

# Sophisticated Two-Channel Pre-Amp for Sublime Audio

Despite being at the cutting edge of the burgeoning home cinema market, Onkyo has never forgotten its roots in pure hi-fi audio. With the P-3000R, we present a streamlined two-channel pre-amplifier that packs a treasure trove of stunning audio technology. The P-3000R handles both analog and digital sources, with connectivity options including AES/EBU digital connectors and a USB input for PC audio.

Separate 192 kHz/32-bit Burr-Brown DACs for each channel ensure accurate digital-to-analog conversion. Meanwhile, to minimize interference and maintain signal quality, the P-3000R employs noise-reducing DIDRC technology, a vibration-resistant chassis design, and independent amplifier circuitry. Thanks to the P-3000R's bi-amping capability, you also have greater flexibility in how you set up your system. As always, the job of all this advanced hardware is to bring you closer to your music and let you feel the unique resonance of each individual instrument.



**ONKYO**

P-3000R PREAMPLIFIER

- DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)
- Separate Digital/Analog Circuitry
- Separate Massive Transformers for Digital/Analog Circuitry (Toroidal Transformer for Analog Circuitry)
- Separate Anti-Vibration Aluminum Panels for Top, Front, and Sides
- New Circuit Board Construction to Reduce Vibration
- PLL Ultra-Low Jitter Technology
- Sampling Rate Control (Up to 192 kHz)
- Separate Burr-Brown 192 kHz/32-Bit DACs (PCM1795) for L/R Channels
- Direct Mode
- Tone Control (Bass/Treble)
- Independent Headphone Amplifier
- Discrete Phono Equalizer
- Phono Input (MM)
- USB Digital Input for 192 kHz/32-Bit HD Audio from PC\*
- 5 Digital Inputs (AES/EBU, 2 Optical, and 2 Coaxial) and 1 Output (Optical)
- Separate L/R Bi-Amping-Capable Pre-Outs
- Gold-Plated, Machined Solid Brass, 19 mm-Pitch Audio Terminals
- 12 V Trigger Out
- Display Dimmer (Normal/Dim/Off)

\*Playback of PC audio requires dedicated software that can be downloaded from an Onkyo website.

**USB** 192 kHz 32-bit



Black model available

### DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)

Since the advent of digital audio, signal-to-noise ratios have improved dramatically. However, the S/N ratio reflects static noise only, and takes no account of another type of noise that occurs as the byproduct of sound reproduction—dynamic noise. To reduce this type of noise, Onkyo has developed DIDRC technology for use in our hi-fi components. Despite being beyond the normal range of human hearing, frequencies above 100 kHz are susceptible to clock pulse and other forms of distortion from digital devices. Such distortion in the super-high-frequency range can generate “beat interference”, which in turn affects the character or atmosphere of the original sound. By improving linearity and reducing distortion in the super-high-frequency range, Onkyo’s new DIDRC technology effectively reduces perceptible noise and delivers clearer-than-ever audio.

### Separate Digital/Analog Circuitry and Transformers

To prevent unwanted interference, the P-3000R employs physically separate circuitry for digital and analog processing. What’s more, it also features separate transformers for digital and analog circuitry.

### Playback of Various Music Sources Including PC Audio via USB

The P-3000R pre-amp accepts analog sources such as records and tapes, along with digital output from iPod via a digital media transport such as Onkyo’s ND-S1. Using the USB port on the rear panel of the P-3000R, you can also connect your PC and play back 192 kHz/32-bit HD audio formats\*.

\*Playback of PC audio requires dedicated software that can be downloaded from an Onkyo website.

### PLL (Phase Locked Loop) Ultra-Low Jitter Technology

Jitter is an unwanted side-effect of the digital-to-analog conversion process caused by fluctuations in the time domain of a digital signal. PLL ultra-low jitter technology reduces jitter by comparing the input and output phases of the digital signal and creating an accurate clock waveform. This enhances the precision of digital signal processing and noticeably improves perceived audio quality.

### Separate Burr-Brown DACs for L/R Channels

High-quality Burr-Brown DACs work to optimize analog audio performance on Onkyo’s new hi-fi components. The P-3000R pre-amp sports dual 32-bit PCM1795 DACs, which support sampling rates of up to 192 kHz, display high resistance to clock jitter, and handle a 123 dB dynamic range. Although these DACs can process two-channel audio on a single chip, Onkyo employs separate chips for each stereo channel, to ensure the most accurate digital-to-analog conversion.

### Bi-Amping Capability

The P-3000R pre-amp offers the audiophile possibilities of bi-amping. Compatible speakers can be bi-amped for separate powering of high and low frequencies. Using the bi-amping mode on the P-3000R gives you greater control of the frequency balance.

### Audiophile-Quality Parts

The P-3000R incorporates a massive toroidal transformer for the analog circuitry that reduces magnetic flux leakage, improves efficiency, and keeps the power supply stable. For the digital circuitry, meanwhile, it employs a high-quality EI transformer. Gold-plated, machined solid brass, 19 mm-pitch terminals ensure a clean connection and help prevent interference between thick, high-quality cables. Meanwhile, AES/EBU digital inputs provide resistance to signal degradation and noise.

### New Circuit Board Construction

Rather than being directly connected to the chassis base, the circuit boards inside the P-3000R are cushioned by internal struts and affixed to the front, side, and rear panels. This method of construction prevents vibrations from the chassis from adversely affecting the circuit boards.

### Separate Panel Construction

The P-3000R features separate aluminum panels for the top, sides, and front to reduce unwanted vibrations caused by internal resonance. Compared to a one-piece chassis design, this construction method offers greater rigidity and improved noise reduction.

## SPECIFICATIONS

### P-3000R Preamplifier

THD+N (Total Harmonic Distortion + Noise) 0.05% (20 Hz–20 kHz, Rated power)

Input Sensitivity and Impedance  
200 mV/47 kΩ (Line)  
2.7 mV/47 kΩ (Phono MM)

Rated RCA Output Level and Impedance  
1 V/330 Ω (Pre out)

Phono Overload 80 mV (MM, 1 kHz, 0.5%)

Frequency Response 5 Hz–100 kHz/0 dB, -3 dB

Tone Control  
±8 dB, 50 Hz (Bass)  
±8 dB, 20 kHz (Treble)

Signal-to-Noise Ratio  
110 dB (Line, IHF-A)  
80 dB (Phono, IHF-A)

### General

Power Supply AC 230 V~ 50 Hz

Power Consumption 29 W

Dimensions (W x H x D) 435 x 99 x 333.1 mm

Weight 11.0 kg

### CARTON

Dimensions (W x H x D) 624 x 247 x 443 mm

Weight 12.5 kg

### Supplied Accessories

- Instruction manual • AC power cord • Remote controller
- AA (R6) batteries x 2

