

Stax SRM-D50 Electrostatic Driver and DAC Review

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In all my years as a headphone listening enthusiast, one thing has remained clear from the very start - there is nothing quite like listening to a Stax system. We take a closer look at the new Stax SRM-D50 which blends electrostatic earspeaker driving tradition with a modern DAC in one unit.

Stax SRM-D50

Compact Electrostatic Driver with DAC

AUD \$1999 RRP

There is something truly intoxicating behind every listen to a Stax earspeaker. It's not just the sheer audio quality that is so captivating, but there is a certain charm shared by no other manufacturers that really make Stax products unique and special.

To me, the headphone market is not dissimilar to the car market. There are high-end German performance pieces which look incredible, are beautifully packaged and boast top-tier performance. Then on the other end of the spectrum, there are budget-friendly releases, that might perform effectively for the price range, but fail to live up to long term expectations or suffer build quality issues.

In this analogy, Stax is the completely stripped out race track car, which has shed all creature comforts such as air conditioning, a sound system, or passenger seats. Stax is all about sheer performance above everything else. And as a result, high-end performance and quality is a term that is synonymous with the Stax branding.



Stax products stand eerily alone in the high-end marketplace. Sharing the same technology as electrostatic speakers (albeit on a much smaller scale), to use a pair of Stax earspeakers one must only use an approved energiser with the correct voltage bias.

These energisers and earspeakers are entirely incompatible with existing dynamic headphones or amplifiers. If you wish to delve into the Stax ecosystem, the only part of your setup that you'll be able to integrate into it will be your source and perhaps a DAC.

Stax's new SRM-D50 is the latest release from the ancient Japanese earspeaker manufacturer which includes an inbuilt DAC. "A USB DAC, from Stax?" I hear you asking. Yes, my friends, it's 2019, and it's a brave new world out there.

The stripped-out track car manufacturer has finally released a luxury product, with air conditioning, four doors and passenger seats. So how does it stack up?

Packaging and materials

Stax products often come neatly packaged in a no-nonsense brown cardboard box, with a polystyrene inner protective shell. Not this time, however; the SRM-D50 comes encapsulated in a

beautiful black box with bold red embossing, luxurious magnetic latches to keep it closed, and very sensible separate containers for all the bits and pieces that come with the SRM-D50.



On the front of the unit, is the 580v Pro bias outlet for the average modern Stax earspeaker, an input selector, and a VU meter.

On the rear is the I/O, which sports an unusually generous selection for an electrostatic energiser; for digital inputs, we have a USB port, a Toslink (optical) port and a Coax (RCA port). For analogue duties, we have the standard stereo RCA pair here. It's interesting to note that Stax omitted any balanced input here, unlike the SRM 353X which has full XLR inputs.

The analogue VU meter is incredible. It sits proudly at the front of the unit and delivers a gentle vintage style orange glow when the unit is powered on. This illumination neatly highlights the intricate details of the needle mechanism inside.

Weighing in at 4.5kg, this thing literally weighs more than a brick. By design, its 4mm solid aluminium casing heats up notably during operation, but at no point becomes too hot to touch.

Inside

The SRM-D50 comes with a built-in DAC that supports PCM 32/384 or DSD, all the way up to 5.6MHz. Access to this DAC can be routed through either the optical, USB or Coax connections.

This chip driving this DAC is an ESS ES9018, which is then fed into a TI OPA1642 op-amp. This exact configuration is shared by the portable younger sibling of the SRM-D50, the SRM-D10.



The implementation of the ESS ES9018 is an interesting step for Stax, as this chip is starting to grow a little long in the tooth for DAC chips in modern implementation. Still, it's a tried and true chipset with strong performance and a reliable track record.

Stax also boast that the SRM-D50 contains an “R core power transformer with less leakage flux”, make from this what you will!

In Use

Setting up this device with my Windows 10 machine was incredibly easy; I just plugged it in, and it started working. For those who want to go deep with some of the high res playback options, Stax has custom drivers available for download online.



The input selector is a tactile toggle switch. It slides in between selections, gently locking into place for each input choice. It honestly feels like something you would expect to find in the interior of a

brand-new Rolls Royce. A soft but confidence inspiring “clink” can be felt when the switch rests into place.

Just like the input selector, the volume knob is also of impeccable quality. It glides around with



ease and has no distinct volume steps. It feels odd to be making such a fuss about these seemingly insignificant elements of this unit, but trust me, these are the kind of details that make you appreciate a solid flagship piece of equipment like this.

The VU meter will always measure the activity of the current input - and even with the volume down, the meter happily

dances about. It's captivating, and you can't help but stare at it while listening.

I had no issues playing DSD files, even with the standard built-in drivers, and the unit never once choked or froze up during my time with it even with long nights of listening and gaming.

Sound

In all my years as a headphone listening enthusiast, one thing has remained clear from the very start - there is nothing quite like listening to a Stax system. There's a certain charm to it; the retro and unashamedly bulky styling of the earspeakers and the proprietary energiser system combine to create an unusual and very untraditional (in the modern world) Head-Fi encounter.

Listening to a Stax system always leads me on a listening journey. I start with my familiar test tracks and end up winding down an experimental path of music and genres I've never listened to before... just to experience it.

The SRM-D50 is no stranger to great sound. The level of transparency it provides is second to none, and I didn't detect any colouration to the music being delivered through it. Everything that you would expect to find in an electrostatic earspeaker rig is right here: lightning



fast transients, effortless details, and the famous Stax rich and sweet sound signature- which I find tends to favour the midrange and upper midrange of the audio spectrum.

The SRM-D50 has an abundance of headroom. I rarely found myself going past the 9 o'clock setting on the volume knob. I did find the volume setting a little aggressive, and it could likely benefit from a selectable gain setting to allow for some more minute volume adjustments.

Compared to a more traditional Stax energiser (for example, the SRS-353X), the sonic qualities of a typical Stax rig are all here: a drier sound leaning towards analytical, with a fast sonic response, and mountains of detail. By comparison, the sound between this and SRM-D50 and SRS-353X are quite similar. The main difference being the 353X's balanced inputs, vs the myriad of digital inputs on the SRM-D50.



Conclusion

The Stax SRM-D50 is purpose-built and high performance. If you have the budget to spend on this kind of high-end audio, this is absolutely the way to be spending it. It's a truly endgame all-in-one unit that may even negate the need for anything else in your audio chain. If you already own Stax earspeakers, this is a recommended upgrade.

If you're sick of the rat race, the incremental gear upgrades, the countless hours of researching individual components online - then Stax makes it easy with the SRM-D50 and a good pair of Stax earspeakers.

Stax is truly here to stay in 2019.

For more information visit [Stax](http://Stax.com).

Specifications

- Frequency response: DC-40kHz (0,-3dB)
- Rated Input Level: 130mVr.m.s
- Maximum Input Level: 30V/ RCA, at minimum volume
- Maximum Output Voltage: 400Vr.m. s (1130Vp-p)
- Gain: 59dB
- Harmonic distortion: 0.025% or less/1kHz-10kHz /When use with SR-L series
- Input Impedance: 20k Ω (RCA)
- Bias Voltage: DC580V
- Mains voltage: AC100-240V 50Hz/60Hz (depending on your country's voltage)
- Power Consumption: 35W
- Operating temperature: 0 to 35 degrees C (less than 90% humidity, non-condensing)
- Dimension: 192(W) \times 67(H) \times 268(D) mm
- Weight: 4.5kg
- Digital Input: USB (type B) \times 1、TOS \times 1、COAX \times 1
- Analog input: RCA \times 1