



NEW REVIEWS HIGH-END AUDIO

THREE'S COMPANY

IF ONE REL R-SERIES SUBWOOFER IS GOOD, TWO IS BETTER, AND THREE CAN TRANSFORM THE SOUND OF YOUR SYSTEM. BY STEVE GUTTENBERG

Multiple subwoofers? I bet some of you must be thinking that sounds like too much of a good thing, and that only bona fide bass gluttons would ever need more than one competently designed and installed subwoofer. Sumiko, importer of the complete line of REL subwoofers, believes otherwise. Before you get the wrong idea, the company is quick to point out that the strategy can be applied with any brand of subwoofers—although it also states that its own subs possess characteristics particularly suited to the multiple-sub concept. Sumiko provided me with three REL R-Series subwoofers to test the theory. It doesn't take long to hear the magnitude of sonic upgrade: The three RELs pump out more and better-defined bass; the dynamic impact feels greater; and most surprising of all, my speakers conjure a far more realistic sense of spatial depth.

British manufacturer REL (for Richard E. Lord) Acoustics produces nothing but subwoofers. For this review, I corralled the complete line of REL R-Series subs—models R-205, R-305, and R-505. Amplifier power, cabinet size, and woofer characteristics distinguish one from another, but they are all compact cube-shaped designs finished in eight coats of hand-rubbed piano lacquer. Their jewel-like appearance and machined metal feet signify their high-end pedigree. Each of the two smaller subs features a single 10-inch, long-throw woofer.

The baby R-205 uses a 200-watt amplifier, and the middle model, the R-305, has a better-constructed 10-inch woofer and delivers 300 watts. The top-of-the-line R-505 sports a 12-inch woofer and a 500-watt powerhouse amp. The subs' digital power amplifiers are located in the rear of the cabinets, and the control electronics are housed in slim-line metal chassis fitted to the undersides of the cabinets; your installer can detach the control module and place it in a more accessible location in your home theater. As shipped, the electronics' controls are located

on the bottom of the sub's front baffle, behind a removable frosted glass panel.

Subwoofer tech-speak can be confusing, so a little explanation is in order. Subwoofers typically supply two distinctly different types of bass for home theaters. DVD soundtracks, whether encoded in Dolby Digital or DTS, typically include a special

The R-Series subwoofers (or Sub-Bass Systems, as REL calls them) all feature a cube-shaped design that can fit into many places—a characteristic that makes installing three of them much easier.



LFE (Low Frequency Effects) channel that contains deep (and often loud) bass sounds. Subwoofers reproduce this track and also supply bass for the main, center, and surround channels when those channels' speakers are too small to reproduce deep bass on their own.

The R-Series models, like all RELs, have a unique feature: They can simultaneously accept speaker-level and line-level/LFE signal inputs. Each input has its own volume control and can be separately adjusted. So if you crave extra-punchy bass for movies, you can boost the LFE level, while keeping the speaker-level input set at a level that sounds right for music. The RELs easily accommodate those sorts of listening preferences.

The bass management systems in audio/video receivers and surround-sound processors direct bass from some or all of the speaker channels to one (or more) subwoofer(s). The multiple subwoofer arrangement has been gaining favor because subs distributed throughout a home theater help eliminate the inevitable "hot spots," or places in the room where there is too much bass. Multiple subs also help ameliorate "dead zones," or places where the bass level drops off. The new REL alternative method starts with a conventionally placed subwoofer that handles LFE and reinforces the bass of just the front left and right speakers. Sub number two provides the same function for just the surround speakers and is placed in the rear of the room, in the diagonally opposite corner to sub number one. Sub number three augments the bass of the front center speaker and should be positioned near that speaker. You could, of course, add a sub to support every speaker in the system, but the folks at Sumiko feel that the law of diminishing returns sets in after three subs—except for really huge home theaters.

A BIGGER BANG The sound of the *Master and Commander* DVD is transformed by the triple R-Series subwoofer setup. Yes, the naval battle scenes where cannonballs are fired into the wooden ships have a lot more gut-wrenching impact, but when the action moves below decks, the thumps and bumps of the sailors' feet sound like they



are coming from directly above my couch. I feel like I am in the ship under attack. Full-throttle blasts of *The Polar Express* DVD take on a more visceral quality; my system plays louder with a newfound ease and sounds more powerful at late-night listening levels. I know the center sub should not make any difference to the sound of dialogue, but it does. Voices are more realistically rendered with the center REL engaged.

To test REL's three-sub theory, I temporarily shut down the center and surround channel R-Series subs, and readjust the primary single sub. Suddenly, the soundstaging seems flatter as the sense of room-filling envelopment collapses. The lightning-fast bass definition goes limp. Further listening proves it is still excellent, just less viscerally alive. Returning to three subs, it is easier to hear the individual pitches of Ginger Baker's thundering drums on Cream's *Royal Albert Hall: London May 2-3-5-6 2005* concert DVD. The drums kick harder, sounding so much more like the real thing, and Jack Bruce's electric bass pops out of the mix so I feel every note. The utter lack of boom is another dramatic difference in the quality of the bass. It sounds airy and delicate, but when subterranean, pants-flapping bass is called for, the REL trio responds like gangbusters.

And it is not just razzle-dazzle surround recordings that benefit. Jacques Loussier's *Impressions on Chopin's Nocturnes* solo piano

Each R-Series sub has separate level controls for the speaker-level and line-level inputs, a crossover control (25-100 hertz), and a phase switch. The control module can be detached for more convenient positioning.

SACD on Telarc takes on greater solidity and presence when bolstered with multiple subs. The piano's majestic scale is not only more completely rendered, it sounds like it is playing in a concert hall instead of in my home theater. The spatial realism bonus adds so much to the experience.

I could have lived happily ever after with my single REL B2 Britannia subwoofer, but the triple REL sonic transformation of my Dynaudio speaker system's sound is huge, akin to upgrading to far more expensive and larger speakers. Now that I am sold on the concept of multiple subwoofing, returning to a single sub is a devastating letdown. HE

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