

I SPECIFICATIONS

MODEL NUMBER: Akai Model M-7, portable 4-track stereo tape recorder.

WEIGHT (NET IN CARTON): 47.3 lbs. (21.5 kg.) for M-7
2.4 lbs. (1.1 kg.) for all accessories supplied.

DIMENSIONS : 20"H×13"W×9"D, overall, case closed. (510H×340W×226D in m/m)

POWER REQUIREMENTS : A.C. 100, 110, 117, 200, 220, 230 or 245 volts interchangeable. 50-60 cycles.

POWER CONSUMPTION : 100 VA.

RECORDING SYSTEM: Specific "cross-field" recording based on the theory of trailless recording bias system. Inline 4 track stereo and 4-track monaural recording.

PLAYBACK SYSTEM : Inline 4-track stereo, monaural and 2-track stereo playback. Playback of monaural double-track and full-track recordings also possible.

TAPE SPEED : Three speeds; 7½" (19 cm.), 3¾" (9.5 cm.) and 1⅞" (4.75 cm.) per second.

TAPE SPEED DEVIATION : Less than ±3 per cent at all tape speeds.

WOW AND FLUTTER : Less than 0.15% R.M.S. at 7½ ips.
Less than 0.25% R.M.S. at 3¾ ips.
Less than 0.35% R.M.S. at 1⅞ ips.

FAST FORWARD AND REWIND TIME: 90 seconds for 1,200 ft. tape at 50 cycles and 75 seconds at 60 cycles.

FREQUENCY RESPONSE : 40 to 23,000 cps. at 7½ ips ±3 db;
40 to 20,000 cps. at 3¾ ips ±3 db;
40 to 10,000 cps. at 1⅞ ips ±4 db.

DISTORTION : Within 3 per cent T.H.D. at all speeds.

SIGNAL-TO-NOISE RATIO : 40 db below recorded level signal at all speeds.

CROSS TALK CHANNEL SEPARATION : Within 53 db between each track.
Better than 60 db at 1,000 CPS 3 VU.

POWER INPUT LEVELS: Microphone input level

-55 db (VR. max) at 1,000 cps.
Phono and radio input level
-15 db (VR. max) at 1,000 cps.

POWER

OUTPUT : Head output, 1 mv. at 1,000 cps.
Pre-Amplifier output, 0.8 V at 1,000 cps, impedance 10,000 ohms
Main output, 34 dbm. up (in 600 ohms).

INSULATION

RESISTANCE : More than 10 MEG ohms

INSULATION

YIELD

STRENGTH: More than one minute at A.C. 1,000 V with Headphone

MONITORING

SYSTEM : (8 ohms) during recording.

MOTOR : Hysteresis synchronous, two-speed motor. Capacitor start.
1/100 HP. Power ratio, 70 per cent.
3,000 to 1,500 rpm at 50 cps,
3,600 to 1,800 rpm at 60 cps.

HEADS : Inline four-track stereo/monaural record-play head;
Impedance...5,000 ohms at 1,000 cps.
Four-track, cross-field bias head;
Impedance...14,000 ohms at 60 kc.
Four-track erase head;
Impedance...18,000 ohms at 60 kc.

MICROPHONE

USED : Square-shaped, dynamic microphone
Impedance...50,000 ohms
Sensitivity...55 db.
Frequency Response...70 to 15,000 cps ± 10 db.

SELF-CONTAINED

SPEAKER : 5×7" (12×18 cm.), oval-shaped, dynamic speaker;
Impedance...8 ohms
Allowable Input...6 watts
Frequency Response...80 to 12,000 cps, ± 10 db.

TUBES USED : 6267 (EF86) × 2, (12AD7) × 2,
6BQ5 × 2, 6X4 × 2, 6AR5 × 1.

REELS USED : Up to 7" reel

RECORDING

LEVEL

INDICATOR: Horizontal, A-model VU meter