New model information



# DENON

# Integrated Amplifier designed for Improved Musical Expression.

The PMA-710AE is equipped with a HC (High-Current) Single Push-Pull Circuit that enforces DENON's design concept for pure audio amplification. This design ensures that you hear delicate musical details, reliably supported by plenty of power. Playback faithful to the original sound is also made possible by a circuit board layout that can handle the greater power from the amplifier section and appropriately respond to the output level and unique character of the signal. In addition, the internal construction of the PMA-710AE has been carefully designed to prevent unwanted vibration from adversely affecting the audio signal.



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## 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 audio and control circuits
- Micro-processor stop mode, for higher sound quality
- Vibration-resistant design with Direct Mechanical Ground Construction
- European sound-tuned

## **Useful Functions**

- Newly-designed system remote control
- Phono Equalizer Amp (MM), for connecting an analogue record player
- PRE OUT jack, for future upgrades
- REC OUT Selector
- Headphone jack

#### Others

- Less than 0.3 W in standby
- Aluminium front panel, befitting of the elegance of a high-end
   audio product
- Design matches the new DCD-710AE CD player

## High quality sound

# High Current (HC) Single-Push-Pull Circuit for musical detail and power

The PMA-710AE 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-710AE'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, supporting high-grade audio sources

The PMA-710AE's tone control and power amplifier circuit have been carefully 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-710AE plenty of latitude to handle the wide dynamic range of high-grade audio sources such as BD, Super Audio CD and DVD-Audio.

# Main transformer with separate power supplies for audio and control circuits

The main power transformer has separate coiled wires for the audio and control circuits. The separate power supplies and divided circuitry layout work together to eliminate mutual interference and thoroughly preserve sound quality.

## Micro-processor stop mode, for higher sound quality

The Micro-processor Stop Mode automatically stops all operations of the micro-processor 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.

#### Vibration-resistant design with Direct Mechanical Ground Construction

The power transformers, themselves a source of vibration, have been placed near the base of the unit and immediately above the insulators to allow direct dissipation of unwanted vibrations, minimizing propagation through the unit.

#### S.L.D.C. (Signal Level Divided Construction), a layout design for optimum response to signal level and character

The layout of the PMA-710AE's circuitry has been divided into a phono circuit, pre-amp circuit, and power amp circuit in accordance with signal level to suppress mutual inference between circuits. Signal paths have also been made as short as possible to minimize signal degradation and ensure a beautifully clear playback sound.

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

The PMA-710AE 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 inputs.

# 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 durable 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 remote unit

The PMA-710AE's system remote 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.

#### PRE OUT jack, for future upgrades

The PMA-710AE is equipped with a PRE OUT jack that allows the connection of a high-output power amplifier or subwoofer in future system upgrades.

#### **REC OUT Selector**

The PMA-710AE's REC OUT Selector function lets the system perform recording operations such as from CD to a recorder while listening to a record.

#### Others

- Speaker A / B switches
- Front panel layout, designed for ease of use
  Integration with the new DCD-710AE's remote control unit

#### Main Specifications

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| Power amplifier section  |   |
|--------------------------|---|
| Rated output             | 50 W + 50 W<br>(8 ohms, 20 Hz - 20 kHz, THD 0.07%)<br>85 W + 85 W |
|                          | (4 ohms, 1 kHz, THD 0.7%)   |
| otal harmonic distortion | 0.01% (8ohms, 1 kHz)  |
| Preamplifier section     |   |
| )hana agualizar          | 150 mV (PEC out torminal)   |

| r reampiner section                      |                                 |
|--|---------------------------------|
| Phono equalizer                          | 150 mV (REC out terminal)       |
| rated output                             |                                 |
| Input sensitivity/<br>Impedance          |                                 |
| Line                                     | 105 mV/47 kohms                 |
|  | (Source Direct: OFF)            |
| Phono                                    | 2.5 mV/47 kohms                 |
| RIAA deviation                           |                                 |
| Phono                                    | 20 Hz - 20 kHz, ±0.5 dB         |
| Signal-to-noise ratio<br>(IHF A network) |                                 |
| Line                                     | 107 dB (Source Direct: OFF)     |
| Phono (MM)                               | 86 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                        | 200 W                           |
|  | (Stand-by: less than 0.3 W)     |
| Dimensions (W x H x D)                   | 434 x 121 x 307 mm              |
| Weight                                   | 6.7 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 |
|       | Preout                | x 1 |
|       |                       |     |
| Other | AC outlet             | х З |

#### **Complimentary Products**



DP-200USB Fully automatic record player



#### TU-1800DAB DAB/FM-RDS/AM Radio Tuner



DCD-710AE CD-Player

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