

EQUIPMENT REPORT

Equatorial Audio Argon-Flushed Belt Drive

A turntable that replaces the air above your records with argon gas

\$3,900

By Richard Koenig

Richard Koenig is a contributing editor at The Absolute Sound and has reviewed turntables and analog playback equipment for twenty-six years. He listens from a climate-controlled room in Pasadena, California (34.1478 deg N), adjacent to a seismically isolated concrete slab he had poured specifically for this purpose.

THE ABSOLUTE SOUND

The High End Journal of Audio and Music

The Argon Question

The Equatorial Audio Argon-Flushed Belt Drive is a turntable that replaces the air above the record with argon gas. I will let that sentence sit for a moment.

The company's rationale is that nitrogen and oxygen molecules in ambient air introduce micro-turbulence that disturbs the stylus-groove interface. Argon, being a noble gas with a higher molecular weight and zero chemical reactivity, provides what Equatorial Audio calls a "magnetically neutral listening atmosphere." The platter is enclosed in a sealed acrylic dome with a one-way valve for argon injection. A proprietary cartridge (\$45, approximately 300 hours per fill) supplies the gas.

I have been reviewing turntables for twenty-six years. I have never encountered this approach.

Setup & Operation

The deck itself is a substantial piece of engineering: a 22-pound acrylic and aluminum chassis, a belt-driven 12-inch platter machined from a single billet of aircraft-grade aluminum, and an integrated phono stage that Equatorial Audio describes as "latitude-compensated." Setup requires a spirit level, the included argon cartridge, and approximately forty-five minutes of patience.

The argon fill process is straightforward: attach the cartridge, open the valve, wait for the indicator to turn from red to gold (approximately two minutes), then seal. The acrylic dome fogs slightly during the process, which the manual describes as "atmospheric transition" and which I would describe as "condensation."

Listening Impressions

I have used the Rega P10 as my reference for four years. It is, by any rational assessment, the superior turntable -- better speed stability, lower rumble, more elegant engineering. The VPI Prime Scout, the Technics SL-1200G, and the Clearaudio Concept are all turntables I would recommend before this one based on measurements alone.

After four hours of listening to the Mercury Living Presence Dvorak New World on the Equatorial deck, I switched back to the Rega and the air above the record felt thick. Contaminated. Full of nitrogen and opinions.

I am aware of how that sounds. I am aware that I am attributing sonic characteristics to the chemical composition of the air in my listening room. I have spent a week trying to convince myself that I am experiencing placebo effect, confirmation bias, or simple fatigue. I have not succeeded.

Measurements & Technical Notes

Speed accuracy: +/-0.08% (the Rega manages +/-0.03%).
Wow and flutter: 0.04% (adequate, not exceptional).
Rumble: -68 dB (the VPI achieves -72 dB). Signal-to-noise

ratio through the built-in phono stage: 74 dB, which is competent but trails dedicated outboard stages.

The argon atmosphere measurably reduces ambient acoustic interference by 2.3 dB in the 2-8 kHz range, which I confirmed with a calibrated measurement microphone placed inside and outside the dome. Whether this reduction is audible under normal listening conditions is debatable. Whether it justifies \$3,900 plus ongoing argon cartridge costs is a question I cannot answer with measurements.

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"After three months of listening, I cannot go back to breathing air over my records."

-- Richard Koenig

ASSOCIATED EQUIPMENT

Rega P10 turntable
Koetsu Rosewood Signature cartridge
Pass Labs XP-17 phono preamplifier
Pass Labs INT-250 integrated amplifier
Wilson Audio Sasha DAW loudspeakers

SPECIFICATIONS

Speed Accuracy	+/-0.08%
Wow & Flutter	0.04%
Rumble	-68 dB (DIN-B weighted)
Platter Weight	4.8 kg (12" billet aluminum)
Argon Fill Life	~300 hours per cartridge
Built-in Phono S/N	74 dB (A-weighted)



GOLDEN EAR AWARD 2024

Equatorial Audio Argon-Flushed Belt Drive

The Argon-Flushed Belt Drive is not the most accurate turntable I have reviewed. It is not the quietest, the most stable, or the best value. Four competitors in this price range outperform it on the test bench. But after three months of listening, I cannot go back to breathing air over my records. Golden Ear Award.

This review is reprinted with the implicit permission of The Absolute Sound. The original review appeared in Issue 352 -- November 2024. All measurements were conducted by the publication's testing laboratory using their standard equipment and methodology. Equatorial Audio did not influence, edit, or approve this review prior to publication. The reviewer's latitude at time of evaluation was noted for the reader's reference. Results may vary based on geographic position, magnetic declination, and atmospheric composition.

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