

OTARI

THE MARK III SERIES

Technology you can trust.

OTARI

MX5050

RECORD

PLAY

STOP

REWIND

F-FWD

EDIT

RECORD



The MARK III/8
1/2" eight-channel recorder

OTARI'S MARK III SERIES. A COMPLETE LINE OF PROFESSIONAL AUDIO TAPE RECORDER/REPRODUCERS FOR BROADCAST PRODUCTION, AUDIO POST-PRODUCTION AND RECORDING STUDIO APPLICATIONS.

Otari's MARK III/2, 4 & 8 recorders, offer the professional a complete range of innovative features and accessories to make any audio recording task easier and more cost effective.

The MARK III/2 1/4" two-channel machine is ideal for recording studio mixdown, as well as for broadcast editing applications. In audio-for-video or film sound production, Otari's optional speed resolver (the EC-401) makes the MARK III/2 the right choice for daily transfer applications using pilot-tone synchronization.

The MARK III/4 provides you with the 1/2" four-channel format which has been the world standard for both audio post-production mixdown and broadcast production – at a great price.

The MARK III/8, 1/2" eight-channel machine offers the recording studio many of the features of Otari's legendary MTR-90, plus performance that rivals 1" eight-channel machines.

The MARK III/8 also brings multitrack flexibility to the new task of production for stereo radio. The audio post-production world especially benefits from the MARK III/8's ability to communicate with SMPTE time-code-based editors, machine controllers, or synchronizers via its convenient and comprehensive interface connector.

This brochure will show you how Otari's MARK III series offers you the right combination of performance features, great sound, and long-run reliability for any recording application – in the most sophisticated production studio, or in your own home studio.



The zero return and reset electronic counter, with an hours/minutes/seconds display, is tape accurate at all operating speeds.

THE MARK III/2, 1/4" TWO-CHANNEL RECORDER

- ☐ BROADCAST: Stereo production/news and studio editing
- ☐ TELEVISION & FILM: Audio post-production; daily transfers with pilot-tone resolving
- ☐ RECORDING STUDIO: Mix-down and copy

Uncompromising design, from its optimized three head configuration, to its world-wide reputation for reliability and quality, the MARK III/2 offers audio professionals everywhere the best performing 1/4" two-channel machine in its price category.

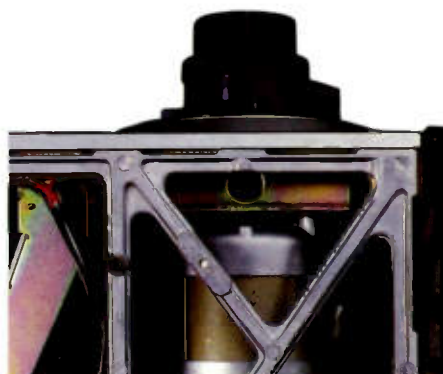
Professional Features that make the MARK III/2 easy to use

- ☐ Transformerless, balanced inputs and outputs with XL type connectors
- ☐ Dual-element metering system with user-adjustable, peak reading LEDs, plus standard VU metering for monitoring of program levels
- ☐ Built-in test oscillators (1 kHz, 10 kHz) for Record alignments or for putting test tones on tape
- ☐ Front panel Record setup adjustments allow machine to be easily fine-tuned for maximum performance
- ☐ Line output is switch selectable for +4 dBm or -10 dBV level to interface with any system
- ☐ Headphone amplifier with channel select and level control
- ☐ Transformerless, balanced mic input with selectable 20 dB pad (and mute)
- ☐ Mic/Line mixing on each channel

- ☐ Record reference levels are switch selectable (185, 250, 320, nWb/m) to allow quick and easy compensation for changing recording tasks
- ☐ Equalization is switch selectable (NAB, IEC) for international compatibility
- ☐ Low frequency Reproduce equalization adjustments for full professional set-up
- ☐ Microprocessor-controlled hours/minutes/seconds real-time counter with zero-return and LED display, tape accurate at any speed
- ☐ Front panel Cue Control (tape lifter defeat)
- ☐ A full-function auto locator (CB-116) is optionally available

Features that deliver Superb Tape Handling and Transport Control

- ☐ Microprocessor-governed transport control logic, motion sensing, and dynamic braking for smooth tape motion and trouble-free operation
- ☐ $\pm 7\%$ variable speed control (+50%, -100% speed via external control) usable in Record and Reproduce
- ☐ Reel size is switch selectable (5", 7", 10.5"), EIA or NAB



Rugged 9mm alloy deckplate with cast structural supports.



The remote control (CB-102) duplicates the MARK III Series transport control and record buttons. For the ultimate in remote operation, the auto locator (CB-116) includes these functions, plus a separate hours/minutes/seconds LED display and six cue point memories for search or repeat.

- ☐ High torque, AC reel motors provide maximum power for fast tape handling, and responsive control during external machine control conditions

Additional Features for Flexibility, Reliability, and Serviceability

- ☐ 3 tape speeds, switch selectable in 15/7.5 ips or 7.5/3.75 ips speed pairs
- ☐ Fourth head switch selectable for quarter track stereo playback
- ☐ Interface connector for external machine control via SMPTE/EBU time-code-based editors, machine controllers, or synchronizers
- ☐ Positive-locking NAB hub adaptors
- ☐ Plug-in head assembly with hinged cover for easy access
- ☐ Modular construction, with convenient rear panel electronics and connector access
- ☐ Can be rack mounted using optional rack mounting kit (RK-32)
- ☐ Optional roll-around floor stand for variable-profile mounting (ZA-52L-32)



The MARK III/2 1/4" two-channel recorder
and MARK III/4 1/2" four-channel recorder

THE MARK III/8 1/2" EIGHT-CHANNEL RECORDER

- ☐ BROADCAST: Multi-track production for stereo
- ☐ TELEVISION AND FILM: Audio post-production; multi-channel sweetening
- ☐ RECORDING STUDIO: Multi-track mastering

Fast and accurate, the MARK III/8 combines a host of production features that free you from the mechanics of audio recording so that you can pursue the creative art of your business.

Individual channel control over status and monitoring, plus master switching gives you complete session control. These controls are duplicated on the CB-110 remote. Punch-in/punch-outs are accomplished with one button. Communication with the recording artist is maintained between "takes" because the MARK III/8 automatically selects the input monitor when the channel is in Record ready and the machine is stopped or in fast wind mode.

Multipin connector provides easy interface with SMPTE/EBU time-code-based editors, machine controllers, or synchronizers.

Audio specifications at 7.5 ips surpass those of other eight-channel machines at 15 ips—while using half the tape!

The MARK III/8 is the professional compact eight-channel production machine for the serious recording engineer or musician.

Professional Features that make the MARK III/8 easy to use

- ☐ Independently switchable +4 dBm or -10 dBV input and output reference level on each channel for easy interface to other equipment
- ☐ Heavy-duty locking, XL type input/output connectors
- ☐ Built-in test oscillator (1 kHz & 10 kHz) and external oscillator input, for record alignment and for putting test tones on tape
- ☐ Dual-element metering system with user-adjustable, peak reading LEDs, plus standard VU metering for monitoring of program levels
- ☐ Headphone amplifier with channel select and level control
- ☐ Individual channel and master switching of monitor electronics
- ☐ Standard Record level and input gain adjustment for each channel
- ☐ Automatic monitor switching
- ☐ Low frequency Reproduce equalization adjustments for full professional set-up
- ☐ Three remote units are available to provide any level of session control desired (CB-114, CB-110 and CB-116)
- ☐ Microprocessor-controlled hours/minutes/seconds real-time counter with zero-return and LED display

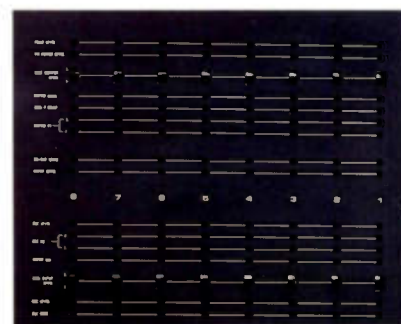
Features that deliver superb Tape Handling and Transport Control

- ☐ Microprocessor-governed transport control logic, motion sensing, and dynamic braking for smooth tape motion and trouble-free operation

- ☐ ±7% variable speed control (+50%, -100% speed via external control) usable in record and reproduce
- ☐ Reel size switch selectable (5", 7", 10.5"), EIA or NAB
- ☐ High torque, AC reel motors provide maximum power for fast tape handling, and precise control during external machine control conditions

Additional Features for Flexibility, Reliability, and Serviceability

- ☐ Speed selection of 15 or 7.5 ips, with 60 minutes record time at 7.5 ips
- ☐ Plug-in optimized three head design with easy access, hinged head cover



Convenient rear panel access to individual channel electronics adjustments.

- ☐ Interface connector for external machine control via SMPTE/EBU time-code-based editors, machine controllers, or synchronizers
- ☐ Positive-locking NAB hub adaptors
- ☐ Easy access, plug-in single-card-per-channel electronics with a full complement of adjustments for each channel
- ☐ Optional roll-around floor stand for variable-profile mounting (ZA-52L-38)

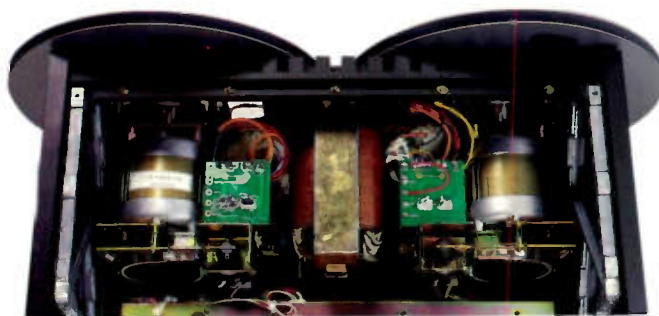
THE MARK III/4 ½" FOUR-CHANNEL RECORDER

- ☐ BROADCAST: Multi-track production for stereo
- ☐ TELEVISION & FILM: ½" four-channel mixdown for audio post-production

Superior audio performance and full over-dubbing capability make the MARK III/4 the obvious choice of the audio engineer. The MARK III/4 serves the needs of the audio businessman as well, with the same reliability and cost-effectiveness that's built into all Otari products.

For maximum performance with minimum investment cost, a ¼" four-channel recorder, the BQII, is also available. This compact format is ideally suited for high quality multi-image production.

High-torque, AC reel motors for fast tape winding power, and a DC servo capstan motor for precise tape speed control, make the MARK III Series perfect for interface to editors and tape machine controllers.



Professional Features that make the MARK III/4 easy to use

- ☐ Independently switchable +4 dBm or -10 dBV input and output reference levels on each channel for easy interface
- ☐ Heavy-duty locking, XL type input/output connectors
- ☐ Built-in test oscillator (1 kHz and 10 kHz), and external oscillator input for Record alignments or for putting test tones on tape

- ☐ Dual-element metering system with user-adjustable, peak reading LEDs, plus standard VU metering for monitoring of program levels
- ☐ Headphone amplifier with channel select and level control
- ☐ Microphone inputs with 20 dB pad
- ☐ Adjustable low frequency compensation
- ☐ Microprocessor-controlled hours/minutes/seconds real-time counter with zero-return and LED display
- ☐ Front panel Cue control (tape lifter defeat)
- ☐ A full-function auto locator (CB-116) is optionally available
- ☐ Integral tape splicing block

Features that deliver superb Tape Handling and Transport Control

- ☐ Microprocessor-governed transport control logic, motion sensing, and dynamic braking for smooth tape motion and trouble-free operation
- ☐ ±7% variable speed control (+50%, -100% speed via external control) usable in record and reproduce
- ☐ Reel size switch selectable (5", 7", 10.5"), EIA or NAB

- ☐ High torque, AC reel motors provide maximum power for fast tape handling, and precise control during external machine control conditions



Easy access electronics with plug-in circuit boards put all adjustments for each channel on a single card.

Additional features for Flexibility, Reliability, and Serviceability

- ☐ Speed selection of 15 or 7.5 ips, with 60 minutes record time at 7.5 ips
- ☐ Plug-in optimized three head design with easy access, hinged head cover
- ☐ Zero-return button operates from positive or negative tape locations
- ☐ Interface connector for external machine control via SMPTE/EBU time-code-based editors, machine controllers, or synchronizers
- ☐ Positive-locking NAB hub adaptors
- ☐ Easy access, plug-in circuit boards put all adjustments for each channel on a single card
- ☐ Automatic monitor switching
- ☐ Can be rack mounted using optional rack mounting kit (RK-34)
- ☐ Optional roll-around floor stand for variable-profile mounting (ZA-52L-34)

MARK III SERIES REMOTES, ACCESSORIES, OPTIONS AND SPECIFICATIONS

REMOTES

CB-102 Remote transport control for MX 5050 series except MARK III/8. Includes Record, Play, Stop, Rewind, Fast Forward, and Record indicator.

CB-110 Remote session controller for MARK III/8. Includes transport controls, channel status switching, tape time read-out, and zero return.

CB-114 Remote transport control for MARK III/8, functionally identical to CB 102.

CB-116 Full function auto locator for MARK III/8, MARK III/4, BQII, and MARK III/2 transports. Six memories with one stroke or keyboard store and search commands, repeat mode (shuttle), transport controls, head and tail guard memories and foot switch punch-in jack. Specify machine model and serial number when ordering.

ACCESSORIES

RK-2B Rack mount kit for BQII

RK-32 Rack mount kit for MARK III/2

RK-34 Rack mount kit for MARK III/4

ZA-52L Metal roll-around floor stand (unassembled) for BQII, MARK III/2, MARK III/4, MARK III/8

ZA-55U Floor stand for remote/auto locator CB110/CB116

ZA-53S Input transformers for MARK III/2 (Set of two)

ZA-53T Output transformers for MARK III/2 (Set of two)

ADP-CBL Set of 10-foot input/output cables for two channels: two XL male to phono, and two XL female to phono

TW-670 Reel hold down, 1/4" NAB hub

TW-671 Reel hold down, 1/2" NAB hub

ZA-52Y 7" Reel hold downs EIA hub

ZA-51A 1/4" x 10.5" Otari empty metal reel, NAB hub

ZA-51H 1/2" x 10.5" Otari empty metal reel, NAB hub

PB-77X Service extender board for BQII and MARK III/4

PB-77Y Service extender board for MARK III/8

INSTRUCTION/MAINTENANCE MANUAL Extra manual (one supplied with recorder) for any model

SPECIFICATIONS & FEATURES

(For full specifications, see individual machine data sheets.)

	MARK III/2	MARK III/4	MARK III/8	BQ-II
CHANNELS	2	4	8	4
TAPE WIDTH	1/4"	1/2"	1/2"	1/4"
TAPE SPEEDS	15/7.5 ips or 7.5/3.75 ips	15 & 7.5 ips	15 & 7.5 ips	15 & 7.5 ips
NOMINAL I/O LEVEL	+4dBm, -10dBV on all models			
EQUALIZATION	IEC/NAB switchable	NAB	IEC	NAB
HEADPHONE AMP	8 ohm impedance	4-channel selectable	8-channel selectable	8 ohm impedance
REAL-TIME DISPLAY	Hours/minutes/seconds display with zero return. on all models			
ALIGNMENT OSCILLATOR	Built in 1 and 10 kHz test oscillator, on all models			
SYNCHRONIZER INTERFACE	Single multipin connector, on all models			
FREQUENCY RESPONSE	25 Hz to 22 kHz	30 Hz to 20 kHz	40 Hz to 25 kHz	30 Hz to 20 kHz
SIGNAL-TO-NOISE RATIO	72 dB	70 dB	68 dB	66 dB
WOW AND FLUTTER	<0.04%	<0.04%	<0.04%	<0.04%
DISTORTION	<0.5%	<0.3%	<0.7%	<0.7%

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

Manufactured in Japan by Otari Electric Co., Ltd.

The Remote Session Controller (CB-110) allows full control of individual channels from the console, while the auto locator (CB-116) offers transport control plus six cue location memories and a Record punch-in footswitch. Shown on ZA-55U floor stand.



THE MARK III SERIES



**MARK III/2, MARK III/4, MARK III/8 and the BQII:
Technology You Can Trust**

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