

SONY



Stereocorder

OWNER'S INSTRUCTION MANUAL



You are now the owner of a complete music system that both records and plays 2 and 4-track Stereophonic tapes. The precision performance and professional features of the Sterecorder 300 will introduce you to an exciting new world of "living sound." This owner's manual will explain the controls, operation and maintenance of your new Sterecorder 300. Read this information carefully before operating. Save this manual for future reference.

Technical Specifications

Power Requirement:	95 watts, 110-117 volts A.C. 60 cycles (50 cycle optional)	Tone Controls:	Two position switch selects either flat response or 8 DB bass boost for monitor speakers or low level listening.
Tape Speeds:	Instantaneous selection-7 1/2 ips or 3 3/4 ips	Editing Facilities:	Instant Stop Lever, Automatic Tape Lifter, Fast Forward and Rewind, Manual Cueing and Digital Footage Indicator.
Frequency Response:	30-18000 CPS at 7 1/2 ips dynamic range ± 2 DB 50-15000 CPS at 7 1/2 ips 30-13000 CPS at 3 3/4 ips dynamic range ± 2 DB 50-10000 CPS at 3 3/4 ips	Mode Selection:	Instantaneous push button switching from stereophonic to monophonic recording and playback, also instantaneous selection of either 4-track or 2-track stereophonic or monophonic recording and playback.
Signal to Noise Ratio: (Per Channel)	50 DB or more across line output (Measured by NARTB standards)	Input Impedance: (Per Channel)	High impedance microphone inputs, High impedance auxiliary inputs.
Flutter and Wow:	Less than 0.15% at 7 1/2 ips Less than 0.25% at 3 3/4 ips	Output Impedance: (Per Channel)	8 ohm monitor speaker or earphone outputs, 600 ohm-0 db line outputs.
Harmonic Distortion:	Less than 2% at 3 DB below rated output	Output Level:	6 watts combined monitor speaker outputs, 2-12AD7, 2-6AU6, 2-6AQ5, 1-12BH7, 1-6CA4.
Erase Head:	In-line (stacked) quarter track	Tube Complement:	
Record/Playback Heads:	In-line (stacked) quarter track	Weight:	35 pounds less case. 42 pounds with case.
Bias Frequency:	65 KC	Dimensions:	16 1/2"W x 12 3/4"D x 7 1/8"H.
Level Indication:	Two V.U. meters (calibrated to zero 00 at 12 DB below saturation)		
Level Controls:	Individual controls on each channel for playback, microphone and auxiliary inputs; provides professional mixing facilities for recording sound with sound.		

Diagram of Controls

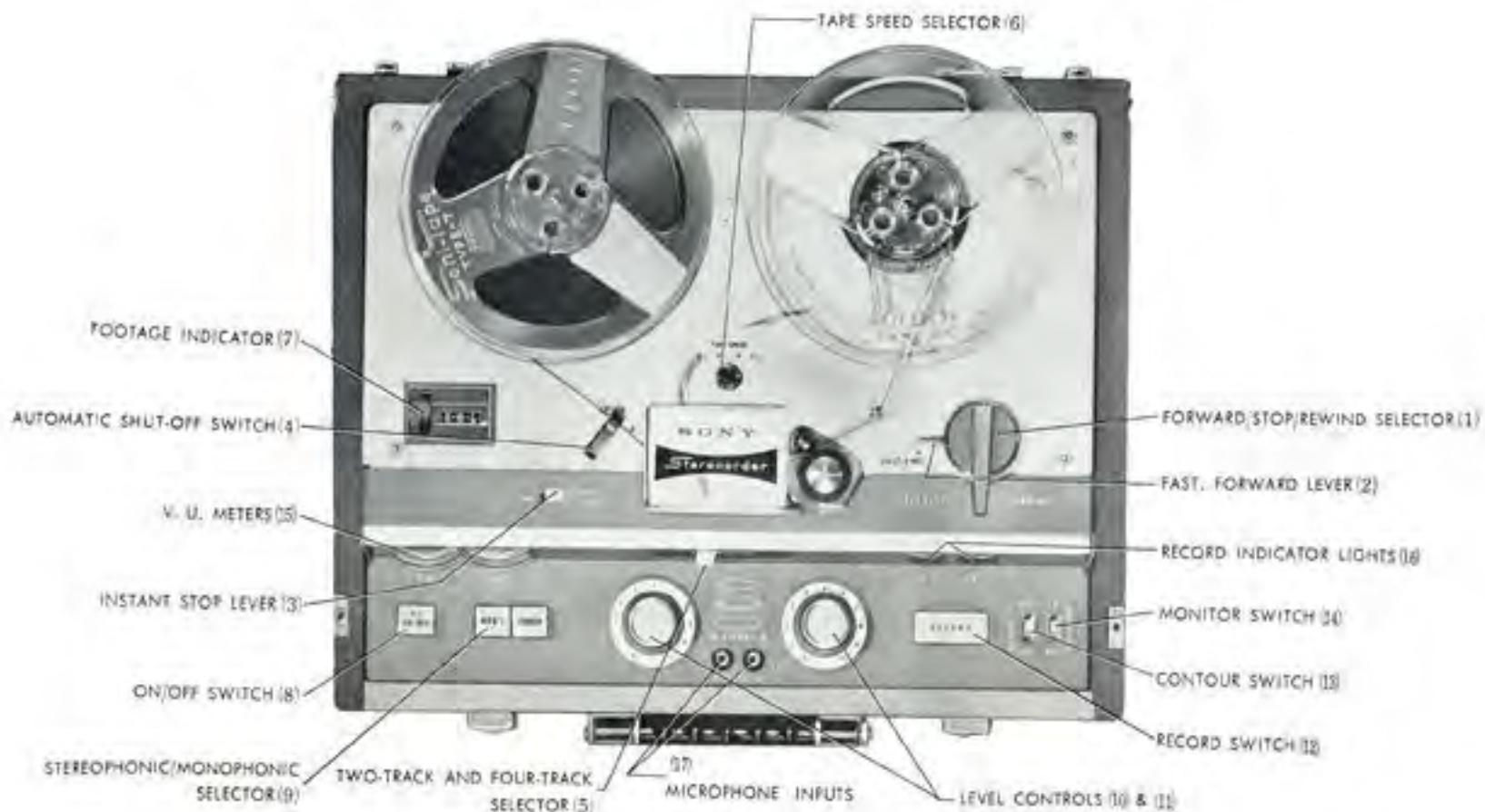
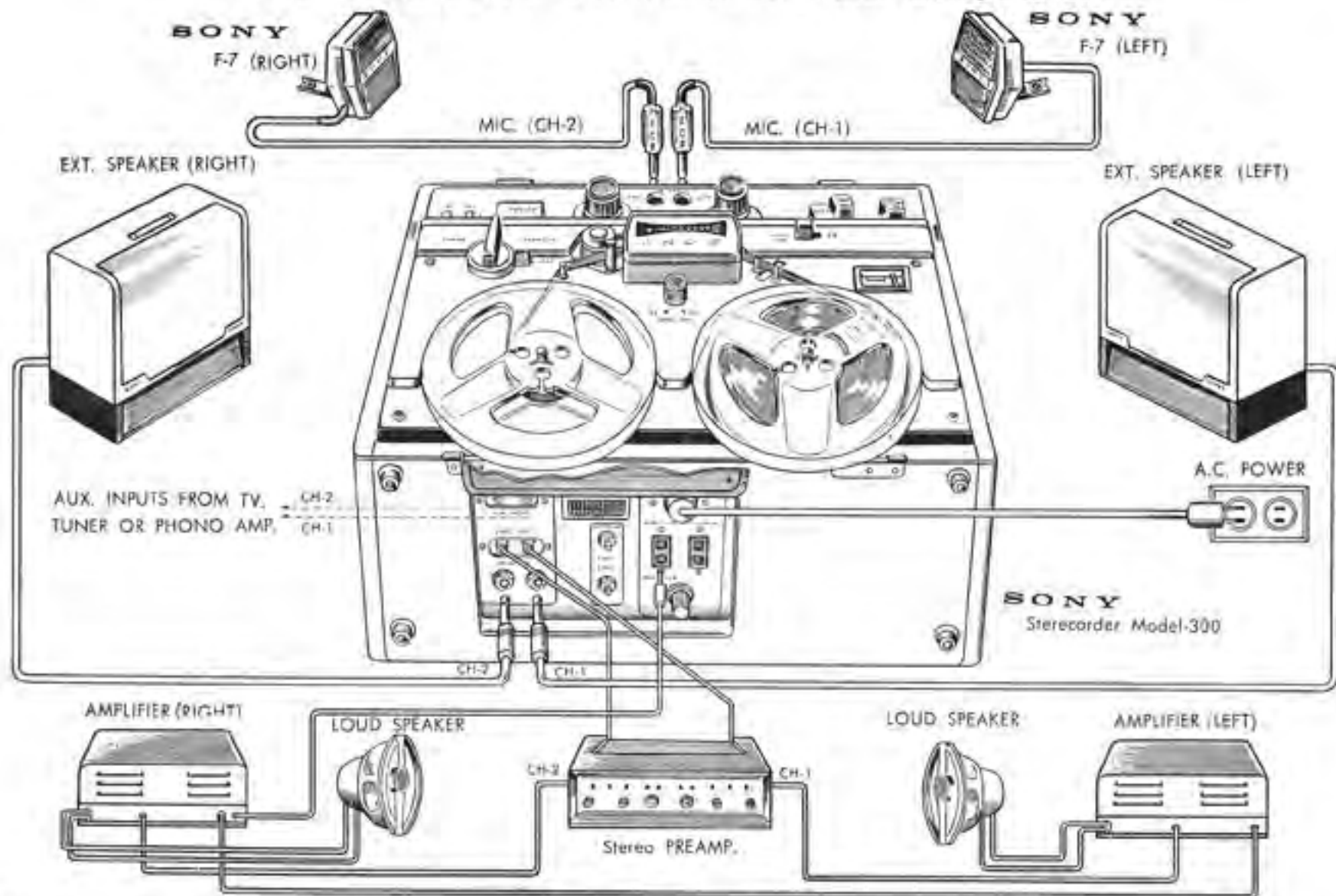


Diagram for Proper Connection to Other Components



Lubrication Chart

The bearings on the STERECORDER hysteresis motor are of the oil-retaining type, and never need oiling. Parts requiring occasional lubrication are listed below.

Parts to lubricate	Quantity of oil	Type of oil	Remarks	
Capstan bearings (figure A)	3 drops once a month	Light machine oil	Don't stain capstan surface	
Pinch roller bearing (figure B)	1 drop once a month	Light machine oil	Don't stain Rubber surface	
Reel shaft (figure C)	1 drop once a month	Light machine oil		
Idler shaft (figure D)	1 drop once a month	Light machine oil		

Quick Guide to Simple Servicing

Trouble	Possible Cause	Service
Pilot lights out, motor inoperative	Open A.C. circuit	Check AC line connection to Wall or chassis, check fuse, check On/Off switch. Check automatic shut-off switch.
No sound in playback when meters indicate signal	Defective speaker cords.	Check speaker, cords and plugs for shorts or open circuits. Check 6AQ5 amplifier tubes. Check MONITOR on-off switch.
No sound in playback and meters do not indicate signal	Defective tubes in pre-amplifiers, head leads disconnected, defective rectifier (6CA4) tube, or defective power amplifier tube 6AQ5	Check pre-amplifier tubes 12AD7 and Check lead connections of heads and at plugs in chassis. Check 6CA4 rectifier tube, and check 6AQ5 amplifier tube.
Poor volume or dull sound in playback, poor frequency response	Dirt on head tracks	Clean heads
Excessive tape hiss	Magnetized heads	Demagnetize heads.

Trouble	Possible Cause	Service
Wow and flutter	Dirt and grease on capstan or pinch roller, slipping tape	Clean capstan and roller, lubricate motor, tighten capstan screw.
Crackling noise during volume adjustments	Dirty or defective volume control potentiometers	
Pre- or post-echoes on recorded tapes	Print-through effect due to exposure of tapes to heat or magnetic fields	NOTE: To prevent print-through, store tapes in cool place. Remove from storage space in case when operating STERECORDER.
Operates in playback but not in record, no meter indication	Defective microphone or microphone leads or inputs	Check if STERECORDER is in record position, check movement of record playback switch, check microphone jacks or aux. input leads and jacks.
Previously recorded signal in background of newly recorded tapes	Poor erasure, dirt on heads	Clean erase head, check oscillator tube (12BH7).