

PMA-2010AE

Integrated Amplifier

DENON

Integrated amplifier with the fruit of many years of Denon audio technology and experience

To further improve expressiveness in sound, the PMA-2010AE inherits the UHC-MOS Single Push-Pull output circuit from Denon's higher-end models and is of a newly-engineered construction, forming a solid foundation for a pure, clean sound. The PMA-2010AE is an integrated amp that emulates high-end models in both elegance and sound quality.



Ultra High Current MOS
SINGLE PUSH-PULL CIRCUIT

Features

High quality sound

- UHC-MOS Single Push-Pull Circuit, for balancing details and power
- Independent preamp and output stage power supplies, plus powerful high current dynamic power circuit
- Precision Direct Mechanical Ground Construction, to thoroughly suppress vibration
- Chassis construction with 6 independent blocks
- Twin transformers with leakage cancelling mount
- Minimum signal paths, to protect signal purity
- Precision Signal Ground Circuit, to protect signal purity
- Large, high-grade ø27 mm volume control unit
- Wide range playback, supporting Super Audio CD

Useful Functions

- Newly-designed remote control unit
- Standby power consumption

Others

- High-performance phono equaliser
- Parts strictly selected for high sound quality
- Machined gold-plated pin jacks

High quality sound

- **UHC-MOS Single Push-Pull Circuit, for balancing details and power**

The PMA-2010AE features UHC (Ultra High Current) MOS circuitry that has been developed to balance advanced speaker drive capabilities and improved sound quality. UHC-MOS technology uses a minimum number of amplifier elements while achieving approximately 10 times the normal supply of current, balancing artistic expression with high output power. The PMA-2010AE thus masterfully reproduces the full sonic range from soft delicate details to powerful transparent climaxes of a musical performance.

- **Independent preamp and output stage power supplies, plus powerful high current dynamic power circuit**

The preamp power circuit that requires stable voltage and the output stage power circuit that requires a large current supply have been placed independently from the stage of the power transformer coils. This configuration of the power circuitry that eliminates adverse influences caused by the operating current of the output stage significantly enhances the resolution of the preamp stage handling low-level signals. On the other hand, large-current Schottky barrier diodes have been used for the rectifier elements to support the expressiveness of the UHC-MOS with their low-noise characteristics and high-speed operation. And a large-capacity, block-type electrode capacitor for audio applications has been used for the power capacitor. This power circuitry supplies clean, stable power to realise a sound space that eminently balances delicate musical nuances and high power.

- **Precision Direct Mechanical Ground Construction, to thoroughly suppress vibration**

The vibration-resistant construction was reviewed to ensure that the adverse influences of vibration on sound quality are thoroughly suppressed. The power transformer, a major source of vibration, has been "float" mounted using a variety of vibration-resistant materials. The radiator has been dampened with a vibration resistant material and a radiator stabilizer, and by mounting the radiator near the foot, interference with the power transformer and other sources of vibration is minimized. In addition, the depth dimension is shorter than previous models and the chassis mounting has been redesigned to improve resistance to vibration.

- The shorter distance between feet guides vibration more easily to the feet.

- The radiator mounting to the chassis has been given a lower centre of gravity to further facilitate vibration guidance to the feet.

- Fins of different thicknesses have been used in the radiator to eliminate the adverse effects of resonance.

These and other measures to minimize the effects of both internal and external vibration, such as in the mounting and placement of the various parts, contribute to impeccable sound transparency and improved localization.

- **Chassis construction with 6 independent blocks**

The PMA-2010AE features a twin monaural axisymmetric construction with separate power amp blocks for the left and right channels to prevent mutual interference between the circuits, shut out noise, and obtain a clear stereo image. Circuits with different signal levels have been isolated into six separate blocks. And 1.6mm thick black-coated steel plates have been used for chassis to eliminate sound coloration caused by mutual interference between the blocks and ensure the playback of sound with a clear sense of space.

- **Twin transformers with leakage cancelling mount**

Two transformers have been connected in parallel to dramatically improve electrical and magnetic characteristics. The Leakage Cancelling (LC) mount-in system, a method of cancelling mutual magnetic influences, has been used to minimise the leaking of magnetic flux, a source of noise inside the amp. The method in which the transformers were mounted also used a combination of special resins and vibration-resistant materials that produce a floating effect to prevent adverse influences from affecting sound quality.

- **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. In the amplifier stage, minimum signal paths reduce noise entering the ground circuit, a fundamental component in signal amplification, and stabilizes ground potential. When the operating foundation of the amplifier circuit is clear, the playback sound is also clear.

- **Precision Signal Ground Circuit, to protect signal purity**

The Precision Signal Ground circuit, a standard for signal amplification, minimizes the effects of noise in the ground circuit to ensure a stable ground phase. The PMA-2010AE employs copper plates on the ground side of the block capacitors for both the left and right channels to ensure direct flow to the ground. This design results in a clean, transparent sound, since the signal is amplified under ideal conditions.

- **Large, high-grade ø27 mm volume control unit**

The PMA-2010AE uses an unusually large ø27 mm volume control unit that suppresses external noise and vibration to enable accurate volume control.

- **Wide range playback, supporting Super Audio CD**

Useful Functions

- **Newly-designed remote control unit**

The remote control unit that comes with the PMA-2010AE also lets you operate Denon DCD-2010AE CD player. High-grade tactile buttons and other features make this remote extremely easy to use.

- **Standby power consumption**

The very low standby power consumption of about 0.3W minimizes the PMA-2010AE's impact on the environment.

Others

- **High-performance phono equalizer (MM/MC)**
- **Parts strictly selected for high sound quality**
- **Machined gold-plated pin jacks**

Ports

In		
	Phono (MM/MC)	x 1
	CD	x 1
	Tuner	x 1
	Line-1	x 1
	Line-2	x 1
	Recorder-1 (Playback)	x 1
	Recorder-2 (Playback)	x 1
Out		
	Recorder-1 (REC)	x 1
	Recorder-2 (REC)	x 1
	Preout	x 1
	Power amp direct	x 1

Main Specifications

Power amplifier section

Rated output	80 W + 80 W (8 Ω, 20 Hz - 20 kHz, THD 0.07%) 160 W + 160 W (4 Ω, 1 kHz, THD 0.7%)
Total harmonic distortion	0.01% (rated output -3 dB, 8 Ω, 1 kHz)

Input sensitivity / Impedance

Power Amp Direct : 0.9 V/47 kΩ

Preamplifier section

Phono equalizer rated output

150 mV

Input sensitivity / Impedance

LINE 135 mV / 47 kΩ (Source direct OFF)

PHONO MM 2.5 mV / 47 kΩ

PHONO MC 200 μV / 100Ω

RIAA deviation PHONO 20 Hz - 20 kHz, ±0.5 dB (MM)
PHONO 30 Hz - 20 kHz, ±0.5 dB (MC)

General Characteristics

Signal-to-noise ratio (IHF A network)

LINE 108 dB (Source Direct: ON)

PHONO MM 89 dB
(input terminals shorted, input signal 5 mV)

PHONO MC 74 dB
(input terminals shorted, input signal 0.5 mV)

Tone controls

BASS 100 Hz, ±8 dB

TREBLE 10 kHz, ±8 dB

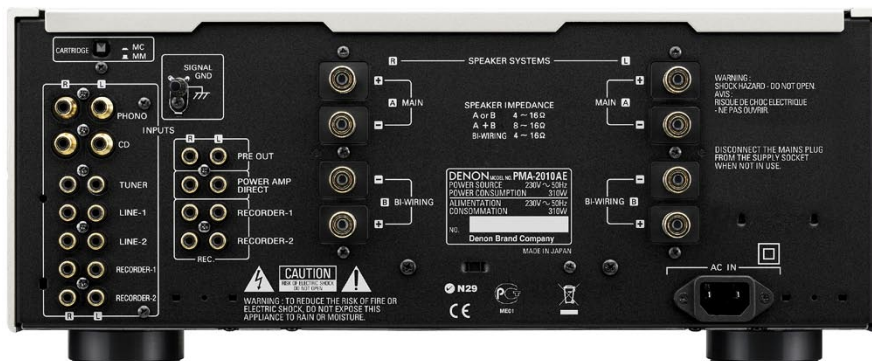
General

Power supply AC230V, 50 Hz

Power consumption 310 W
(Stand-by: less than 0.3W)

Dimensions (W x H x D) 434 x 181 x 435 mm

Weight 24.0 kg



*Design and specifications are subject to change without notice.

Denon Brand Company

D&M Building, 2-1 Nishin-cho, Kawasaki-ku, Kawasaki-shi,
Kanagawa, 210-8569, Japan
www.denon.com

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