are down, firmly press on one button, this will cause the other to spring up, after it springs up press it slightly and the remaining button will spring up. When there is no tape threaded on the recorder, turn the FUNCTION SELECTOR to either Forward (◀, ▶) position to release record buttons.

NOTE: If the FUNCTION SELECTOR is turned to Stop position while recording, the RECORD BUTTONS will be released and the recorder will automatically switch from record to playback mode.

- B. MIC/AUX Input Level Control Knobs [L] & [R]: two Level Control Knobs adjust recording input level of the sound from a microphone and other sources connected to Auxiliary Input Jacks. Turn clockwise toward [MAX] to increase and counterclockwise toward [MIN] to decrease the recording input level.

The left Input Level Control Knob marked L controls the left channel and the right Input Level Control Knob marked R controls the right channel. The input levels for both channels are indicated on the VU METER.

- C. TUNER Input Level Control Knob  
This knob adjusts the input level of the sound from a program source connected to Tuner Input Jacks. Turn clockwise toward [MAX] to increase and counterclockwise toward [MIN] to decrease the record and playback level.
- D. PHONO Input Level Control Knob [L/R]  
This knob adjusts the input level of the sound from a program source connected to Phono Input Jacks. Turn clockwise toward [MAX] to increase and counterclockwise toward [MIN] to decrease the record and playback level.

- C. TUNER Selector Button: Press to connect the Tuner Inputs for recording or playing a tuner through the TC-560.
- D. PHONO Selector Button: Press to connect the Phonograph Inputs for recording or playing a phonograph through the TC-560.

#### 12 PILOT LAMP

This lamp will be illuminated when the power is on. In DC operation it will remain illuminated even though the POWER ON-OFF SWITCH is pressed down to either ON or OFF.

Disconnect DC adaptor when the recorder is not in use.

#### 13 POWER ON-OFF SWITCH [POWER]

This seesaw switch turns the recorder on or off. Press down the side of the switch marked with a black dot (•) to turn the power ON. Press the other side to turn OFF.

NOTE: In DC operation the switch does not function. (The amplifier is on when the DC power supply cord is connected.)

#### 10 FUNCTION SELECTOR

This knob controls all tape motions; Forward (left and right), Stop, Fast Rewind (left and right). To play tape, turn FUNCTION SELECTOR to the necessary position (◀, ▶). To rewind tape, turn FUNCTION SELECTOR to the necessary rewind position (◀◀, ▶▶). To stop tape motion, turn FUNCTION SELECTOR to Stop position (■).

#### 11 SOURCE SELECTORS [SELECTOR]

(See Fig. 3)

- A. TAPE/MIC Selector Button: press to play back recorded tapes or to connect the Microphone Inputs for recording.
- B. AUX Selector Button: Press to connect the Auxiliary Inputs for recording or playing through the TC-560.

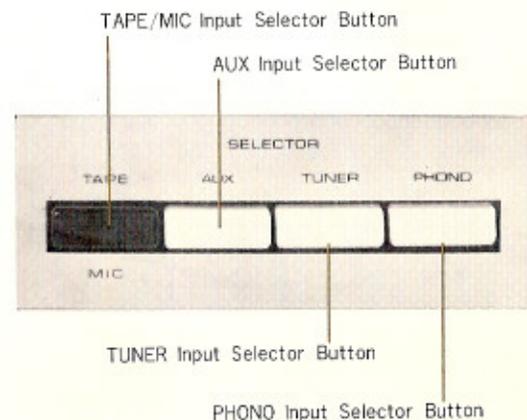


Fig. 3

#### 14 HEADPHONE JACK [HEADPHONE]

This jack connects to any high quality stereo headphone (8 ohms or 10 K ohms) equipped with a standard binaural phone plug. Recommended headphone is the SONY Stereo Headset DR-3C or DR-3A (optional accessory). Turn the SPEAKER ON-OFF SWITCH to OFF and adjust the VOLUME CONTROL KNOBS and TONE CONTROL KNOBS [BASS] & [TREBLE] for your listening preference.

### 15 VOLUME CONTROL KNOBS [VOLUME]

These knobs control the sound volume of speakers or headphones. Both knobs will rotate simultaneously or separately. For balancing stereo sound, turn one knob while holding the other stationary. The outer knob controls the left channel and the inner knob controls the right channel. (See Fig. 4)

### 16 TONE CONTROLS [TONE]

#### Bass Tone Control Knob [BASS]

This knob simultaneously adjusts bass characteristics of both channels, Left (L) and Right (R) through either the speakers or headphones. Turn clockwise to increase the bass. Turn counterclockwise to decrease the bass.

#### Treble Tone Control Knob [TREBLE]

This knob simultaneously controls treble characteristics of both channels, Left [L] and Right [R] through either the speakers or headphones. Turn clockwise to increase treble, turn counterclockwise to decrease.

For flat response both control knobs [BASS] and [TREBLE] should be set in mid-position [FLAT].

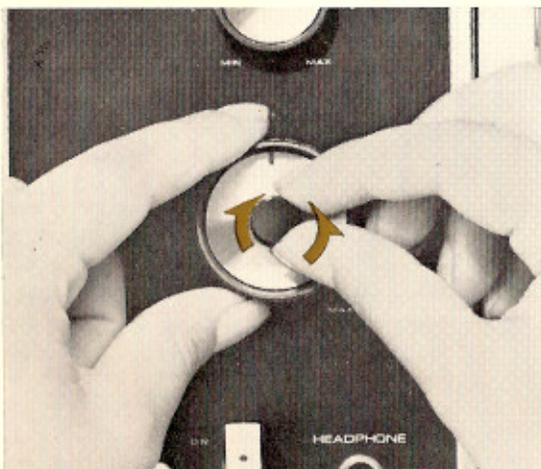


Fig. 4

### 17 MODE SELECTOR [MODE]

This selector has three positions [L], [STEREO] and [R].

#### [L] position

This position connects left channel sound to both left and right speakers or headphones.

#### [STEREO] position

This position connects left and right sound to the respective speaker or headphones.

#### [R] position

This position connects right channel sound to both left and right speakers or headphones.

### 18 SPEAKER ON-OFF SWITCH [SPEAKER]

This switch turns the speakers ON or OFF. When monitoring through HEADPHONE JACK, turn this switch off.

### 19 NOISE SUPPRESSOR SWITCH [NOISE SUPPRESS]

In ON position, this switch cuts off signals by 12 db/octave 9KHz so that any prevalent hiss noise on all the input sources in playback is suppressed. Besides noises on the Line Output jacks and the External Speakers jacks are also suppressed, however, response to be recorded on the tape is not affected by this switch.

### 20 FUSE HOLDER [FUSE 1A]

The fuse holder contains a 1 ampere fuse. To replace the fuse, turn the holder counterclockwise. Replace with a 1 ampere fuse only.

### 21 SPEED TUNING JACK [SPEED TUNING]

This jack is used for connecting the SONY Remote Control RM-6 (optional accessory). Insert the two-pin plug of the RM-6 into the SPEED TUNING JACK [SPEED TUNING]. Tape speed can be controlled in playback only.

\*The Stop Button of the RM-6 will not function on this tape recorder.

### 22 POWER SOCKET [AC 117V DC 12V]

This socket is for connecting to 117V AC household power line. Insert the AC Power Cord (supplied) into the socket and the other end into any 117V AC outlet. Operation on auto/boat battery DC 12V is possible with the use of SONY Car Battery Cord DCC-2AW (optional accessory). Refer to page 8.

### 23 AC OUTLETS [SWITCHED, UNSWITCHED AC 117V OUTLET TOTAL 200W]

One of the AC outlets [SWITCHED] supplies 117V AC power to other components. This outlet operates only when the Power ON-OFF SWITCH is ON. The other [UNSWITCHED] also supplies

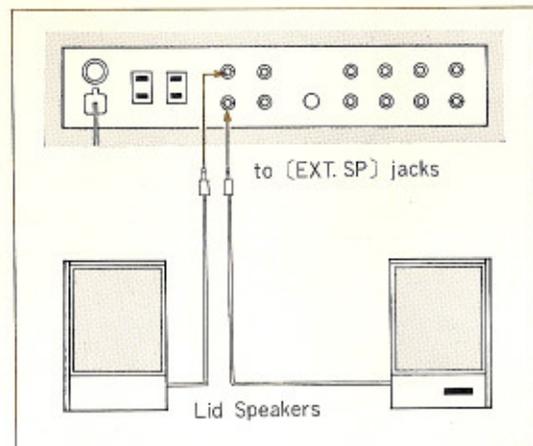


Fig. 5

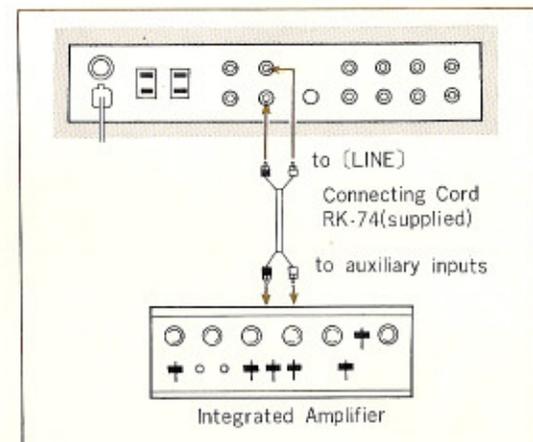


Fig. 6

117V AC power and is not switched off by the POWER ON-OFF SWITCH. Both are linked and total AC power supply is 200 watts.

#### 24 EXTERNAL SPEAKER JACKS [EXT SP]

Equipped with mini jacks. Connect the lid speakers or any 8ohms external speakers.

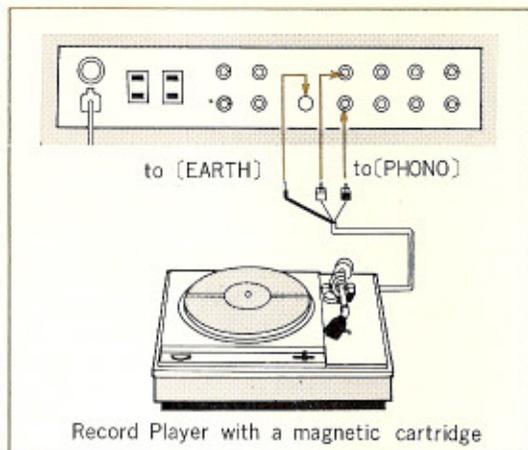


Fig. 7

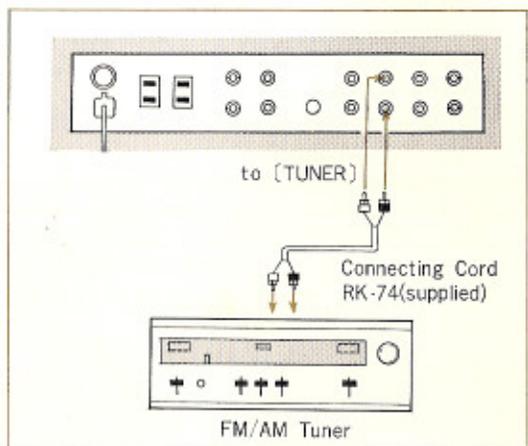


Fig. 8

Connect the left speakers to L jack and the right speaker to R jack respectively. The speakers can be used either vertically or horizontally. (See Fig. 5)

#### 25 LINE OUTPUT JACKS [LINE]

Equipped with standard phono jacks. Connect outputs to another tape recorder inputs (auxiliary inputs, or line inputs), or auxiliary inputs or line inputs of an integrated amplifier or pre-amplifier. (See Fig. 6)

#### 26 GROUND TERMINAL [EARTH]

This terminal is for ground connection with a record player or tuner, etc.

#### 27 PHONO INPUT JACKS [PHONO]

Equipped with standard phono jacks. Connect magnetic type phono cartridge having a maximum sensitivity of 2 mV. The desired volume levels of the phonograph inputs are controlled by the Level Control Knobs [PHONO] according to the cartridge used. These input jacks have an impedance of approx. 50K ohms. (See Fig. 7)

\*Insert two short plugs, provided for muting input terminals, into the Phono Jacks, while these jacks are not in use.

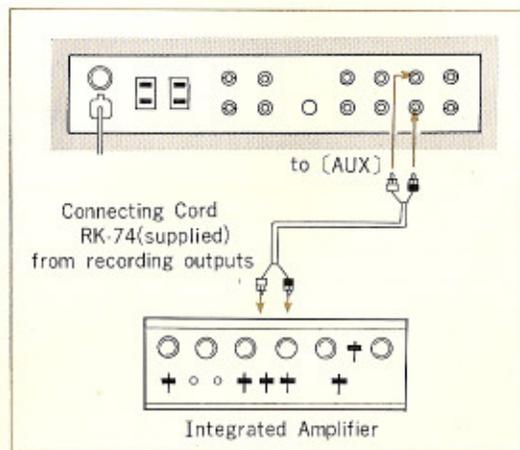


Fig. 9

#### 28 TUNER INPUT JACKS [TUNER]

Equipped with standard phono jacks. Will accept outputs of FM/AM tuner, integrated amplifier (recording outputs), tape recorder (monitor outputs or line outputs) for listening or recording programs directly from the connected component. These inputs have an impedance of approx. 100K ohms and sensitivity of 120 mV. (See Fig. 8)

#### 29 AUXILIARY INPUT JACKS [AUX INPUT]

Equipped with standard phono jacks. These phono jack inputs accept outputs of an integrated amplifier (recording outputs), FM/AM tuner, tape recorder (monitor outputs or line outputs), record player equipped with a crystal cartridge, etc., for recording programs directly from the connected component. These inputs have an impedance of 100K ohms and sensitivity of 25 mV. (See Fig. 9)

#### 30 MICROPHONE INPUT JACKS [MIC]

Equipped with mini jacks. Will accept the SONY dynamic microphone F-98 (supplied) or any high quality low impedance microphone. Also accepts inputs of the SONY telephone pick-up TP-4S (optional accessory) and SONY radio equipped with a recording jack. (See Fig. 10)

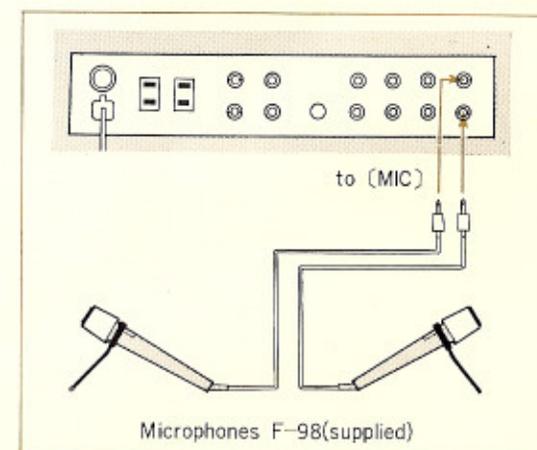


Fig. 10

## Power Source

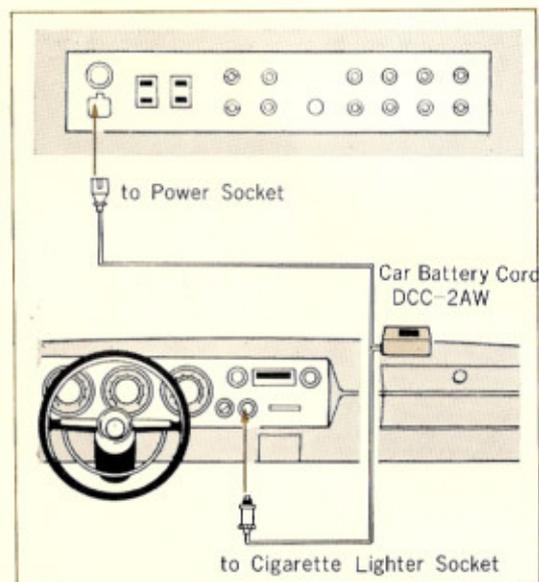
### Operation on House Current

Connect AC power cord (supplied accessory) to the POWER SUPPLY SOCKET [AC 117V DC 12V] and the other end of the cord to an AC outlet. Turn the POWER SWITCH on.

### Operation on Auto/Boat Battery

Use the SONY Car Battery Cord DCC-2AW (optional accessory) for 12 volts electrical systems. Insert the round plug of DCC-2AW into the cigarette lighter socket of a car, etc., and 4-hole plug into the POWER SUPPLY SOCKET [AC 117V DC 12V] of the recorder. Check if your car has noise suppressors, if not, their installation may be necessary to avoid undesirable noise. Your local auto dealer or mechanic can install them.

\*The green PILOT LAMP will remain illuminated unless the car battery cord DCC-2AW is disconnected.



## How to set up and use as a Stereo Center

### Preparation

1. Insert AC POWER CORD into AC 117V outlet.
2. Place left and right speakers at desired location and connect them to the respective EXTERNAL SPEAKER JACKS [EXT SP].
3. Press the POWER ON-OFF SWITCH [POWER] to turn the power ON. The green PILOT LAMP lights and the TC-560 will be ready for operation. Make sure to set FUNCTION SELECTOR to the Stop position [■].
4. Connect stereo or monophonic source to proper inputs. Refer to "OPERATION OF CONTROLS AND CONNECTIONS" on page 4.

### Operation

1. Press down the desired corresponding SOURCE SELECTOR of the connected component (AUX, TUNER or PHONO). When a program source is connected to Microphone Jack(s), be sure to press down the Record Button(s).
2. Set the MODE SELECTOR [MODE] to [STEREO] or either [L] or [R] position.
3. Press the SPEAKER SWITCH [SPEAKER] to turn on.  
When listening through headphones, press it again to turn it OFF.
4. Adjust the corresponding Input Level Control Knob (MIC/AUX, TUNER, or PHONO) so that the needle of the VU METERS does not swing beyond the boundary of the red and white zones. (See VU METERS page 4).
5. Adjust the VOLUME CONTROL KNOBS [VOLUME] and the TONE CONTROL KNOBS [TONE] for your listening preference.

## How to use as a Tape Deck

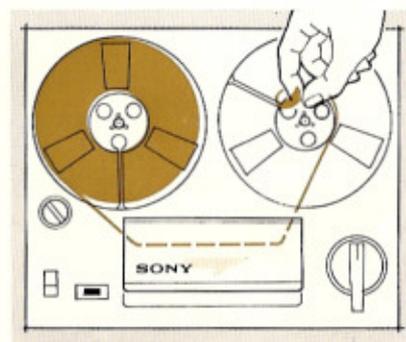
### Tape Threading

Reel sizes from 3 to 7 inches diameter can be accommodated. Before threading tape, insert AC POWER CORD into AC 117V outlet.

1. Place an empty reel on the RIGHT REEL SPINDLE and a full reel of tape on the LEFT REEL SPINDLE in normal direction operation.\*
2. Unwind about 18 inches of tape or leader from a full reel of tape and bring it from left-to-right through the tape path under HEAD COVER. Dull side of the tape should face the heads.
3. Wrap it around the empty reel hub, or insert the end into the reel slot. (The use of a SONY Easy Tape Threader will facilitate the threading of tape.)
4. Set the desired tape speed of 7½ ips., 3¾ ips or 1½ ips by turning the TAPE SPEED SELECTOR [TAPE SPEED]. A recording tape must be played back at the same speed at which it was recorded.

NOTE: When the TC-560 is used in vertical position, put the supplied Reel Caps on the Reel Spindle (left and right).

\*Reverse threading procedure, if using tape in reverse direction, becomes necessary.

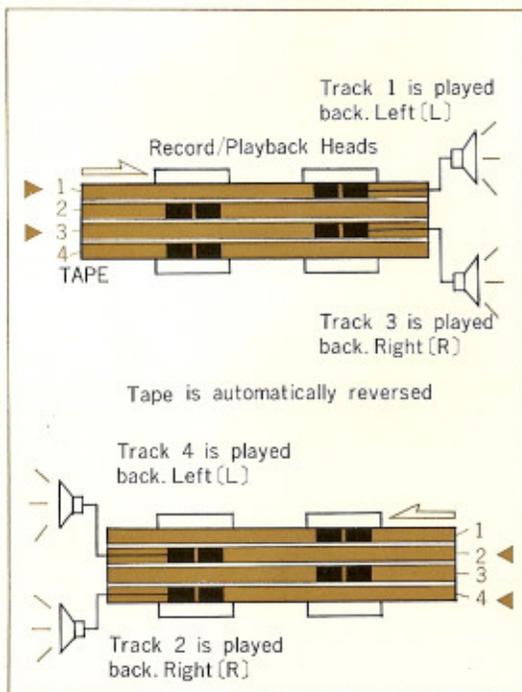


## Tape Playback

When playing tapes, refer to "OPERATION OF CONTROLS AND CONNECTIONS" (page 4) for the proper operation and connections of the tape recorder. The E.S.P. automatic tape reverse works on almost all recorded tapes available on the market. If, however, the tape is recorded to the very end or the unrecorded portion is too short, splice an 8 feet length of leader to the end of tape. This allows the 'Automatic Reverse' E.S.P. system to operate.

### 4-Track Stereo Tape Playback

1. Thread a recorded tape on the recorder.
2. Select the tape speed.
3. Press the POWER ON-OFF SWITCH [POWER] to turn the power ON.



4. Set the AUTO REVERSE SWITCH [AUTO REVERSE] to ON.
5. Press the MIC/TAPE Button [MIC/TAPE] of SOURCE SELECTOR [SELECTOR].
6. Set the MODE SELECTOR [MODE] to the STEREO position.
7. Press the SPEAKER SWITCH [SPEAKER] to ON.  
When listening through headphones, press the SPEAKER SWITCH [SPEAKER] to OFF
8. Adjust the VOLUME CONTROL KNOBS [VOLUME] and the TONE: [BASS] and [TREBLE]: for the desired volume and tone quality.

NOTE: Speaker volume is not indicated on the VU METERS. The deflection of the needles of the VU METER shows the output level from the LINE OUTPUT JACKS [LINE].

9. When tracks 1 and 3 are completed, the tape direction is automatically reversed, then tracks 4 and 2 will be played.
10. When tracks 4 and 2 are completed, the recorder will automatically shut off. Turn the FUNCTION SELECTOR to Stop position. [■].

NOTE: To eliminate hiss noise on tape, if any, set the NOISE SUPPRESSOR SWITCH [NOISE SUPPRESS] to ON.

### 4-Track Monophonic Tape Playback

The following 'Automatic Reverse' playback procedure is recommended for a monophonic tape whose sequence of recording is: track 1...track 4...track 3...track 2 and whose unrecorded portion of beginning and end of tracks 2 and 3 is almost the same length as that of tracks 4 and 1.

NOTE: If the tape is fully recorded to its complete end or its unrecorded portion is short, splice an 8 feet or longer leader to the tape end for 'Automatic Reverse' playback.

1. Thread the tape on the recorder.
2. Select desired tape speed.
3. Turn the AUTOMATIC REVERSE SWITCH [AUTO REVERSE] to ON.
4. Press POWER ON-OFF SWITCH [POWER] to turn the power ON.
5. Press the MIC/TAPE Button [MIC/TAPE] of the SOURCE SELECTOR [SELECTOR].
6. Set the MODE SELECTOR [MODE] to [L] position.
7. Press down the SPEAKER SWITCH [SPEAKER] to ON.  
When listening through headphones, press down the SPEAKER SWITCH [SPEAKER] to OFF.
8. Turn the FUNCTION SELECTOR to the Right Forward position (▶).
9. Adjust the VOLUME CONTROL KNOBS [VOLUME] and the TONE CONTROL KNOBS: [BASS] and [TREBLE]: for your desired volume and tone quality.

NOTE: Speaker volume is not indicated on the VU METERS. The deflection of the needle of the VU METER shows the output level from the LINE OUTPUT JACKS [LINE].

10. When track 1 is completed, tape direction is reversed automatically and then track 4 will be played.
11. When track 4 is completed, the recorder will automatically shut off. Then turn the FUNCTION SELECTOR to the Stop position [■].
12. To play back tracks 3 and 2, set the MODE SELECTOR [MODE] to [R] position. Then repeat steps 8, 9.

NOTE: To suppress hiss noise on tape, if any, set the NOISE SUPPRESSOR SWITCH [NOISE SUPPRESS] to ON.

## Tape Recording

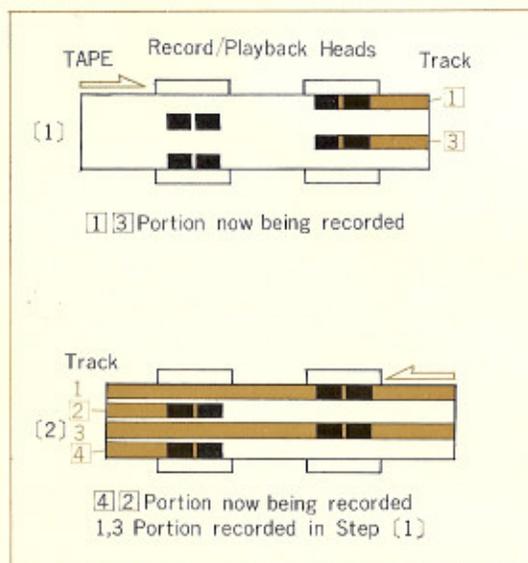
Before recording, try to estimate the input program's playing time and provide more tape on the recorder than you think you will actually need. To make your own recorded tapes for SONY E.S.P. 'Automatic Reverse' playback, leave an unrecorded portion at the end of more than 8 feet (10 seconds or over) or splice a leader tape of the same length.

**IMPORTANT:** Keep the intervals between program material on the tape to less than 8 seconds in length.

### 4-Track Stereo Recording

\*Slide the lid of the RECORDING FACILITIES located on the front panel to the right.

1. Thread the tape on the recorder and reset TAPE COUNTER to [0000] by pressing the reset button.
2. Select desired tape speed by turning TAPE SPEED SELECTOR [TAPE SPEED]: 7½ips., 3½ips or 1½ips.



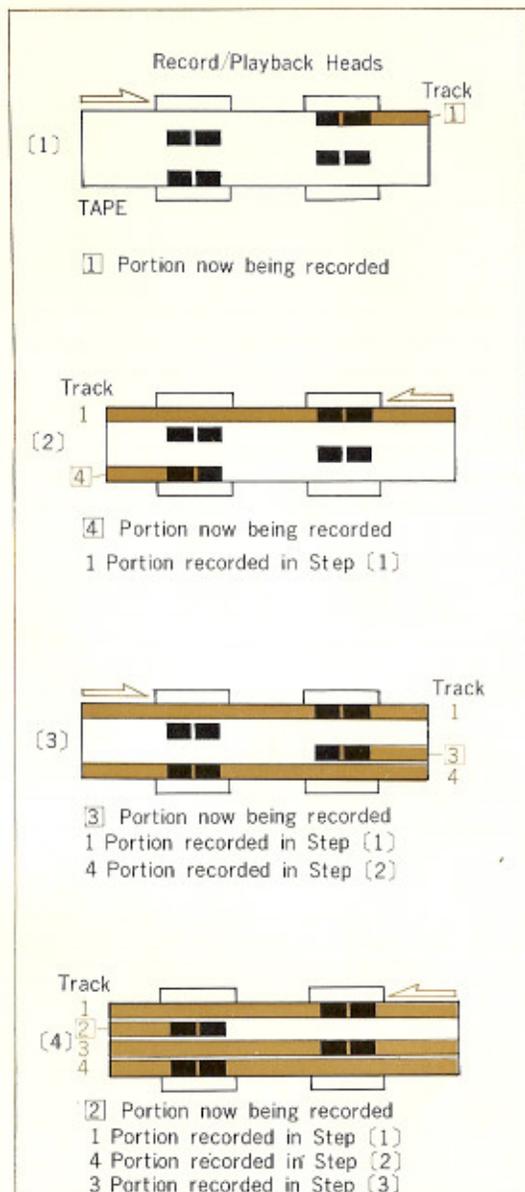
3. Press the POWER ON-OFF SWITCH [POWER] to turn the power ON.
4. Connect stereo source to proper inputs. Refer to "OPERATION OF CONTROLS AND CONNECTIONS" on page 4.
5. Press the buttons of the corresponding SOURCE SELECTOR (TAPE/MIC, AUX, TUNER or PHONO) Button of inputs.
6. Set the MODE SELECTOR [MODE] to the STEREO position.
7. Press the RECORD BUTTON [L] & [R] and adjust the corresponding Input Level Control Knob (MIC/AUX, TUNER or PHONO) by watching the deflection of the needle of the VU METERS for proper recording level.
8. Hold the RECORD BUTTONS [L] & [R] in and turn the FUNCTION SELECTOR to the Right Forward position (▶). The RECORD BUTTONS are locked and stereo recording on tracks 1 and 3 has started.

**NOTE:** Leave the end of tracks 1 and 3 unrecorded for approximately 8 feet (10 seconds or over).

9. When recording of side 1 (track 1 and 3) is finished, record side 2 (tracks 2 and 4) without rewinding by repeating the same procedure as in paragraphs 7 and in this case, turn the FUNCTION SELECTOR to STOP position (■). Turn the FUNCTION SELECTOR to the Left Forward position (◀). Now the tape moves in right-to-left direction.
10. When recording is completed, turn the FUNCTION SELECTOR to Stop position (■). Now the tape is ready for stereophonic playback.

### 4-Track Monophonic Recording

1. Thread the tape on the recorder and reset the TAPE COUNTER to [0000].
2. Select desired tape speed.
3. Press POWER ON-OFF SWITCH [POWER] to turn the power ON.



4. Connect monophonic source to left L input for source used. Refer to "OPERATION OF CONTROLS AND CONNECTIONS" on page 4.
5. Press the button of the corresponding SOURCE SELECTOR Button (TAPE/MIC, AUX, TUNER or PHONO) of inputs.
6. Set the MODE SELECTOR [MODE] to the L position.
7. Press the RECORD BUTTON [L] and adjust the respective Input Level Knob (MIC/AUX, TUNER, PHONO) so that the needle of the VU METER may not swing beyond the boundary of the red and white zones.
8. Hold the RECORD BUTTON [L] in and turn FUNCTION SELECTOR to the Right Forward position (▶). The RECORD BUTTON is now locked and monophonic recording on track 1 has started.

NOTE: Leave the end of tape unrecorded for approximately 8 feet (10 seconds or over).

9. Record track 4 by turning the FUNCTION SELECTOR to the Left Forward position (◀) and pressing the left RECORD BUTTON. Now the tape moves in right-to-left direction. Record so that the beginning portion of track 1 may coincide with the ending portion of track 4 by utilizing the TAPE COUNTER.
10. When the end of tape is reached, turn the FUNCTION SELECTOR to the Stop position (■).
11. To record track 3, change the connection of input program from the left [L] to the right [R] input jack.
12. Set the MODE SELECTOR [MODE] to the R position.
13. Hold the RECORD BUTTON [R] in and turn the FUNCTION SELECTOR to the Right Forward position (▶). Now recording on track 3 has started.
14. When the end of tape is reached, track 3 has been recorded. Try to record so that the ending portion of track 3 will coincide with

beginning portion of track 4 by utilizing the TAPE COUNTER.

15. To record track 2, follow the same procedure as in paragraph 13, and turn the FUNCTION SELECTOR to the Left Forward position (◀).  
\*Record so that the beginning portion of track 2 will coincide with the beginning portion of track 4 by utilizing the TAPE COUNTER.
16. When recording on track 2 is completed, turn the FUNCTION SELECTOR to Stop position (■). Now the recorded tape is ready for monophonic playback.

## Tape Speed Control (SPEED TUNING)

This system is mainly designed for matching the sound pitch of musical instruments which can not be easily tuned. With the use of the SONY Remote Control RM-6 (optional accessory), the tape speed can be tuned by turning its Speed Control Knob. This system is used only for playback.

NOTE: The RM-6 is furnished with an Instant Stop Button, but it is inoperative on this model TC-560. For further details, read the INSTRUCTION FOR USE of the RM-6.

## Tape Erasing

When the recorder is set in record mode, the Erase Head will erase the track (or tracks) of the tape for the corresponding activated pole pieces of the recording head. Therefore, when you start a new recording, any previous recordings are automatically erased as the tape passes the erase head. You can also erase a recorded tape without adding a new recording. Place the recorder in record mode, press down the TUNER Selector Button of SOURCE SELECTOR, and turn the TUNER Input Level Control Knob clockwise to MIN (or disconnect input program sources in the rear of the set). Then run the tape through. The tape will be erased more quickly at the speed of 7½ips. or use a Bulk Eraser for immediate erasure.

## Public Address

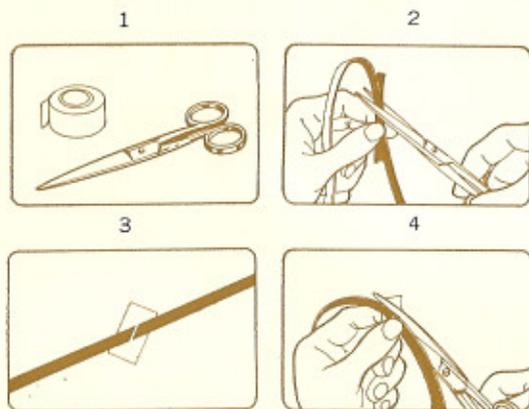
This recorder can be used as public address system for microphone, tuner, phonograph, etc. Plug the corresponding input sources into proper input jacks. For stereophonic applications, connect both L and R jacks. Press the button of the corresponding Input Button of SOURCE SELECTOR. Adjust proper Input Level Control Knob(s) using the same procedure as recording level adjustments. Then press the SPEAKER SWITCH [SPEAKER] to turn the Speaker(s) ON. Adjust the VOLUME CONTROL KNOBS [VOLUME] and the TONE CONTROL KNOBS [TONE].

\*When a program source is connected to Microphone Jack(s), be sure to press down the Record Button(s).

NOTE: If a howling sound (acoustic feedback) occurs, keep the microphone away from the speaker.

## Tape Splicing

1. Use splicing tape and a pair of scissors. Do not use ordinary cellophane tape: it tends to deteriorate.
2. Overlap recording tapes and make a diagonal cut across both tapes.
3. Carefully align and butt the cut ends together. Keep the ends in contact, then firmly press a piece of splicing tape over the shiny side of the tape to make a firm joint.
4. Trim off the excess splicing tape.



## Maintenance

### Cleaning Heads

The iron oxide particles in the tape may build up a deposit on the heads. These deposits prevent complete erasure of old recordings and causes deterioration of playback and recording characteristics. Therefore, it is advisable to clean the heads after every ten hours of use or less as may be required. Remove the HEAD COVER by loosening the screws located on both sides of the cover with a small screw driver. Use the head cleaning ribbon (supplied) or a soft cloth and carefully wipe the portion of the heads over which the tape travels. When the deposits cannot be removed, moisten the ribbon or cloth with denatured alcohol. The use of inferior brands of tape will result in excessive oxide deposits. Frequent inspection of the head will help maintain optimum performance. The use of SONY Tape is recommended for best results.



### Demagnetizing Heads

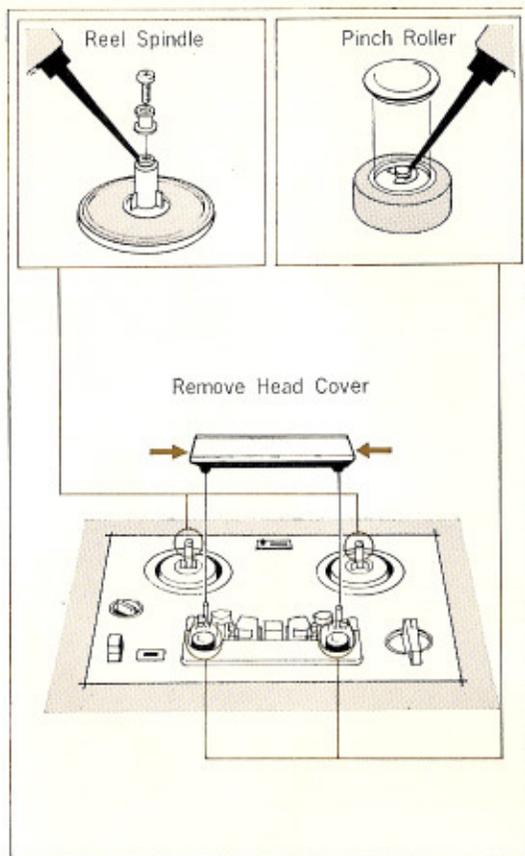
Through continuous use, the varying magnetic fields of the tape will be gradually built up residual magnetism on the gap of the heads. Excessive residual magnetism on the heads will produce noise on the tape while it is being played or recorded. Therefore, it is advisable to demagnetize the head from time to time. Periodic use of the SONY Head Demagnetizer HE-2 or equivalent is recommended for best possible performance.

\*It is unnecessary to demagnetize the erase head.



## Lubrication

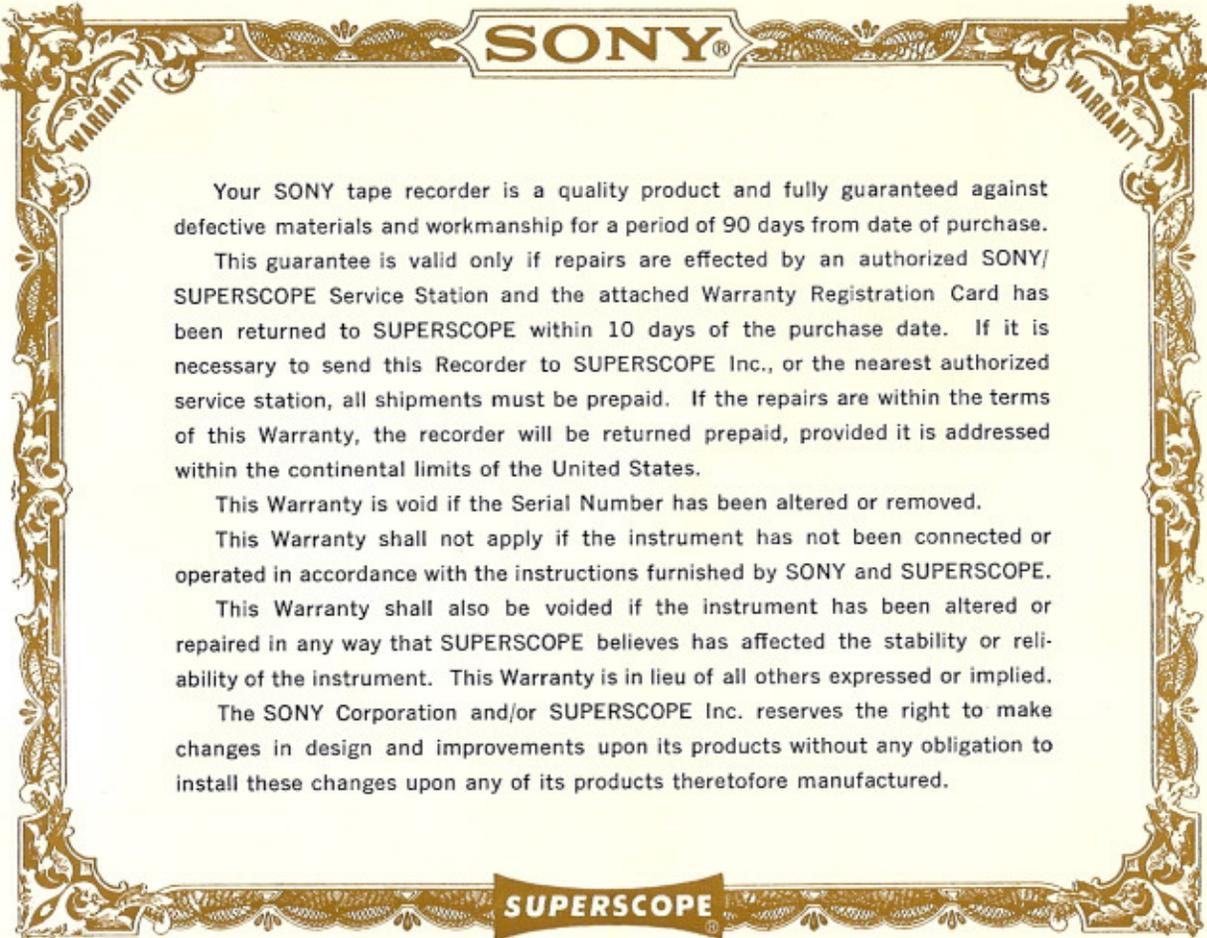
Use light machine oil and lubricate Pinch Roller and Reel Spindles every 6 months. Avoid excessive lubrication as it may cause slippage in the mechanism and contamination of your tape.



## Specifications

Power requirements:	50 watts (max), 117 volts, 60 cycles AC
Tape speed:	7½ ips, 3½ ips, 1½ ips.
Reel:	7 inches or smaller
Frequency response:	30~18000 Hz at 7½ ips. 30~14000 Hz at 3½ ips. 30~10000 Hz at 1½ ips.
Flutter and wow:	Power output: Music power 20 W (both channels) 0.07% at 7½ ips. 0.1 at 3½ ips. less than 0.15 at 1½ ips.
Signal-to-noise ratio:	52 db
Harmonic distortion:	less than 2.0% (at overall normal level) less than 0.5% (at total input playback)
Level indication:	VU Meters calibrated to NAB standard
Recording time:	4-Track stereo, 4-Track monophonic 1800' tape 6 hrs. 12 hrs. 1½ ips. approx. 140 seconds (1200' tape)
Fast winding time:	
Tone controls:	Two separate controls for bass and treble
Inputs:	microphone inputs: low impedance (suitable for supplied microphones) maximum sensitivity -72 dB (0.2 mV) auxiliary inputs: impedance 100 K ohms maximum sensitivity -30 dB (25 mV) tuner inputs: impedance 100 K ohms maximum sensitivity -16 dB (120 mV) phono inputs: impedance 50 K ohms maximum sensitivity -52 dB (2 mV)
Outputs:	line outputs: most suitable load impedance 100 K ohms output level -2 dB (0.6 V) external speaker outputs: Load impedance 8 ohms headphone outputs: Load impedance 10 K ohm or 8 ohm
Transistors:	2SC631 or 633×43, 2SD28×8, 2SB381×2, 2SD127A×2, 2SB383×2, 2SC318×1
Diodes:	5GD×5, 1T22×7, FR1×8, 1S332×1, 1S334×1
Dimensions:	20½(w)×11½(h)×17½(d)''
Weight:	50 lbs. (without accessories)
Supplied accessories:	Microphone F-98 (MTL) 2 Microphone Stand for F-98 2 SONY Reel R-7A 1 Pin Plugs (red and black) 2 each (can be used when the end of your connecting cord does not fit to the jack of the tape recorder) AC Power Cord 1 Head Cleaning Ribbon 1 Reel Cap 2 Short plug 2
Available accessories:	Telephone Pickup TP-4S Stereo Headset DR-3A (8 Ω), DR-3C (10 kΩ) Stereo Microphone Mixer MX-6S, Microphone Mixer MX-600M Head Eraser HE-2 Remote Control RM-6 Connecting cord RK-74





**SONY**<sup>®</sup>

Your SONY tape recorder is a quality product and fully guaranteed against defective materials and workmanship for a period of 90 days from date of purchase.

This guarantee is valid only if repairs are effected by an authorized SONY/SUPERSCOPE Service Station and the attached Warranty Registration Card has been returned to SUPERSCOPE within 10 days of the purchase date. If it is necessary to send this Recorder to SUPERSCOPE Inc., or the nearest authorized service station, all shipments must be prepaid. If the repairs are within the terms of this Warranty, the recorder will be returned prepaid, provided it is addressed within the continental limits of the United States.

This Warranty is void if the Serial Number has been altered or removed.

This Warranty shall not apply if the instrument has not been connected or operated in accordance with the instructions furnished by SONY and SUPERSCOPE.

This Warranty shall also be voided if the instrument has been altered or repaired in any way that SUPERSCOPE believes has affected the stability or reliability of the instrument. This Warranty is in lieu of all others expressed or implied.

The SONY Corporation and/or SUPERSCOPE Inc. reserves the right to make changes in design and improvements upon its products without any obligation to install these changes upon any of its products theretofore manufactured.

**SUPERSCOPE**<sup>®</sup>

