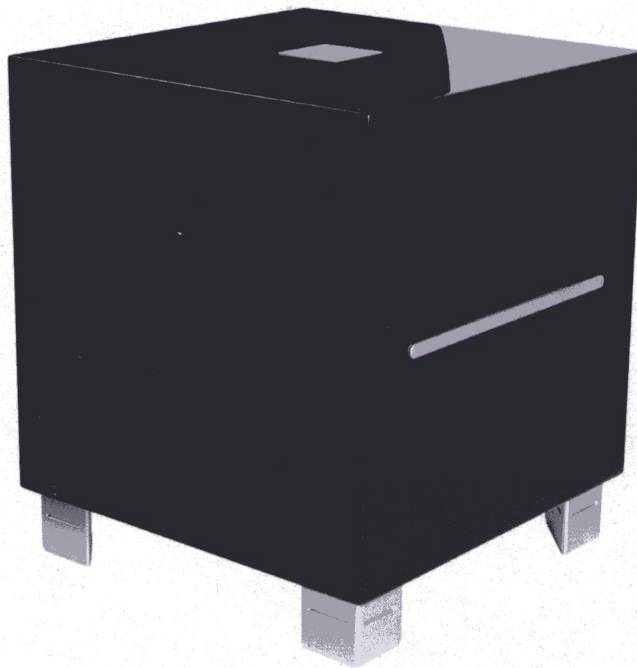


loudspeaker focus
EQUIPMENT REPORT



REL R-218 Sub-Bass System

Truly Satisfying

Neil Gader

The REL R-Series sub-bass systems have been substantially improved for 2011, and are now called the Serie R. This mid-priced, three-model line boasts improved amplification from a Class D circuit, revised drivers, retuned filter networks, and even upgraded cabinets. The \$1299 R-218 considered here is the entry-level model and sports a single downward-firing 10" driver in a rigidly braced, high-gloss-lacquered MDF cabinet. By contrast the larger R-528 and R-328 feature an active front-firing driver and a down-firing passive radiator.

Let's face it: Visually most subwoofers are fashion emergencies, but REL has restyled the ungainly box by adding a luminous, hand-rubbed piano-black lacquer finish and some bespoke aluminum treatments. Its footprint is modest and, by subwoofer standards, its look is elegant and discrete. Build-quality—always a REL hallmark—is even better in this new model, with seams so tight they appear to be waterproof. The back-panel controls are set on an aluminum plate that hides the internal amp and circuitry. They include a crossover-frequency control, phase toggle (0° or 180°), separate volume controls for LFE and high-level/low-level inputs, and the high-level Speakon socket that connects the main system amplifier to the sub. An IEC socket allows for a detachable power cord of the user's preference.

REL subs are equipped with low-pass filtering only—the main speakers are run full-range with no high-pass filter. REL assumes the main speakers already produce a fair portion of

the low-frequency spectrum. In contrast a sub fitted with high-pass filtering also selects the low-frequency rolloff point of the satellite—an additional feature that has its own compensations for bass-shy satellite speakers by relieving the smaller woofer of bass responsibility and, thereby, improving dynamics and output. Some will argue, on the other hand, that the additional filter and circuitry can also result in unwelcome colorations.

The recommended method of connection is via the Neutrik Speakon high-level cable, which is included. This interconnect

SPECS & PRICING

Type: Sealed-box, down-firing

Driver: 10" long-throw steel-chassis

Integral amplifier power: 250W

Class D

Bass extension: 25Hz (-6dB)

Connections: High-level Neutrik

Speakon, low-level single RCA, LFE RCA

Dimensions: 12" x 13.6" x 12.5"

Weight: 29 lbs.

Price: \$1299

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EQUIPMENT REPORT - REL R-218

sends the signal from the speaker taps of the main system amplifier to the subwoofer. The subwoofer receives the identical signal or “voice” that the main speakers are seeing—a method central to the REL philosophy that integrates the sub into the entire chain of the audio system (because of the REL’s very high 100k ohm input impedance the sub’s amp has no effect on your power amplifier). REL recommends placing the subwoofer in the corner behind the main speakers as a starting point, and the manual offers detailed instructions for setting the phase switch, crossover adjustment, and level control. Crossover settings have been simplified for the R-218. A single knob is substituted for the “coarse” and “fine” adjustments found on the more elite models. The crossover knob selects one of about forty frequencies over the range of 30Hz to 120Hz. There are no hash marks to indicate the crossover frequency; users are encouraged to set the crossover frequency by ear. Using a couple of familiar bass-oriented recordings and a friend to man the controls makes the set-up task a cakewalk.

The sonic results are what I’ve come to expect and admire from REL subs—an even-handed balance between pitch and extension, with little to no cabinet coloration or resonance. In extension, the R-218 plummets easily and with good output into the upper twenty-cycle range, and it does so without drama. It’s stable and controlled at all levels and doesn’t begin crabbing around the room like some hapless subs I’ve encountered. Most importantly, and fulfilling the primary directive, there’s a near seamless transition between sub and satellite. Using the Sonus faber Liuto Monitor (reviewed elsewhere in this issue) and my own somewhat larger ATC SCM20 monitors, the R-218 takes familiar recordings like Jennifer Warnes’ “Famous Blue Raincoat” [Shout Records] and returns the growl from the bowed standup bass to the conversation. The tenor sax is weightier and more expansive. On this track the ability of the REL to integrate with the main speakers saturates the music with a heavier, more humid character, and soothes what would otherwise be a dry vocal. It’s a difference more in keeping with the melancholy atmosphere of the song.

Like every REL I’ve encountered the R-218 maintains the chameleon-like ability to disappear into the character of the left/right main speakers. One way it does this is by matching the speed profile of the main speakers. The REL is quick to react to low fundamentals and then keeps pace with the unwinding harmonics rather than holding them back like the proverbial sonic boat anchor. During Warnes’ “The Ballad of the Runaway Horse,” there is a series of plucked chords from the cello. With the R-218 off, this cue sounded credible. With the REL inserted back into the system, missing soundboard elements instantly resurfaced, bringing with them a degree of warmth and resonance that was easy to overlook in the sub’s absence. This is what a good sub does; time and again it returns not only the music but the *venue* to a recording. It allows notes to hang in the air a bit longer, and the deepest notes and pulses to sustain and decay. It’s an almost subliminal calculation, but once the ear recalibrates to the spatiality that a subwoofer infuses in a recording, its removal leaves the acoustic soundspace empty and the reverberant field weakened. Like the air being let out of a balloon, music no longer pushes against the boundaries of the venue.

The R-218 is easily one of the best small subs I’ve reviewed, but is it my favorite REL? Not quite, but only by a small margin. A few years ago I reviewed the somewhat larger, heavier, and more expensive Britannia B3 [Issue 163], a front-firing, ported configuration. The B3 disappeared as a source more completely than any subwoofer has in my room. It had a combination of heft, pitch stability, decay retrieval, and speed that made it seem as if it had driven anchor bolts into the very foundation of my home. In comparison the R-218 has a lighter signature and a less ominous character in the bottom octaves. But unlike the mightier B3, the R-218 is so physically small that it can disappear in most rooms, a big plus for many of us.

The R-218 is another in a seeming continuous parade of exceptional REL performers. Without spectacle and with little-to-zero editorial comment, the REL subwoofers ply their trade. Historically, combining “small” and subwoofer is as frustrating as blending oil and water. And the result often ends up being more appetizer than entrée. The R-218 is one of a handful of small subwoofers that truly satisfies. In the world of the bottom octave, my friends, that is truly the bottom line. **tas**