

10 Tips To Get Your Music HEARD

RECORDING

The magazine for the recording musician

SONGWRITING SUCCESS!

How To: • Improve Your Studio
• Grow Your Audience
• Make More Money



Microphones

—Pointers In The Right Direction



15 New Product Reviews

Blue • Daking Audio • Korg • Prism Sound
Realitone • Samson • SBS Designs • sE Electronics
Soundtoys • Toontrack • and more!

NOVEMBER 2014
USA \$5.99
CANADA \$5.99



VOL. TWENTY EIGHT
NUMBER TWO



BY MIKE METLAY

It hasn't been that long since we reviewed a pair of Samson monitors; the Resolv SE (February 2014) was a wonderful surprise, combining very listenable sound quality with a price anyone could afford. No sooner did that review hit the stands than Samson announced the next step in the Resolv monitor lineup—the Resolv RXA monitors, which bring together a new woofer design with that relatively rare but noteworthy beast, a ribbon tweeter.

For those who might not be familiar with the technology, ribbon tweeters are based on a design originated by Dr. Oskar Heil and sold by ElectroStatic Sound (ESS) since the early 1970s. In very simple terms, this



size, with or without a subwoofer. The speakers were mounted in an equilateral triangle on Ultimate Support stands, roughly 60" apart, and isolated with a set of Sorbothane domes of 30 durometer stiffness (my thanks to Bruce Black for keeping me supplied!). The listening field was kept clear of console reflections, and after burning the speakers in for a day with loud music of various sorts, I settled in to adjusting their response and listening at a nominal SPL of about 80 dBA on average.

I spent more time than usual playing with the EQ trims on the back of the speakers; I think that was due in part to the fact that I was

Samson Resolv RXA6 Active Studio Monitors

An unusual but well-respected tweeter design yields one fine monitor

tweeter, originally called the Air Motion Transformer, consists of a tightly folded sheet of plastic in a strong magnetic field. When electricity hits it, it expands and contracts in a manner similar to that of an accordion bellows or human vocal cords; the folded tweeter packs a lot of surface area into a very small space, and the result is a speaker that looks like a small point source but has the air delivery of a much larger device. The end result, when done right, is wide treble extension and very low distortion.

The Resolv RXA isn't the first ribbon-tweeter speaker manufactured by Samson—that honor goes to the well-liked Rubicon speakers sold in the early 2000s (we reviewed the Rubicon R6a in January 2006). With that pedigree plus the fact that I'm a fan of well-made ribbon tweeters in monitors, I was eager to take the new speakers out for a test run. Would they continue the tradition of "lots of speaker for not very much money" begun by the Rubicon and continued by the Resolv SE?

Small or not so small

As was the case with the Rubicon, the Resolv RXA is available in two woofer sizes: the RXA5 with a 5" woofer and the RXA6, the model I received for review, with a 6" woofer. Aside from woofer size and amplifier power, all other features are identical between the two models. So what have we here?

The RXA6 starts with a new woofer design, a 6" copolymer woofer with a butyl surround, and pairs it with a 34 x 27 mm Air Displacement Ribbon tweeter (Samson's version of the ribbon tweeter technology). It's a bass reflex system, with a large rear-firing port near the upper edge of the sturdy 0.6" thick MDF cabinet that lends rigidity at the cost of a not-trivial 19-pound weight.

The RXA6 is biamplified, with 75 Watts RMS for the woofer and 25 W RMS for the tweeter; its Linkwitz-Riley crossover is set to a slope of 12 dB/octave frequency of 3.5 kHz. The claimed frequency response is 45 Hz to 27 kHz, with no tolerances given (± 3 dB is a reasonable guess based on the specs of other Samson monitors, but it's only a guess).

The rear panel offers balanced inputs on XLR and TRS and unbalanced inputs on RCA. Controls include a level pot with a center detent and two recessed trim pots for high and low frequency EQ. Power is provided via a standard IEC power cable, and there's easy access to the fuse and a pair of 6 mm metric thread inserts for a wall mount. When power's turned on, the logo on the front fascia lights with a white LED.

Setup and tuning

I placed the Resolv RXA6 speakers in my office/studio at Music Maker Publications, a reasonably well-treated room that works well with nearfield monitors up to 8" in

given both high and low frequencies to work with (the Resolv SE has a switch for HF control but no LF control at all), and in part to my curiosity as to what the EQ was actually doing. The specs and manual don't specify details, so I listened first and got details from Samson later.

Samson states that these are 6 dB/octave shelving filters with corner frequencies of 80 Hz (LF) and 8 kHz (HF). They can boost/cut by ± 6 dB, which is a pretty wide throw for small monitors and more than enough to get a careless engineer in trouble... my rule of thumb is that if you have to tweak the EQ on a speaker by more than 2 dB to get it to sound right, you might want to consider moving your speakers or playing with your room acoustics a bit.

I found the HF adjustment more than enough to make the tweeters sound hissy or dull; this adjustment is usually intended to correct for console bounce or an overly absorptive room. While my room does have issues, those aren't two of them, so I quickly settled on leaving the HF set flat. On the other hand, I played a lot with the LF setting; these speakers' rear porting seemed to interact with the front wall of the room, giving me a bit of bass reinforcement that was offset nicely by the LF trims. I couldn't decide whether I was happiest with them set flat or with a 1–2 dB cut; I think I could happily work with either.

Listening

The first impression I had of the Resolv RXA6 was of a very solid and believable tonal balance. Cheap speakers make themselves known with artifacts like weird midrange, funky imaging, woofy or weak or “one-note” bass, and the RXA6 had none of the above.

Starting at the low end, I was surprised by the detail and clarity of the bass. This is not a bass-heavy speaker; Samson even devotes a page in the nicely illustrated manual to adding a subwoofer if you really want to feel that low extension. But what bass there was felt right, with lots of really fine detail that one isn’t used to hearing down there; fundamentals and overtones tied together well when listening to low notes on grand piano, acoustic bass, or synth bass.

There is just a touch of forwardness around the crossover frequency; this has the effect of lifting vocals and lead instruments up and out of the mix and presenting them in crisp relief, letting you pick out artifacts, tuning issues, and sloppy edits with ease. A fair number of speakers out there tend to have a slight smiley-curve frequency response to them, with a bit more oomph in the bass and zing in the treble at the expense of the mids being a bit more laid back. I didn’t hear that as being true for the RXA6, which presented itself as more of a “hear the critical mids under a microscope” listening experience.

Balancing the clear bass and the forward mids, the ribbon tweeter was delightful, presenting a vibrant and sparkly but not spitty or harsh high end that showcased even the finest details in cymbals, overtones on guitars and violins, tambourines, and the like. I like ribbon tweeters for the way they present lots of believable treble without working themselves too hard; the result is less distortion, less ear fatigue, and more trustworthy sound up high.

Perhaps the most startling aspect of the RXA6 was how wide and deep its sweet spot was. These speakers are quite forgiving of listener position; if you have bandmates crowding around to listen, they’ll provide a relatively reliable sonic picture with a strong phantom center to listeners even a couple of feet from the sweet spot on either side.

Do I have any complaints? Only one—the quiescent noise of the built-in amplifiers is noticeable as a faint hiss when the monitors aren’t passing audio in a quiet room. This hiss isn’t affected by the type of connection (balanced/unbalanced) or by the onboard level setting; it’s just there. The moment you start passing audio at any level, it’s masked, but some listeners might find it obtrusive. Samson acknowledges the issue and says that improvements to shipping units are ongoing.

Tied up with a ribbon

As an entry point for engineers who want to try a ribbon-tweeter active monitor,

the Resolv RXA monitors are a near-unbeatable entry in the current market. Even as a second monitor for larger rooms they have a lot to recommend them. Check them out! ➤



Prices: Resolv RXA5, \$199.99 each; Resolv RXA6 (as reviewed), \$249.99 each

More from: Samson, www.samsontech.com