

SONY



Tape recorder

Model 111

Owner's Instruction Manual



Head (15) over which

(15) (14) (13)

(15) (16) (17)

How to Load the Tape

Place the Pick-up Reel (17) (empty reel) on the right spindle, and the Supply Reel (16) (reel of tape) on the left spindle. Then rotate the reels until the three spindle spokes engage with the corresponding slots of the each reels.

Unwind approximately 1 foot of tape or leader from the Supply Reel.

Keep the unwound portion of tape (leader) slightly taut with shiny surface to the outside. Bring the leader from the left to the right through the space between the Head Covers (15).

Wrap the leader around the hub of the Pick-up Reel, or insert the end into the slot provided on the reel. The tape is now ready for recording and/or playing.





How to Switch On

Connect the Power Cord to the AC Line Receptacle (9) on the left side of the cabinet, and the other end of the cord to the AC power source.

Turn the Volume Control knob (2) counter-clockwise to switch on the power and the orange Pilot lamp (5) located on the left of the knob will light, indicating Tape recorder 111 is turned ON.



How to Record

Connect the Microphone plug into Jack "MIC" (6).

Turn the Function Selector knob (1) to the "FWD" position while pulling the red Record Lever (3) in the direction as shown by the arrow.

Adjust the recording level by turning the "VOLUME" knob (2). The best position for recording level is where the green light of the Recording Level Indicator (4) goes out at the strongest peak of sound volume.



When recording from radio, connect the clips of the Radio Card to the detector output, or to the moving coil of the speaker of the radio and the other end of the Cord to the "RADIO" Jack (7).

The recording level can be pre-set by simply pulling the Record Lever (3) without running the tape.



To stop the tape motion for a moment during recording, turn the Function Selector knob (1) to the "PAUSE" position, and to return to recording, return the Function Selector knob to the "FWD" position.

Since Model 111 is a two track equipment, half track recordings can be made. When recording on the upper half of the tape has been completed, reverse the reels by inverting and placing the loaded take-up reel on the left supply spindle and the empty reel on the right take-up spindle. Then, the other half of the tape is ready for recording.



How to Rewind

Turn the Function Selector knob (1) to the "REW" position.

How to Reproduce

Place the Function Selector knob (1) in the "FWD" position and adjust the sound volume properly by turning the Volume Control knob (2). The "EXT" jack (8) located at the right side of the cabinet provides the output for the external speaker. The output level is approx. 2 watts and impedance is 8 ohms.

Connect the plug of the Radio Cord to the "EXT" jack and the taps to the moving coil of an external speaker.

When an external speaker is connected to this jack, the built-in speaker is automatically disconnected.

This output can be used to connect the Model 111 to an external pre-amplifier and a power amplifier of any high fidelity system. When connecting in this manner, an 8 ohm 3 watt resistor must be inserted across the leads.



How to Fast Forward

To operate in the fast forward, place the Function Selector knob (1) in the "F.F." position.

To change from "F.F." to "FWD", stop the tape motion by turning the Function Selector knob to the "PAUSE" position and then advance the Function Selector knob to the "FWD" position.

NOTE: When Not in Use

Be sure to place the Function Selector knob (1) in the "STOP" position.
Place the Volume Control knob (2) in the "Off" position.

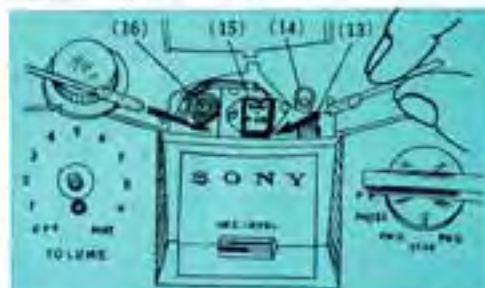
MAINTENANCE

Clean the Capstan (13), the face of the Record/Playback Head (15) over which the tape travels and the Semicircular insertion above silver wear in the Erase Head (16) by carefully wiping with a piece of soft, clean fabric dampen with denaturated alcohol. Absorbent cotton fixed to a match stick or applicator (Q-Tip) is recommended for easy cleaning of precision parts.

Keep the Heads, (15) and (16), away from magnetized object such as steel screw driver.

Lubricate the Capstan (13) every 200 hours of operation by putting one drop of light machine oil on the sponge located on the bearings.

Lubricate the Pinch Roller shaft (17) every 500 hours of operation with one drop of light machine oil. In this case do not wipe off the special black colour grease around the shaft. Excessive oiling may cause slipping of mechanism, therefore, use oil sparingly, and don't stain rubber surface with oil. No lubrication is necessary for other parts.



How to Remove Head Cover

Pull the Head Cover (12) upwards tilting slightly to the rear of the machine.



How to Remove Top Panel

Disconnect the Power Cord from the power source.

Remove the Head Cover (12), "VOLUME" Knob (2), "SELECTOR" Knob (1) and "REC" lever Knob (3) by pulling upwards.

Remove the 3 set screws, one under the "VOLUME" Knob, one in the "Capstan Holder" and one at rear the "REC" lever on the Top Panel and the 2 set screws on the rear of the machine.

Then pull the Top Panel upwards.

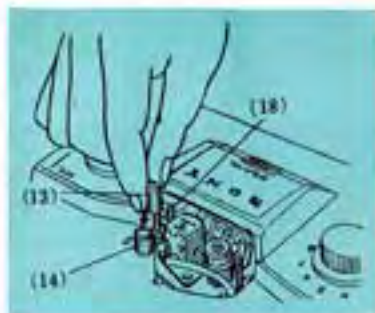


How to Change Speed

Tapeorder 111 is shipped with the Tape Speed set for 3 $\frac{1}{2}$ ips (inches per second). To change from 3 $\frac{1}{2}$ ips to 1 $\frac{1}{2}$ ips, slow speed for double recording and/or playing hours, remove the Head Cover (12), and remove the Capstan (13) by turning counter-clockwise and pulling upwards.

Put the Capstan in the Capstan Holder (14) beside the Capstan shaft, (18)

3 $\frac{1}{2}$ ips, with the Capstan on the Capstan Shaft, is recommended for music or other recordings where better tonal quality is required.



Tapeorder Model 111 Specifications

Dimensions :	8 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ " (225 x 115 x 200 mm)
Weight :	10.8 pounds (4.9 kg) including accessories
Power requirements :	Approx. 45 watts, 110~117 volts 60 cps. AC.
Reel size :	Up to 5"
Tape speed :	3 $\frac{1}{2}$ ips and 1 $\frac{1}{2}$ ips
Playing time :	30 minutes with 5" reel at 3 $\frac{1}{2}$ ips 60 minutes with 5" reel at 1 $\frac{1}{2}$ ips
Wow and flutter :	Less than 0.4% RMS
Frequency response :	70-8,000 cps at 3 $\frac{1}{2}$ ips 70-4,000 cps at 1 $\frac{1}{2}$ ips
Signal to noise ratio :	Over 40 db at standard recording level
Input :	Microphone jack (1)—high impedance High level input jack (1)—high impedance
Output :	Jack for external speaker (1)
Output power :	2 watts
Speaker :	3" x 6" PM dynamic, 8 ohms
Tube complement :	1-6AU6, 1-6AV6, 1-6AR5
Rectifier :	1-selenium rectifier
Recording indicator :	Fluorescent light beam indicator tube
Bias frequency :	Approx. 30 kc
Recording system :	Dual track

Superb quality

Outstanding features

Newest styling

Your best companion

SONY means QUALITY

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