New model information

DCD-2020AE

Super Audio CD Player

DENON

Enjoy the impeccable quality of high-resolution sound with refined audio technologies from Denon

The DCD-2020AE is a Super Audio CD player that lets you enjoy not only CDs but also sound sources from a PC or portable audio device such as an iPhone in high audio quality. On the rear panel is a USB-B port that lets you connect a PC and enjoy music files from it through the sophisticated audio circuitry of the DCD-2020AE, while on the front panel is a USB-A port that lets you do the same with music stored on an iPhone, iPod, or USB memory. Impeccable sound quality from the DCD-2020AE is possible thanks to hallmark Denon audio technologies such as Advanced AL32 Processing, DAC Master Clock design, Disc Drive Mechanism, and Direct Mechanical Ground Construction.

ADVANCED AL32 PROCESSING · SUPER AUDIO CD · COMPACT DISC DIGITAL AUDIO · MP3 · WMA · Made for iPod iPhone

Features

High quality sound

- Advanced AL32 Processing and a new high precision 32-bit/192kHz D/A converter, to dramatically enhance the music listening experience
- Denon's Disk Drive Mechanism with S.V.H. Loader
- DAC Master Clock design with low jitter oscillator and Minimal Signal Paths
- Twin Transformer for separated digital and analog power supply
- Vibration-resistant design with Direct Mechanical Ground Construction
- Minimum Signal Paths, to protect signal purity
- Play various types of digital content in high sound quality
  - -Rear USB-B input, for high-resolution sound from a PC
  - -Front USB-A input for iPhone/iPod, or USB device
  - -Optical and coaxial digital inputs
- Compressed Audio Restorer
- Pure Direct mode, for pure enjoyment of music
- Parts strictly selected for high sound quality

Useful Functions

- Easy-to-use remote control for CD and Amp operation
- Battery recharge function continues to charge even during standby
- Auto-standby
- Low power consumption in standby mode

High quality sound

• Advanced AL32 Processing and a new high precision 32-bit/192kHz D/A converter, to dramatically enhance the music listening experience

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. 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.

• Denon's Disc Drive Drive Mechanism with S.V.H. Loader

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-2020AE 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 maximum accuracy and playability in signal playback, corrections have been made for each unit individually. A new, vibration-absorbing aluminium die cast disc tray has also been adopted for the DCD-2020AE.

And a S.V.H. (Suppress vibration, Hybrid Construction) Loader of a hybrid construction combining different materials gives stability to the disc drive so that the disc can be read with utmost accuracy.of a hybrid construction combining different materials gives stability to the disc drive so that the disc can be read with utmost accuracy.

• DAC Master Clock design

Since the DCD-2020AE supplies clock signals to each device, a master clock has been placed immediately adjacent to the D/A converter to achieve accurate
D/A conversion with minimal time axis jitter. A new low-jitter oscillator has also been adopted to generate the clock signals. This Denon Master Clock design ensures that sound is correctly localized and your sound space is thoroughly realistic.

• Twin Transformer for separated digital and analog power supply

To eliminate mutual interference between the digital and analog circuits, the DCD-2020AE has adopted a dual transformer configuration in which the power supplies for these circuits are completely separated. By using OFC wire coils for the analog transformer and positioning the transformers in an orientation that avoids the effects of spurious magnetic flux on each other, the S/N ratio and a sense of energy have been greatly improved. Cast aluminium with superior vibration-absorbing characteristics was used for the base of the transformer when it was mounted onto the chassis to suppress vibration not only from the transformer itself but from other internal parts and the outside as well. Together with sound quality capacitors employed in the power circuit, this dual transformer configuration produces a base that improves power supply stability and enhances high-quality sound playback capabilities.

• Minimum signal paths, to protect signal purity

Signal paths have been made thoroughly simple and straight to ensure a pure playback sound. The minimization of signal paths prevents signal degradation between circuits.

• Vibration-resistant design with Direct Mechanical Ground Construction

The DCD-2020AE 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. The construction of the bottom chassis features 3-layers, the top chassis 2 layers, and 2 layers for the side panels, too. Since the layers are made of different materials, they also suppress sympathetic vibrations. A highly rigid B.M.C. (Bulk Molding Compound) has been newly adopted for the insulator material on the DCD-2020AE. This thorough attention to constructing a vibration-free chassis ensures that the sound you hear from the DCD-2020AE is the cleanest it can possibly be.

• Play various types of digital content in high sound quality

- Optical and coaxial digital inputs

With the digital inputs, you can use the DCD-2020AE as a standalone D/A converter. Denon's Advanced AL32 Processor and other high-quality-audio circuits in the DCD-2020AE let you enjoy a rich, satisfying sound. (Supports PCM signals and sampling frequencies of 32-192 kHz.)

-USB port, for connecting an iPod or USB memory(*1) When you connect an iPod or USB memory (containing WMA/MP3 files) nnected. When you connect the iPod, you can even continue listening to the track that was in play before connection. Since the iPod transmits digital signals, the sound you hear as they pass through the DCD-2020AE's audio circuitry is of much higher quality.

*1) Supports USB mass storage class.

-Rear USB-B input, for high-resolution sound from a PC

The DCD-2020AE is equipped with a USB-B input to let you enjoy audio files recorded on a PC, and the DAC master clock design ensures that the sound you hear is jitter-free. The USB-B input format supports high-resolution audio sources up to 192 kHz / -24 bits.

• Compressed Audio Restorer

The DCD-2020AE lets you select the Compressed Audio Restorer function when playing files in the MP3 or WMA sound compression format from disc or USB. This function restores signals that have been omitted during compression so that you can hear the sound close to the way it was prior to compression. The sound will also be richer, as the deep bass range is corrected at the same time. The effect of the Compressed Audio Restorer can be set to one of three levels, or turned off.

Useful Functions

• Easy-to-use remote control for CD and Amp operation

The remote control that comes with the DCD-2020AE also lets you operate Denon PMA-2020AE integrated amplifier. High-grade tactile buttons and other features make this remote extremely easy to use.

• Battery recharge function continues to charge even during standby

If the DCD-2020AE goes into Standby mode while your connected iPod is still charging, the iPod will continue to charge.

Specifications

Analog Ouput	**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	121 dB (Audible range)	120 dB
Dynamic range	118 dB (Audible range)	101 dB
Total harmonic distortion	0.0008% (1 kHz, audible range)	0.0015% (1 kHz)
Wow & Flutter	Below measurable limit	Below measurable limit
Signal system	1-bit DSD	16-bit Linear PCM
Digital Output		
Coaxial	-	0.5 Vp-p/75 ohm
Optical	-	-15 to -21 dBm
Emission wavelength	-	660 nm
Digital Input		
Format	Digital audio interface (Lineara PCM)	
General		
Power supplu	AC 230 V, 50/60 Hz	
Power consumption	33 W (Stand-by less than 0.3 W)	
Power consumption in standby mode	0.2 W	
Dimensions (W x H x D)	434.0 x 138.0 x 335.0 mm	
Weight	13.7 kg	

*Design and specifications are subject to change without notice.
*"Made for iPod," "Made for iPhone," and mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Please note that the use of this accessory with iPod, or iPhone, may affect wireless performance. *Apple is not responsible for the operation of this device or its compliance with safety and regulatory. *iPhone and iPod are trademarks of Apple Inc., registered in the U.S. and other countries

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