

## REL 212/SE subwoofer

by Alan Sircom



**T**here is one obvious and one not so obvious impression to draw from the REL 212/SE subwoofer. The obvious one is the sheer size of it means it is a real earth-mover, one of those subwoofers that loosen fillings in cinemas. And yes, it can do that if that's what you want from a subwoofer. But it's also capable of so much more, and brings a level of clarity and openness to any good speaker system. Unfortunately, that side of it is all too easy to miss.

The 212/SE is on the big side for a subwoofer. In fact, it's about the size of a small washing machine. This gives the sealed box 212/SE the potential for stacking two powered long-throw 300mm 'Continuous Cast Alloy Bass Engine' cone drive units along the front panel, with passive radiating 300mm 'Continuous Cast Alloy Bass Engine' cone drive units firing rearward and downward. And yet, the cabinet still has room for a 1kW of on-board amplification. It has the usual REL low- and high-level connections and controls (designed ►

*“It gives the subwoofer itself time to bed in and shake down, and with four 300mm drivers, there’s a whole lot of shaking down required.”*

- ▶ for both speaker level connection for traditional audio use, and fed by a RCA phono lead for ‘point one’ use in a multichannel context).

Those are big boy specifications for a big boy subwoofer, and that is how many might perceive the REL 212/SE. And, indeed, if that’s what you want from a subwoofer, this delivers the goods. Whether it’s playing organ pedal notes so low you feel the breath being pushed out of your lungs, tooth-rattling super deep wub-wub-wubby dubstep (remember dubstep? It was all the rage a few years ago, and even advertising agencies have dropped it like a sonic stone now), or the sounds of spaceships and gun-play so loud and bass-heavy that bits of furniture run and hide, the 212/SE can do this and more without breaking sweat. But this is not just a bass bazooka, as the REL is equally well geared toward a more tamed approach.

Used in a pure audio context, where the REL is connected to the red terminals of left and right loudspeaker outputs at the amplifier, and one of the black terminals, the 212/SE can be a deft, persuasive performer. This requires a careful hand, moving away from the ‘slam/bang’ kind of bass performance and instead toward a ‘barely audible’ gentle blend with the loudspeaker output. This is done through the medium of the level and bass roll-off control, and occasionally the phase setting should you set the speaker and subwoofer in very different parts of the room.

In fact, two important conditions should be met to show what the REL 212/SE is capable of, careful setting of the controls to match the loudspeaker notwithstanding. The first is a very precise installation of the whole system, but especially the loudspeakers and their position relative to the subwoofer. REL makes a strong case for using the ‘master set’ method of installation, which effectively ‘locks down’ one loudspeaker using tiny increments until bass integrates with treble, and this acts as an anchor when applying the same rules to the other speaker. A relatively simple track with a good bass-line is often called for (often ‘Ballad of a Runaway Horse’ by Jennifer Warnes’ from the *Famous Blue Raincoat, 20th Anniversary Edition CD*, Attic). This set-up procedure can sometimes require hours of careful positioning, and sometimes may even have a different toe-in on one side relative to the other if the room demands it. However, with this set-up completed,

it gives the speakers the perfect balance, ideal for a subtle underpinning of REL to broaden out the performance. The other important condition is to set the sub just at the limit of audibility... and then revisit a week or two later and turn it down a notch!

There are a couple of good reasons for turning the subwoofer down after a week or so. First, it gives the subwoofer itself time to bed in and shake down, and with four 300mm drivers, there’s a lot of shaking down required. Second, and possibly more importantly, you need a week or so to get used to the sound, and invariably that means you turn things up ever so slightly too high at first. Revisit the settings and you’ll likely find the level a smidgeon (equivalent to 1.2 metric tads) too high. This is far from ‘too loud’, but it does represent a slight exaggeration in the bass regions that isn’t the total truth. We stress this in almost every subwoofer review and certainly almost every REL review, but the amount of low-end energy the 212/SE can deliver means you have to set the level control with the sensitivity of a safecracker.

When suitably set up, the first thing that registers with the listener is exactly not what you might expect. For a very large subwoofer, capable of delivering some serious bass firepower, what comes to the fore fastest is its agility and precision. Far from flooding the listening room with bass, what you notice first is how much faster your loudspeakers sound. The soundstage width and focus improves, too, but we’ve come to expect that from REL’s speaker support group. But it’s the speed of the speakers aided by the REL that gets to you. They seem to be physically faster, regardless of whether ported, sealed, or point source. I didn’t have a chance to test this with a pair of electrostatics (normally considered the toughest nut to crack in terms of integration with dynamic bass units, although MartinLogan cracked this particular nut several years ago), but I am fairly confident that even these speaker designs could be improved with the judicious use of the 212/SE, something I would be less happy about predicting with other RELs in the range.

That bass foundation liberates the loudspeakers, and that sentence needs no qualification. You likely chose your loudspeakers on the basis of a balance of detail retrieval, soundstage properties, rhythmic precision, midrange accuracy, treble extension, overall coherence, and bass depth ▶

*“The REL 212/SE gave Cradle of Filth the opportunity for a little more understanding on my part.”*



- ▶ relative to speaker and room size. The 212/SE acts on all these properties, teasing out that bit more of what made you buy those loudspeakers in the first place. And it works both musically and ‘kit-wise’ across the board.

Curiously perhaps the music that best sums up what the REL 212/SE does is from extreme metal band Cradle of Filth. Their live DVD (on Roadrunner records) has a three track EP on TIDAL of the same name: *Peace Through Superior Firepower*. That perfectly expresses what the 212/SE brings to the party, and its effect on the last track ‘Mother of Abominations (Live in Paris)’ shows why that’s important. The crowd ceases to be an amorphous mass of noise, and instead becomes a roiling

## TECHNICAL SPECIFICATIONS

**Type:** sealed box active subwoofer

**Drive units:** 2x 300mm long-throw Continuous Cast Alloy cone (active), 2x 300mm Continuous Cast Alloy cone (passive)

**Connections:** High Level Neutrik Speakon, Low Level stereo RCA, LFE RCA, SMA for wireless antenna

**Amplification:** 1kW, ‘next gen’ Class D

**Finish:** Piano black

**Dimensions (WxHxD):** 44.5x81.6x51cm

**Weight:** 55.3kg

**Price:** £3,250

**Manufactured by:** REL Acoustics Ltd

**URL:** [www.rel.net](http://www.rel.net)

**Tel:** +44 (0) 1656 76877

sea of Goths, the opening back-of-the-throat incantation moves from being schlocky nonsense to being really rather frightening, the insistent speed metal beat takes on even more menace and becomes more of an assault on the senses. This still ends up sounding like uncomfortable, ridiculous noise to anyone not into Cradle of Filth (which, let’s face it, is most of us), but you can begin to get it a little more through the REL. OK, in fairness I went looking for something to match the ‘Peace Through Superior Firepower’ line and landed on Cradle of Filth, but it fits all the same: it wasn’t unintelligible, but it was incomprehensible before, and the addition of the REL 212/SE gave Cradle of Filth the opportunity for a little more understanding on my part.

The REL 212/SE is more than just another subwoofer. While it has foundation-threatening levels of bass energy on tap, it’s also one of the best upgrades you can do for your system, because it takes everything you like about your existing system and makes more of it: more midrange clarity, more high frequency extension, more soundstaging, and a lot more speed. The downsides are three-fold: it’s a big box, it cuts a relatively big hole in your bank balance, and it’s unlikely to stay on its own for long, as you will start eyeing up the options for a matching pair of 212/SE. These things apply more or less universally, too: if speakers that don’t benefit from the 212/SE exist, they would have to be a pair of extraordinarily meaty loudspeakers that would dwarf the 212/SE both physically and financially. Bass is not just for bass-heads, as the REL 212/SE demonstrates, and as a result comes very highly recommended. +