

## The Infinity RS-1: Ganging Up On HP

Let me say right away that I believe the Infinity RS-1, at the very least, deserves a strong four-star rating. This means that the RS-1 is on a level of direct comparison with the IRS Series II and, I'd say, is the best dollar-for-dollar value among the "great" speakers. (If you recognize those words as HP's in describing the Magneplanar Tympani IV you are correct: I feel strongly that they more aptly describe the RS-1.)

Before continuing my case, I think it only fair to describe to you what my listening biases are so that you may, in the words of HP, "evaluate the evaluators." Besides a natural midrange and the ability to capture the true tonal characteristics of the instruments of the orchestra (or outstanding frequency response linearity, if you will), which, I would assume are on everybody's checklist, there are, for me, three additional items that need to be added in order to make a great speaker system and the RS-1 has all three, in spades:

It has the strong bass foundation that I consider necessary for the enjoyment of symphonic music. Its dynamic contrasts are superb, and its imaging is phenomenal. In all three of these categories, and I include the Tympani IV, the RS-1 is second only to the IRS Series II.

In fact, I believe the RS-1 is the equal, or even slightly better, than the IRS-II in its reproduction of the bass foundation of the symphony orchestra. Now, I want to make it clear here that I am not referring to the lower fundamentals of a nine-foot concert bass drum or a regular bass drum, for that matter, because among the great speaker systems only the IRS can reproduce that sound with concert hall fidelity. I am talking about the bass section of the symphony orchestra—"when the RS-1 woofer system reproduces bowed bass, the tonal textures are correct and the overall weight is reminiscent of only that I have heard live." Word for word I agree with PHD, while with the IRS, the textures in this area, are, at times, reproduced with more weight than I have heard live.

PHD says that "the RS-1 has the uncanny ability of setting up one of the most realistic stereo stages, aside from the real thing, that I have ever experienced. . . . It then places images on that stage with a three-dimensional acuity." Can anyone ask for more? Well, I've done this little experiment with friends who

are hearing the RS-1 for the first time. With a symphony orchestra in full roar, I ask them to go up to the RS-1 and stand between the mid-tweeter panels. What they hear is this: From the left wall of the room to the right, there is a seamless string section and three out in front of them at the rear wall and in position are the tympani, trumpet, and trombone sections. My friends flip out when they hear this and I don't blame them. You will too.

HP states that Infinity's people were mystified by his relative lack of enthusiasm for the RS-1. Well, so were PHD, Sam Burstein, and yours truly until we each, independently, came up with the same reason why our listening results differed from HP's in those areas where he downgraded the RS-1.

Despite these differences, which I will soon point out, our respect for the hearing acuity of HP has remained the same. How is this possible? Because, despite all his "relative lack of enthusiasm," and a conditional and optimistic four-star rating (in actuality, even a conditional four stars is a superb rating in TAS) he still says "I've far from exhausted my efforts to get these things right." It's as though his subconscious was telling him he might have missed something and so he wasn't making the review his final statement on the RS-1.

If anyone thinks I am saying this to "butter up" the boss, then you don't know PHD, SB, SM or, for that matter, HP, who has, right from the inception of TAS, insisted on multiple reviews of the most important High End products to ensure that different viewpoints are expressed. To my knowledge, no other audio magazine in the world would dare follow his policy.

While you salivate in anticipation of where we think HP went wrong, you will need just a little more background. On the evening of March 27, Sam and I were returning from the Tenth Anniversary Party of TAS in a driving rainstorm. We stopped at my house and Sam came in to have a hot cup of tea while he waited for the rain to let up. We talked about the party while we listened to some chamber music via the RS-1. On our laps, hot off the press, were our unopened copies of the Tenth Anniversary issue of TAS. About halfway through the record, Sam remarked on the beauty of the sound

and then told me that he was considering selling his QRS-1D (four star "worth-its-weight-in-silver" system) and buying the RS-1. When I asked him why, he proceeded to run off a series of descriptive phrases which turned out to be, almost verbatim, the words of PHD.

We then opened our copies of TAS to check out the RS-1 reviews. Both of us nodded our heads in agreement as we read PHD, so similar was his point of view to ours but, as we read HP's list of liabilities, we found ourselves temporarily stunned because they simply did not apply to our listening experience with these speakers.

PHD, Sam, and yours truly all feel that the source of our differences with HP lie in one root cause: Music Room One. It is our belief that, for the first time, after reviewing so accurately so many other speakers in this room, a speaker came along (the RS-1) with such large dynamic contrasts and bass energy that it has caused room problems which, in turn, have affected the speakers in the way HP describes. We therefore urge him to move these speakers to another room that is better furnished than listening room one because we feel it is the lack of furnishings alone, or in combination with the shape of room one, that is responsible for HP's different point of view. So, the criticism that follows should be seen in that light.

HP asserts (Issue 29, p. 27) that the "more typical and average American style listening room... is close to a square than a rectangle" and that (Issue 21, p. 67) "Room One is a living sounding room... it is sparsely furnished." It is also a square, 12' X 14' 8". Now, I will make no claims as to what the average American style listening room looks like, but I would be willing to make a rather large bet that the average American who buys an RS-1 does not have an average American style listening room and if he or she does, it is not sparsely furnished.

My own listening room is 11' 8" X about 22' (certainly not a large one) and has wall-to-wall carpeting with a sofa, two chairs, and a bench. PHD's is 17' X 27' (now that's large, and, boy, do I envy him), wall-to-wall carpeting, and an overstuffed sofa. So, even if your listening room is somewhat smaller than mine or closer to a square in shape, as long as it's reasonably furnished I feel sure that you will get the same great sound from your own RS-1 that PHD and I are getting from ours.

HP says that "the well-nigh universal complaint I've heard from RS-1 owners (Marks, Burstein, and PHD from TAS and

Rick D'Aversa, a TAS fellow traveler) has been about their inability to drive the woofer towers satisfactorily."

Being Marks, I'll speak first. It is true that I told HP, just after my initial set-up of the RS-1, that I was not getting enough bass, but I never said it was because of any lack of power. I had simply placed the speakers in the approximate starting position recommended by Infinity. By following Infinity's instruction booklet suggestions for increasing the bass strength of the woofer towers (four simple woofer movements per side), I was able, in a two-day period (it could have been done in one), to get the RS-1 into a state of balance with the bass contour frequency control set at zero. I now regret not calling HP and making him aware of that fact.

I did not conceive that he would have had any more problems than in achieving a correct match between the mid-tweeter section and the woofer towers. As for Burstein, HP simply forgot that he owned the QRS-1D.<sup>1</sup> In fact, one of the major reasons Sam prefers the RS-1 to the QRS-1D is the correct balance that I've just discussed which is not found in the QRS-1D. Here's PHD: "When a solid-state amp is used to drive the bottom end and a tube power amplifier is used to drive the mid-tweeter panels, the blend is nearly seamless."

And here's what PHD has to say about his woofer tower problems: "It can be driven to what would be considered 'loud' listening levels by a good amp such as the Hafler DM-500...". He also named a half-dozen other amps that will do the same including his now-preferred Phase Linear DR-306, so I do not see HP's point of "requiring the listener to muddle about trying to find the right bass amp" because PHD has already done the job for them and saved them all the money HP implies they would have had to spend to get it right. PHD continues "...but I have not found an amp that can drive it to rock concert or 100 plus dB levels at very low frequencies." This is a 11' 8" X about 22' room for HP and PHD whose job it is to search for the absolute sound, but you have to keep in mind that only the IRS, of the "great", speakers, provides a deeper bottom end than that of the RS-1. (I can just see EM chucking over this as the Darth Vader boys HP, PHD, and Arnie Nudell exchange woofer cone blasts.) I think it more important to our readers to know that "this product provides

<sup>1</sup>Neglect. HP heard Burstein's description of Mark's system.

concert hall realism at reasonable volume levels." You are dead right, PHD, and SB concurs.

Other complaints of HP are that the RS-1 is tense, cool, and "does not bloom or form in the way real music does." Like Nudell, PHD, and SB, I vigorously disagree with all these opinions. When I play the Rachmaninov Variations on a Theme of Paganini (RCA LSC-2430), the Chicago strings are so sweet they are almost tangible ("that ole easy breezy naturalness of the real thing loud or soft," to quote HP). The RS-1 simply plays peak what it is fed. If it's a horror, like the CBS Szeft Brahms Symphonies, it sounds like a horror, but if it's any of the great live acts, you have the naturalness of the real thing. Thus, the RS-1 is not, in my opinion, tense or cool, and since it does provide concert hall realism, the sound blooms for me in the way real music does.

At this point I think it important to state, once again, that we believe the problem is not with HP's ears. We feel certain our differences are because of the unique interface of the RS-1 with listening room one. We also think that when he hears these speakers in a proper environment, the RS-1 will take its place as second only, at this point in time, to its Dad, IRS, in the never-ending search for the absolute sound—live music itself. If you prefer another great speaker because it has a special virtue that you prize above all others, I salute your choice. After all, no one speaker has all the keys to the absolute sound.

The irony of all our differences with HP is implicit in the first sentence of PHD's summary (a summary with which I fully concur): "If you are interested in a speaker system that will interface with nearly every listening room and one that will give you outstanding frequency response linearly, coupled with superb dynamic range, dynamic contrast, and low distortion then the RS-1 speaker system is for you."

—Sidney Marks



PHD's Thoughts:

Two rather significant changes have been made to this loudspeaker system (one by yours truly and one by Infinity) since my debut on the system in our last issue. The In-

finity modification is especially noteworthy for two reasons. First of all, something has happened to Infinity's technical services department. The instructions for installing this modification were the best I have ever seen from any manufacturer. They are well thought out, clear, easy to read, and even come with a colored schematic showing the placement of parts and wires for those who can't or won't read.

What Infinity did here was to take a rather complex crossover modification and simplify it to the point that any one handy with a screw driver and a soldering iron could install it in fifteen minutes. Infinity has replaced all of the midrange and high frequency non-polarized capacitors in the crossover. What this does is open up and purify the midrange, adding a degree of inner detail and intimacy to the midrange of this system that has rarely been heard from any other loudspeaker system. The top end of the RS-1 is also more extended and open (with possibly a dB or two more energy at the extreme top), in making this minor crossover change Infinity has removed a veil (or two) from the midrange/woofer system along with a slight trace of grunge that even yours truly never realized was there. The modification is definitely worth the time and effort it takes to install it.

In our last issue, HP's commentary on the RS-1 certainly left most of us feeling that HP must be of at least two and possibly three minds about this speaker system. Most of us who have listened at length to the RS-1 do not agree that there is anything odd about it. However, we do understand why HP could have reached that conclusion since the music room he used for testing has a tendency towards those characteristics. [HP: PHD, too, has never done any serious listening in Room #1 — it is not cold.]

The second modification that I have made to this speaker system has been the addition of a second pair of Infinity woofer towers. My suspicions about the bottom end of this speaker system have been confirmed. This system does provide an exceptional degree of definition, but since it has roughly one third the radiating area of the woofers found in the IRS, it is incapable of moving those large amounts of air in my listening room. Thus, the lack of bloom. When I finally figured out how to correctly interconnect two pairs of woofer towers all of the concerns that I had with the bottom end disappeared. While it is true that the mid range/mid bass coupling is still not perfect, it is so close that one no longer focuses attention in this critical area. With four woofer

towers giant bass drums sound just that way; huge wave fronts of low and mid bass energy now move through the listening room with ease. In order to eliminate (or at least ameliorate) standing waves within the room, these four woofer towers were moved towards the inside of the stereo stage and angled slightly toward the center of the listening room. As a result the low frequencies do not pile up around the periphery of the room causing acoustic feedback (and avoid in the center of the room). The woofer system is now capable of producing flat 20 to 100 Hz bass energy at listening levels in excess of 100 dB.

In case you are interested in the electrical hookup of the additional woofer system, I will describe it, but I warn you, it is a rather costly addition. Since the RS-1 woofer towers are constantly monitored by a special servolike feedback system within the crossover network, one cannot just hook an additional woofer tower in series or parallel without creating a substantial mismatch between the crossover and the woofer itself, but yours truly theorized that since all crossover monitoring systems, and woofer towers dynamic characteristics were exactly the same that one crossover could feed two identical amps, each driving two woofer towers with complete compatibility. (The trick was to install another identical power amplifier\* to drive the second set of woofers. This power amp derives its input signal from a parallel connection to the power amp driving the first set of woofers.) As a result you have one crossover which is monitoring the performance of one woofer tower, but driving two identical amplifiers into independent but

identical woofer towers. The result is the same superb definition and low coloration with three times the bloom and bottom and energy, and no woofer cone breakup or bottoming. It was necessary to readjust the woofer to mid range crossover control to assure that the same low coloration characteristics were maintained. In my music room I have found that the lowest low frequency cut off point works best with the woofer volume reduced by four dB (relative to a single woofer system).

Bottom line, I have heard only one other speaker system that outperforms the Infinity RS-1, its big brother the IRS.

#### *HP Responds:*

*None of the aforementioned gentlemen have ever done any serious listening in Room 1, I have.*

*Room 1 is capable of sustaining very deep bass. Maybe it's the odd dimensions, the 9-inch plaster walls, and the basement underneath. It is also very analytic and extremely revealing since it masks virtually nothing. I consider it neutral, probably more yag than yin.*

*However, students of the genre will discover from Mark's account and the previously published account of PHD's listening room what gentlemen live in is an environment that is, er, shall we say, most appropriately called plush. Meanwhile, poor ole country-boy HP must make do with an (relative to them) austere environment; one that injects less "personality" on the final sonic result.*

*Yes, I have heard the RS-1's sounding anything but cool and I've heard the bass and reproduced well, but not with the authority of the IRS (my standard). PHD's solution—four woofer towers—hardly invalidates my comments.*