

ROTEL[®]



 **DIAMOND SERIES**

ROTEL®



DIAMOND SERIES

The “Diamond Series” models earn their distinction from the brand’s 60-year legacy of unwavering commitment to quality and passion for audio performance, having been established in 1961 in Tokyo, Japan by founder Mr. Tomoki Tachikawa.

The Diamond Series models feature industrial design engineered with modern, contemporary styling complimenting Rotel’s current offerings while paying tribute to the brand’s iconic heritage through generations of legacy models.





RA-6000 Stereo Integrated Amplifier

The Rotel Diamond Series RA-6000 Integrated Amplifier celebrates 60-Years of heritage and tradition delivering performance, passion, and value synonymous with the brand's iconic Japanese heritage. The RA-6000 supports an exceptional array of modern and legacy sources with RCA (3), XLR, Moving Magnet Phono stage for vinyl fans, aptX™ HD and AAC wireless Bluetooth, Coaxial (3), Optical (3), and asynchronous PC-USB inputs.

Conveniently packaged in the elegant Diamond Series industrial design the RA-6000 delivers 350 watts of robust, Class AB output power into 4 ohm speakers. An in-house manufactured toroidal transformer feeds dedicated power to all critical circuits utilizing high efficiency, low ESR slit-foil smoothing capacitors delivering an abundance of ripple free, reserve power and current with exceptional control of rich, deep bass energy.

Physical and electrical isolation techniques are utilized in the digital and high gain amplifier circuits reducing noise in the highly sensitive analog stages further lowering the noise floor and reducing distortion.

Digital sources are processed via a premium 32-bit/384kHz Texas Instruments Digital-Analog converter extracting the finest of details portrayed on an immersive sound stage. Coaxial and Optical inputs support 24-bit/192kHz PCM audio. The PC-USB input renders up to 32-bit/384kHz high resolution music files, unfolds and renders MQA and MQA Studio, and is fully certified Roon Tested for the highest compatibility with Roon software.

Front panel controls, a back-lit IR remote control and 2-line display provide intuitive operation of the unit.

Ethernet, RS232, 12V trigger and external remote input ensure simplified integration with all popular control systems.

The RA-6000 is available in both black and silver colors.

RA-6000 Stereo Integrated Amplifier



Texas Instruments premium 32-bit/384kHz Digital to Analogue Converters



2 x 350 Watts of robust Class AB power, 4 Ohms



PC-USB supporting MQA and MQA Studio



Wireless aptX™ HD and AAC Bluetooth



Moving Magnet Phono stage input



XLR Balanced inputs



Certified Roon Tested





DT-6000 DAC Transport

The Rotel Diamond Series DT-6000 DAC Transport celebrates Rotel's 60-Year history delivering performance, passion and value synonymous with the brands Japanese heritage. The DT-6000 supports Coaxial, Optical and PC-USB inputs as well as an integrated CD Player for the ultimate flexibility playing your favorite sources rendering digital audio with dynamic precision and authentic accuracy.

The DT-6000's critical Digital to Analog circuits utilizes an ESS Sabre 8-Channel ES9028PRO DAC dedicating 4 channels each to the Left and Right stereo outputs. The DACs multi-channel processing delivers unprecedented details with an ultra-low noise floor through fully differential circuits resulting in an immersive, expansive sound stage.

Dedicated power supplies feed all critical circuits driven by an in-house manufactured low-emission shielded toroidal transformer with high efficiency, low ESR slit-foil smoothing capacitors delivering ripple free current. Physical circuit board isolation techniques and electronic decoupling design methods result in lower residual noise and reduced distortion in the sensitive analog stages including the external DAC output filters.

The Coaxial and Optical inputs support PCM audio up to 24-bit/192kHz with the asynchronous PC-USB input rendering up to 32-bit/384kHz high resolution music files. The PC-USB also supports MQA and DSD 4X and is certified Roon Tested for the highest compatibility with Roon software.

The smooth action tray loading CD player utilizes Rotel's formidable 30-years of experience engineering and manufacturing award winning disc spinners. The industrial design includes a spring-floating CD mechanism with damping materials to reduce mechanical noise and vibrations during playback. Precision motor controls and the optical laser pick-up extract every nuance and detail from CD collections both large and small.

Front panel controls and a back-lit IR remote provide intuitive operation of the unit with playback status, music file stream details and CD Metadata shown on the 2-line display.

The RS232, 12V trigger and external remote input ensure simplified integration with all popular control systems.

The DT-6000 is available in both black and silver colors.

DT-6000 DAC Transport



ESS premium 32-bit 8-Channel Digital to Analog Converter



Supports MQA, MQA Studio and DSD (4X)



Smooth tray loading CD mechanism



Fully balanced differential XLR outputs



Low noise, in-house manufactured shielded toroidal transformer



Certified Roon Tested







SPECIFICATIONS

RA-6000 Stereo Integrated Amplifier



Maximum Power Output	350 watts/ch (4 ohms)
Continuous Power Output	200 watts/ch (8 ohms)
Total Harmonic Distortion	< 0.0075%
Intermodulation Distortion (60 Hz : 7kHz, 4:1)	< 0.03%
Frequency Response	
Phono Input	20 Hz - 20k Hz, 0 ± 0.5 dB
Line Level Inputs	10 Hz - 100k Hz, 0 ± 0.5 dB
Damping Factor (20 Hz - 20 kHz, 8 ohms)	600
Input Sensitivity / Impedance	
Phono Input (MM)	5.2 mV / 47k ohms
Line Level Inputs (RCA)	340 mV / 5.6k ohms
Line Level Inputs (XLR)	540 mV / 100k ohms
Input Overload	
Phono Input (MM)	52 mV
Line Level Inputs (RCA)	3.5 V
Line Level Inputs (XLR)	4.5 V
Preamplifier Output / Impedance	1.9 V / 100 ohms
Signal to Noise Ratio (IHF A-weighted)	
Phono Input (MM)	80 dB
Line Level Inputs	103 dB
Digital to Analog Converters	Texas Instruments

SPECIFICATIONS

RA-6000 Stereo Integrated Amplifier

Digital Section

Frequency Response 10 Hz - 90k Hz (0 ± 2 dB, Max)

Signal to Noise Ratio (IHF A-weighted) 102 dB

Input Sensitivity/Impedance 0 dBfs / 75 ohms

Preamplifier Output Level 1.43 V (at -20 dB)

Coaxial/Optical Digital Signals SPDIF LPCM
(up to 24-bit / 192k Hz)

PC-USB USB Audio Class 2.0
(up to 32-bit / 384k Hz)*
*Driver installation required
Support MQA and MQA Studio
(up to 24-bit / 384k Hz)
Roos Tested

Power Requirements

USA 120 V, 60 Hz

EC 230 V, 50 Hz

Power Consumption 500 watts

Standby Power Consumption

Normal < 0.5 watts

Network Standby < 2 watts

BTU (4 ohms, 1/8th power) 1239 BTU/h

Dimensions (W x H x D) 431 x 144 x 425 mm

17 x 5 ⁷/₈ x 16 ins

Front Panel Height 3U / 132.6 mm / 5 ¹/₄ ins

Weight (net) 18.81 kg, 41.47 lbs.

Finish Silver and Black



SPECIFICATIONS

DT-6000 DAC Transport

Total Harmonic Distortion + Noise

Optical/Coaxial Input < 0.0007%

CD/PC-USB Input < 0.0012%

Intermodulation Distortion < 0.0012%

Frequency Response (0±0.5 dB) 20 Hz - 20k Hz, +0, -0.15dB
10 Hz - 70k Hz, +0, -3dB

Channel Balance ± 0.5 dB

Channel Separation > 115 dB @ 10k Hz

Signal to Noise Ratio (IHF A-Weighted) > 115 dB

Dynamic Range > 99 dB

Input Sensitivity 0 dBfs / 75 ohms

Analog Output Level / Impedance (0 dBfs)

Unbalanced (RCA) 2.1 V / 10 ohms

Balanced (XLR) 4.3 V / 20 ohms

Digital to Analog Converters ESS Sabre



SPECIFICATIONS

DT-6000 DAC Transport

Coaxial/Optical Digital Input

SPDIF LPCM
(up to 24-bit / 192k Hz)

PC-USB

USB Audio Class 2.0
(up to 32-bit / 384k Hz)*
*Driver installation required

Support DSD and DoP
(up to 11.2M)

Support MQA and MQA Studio
(up to 24-bit/ 384k Hz)

Roos Tested.

Power Requirements

USA
EC

120 V, 60 Hz
230 V, 50 Hz

Power Consumption

25 watts

Standby Power Consumption

< 0.5 watts

Dimensions (W x H x D)

431 x 104 x 320 mm
17 x 4 x 12 ³/₅ ins

Front Panel Height

2U / 88.1 mm / 3 ¹/₂ ins

Weight (net)

8.11 kg, 17.88 lbs.

Finish

Silver and Black



ROTEL®

AMPLIFYING SOUND, ELEVATING LIFE.™



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Being Roon Tested means that Rotel and Roon have collaborated to ensure you have the best experience using Roon software and the Rotel equipment together, so you can just enjoy the music.