RC-1590
Stereo Preamplifier

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.

SPECIFICATIONS

Total Harmonic Distortion (20Hz - 20kHz)	<0.002% (Analog)
Input Sensitivity/Impedance	
Phono Input (MM)	2.5 mV / 47k ohms
Line Level Inputs (RCA)	150 mV / 100k ohms
Line Level Inputs (XLR)	250 mV / 100k ohms
Output Level	
Line Level (RCA)	1 V
Balanced (XLR)	2 V
Frequency Response	
Phono Input	20Hz - 20kHz, 0 ±0.2 dB
Line Level Inputs	10Hz - 100kHz, 0 ±0.1 dB

Signal to Noise Ratio (A weighting)	
Phono Input	80 dB
Line Level Inputs	112 dB
Channel Separation	
Phono Input	>75 dB
Line Level Inputs	>75 dB
Digital Section	
Frequency Response	20Hz - 20kHz, (±0.5 dB, Max)
Signal to Noise Ratio (A weighting)	108dB
Digital Inputs	SPDIF LPCM (up to 192kHz 24bit)
PC-USB	USB Audio Class 1.0 (up to 96kHz 24bit)
	USB Audio Class 2.0 (up to 192kHz 24bit)*
	Driver installation required DSD/DoP 1x, 2x
Power Requirements	
USA	120 V, 60 Hz
EC	230 V, 50 Hz
Power Consumption	45 watts
Standby Power Consumption	<0.5 watts
BTU	78 BTU/h
Dimensions (W x H x D)	431 x 144 x 348mm, 17 x 5 7/8 x 13 7/9 in
Front Panel Height	3U (132.6mm, 5 1/4 in)
Weight (net)	9.2 kg, 20.28 lbs.