

# REL T3 Subwoofer

Depth charged.



BY DARRYL WILKINSON

**Last year, my family and I** moved from our little house near a noisy city airport to a more pastoral setting where, aside from a nearby neighbor who likes to bulldoze anything with leaves on it, the loudest thing is an old four-wheel-drive F250 pickup we bought for hauling things (including our butts) around the farm. Although it's in surprisingly good shape, some things don't always work, like the original factory radio, for instance.

Because we receive letters of thanks from Middle Eastern countries, multinational oil companies, and Vladimir Putin himself every time we fill up this massive beast, we don't drive it unless we really need to. I did need to the other day, and, as I sat stopped at an intersection, I marveled at how well the radio was working—too well, actually. Unbeknownst to me, just as a new song began, a car that was well endowed in the art of bass reproduction had pulled up near me. The proximity and timing were evidently perfect, because that crappy factory radio suddenly came to life with a full, tight bottom end that

would have given J. S. Bach a serious case of organ envy.

One of the more interesting parts of this experience was how the addition of tightly integrated low bass can make a less-than-perfect set of speakers sound better than you would expect in the mid and high frequencies. And, in this case of serious junk-in-the-trunk bass, I'm not talking about the traditional satellite/subwoofer setup in which the sub hogs all the sound below a set crossover point and only passes on the upper frequencies to the main speakers. This particular effect helps your brain ignore, to some extent, the pain of a shrill and thin-sounding speaker by adding depth and a sense of

dimension. It's all the more interesting that this event occurred on the very day that three T-series subwoofers from REL showed up for my bass-enhancing pleasure. Sheer coincidence or divine providence? I think... well, yeah, it was sheer coincidence. (But it adds a nice touch to the story.)

So REL, a high-end subwoofer maker (the top-end model, the Studio III, retails for \$9,000) located in Great Britain, has this new T-series line of lower-priced subwoofers. REL is not your typical speaker company. Actually, since REL only makes subwoofers, you could technically say that they



aren't a "speaker company" at all. But REL still differs from most companies, whether they make speakers and subs or just subwoofers. The company's fundamental philosophy on how best to connect and integrate a subwoofer is quite different from the norm. This leads to differences in design, setup, and, until now anyway, selling price. For REL fans, it's the price of the T-series subwoofers that's the most exciting. Prior to this introduction, the least expensive REL was the \$749 Q108. The new model most under scrutiny here, the T3, is manufactured in China and comes in at \$598 (with the T2 and T1 following, respectively, at \$798 and \$998).

It's nice to see that the T-series retains a classic feature of all REL subwoofers: independent volume control of both the main and LFE inputs. To take advantage of this capability, REL recommends that you hook up the T3 via the high-level inputs on the back of the sub directly to the same speaker terminals on the receiver or power amp that the main speakers are using. That way, the subwoofer accepts the identical signal as the main speakers. You should connect the LFE input to the LFE output on the back of the receiver/amp and set the processor to Large for the front speakers. This allows you to set a fixed offset in the balance between the portion of the bass information gleaned from the main channels and the LFE signal itself.

A feature unique to the T-series among REL models is a downward-firing active woofer matched with a front-mounted passive radiator. In the T3, both are 8-inch units used in conjunction with a 150-watt Class AB amplifier. REL recommends you use the T3 in a corner

along the same wall as the front speakers. The front-mounted passive radiator also provides more output and, REL claims, adds textural detail. Because of the passive radiator's long-throw nature, the front grille is rounded outward, as if it were part of a sphere that had been lopped off and placed on the front. It, along with the rectangular rails on the left and right sides of the cabinet, gives the subs an unusual look that is both modern and retro at the same time.

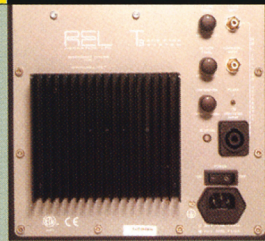
REL's foundational bass philosophy directly affects subwoofer setup. Whereas most companies recommend setting up the sub's crossover point at around 80 hertz, REL suggests that you begin with the crossover control set at 25 Hz and gradually move up from there until you find the appropriate mating point. The result is almost always lower than 80 Hz with

moderate-sized or larger main speakers. (Remember, the main speakers will run full range.)

I used the T3 with a pair of Definitive Technology Mythos Fours (plus a Mythos Three center and a pair of Mythos Two surrounds). The Mythos Fours do not include powered subs, so they definitely benefit from the presence of a good subwoofer. In this setup, I found the best crossover point to be just a bit lower than 60 Hz.

I've used a number of good subwoofers that have improved my system's overall bass output. Many of them gave the impression of being able to play louder than the T3, and some of them rattled the walls more. However, none were quite as good at creating a feeling of ultra-low bass that, for lack of a better way to describe it, settled over the room as if it were a blanket of low-frequency

## AT A GLANCE REL T3 SUBWOOFER

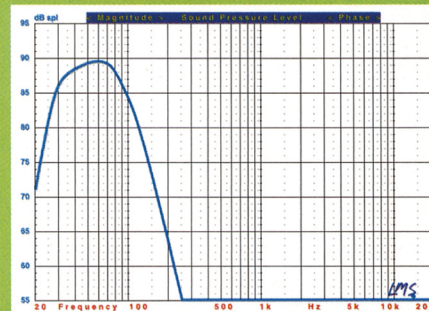


These listings are based on the manufacturer's stated specs; the HT Labs box below indicates the gear's performance on our test bench.

### SUBWOOFER: T3

Connections:	Neutrik Speakon high-level, line-level, LFE with separate volume control
Enclosure Type:	Passive radiator
Woofer (size in inches, type):	8 active (1), composite cone, 8 passive (1), composite cone
Power Rating (watts):	150
Crossover Bypass:	Yes
Available Finishes:	Cherry, Black, White
Dimensions (H x W x D, inches):	13.75 x 11.2 x 14
Weight (pounds):	27
Price:	\$598

## HT Labs Measures: REL T3 Subwoofer



This graph shows the quasi-anechoic (employing close-miking of all woofers) frequency response of the T3 subwoofer (blue trace).

The T3's close-miked response, normalized to the level at 80 Hz, indicates that the lower -3-dB point is at 30 Hz and the -6-dB point is at 27 Hz. The upper -3-dB point is at 97 Hz using the LFE input. —MJP



information. And I'm not sure I've heard these particular Mythos speakers sound better.

For example, on "Rock You Gently" from Jennifer Warnes' *The Hunter* CD, the T3's presence


extended the depth of Warnes' voice. The effect didn't so much make the bass louder as it seemed to expand the overall dimensions of the soundfield. On "Way Down Deep," every percussion instrument sounded larger and richer in tone; and even other instruments you wouldn't normally expect, such as the seed-pod rattle, lost a bit of harshness and sounded fuller.

The benefit of the independent volume controls was apparent in numerous movies, including *Talladega Nights* and *Hot Fuzz*. (I mention those for no other reason than that they were quite fun to watch.) Although much of the engine rumble in *Talladega Nights* was present in the LFE channel, there was indeed some bass present in the main speaker-level signal. There's a similar situation with the *Dave Matthews and Time Reynolds: Live at Radio City* Blu-ray disc on which, with a song like "Gravedigger," you

### HIGHLIGHTS

- Exceptional deep and articulated bass response
- Recommended for room-corner placement
- Independent volume controls for speaker and LFE inputs

hear bass from both the LFE and main channels. Here, both the vocals and the guitars (including individual plucks) sounded much more detailed and rich thanks to the T3. Because of the T3's dual-volume-control configuration, I didn't need to readjust the bass output when I switched between straight two-channel music and seat-pounding movie watching.

There's no one perfect subwoofer, obviously, and REL's T3 won't appeal to the person who wants his system to really boom. Many home theater owners simply want a bit more bass. There's no doubt that this relatively small, relatively affordable subwoofer did a fantastic job of improving my speaker system's depth without drawing attention to itself. And that's about the best praise you can bestow upon any subwoofer—or any audio component, for that matter. 

## Step Up to Step Down

Although I've focused most of the attention on the T3 because of its price, there's no doubt as to the extra drama, texture, and enhanced spatial presence that came from setting up the T2 or, especially, the T1 during my testing. The T1, in fact, should stay in my system as a reference subwoofer to compare against others costing upwards of \$1,600—and the T1 comes in at under a grand. Even at that price, it's still probably the best buy of the three. Mind you, as I've noted with the T3, the T1 isn't a blow-you-out-of-your-seat subwoofer. (Nor is the T2.) It's more of a turn-your-innards-into-gelatin type of sub. Either approach to bass in a system can be argued as best, just as one might quarrel over the choice of corn syrup versus cane sugar in a well-known cola. You'll have to make the call on that. But the fact of the matter is that these subs are hot and definitely worth considering with almost any (with-in reason) speaker system you have.



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REL T3 SUBWOOFER					OVERALL RATING
Build Quality	Value	Features	Performance	Ergonomics	94 GOOD
<ul style="list-style-type: none"> <li>→ Finished solid-maple side rails</li> <li>→ Crossover and volume controls with detents</li> </ul>	<ul style="list-style-type: none"> <li>→ High-end audio performance at a budget price</li> <li>→ Stylish and compact design</li> </ul>	<ul style="list-style-type: none"> <li>→ Separate volume controls for speaker-level and LFE inputs</li> <li>→ Neutrik Speakon high-level connector</li> </ul>	<ul style="list-style-type: none"> <li>→ Established a bass underpinning for the system</li> <li>→ Created bass output with texture and nuance</li> </ul>	<ul style="list-style-type: none"> <li>→ Small cabinet size and forward-firing passive and down-firing active provide more placement options</li> <li>→ Side cabinet rails are convenient for lifting</li> </ul>	
93 GOOD	96 EXCELLENT	93 GOOD	94 GOOD	90 GOOD	

**General information**  
 REL T3 Subwoofer, \$598/each → REL, (510) 843-4500, [www.rel.net](http://www.rel.net)  
 Sumiko Audio, (510) 843-4500, [www.sumikoaudio.net](http://www.sumikoaudio.net) → Dealer Locator Code REL

Although there are less expensive subwoofers available, it's very difficult to find one that blends so well with the main speakers and provides such a sense of space when playing back movies or music.