

## REL R-328 subwoofer

By Alan Sircom

**W**e are constrained by our biases and prejudices. Too often, when exploring those prejudices, we find they are baseless. So it is with the audiophile's intrinsic dislike for subwoofers. REL's subwoofers are some of the few that get under the radar, but we regularly have to refresh people's memories as to why they are so useful. This review of the R-328 is partly that re-explanation.

In fairness, perhaps it's not hard to see why subs get such short shrift with music lovers. They are commonplace in home theatre systems where they are almost invariably set too high for audio use. They might boom and bang and make whomping sounds when the gunplay happens and the starships clash on screen, but we often want a bit of subtlety and finesse, not simply noise and grunt.

In musical usage, a good subwoofer should be like a Victorian child – seen and not heard. So, what would be the point of a subwoofer under such conditions? Paradoxically, absolutely not what you'd expect.

In a way, we blur two kinds of bass reinforcement together, and home theatre systems are after a different kind to most audiophiles. Carefully – and I mean, really carefully – installed and set-up subwoofers act to help control stray in-room resonance and boom in a room, acting as an active bass controller more than a bass provider.

Of course, this places some not inconsequential demands on the sub design. A big bass driver in a box with some amps will happily chuff and grunt along with the film score, but when acting to keep up with the flow of musical content, it's all about speed and precision. This is where REL has always scored highly, and the latest Serie R electronics builds on the strength of the R-Series and previous models, harking right back to the early 1990s. A lot of this comes down to the REL-D input stage, which the

company claims gives the right impedance and grounding environment for the 350W Class D amplifier driving the active unit.

Like all Serie R models, the REL sub here has controls for high and low level and crossover frequency and – although it has a phono input for running off the LFE output of a multichannel amp, in audio it's best used connected to the loudspeaker terminals, with the supplied long black cable with bare conductors at one end and a blue Neutrik Speakon at the other. Install one subwoofer (two, three or four are better) in line with the loudspeakers and adjust lower and lower levels until the subwoofer cannot be heard... and wonder why your enjoyment of your loudspeakers took a big step in the right direction. Suddenly, the sound seems more free and open, the treble is more coherent and understandable, the midrange is more dynamic and expressive and the bass is more precise and taut. And often lighter sounding in the process; not light





▶ as in floaty and insubstantial, but 'light' as in port-resonances and rear wall proximity effects are less overt and have less control over the sound.

Selection of the subwoofer is relatively simple; the bigger the room or the speakers, the bigger the subwoofer. Using the entry-level R-218 (with its downward-firing single 254mm driver and 250W amp) doesn't have the same room filling capabilities as the R-328 (with its forward-firing 254mm long-throw driver and a 305mm down-firing passive radiator). The 328 will work well in most mid-to-large size rooms, where the 528 (305mm both active and passive, 500W class D amp) will work with even the biggest speakers in the biggest rooms. A second sub in line with the listener's chair alongside the side wall, or even a sub per loudspeaker and two more sitting either side of the listener will do more of the same (more insight into the mid and top, better room/bass integration).

I can't stress enough just how careful and how low you need to be with the setting of the REL R-328. It's in "Is this thing on?" territory. If you unplug the speakers all you should hear is the gentlest, muffled but really, really deep 'whump, whump' underpinning of the sound, quiet and subtle enough to be seemingly swamped by the output of the loudspeaker. If that sound begins to make the room shake like the T-Rex in *Jurassic Park*, you have it (or your amp's volume level) set too high. Do this in reverse though (have the speakers plugged in and throw the power switch on the subwoofer) and the change is marked; it's like someone replaces your speakers with a far better pair. Turn it on, bigger, more natural sound. Turn it off, your speakers sound that bit smaller and less 'free'. If you have the right subwoofer for the speakers and the room, it does this regardless.

It's an odd effect for many audiophiles, because we assume the low-end of a full-range loudspeaker is deep-bass enough. It's not, because it's not about deep bass, it's about in room bass control. No matter how full range

the loudspeaker, the place where best to put loudspeakers for good mid and treble performance is one of the least useful places for accurate bass. In particular, it's the worst possible place to try to use the bass to mitigate some room resonance and help open up the sound beyond 200Hz. For that, you need subwoofer support, and you need a sub like the REL that's capable of underpinning the sound without lag, flap or flab.

There are many ways to crack the room



acoustics nut. In some cases, the cure is worse than the disease (bass trapping vs. divorce proceedings, DSP and other forms of active equalization vs. the space between the notes, and so on), but a well-sorted sub like the R-328 can work wonders. They can even be hidden as low side tables (just remember not to water plants on them). The only downside is they are addictive. You start with one, and pretty soon you have three or four...+

## TECHNICAL SPECIFICATIONS

REL R-328 subwoofer

**Drive Units:** Custom-Designed 254mm long-throw front firing drive unit. 305mm down firing passive radiator.

**Inputs:** Line level phono, speaker level Neutrik Speakon (cable supplied)

**Amplifier:** 350 Watt high-current Class D power amplifier.

**Dimensions (WHD):** 34x38x39cm (height includes feet, depth includes grille).

**Weight:** 20.4 kg.

**Price:** £999

Manufactured by REL Acoustics

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