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REVIEW

BY MIKE METLAY

PreSonus

Eris Series High-Definition Studio Monitors

A new name for two impressive new entries in the active-speaker market

PreSonus has gotten into the speaker game, and its first models to market are the Eris Series. Why "Eris"? No clue. Eris was the Greek goddess of chaos (she helped start the Trojan War, but that's another story); her name's been attached to the anarchist Erisians from the famous *Illuminatus!* novels, and to the distant dwarf planet Eris that circles our sun every 557 years. But studio monitors?

There's nothing particularly chaotic about the new Eris speakers... in fact, PreSonus' first studio monitors present very neat solutions to the problem of affordable, good-sounding monitoring for small studios. We got to work with both new Eris models for some extended listening sessions, and here's what we learned.

In common and different

The two Eris models are the E5 and E8. Both are biamplified 2-way speakers in front-ported cabinets of vinyl-laminated MDF, with silk dome tweeters and long-throw woven Kevlar woofers in a nicely curved fascia with tweeter waveguide.

The E5 has a 1" tweeter and 5.25" woofer, with a 35W high-frequency amplifier, a 45W low-frequency amplifier, and a 3 kHz crossover frequency. It claims a frequency response (no ±dB tolerances given) of 53 Hz to 22 kHz. The E8 has a 1.25" tweeter and an 8" woofer with a 65W high-frequency amp, a 75W low-frequency amp, and a 2.2 kHz crossover frequency. Its rated frequency response is 35 Hz to 22 kHz.

Both offer a variety of audio tweaks on the rear panel, letting the user customize the speakers' sound for best results in a variety of placements. Inputs are on unbalanced RCA, balanced 1/4" TRS, and XLR. There are center-detented controls for Input Gain, High and Mid frequency tuning, and switches for Low Cutoff and Acoustic Space adjustment. Power is via standard IEC cable, and the rear-panel power switch is complemented by a bright blue front-fascia LED sporting the PreSonus logo.

Tuning for the space

The E5 is small enough to be used on a computer desktop, while the E8 is better suited to mounting on stands, and both offer useful tweaks to better match the speakers to your room. With the exception of the Low Cutoff, all the provided controls are intended to help you correct for specific, common problems with room acoustics.

The High eq is a shelving band with ±6 dB of boost/cut and a corner frequency at 4.5 kHz, and the Mid eq is a broad (roughly two octaves, according the manual) peaking eq with a center frequency of 1 kHz and ±6 dB of boost/cut. I recommend using these eq controls with great caution; they offer a wide range of tonal tweaks that are very musical to the ears—that makes them tempting to play with in order to get your speakers to sound "good", when what you actually want is accuracy.

The High shelf acts as a "tilt" control to mellow or sharpen the high end of what you're hearing; it's best used very subtly in situations where a room has partial acoustic treatment like foam panels, which tend to preferentially damp the high end. The Mid eq lets you compensate for

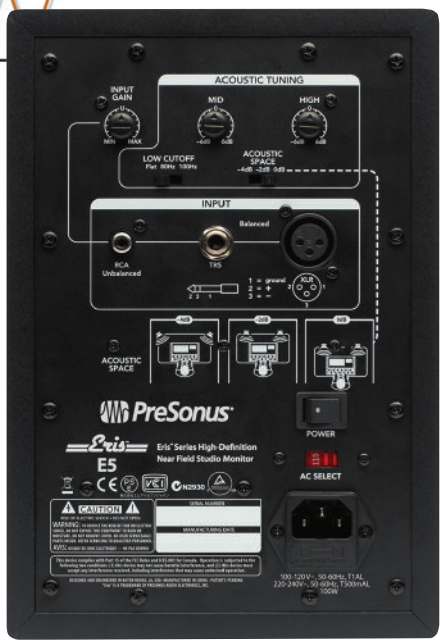
oddnesses that happen in the low mids, most commonly the reinforcement you get from audio bouncing up to your ears from your mixing desk. If you feel you need more than a dB or two of correction, you should probably double-check other parts of your listening chain, or the room itself, as a very large boost or cut that's set within the speakers is applying a bandage to a much larger problem.

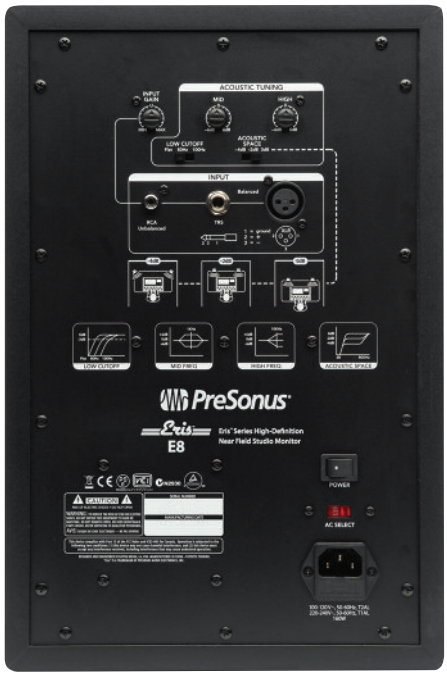
The Acoustic Space switch is a low shelving control that can either be set flat or to 2 or 4 dB of attenuation with a corner frequency of 800 Hz. This switch is specifically designed for situations where you can't place the speakers sufficiently far away from walls or corners to prevent bass buildup; ideally the –2 dB setting would work for speakers near a back wall, and the –4 dB setting would help compensate in situations where the speakers need to be set in the corners of a room.

The last switch, Low Cutoff, allows you to engage a 12 dB/octave highpass filter with a corner frequency of 80 or 100 Hz. This is specifically intended to allow the Eris speakers to work with a separate subwoofer, if you feel your monitoring situation needs the stronger extended bass of a sub; our listening sessions were based entirely on listening to the Eris speakers by themselves.

Speaking of listening sessions, we set up the two Eris speakers under very different sets of conditions, based on their likely areas of use. The E5 monitors were tested in a desktop-audio setup with IsoAcoustics ISO-L8R155 isolation stands on conventional shelves, as one might use when working with a DAW in a home studio. The E8 speakers were mounted on speaker stands in the listening/mix room at Music Maker Publications, which is treated with GIK Acoustics paneling to control reflections at the listening position. In both cases, the speakers were set up as closely as possible to an equilateral triangle with the tweeters level with our ears—4 feet on a side for the E5 monitors and more like 6 feet on a side for the E8 speakers.

Per PreSonus's advice, we did not burn in either set of speakers before beginning our critical listening; our first impressions came (literally) straight out of the box. As usual, our listening materials included well-known and very simply recorded rock, jazz, acoustic singer/songwriter pop featuring guitar and piano, and classical music, with excursions into world music, electronica of various sorts, and of course the infamous mistakes and missteps of albums we'd recorded in comparatively primitive recording setups in the 1980s and 1990s.





Listening to the E5

Our first impression upon firing up the E5 was, "Whoa, that's loud!" Our second impression was, "Whoa, that's kinda *harsh*." Our third impression was, "Ah... when in doubt, make sure you've set your input levels properly!"

These little speakers are very efficient and get loud pretty quickly, but they have a convincing way to keep you listening at safe/sane levels; while they're rated to 102 dB peak SPL at 1 meter, the woofers start to sound brittle and unpleasant when you get close to that level. Our ideal "loud listening" level for the E5 was a much more reasonable 85 to 90 dBA SPL at the listening position, and for most styles of music we got great results in the very ear-friendly range of 75 to 80 dBA SPL.

We tweaked the controls around a bit and determined that the High and Mid eq can in fact get really extreme if overused; we ended up setting them Flat for the serious listening. Our listening setup was rather close to a rear wall, and in our initial listening we went back and forth between having the Acoustic Space control set to Flat or to –2 dB. In the end, we felt that the bass we were getting when the Acoustic Space control was set Flat wasn't overhyped or thumpy, so we left the control there. We didn't use the Low Cut at all, since our system doesn't include or need a subwoofer; if you're keeping score, that means our reported results were all from having the adjustment controls set flat (and the Input Gain set to unity as well).

Starting at the bottom, the one place where the laws of physics will get you every time is in a small woofer's ability to reproduce bass accurately; the E5's low end of 53 Hz is usable but you'll have to check your results on larger speakers before you consider your mixes "done". The rolloff in the bass was polite and smooth, and there was a lot of thump in kick drums and solid harmonic structure in bass guitars and low piano notes, even if the very lowest fundamentals couldn't be heard fully.

Mids were forward and rockin', with vocals and guitars prominent and detailed; on acoustic tracks, details like finger squeaks on strings and breaths for phrasing were clear and evident. I didn't notice any radical jumps in level or character around the crossover point. Highs were extended and smooth, without any edgy spikiness or resonances that leaped out; finger cymbals and hi-hats were clear and bright, and when an

artist substituted a sample for the real thing, you could often tell. Similarly, the edgy artifacting that comes from heavily compressed MP3 encoding was clearly audible... and annoying, when it was supposed to be.

I found I enjoyed the E5s most when working with predominantly acoustic music at lower listening levels; they do well with rock and dance music when cranked up loud (if not *too* loud, as discussed above), but the forward midrange did lead to some very complex rock mixes sounding cluttered—especially stuff that relied a lot on layered loops for its structure. Acoustic jazz and country were a delight, with fingerstyle guitar, hand percussion, mandolin, violin, and brush-style drumming standing out sweet and clear.

Could I mix on these speakers? Absolutely. And if I was primarily an acoustic recording engineer who worked with small groups, I would appreciate the privilege. It's true that for larger rooms, and/or for heavy rock or electronic music with more bass, there might be better choices out there—which leads me to...

Listening to the E8

Our listening setup for the E8 was on speaker stands well away from walls and corners in a well-treated room; we weren't expecting to need any of the rear-panel acoustic tweaks, and quick tests confirmed that fact. As with the E5, we ended up doing all of our listening with all rear-panel controls set flat.

The highs and mids on the E8 were very similar to the E5; vocals and midrange instruments tended to be very far forward, and there was that tendency for really dense mixes to sound congested, but not to the extent we heard in the E5. What truly distinguished the E8 was its power handling—it could get very loud without any of the brittleness of the E5—and its bass, which was solid, learnable, and most important, nicely extended down to where you're not missing a whole lot for practical purposes.

My sentiments about the E8 are similar to those for the E5 but a bit more so, if that makes sense; I could learn these speakers and mix happily on them in most genres of music, with no more than the usual recourse to check-mixes. Perhaps their greatest value is in letting a starter studio hear real bass without a subwoofer; a cheap sub is way worse than no sub, and for a less-than-optimal room and/or an engineer who's inexperienced at dialing in a sub properly, a pair of speakers that can deliver the lows on their own will win every time.

Hail Eris!

Let's talk price. The E5 costs a bit more per pair than a set of cheap-ass desktop computer speakers and a thumpy little one-note sub, but for your money you get monitors you can actually use for real engineering. The E8 is even more of a no-brainer: it basically allows recording musicians who want proper full-range studio monitors, but don't yet have the budget for high-end products, to get into the game without hurting themselves.

Later this year, PreSonus will ship the Sceptre monitors, DSP-assisted coaxial designs priced to take on the competition in the "over $1000 per pair" price range. We'll be very curious to give them a try when they're ready, but in the meantime, the Eris speakers make for a very auspicious debut. They bring honest-to-gosh studio monitoring into the price range of just about any studio, and they do it with class.

Prices: Eris E5, $149.95 each; Eris E8, $249.95 each

More from: PreSonus, www.presonus.com