



## MICROPHONE RECORDING

1. Place MODE SWITCH in STOP position.
2. Place reel of tape (FEED REEL) on FEED REEL SPINDLE.
3. Place empty reel (TAKE UP REEL) on TAKE UP REEL SPINDLE.
4. Thread tape as shown in Sketch 1. (The polished side of the tape should be facing the front)
5. Plug microphone into MIC jack.
6. Plug POWER CORD into any convenient 110–120 V.AC 60 cycle receptacle.
7. Turn VOLUME CONTROL knob clockwise. A click will be heard and the magic eye LEVEL INDICATOR will indicate green fluorescence within 30 seconds.
8. Advance VOLUME CONTROL knob to approximately mid position and allow amplifier tubes to warm up for at least 1 minute.
9. Turn MODE SELECTOR to RECORD position by pressing down on MODE SELECTOR knob. This is a safety feature for preventing accidental erasure.
10. TAKE UP REEL will start turning in a counter clockwise direction and begin taking up tape.
11. Speak into microphone in normal tone and adjust VOLUME CONTROL so that magic eye LEVEL INDICATOR flickers slightly and beam angle does not overlap. Different position of microphone and VOLUME CONTROL settings should be tried for optimum playback results.
12. To stop recording turn MODE SELECTOR to STOP position.
13. To record other half of tape width, flip over full TAKE UP REEL on to FEED REEL SPINDLE and place empty FEED REEL on to TAKE UP SPINDLE

## PLAYBACK

1. To playback recording it is necessary to rewind tape to the start position on tape.
2. Turn MODE SELECTOR to REWIND and when tape has rewound to start position, turn MODE SELECTOR to STOP position.
3. Turn MODE SELECTOR to PLAY position and adjust VOLUME CONTROL to desired volume level.

## DIRECT RADIO OR PHONO RECORDING

1. Plug extension lead supplied with recorder into RADIO jack and connect clip leads across voice coil of loud speaker of radio or phono. Sketch 2.
2. For optimum results connect as in sketch 3. This method eliminates distortion and hum that may be present in radio or phono amplifier and speaker.
3. Recording radio or phono direct in steps 1 to 3 should not be attempted if the radio or phono is of the AC/DC type since AC/DC units may present a shock hazard. In order to prevent this, an isolation line transformer should be used with the AC/DC unit.

## RE-RECORDING AND ERASING

Tape may be used over and over again. Deletions and change of recorded material can be made by following steps 9–12 in MICROPHONE RECORDING. It is not necessary to erase previous recording before making new recording as when MODE SELECTOR is in RECORD position, previous recording is erased.

To erase without recording turn VOLUME control to MIN Position and proceed as in MICROPHONE RECORDING steps 9–10.

## SPEED CHANGE

1. Place MODE SELECTOR in STOP position and VOLUME CONTROL power in OFF position.
2. Remove HEAD COVER by pulling upwards on both ends of HEAD COVER.
3. Unscrew thumbscrew on top of CAPSTAN HOLDER and place  $7\frac{1}{2}$  capstan sleeve on to CAPSTAN.
4. Tighten thumbscrew.
5. Replace HEAD COVER.

## tone CONTROL

Maximum clockwise rotation HI will give maximum high frequency response.

Maximum counter-clockwise LOW will result in maximum low frequency response.

Set in position which gives most pleasing sound.

## EXTERNAL SPEAKER

Plug extension lead into EXTSP jack. Connect clip leads to voice coil of external speaker.

Any permanent magnet type speaker of 4 to 8 ohms may be used.

BEFORE TURNING OFF RECORDER PLACE MODE SELECTOR IN STOP POSITION IN ORDER TO PREVENT FLAT SPOTS FORMING ON RIM OF PINCH ROLLER. FLAT SPOTS ON PINCH ROLLER WILL RESULT IN WAVERING SPEED AND IT WILL BE NECESSARY TO OPERATE THE RECORDER IN PLAY POSITION WITHOUT TAPE FOR A PERIOD OF TIME IN ORDER TO "WORK OUT" THE FLAT SPOTS.