The MX5050 BIII has long been the standard in 1/4" 2 track analog recorders. It features an optimized three-head design and transformerless balanced inputs and outputs to provide superior frequency response, low distortion and high signal-to-noise performance under the most demanding conditions. Record setup adjustments can be made from the front panel, and a convenient built-in oscillator provides test tones for calibration/maintenance.

The direct drive capstan motor is servo-controlled, and an integral microprocessor governs tape handling, including dynamic braking, motion sensing and transport logic. A built-in mini-autolocator provides three one-touch cue-point memories, search zero, and a repeat function. The tape timer display shows tape time in Hrs/Min/Sec., as well as tape speed in inches per second and percentage of tape speed. Capstan speed can be varied by ±20% in 0.01% steps using the built-in “pitch” control. Time-code editing using a synchronizer is accomplished via the 37-pin Otari standard parallel interface.

The extremely rugged mechanical construction includes a 1/4" deckplate with cast aluminum side panels and steel support members. All circuit boards are designed to swing out or unplug for quick service access.

**SYSTEM HIGHLIGHTS:**
- Positive-action transport controls
- Balanced transformerless XLR I/Os
- DC capstan, Quartz PLL servo-controlled
- Built-in mini-autolocator
- Rehearse function
- Automatic monitor switching
- Built-in test oscillator and external oscillator input
- Variable pitch control (±20%)
- Front panel record setup adjustments
- 1/4" deck plate with cast aluminum side panels and steel support members

continued on back
**SPECS**

### TAPE TRANSPORT

- **Track Configuration**: 1/4" 2 Track
- **Motor**: Capstan x1 (DC brushless PSC servo motor), Reel x2 (AC Induction Motor)
- **Reel Size**: Max. 10.5" NAB
- **Tape Speed**: High Speed Pair: 15 ips/7.5 ips, Low Speed Pair: 7.5 ips/3.75 ips
- **Tape Speed Accuracy**: ±0.2%
- **Wow And Flutter**: Peak Weighted Per DIN 45507
  - 15 ips: max. ±0.06 %
  - 7.5 ips: max. ±0.08 %
  - 3.75 ips: max. ±0.12 %
- **Start Time**: Time required to accelerate to double the specified Wow and Flutter value.
  - 15 ips: max. 0.5 sec
  - 7.5 ips: max. 0.4 sec
  - 3.75 ips: max. 0.3 sec
- **Stop Time**: Time to stop from Play mode
  - 15 ips: max. 0.5 sec
  - 7.5 ips: max. 0.3 sec
  - 3.75 ips: max. 0.3 sec
- **Fast Wind Time**: max. 110 sec for 2500 ft (50Hz)
  - max. 90 sec for 2500 ft (60 Hz)

### ELECTRONICS

#### Input
- **Line**: Transformerless Active Balanced
  - Input Impedance: 100kohm, 20Hz–20kHz
  - Nominal Level: +4dBu
  - Max. Level: +30dBu
  - Connectors: XLR Female type
- **Mic**: Transformerless Active Balanced
  - Input Impedance: 10kohm
  - Min. Level: -70dBu/-50dBu/OFF switchable
  - Mic. Impedance: Min. 150ohm

#### Output
- **Line**: Transformerless Active Balanced
  - Output Impedance: Max. 180m (20Hz–20kHz)
  - Local Impedance: Min. 200ohm
  - Nominal Level: +4dBu/16dB switchable
  - Max. Level: +26dBu for 200ohm
  - Connectors: XLR Male type
- **Phone**: Local Impedance: 8ohm
  - 1/4" Standard Stereo Phone Jack
- **Equalization**: NAB/IEC Selectable
- **Standard Reference Flux**: MX-5050 BIII, 185/250/320* nWb/m
  (*open circuit flux*)

#### Frequency Response REC/REP Frequency Response
- **15 ips**: 30Hz - 20kHz ±2dB
- **7.5 ips**: 30Hz - 18kHz ±2dB
- **3.75 ips**: 20Hz - 10kHz ±2dB

#### REC/SEL-REP Frequency Response
- **15 ips**: 250Hz - 7.5kHz ±3dB
- **7.5 ips**: 250Hz - 5kHz ±3dB
- **3.75 ips**: 250Hz - 2.5kHz ±3dB

### Signal to Noise Ratio

<table>
<thead>
<tr>
<th>Filter</th>
<th>Unweighted</th>
<th>Weighted</th>
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<tbody>
<tr>
<td>Speed</td>
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<tr>
<td>15 ips</td>
<td>IEC 70dB</td>
<td>73dB</td>
</tr>
<tr>
<td>NAB</td>
<td>69dB</td>
<td>72dB</td>
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<tr>
<td>7.5 ips</td>
<td>IEC 67dB</td>
<td>70dB</td>
</tr>
<tr>
<td>NAB</td>
<td>71dB</td>
<td>73dB</td>
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<tr>
<td>3.75 ips</td>
<td>IEC 64dB</td>
<td>67dB</td>
</tr>
<tr>
<td>NAB</td>
<td>64dB</td>
<td>67dB</td>
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### OPTIONAL ACCESSORIES

<table>
<thead>
<tr>
<th>Name</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>Auto Locator (8-memory)</td>
<td>CB-119</td>
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<tr>
<td>Remote Controller (Transport)</td>
<td>CB-127</td>
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<tr>
<td>Input Transformer (2Ch unit)</td>
<td>IA-53T-T</td>
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<tr>
<td>Output Transformer (2Ch unit)</td>
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<tr>
<td>Pedestal</td>
<td>IA-521-22</td>
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<tr>
<td>Rack Mount Kit</td>
<td>RK-2B</td>
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<tr>
<td>2-Trk version with 1/4&quot; Tk Playback</td>
<td>MX5050 BIII-P</td>
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