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# REVIEW

BY MIKE METLAY

## Samson SR850 and SR950 Studio Reference Headphones

Open or closed? Take your choice—or choose both



Samson has brought affordable quality to many facets of the home-studio world over the past few years. We've been surprised, pleased, and impressed by offerings of all kinds, from quality studio monitors that anyone can afford (the Resolv SE monitors, reviewed February 2014) to portable and powerful USB MIDI controllers (the Graphite M Series, reviewed June 2014) to a whole line of new microphones, reviews forthcoming. With the SR850 and SR950, Samson takes a bold step into a new realm—studio monitor headphones. I had a chance to work with these two new headphones for several weeks, and here's what I discovered.

### Closed or open? How about both?

One of the big points of contention in the world of studio headphones is whether one can do better work with fully closed headphones or with an open or semi-open design. Proponents of closed designs cite their excellent isolation from outside distractions and

their strong bass response; lovers of open phones talk about smooth and accurate reproduction across the frequency spectrum; and a fair number of engineers like to have both types on hand, one for the tracking room and one for the control room—nice exciting closed phones with good isolation for the artists as they play, and good clear open phones for the engineer as he tracks them.

There's a lot of merit to both design types, and certain companies make their reputation based on one or the other... but there are more than a few companies that offer both. And that's what Samson's done here: the SR850 is a semi-open design for the most accurate possible frequency response, and the SR950 is a closed design that gives maximum isolation and enhanced bass (and treble, as we'll explain in a moment).

### The SR850: Specs

The SR850 is a semi-open dynamic headphone with 50 mm drivers with Neodymium magnets. 50 mm is on the large side for headphone drivers, with 40 to 45 mm being more commonly-seen sizes, and this probably contributes somewhat to the SR 850's fairly impressive claimed frequency response of 10 Hz to 30 kHz. There's no frequency response plot given in the manual or online, but the marketing language implies that this is meant to be a relatively flat and neutral headphone, offering clarity without emphasis from the deep bass to the extended highs.

As a 32 ohm headphone, the SR850 is able to get quite loud from even relatively low-voltage headphone amps. Its maximum SPL isn't given, but it happily reproduces levels over 100 dB with no obvious straining or breakup. It's a very light and airy-feeling headphone, just over 9 ounces in weight, with lushly padded velour earpads and a self-adjusted springloaded headband that's quite comfortable. The large circumaural earcups are vented at the back and sit nicely on the head for extended listening without fatigue. Its 2.5 meter (8.25') cable is permanently attached at the left earcup and ends in a gold-plated minijack with screw-on 1/4" adaptor.

### The SR850: Listening

The SR850 presents a good introduction to what's good about an open-closed headphone. Everything is there, everything is clear, everything is in balance... there's no hype or scoop, nothing to make the music particularly "exciting" or "grabby" that isn't in there already. Compared to headphones that are designed to pump you up and get you grooving, they might almost seem a bit boring... until you start to do serious work with them.

Where do we start? How about at the high end, where the extended but not emphasized treble brings a good believable

rendition of cymbals, hi-hats, the higher harmonic structure of brasses and winds, and the “special sauce” that surrounds a clear female vocal? The mids provide a good balance of power and crisp clarity that’s present in the mix without being overly forward—lead vocals and guitars, the key elements of any good rock track, are there where they can be analyzed and picked apart, warts and all, yet as a nicely glued-in part of a good mix. And from there it’s down into the bass, which is what one wants and needs to hear in a mix: solid, believable, with no nasty resonances or low-energy frequencies, clear and deep.

The stereo imaging of the SR850 is very good. You can easily pick out sources in the soundstage and get a feel for how wide you’re getting with things like widely panned delay effects or stereo drum loops. Details of edits and punches can be heard with stark clarity, making cleanup a breeze... nothing’s getting away from you.

The main strength of the SR850, the open back that gives it such good frequency balance, is its only weakness—these phones bleed like crazy and you can’t wear them near an open mic. That’s a small price to pay for such a nicely neutral listening experience, especially for the new recording musician who might not have a clue as to what a proper studio headphone should be.

### The SR950: Specs

The SR950 is a closed-back dynamic headphone with 50 mm drivers and Neodymium magnets. Like the SR850, it offers a comfortable fit with velour-padded earpads and a self-adjusting headband, and has the same 8.25' straight cable with mini-jack and screw-on 1/4" adaptor. It's also a 32 ohm headphone and gives the listener plenty of volume from even the wimpiest sources.

Its closed earcups are substantially larger than the SR850's and seal tight to the ears; there's very little bleed unless you're listening at dangerous SPL. It's slightly heavier than the SR850 as well, with a weight of nearly 11 ounces. The headband and earpads are comfortable enough so the extra weight doesn't get fatiguing for several hours.

The SR950's stated frequency response (again, with no tolerances given) is 10 Hz to 25 kHz, and the frequency plot in the manual shows an intriguing curve with significant (up to 6 dB) smooth bumps below 100 Hz and from 5 to 20 kHz, centered on 10 kHz or so. I was curious to hear how these phones sounded with that sort of response...

### The SR950: Listening

After the neutral clarity of the SR850, the SR950's sound was a real surprise, and the word I'd use to describe the experience

is “fun”. The SR950 has a lot of high mids and presence, and a whole lot of yummy, clear, powerful bass. That makes it a blast (literally!) to listen to when working with any sort of music that has a lot of critical information in the low end—not just EDM, hip hop, or electronica, but also a lot of jazz that relies heavily on string bass and piano.

Vocals are exceptionally forward and dramatic in these phones. You can pick out intonation issues, lip smacks, and other details with ease, and know when things need to be fixed. The highs aren't as extended as on the SR850 but there's plenty there, and that bump around 10 kHz means you feel what there is with more energy.

The soundstage is dramatically separated into Left and Right, with less of a sense of implied “phantom center” than some phones provide. I attribute this at least partly to the isolation that the SR950 provides, which is pretty impressive. It's not until you take them off and the real world once again intrudes on your consciousness that you realize just how little of it was filtering through into your ears; specialized isolation headphones will seal things out more effectively, but you'd have to hunt pretty hard to find a pair of iso headphones that are this much fun to listen to.

This frequency response is really geared toward excitement, with the mids a bit laid back behind the kick-ass bass and lush treble. I can see these phones becoming popular for recreational listening and for a check on popular trends in modern headphone design as well as for detailed work in the studio; they do have more of a nod toward the big-bass/clear-highs sound that's popular today than many studio phones.

### Choices, choices

When I got these headphones, I made a point of reviewing them before I looked at what they cost. The prices I finally saw them selling for frankly stunned me; both of these models would still be contenders at considerably higher prices, and the SR850 in particular represents astounding value for the money. There simply aren't that many open-design phones out there at prices that even come close to this, regardless of sound quality.

With these new offerings, Samson makes it easy for even a beginner at home recording to have a headphone that won't be a sonic letdown. ➤

**Prices:** SR850, \$49.99; SR950, \$69.99

**More from:** Samson, [www.samsontech.com](http://www.samsontech.com)

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