

## Product Information DCD-2500NE





**DCD-2500NE** 

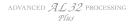
**SUPER AUDIO CD PLAYER** 

## PREMIUM CD/SACD PLAYER WITH ADVANCED AL32 PROCESSING PLUS FOR PURE PERFORMANCE

Denon is one of the rare audio brands that continued to actively develop Hi-Fi components and accumulate, refine, and pass down Hi-Fi audio technologies. The 2500NE series, designed for today's age, has been developed by both veteran engineers and talented young engineers who have inherited the Denon technologies and expertise that have been cultivated over many years and decades. The DCD-2500NE focuses on achieving the essence of a disc player: ultra-high precision in reading discs and supplying high-quality audio signals to the amp. To achieve this, the signal paths are as short as possible and the

whole circuitry is minimized. The engineers also redesigned the disc drive mechanism brackets and the chassis to eliminate vibration, the great enemy of disc players, and achieve ultra-vibration-resistant performance. The information on the disc is now read with impeccable accuracy and a clean, high-grade signal is supplied to the DCD-2500NE's Advanced AL32 Processing Plus circuitry. Besides CD and Super Audio CD playback, the DCD features playback of audio recordings up to PCM192/24 or DSD5.6 recorded on a DVD R/RW for full flexibility and extended access to high resolution audio.















#### Advanced AL32 Processing Plus and high precision 32-bit/192kHz D/A converters, to dramatically enhance the music listening experience

The DCD-2500NE is equipped with Advanced AL32 Processing Plus, the latest version of Denon's analogue waveform reproduction technology which utilizes unique data interpolation algorithms and also supports high-resolution sound sources. These algorithms interpolate points that should exist before and after the points in large quantities of data to achieve a smooth waveform that is close to that of the original signal. By carefully restoring data that was lost during digital recording, the resulting playback sound is highly detailed, free of interference, accurately localized, richly expressive in the lower range, and beautifully faithful to the original sound.

High-precision 32-bit, 192-kHz D/A converters have been used to bring out the maximum performance of the Advanced AL32 Processor. These D/A converters transmit differential output to each channel to improve sound quality during playback.

#### DSD data disc playback support

In addition to CD and Super Audio CD, the DCD-2500NE can play DSD (2.8 Mhz / 5.6 MHz) files and high-resolution files up to 192 kHz / 24 bits recorded on DVD-R/RW and DVD+R/RW discs. Music files with sampling frequencies of up to 48 kHz recorded on CD-R/RW discs can also be played.

#### Independent digital and analogue power transformers

The power units for the digital and analogue circuits, whose signals have different characteristics, have separate transformers to eliminate mutual interference and noise. An aluminum plate has also been combined to the underside of the steel transformer base to strengthen rigidity.

### Advanced S.V.H. Mechanism, Denon's original disc drive design

The DCD-2500NE's disc drive is the same Advanced S.V.H. Mechanism that is used in high-end models. The circuitry that controls the pickup and decodes the signals read from the disc has been newly developed. Signal paths have been shortened to an absolute minimum and circuits have been miniaturized to ensure that excess current or noise will not occur. The various parts of the mechanism have been made with different materials such as a combination of stainless and copper plating for the top panel to strengthen rigidity, diecast aluminum for the disc tray, and 2mm thick steel for the mechanism brackets. Improvements in high-mass, vibration-resistant properties and the dispersal of resonation points contribute to a high level of vibration resistance. In addition, the mechanism's low center of gravity suppresses any vibration occurring inside the mechanism due to disc rotation, and the mechanism structure also effectively suppresses external vibration. By eliminating unwanted vibration, servo-related operations are minimized, and by also minimizing unnecessary controls and current consumption, digital signals can be read from the disc with optimum accuracy under stable conditions.

#### DAC Master Clock Design

To accurately synchronize digital circuits, the DCD-2500NE's DAC Master Clock Design treats the DAC as the master when clock signals are supplied. Positioning the master clock immediately adjacent to the D/A converter (DAC) suppresses jitter and ensures optimum precision in D/A conversion. In addition, the quality of the clock, which becomes the reference for semiconductor operation, is extremely important for ensuring that the digital audio circuitry performs at its maximum potential. The DCD-2500NE thus employs a clock oscillator to dramatically reduce phase noise that is the displacement of frequencies. The clock power circuit has also been vastly improved to bring out the full potential of the high-quality clock's performance. A conductive polymer capacitor with particularly outstanding highfrequency impedance characteristics for Denon's renowned sound quality has been placed at the base of the clock's power source, and an ultra-compact film capacitor that is different from layered ceramic capacitors has been placed close to the clock, to achieve an improved S/N ratio and a transparent sound with superior spatial expression. The DCD-2500NE is equipped with two clock oscillators, one for each sampling frequency (44.1 kHz and 48 kHz), that can be switched between the frequencies to thoroughly suppress litter.

### Vibration-resistant design with Direct Mechanical Ground Construction

The chassis has been designed throughout to eliminate the adverse effects on sound quality caused by subtle vibrations from the player's interior or by external vibrations from the speakers.

#### **NEW AND UPGRADED FEATURES**

- Advanced AL32 Processing Plus and a high precision 32-bit/192kHz D/A converters PCM1795, to dramatically enhance the music listening experience
- · Advanced S.V.H. Mechanism, Denon's original disc drive design
- DAC Master Clock design with low jitter oscillator and Minimal Signal Paths
- DSD data disc playback support

## STATE-OF-THE-ART DENON SOLUTIONS FOR MAXIMISING CONTENT QUALITY

- High quality audio reproduction from any kind of digital media recorded on a disc
- · Separated digital and analogue power supply
- Vibration-resistant design with Direct Mechanical Ground Construction
- Minimum Signal Paths, to protect signal purity
- Pure Direct mode, for pure enjoyment of music
  Parts strictly selected for high sound quality

#### **EASE-OF-USE**

- · Easy-to-use remote control for CD and Amp operation
- · Auto Standby and low power consumption at stand-by 0.1 W

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\* All specs can be subject to change \* Available in Premium Silver

 EAN
 DCD2500NESPE2
 4951035056981
 Premium Silver

 UK
 DCD2500NESPE2GB
 4951035056981
 Premium Silver

# Specifications SACD section 2 channels Channels 2 repair (-3 dB) Frequency response 2Hz - 50kHz (-3 dB) Dynamic range 112 dB Signal-to-noise ratio 120 dB Total harmonic distortion 0.0008% (1 kHz, audible range)



CD section	
Channels	2 channels
Frequency response	2Hz-20kHz
Dynamic range	101 dB
Signal-to-noise ratio	118 dB
Total harmonic distortion	0.0015% (1 kHz)

 Output voltage
 2.0 V (10 kohms)

 Digital output
 0.5 Vp - p/75 ohms

 -15 to -21 dbm
 660 nm

|V01|