

## PMA-1520AE

Integrated Amplifier

DENON®



Premium Silver



Black

ADVANCED  
*Ultra High Current MOS*  
SINGLE PUSH-PULL CIRCUIT

## RICH SOUND FROM VARIOUS MUSIC SOURCES THANKS TO ADVANCED UHC-MOS SINGLE PUSH-PULL OUTPUT CIRCUIT

The PMA-1520AE's remodeled Advanced UHC-MOS Single Push-Pull Circuit for instance or the twin transformers with leakage cancelling technology prove, that Denon always finds ways to advance their famed 2-channel products. The Precision Direct Mechanical Ground Construction thoroughly suppresses vibration thus minimizing adverse influences on the output signal. The power transformer, a major source of vibration, has been "float" mounted using a variety of vibration-resistant materials and a radiator stabilizer. It further owns separate power supplies

for analogue and digital circuits. A chassis construction with independent blocks and the large highgrade volume potentiometer further suppress external noise and unwanted interferences between the parts. All relevant ingredients have been strictly selected to deliver the high sound quality for which Denon is renowned. The high-performance phono equalizer makes the PMA-1520AE the best choice also for vinyl lovers. Everything is protected by a thick aluminum front panel with the Denon logo engraved.

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

The amplifier features Advanced UHC (Ultra High Current)-MOS technology that utilises a minimum number of high-current amplifier elements to balance advanced speaker drive capabilities and improved sound quality. Advanced UHC-MOS is an ideal amplifier whose power supply performance is superior to that of bipolar transistors and incorporates the sound quality advantages of MOS-FETs. The Advanced UHC-MOS is provided in a single push-pull configuration that eliminates deviations in the amplification stage and balances high power with delicate musical details. This circuit masterfully reproduces the full sonic range, from the delicate musical nuances to the powerful climaxes of rich musical expression.

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.

### Direct Mechanical Ground Construction to minimise unwanted vibration

The PMA features a construction that thoroughly suppresses the adverse influences of vibration and electrical noise. Compared to previous models, the centre of gravity has been lower where the

power amplifier board has been mounted closer to the bottom of the chassis, a construction that protects the circuitry from vibration. A twin monaural configuration with L/R symmetry has been adopted for the power amplifier block. And since circuits with different signal levels have been separated, they are thoroughly protected from mutual interference or noise. These design improvements contribute to a highly transparent, expressive sound.

### Leakage-cancelling-mounted twin transformers

Two transformers have been connected in parallel to dramatically improve electrical and magnetic characteristics. The Leakage Cancelling (LC) mounting 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 transformers were mounted with a plate between them and the chassis. Unlike conventional models, this plate is dual-layered. A combination of special resins and vibration-resistant materials has also been used to produce a floating effect that prevents adverse influences from affecting sound quality.

### High-grade volume control for precise quality management

The high-grade volume control, an element that significantly influences the quality of sound from an amplifier, is the same motor-driven volume used in the high-class top model. Denon engineers carefully tested several types of volume controls before deciding that this was the one that best brought out the expressive power of sound in a class of its own.

### High-current, dynamic power supply, to support high speed and large current flow

Low-noise Schottky barrier diodes, well known for its superior switching characteristics, have been used in the rectifier circuit. The Schottky barrier diode provides ample current capacity to accommodate ongoing successions of large bursts in sound while preserving its power and stability. Lower impedance has been achieved by doubling the normal thickness of copper foil used in the power supply circuitry, a design that adds stability to the current supply. The use of custom parts for the block capacitor, thoroughly tested for their contribution to high sound quality, further underscores Denon's uncompromising approach to audio technology and impeccable sound.

### 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 stabilized ground potential. When the operating foundation of the amplifier circuit is clear, the playback sound is also clear.

### NEW AND UPGRADED FEATURES

- Advanced Ultra-High Current (UHC)-MOS Single Push-Pull Circuit with new type dual FET transistor for more transparency and details
- Leakage-cancelling-mounted twin transformers
- High-grade volume control for precise adjustment
- High-performance phono equaliser
- Parts strictly selected for high sound quality

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

- 2x 140 W (4ohm)
- Shottky diodes and selected parts
- solid heat sink, to suppress vibration
- Microprocessor Stop Mode
- Gold-plated speaker terminals
- Vibration-resistant design with Direct Mechanical Ground Construction
- High-current, dynamic power supply, to support high speed and large current flow
- Minimum signal paths, to protect signal purity
- Wide range playback, supporting Super Audio CD and High Resolution Audio as FLAC HD or DSD

### EASE-OF-USE

- System remote control unit to control not only the amplifier but also a CD player and Network Audio player
- Large size volume control knob for precise adjustment
- Power Amp Direct input for easy integration in a Multichannel AV System
- 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 Black and Premium Silver

EAN	Model	Serial No.	Color
	PMA1520AEBKE2	4582116369746	Black
	PMA1520AESPE2	4582116369753	Premium Silver
	PMA1520AEBKE2GB	4582116369746	Black
	PMA1520AESPE2GB	4582116369753	Premium Silver



### Technical information

Power amplifier section	
Rated output	70 W + 70 W (20 Hz - 20 kHz, 8 ohms, T.H.D. 0.07%) 140 W + 140 W (1 kHz, 4 ohms, T.H.D. 0.7%)
Total harmonic distortion	0.01% (rated output -3 dB, 8 ohms, 1 kHz)
Preamplifier section	
Input sensitivity/Impedance	
PHONO MC	0.2 mV/100 ohms
PHONO MM	2.5 mV/47 kohms
LINE	125 mV/45 kohms (Source Direct: OFF)

Signal-to-noise ratio	
PHONO MC	74 dB (0.5 mV input)
PHONO MM	89 dB (5 mV input)
LINE	108 dB
Tone control	
Treble	± 8 dB at 10 kHz
Bass	± 8 dB at 100 Hz
General	
Power supply	AC 230 V, 50 Hz
Power consumption	295 W (Standby: 0.2 W)
Dimensions (W x H x D)	434 x 134 x 410 mm
Weight	16.1 kg

### Ports

IN	Quantity
Phono (MM/MC)	x 1
Audio input (incl. Phono)	x 6
Power Amp Direct	x 1
Out	
Pre Out	x 1
Rec output	x 1
Speaker out (Bi-wiring)	A/B

|V01|

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