

A Better Approach to Great Speakers?

## ProAc Tablette Reference 8 Signature and REL Strata III Subwoofer

**A**rmed with a \$2995-to-\$3995 budget for a new pair of speakers, I think most people would shop for one-box, integrated full-range speakers. In this price range there are excellent products that have reached a high level of refinement. And, this budget allows you to contemplate technologies not widespread at more proletarian prices: electrostatic drivers, transmission lines, bi-amplification, and advanced cabinet materials. But are there other, perhaps better, approaches? If so, in what ways are they better?

There are other approaches. I set out in this review to check out the viability of one such alternative speaker strategy for music reproduction based on the following thoughts and observations:

1. The rapid growth of the home-theater market has led to a vast amount of R&D in powered subwoofers. Maybe some of these designs are really good, and better than the "built-in" woofers in typical full-range speakers.
2. These subwoofers might also have facilities for tight integration with exceptional main speakers, specifically those with superb midrange and treble drivers
3. This division of labor—let bass experts do great bass, and mid/high-frequency designers do their thing—could lead to superior results for those who really value great bass and particular mid/high qualities.
4. Such a system (based on main speakers plus a powered subwoofer) might be more flexibly integrated into real rooms and real systems.
5. The combination of specialist design and flexible room integration, together with the economies of buying one woofer instead of two, could yield better value for money.

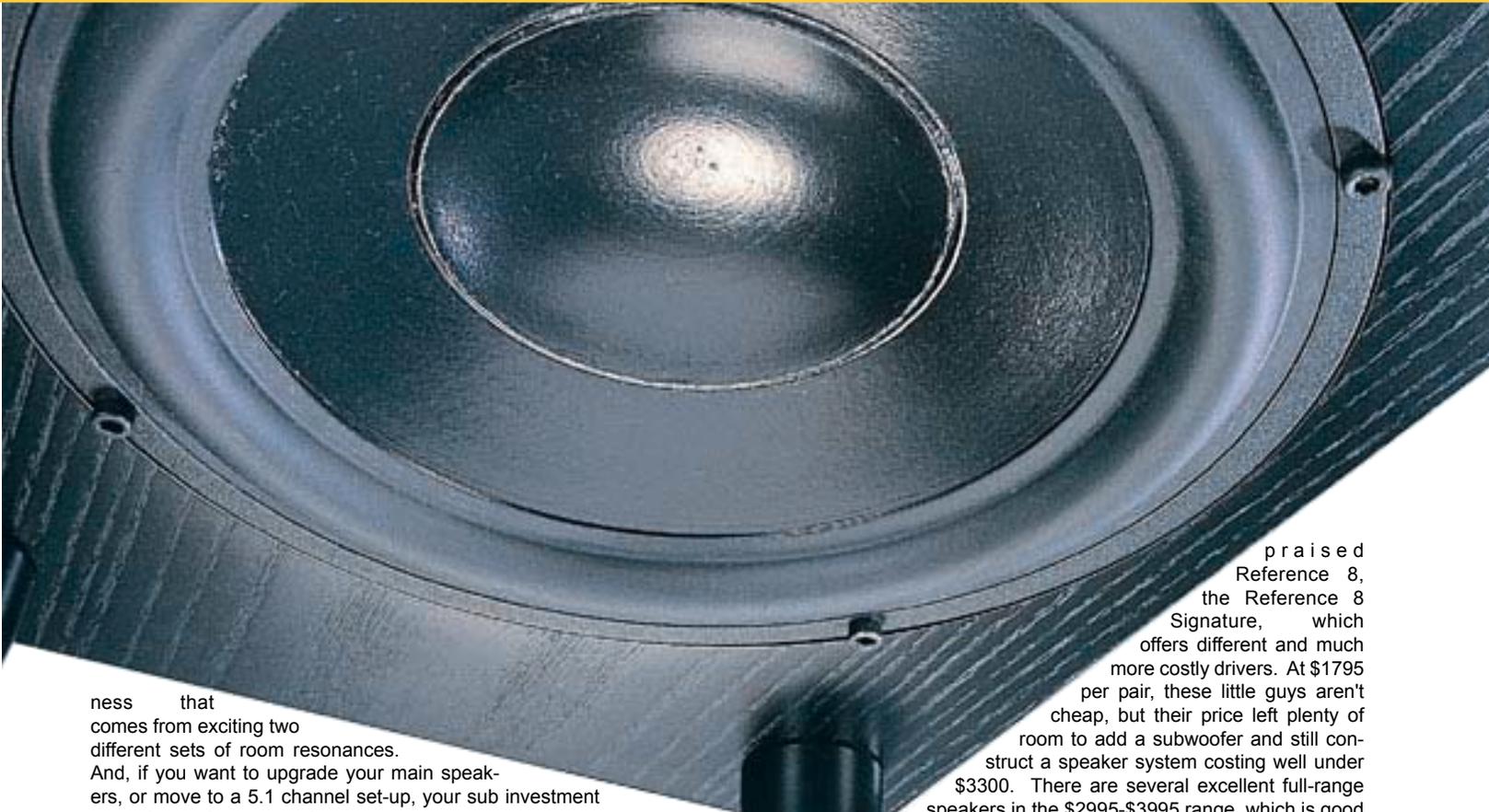
You might imagine side benefits, too. The subwoofer-oriented strategy allows you to chart an upgrade path if you're enchanted by main speakers in a given price range but realize you may want to add near state-of-the-art bass at some later point. Subwoofers give you expanded options. For example, you no longer need the most powerful amp, because the sub you add will be powered. Similarly, you are free to



choose your main speakers and amplifier more for midrange and high-end excellence than for bass extension to take advantage of this (in addition to the ProAc main speakers addressed in this review, the Magnepan MG12/QRs reviewed by Sallie Reynolds elsewhere in this

**"The magic of the ProAcs is that they offer a level of transparency that is very like an electrostat. They give the sense that a veil or filter has been removed between you and the music. Each instrument or voice is clearly delineated, and is very fine grained."**

issue are good examples of speakers that offer terrific mids and highs with a completely different soundstage from most other speakers). Another nice element of the satellite-sub approach is modularity. You can add another sub—generally not for bass power, but for the smooth-



ness that comes from exciting two different sets of room resonances. And, if you want to upgrade your main speakers, or move to a 5.1 channel set-up, your sub investment doesn't have to go down the drain.

But, let's be honest: this strategy rubs against the grain of high-end audio thinking. First, it involves the use of (hold your nose!) *home-theater* products. Secondly, it seems to mimic the awful satellite/subwoofer approach used in many dirt-cheap speakers packaged with computers and one-box stereo systems. However, if you read the fine print above, and know that the devil is in the details, there is scarcely any connection between the alternative strategy I propose and either entry-level home-theater or computer speaker systems.

What I found is that this alternative satellite/subwoofer strategy can produce not just acceptable but superb results. I was rather surprised, actually, at what can be achieved, and I think there is a very real possibility that the sat/sub approach can deliver better results for the money,

**"Electric bass, when done right, gives you a sense of air moving in the room, combined with clear articulation of upper-bass frequencies coming from plucking the strings or from playing higher on the fretboard. The REL nailed this sound, pretty much out of the box."**

at least for certain listeners. As you might expect, it requires a lot more work and thinking than simply buying a pair of full-range speakers and setting them up correctly.

To test this idea, I had to start with equipment that, as far as I could tell, fit with the strategy outlined. I chose the ProAc Tablette for midrange and high frequencies because experience with this long-standing design series (ProAc has offered a version of the Tablette for 20 years) told me that they possessed some state-of-the-art qualities. ProAc has recently released a new, more extreme version of the highly

praised Reference 8, the Reference 8 Signature, which offers different and much more costly drivers. At \$1795 per pair, these little guys aren't cheap, but their price left plenty of room to add a subwoofer and still construct a speaker system costing well under \$3300. There are several excellent full-range speakers in the \$2995-\$3995 range, which is good because I wanted the competition to be stiff.



I chose the REL Strata III subwoofer to mate with the ProAcs. This choice was based on the simple fact that the REL people have a clearly articulated goal of building subs for the purpose of seamless integration with main speakers *for music* (they work well on film soundtracks too, but REL feels that music represents the greater integration challenge, a view I can wholeheartedly support). It didn't hurt, in my mind, that REL has an excellent reputation among audiophiles. At \$1295 in Brittex black (or \$1495 in furniture-grade wood finishes), this is an affordable sub by high-end audio standards (though not a cheap one as measured by the "inches of woofer per \$" criterion). More on that in a moment.

As luck would have it, the ProAcs arrived about a week before the REL. Anxious to break them in, I set them up with my reference NAD 320BEE amp and the Yamaha S2300 universal player. I also tried \$399 and \$999 subwoofers that I had on hand, both of these from well-known manufacturers and sporting very positive reviews in the home-theater world. As is my practice, I used RPG's speaker location software so that I could start with a setup that had a logical hope of producing smooth bass (this software frequently reveals that a chosen speaker/listener placement combination probably has distressingly lumpy bass).

After a few days of listening to many CDs, and countless adjustments to the phase, crossover, and level knobs on the subs, I was ready to throw in the towel. Much of the time, I had a weird combination of inarticulate, slightly boomy bass, combined with a lack of solid bass power. Maybe the ProAcs, because their bass doesn't go very deep (they roll off at 70-80Hz), forced these subs to run up to frequencies their designers never intended? Maybe I never found the right control combination (the permutations on many subs are astounding)? Maybe less-expensive subs are mainly designed for home theater's "Low Frequency Effects"? In any event, the sound of the ProAcs alone was preferable to the sorts of things I heard when I added these subs. Given that, buying subwoofers by the pound isn't very appealing.

Just before I lapsed into terminal depression about the sound I was getting, the REL arrived. I wasn't too hopeful, but I carefully read the instruction manual, which turns out to be an absolute must. Why?

Because the REL design runs counter to the assumptions that a typical audiophile would make. First and foremost, REL insists that the best hook-up method is to make connections through the high-level outputs (i.e., speaker terminals) of your amp. The idea is that the character of the amplifier must be reflected in both the main speakers and the sub. I was skeptical, but the manual is very clear, so, hey, why not? REL is also very clear about not setting the bass cutoff frequency for the sub too high. This is in part because the REL concept runs the main speakers full range, and if the "crossover" is too high, you'll get a bass bump where the sub and main speakers overlap. Finally, the manual has some practical tips for setting the other control knobs (phase and level). You would think the latter would be commonplace, but you would be wrong. Actually, after reading many other subwoofer manuals, you're often hard pressed to figure out what the controls really do.

The initial setup process for the REL took about 15 minutes. I then put Jennifer Warnes' *The Well* [Ryco] into the Yamaha, pressed play, and as I was sitting down, I thought "Whoa!—real music." Electric bass, when done right, gives you a sense of air moving in the room, combined with clear articulation of upper-bass frequencies coming from plucking the strings or from playing higher on the fretboard. The REL nailed this sound, pretty much out of the box. In addition, great bass, because it is so often the rhythmic foundation of the music, has to sound like it is in time with the music. All too often, speakers deliver bass that sounds as if it is slightly lagging. The REL got this part right, too. You can tell when you have the urge to crank up the volume that the rhythm is right.

In the past, much criticism has been leveled against subwoofers because the "character" of their sound just seemed different from that of the main speakers. This is a common topic of discussion when mating subs with electrostatic speakers. Whether by luck or good design, this "dis-integrated" sound was not what I heard with the REL and the ProAcs. I found this a bit surprising, since the ProAcs have a very distinctive and "fast" sound.

The magic of the ProAcs is that they offer a level of transparency that is very like an electrostat. They give the sense that a veil or filter has been removed between you and the music. Each instrument or voice is clearly delineated, and is very fine grained. The other part of the ProAc magic is that the speaker seems to have very low distortion, so you aren't punished with harshness in order to have this level of transparency. Try the SACD version of Janis Joplin/Big Brother and the Holding Company's *Cheap Thrills* [Sony]. SACD or not, this is an old, live and not very well made recording. But on the ProAcs it comes together because you can hear each of the great musicians clearly, with-

out a laser shot to your eardrums. I found this aspect of the speaker to hold up in comparison even with much more expensive speakers like the Revel Salons.

There is a price to pay for this transparency, though you may not care about it. First, the soundstage of the ProAcs is miniaturized. Image height in particular is restricted. I noticed this in comparison with the Revels and with a classical British monitor, the Harbeth HL-7ESII. The ProAc is rather like looking at a small but very high resolution TV.

The second tradeoff with the ProAcs is that you never quite escape the feeling that their frequency balance is tilted toward the mid-treble. Overall, the voicing of the speaker is rather "light." It sounds as if the frequency response rises slowly and smoothly from about 100Hz to 7kHz and then flattens out (there can be some very high-frequency brightness, too, but this is quite amplifier dependent and may not be a characteristic of the speaker at all). Note that this tilted frequency balance might be termed "bright". This, how-

ever, would be far too crude an assessment. To understand the Tablettes' carefully chosen high frequency balance, we really have to think about several factors.

First, we could, and I do, mean that the speaker's frequency balance affects the tonality of instruments. With the Tablettes this effect is minor, but, for example, violin tone is a little off of the much-sought-after lush, rosy target. This error is small, but if bowed string tone is the sine qua non of high frequency reproduction for you, the ProAc probably won't be your cup of tea. Before you turn the page though, consider some other issues. When I say the Tablettes are bright, you might think this means that the speaker exaggerates the leading edge of transients, but this is decidedly *not* the case. On the contrary, the Tablettes' treble smoothness really makes them very listenable. In fact, there are many speakers I've heard with a bit less treble energy than the Tablettes, but whose treble paradoxically sounded rougher and edgier, and I found them much less enjoyable than the "brighter" ProAcs. Finally,

I must say that many speakers address the tonality problem, but in the process lose a natural sense of dynamics. Here is where the Tablettes shine—they handle macro and micro dynamics with tremendous aplomb. For example, when I listened to guitar, mandolin, banjo and dobro this accurate dynamic capability in the high frequencies gave plucked string a sense of life that is unusual. Quite an accomplishment.

In sum, the ProAcs offer a sonic character from 200Hz on up that is distinctive and seductive. They offer a level of transparency that we usually associate with speakers at four or five times the price, with excellent dynamics, and good, but not perfect instrumental tonality. At the same time, they lack low frequency orchestral weight, the punch of kick drums, and the tonal color of string bass needed to really be considered great.

A key point is that these are characteristics that I think would be hard to find in most \$2995-\$3995 full-range speakers. If you value these characteristics highly, or if you were to find another speaker with similar-



ly outstanding albeit different qualities, you'd be sorely tempted to buy— if only you could solve the bass problem. This is where you'd like a good subwoofer to enter the picture.

Given my earlier experiences with the subs in this system, I was surprised that the character of the REL fit in so well with the ProAcs. That it does is because the bass on the REL is quite open and detailed. Try any of the recordings in my "reference bass CD list" and you'll hear quite specific tone color and air. You can, for example, clearly hear the difference between the subterranean synth on Little Feat's *The Last Record Album* [Warner] and the acoustic bass on Patricia Barber's *Verse* [Blue Note/Premonition]. This is not always the case. At the same time, both the midrange of the ProAcs and the bass of the REL sound tightly controlled—perhaps a little more tightly controlled than in live music. The air is there, but it just isn't as full as in reality.

I recently had the opportunity to attend a performance of Puccini's *Turandot*. There are some enormous bass drum whacks in this marvelous opera that energize the entire hall. Listening to a recorded version [Mehta, Sutherland, Pavrotti; Decca], I didn't get the same sense of compression waves moving across the hall. Part of this is the recording's limitations, but part of it is the tight control of the speakers. Please don't misunderstand, this system has ample, detailed bass, it just errs ever so slightly on the side of control rather than looseness (the side to err on, certainly).

The REL is an exceptional subwoofer, but good integration depends equally upon placement and setup flexibility. In a one-box, full-range speaker, the woofer location is pretty much constrained by where the mid/high frequency drivers need to go for imaging purposes. Not so with a separate sub. The downside of the separate sub is that you have to do a lot of work to get the integration right. I found the REL pretty easy to get close to right, but the last 5% took weeks, because I had to listen to a lot of recordings and then make final tuning adjustments by trial and error. Once you have high definition bass, you realize not all recordings treat bass with equal respect, leading you to undo some of your adjustments. And with the controls staring you in the face, you're always tempted to try for "a little bit better." This can be a distraction for a while, but it is a worthwhile one.

The overall effect of the REL plus the Tablettes is one of transparency and dynamic accuracy. Transparency, in this case, means you can clearly hear the qualities of each instrument, and because this is true up and down the frequency spectrum, one of the common reminders that the music isn't real but is being reproduced goes away. Similarly, the dynamic "aliveness" of real instruments is retained, making it that much easier to focus on the music, not on distractions. The major area where this system falls short is in maintaining the illusion of the performance space. I would love to try this satellite/subwoofer system in a larger listening room to see if this could be ameliorated.

I think some comments are in order that might be extrapolated beyond these specific speakers. First, the value of adding a sub (one or two), interestingly, doesn't lie so much in getting that 22Hz organ pedal right; rather the value of the sub is in allowing you to get the whole mid-bass and low bass range from 100 Hz on down right. I would caution against thinking of subwoofers as *subwoofers*. Rather, they are woofers, plain and simple, at least in this application. The point here is that the range from 100 Hz down is disproportionately multifaceted. Numerically, the range from 20 Hz to 100 Hz seems miniscule in comparison with the range from 100 Hz to 20,000 Hz, but the ear can hear so many different tonal colors in this range, and so many arrangements are founded on these frequencies, that mid and low bass is crucial. I still agree with conventional audiophile thinking that the midrange has to be right, first and foremost. But getting the bottom 2-3 octaves right in quality and level is a crucial next step toward great musical reproduction.

Second, there are much, much bigger differences between subwoofers than I imagined. These differences are at least as big as the differences between well-designed main speakers (assuming they have similar radiation patterns). If you clearly understand the point about subwoofers really being woofers, this makes a bit more sense. This observation also helps clarify why the sat/sub approach may have advantages over the integrated one-box approach. If there are huge differences between subs, why should we assume that every talented speaker

designer has equal talent for both bass and the rest of the frequency spectrum? Some designers may be able to do both, just as you may own a preamp and a power amp from the same manufacturer. But you might choose them from different designers. Cherry picking, as they say.

Still, with many designers working on full range speakers in the \$2995-\$3995 range, it is worth asking if these integrated speakers in point of fact are just plain better. If you value coherence above all else, I would have to say yes. To take specific examples, both Thiel (the CS 2.4) and Definitive Technology (the BP7001SC) make outstanding speakers around this price range that have excellent bass, mids, and highs and are tightly integrated. However, if you don't mind sacrificing that last bit of integration, a sub together with very high-quality mid/high-frequency speakers can offer you greater transparency from the bass on up. In particular, I would say that if you find a speaker with bass on the light side, but mids and highs that you love, there is every chance that adding a high-end sub could get you everything you need.

## Specifications

### REL Strata III Subwoofer

**Frequency Response:** 20Hz-120Hz

**Power:** 100 watts

**Drivers:** 10" downward facing driver in sealed box

**Inputs & Controls:** Line and high-level inputs, low pass filter with 24 selectable frequencies from 24hz to 96hz, phase switch, gain control

**Dimensions:** 16.39" x 20.57" x 12.81"

**Weight:** 51 lbs.

**Price:** \$1295 (Brittux Black finish), \$1495 (Cherry, Walnut, or Rosewood)

### ProAc Tablette Reference 8 Signature

**Driver complement:** 4.5" woofer, 1" silk dome tweeter

**Frequency response:** 38-30 kHz

**Sensitivity:** 86db

**Impedance:** 8 ohms

**Recommended amplifier power:** 10-100 Watts

**Dimensions:** 6" x 10.5" x 9"

**Weight:** Not specified

**Price:** \$1,795/pair

## Manufacturer Information

### REL Acoustics

c/o Sumiko

2431 Fifth Street

Berkeley, CA 94710

(510) 843 4500

www.sumikoaudio.net

### PROAC Acoustics

c/o Modern Audio

112 Swanhill Ct.

Baltimore, MD 21208

(410) 486 5975

www.proac-loudspeakers.com

## Associated Equipment

NAD 320BEE and Audio Research VSi55 integrated amplifiers; Meridian 861 Digital Controller; Sunfire Signature power amp; Yamaha DVD-S2300 CD/SACD/DVD player; Revel Salon and Harbeth HL-7ESII loudspeakers; Monster cable speaker cables and interconnects.

## Selected high-quality recordings useful for bass evaluation:

Patricia Barber, *Verse* [Blue Note/Premonition]

Annie Lennox, *Bare* [BMG]

Little Feat, *The Last Record Album* [Warner Brothers]

Orlando "Cachaïto" Lopez, *Cachaïto* [World Circuit/Nonesuch]

Jennifer Warnes, *Famous Blue Raincoat* [Cypress]

Jennifer Warnes, *The Well* [Sony]