

# Otari Mx-55 N-M

## Tape Transport

<b>Track Configuration</b>	1/4" (6.3 mm) Width Tape, 2-track 2-channel, NAB or DIN Stereo
<b>Nom. Tape Speed</b>	38.1 & 19.05 cm/s (15 & 7.5 ips) switchable Changeable to 19.05 & 9.5 cm/s (7.5 & 3.75 ips)
<b>Speed Accuracy</b>	Within $\pm 0.2\%$
<b>Speed Deviation</b>	Less than 0.2%
<b>Pitch Control</b>	$\pm 20\%$ continuously variable control. Percentage or ips readout with 0.01% precision multiturn encoder servo system.
<b>Fast Wind Time</b>	60 Hz = 100 s, 50 Hz = 110 s (2,500 ft tape)
<b>Reel Size</b>	NAB 10.5", 7", 5", EIA (cine), DIN Reel Tape Max. Length = 3,280 ft (tape thickness 50 $\mu\text{m}$ )
<b>Motor</b>	Capstan = DC Brushless Motor, Quartz PLL Controlled Direct Drive Reel = AC Induction Motor
<b>Head</b>	Plug in head block with full access to independent head height, tilt and azimuth adjustment
<b>Start Time (Time to reach within twice specified wow &amp; flutter.)</b>	38.1 cm/s = Less than 0.5 s 19.05 cm/s = Less than 0.3 s 9.5 cm/s = Less than 0.2 s
<b>Wow &amp; Flutter (PEAK WTD, DIN45507, IEC Pub.386)</b>	38.1 cm/s = Less than $\pm 0.06\%$ 19.05 cm/s = Less than $\pm 0.08\%$ 9.5 cm/s = Less than $\pm 0.12\%$
<b>Tape Timer</b>	Seven segment LED readout from tachometer/logic measurement circuit; indicates tape time in Hours, Minutes and Seconds.
<b>External Speed Control Range</b>	-50%, +100% at all speeds (4.8 to 19.2 kHz)
<b>VEM Tape Speed</b>	+100% with VEM optional accessory and continuous lower speed change accompanying tone change

# Electronics (Measured with AMPEX #456 tape. 0 dBu

0.775 V)=

<b>Line Input</b>	3-pin XL Type Connector (female) Transformerless Active Balanced Input Impedance: 10 k $\Omega$ Ref. Input Level: +4 dBu (0 to +10 dBu), -16 dBu (-10 to -20 dBu) Max. Input Level: +30 dBu
<b>Mic Input</b>	3-pin XL Type Connector (female) Transformerless Active Balanced Input Impedance: 10 k $\Omega$ (20 Hz to 20 kHz) Min. Input Level: -70 dBu Microphone Impedance: 150 to 10 k $\Omega$ With Supply Channel (CH1/BOTH/CH2) Selection Switch
<b>Line Output</b>	3-pin XL Type Connector (female) Transformerless Active Balanced (bal/unbal. switchable) Output Impedance: 5 $\Omega$ Ref. Output Level: +4 dBu (0 to +13 dBu), -16 dBu (-7 to -20 dBu) Load Impedance: min. 200 $\Omega$ Max. Output Level: +26 dBu (bal. load), +21 dBu (unbal. load)
<b>Bias and Erase Frequency</b>	150 kHz
<b>Magnetic Flux Level</b>	MX-55N = 185/250/370 nWb/m (switchable) MX-55D = 250/320/510 nWb/m (switchable)
<b>Frequency Response(Rec/Rep. 0 dB = 250 nWb/m)</b>	38.1 cm/s = 30 Hz to 20 kHz $\pm$ 2 dB (0 dB) 19.05 cm/s = 20 Hz to 18 kHz $\pm$ 2 dB (-10 dB) 9.5 cm/s = 20 Hz to 10 kHz $\pm$ 2dB (-20 dB)
<b>Frequency Response(Sel-Rep)</b>	38.1 cm/s = 30 Hz to 12 kHz $\pm$ 3 dB 19.05 cm/s = 20 Hz to 5 kHz $\pm$ 3 dB 9.5 cm/s = 20 Hz to 2.5 kHz $\pm$ 3 dB
<b>Distortion (38.1 cm/s, 1 kHz, 250 nWb/m)</b>	Less than 0.3%
<b>Crosstalk</b>	MX-55N = min. 55 dB MX-55D = min. 50 dB
<b>Depth of Erasure(38.1 cm/s, 1 kHz, 1040 nWb/m)</b>	MX-55N = min. 75 dB MX-55D = min. 70 dB

<b>Rec/Rep Signal-to-Noise Ratio(30 Hz to 18 kHz BPF, UNWTD)</b>	MX-55N NAB 38.1 cm/s, 1040 nWb/m = 69 dB MX-55N NAB 19.05 cm/s, 1040 nWb/m = 71 dB MX-55N NAB 9.5 cm/s, 740 nWb/m = 64 dB MX-55N IEC 38.1 cm/s, 1040 nWb/m = 71 dB MX-55N IEC 19.05 cm/s, 1040 nWb/m = 68 dB MX-55N IEC 9.5 cm/s, 740 nWb/m = 64 dB MX-55D IEC 38.1 cm/s, 1040 nWb/m = 72 dB MX-55D IEC 19.05 cm/s, 1040 nWb/m = 69 dB MX-55D IEC 9.5 cm/s, 740 nWb/m = 65 dB
<b>Test Signal Oscillator Frequency</b>	100 Hz, 1 kHz, 10 kHz Sine Wave, switchable

# Miscellaneous

<b>Power Requirement</b>	100/110/117/200/220/240 VAC, ±10%, single phase 50/60 Hz
<b>Power Consumption</b>	150 VA
<b>Operating Environment</b>	Temperature: 5 to 45°C, Relative Humidity: 20 to 80%
<b>Storage Environment</b>	Temperature: -20 to 45°C, Relative Humidity: 10 to 80%
<b>Weight</b>	30 kg
<b>Dimensions (W x D x H)</b>	440 x 222 x 488 mm
<b>Standard Accessories</b>	NAB Reel Adapter 10.5" Empty Reel (MX-55N only) DIN 12" Empty Reel (MX-55D only) Power Cord Fuse 1 A x 2 Fuse 2 A x 4 Fuse 5 A x 1 Fuse 5 A (slow blow) x 1 Lubrication Oil (PZ9E003) Case Foot Operaiton Manual
<b>Optional Accessories</b>	CB-127-S Remote Controller ZA-81G-S Stand (with Reel Spacer. Tilt Adjustable) ZA-81B-T Stand (without Reel Spacer) ZA-81D-S Reel Spacer (for ZA-81B-T) ZA-5CG Rack Mount Bracket SB-12S Scissors ZA-5CU Fader Control Kit PB-1AXAS VEM (Voice Edit Mode) PCBZA-5CW Proximity Switch Kit ZA-5CX Multi Purpose Phone Jack Kit ZA-5CL Input Transformer ZA-5CM Output Transformer

Revision #3

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