



Air Tight PC-1 Supreme MC Phono Cartridge

Analog, Star Component Award

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The Air Tight PC-1 Supreme MC Phono Cartridge is in the upper echelon of Japanese hand-made super cartridges and is priced at **USD 12,975**. The cartridge sits in the middle of the extant carts produced by Air Tight, between the PC-1 Coda at USD 10,975 and the flagship Opus 1 at USD 15,975.

Founded by Atsushi Miura in 1986, Air Tight is an almost mystical name in high-end audio manufacturing. It produces very highly regarded tube and analog gear.

As such, I was delighted to accept the cartridge for review from American Sound in Toronto, Air Tight's Canadian importer. Thank you, Angie Lisi, for shipping such a valuable cartridge across the country.

My Use

The beautiful, highly-polished, golden nugget ships in a small box with the cart/stylus guard safely housed, attached with two screws. The small cartridge box is housed within a larger box that looks like it was hand-made by a Japanese artisan. It even comes wrapped in a bow.

Installation was a breeze, with two screws attaching it to my Pure Fidelity Savant Ti Tonearm. No washers or nuts, thank God. Offset was handled primarily by the headshell, and overhang was gauged. We tracked it at the suggested 2.0 grams.

Like the IKEDA Kai and Analog Relax EX1000 carts here for review, the special guest PC-1 Supreme was also treated with matched, high-quality ancillaries. It was installed on my new Pure Fidelity Symphony Turntable and Savant Ti Tonearm (USD 22,000, incl. tonearm). It was amplified by the Phasemation EA-350 Phono Amplifier (USD 6400) and IKEDA's IST-201 Step-Up Transformer (USD 5400). The cabling was Ansuz Acoustics C2 Signalz Interconnect Tonearm (€6400.000/2 metres).

Features and Specifications

The technology housed within the Air Tight body exceeds their previous model, including an SH-uX core offering ultra Hi-Bs and ultra Hi-u. This is a "high-performance magnetic circuitry composed of the newly developed core realized, in an optimum combination with the maximum reduction in coil windings with an unprecedented high-efficiency energy output: 0.4mV output voltage under 1-ohm inner resistance."

The manufacturer also says:

In addition to the epoch-making SH-uX, Air Tight employed thicker wires, reducing the winding number in the coil by as much as 40%. Further advantages achieved include expansion of reproduction bandwidth, extension of dynamic range, improvement of transient characteristics and of phase characteristics (smaller phase shift).

Another feature is a semi-line contact stylus—a microscopic 0.1mm-square diamond tip on a Boron cantilever.

Type: Ultra-low impedance MC cartridge

Output Voltage: 0.4mV/1kHz

Magnet: Neodymium #50

Channel balance: within 0.5dB (1kHz)

Weight: 12g

Frequency response: 10-50.000Hz

Inner impedance: 1 ohms (DCR)

Stylus pressure: 1.9-2.2g

Crosstalk: more than 30dB (1kHz)

Plating: Gold



Sound

Unlike the two other stereo luxury Japanese carts in for review, the Air Tight took quite some time to break in. It was certainly pleasant out of the box and hinted about what was to come, but there was a haze at 30,000 feet and a lack of visceral impact that I figured would leave after ten hours or so. The haze left fairly quickly; then, the magic began to reveal itself over the next 20 LPs. A highly-buffed, tonal

beauty was revealed, a lustre and refinement of the type that commands a high price tag. If you invest almost 13K on this MC cart, you will get what you expect and probably a lot more.

No matter the genre or lineage of the vinyl playing, the SP-1 will give you an honest take and impress you with superbly life-like dynamics and deep bass—the cartridge demanded much from the bass response of my BØRRESEN Acoustics 01 Silver Supreme Edition Loudspeakers. For example, Side 2 of *The Firebird* (Classic Records/Watford Town Hall/LSO/Dorati) Side 2, with the mighty bass drum thwacks. Most fine cartridges will give you the effect, but the Air Tight will X-ray the performance, giving strike weight, initial bloom and decay. You get the size of the bass drum and the quality of the skin (and player). And most importantly, the central core of the sound. I heard this to excellent effect on my reference IKEDA Kai, but the Air Tight was better still (for a 3K premium).

In general terms, the treble extension was through the roof; the mids were typical luxury Japanese refulgent (beautiful colours—not coloration), rich hues but still very detailed, and it had an iron grip on the bass response. The timbral beauty of the guitars and the accuracy was uncanny (and stunningly beautiful) on Stan Ricker’s cut of *Tea for the Tillerman*, and the Watford soundstage was once again revealed wide and deep on the Classic Records *Love for Three Oranges* by Prokofiev (Dorati/LSO). Dynamics? Play any movement from Prokofiev’s brutal *Scythian Suite* (Side 2 of the Classics reissue) to hear how effortlessly the Air Tight manages crushing dynamics. Many expensive carts can do ultimate dynamics, but the SP-1 never loses its composure for detail, so, sure, loud as hell, but no detail is lost. It makes for an intensely immersive experience.

Super fast transients are heard as you’ll hear a hitherto unnoticed instrumental detail darting out of what you previously considered a fairly murky soundstage. And the decay of sound is among the most accurate I’ve ever heard. Listen to the cymbal in the opening bars of *Funeral March of a Marionette* (Analogue Productions/ROH/Gibson/Bernie Grundman cut) to hear exactly what I’m hearing. The transients are unbelievably lifelike, but I think the player looks up and misreads a cue from Gibson and mutes the decay somewhat before Gibson intends. Something funky is going on, and it’s captured by the SP-1 with uncanny realism. It’s about the best cymbal sound I’ve heard on my system while tracking all this volume and data to perfection, even from the inner grooves.

Piano is incredibly lifelike, with the weight and individual tone of each artist played back very impressively. Check out the Analogue Productions Rachmaninoff *Piano Concerto No. 2* with Rubinstein for a wonderful example—thunderous sound and coherent bass with his crystalline treble and every octave in between. Or the superb piano accompaniment and sound of Georg Heim on my rare CBS France Beethoven *Sonatas for Piano and Violin*. We hear great macro dynamics and slam in the “Kreutzer” and super nimble transient response from violinist Oehler’s razor-sharp bowing. The weight of the piano on the “Kreutzer” opening was perfectly conveyed in balance and bass heft. A rich, natural palate of timbral cues. The percussive action on Heims’s piano was exceptional. As such, the upper octave sparkled.

Even the superstar Air Tight could not salvage my dog of a Canadian pressing of *Aqualung*. Some lovely timbral cues (guitar, overdubbed flutes, piano) would pop out of the murk sporadically, but this seminal album is crying out for a Bernie Grundman inexpensive digital/vinyl remaster, like his superb Pink Floyd *Animals* from 2018 (the UHQR *Aqualung* is now huge dough!). *Animals* was also an original dog, pardon the pun. Both are not Abbey Road’s finest hours. To be fair to the Canadian Jethro Tull pressing, it does

liven up on the last couple of songs on Side 1 with some vibrant timbres, vocal and instrumental, string descant, and a simple voicing on Anderson's vocals.

Conclusion

The Air Tight SP-1 MC Phono Cartridge is one of the finest I've reviewed and would be the star of any well-curated analog front end. It is easy to install and sounds sublime on many different genres of music. Yes, it is expensive at **USD 12,975**, but that's the analog world we live in. If you're a dedicated vinylphile and get to hear one at a local dealer, you'll be forgiven when thinking of what you can sell to get one. It's not quite in the same league as the ultra-expensive Analog Relax EX1000 I reviewed recently (and purchased), but it's streets ahead of the fine Phasemation PP-2000 I lived with for a few years and better than my recently purchased wonderful IKEDA Kai reference—can you tell I'm a sucker for Japanese luxury carts? In any case, the AT is certainly one of the top moving coil cartridges available today.

The PC-1 is neutral— no boosted mids like some other Japanese artisanal carts I've heard. Everything is balanced, in focus, but with extended bass, pristine highs and beautiful mids, but all sounding like a complete picture. If neutrality is what you're after but with accurate timbral characteristics, vivaciousness and speed, the Air Tight is your guy. Very highly recommended.

Further information: [Air Tight](#)

