# Laying a new golden egg

Adam Rayner hooks up a small but beefy subwoofer from the new owners of a familiar name

Sumiko is the company that bought REL a little while back, and even though this subwoofer series has development history going back three years – with many attempts at designing the components before Sumiko was happy – this may well be the first real post-'golden goose' REL. The goose that laid the golden subwoofer eggs was of course Mr. Richard Lord.

Everyone in the industry has immeasurable respect for Richard Lord, and after all it was the long history Richard created that Sumiko was buying. RELs were, after all, sub-bass systems, not mere subwoofers. Lord remains the figure everyone wants to impress, even after his retirement. If a product wouldn't have excited Richard, then they'd feel they have failed. Sumiko did start working on products in advance of actually getting involved with REL, but that's a bit like building up a sprint in anticipation of taking over the baton.

The background information I was given about this product was largely about the idea of using a passive radiator to get the effects of a larger-coned sub into a smaller space; and about how the passive and actively-driven speaker cones were developed independently, as they do different jobs.

The T1 is a solid-looking spud – you have a choice of finishes, the black I saw and a cherrywood. Though it no longer has the soft limiting control, nor any auto-on-off switchery in its innards (both to save cost and to make statements about lack of compromise), it still features the rare and special dual-input concept. You hook up the single RCA feed – either into the LFE/.1 channel socket if you are using your own front-end's crossover, or else into the other single RCA socket, simply marked 'low-level input' – as well as using the high-level input speaker lead Speakon. High- and low-level inputs share a gain knob, with the LFE/.1 input getting another.

Most front-ends with crossovers offer level control so you can still control relative levels of high- and low-level input. This crossover has the third knob on the back. Apart from that, it has a simple phase-flip switch, and the mains switch and socket alongside the dual-cut heat sink. There's a healthy 335W RMS amplifier – quoted to easily reach 440W in moments of effort.

Like so many woofers with down-firing elements, the acoustic loading of the bass coming out of the bottom is decided by how far the unit is held off the floor. As the REL T1 needs some serious space underneath it, they used a frame arrangement rather than stilt-sized feet to offer it the right boundary loading against the deck. The frame also features bushings underneath to spike it if you want.

The face of the sub wears a cloth-covered concave grille that bulges out beneath the REL badge. This is the home of the differently-suspended 10in cone – the one without the magnet hanging on the back to shove it. It simply wobbles. It's favourite wobbliness (or Fs) is a few Hz lower than that of the main driver's 31Hz, at only 29Hz. That said, the suspensions of both speakers, combined with the acoustic loading of the floor beneath, conspire to provide a sexy low F0 or flat response, down to 25Hz. This means it should still be relevant and sensate way below this. In order to find out, I spun up some DVD's and scared the puffer fish in our little tank.

## Performance

As usual with RELs, corner placement gives the best results; true low-bass pressurisation below 40Hz is best derived from corner placement, where the most linear and efficient bass can be produced. High-level connection can be made without affecting the performance of the amplifier because the input impedance is 100,000Ω, producing negligible additional demand on your system.

First, as ever, I gave it the horror 15Hz pull-through just to see if the thing really can judder my room like it was a 15in sub, as it said in the blurb. Telarc's version of the *Mars* part of Holst's *Planet Suite* is always a good place to start.

The instant it played you could tell the REL was a class act, with real control and savage profundity. Very musical, it held onto a deep and changing bass throb with proper grip. I tried a mad movie segment, 5mins 20scs into *Polar Express* with the arrival of the eponymous train. It did find the woofer's limit, as this section is completely ridiculous and I've only heard it at full scale a couple of times. Thinking

## RATINGS

**Highs:** Deep, fat bass with real control and incredible value
**Lows:** Nothing that couldn't be solved by buying a bigger REL

| | |
|---|---|
| Slam | ★★★★½ |
| Depth | ★★★★½ |
| Precision | ★★★★½ |
| OVERALL | ★★★★½ |

## SPECIFICATIONS

| ITEM | DETAILS |
|---|---|
| *REL T1 Subwoofer* | |
| Drive units | 10in Active paired with 10in Passive ULT (Ultra Long Throw) drivers |
| Enclosure type | Sealed box with passive radiator loading |
| Frequency response | Flat to 25Hz (deeper in-room) to crossover point |
| Power output | 335W RMS from on board amp, 440W peak |
| Dimensions | 361(w) x 400(h) x 419(d)mm |
| Weight | 18Kg |

**Connections** One Neutrik gastight Speakon for high level connections, one RCA socket for LFE/.1 input and one RCA socket for low level input, plus IEC mains


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about it, asking something small enough to fit on the luggage rack to sound the same as a full-size train isn't really fair. However, nobody told the REL, and it shook the room without quite managing to emerge into the garden.

*A Bug's Life* is always great for musical bass integration. The bit where the leaf falls and the ant wails 'I'm LOST!' makes a good thump, but not as fabulous a rumble as when the grasshoppers invade the ants' nest; the wing-beats are huge, and the REL's control was brilliant. It fights way out of its weight league, and shakes like a brute when under signal.

## Conclusion

Compact and good-looking, with great output, REL's T1 scores a top mark by the sheer synergy of all it does. The best thing I can say for it? It's a real REL... ■

*The main driver is coupled to a differently-suspended 10in cone*

*Inputs, heatsink, level and crossover controls on the back*