

DENON®

Product Information

PMA-2500NE



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INTEGRATED AMPLIFIER WITH DAC-MODE

PREMIUM INTEGRATED AMP REPRESENTING A NEW ERA OF AUDIO ENJOYMENT

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. And the performance of the PMA-2500NE goes well beyond that of Denon's previous PMA-2000 series. With its ultimate built-quality, unique Denon technologies and state-of-the-art connectivity, the

PMA-2500NE truly is a masterpiece of sound technology. Thanks to the rear USB-B input and embedded high quality D/A converter, the PMA plays high resolution files up to 384kHz/32bit and DSD up to 11.2MHz from a computer in impeccable sonic quality. For the best performance from analogue inputs, the PMA features an Analog Mode which allows to switch off all unutilized sections like the digital input circuitry or the low noise display for an unaltered audio reproduction.

ADVANCED
Ultra High Current MOS
SINGLE PUSH-PULL CIRCUIT

Hi-Res
AUDIO

ADVANCED *AL32* PROCESSING
Plus

USB-B/PC
DIRECT

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Advanced Ultra-High Current (UHC)-MOS Single Push-Pull Circuit for balancing Power and Details

To achieve impeccable balance between delicate details and vigor in sound, the PMA-2500NE employs Ultra High Current MOS (UHC-MOS) FETs, capable of producing ample current in a single push-pull configuration which deliver superior linearity in the output stage throughout the sonic range from musical details to robust current. The technique of driving multiple amplifier devices in parallel to secure robust current has solved the problem of muddiness in sound caused by uneven performance among the devices. And to achieve musical expression filled with the delicate nuances of sound, Denon has continued to focus on amplification performed by one pair of devices. The PMA-2500NE is endowed with high-voltage, large-capacity UHC-MOS FETs (peak current of 210A). In addition, the Dual FET + cascode bootstrap connection maintains a constant voltage for the UHC-MOS while improving temperature stability, to reliably bring out the superior acoustic characteristics of UHC-MOS.

Direct Mechanical Ground Construction to minimise unwanted vibration

The power section, mounted on a sub-chassis solidly constructed with three layers of 1.6mm thick steel plates, has been positioned in the centre of the PMA-2500NE. With heat sinks on both sides, this construction of well-balanced mass is in an ideal location to prevent unwanted vibration from affecting sound quality. In addition, the feet supporting the heavy weight of the power transformer, heat sinks, and chassis are made of highly rigid, solid Bulk Molding Compound (BMC), and high-density felt pads attached to the bottom of the feet further absorb vibration.

NEW AND UPGRADED FEATURES

- Further improved sound quality
- 2 optical and 2 coaxial digital inputs
- USB-B input for High Resolution Audio up to 384kHz/32bit and 11.2MHz DSD
- Advanced AL32 Processing Plus

Advanced AL32 Processing Plus supporting 384-kHz/32-bit PCM input

For digital input, the PMA-2500NE employs 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 384-kHz/32-bit PCM signal input. 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. With the PMA-2500NE's digital input, high-quality analogue signals that pass through Advanced AL32 Processing Plus are sent to the amp block at the stage that follows.

6-block chassis configuration

The PMA-2500NE's chassis is configured of six independent blocks that house the phono equalizer and input circuitry, volume control circuitry, USB-DAC circuitry, amplification circuitry, power section, and the control section. The chassis constructed with 1.6mm thick steel plates protects the signal circuits from external vibration and eliminates the adverse effects of mutual interference among the circuits.

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

- 2x 160 W (4ohm)
- Advanced Ultra-High Current (UHC)-MOS Single Push-Pull Circuit for balancing Power and Details
- DAC Master Clock Design
- Complex chassis construction with 6 independent blocks to eliminate unwanted noises
- High-performance MM & MC Phono Equalizer
- Analog Mode switching off all digital sections to maximize performance while listening to analogue sources
- Digital isolator to eliminate high-frequency computer noise on the USB-B
- Direct Mechanical Ground Construction to minimise unwanted vibration

USB-DAC supporting up to 11.2-MHz DSD and 384-kHz/32-bit PCM

The PMA-2500NE provides USB-DAC functions that support high-resolution 11.2-MHz DSD and 384-kHz/32-bit PCM input signals. DSD transmission methods support ASIO native playback and DSD Audio over PCM Frames (DoP) with Wasapi or Kernelstreaming. Since asynchronous transfer is controlled by the PMA-2500NE's master clock rather than the clock of a computer the transfer is free of jitter. The D/A converter used in the PMA-2500NE is the same 384-kHz/32-bit DAC PCM1795 used in the DCD-2500NE to deliver a clean, high-grade sound.

Robust power supply circuitry

The PMA-2500NE is equipped with two transformers that have been mounted facing opposite directions in a leakage canceling (LC) mount system to cancel mutual influences of magnetic flux, a source of noise, leaking from the transformers. Denon's custom-designed, large-capacity electrolytic capacitors have been used for rectification, and low-loss, low-noise, high-speed Schottky barrier diodes have been used in the rectifier circuitry. This ensures a sufficient supply of clean current. To achieve a "simple & straight" circuit configuration, the connection unit between the diode unit and the block capacitor has been removed to drastically shorten the current supply line to the power amp. Extremely thick OFC wiring material has been used for the power line to reduce impedance.

EASE-OF-USE

- System remote control unit to control the amplifier and CD Player as well
- Large size volume control knob for precise adjustment
- External Pre-Amplifier Input for easy integration in a Multichannel AV System
- Digital input and IR Control port for easy integration of HEOS link to add streaming and internet radio capability
- Auto Standby and low power consumption at stand-by 0.2 W

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

EAN	PMA2500NESPE2	4951035057865	Premium Silver
UK	PMA2500NESPE2GB	4951035057865	Premium Silver



Technical information

Power amplifier section		Signal-to-noise ratio	
Rated output	80 W + 80 W (20 Hz - 20 kHz, 8 ohms, T.H.D. 0.07%) 160 W + 160 W (1 kHz, 4 ohms, T.H.D. 0.7%)	PHONO MC	74 dB (0.5 mV input)
Total harmonic distortion	0.01% (rated output -3 dB, 8 ohms, 1 kHz)	PHONO MM	89 dB (5 mV input)
Preamplifier section		LINE	110 dB
Input sensitivity / Impedance		Tone control	
PHONO MC	0.2 mV/100 ohms	Treble	± 8 dB at 10 kHz
PHONO MM	2.5 mV/47 kohms	Bass	± 8 dB at 100 Hz
LINE	135 mV / 47 kohms (Source Direct: OFF)	General	
		Power supply	AC 230 V, 50 Hz
		Power consumption	310 W (Standby: 0.2 W)
		Dimensions (W x H x D)	434 x 182 x 431 mm
		Weight	25.0 kg

Ports

IN	Phono (MM/MC)	x 1
	Audio input (incl. Phono)	x 5
	Digital Optical	x 2
	Digital Coaxial	x 2
	USB-B	x 1
	External Pre-Amplifier	x 1
OUT	Rec output	x 1
	Speaker out (Bi-wiring)	A/B