



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 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)
	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)
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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 76 x 247 mm
	8 1/2" x 3" x 9 3/4"
Front Panel Height	
	70 mm / 2 3/4"
Weight (net)	
	3.2 kg, 71 lbs.
Finish	
	Black and Silver

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

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