

OTARI

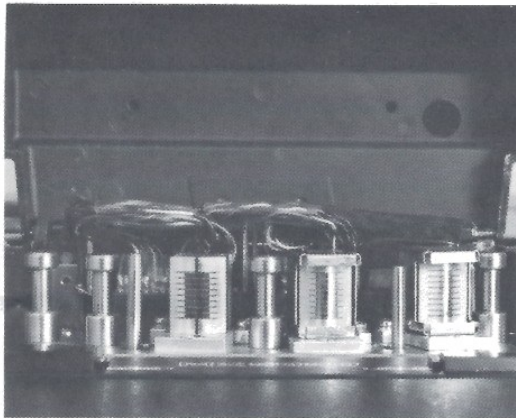
MX-5050-8 COMPACT EIGHT CHANNEL RECORDER

A half-inch eight channel recorder specifically designed to bring the many benefits of multi-channel recording to small studios, musical groups, educational institutions, and training directors—at a price they can afford.

- Full range of professional features.
- Motion sensing.
- 15 and 7-1/2 ips tape speeds.
- Selective reproduce.
- Front and rear adjustable electronics.
- Variable speed dc capstan servo.
- Portable, rack, or console mounting.



MX-5050-8 COMPACT EIGHT CHANNEL RECORDER



Separate Record and Reproduce Heads

Eight channel MX-5050-8 in-line heads are separate function units optimized for erase, record, and reproduce. The record and reproduce heads are of special hard Permalloy which provides better head life than standard metal heads and avoids the noise problems associated with ferrite heads, yet offers excellent output signal levels. Ferrite is used for the erase head where noise is not a factor. Entire head assembly is plug-in removable for ease of replacement.

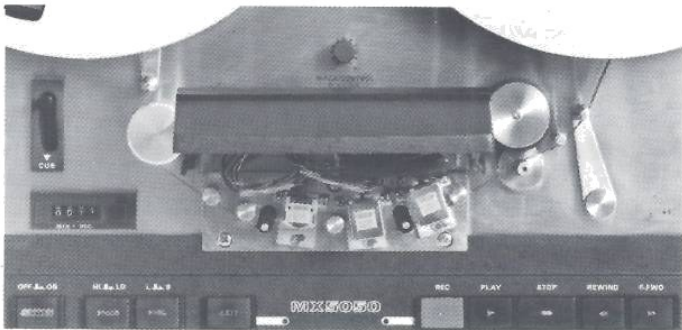
The new eight channel MX-5050-8 from Otari is a compact half-inch eight channel recorder with a full complement of professional performance and features. It is specifically designed for those small studios, musical groups, and serious recordists, who haven't been able to afford multichannel recording before and don't require compatibility with standard one-inch eight track machines. The MX-5050-8 will also find a variety of uses in schools, universities, and training applications to record master tapes for audio-visual presentations, videotapes, and films, or to teach multichannel recording.

Here are some of the features of the MX-5050-8 that make it the logical choice for beginning eight channel systems:

- Selective reproduce on all eight channels.
- Motion sensing to prevent tape damage.
- Front panel edit to allow spilling and rocking.
- Adjustable cueing control for audible monitoring in fast modes.
- Variable speed ($\pm 7\%$) dc capstan servo standard.
- Front adjustable bias, record EQ, output level.
- Bias adjustable for new high energy tapes.
- 600 ohm variable or fixed outputs (switchable +4 or -10 dBm).
- XLR line input and output connectors.
- Plug-in card electronics.
- Punch-in and punch-out record without clicks or pops.

Visit your nearest Otari professional dealer for a demonstration of this exceptional new recorder. He can show you how easily you can get into multichannel recording with the MX-5050-8.

Separate Transport and Electronics. To give you maximum versatility in mounting and installation, the MX-5050-8 is contained in two separate packages. One is the transport and control assembly, the other is the electronics. The cases are made of vinyl covered wood with rugged steel reinforced rubber corners. Each can be supplied with optional front and rear covers to convert the already heavy-duty cases to true road cases for remote assignments. For studio use, rack mounting adaptors and a floor console with wheels are available.



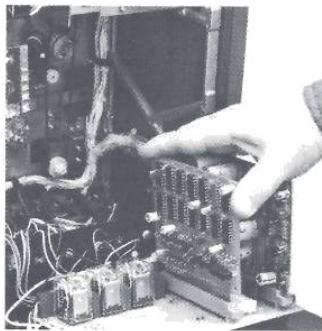
Accessible Heads, Min/Sec Counter, Adjustable Cue.

For ease of cleaning, degaussing, and marking edit points, the head cover of the MX-5050-8 is hinged to provide complete front access. For improved head life, tape lifters are automatically activated in fast modes. To the left of the head assembly is the counter, accurately calibrated in minutes and seconds. This is indispensable for recording applications and far more useful than the more common reel rotation counter. Above the counter is the adjustable cue control which defeats the head lifters in the head assembly to permit an audible signal in the fast modes for cueing. To the right of the head assembly, note that the capstan is located on the non-oxide side of the tape, to reduce tape scratching.

MX-5050-8 Click-Free Electronics. Of advanced design, the MX-5050-8 electronics have many user oriented features and controls. Starting at the left, note that the line and microphone input level controls for each channel are ganged on the same shaft. This makes it simpler to mix inputs without having to jump back and forth between controls. Below the input controls are individual *Record* interlock controls for each channel, which allow you to come in and out of record without pops and clicks. *Selective Reproduce* controls at the right provide reproduction

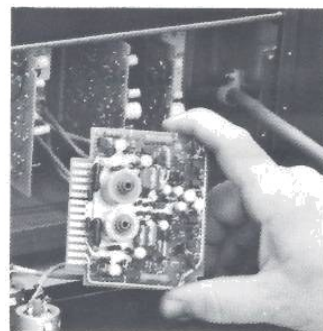


of previously recorded tracks in perfect time synchronization with new material. Front adjustable bias with the built-in test oscillator makes changing bias level for the specific type being used a fast, simple operation. Similarly, setting standard operating reproduce level and record equalization are front adjustable. Output levels can be varied or fixed by operating the Standard Reference Level (SRL) front panel switch. The large panel meters are true VU meters that meet ANSI specifications for response and ballistics characteristics.



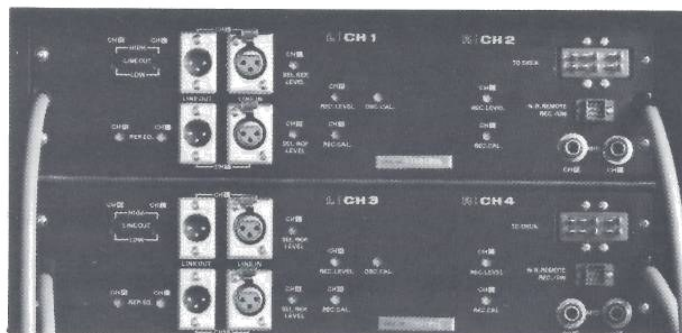
Plug-in Transport Boards.

Transport control logic electronics are contained on plug-in boards, easily accessible by lowering the hinged rear panel. Note uncluttered construction and ease of access to reel motor brake bands and other components for routine maintenance.



Plug-in Electronics Boards.

Gold plated contacts and complete plug-in modularity provide reliability and serviceability of MX-5050-8 electronics.



XLR Connectors and Rear Accessible Adjustments.

Both line input and output connectors are heavy duty professional type XLR's. High impedance microphone inputs are standard quarter-inch phone type. Secondary electronic adjustments, all rear panel accessible, include reproduce equalization, selective reproduce level adjust, record level and calibration, test oscillator calibration, output level selector switch High (+4 dBm) or Low (-10 dBm), and noise reduction system (dbx, Dolby) interface jack.

MX-5050-8 SPECIFICATIONS

TRANSPORT

Tape Tracks and Channels: Eight in-line tracks with eight channels of electronics. Track width is 0.040 in. (1.0 mm).

Tape Speeds: 15 and 7-1/2 ips (38 and 19 cm/s). Maximum deviation $\pm 0.15\%$.

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

Reel Size: 1/2 X 10-1/2 inches NAB.

Heads: Three eight track in-line: erase (ferrite), record, reproduce (both hard Permalloy).

Motors: Capstan: Variable speed dc servo controlled motor ($\pm 7\%$ correction).

Reels: Two induction torque motors.

Flutter and Wow: (per NAB weighted):

15 ips: less than 0.06%. 7-1/2 ips: less than 0.08%.

ELECTRONICS

Connectors: Line input and line output: standard three-pin XLR. Microphone: standard 1/4 inch phone jack.

Inputs: Line: Minimum — 15 dBm, unbalanced 50 k ohms.
Minimum — 15 dBm, balanced 600 ohms with optional transformer.
Microphone: Minimum — 70 dB, unbalanced, nominal 50 k ohms (usable range 150 to 50k ohms).

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 dBm nominal 8 ohms unbalanced.

Equalization: NAB standard for 7 1/2 and 15 ips.

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

Tape Speed	NAB	NAB
	Weighted	Unweighted
15 ips	63 dB	60 dB
7-1/2 ips	62 dB	59 dB

Measured with respect to a record level of 520 nWb/m to biased tape noise when using 3M206, Ampex 456, or 3M 250 tape.

Crosstalk: At 1000 Hz on adjacent tracks: greater than 50 dB.

Frequency Response: (overall record/playback)

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

35 to 25,000 Hz ± 3 dB.

7-1/2 ips (at -10 dB): 50 to 18,000 Hz ± 2 dB.

40 to 20,000 Hz ± 3 dB.

Specifications based on Ampex NAB alignment tape and 3M206.

Selective Reproduce Frequency Response:

15 ips: 100 to 15,000 Hz ± 3 dB.

7-1/2 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, 180 watts. Strappable for 220/240 volts, 50 Hz; single phase ac, 180 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.

Mounting: Vinyl covered wood case (standard). Rack mounting kit and floor console (optional).

Weight: Transport: 64 lbs (29 kg).
Electronics: 55 lbs (25 kg).

Standard Accessories: Vinyl covered wood cases, reel hold down knobs, fuse, empty reel, instruction manual.

Optional Accessories: Balanced 600 ohm line input and output transformers, remote control unit, console, 19 inch rack mounting adaptor, and front and rear snap-on covers.

Size: Transport:

Height: 16-11/16 inches (42.4 cm).

Width: 18-1/8 inches (46 cm).

Depth: 9-1/2 inches (24.1 cm).

Electronics:

Height: 19-3/16 inches (48.7 cm).

Width: 18-1/8 inches (46 cm).

Depth: 9-1/2 inches (24.1 cm) overall, including knob and connector clearance.

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



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