

REL S/510 subwoofer

by Alan Sircom

We've taken a little bit of a hiatus with subwoofers of late, for an odd reason. Of recent years, our reviews have tended to be mostly of REL subwoofers (and a few notable exceptions like Eclipse). This seems partisan, but the reality is we've struggled to find subwoofers that integrate with music as well as REL: Eclipse being one of the rare exceptions. The problem then becomes do we hold back on REL reviews because they are the only brand that consistently makes musically-credible subwoofers (thereby

punishing REL for being good at its job and the rest of us for missing out on good subwoofers), or do we lower our standards? After much soul searching, we went for – rather than hid from – quality, and the new S/510 from REL is every bit the 'quality' option.

The S/510 manages to achieve the seemingly impossible task of squeezing a quart into a pint pot, without either shattering the glass or making the outcome not worth the effort. It uses a 10" front firing long-throw continuous cast alloy cone bass driver, with a second passive radiator firing into the floor. It also uses the NextGen3 version of REL's evergreen 500W powerpack. It fits all of this into a relatively small and deceptively heavy box.

We have somehow got into our respective heads that high-quality bass performance requires big subwoofers with large bass drivers. It's the old motoring adage, "there's no replacement for displacement" in action. The trouble is that when you bring the big bass guns to bear, sometimes what you



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- get is big and slow bass. Bass should be deep when needed, underpinning the sound when not directly called for, and in both cases... it needs to be fast. While ‘moving air’ is all about displacement, if that air is moved even a 256th note behind the beat, it sounds ‘off’ and if the transient speed of a large driver means the bass note is even a 256th note behind the beat at the attack and release phase, it makes the musical performance sound ‘slow’ and ‘ponderous’. By delivering bass through a faster, harder working smaller bass driver, it can keep pace with the rest of the musical delivery and therefore lets the music be a little freer.

You can hear the difference between ‘musically integrated’ subwoofers and their more cinematic brethren by playing a simple piece of music with a bass line. It’s perhaps no wonder that REL uses ‘The Ballad of the Runaway Horse’ by Jennifer Warnes and the late bassist Rob Wasserman, either from the 20th Anniversary version of *Famous Blue Raincoat* by Warnes [Private Music, BMG] or from Wasserman’s *Duets* [MCA]. The recording is simple (effectively a voice and a bass), but tells you all about a sub. Switching a correctly set-up subwoofer in and out adds some depth and ‘shape’ to the bass notes, of course, but what it does when set properly is lock Warnes’ voice in the centre of the soundstage. The better the sub, the more precisely that voice is solidly rooted between the speakers and with the S/510, if her voice was any more rooted, she’d need watering.

Expanding that out to more complex music, what makes the sound so well focused and precise with voice and bass extends to a complete band or a whole orchestra. Of course, the call of the bass is impossible to resist, so out came ‘Mein Teil’ from the Rammstein album *Reise, Reise* [Universal], followed closely by the title track of Infected Mushroom’s *IM The Supervisor* [YoYo]. First we used these on the affordable yet excellent Swisstone by Graham Audio LS3 loudspeaker on its own stands. This two-way has a lot to offer, but its bass – though good – is constrained by the size of the cabinet. The S/510 is like swapping the LS3 for a bigger, and in many respects better loudspeaker. Obviously these two tracks gave the subwoofer something meaty to get its teeth into, and didn’t disappoint. Bass lines were thicker, faster and with more of a fuller ‘thack’ to each bass note. On the other hand, in both cases what you also got was more separation around the rest of the instruments, more of a sense of scale to the sound and size to the soundstage, and a greater sense of lyrical articulation. On the Rammstein track it felt that my sub-schoolboy German suddenly passed an exam, as I could sort of understand the lyrics slightly more. Curiously, the same benefits were bestowed on big speakers too.

There is almost a generational improvement with REL subwoofers. Last year’s best model is often eclipsed by this year’s second from the top, and so on. The REL S/510 is a fine example of this generational evolution. The late Richard Lord who first came up with the original concepts for REL



TECHNICAL SPECIFICATIONS

Type: Front-firing active woofer, down-firing passive radiator

Inputs: Hi Level Neutrik Speakon, Lo Level single phono, LFE phono

Active drive unit: 300mm alloy driver with aluminium chassis

Passive radiator unit: 300mm carbon-fibre

Power output: 500w (RMS)

Lower frequency response: 21Hz at -6dB

Gain control range: 80dB

Dimensions (WxHxD): 39 x 45 x 44cm

Weight: 26.3kg

Price: £1,899

Manufacturer: REL Acoustics

URL: rel.net

Tel: +44(0)1656 768777

loudspeakers would likely have approved of the S/510, because he loved his bass, but he also loved his bass controlling the sound of the rest of the system with an benign, yet, iron authority. That’s precisely what you get here, and those who think they don’t need a subwoofer because they have big speakers or a small room are wrong, and the REL S/510 is waiting to show you how wrong. +