



# Nakamichi 580M/581/582

## 580M 2-Head Cassette Deck

Special narrow-gap Sendust record/play head—the pinnacle of combination-head performance, 20 to 20,000 Hz  $\pm 3$  dB with less than 1% THD sets this recorder apart from the crowd! Dolby calibration for each channel and each tape.



## 581 Discrete 3-Head Cassette Deck

Discrete 3-Head technology highlights the 581. S/N more than 66 dB—20 to 20,000 Hz with under 0.8% THD! Dolby and bias adjustments with built-in 2-frequency oscillator assures Nakamichi performance with any quality tape.



## 582 Discrete 3-Head Cassette Deck

Acclaimed by every leading reviewer, the 582 is the ultimate recorder for the serious audiophile. With three discrete heads and full off-tape monitoring, the 582 has become the recorder on which experts evaluate tape!



# For The Serious Recordist

## 580-Series Philosophy

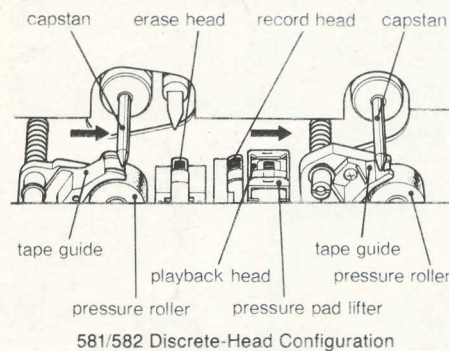
580-Series cassette recorders occupy a unique position in the Nakamichi universe—which is to say they are unique in the world! The culmination of our effort to create equipment that affords the *serious* recordist an ability to extract *total* performance from each tape, the 580M, 581, and 582 are dedicated to those who take recording seriously and like to practice their art. With a 580-Series deck, recording is not only convenient but pleasurable.

Each 580-Series deck has individual *record-calibration* controls for each track and for each of the three major tape groups—premium ferric, chrome/chrome-equivalent, and metal. A self-contained tone generator and accurate metering afford precise Dolby tracking for today's tapes and tomorrow's formulations as well. On the discrete-head 581 and 582, a second tone oscillator provides a precise means of *bias adjustment* and opens the world of new tape formulations to you.

Nakamichi's unique Asymmetrical, Diffused-Resonance, Dual-Capstan Transport with IC-Logic Control and Motor-Driven Cam not only provides superior tape motion in RECORD and PLAY but a special high-speed *cueing* function too. Touch REWIND or FAST FORWARD when in either high-speed mode, and the tape slows to one-third; the heads approach the tape so you can hear the program. Press either button again, and the speed is one-fifth for precision program location.

## Sophisticated Mechanical Innovation

It is no exaggeration to claim the 580-Series transport as the first true innovation in tape-transport technology in many years. While conventional wisdom admits the superiority of the dual-capstan design in wresting control of the tape from the cassette housing, typical two-capstan machines are afflicted with common resonances that increase the audibility of "wow." Nakamichi's unique Asymmetrical, Diffused-Resonance Transport eliminates common modes by employing capstans, flywheels, and pressure rollers of different diameter and inertia. No two parts rotate at the same speed so resonances are diffused. Specially chosen plastics and aluminum alloys absorb vibration and prevent it from producing flutter. Heat-producing, jarring solenoids have been eliminated entirely, replaced by a unique, smooth-acting, motor-



driven cam. Two precision shoes, one at each capstan, guide the tape with exquisite accuracy—so superior to common fork guides that 20-kHz response is achieved without user-adjusted azimuth! And, to prevent tape skew across the heads due to a misaligned pressure pad, the pad is automatically lifted out of the way in

the record and play modes. Elimination of the pressure pad also eliminates the scrape flutter and modulation noise it induces.

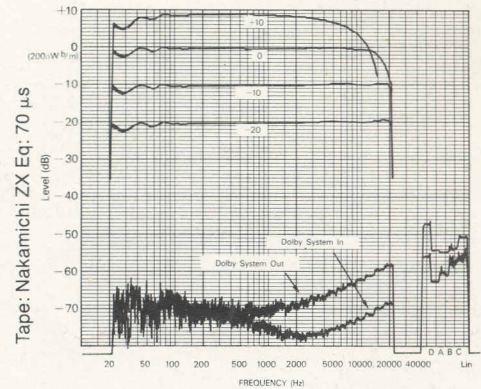
## A New Standard of Excellence in Recording

Hardly had the Nakamichi 582 been introduced when it was greeted with rave reviews and became the new standard of excellence adopted by tape manufacturers and reviewers alike as the recorder with which to evaluate magnetic tape. Why? Because of its unique combination of performance and features—its adaptability to different tape formulations, its stability of reproduction, and its superb high-level recording ability, low noise and distortion.

This excellence stems from Nakamichi Discrete-Head Technology—physically and magnetically separate *Crystalloy* recording and playback heads and exclusive Dual-Gap, Direct-Flux erase head—and superior Nakamichi recording electronics—DC coupled with Double-NF circuitry. Precisely the same

heads and electronics are used on the 581, and it provides performance and features identical to the 582 except for the omission of off-tape monitoring provisions. Bias and record-calibration adjustments can be made on *either* deck without rewinding the tape.

The 580M is a 2-head recorder using the same transport and virtually the same electronics as the 581/582. Record calibration compensates for differences in tape sensitivity. With its ultra-fine-gap Sendust record/play head, the 580M is fully metal-compatible and affords the same bandwidth—20 to 20,000 Hz  $\pm$  3 dB—as the 581/582 albeit at slightly greater distortion and noise.



580M/581/582 Frequency Response/Noise Analysis

## Features

- Metal-Tape Recording For Superior High-Frequency Headroom
- Advanced Magnetic Heads With 20–20,000 Hz Response
- Dual-Gap, Direct-Flux Head For Complete Erasure Of Metal Tape
- Asymmetrical, Diffused-Resonance Transport With Motor-Driven Cam
- Cal Controls and Tone Generator Assure Perfect Dolby Tracking
- Wide-Range Bias Adjustment Matches All Tapes (581/582 only)
- IC Logic With Cue, High-Speed Shutoff, And Slack-Tape Takeup
- 47-dB Peak-Responding Meters For Tape Setup And Recording
- Dolby Noise-Reduction System With Defeatable MPX Filter
- Record, Balance, And Output-Level Controls
- Total Remote Control Via RM-200 Option
- Timer Operation And Tape-Start Memory
- High-Output Headphone Jack Plus DC Power For Blackbox Series

## Specifications:

Power Source	100, 120, 120/220-240, 220 or 240V; 50/60 Hz (according to country of sale)
Power Consumption	27W (581/582); 23W (580M) Max
Tape Speed	1-7/8 ips (4.8 cm/s) $\pm$ 0.5%
Wow-and-Flutter	Less than 0.10% WTD Peak Less than 0.05% WTD rms
Frequency Response	20–20,000 Hz (–20 dB Rec. Level)
Signal-to-Noise Ratio	Better than 66 dB (581/582) Better than 64 dB (580M) (400 Hz, 3% THD, A-WTD rms)
Total Harmonic Distortion	Less than 0.8% (ZX Tape); Less than 1.0% (SX, EXII Tape) (581/582) Less than 1.0% (ZX, EXII Tape); Less than 1.2% (SX Tape) (580M)
Erasure	Better than 60 dB below saturation level (1 kHz, ZX Tape)
Separation	Better than 37 dB at 1 kHz, 0 dB
Crosstalk	Better than 60 dB at 1 kHz, 0 dB
Bias Frequency	105 kHz
Input	50mV, 50k ohms
Output Level	1V (400 Hz, 0 dB, Output Level at Max)
Headphone	45mW
Dimensions	500(W) x 130(H) x 350(H) millimeters 19-11/16(W) x 5-1/8(H) x 13-25/32(D) inches
Approximate Weight	8.3 kg, 18 lb 5 oz

\*Specifications and appearance subject to change without notice.

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Printed in Japan S-805850A