

MX-5050-B

all-new compact professional recorder

All proven features of the pace-setting MX-5050, such as front adjustable bias and record EQ, selective reproduce, edit and cue, test oscillator, plus:

new: TTL/IC logic for noise free punch-in and punch-out.

new: Three speeds in field selectable speed pairs of 15/7½ or 7½/3¾ ips.

new: 24 dBm headroom, 28 dBm output.

new: Dc capstan servo standard, with ±7% speed control in record *and* reproduce.

new: Peak reading LED's plus standard VU meter.

new: Return to zero memory feature for mix-down.

SPECIFICATIONS—MX-5050-B

TRANSPORT

Tape Width and Channels: ¼ inch (6.3 mm) wide.

Two Channels: 0.075 inch (1.9 mm) track width.

Tape Speeds: Three speeds in internally switchable speed pairs of: 15 and 7½ ips (38 and 19 cm/s) or 7½ and 3¾ ips (19 and 9.5 cm/s).

Maximum deviation 0.15% with 1.5 mil (0.038 mm) tape.

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

Reel Size: 10½ inch EIA or NAB; 5 or 7 inch plastic.

Heads: Four head stacks: ½ track erase, ¼ track reproduce, ½ track record, ½ track reproduce.

Motors: Capstan: Three speed 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%
3¾ ips less than 0.10%

ELECTRONICS

Connectors: Standard three-pin XLR.

Inputs: Line: Minimum -15 dBm, unbalanced 50 k ohms. Minimum -15 dBm, balanced 10 k ohms with optional transformer.

Microphone: Minimum -70 dBm, unbalanced, nominal 50 k ohms (usable range 150 ohms to 10 k ohms). Switchable 20 dB attenuator on back panel.

Outputs: Line: Variable or fixed level.

Fixed level: +4 dBm or -10 dBm rear panel switch selectable. Maximum output +28 dBm. Headroom: +24 dB before clipping. Load Impedance: 600 ohms, balanced. Output Impedance: 50 ohms, balanced.

Headphone Jack: -24 dBm, 8 ohms or higher impedance. Equalization: NAB standard for 3¾, 7½ and 15 ips. IEC also included, rear panel switchable.

Record Level: Rear panel switchable: 185, 250, or 320 nWb/m.

Signal to Noise Ratio:

Tape Speed	Overall Record/Playback Unweighted	Playback Only Electronics (at all speeds)
15 ips	66 dB	72 dB unweighted
7½ ips	66 dB	
3¾ ips	65 dB	

Measured with respect to a record level of 520 nWb/m to biased tape noise when using Ampex 456 or 3M 250 tape, using a 30 Hz to 18 kHz audio filter.

Frequency Response:

Tape Speed	Overall Record/Playback	Playback Only
15 ips (at 0 VU, +4 dBm)	30 Hz to 22 kHz (±2 dB)	31.5 Hz to 20 kHz (±2 dB)
7½ ips (at -10 VU, -6 dBm)	25 Hz to 20 kHz (±2 dB)	31.5 Hz to 16 kHz (±2 dB)
3¾ ips (at -10 VU, -6 dBm)	30 Hz to 12 kHz (±2 dB)	31.5 Hz to 10 kHz (±2 dB)

Based on 250 nWb/m alignment level and 3M 206. Using an MRL 21J205 alignment tape.

Distortion: Less than 0.7% at 1000 Hz at 250 nWb/m.

Test Oscillator Frequency: Nominal 1000 Hz.

Indicators: Standard VU meters plus peak reading LED's set at +9 dB (adjustable) based on 185 nWb/m.

PHYSICAL

Operating Position: Vertical or horizontal.

Power Requirements: 117/220/240 volts, 50/60 Hz. 100 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: Cabinet: 53 lbs. (24 kg). Portable case: 62 lbs. (28.2 kg).

Mounting: Vinyl covered wooden cabinet (standard); portable case, floor console, or rack mounting adaptor (optional).

Standard Accessories: Empty 10½ inch NAB reel, precision hold down knob, NAB real shims, operating manual.

Optional Accessories: 10 k ohm balanced input transformers (IPT-B), Remote Control (CR-705A), line adaptor cables (ADP-CBL), portable case (P2-B), floor console (CSL-B), rack mounting adaptors (RK-2B).

Size: Height: 21¾ inches (55.6 cm) including reel overhang. Width: 21½ inches (54.6 cm) including reel overhang. Depth: 8½ inches (20.6 cm).

Portable case adds front and back covers for total depth of 14½ inches (36.8 cm).

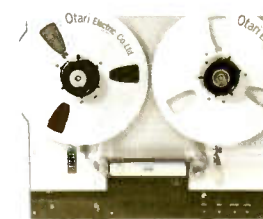
other outstanding reasons
for selecting otari....



Mark II-2



MX-5050-QXHD



ARS-1000



MX-5050-8D



MX-7800



DP-4050

MX-7800 One-Inch Eight-Track
First full-function one-inch eight-track
• 100% remote controlled • Remote LED tape timer, return-to-zero
• 30/15 ips • Dc capstan servo.

MX-5050-8D Eight-Channel Half-Inch
Full eight track performance and features • 15 & 7½ ips • Variable speed (±7%) dc capstan servo.

MX-5050-QXHD Four-Channel Quarter-Inch
15 & 7½ ips • Variable speed (±7%) dc capstan servo
• Other features same as two-track.

MX-5050-FL One-Channel Full-Track • 7½ & 3¾ ips • Also reproduces two-track.

Mark II-2 Two-Channel Quarter-Inch
All MX-5050 features plus:
• Separate transport and electronics
• 15 & 7½ ips • Variable speed (±7%) dc capstan servo.

Mark II-4 Four-Channel Half-Inch
Same features as Mark II-2.

ARS-1000 Automated Radio Station Reproducer
Two speeds 7½ & 3¾ ips • Two channel stereo • Ruggedized for continuous operation.

OTARI

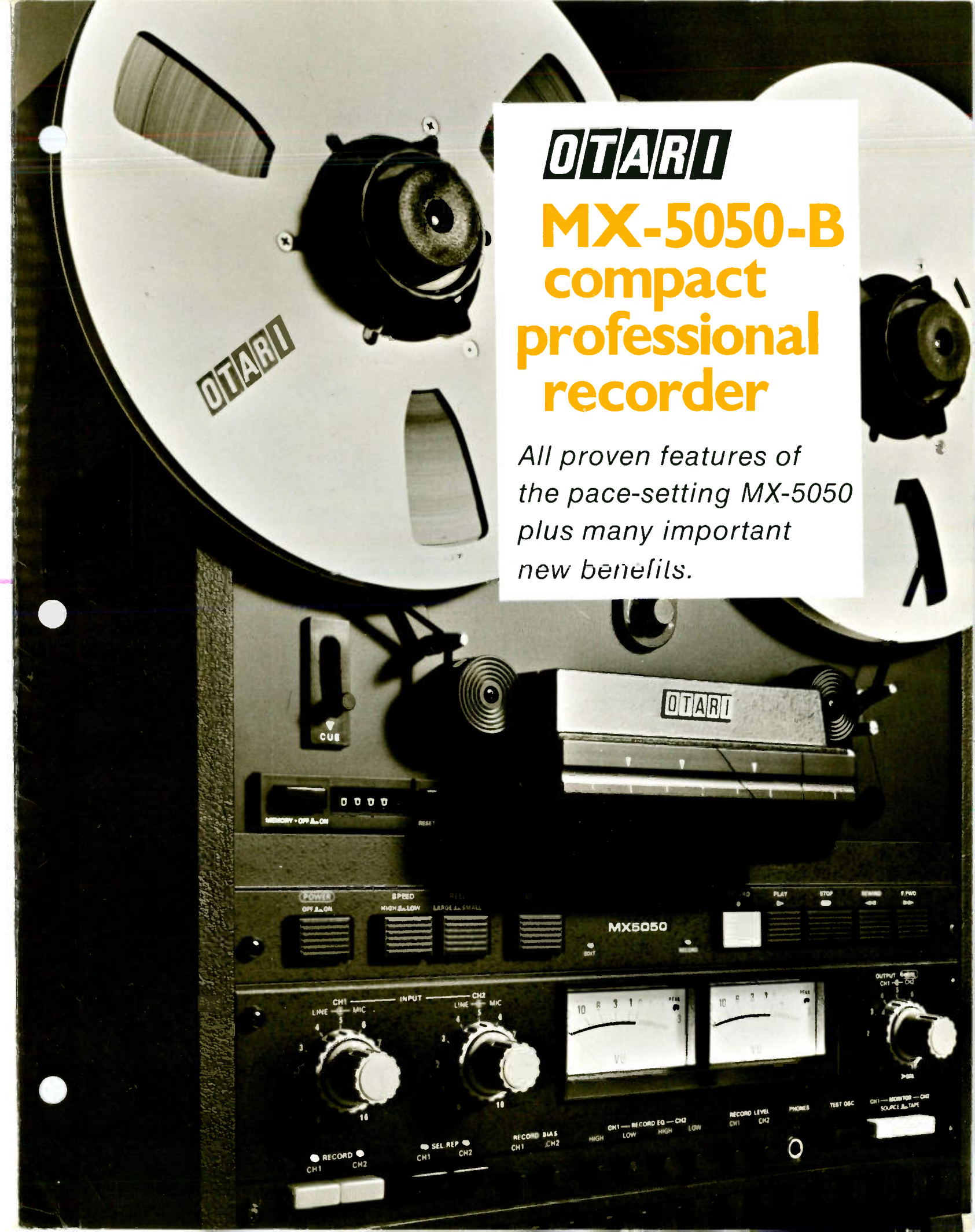
Otari Corporation
2 Davis Drive, Belmont, CA 94002
415/592-8311 TWX: 910-376-4890
MANUFACTURED BY OTARI ELECTRIC CO., TOKYO, JAPAN

EFFECTIVE SEPTEMBER 1979
DISTRIBUTED BY:

OTARI

MX-5050-B compact professional recorder

All proven features of
the pace-setting MX-5050
plus many important
new benefits.



MX-5050-B

The best \$3500 two-channel recorder for under \$2500.
Logical successor to the first truly professional compact recorder, the MX-5050.

Dc Capstan Servo: $\pm 7\%$ Speed Control: Dc capstan servo system provides exceptionally stable tape speeds, plus ability to vary both record and reproduce speeds by $\pm 7\%$ of nominal.

Adjustable Cue Control: Helps locate selections by defeating head lifters in fast forward or rewind to allow you to hear an audible signal. Adjustable feature varies the signal volume to prevent overloading of earphones or monitors.

Built-in Splicing Block: As a real production convenience, a precision-aligned and indexed splicing block is mounted right on the head cover. Cover is hinged and lifts for easy access to heads.

Selection Locator Memory: Return to zero memory recues machine to zero setting, a real time saver.

Three Speeds: Three speed operation in speed pairs of $15/7\frac{1}{2}$ or $7\frac{1}{2}/3\frac{3}{4}$ ips are internally switchable on PC board inside the back cover. Equalization is automatically changed at the same time.

Edit Control: Indispensable for production work, allows you to rock the reels back and forth or to spill tape at right of transport. Deactivates take-up motor and end-of-tape lever.

Selective Reproduce: Another important production feature for overdubbing, selective reproduce allows a new track to be laid down next to previously recorded tracks in perfect time synchronization.

Front Adjustable Bias and Record EQ: To peak bias when changing tapes or to quickly reset record equalization, these adjustments are front accessible.

Plug-in, Rugged Permalloy Heads: Otari MX-5050-B heads are plug-in for ease of servicing. They are fabricated from hard Permalloy, a rugged material that gives the best compromise between extended head life and optimum signal output.

Extra Reproduce Head: In addition to the half-track reproduce head, an extra playback head is included in the head assembly to reproduce quarter-track tapes. Selection between the two heads is made by a switch accessible through the top of the head cover.

Flashing Ready Light: This provides a visual indication, easily seen even from a distance, of the record-safe mode which helps to prevent accidental erasure. An LED indicator pulses to signify that the recorder is in the ready mode after either of the Record Selector push buttons has been depressed. To initiate recording, the Record button in the transport control cluster is then activated, which changes the pulsing of the LED to continuous illumination.

Noise Free Punch-in and Punch-out: Newly designed TTL/IC logic provides freedom from clicks and pops when punching in or out of the Record mode on the run.

Motion Sensing Control Logic: Motion sensing allows you to go directly into Play from Fast Forward or Rewind without time delays, breaking or stretching tape, or having to go through Stop.

Peak Reading LED's: Besides large easy-to-read VU meters, the MX-5050-B has a peak reading LED set to +9dB. This can be set at a different threshold if desired.

Fixed Output Level: A standard reference level (SRL), or fixed output position, is front panel switch selectable. This is normally +4dBm for a balanced 600 ohm line, but can be changed to -10dBm by a rear panel switch to facilitate interface with low-level mixers or other peripheral equipment.

Built-In Test Oscillator: Peaking bias is made much faster with the build-in 1000 Hz test signal. It is also useful for putting a cue tone on the tape for selection location.

+4 or -10 dBm Output: Selects between either the +4dBm level for a 600 ohm line or -10dBm level for low-level mixers or similar equipment.

Remote Control Connector: All transport operating controls (Record, Play, Stop, Rewind, and Fast Forward) are brought out to this connector for selection by an optional remote control unit.

NAB/IEC EQ: Both NAB and IEC equalization circuitry are included and are selected by this switch.

Choice of Three Record Levels: To maximize performance with different tapes, the MX-5050-B includes three separate calibrated record levels in nWb/m: 185 (original standard), 250 (for high-output low-noise tapes), 320 (the IEC and DIN standard).

Microphone Attenuator: For added versatility when using microphone preamps or high output mics, this switch provides a 20 dB pad.

XLR Connectors, Slanted Panel: All input and output connectors are three-pin XLR, mounted on a slanted panel so the machine can be operated horizontally.

