



MARK II TWO AND FOUR CHANNEL PROFESSIONAL RECORDERS

PRELIMINARY SPECIFICATION SHEET

- New generation of popular MX-5050 recorder.
- Two versions: two-channel quarter inch, four-channel half inch.
- All MX-5050 features plus:
- Separate transport and electronics for convenient table top console or floor console mounting.
- Dc capstan servo standard with $\pm 7\%$ pitch control.
- Completely accessible front and rear electronics adjustments.
- Interface Jack for dbx and Dolby noise reduction.



Otari proudly presents the new Mark II—its second generation of compact professional recorders. In 1974, Otari established a new concept in professional machines with its MX-5050 series, a compact recorder with features and performance like those usually found only on the larger, more expensive recorders.

Now, Otari has taken the next logical step with its Mark II. This new series incorporates all the features, performance, and reliability of the MX-5050, and adds several new items that put it in a class by itself. These include: separately packaged transport and electronics, dc capstan servo with pitch control as standard, plug-in electronics, complete accessibility to electronics adjustments, and an interface jack for adding a dbx or Dolby noise reduction system.

For versatility of application, the Mark II is available in two versions: a two channel with quarter-inch tape and a four channel with half-inch tape. Thus, both versions of the Mark II use standard half-track spacing (0.075 inch or 1.9 mm)—the most common professional format. In addition, the two channel version has an extra reproduce head in quarter-track format for quarter-track stereo tapes.

The main features and benefits of the Mark II are shown at the left. Also, consider the following advantages when comparing this remarkable new recorder with competitive units: smooth tape handling, professional outputs (600 ohm) and connectors (XLR's), fixed output position at standard operating level of +4 dBm or -10 dBm (rear panel selectable), splicing block on head cover (two channel version), and new, easier to operate reel hold down knobs. Options include: low impedance microphone transformers, balanced-line input and output transformers, remote control, and floor console.

SPECIFICATIONS

TRANSPORT

Tape Width & Channels:

Two Channel: ¼ inch (6.3 mm) tape, 0.075 (1.9 mm) track width.

Four Channel: ½ inch (12.7 mm) tape, 0.075 (1.9 mm) track width.

Tape Speeds: 7½ and 15 ips (19 and 38 cm/s). Maximum deviation ±0.15%.

Rewind Time: Less than 90 secs for 2500 foot reel.

Reel Size:

Two Channel: 5 and 7 inch plastic or 10½ inch, EIA or NAB.

Four Channel: 10½ inch NAB.

Heads: Two Channel: Four head stacks: ½ erase, ¼ reproduce, ½ record, ½ reproduce

Four Channel: Three four-track in-line stacks: erase, record, reproduce.

Motors: Capstan: Variable speed (±7%) dc servo controlled motor

Reels: Two induction torque motors.

Flutter and Wow: (Measured per NAB weighted):

TAPE SPEED

15 ips less than 0.05%.

7½ ips less than 0.06%.

ELECTRONICS

Connectors: Line input and line output, standard three-pin XLR. Microphone, standard ¼ inch phone jack.

Inputs: Line: Minimum — 15 dBm, unbalanced 50 k ohms. Minimum — 15 dBm, balanced 600 ohms with optional transformer.

Microphone: Minimum — 70 dBm unbalanced, nominal 50 k ohms (high impedance). Balanced 150/250 ohms with optional in-line transformer.

Outputs: Line: Variable or fixed level. Fixed level: +4 dBm or -10 dBm rear panel switch selectable. Headroom: +19 dBm before clipping. Impedance: 600 ohms unbalanced (600 ohms balanced with optional transformer).

Headphone Jack: -24 dB, nominal 8 ohms unbalanced.

Equalization: NAB standard for 7½ and 15 ips (EIA, CCIR, and IEC also available).

Signal-to-Noise Ratio (overall record/playback):

Tape Speed	NAB	NAB
	Weighted	Unweighted
15 ips	68 dB	65 dB
7½ ips	68 dB	65 dB

Measured with respect to a record level of 520 nWb/m to

biased tape noise when using Ampex 456, 3M 250, or equivalent low-noise high-output tape.

Crosstalk: At 1000 Hz on adjacent tracks, greater than 60 dB.

Frequency Response (overall record/reproduce):

15 ips (at 0 VU): 50 to 20,000±2 dB. 35 to 25,000 Hz±3 dB.

7½ ips (at -10 dB): 50 to 18,000±2 dB.

40 to 20,000 Hz±3 dB.

Selective Reproduce Frequency Response:

15 ips: 100 to 15,000 Hz±3 dB

7½ ips: 70 to 10,000 Hz±3 dB

Distortion: Less than 1% at 1000 Hz at 185 nWb/m.

Test Oscillator Frequency: Nominal 1000 Hz.

PHYSICAL

Operating Position: Vertical or horizontal.

Power Requirements: 117 volts, 60 Hz, single phase ac, 105 watts. Or 220/240 volts, 50 Hz, single phase ac, 105 watts.

Operating Environment: 40° to 104°F (5° to 40°C). 20 to 80% RH

Storage Environment: -5° to 113°F (-20° to 45°C). 10 to 80% RH.

Weight: Two Channel: 64 lbs (29 kg).

Four Channel: 84 lbs (38 kg).

Mounting: Table top console (standard). Floor console pedestal (optional).

Standard Accessories: Table top console, dc capstan servo, empty 10½ inch NAB reel, NAB reel precision hold down knob, fuse, NAB reel shims.

Optional Accessories: Balanced low Z mic input transformers, balanced 600 ohm line input and output transformers, remote control unit, floor console pedestal.

Size: Two Channel: Table top console

Height: 19 inches (483 mm)

Width: 16½ inches (419 mm)

Depth: 25 inches (635 mm)

Four Channel: Table top console

Height: 26 inches (660 mm)

Width: 16½ inches (419 mm)

Depth: 25 inches (635 mm)

Otari reserves the right to change specifications without notice or obligation.

EFFECTIVE NOVEMBER 1976

DISTRIBUTED BY:



Otari Corporation
981 Industrial Road
San Carlos, California 94070
(415) 593-1648 TWX 910-376-4890

Otari Electric Co., Ltd.
4-29-18 Minami Ogikubo
Suginami-ku
Tokyo 167, Japan
(03) 333-9631 Telex J26604