

# Nakamichi 480 2 Head Cassette Deck

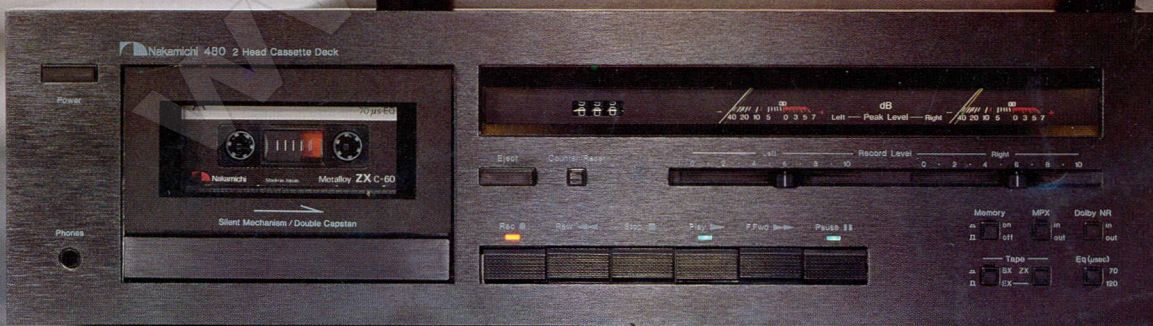
## 480/Silver

Complement your system with a Nakamichi 480—in black or silver to coordinate with any componentry. Whichever you choose, you will experience the excellence of Nakamichi sound—the unique purity and detail that has never been equalled—quality evident in a deck that is both economical and simple to operate.



## 480/Black

Our special narrow-gap Sendust R/P head and Direct-Flux Erase head make the 480 compatible with the most advanced tape formulations—EX, SX, and ZX Metalloy. And, its unique 3-motor, Asymmetrical, Diffused-Resonance Transport with Motor-Driven Cam virtually eliminates vibration, flutter and modulation noise.



# The Excellence of Simplicity

## The Nakamichi Philosophy of Excellence

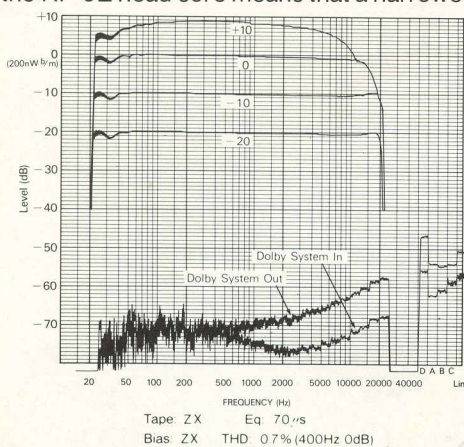
Whether designing an ultra-high-technology recorder such as the 680ZX or a modestly priced deck such as the 480, Nakamichi's commitment to excellence in the fine art of recorded sound is unwavering. Compare specifications. No competitively priced cassette deck approaches the technological excellence of the Nakamichi 480. With its 20,000-Hz response, and its unique Asymmetrical, Diffused-Resonance Transport—a design it shares with the most advanced Nakamichi products—it is in a class by itself.

But what of the sound? Technical specifications do not tell the whole story. Simply listen. At Nakamichi, we are committed to music—to listening in our Tokyo concert hall, to comparing recorded sound with its *live* origins. The 480 is the result of that commitment—a recorder that shares the unique purity of Nakamichi sound—a recorder whose excellence lies in its simplicity of operation—a recorder designed specifically for the lover of good music.

## New R/P Head Technology Affords Metal-Tape Compatibility

Metal-alloy tapes offer significantly more high-frequency headroom than conventional tapes. But they require significantly higher bias and recording levels to achieve their potential. Thanks to the development of a new Sendust combination R/P head, metal-tape compatibility with Nakamichi sound and Nakamichi specifications (20-20,000 Hz) is now possible in a two-head configuration. The remarkably high flux-handling properties of the RP-9E head core means that a narrower gap can be used

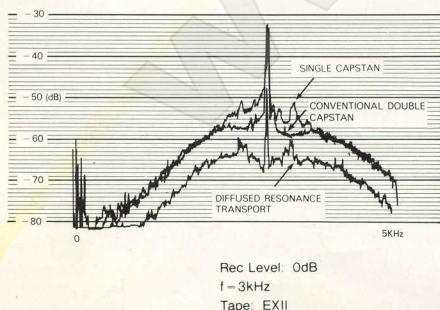
without pole-tip saturation—the key to achieving Nakamichi excellence from a combination head. While the 480 achieves excellent results with all conventional tapes, the superior high-frequency headroom of Nakamichi ZX Metalloy tape produces clean, crisp, utterly transparent highs that must be heard to be believed.



Frequency Response/Noise Analysis

## Direct-Flux Erase Head

Erasing metal tape is even more difficult than recording on it. Nakamichi research has shown that incomplete erasure—especially of low-frequency signals—is responsible for the loss of clarity that is often experienced on subsequent recordings. The E-8L direct-flux, dual-gap erase head is actually more efficient than a professional bulk eraser.



Modulation-Noise Analysis

## Asymmetrical, Diffused-Resonance Transport

Nakamichi's advanced technology is reflected in the 480 by more than the direct-flux erase head. The 480 transport makes use of the same dual-capstan, asymmetrical, diffused-resonance, technology that has

won world acclaim since its inception, and it shares the remarkably low flutter and modulation noise of all Nakamichi Diffused-Resonance designs.

Mechanical resonances are minimized by using two capstans of different diameters rotating at different speeds. A unique motor-driven cam positions the heads, applies and releases the brakes, and performs every solenoid function with smooth, gentle precision. Vibration is damped through the use of special plastic and aluminum alloys, and a tape-pad lifter eliminates this common source of modulation noise.

## IC Logic Control

With its motor-driven cam, the 480 provides advanced IC-logic control. Direct access between the fast and normal-speed modes is available at the touch of a button—without pressing STOP—and the 480 will follow your commands quickly and without tape damage. The 480 can be set for timer operation in either record or play, and an optional RM-100 remote-control system lets you direct the transport from your armchair. Pause is virtually instantaneous and totally quiet in operation.

## Wide-Range Peak-Responding Meters

The 480 features Nakamichi 47-dB-range peak-responding meters—essential to set the optimum recording level for any program.

## Features

- Metal-Tape Recording For Superior High-Frequency Headroom
- Sendust R/P Head With Narrow Gap And 20,000-Hz Response
- Dual-Gap, Direct-Flux Head For Complete Erasure Of Metal Tape
- Asymmetrical, Diffused-Resonance Transport With Motor-Driven Cam
- IC Logic With High-Speed Auto Shut Off Protects Your Tapes
- Auto Takeup Of Slack Tape Whenever A New Cassette Is Loaded
- Exclusive Nakamichi 47-dB-Range Peak-Responding Meters
- Dolby Noise-Reduction System With Defeatable MPX Filter
- Separate Tape And Equalization Switches For ZX, SX, And EX Tapes
- Slider-Type Record-Level Controls Visually Coordinated With Meters
- RM-100 Remote Unit (Optional) With Full Transport Control
- Timer Operation In Record Or Playback Via Accessory Timer
- Headphone Output Optimized For Professional 8-ohm Headsets
- Tape-Start Memory With 3-Digit Counter And Mechanical Reset
- Available In Matte Black Or Silver To Coordinate With Any System

## Specifications:

- Power Source . . . . . 100, 120, 120/220-240, 220 or 240V; 50/60 Hz (according to country of sale)
- Power Consumption . . . . . 23 W Max.
- Tape Speed . . . . . 1-7/8 ips (4.8 cm/s) ± 0.5%
- Wow-and-Flutter . . . . . Less than 0.11% WTD Peak, 0.06% WTD rms
- Frequency Response . . . . . 20-20,000 Hz (-20 dB Rec. Level)
- Signal-to-Noise Ratio . . . . . Better than 62 dB at 400 Hz, 3% THD, (Dolby NR in, 70 μs) WTD rms
- Total Harmonic Distortion . . . . . Less than 1.0% at 400 Hz, 0 dB (ZX, EXII Tapes)  
Less than 1.2% at 400 Hz, 0 dB (SX Tape)
- Erasure . . . . . Better than 60 dB below saturation level at 1 kHz
- Separation . . . . . Better than 36 dB at 1 kHz, 0 dB
- Crosstalk . . . . . Better than 60 dB at 1 kHz, 0 dB
- Bias Frequency . . . . . 105 kHz
- Input . . . . . 50 mV, 30k ohms
- Output Level . . . . . 600 mV (400 Hz, 0 dB) 2.2k ohms
- Headphone . . . . . 10 mW (400 Hz, 0 dB) 8 ohms
- Dimensions . . . . . 450(W) x 135(H) x 289(D) millimeters  
17<sup>2</sup>/<sub>32</sub>(W) x 5<sup>5</sup>/<sub>16</sub>(H) by 11<sup>1</sup>/<sub>2</sub>(D) inches
- Approximate Weight . . . . . 6.4 kg, 14 lb 2 oz
- Specifications and appearance subject to change without notice.
- Dolby NR under license from Dolby Laboratories.
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