

Advanced AL32 Processing Lets You Hear the Delicate Nuances of Music

The DCD-1510AE features the same Advanced AL32 Processing of Denon's high-class DCD-2010AE. This technology dramatically enhances information volume from the CD to produce a sound more faithful to the original. The DCD-1510AE also has a USB port for directly receiving digital tracks stored on an iPod or USB memory. When digital audio signals are input from an external device, they pass through Advanced AL32 Processing and other circuits developed by Denon to maximise sound quality, allowing you to experience a depth of sound not possible with the portable audio device by itself.

ADVANCED *AL32* PROCESSINGCOMPACT
disc
DIGITAL AUDIO

MP3

WMA



Features

High quality sound

- Advanced AL32 Processor and high-precision 32-bit, 192-kHz D/A converters, to reproduce the original sound
- Denon's Disc Drive Mechanism, core technology for digital disc playback
- DAC master clock design, to suppress jitter and noise
- Power section with digital and analog circuitry isolated from transformer coils
- Minimum signal paths, to protect signal purity
- Precision Direct Mechanical Ground Construction, to thoroughly suppress vibration
- USB port for playback of digital tracks from iPod or USB memory

- Plays back multi-channel layers of Super Audio CD

- Parts with a track record for high sound quality

Useful function

- System remote control unit to control not only the CD player but also an amplifier

Other

- Lower power consumption at stand-by 0.1 W (in Eco Standby)

High quality sound

• Advanced AL32 Processor and high-precision 32-bit, 192-kHz D/A converters, to reproduce the original sound

Denon's Advanced AL32 Processor expands audio data to 32 bits and uses a proprietary algorithm to interpolate the data and perform up-conversion and sampling, achieving a playback sound that is close to the original source. Since high-performance devices capable of large-capacity processing read data samples across a wide spectrum and process them in a single stage, they interpolate signals with greater precision compared with multi-stage digital filters and other such devices. In addition, the use of algorithms ideal for frequency characteristics outside the audible range to filter sudden bursts of musical data or continuous sound at high frequencies protects sound quality from the adverse effects of aliasing noise or drops in high-range response. The Advanced AL32 Processor reproduces the delicate nuances of music, as well as spatial information such as the position of the artist and the breadth, height, and depth of the stage, in a more natural manner.

To ensure that the Advanced AL32 Processor performs at its maximum potential, the DCD-1510AE has been fitted with high-precision 32-bit, 192-kHz D/A converters. These D/A converters transmit differential output to each channel to improve sound quality during playback. These converters let you enjoy minute details of music with remarkable clarity, including the acoustic resonances of concert halls.

• Denon's Disc Drive Mechanism, core technology for digital disc playback

Since Super Audio CD rotates at high speed, the drive mechanism itself is a source of considerable vibration. To thoroughly suppress that vibration, the motor shaft in the DCD-1510AE has been shortened as much as possible, and the drive motor has been placed close to the turntable. Misalignment of the laser beam axis and the angle of the turntable or pickup mechanism base affect disc reading accuracy. To eliminate such mechanical variations and ensure high accuracy in signal playback and playability, corrections have been made for each unit individually. In addition, a S.V.H. (Suppression Hybrid Construction) loader of a hybrid construction combining different materials gives stability to the disc drive so that the disc can be read with optimum accuracy

• DAC master clock design, to suppress jitter and noise

The DCD-1510AE features the same type of DAC that is used in our high-class CD player as a master of clock signals for all devices. Since these clock signals are generated by an oscillator circuit module, it is possible to obtain highly reliable oscillation unaffected by PC board patterns and other elements.

• Power section with digital and analog circuitry isolated from transformer coils

The digital and analog circuits have been separated from the transformer coils to minimise mutual interference.

• Minimum signal paths, to protect signal purity

The signal paths are all simple and straight to ensure pure, noise-free audio playback. Signal degradation is prevented by minimising twists and turns in the signal path. In the DCD-1510AE, servo-related digital signal processing occurs directly below the disc mechanism unit to shorten the digital signal path and boost signal-to-noise (S/N) performance. The transformers for the digital and analog signals have also been mounted in separate locations within the chassis, and the power unit for the analog signals has been placed near the analog circuit board to shorten the path from the power circuit and achieve lower impedance. These design improvements further ensure a stable supply of current and playback of a spacious, transparent sound.

• Precision Direct Mechanical Ground Construction, to thoroughly suppress vibration

The disc drive mechanism, designed with a low centre of gravity, has been placed at the centre of the main chassis and mounted at a lower position compared to conventional CD players to further improve resistance to vibration. The mounting structure has also been simplified to reduce the number of resonance points. The adverse influences of both internal and external vibration on sound quality are now negligible.

• USB port for playback of digital tracks from iPod or USB memory

The DCD-1510AE includes a USB port that lets you play digital music files directly from your iPod or USB memory (*1).

The signals pass through the DCD-1510AE's Advanced AL32 Processor and high-precision 32-bit, 192-kHz D/A converters to give you extremely satisfying, high-quality sound. You can also use the remote control unit to select files, and file names and other details can be displayed. The iPod can also be recharged during playback.

(*1) Supports 5th-generation iPods and later, and USB memories of mass storage class.

• Plays back multi-channel layers of Super Audio CD

The DCD-1510AE lets you downmix the multi-channel layers of Super Audio CD to stereo during playback.

• Parts with a track record for high sound quality

Denon engineers have strictly selected parts that have passed a battery of listening tests based on their many years of experience developing top-quality audio equipment. The sound of the DCD-1510AE has been carefully tuned to achieve a level of quality that is one rank above other players in this class.

Useful function

• System remote control unit to control not only the CD player but also an amplifier (*2)

The supplied remote control unit can be used to operate the Denon PMA-1510AE integrated amplifier as well as the DCD-1510AE. The buttons used most frequently have been arranged for easy operation when the unit is held in one hand.

(*2) DCD-1510AE's remote control unit is the same as PMA-1510AE's one. RC-1143

Other

• Lower power consumption at stand-by 0.1 W (in Eco Standby)

Specifications

Analog Output	Super Audio CD	CD
Channels	2 channels	2 channels
Frequency range	2 Hz - 100 kHz	2 Hz - 20 kHz
Frequency response	2 Hz - 50 kHz (-3 dB)	2 Hz - 20 kHz
Signal-to-noise ratio	117 dB (audible band)	117 dB
Dynamic range	113 dB (audible band)	100 dB
Total harmonic distortion	0.0010 % (1 kHz, audible band)	0.0018 % (1 kHz)
Wow & Flutter	Below measurable limit	Below measurable limit
Output voltage (unbalanced)	2.0V (10 k ohm)	2.0V (10 k ohm)
Signal system	1-bit DSD	16-bit Linear PCM
Sampling frequency	2.822 MHz	44.1 kHz
Digital Output		
Coaxial	-	0.5 Vp-p/75 ohm
Optical	-	-15 to -21 dBm
Emission wavelength	-	660 nm
General		
Power supply	AC 230 V, 50 Hz	
Power consumption	30 W 0.2 W (Standby) 0.1 W (Eco Standby)	
Dimensions (W x H x D)	434 x 135 x 331 mm	
Weight	8.0 kg	



*Black version is also available.

*Design and specifications are subject to change without notice.