

Enjoy delicate musical nuances and spacious acoustic sound with time-honoured Denon audio technologies

The PMA-2020AE is an integrated amplifier that faithfully reproduces a wide range of music sources, from analogue record players to the most advanced sound sources from a PC. A variety of advanced circuits in this amp ensure a consistently stable supply of power even for musical passages with sudden bursts of sound or continuous fortissimos. The circuit configuration includes a further-improved Advanced UHC-MOS Single Push-Pull Circuit, and the strengthened power circuit masterfully reproduces delicate musical details on a powerful, rock-solid foundation. The remote controller that comes with the PMA-2020AE also operates the main functions of a Denon CD player, letting you enjoy ease of use in addition to stunning sound quality.



ADVANCED
Ultra High Current MOS
SINGLE PUSH-PULL CIRCUIT

Features

High quality sound

- Advanced UHC-MOS Single Push-Pull Circuit with New Schottky barrier diodes, for musical detail and power
- New Ultra High Current MOS with greater current capacity
- Highly accurate Dual FET + Cascade Bootstrap Circuit to improve stability
- Twin transformers with leakage cancelling mount
- Independent preamp and output stage power supplies, plus powerful high current dynamic power circuit
- Minimum Signal Path, to protect signal purity
- Chassis construction with 6 independent blocks
- Vibration-resistant design with Direct Mechanical Ground Construction
- Large, high-grade 27 mm volume control unit
- Precision Signal Ground Circuit, to protect signal purity
- Parts strictly selected for high sound quality

Useful Functions

- Power Amp Direct
- PRE OUT port
- Easy-to-use remote control for Amp and CD operation
- Auto-standby, to minimize power consumption

Others

- High-performance phono equaliser (MM/MC)
- Machined gold-plated pin jacks

High quality sound

- **Advanced UHC-MOS Single Push-Pull Circuit with New Schottky barrier diodes, for musical detail and power**

The PMA-2020AE employs a large-current UHC-MOS for its amplifier element to configure an ideal circuit that is both a simple push-pull circuit and one that is capable of high-power output. The UHC-MOS in this amp is of a new type that provides greater current capacity and represents the heart of the Advanced UHC-MOS Single Push-Pull Circuit that has vastly improved the power amp block and power supply block circuit configuration. The original sound is now reproduced with a highly transparent, realistic quality. A new Schottky barrier diode with 1.5 times better performance compared with the previous model has been used in the power supply unit, improving the expressive power of the UHC-MOS through reduced switching noise and highly capable power transmission thanks to high-speed operation.

- **New Ultra High Current MOS with greater current capacity**

From a single element, the Ultra High Current MOS (UHC-MOS) produces the current linearity previously produced by 35 conventional MOS-FETs and 3 bipolar transistors. The PMA-2020AE is equipped with the latest UHC-MOS with further expanded current capacity, boosting peak current from 120A to 210A. A copper plate with high heat conductivity has been added between the UHC-MOS and the radiator to improve heat dissipation, enhance stability in amplifier element operation, and ensure consistent reproduction of sound quality from minute to very large signals.

- **Highly accurate Dual FET + Cascade Bootstrap Circuit to improve stability**

A new Dual FET has been adopted for the input stage of the power amp. This feature-rich Dual FET suppresses the adverse influence of heat changes on sound, contributing to stable operation. Also, since a Cascade Bootstrap Circuit has been employed in the first stage of the differential amplifier circuit, superior amplification with negligible misalignment in frequency phase is now possible.

- **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.

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

- **Minimum Signal Path, to protect signal purity**

- **Chassis construction with 6 independent blocks**

The PMA-2020AE 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 6 separate blocks. And 1.6 mm 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.

- **Thoroughly vibration-resistant design with Direct Mechanical Ground Construction**

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.

- A highly rigid B.M.C. (Bulk Molding Compound) has been newly adopted for the insulator material on the PMA-2020AE.

- 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.

- **Large, high-grade 27 mm volume control unit**

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

Useful Functions

- **Power Amp Direct**

The PMA-2020AE provides a Power Amp Direct input feature that allows the unit to be used as a standalone power amplifier when combined with an A/V preamplifier or similar component.

- **PRE OUT port**

The PMA-2020AE is equipped with a versatile PRE OUT port that lets you connect a separate standalone power amplifier or add a subwoofer.

- **Newly designed system remote for Amp and CD operation**

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

- **Auto-standby, to minimize power consumption**

When no signals or operations are detected for a certain period of time, the PMA-2020AE automatically switches to standby mode where power consumption is at its lowest level. Auto-standby ensures that electricity is not wasted.

Ports

In		
	Phono (MM/MC)	1
	CD	1
	Tuner	1
	AUX	1
	NETWORK	1
	Recorder-1 (Playback)	1
	Recorder-2 (Playback)	1
	Power amp direct	1
Out		
	Recorder-1 (REC)	1
	Recorder-2 (REC)	1
	Preout	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 / 100 Ω

RIAA deviation PHONO 20 Hz - 20 kHz, ±0.5 dB

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 AC230 V, 50/60 Hz

Power consumption 360 W

Power consumption in standby mode

0.2 W

Dimensions (W x H x D) 434.0 x 181.5 x 434.2 mm

Weight 24.4 kg



*Design and specifications are subject to change without notice.