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Denon PMA-1700NE

Denon PMA-1700NE Integrated Amplifier User Manual

Model: PMA-1700NE | Brand: Denon

1. INTRODUCTION AND OVERVIEW

The Denon PMA-1700NE is a high-performance integrated amplifier designed to deliver exceptional audio fidelity. It features an ultra-high current (UHC) single push-pull circuit combined with Advanced AL32 Processing Plus, ensuring rich, detailed, and immersive music reproduction that remains true to the original recording.

With 140 Watts per channel, this amplifier is capable of driving a wide range of speakers while maintaining outstanding sound quality without distortion. It includes versatile connectivity options such as three digital inputs, a rear USB-B input, and built-in MM and MC phono inputs, allowing for impeccable sonic fidelity from various sources, including vinyl and high-resolution computer files up to 384 kHz/32 bit and DSD up to 11.2 MHz.

The PMA-1700NE supports a broad array of audio formats, including MP3, ALAC, WAV, FLAC HD, and DSD. It can also function as a stereo pre-amplifier for integration with additional power stages. Built with premium components and backed by Denon's more than 110-year legacy of audio innovation, this amplifier provides unmatched performance for your cherished music collection.

2. KEY FEATURES

- **High-Power 2-Channel Integrated Amplifier:** Delivers 140W per channel with Advanced AL32 Processing Plus for detailed, distortion-free audio.
- **Impeccable Sound Precision:** Powered by Denon's advanced ultra-high current single push-pull circuit, balancing high power and musical detail for clean, rich, and immersive audio.
- **Built-in Phono Equalizer:** Supports both MM (Moving Magnet) and MC (Moving Coil) cartridges, bringing vinyl collections to life. Analog Mode allows for turning off power to digital sources for pure analog playback.
- **Extensive Connectivity:** Features 3 digital inputs (optical, coaxial), a USB-B input for D/A conversion, and pre-amp input terminals for external audio components.
- **Wide Audio Format Compatibility:** Supports MP3, ALAC, WAV, FLAC HD, and DSD for high-quality digital music playback from USB drives or network connections.
- **Robust Build Quality:** Constructed with premium components, reflecting Denon's 110+ years of audio

excellence.

3. SETUP

3.1 Unpacking

Carefully remove the PMA-1700NE from its packaging. Retain all packaging materials for future transport or service. Refer to the included Quick Start Guide for initial setup steps.

3.2 Placement

Place the amplifier on a stable, level surface away from direct sunlight, heat sources, and excessive moisture. Ensure adequate ventilation around the unit to prevent overheating. Allow at least 10 cm (4 inches) of clear space above and around the amplifier.



Image: The Denon PMA-1700NE amplifier positioned on a cabinet between two speakers, illustrating proper placement in a home audio setup.

3.3 Speaker Connections

Connect your speakers to the speaker terminals on the rear panel. Ensure correct polarity (+ to + and - to -) for each speaker. The PMA-1700NE can drive speakers with an impedance of 4 ohms or higher. For optimal performance, use high-quality speaker cables.

4. CONNECTIONS

The PMA-1700NE offers a comprehensive array of input and output options to integrate with various audio components.

4.1 Rear Panel Connections



Image: Detailed view of the amplifier's rear panel, showing various audio input and output terminals, including digital, analog, and phono connections.

- **Digital Audio Inputs:** Connect digital sources like CD players, Blu-ray players, or TVs using the optical (x2) or coaxial (x1) inputs.
- **USB-B Input:** For connecting a computer to utilize the amplifier's high-quality DAC for high-resolution audio playback.
- **Analog Audio Inputs:** Multiple RCA inputs for various analog sources (e.g., CD, Network/AUX, Recorder).
- **Phono Input (MM/MC):** Dedicated input for turntables, supporting both Moving Magnet and Moving Coil cartridges. Ensure the correct cartridge type is selected on the front panel.
- **EXT. PRE IN:** Allows the PMA-1700NE to be used as a power amplifier by connecting an external pre-amplifier.
- **AUDIO OUT (RECORDER):** For connecting a recording device.
- **SIGNAL GND:** Ground terminal for turntables to reduce hum.
- **IR CONTROL:** For connecting an infrared remote control system.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

Press the POWER button on the front panel or the remote control to turn the unit on or off. The power indicator will illuminate when the unit is on.

5.2 Source Selection

Use the INPUT SELECTOR knob on the front panel or the corresponding buttons on the remote control to choose your desired audio source (e.g., CD, Phono, Optical, Coaxial, USB-DAC).

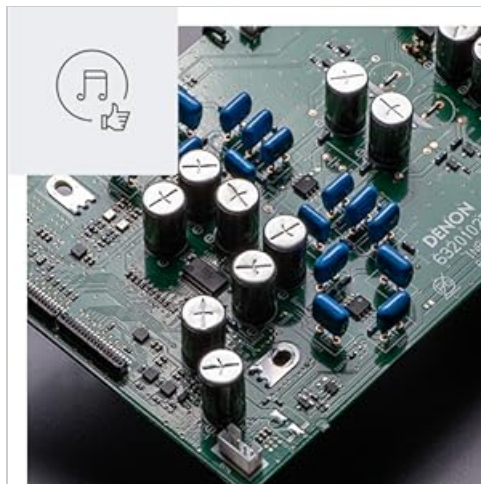


Image: The front panel of the Denon PMA-1700NE amplifier, showcasing the input selector, volume knob, and other controls, alongside its remote control.

5.3 Volume Control

Adjust the listening volume using the large VOLUME knob on the front panel or the VOLUME +/- buttons on the remote control.

5.4 Tone Controls

The amplifier includes BASS, TREBLE, and BALANCE knobs on the front panel for fine-tuning the audio output to your preference or room acoustics. These controls can be bypassed for the purest signal path by engaging the

'Source Direct' mode.

5.5 Analog Mode

Activate the 'Analog Mode' to turn off power to the digital audio circuitry, ensuring the purest possible sound reproduction from analog sources like turntables.

5.6 Phono Equalizer Settings

If using a turntable, select either 'MM' (Moving Magnet) or 'MC' (Moving Coil) on the front panel to match your cartridge type. This ensures proper amplification and equalization for your vinyl playback.

6. AUDIO PROCESSING

The PMA-1700NE incorporates advanced technologies to deliver superior sound quality:

- **Advanced AL32 Processing Plus:** Denon's proprietary analog waveform reproduction technology interpolates digital data to reproduce the original analog waveform, resulting in a smooth, highly detailed, and richly expressive sound.
- **Ultra-High Current (UHC) Single Push-Pull Circuit:** This circuit design provides high power output with minimal distortion, ensuring dynamic and precise audio reproduction across the entire frequency range.
- **Hi-Res Audio Support:** The integrated USB-DAC supports high-resolution audio formats up to 384 kHz/32 bit PCM and DSD up to 11.2 MHz, allowing you to enjoy studio-quality sound.
- **Supported Audio Formats:** The amplifier is compatible with a wide range of digital audio formats including MP3, ALAC, WAV, FLAC HD, and DSD.

7. SPECIFICATIONS

Feature	Specification
Output Power	140 Watts per channel (into 4 ohms)
Number of Channels	2
Item Dimensions (L x W x H)	17.1 x 16.2 x 5.3 inches
Item Weight	17 Kilograms
USB-DAC Support	Up to 384 kHz/32 bit PCM, DSD up to 11.2 MHz
Phono Input	MM (Moving Magnet) / MC (Moving Coil)
Digital Inputs	2 Optical, 1 Coaxial
Supported Audio Formats	MP3, ALAC, WAV, FLAC HD, DSD
Specification Met	Roon Tested, Hi-res Audio Certified

8. MAINTENANCE

To ensure the longevity and optimal performance of your Denon PMA-1700NE, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the exterior surfaces with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or chemical sprays, as these can damage the finish.
- **Ventilation:** Regularly check that the ventilation openings on the top and sides of the unit are not obstructed. Proper airflow is crucial to prevent overheating.
- **Dust Removal:** Periodically use a soft brush or a low-power vacuum cleaner with a brush attachment to remove dust from the ventilation grilles.
- **Power Cord:** Ensure the power cord is securely connected and not pinched or damaged.

9. TROUBLESHOOTING

If you encounter issues with your PMA-1700NE, refer to the following basic troubleshooting steps. For more detailed solutions, consult the comprehensive user manual or contact Denon support.

- **No Power:** Ensure the power cord is securely plugged into both the amplifier and a working wall outlet. Check if the power button is pressed.
- **No Sound:**
 - Verify that the correct input source is selected.
 - Check all speaker connections for proper polarity and secure fit.
 - Ensure the volume is turned up and not muted.
 - If using headphones, ensure they are properly connected and that the speaker output is not disabled.
- **Distorted Sound:**
 - Check speaker impedance compatibility.
 - Reduce the volume to see if distortion decreases.
 - Ensure all cables are securely connected and not damaged.
- **Humming Noise (Phono Input):** Ensure the turntable's ground wire is securely connected to the SIGNAL GND terminal on the amplifier.

10. WARRANTY AND SUPPORT

The Denon PMA-1700NE Integrated Amplifier comes with a **3-year warranty**. Please retain your proof of purchase for warranty claims.

For technical support, service, or detailed warranty information, please visit the official Denon website or contact your authorized Denon dealer.

11. PRODUCT VIDEOS

11.1 Denon PMA-1700NE Shortened Product Overview

Your browser does not support the video tag.

Video: A concise overview of the Denon PMA-1700NE Integrated Amplifier, highlighting its key features and design. This video provides a visual summary of the product's capabilities and aesthetic.