

# A-9000R INTEGRATED STEREO AMPLIFIER

SILVER | BLACK



AWRAT ADVANCED WIDE RANGE AMPLIFIER TECHNOLOGY DIDRC **USB** 192 kHz/24-bit **RI**



## Elite Integrated Amp Brings Your Music to Life

Built to exacting standards by—and for—genuine music lovers, the A-9000R offers a unique combination of performance and versatility. As one of Onkyo's new Reference series hi-fi components, the A-9000R shares an advanced design DNA with its sibling models. Like the M-5000R power amp, it includes AWRAT, quad push-pull amplification, and three-stage inverted Darlington circuitry. And like the P-3000R pre-amp, it features Amphenol AES/EBU digital connectors and employs asynchronous signal transfer over USB to support pristine playback of HD audio. On top of this, the A-9000R also incorporates separate 192 kHz/24-bit Wolfson® DACs for L/R channels, a noise-reducing DIDRC sound module, and a low-vibration chassis to minimize interference and preserve signal quality. But what sets this unit apart is its ability to be configured in any of four different amplifier modes, depending on how you want to integrate it with your other hi-fi gear. It's that kind of versatility, married to high-end build quality, that makes the A-9000R an extremely appealing choice for the audiophile.

### FEATURES

- 140 W/Ch at 4 Ω, 20 Hz–20 kHz, 0.05%, 2 Channels Driven, IEC
- AWRAT (Advanced Wide Range Amplifier Technology)
- DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)
- Quad Push-Pull Amplification Design with Three-Stage Inverted Darlington Circuitry
- 192 kHz/24-Bit HD Audio Playback via USB (Asynchronous Transfer)
- Separate Anti-Vibration Aluminum Panels for Top, Front, and Sides
- New Circuit Board Construction with Internal Struts to Reduce Vibration
- Symmetrical Layout of L/R Channels
- Separate Wolfson® 192 kHz/24-Bit DACs (WM8742 x 2) for L/R Channels
- Four Large 18,000 μF Capacitors
- 1.2 mm-Thick Copper Bus Plate for Perfect Grounding
- Four Amplifier Modes (Integrated Amp, Power Amp, Pre-Amp, Split Pre-Amp/Power Amp)
- 4 Digital Audio Inputs (1 Amphenol AES/EBU, 1 Optical, and 2 Coaxial)
- 3 Analog Audio Inputs and 1 Output
- Main-In Terminal
- Audio L/R Pre-Out
- Machined, Gold-Plated RCA and Phono Terminals
- Customized, Gold-Plated, Banana Plug-Compatible Speaker Posts
- Independent Headphone Amplifier
- Discrete Phono Equalizer (MM/MC)
- Speaker A/B Drive



# A-9000R INTEGRATED STEREO AMPLIFIER

## AWRAT (Advanced Wide Range Amplifier Technology)

The A-9000R employs a host of proprietary Onkyo technologies to ensure optimal audio performance.

**1. DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)**  
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.

### 2. Low Negative-Feedback Design

Too much NFB makes a system susceptible to counter-electromotive force from the speakers, resulting in a drop in perceived sound quality. To avoid this, Onkyo focuses on improving the frequency response and reducing distortion, without relying so much on NFB.

### 3. Closed Ground-Loop Circuits

The A-9000R employs a sophisticated closed-circuit design in which each circuit has a separate link to the power supply. This helps to cancel individual circuit noise and keep the ground potential free of distortion.

### 4. HICC (High Instantaneous-Current Capability)

Handling current loads up to 140 amperes, HICC enables an amplifier to immediately cancel the speakers' reflex energy and instantaneously send out the next signal. The same high current required to achieve this also supports the amplifier's ability to handle speaker impedance fluctuations.

### 5. Symmetrical Twin-Monaural Construction

Power devices for the left and right channels of the A-9000R are aligned symmetrically. Each channel has the same electrical and structural design, and signal pathways are uniform in length. This helps to minimize errors in stereophonic playback.

## Quad Push-Pull Amplification Design with Three-Stage Inverted Darlington Circuitry

Three-stage inverted Darlington circuitry brings greater efficiency to the A-9000R power amp by employing a low-NFB design to maintain voltage stability and enhance transient response. Extremely sensitive to oscillations, this circuitry requires very advanced control technology in order to be incorporated into the amplifier. Breaking further new ground, the A-9000R employs two extra transistors for each channel in a "quad push-pull" design that significantly enhances amplification power.

## Four Amplifier Modes for the Ultimate in Versatility

Boasting the combined capabilities of a pre-amp and a power amp, the A-9000R is an amplifier with a difference. At the turn of a knob, it can be configured to run in any one of four distinct modes. Depending on how you want to integrate it into your hi-fi system, you can use it as an integrated amp, as a power amp, or as a pre-amp. On top of that, you can also set up the A-9000R in split mode. This enables the pre-amp and power amp to work separately, so you can incorporate another device, such as an equalizer.

## Asynchronous Transfer via USB for 192 kHz/24-Bit HD Audio

On the rear panel of the A-9000R is a USB input that lets you connect a PC and play back stunningly lifelike 192 kHz/24-bit HD audio formats\*. The USB implementation here utilizes asynchronous transfer to enhance the stability and quality of the audio signal.

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

## Separate Wolfson® 192 kHz/24-Bit DACs for L/R Channels

High-quality Wolfson DACs work to optimize analog audio performance on the A-9000R. The receiver features dual 24-bit WM8742 DACs, which support sampling rates of up to 192 kHz. Although these DACs are specified to handle two-channel audio on a single chip, Onkyo employs separate chips for each stereo channel to ensure the most accurate digital-to-analog conversion.

## New Circuit Board Construction

Rather than being directly connected to the chassis base, the circuit boards inside the A-9000R 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 A-9000R 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.

## Audiophile-Quality Parts

To ensure optimal performance from the A-9000R, Onkyo's engineers incorporated a range of professional-grade parts. Four 18,000-microfarad capacitors and an extremely low-impedance 1.2 mm thick copper bus plate both contribute to achieving a smooth and stable power supply. Machined and gold-plated RCA and phono terminals ensure an extremely clean connection, while Amphenol AES/EBU digital inputs provide excellent resistance to signal degradation and noise.

## SPECIFICATIONS

<b>Power Output</b>	140 W/Ch (4 Ω 20 Hz–20 kHz, 0.05%, 2 channels driven, IEC) 75 W/Ch (8 Ω 20 Hz–20 kHz, 0.05%, 2 channels driven, IEC)
<b>Dynamic Power</b>	450 W (1 Ω), 310 W (2 Ω), 230 W (3 Ω), 180 W (4 Ω), 100 W (8 Ω)
<b>THD+N (Total Harmonic Distortion + Noise)</b>	0.006% (Half power) 0.03% (1 kHz, 1 W Output) 0.008% (20 Hz–20 kHz, Half power) 0.03% (20 Hz–20 kHz, 1 W Output)
<b>Damping Factor</b>	130 (1 kHz, 8 Ω)
<b>Input Sensitivity and Impedance</b>	150 mV/47 kΩ (Line) 2.25 mV/47 kΩ (Phono MM) 0.18 mV/100 Ω (Phono MC)
<b>Rated RCA Output Level and Impedance</b>	1 V/300 Ω (Pre out)
<b>Maximum RCA Output Level and Impedance</b>	5 V/300 Ω (Pre out)
<b>Phono Overload</b>	70 mV (MM, 1 kHz, 0.5%) 5.2 mV (MC, 1 kHz, 0.5%)
<b>Frequency Response</b>	10 Hz–100 kHz+0 dB, -1 dB (1 W, Line) 1 Hz–250 kHz+0 dB, -3 dB (1 W, 8 Ω)
<b>Tone Control</b>	±10 dB, 80 Hz (Bass) ±10 dB, 10 kHz (Treble)
<b>Signal-to-Noise Ratio</b>	107 dB (Line, IHF-A) 60 dB (Phono MM, IHF-A) 70 dB (Phono MC, IHF-A)
<b>Speaker Impedance</b>	4 Ω–16 Ω (A or B), 8 Ω–16 Ω (A + B)
<b>General</b>	
<b>Power Supply</b>	AC 230 V~, 50 Hz
<b>Power Consumption</b>	300 W
<b>Standby Power Consumption</b>	0.2 W
<b>Dimensions (W x H x D)</b>	435 x 175 x 435 mm
<b>Weight</b>	18.5 kg
<b>CARTON</b>	
<b>Dimensions (W x H x D)</b>	627 x 320 x 534 mm
<b>Weight</b>	22.5 kg
<b>Supplied Accessories</b>	
• Instruction manual • AC power cord • Remote controller • AAA (R03) batteries x 2	



Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice.

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