

RC-1590

Stereo Control Amplifier





Dual toroidal transformers isolate the analogue and digital signal paths



Balanced XLR inputs and dual outputs



Bluetooth with aptX



AKM premium 32-bit/768kHz Digital to Analogue Converter

It's all about control.

The RC-1590 stereo preamplifier has been engineered to the highest audio performance levels and provides an incredible level of control and flexibility for the user. Starting with a high performance power supply consisting of two Rotel custom built toroidal transformers for maximum efficiency and low magnetic fields, these transformers provide low-noise isolation between the analog and digital signals. They are part of a reference-grade power supply consisting of individual analog and digital regulator circuits with custom-made slit-foil capacitors. Slit-foil capacitors have very quick charge discharge times and low signal loss ensuring tight bass performance.

Rotel engineers wanted to create a reference quality stereo preamplifier to match with our new RB-1590 stereo power amplifier. Every aspect of component selection and circuit topography was designed and carefully evaluated during multiple listening sessions to ensure the highest fidelity. For example, analog and digital circuits were designed separately, by specialized Rotel teams. Analog inputs are all very low noise circuitry and include a high performance moving magnet phono stage. Digital inputs are fully isolated and feature a precision 32bit 768KHz Digital to Analog Converter(DAC).

The RC-1590 is fully feature-laden with Balanced XLR and Unbalanced RCA inputs and outputs, a TI precision volume control IC, a fixed volume line output, dual mono subwoofer outputs, digital outputs (Coax and Optical), digital inputs (3 Coax and 3 Optical), Aux, CD, and Tuner analog inputs, Internal APTX Bluetooth (supports APTX and standard Bluetooth) with rear mounted external antenna, a front USB iPod with 2.1A charging input, and rear panel PC-USB 24bit 192KHz input supporting DSD (Windows) and DoP (MAC computers DSD over PCM).

Other essential features include a remote control, 2 x 12-volt trigger outputs, a dimmable display, an automatic power off function (configurable), RS232 and IP control for automation system integration, Internet based software updates, Rotel Link connection, a detachable IEC power cord, an external IR remote input, and a front mounted 3.5mm headphone output jack.

For music enthusiasts who won't accept compromise, the RC-1590 preamplifier is in a class by itself, at a price that belies its incredible performance.



RC-1590

Stereo Control Amplifier



SPECIFICATIONS

Total Harmonic Distortion	< 0.002%	Digital Section	
(20 Hz-20k Hz)		Frequency Response	20 Hz - 20k Hz (±0.5 dB, Max)
Input Sensitivity / Impedance		Signal to Noise Ratio	108 dB
Phono Input (MM)	2.5 mV / 47k ohms	(A weighting)	
Line Level Inputs (RCA)	150 mV / 100k ohms	Digital Inputs	SPDIF LPCM
Line Level Inputs (XLR)	250 mV / 100k ohms		(up to 192k Hz 24 bit)
Output Level		PC-USB	USB Audio Class 1.0
Line Level (RCA)	1 V		(up to 96k Hz 24 bit)
Balanced (XLR)	2 V		USB Audio Class 2.0
Frequency Response			(up to 384k Hz 32 bit)*
Phono Input	$20 \text{ Hz} - 20 \text{k Hz}, 0 \pm 0.2 \text{ dB}$		*Driver installation required
Line Level Inputs	10 Hz - 100k Hz, 0 \pm 0.1 dB	General	
Signal to Noise Ratio (A weighting)		Power Requirements	
Phono Input	80 dB	USA	120 Volts, 60 Hz
Line Level Inputs	112 dB	EC	230 Volts, 50 Hz
Channel Separation		Power Consumption	45 watts
Phono Input	> 75 dB	Standby Power Consumption	< 0.5 watts
Line Level Inputs	> 75 dB	BTU	78 BTU/h
		Dimensions (W x H x D)	431 x 144 x 348 mm
			(17 x 5 ¹ 1/ ₁₆ x 13 ½ ins)
		Front Panel Height	3U (132.6 mm, 5 ¼ ins)
		Weight (net)	9.2 kg, 20.28 lbs.