New model information

PMA-510AE

Integrated Amplifier

DENON

Speaker drive capability a step up in class.
Integrated amplifier with enhanced sound expression.

The PMA-510AE features High-Current Single-Push-Pull circuitry based on Denon's ideal for pure audio amplifiers that aims for both strength and detail in the musical sound being heard. Denon engineers have tapped their proven audio technology to create an integrated amplifier that is a step up in class from previous designs. For improved convenience, the remote control unit that comes with the PMA-510AE includes the main functions that control Denon CD players.

High Current
SINGLE PUSH-PULL CIRCUIT

S.L.D.C
SIGNAL LEVEL DIVIDED CONSTRUCTION

Features

High quality sound

- High Current (HC) Single-Push-Pull Circuit to balance musical detail and power
- Wide dynamic range playback, supporting a high-grade audio sources
- Main transformer with separate power supplies for analog and digital circuits
- Microprocessor stop mode, for higher sound quality
- Thoroughly vibration-resistant design with Direct Mechanical Ground Construction
- European sound-tuned

Useful Functions

- Newly-designed system remote unit
- Phono Equalizer Amp (MM), for connecting an analog record player
- Headphone jack

Others

- Less than 0.3 W at stand-by
- Aluminium panel design, befitting the elegance of an audio component
- Design matches the new DCD-510AE CD player

High quality sound

• High Current (HC) Single-Push-Pull Circuit to balance musical detail and power

The PMA-510AE incorporates HC transistors with 2 to 3 times the electrical current supply capability of conventional power transistors for audio. Denon's acclaimed HC Single-Push-Pull Circuit has been inherited from its high-end models which, together with a fully discrete amplifier design, produces a powerful sound filled with beautiful musical details.

• High-speed, high-capacity power supply circuit for HC Single-Push-Pull

The PMA-510AE's power circuit uses a block capacitor that Denon engineers have jointly developed with a parts manufacturer and a Schottky-barrier diode that features low internal resistance for low loss, short recovery time, and negligible rectifying noise. This highly stable electrical current supply further brings out the expressive power of sound produced by the HC Single-Push-Pull Circuit.

• Wide dynamic range playback, supporting a high-grade audio sources

The PMA-510AE's tone circuit, power amplifier circuit and other areas have been fine-adjusted to secure a frequency response of up to 100 kHz during actual use. Also, improvements in the volume circuit suppress noise in the amplifier to achieve high sonic resolution. These features and others give the PMA-510AE plenty of latitude to handle the wide dynamic range of high-grade audio sources such as Super Audio CD and DVD-Audio.

• Main transformer with separate power supplies for analog and digital circuits

The coiled wire of the power transformer for the audio signal and control circuits has been separated to eliminate mutual interference and adverse influences on sound quality. The PMA-510AE also has a prepared transformer to minimize power consumption during remote power-off standby and improve environmentally friendly performance.

• Microprocessor stop mode, for higher sound quality

The Microprocessor Stop Mode automatically stops all operations of the microprocessor when it is not needed during playback. By stopping the oscillation of the microprocessor's clock during normal listening, the audio signal is protected from noise and the quality of sound is improved.

• Thoroughly vibration-resistant design with Direct Mechanical Ground Construction

The power transformers, itself a source of vibration, has been placed near the ground and immediately above the insulators to allow direct release to the ground and thoroughly prevent the propagation of unwanted vibration or noise.

• Signal Level Divided Construction

The PMA-510AE employs Denon's Signal Level Divided Construction (SLDC) in which the circuits for small and large signals, the microprocessor, and other circuits are separated in an ideal manner to minimize mutual interference.

• "Source Direct" function, for clean pure audio playback (simple & straight signal)

The PMA-510AE includes a Source Direct function that allows the audio signal to bypass the Bass, Treble, Loudness, and Balance control circuits and maintain its purity for optimum sound transparency during playback. This Source Direct function works for all input sources.

• Every detail of the design devoted to high-quality sound

The relay switch used for CD and Phono input contains an inert gas to prevent the occurrence of noise that can negatively affect the signal. In addition, highly reliable parts strictly selected for their contribution to sound quality, such as the large-capacity block capacitor for the power supply circuit, high-quality sound carbon resistors, and high-quality sound capacitors, are also used. Each individual part employed in configuring the circuits reflects this emphasis on high sound quality.

Useful Functions

• Newly-designed System remote unit

The PMA-510AE's system remote unit controls the main volume, function switching, muting, and remote power on/off (linked with an AC outlet). The system remote also controls Denon CD players and tuners.

[CD player operations]

- Number buttons
- Program / direct play
- Random play
- Repeat playback
- Play / pause
- Stop
- Reverse-skip
- Forward-skip

etc..

[Tuner operations]

- Preset channel call

• Speakers A / B switches

Others

• Front panel layout, designed for ease of use

• Integration with the new DCD-510AE's remote control unit

Main Specifications

Power amplifier section

Rated output	45 W + 45 W (8 ohms, 20 Hz - 20 kHz, THD 0.07%) 70 W + 70 W (4 ohms, 1 kHz, THD 0.7%)
Total harmonic distortion	0.02% (8ohms, 1 kHz)

Preamplifier section

Phono equalizer rated output	150 mV (REC out terminal)
Input sensitivity / Impedance	
Line	100 mV/47 kohms (Source Direct: OFF) 100 mV/16 kohms (Source Direct: ON)
Phono	2.5 mV/47 kohms
RIAA deviation	
Phono	20 Hz - 20 kHz, ±0.5 dB
Signal-to-noise ratio (IHF A network)	
Line	105 dB (Source Direct: ON)
Phono (MM)	84 dB (input terminals shorted, input signal 5 mV)
Tone controls	
Bass	100 Hz, ±8 dB
Treble	10 kHz, ±8 dB

General

Power supply	AC 230 V, 50 Hz
Power consumption	185 W (Stand-by: less than 0.3 W)
Dimensions (W x H x D)	434 x 121 x 307 mm
Weight	6.5 kg

Ports

In	Phono (MM)	x 1
	CD	x 1
	Tuner	x 1
	Line	x 1
	Recorder-1 (Playback)	x 1
	Recorder-2 (Playback)	x 1
Out	Recorder-1 (REC)	x 1
	Recorder-2 (REC)	x 1
Other	AC outlet	x 1

Black version is also available

*Design and specifications are subject to change without notice.

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