

Ed Selley discovers if REL's 8in T7i subwoofer is perfectly suited to running in tandem

Does it take two to tango?

They may be only responsible for a select part of the audio we hear in a film mix, but AV-hedz have a love of subwoofers. In response to this, there are a few companies that concentrate on nothing else. REL is one of them, and has developed some very specific ideas about how sub-bass should be created.

The T7i is a case in point. This is the middle model of the Serie T range, which forms the entry point for REL's conventional subwoofer lineup. The 'i' denotes that it is an improved version of the preceding T models, but the nature of some of the changes are sufficiently extensive it might have been fair to describe it as a new beast.

The T7i still uses an 8in main driver partnered with a 10in passive radiator, but the positions have been swapped around so the active driver is now forward-firing while the radiator moves to the underside.

The drivers are also heavily revised. They use doped paper as a basic material but REL has changed the paper type to make the driver stiffer and lighter. The active driver then has a metal section that overlaps much of its visible portion, which adds further rigidity (and makes for a fine place to stick a company logo). REL has placed great emphasis on the stiffness of the drivers because it has a considerable effect in turn on their control and response, which results in them starting and stopping faster than before.

The subwoofer cabinet has been beefed up too and is now made from inch-thick MDF, which results in a very rugged enclosure indeed.

REL fits integral feet that give the required clearance for the lower radiator. While still not the best possible choice for a suspended floor, this should make the T7i easy enough to place as there is no bass port needing to be accommodated. It's also finished to a high standard for a device that sells for £850.

Some aspects of the T7i's design are more identifiably REL. The presence of cooling fins on the rear panel is a clear indicator that there's no Class D amplifier present here. Instead, a 200W class AB amp, complete with burly hand-wound toroidal transformer, provides the required power.

As is tradition with REL subwoofers, alongside the standard phono input for an LFE signal, you'll find a Neutrik Speakon interconnect that attaches directly

to the L/R speaker terminals of an AVR/processor, offering a high-level input. This enables the sub to be used with two-channel material (no LFE channel), as it takes the bass info that's supplied to the front pair. Yet REL also lets you use both the high-level and LFE inputs simultaneously (you'll need to set your speakers to 'large' on your AVR), and suggests this is the best installation, allowing you to switch between two-channel and multichannel listening, and feeding the T7i additional bass info during the latter.

There's no onboard EQ, physical remote or funky app to play with here, but the back panel controls do include separate volume adjustment for the high- and low-level inputs, in addition to crossover dial and phase switch.

Doubling up

So why have we photographed two of them? REL's argument is that using a pair of subwoofers allows for a more even spread of low-end energy in most rooms. Using two subwoofers means they can be placed in such a way as to avoid standing wave issues and the simple expedient of having double the radiating area should allow for a more effortless reproduction of low-frequency output. Plus every AVR worth its salt these days has dual subwoofer pre-outs, so it'd be a shame not to use them...

To make the employment of a second unit more practical, REL has developed an optional wireless connection module for the Serie T range. Called the Arrow (as a nod to the Longbow module of the Serie S, Habitat and No.25 subs), this takes the form of a transmission unit that connects to the LFE or speaker output of your AV processor (again, a simultaneous connection is possible), and a receiver module that attaches to an RS232 connection on the sub's rear. REL says that the connection is lossless and lag-free. At £200, the Arrow adds a sizable chunk to the cost of a T7i, but I found it worked absolutely fine and stopped me tripping over a trailing wire. Pairing is quick and easy, and the range is suggested to reach over 13 metres.

AV INFO

PRODUCT:
8in subwoofer with 10in passive radiator

POSITION:
Middle of the Serie T range, which is REL's entry-level

PEERS:
SVS SB-1000;
Velodyne Impact 10;
Artison Nano 1

1. Four chunky feet raise the REL enough to let its underside passive driver breathe

HOME
CINEMA
Choice
RECOMMENDED

I did, however, begin my testing with a single T7i connected to my AVR via conventional phono cable.

Ready, set, go...

Unlike some more brash woofers, this 8in/10in combi doesn't immediately grab you by the lapels and shake your brains out. And, compared to the gut-rattling fury of something like GoldenEar's SuperSub X [see HCC #272], the T7i simply doesn't go as deep (REL claims a 30Hz response) or load the room as effectively, but it counters with an agility to its performance. Indeed, spend a little time with the T7i and its attributes come to the fore.

Watching *Patriots Day* (Blu-ray, DTS-HD MA) allows the T7i to shine. The subwoofer is able to handle the grizzly bombing scene itself with effective depth and impact, managing to be subsonic at the very lowest part of its frequency response, and this lends the blast a visceral realism that supports the onscreen imagery.

This, of course, is the very minimum of what we should expect from a subwoofer at this price point. Where the T7i really starts to show its talents is when the explosion ends and the hunt begins. Trent Reznor's brooding score has plenty of bass energy in it and this woofer integrates this

'The T7i partners my speakers superbly, delivering *Patriots Day's* bassy score in an effortless fashion'

beautifully into the dense and atmospheric soundtrack. Paired with my satellite speakers needing a 90Hz crossover, the REL partners superbly and delivers the bottom registers in an effortless fashion. A hallmark of a good sub is that you gain a real appreciation of what it is doing when you turn it off, and the REL is an especially fine example of this.

The speed of its driver array means that it excels with complex low-frequency material. The final live performance of *Caravan* in *Whiplash* (Blu-ray, DTS-HD MA) is something of a torture test for subwoofers, and a scene that I've watched countless times. There's very little in the

SPECIFICATIONS

DRIVE UNITS: 1 x 8in front-firing paper/aluminium active driver; 1 x 10in down-firing paper passive driver **ENCLOSURE:** Sealed **FREQUENCY RESPONSE (CLAIMED):** 30Hz-200Hz **ONBOARD POWER:** 200W Class AB **REMOTE CONTROL:** No. **DIMENSIONS:** 429(w) x 460(h) x 410(d)mm **WEIGHT:** 43kg **FEATURES:** LFE input; low-level input; high-level input (via supplied Neutrik Speakon interconnect); compatible with optional (£200) Arrow wireless transmission system

PARTNER WITH



WHIPLASH: Not only is Sony Pictures' Blu-ray one of Ed Selley's audition platters, it's a cracker of a movie too, taking the world of jazz drumming as a jumping off point for an emotionally draining exploration of the human spirit.

way of overtly aggressive bass but as Miles Teller's drumming gets ever more frantic, the need to deal with dozens of separate drum beats, keeping them distinct from one another, is paramount. With this sequence, the T7i puts in one of the finest performances I've heard.

Even without the high-level connection in use (wilfully ignoring REL's manual that declares 'you will almost always' hookup this way), this is a seriously accomplished device. And even if you choose, as an LFE purist, not to run a simultaneous input for movie playback, you should certainly experiment with the high-level connection for conventional two-channel audio. I found it improved the sub's integration with my L/R speakers and sense of speed.

So, what happens when you double them up? My listening room has the benefit of being fairly free from standing wave issues so there is little to be gained from trying to 'fill in' a part of the room, but running the two units – one via the Arrow wireless module and one via conventional wired connection – proves illuminating. The field assault sequence in *Fury* (Blu-ray, DTS-HD MA) gains some of the heft that it lacks with a single T7i. But, importantly, this extra impact isn't achieved at the expense of the precision and detail that is present with a single woofer. The sound of the tanks is still reproduced as a medley of distinct effects – engines, tracks and gunfire – and this helps to make for a more immersive and believable performance.

The need for speed

Even without the Arrow module, two T7is is a fairly significant expense, and you have to consider the additional space that two – even fairly compact – subs would need over a single chassis. But the benefits of such a setup do make themselves felt. As a double act, this is a wonderfully detailed and agile sub-bass system that mixes impressive heft and impact with speed and nuance. A single T7i shows many of the same admirable traits, and if you need a sub for music, its desirability increases ■

2. The rear-mounted heatsink keeps the T7i running cool

2



HCC VERDICT



REL T7i
→ £850 each → www.rel.net

WE SAY: Fairly costly for a smallscale woofer but performance is commensurate with the price. Fleet of foot and detailed, it puts in a fine and realistic performance with movies and music.