ROTEL

VOLUME

POWER

30
BLUETOOTH

GAIN
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SOURCE   BAL   SE

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Certified Roon Tested

ESS premium 32-bit Digital to Analog Converter

Bluetooth with aptX™ HD and AAC

Fully balanced differential XLR outputs

Includes remote control

The Rotel DX-3 is the ultimate audio companion combining the sophistication of an ESS Sabre DAC with an integrated Class A Headphone Amplifier packaged in an elegant, size-efficient chassis. Audio is rendered with precision and performance supporting an array of both modern and legacy source inputs including PC-USB (32-bit / 384kHz) with DSD 4X support, Coaxial and Optical (24-bit / 192kHz), wireless aptX™ HD Bluetooth and an RCA analog connection.

At its core the DX-3 is driven by an ESS Sabre ES9028PRO 8-channel DAC ensuring exceptional digital-to-analog conversion rendering music with ultimate resolution maximized on an immersive soundstage. The internal headphone amplifier is powered by a custom in-house manufactured, shielded toroidal transformer with high current drivers to deliver dynamics with an ultra-low distortion of < 0.004%.

Variable user selectable headphone gain levels of High, Medium and Low ensures support for low and high impedance headphones through convenient front panel 4.4mm balanced and 6.35mm single ended headphone

connectors. Volume attenuation is controlled by an audiophile grade NJW1195A analog controller delivering precise steps as refined as 0.5dB.

The DX-3 also functions as a standalone DAC and fully functional Preamplifier via XLR Balanced and RCA outputs. This extends the flexibility of installation to directly drive external amplifiers, powered speakers or feeding an existing audio system.

A full-color front panel display provides all user feedback and simplifies a powerful array of setup options with ease. The included aluminum extruded remote control puts the power of the DX-3 in your hands providing access to all runtime and setup functions.

Whether used as a high-performance Headphone Amplifier, feature laden Preamplifier or high-performance DAC, the DX-3 redefines the personal audio space with performance, features and value exquisitely packaged; ideal for discerning audiophiles.

SPECIFICATION

HEADPHONE SECTION

Power Output (THD+N < 1%)

Single-ended (6.35 mm)	765 mW (16 Ω)
	383 mW (32 Ω)
	41 mW (300 Ω)
Balanced (4.4 mm)	2.8 W (16 Ω)
	1.4 W (32 Ω)
	150 mW (300 Ω)

Total Harmonic Distortion (32 Ω, 1k Hz)

Single-ended	< 0.008% @ Output = 70 mW
Balanced	< 0.004% @ Output = 270 mW

Intermodulation Distortion (60 Hz : 7k Hz, 4:1)

Single-ended	< 0.01%
Balanced	< 0.006%
Frequency Response	20 Hz - 20k Hz, (+0 dB, -0.2 dB)

Output Impedance

Single-ended	< 0.3 Ω
Balanced	< 0.6 Ω

Signal to Noise Ratio (IHF "A" weighted)

Single-ended	> 100 dB
Balanced	> 110 dB
Gain	0 dB @ Gain = H
	-6 dB @ Gain = M
	-12 dB @ Gain = L
Recommended Headphone Impedance	16 Ω - 300 Ω

ANALOG SECTION

Total Harmonic Distortion (20 Hz– 20k Hz)

Unbalanced (RCA)	< 0.006%
Balanced (XLR)	< 0.003%

Intermodulation Distortion
(60 Hz : 7k Hz, 4:1) < 0.001%

Frequency Response	20 Hz – 20k Hz (+0 dB, -0.4 dB)
Signal to Noise Ratio (IHF "A" weighted)	> 107 dB

Line Output Level / Impedance

Unbalanced (RCA)	1 Vrms / 100 Ω
Balanced (XLR)	2 Vrms / 200 Ω

Input Sensitivity / Impedance	1.2 V / 10k Ω
Input Overload	5 V
Channel Separation	> 86 dB @ 10k Hz

DIGITAL SECTION

Total Harmonic Distortion (20 Hz– 20k Hz)

Unbalanced (RCA)	< 0.005%
Balanced (XLR)	< 0.003%

Line Output Level

Unbalanced (RCA)	1.6 Vrms
Balanced (XLR)	3.5 Vrms
Frequency Response	10 Hz – 20k Hz (+0 dB, -0.5 dB)
Signal to Noise Ratio (IHF "A" weighted)	> 112 dB
Input Sensitivity / Impedance	0 dBFS / 75 Ω
Digital to Analog Converter	ESS ES9028PRO DAC (32-bit/768k Hz)
Digital Inputs	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 (up to 11.2 MHz)
	and DoP (up to 5.6M Hz)
	Roon Tested

GENERAL

Power Requirements

USA	120 V, 60 Hz
Europe	230 V, 50 Hz
Power Consumption	30 W
Standby Power Consumption	< 0.5 W
BTU	100 BTU/h
Dimensions (WxHxD)	215 x 73 x 247 mm
	8 1/2" x 2 3/4" x 9 3/4"
Front Panel Height	70 mm / 2 3/4"
Weight (net)	3.2 kg, 7.1 lbs.
Finish	Black and Silver

All specifications are accurate at the time of printing.
Rotel reserves the right to make improvements without notice.