

“ ... very, very good ...
approached the awesome ...
I AM IMPRESSED ... ”

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HI-FI HOME AUDIO & VIDEO

“In some reviews I read, the reviewer claimed the Studio/100’s equaled or outperformed speakers in the 5 - 10 kilobuck range. My experiences with these loudspeakers gave me no reason to doubt this claim.”

by Dennis O. Wasnich

STUDIO/100

The Reference Series of loudspeaker from this Canadian manufacturer is advertised (see their web site at www.paradigm.com) as “extensively designed and refined,” “taking a cost-no-object approach.” Far be it from me to dispute their claims, but I cannot think that cost considerations were ignored in any speaker Paradigm makes. On the other hand, Paradigm has a well-deserved reputation for offering excellent speakers at the price-points they represent. The Studio/100 v.2 is the top-of-the-Reference Studio-line model, representing the best that Paradigm can offer (at least at this price point). There are four other non-amplified models in the Studio line, the Studio/20, 40, 60, and 80. The “v.2” is the second version of the Studio 100 (hence the name), and represents improvements in nearly every area of the speaker components and design despite its close visual similarity to the original

model. They are offered in a few finish alternatives of two basic types: laminate and veneer; the laminates are nice, though obviously “artificial,” and the veneers are utilitarian mostly, looking nice without being the “richest” one could imagine. In the case of the veneer finish, wood panels are actually added to the sides of the units, making them slightly larger and presumably reinforcing the already-rock-solid cabinet. The difference isn’t supposed to affect the sound, but it’s hard to imagine that extra stiffening not making the



cabinet even more non-resonant—a good thing to consider for the extra money. In either type, there are only three “finishes” available: Light Cherry, “Rosenut,” and Black Ash. Of the three, the “Rosenut” is the most “rich-looking”—my best guess from examining the grain is it’s actually an oak veneer, stained with Walnut and Rosewood varnish/stain, making it a deep burgundy color that looks nice, although I personally would have preferred the oak (if so) to remain unstained.

“... I am impressed ... Those drivers can thump when the program source offers thumping material! ... great tautness ... the Studio/100s seem to suck up watts and deliver more and more sound ... showed impact, weight and speed ... full and warm, solid and convincing ... exciting to listen to.”

Speaking of the cabinet, it is *heavy*! The 110-pound weight, while possible to maneuver around your listening room, makes it something that will stay put when you get it there! I found that “walking” it into position was the best one-man method. Carrying the shipping boxes with the speakers inside though, is a two-man chore unless you have a cart. You unpack the speakers by opening the *bottoms* of the cartons, removing the piece of 7-ply plywood and other (cardboard) packing materials, including a small “box” attached to a filler. In that box are the four “spikes” and “locknuts.” The spikes are a threaded rod about two inches long, sharply pointed on one end and with a screwdriver slot on the other. These thread into four bushings mounted in the bottoms of the speakers. The locknuts are round, about two inches in diameter and maybe an inch thick with a step on one side, and apparently gold-plated. While the instructions aren’t

perfectly clear about mounting the feet, it appears you have four options: put the pointed end of the spikes into the bushings and using the locknuts for feet (tightening them while holding the spike with a screwdriver); or leave the pointy-end out (as spikes) and using the locknut to hold them at a correct height or leave the screwdriver-end of the spike protruding for a less “sharp” spike, or turn the locknut small-side down for a smaller foot. The problem with the second method is there’s no good way to hold the spike since now the screwdriver slot is inside the speaker. Knowing I was going to have to maneuver them, I set them up in the first option, figuring it would be easier to move them if the spikes weren’t digging into the carpet. The next step in unpacking is to set the speaker (still in the box) on its feet and then pull the box off over the top. When this is done, you finally get to see the speaker in all of its glory. The top, back, front and bottom are a dark gray, textured but plain finish while the sides are in the veneer (or laminate—mine are the rosenut veneer, if that matters to you). The front is mostly covered by the dark cloth-covered grill which snaps against the front with several plastic pins. The manual says these speakers are designed to sound best with the grills on, so I played them that way (after taking a quick look at the high-tech-looking drivers under them).

There are four five-way binding posts set in the lower portion of the back of the units at an angle to offer better access. I’ve read complaints by some magazine-reviewers about these binding posts, but found them easy to use, although I’m not switching them every five minutes to another speaker cable to find a “perfect” match. These posts are “shorted” together with two very light gauge metal pieces that appear to be gold-plated. The manual says they’re intended to be bi-wired, so I set them up that way with Monster Cable Original speaker leads about 12 feet long. The holes in the binding posts are easily large enough for such heavy cable leads (I didn’t use any kind of termination on them, figuring to let the strands of copper smash down for better contact).

“There is only one way to describe the midrange — “Sweet.” ... sounds are reproduced very cleanly and dynamically ... Vocals (male or female) come through with lots of detail and emotion ... guitars had the right amount of “ring” and presence to make them come alive ... Piano solo was — rich, warm and beautiful ... Horns — clean and bright ...”

I gave them a quick audition—they were a bit “bright and tight” (“lean ’n mean”?) right out of the box (I had expected that as I have been told by everyone including Paradigm that they need to be broken in for several hours before they sound their sweetest—a fact I confirmed while auditioning speakers in my dealer’s showroom where they had a “new” unit and one with reportedly 150-hours of use on it, and there was a whole *world* of difference!) Still, they didn’t sound too bad in their “virgin” state. After that quick audition, mostly to make sure they worked, I put them on a diet of Pink Noise for about 20 hours over the next three nights while I slept, doing some intermittent auditioning during the days when I had the chance. After the first night, they had smoothed out quite noticeably, and continued to improve at least through the second night—the third was just for “insurance” as I pretty much considered them “broken in” by then, although the bass continued to improve slightly over the next 20+ hours of use.

DETAILED DESCRIPTIONS:

The cabinet of the Studio/100 is what Paradigm calls a “Cascade enclosure,” meaning there are multiple braces inside. Three vertical and three horizontal braces

“... a cabinet that is solid—rapping on them with your knuckles results in a rather muted, dull “thunk” that gives no indication of anything moving as a result of the impact (and sore knuckles!)”

grid the inside of the cabinet (at least according to the brochure—I didn’t cut them open to look!) with large holes cut through each section to allow air to move through without restriction. According to that brochure, “MDF construction is used throughout, front and rear baffles use self-locking serpentine joints, and internal braces are arranged in a sequential interlocking cascade—the first vertical brace is locked into the first horizontal brace, which is then locked into the next vertical brace, etc.” The midrange unit is enclosed in its own separate “box” of MDF mounted to the front baffle to isolate it from the woofers. What Paradigm calls “UHP” (Ultra-Fine High-Loft Polyfiber) damping material fills the chambers inside the cabinet to absorb rear wave and internal standing waves while allowing low frequency waves to reach the port at the lower front of the cabinet. The port has flared edges on both ends to reduce turbulence. All drivers are mounted extending through the front the same thickness as the baffle frame so that when the frame is attached, the drivers end up acoustically “flush-mounted” to reduce reflections. The end result is a cabinet that is *solid*—rapping on them with your knuckles results in a rather muted, dull “thunk” that gives no indication of any-thing moving as a result of the impact (and sore knuckles!)

Paradigm claims to utilize “ideal response” drivers (which they manufacture themselves), allowing them to use simpler crossovers, in turn allowing them to minimize the components in the crossover

network. The design is claimed to be a phase-coherent, quasi-Butterworth design using high-power Ceramic resistors, film capacitors in all signal paths, and air-core and steel-core inductors. The crossover boards are separated inside the cabinet to reduce any interaction, and they are set up for bi-amping or bi-wiring the speakers, which Paradigm recommends.

The high-frequency driver, a PAL™ (Pure-Aluminum-dome) tweeter is mounted near the top of the cabinet front. Its suspension uses a treated textile to ensure uniform, instantaneous power response. The “High-Pressure Die-cast Aluminum chassis” is said to eliminate mechanical flexing and ringing while also providing a heatsink. The frame is Waveguide™ coupled to promote a wide dispersion and flat response while oversized damping chambers smooth extended lower frequency response. Dual magnets increase the energy of the magnetic gap as well as provide thermal mass for greater power handling. High temperature voice-coils, ventilated aluminum formers, and ferro-fluid cooling/damping are to increase power handling, lower distortion and improve reliability.

The bass and midrange drivers use MLP™ (Mica-Loaded Polymer) cones for high stiffness to mass ratio with internal damping for smooth response. Internal/external heatsinks and AVS™ cooling are to provide high power handling and low distortion while again increasing reliability. Oversized magnetic assemblies use “symmetrically-focused-field” geometry to ensure low distortion and greater linearity. The chassis is again a “high-pressure die-cast” type to control mechanical flexing and ringing. Synthetic butyl suspensions for high hysteresis and progressive damping are used to eliminate distortions. High-temperature, multi-layer voice-coils with ventilated Apical® formers are used to increase accuracy and reliability while extended voice-coils are claimed to provide excellent liner response. The woofers are left shiny black, but the midrange driver is obviously

stiffened with some fibers, it looks like Kevlar®, although I can’t find that stated in the manual, so perhaps that’s the Mica-fibers I’m seeing. I measured the woofers because I couldn’t believe they were 8.5” in diameter—in my book, they ain’t! I measure 7” at the outside edges (the “moving part”) of the “surrounds,” making the area of two of them equivalent to a single, “real” 10” driver. I measured the midrange driver too, after my experience with the woofers, and I get 5.5” at the outside of the surrounds. The tweeter looks like 1” in diameter, so I didn’t measure it.

ASSOCIATED EQUIPMENT:

I powered the Studio/100s with my McIntosh MC-7270 solid-state power amplifier, which delivers well over 270 watts without clipping. I attached the Paradigms to the 4-ohm taps of the Mac’s output transformer as reports (and my Dealer) tell me they run in that impedance range. The Mac was fed with my B&K Components Reference 20 Preamp/Processor with Phillips/Magnavox CD and DVD players for source material. As stated previously, the Studio/100s were connected to the Mac with Original Monster Cable speaker wires in bi-wire arrangement.

Sorry, I don’t do “analog” anymore, so I won’t list that equipment here. My turntable is gone from the system, never to return. If you’re an “analogue freak” and are offended, sorry, but that’s it. I gave up the tweaking, fiddling, cleaning, adjusting, swearing, crinkling cellophane-sound, pops, clicks, ticks, skips, warps and rumbles of LPs some while back. I’m not criticizing you if you’re still putting up with that, and I won’t argue that *when they’re working, properly*, LPs sound great. (The same can be said for CDs and DVDs: *When they’re done right*, they sound great.) The difference is, on average, it takes far less effort for me to be happy with CDs and I am happier with them a greater amount of time than with LPs.

I have Home Theater equipment, and am set up for that, but to me, if a speaker reproduces music correctly, and has sufficient dynamic ability, it can easily perform Home Theater. The only thing that would cause this to not be true is a speaker's ability to handle dynamics, which is why I made that qualification in the previous statement. Therefore, I will not even address the "Movie Sound" experience in this review as it is only concerned with *music* reproduction.

"... Paradigm's tweeters give out all of the information necessary to let you visualize the brass discs bouncing and ringing away when the drummer smacks them with his stick. Horns ... punch through the other music in a live-like fashion, ... no coloration or overly-bright output ..."

PLACEMENT:

Actually, placing the Studio/100s was fairly easy. They don't seem to be too finicky about where they sit as long as you don't crowd the side walls (where you'd get reflections which would smear the imaging). They are definitely not shielded, as my first location was too close to my video monitor and degaussing was obviously required! They ended up about 2.5–3 feet from the monitor where the magnets don't effect the video tube leaving them about 8' apart and 7' in front of my listening seat. I tried them well away from the wall behind them (the "front" wall), and pushed back to where the rears of them were within 6" of the wall (making the drivers about 2' from the wall), and they didn't seem to care much (other than a slight added warmth to the bass response) either way in my fairly "dead" approximately 18' W by 12' D by 9' H listening room. I tried them

"pointing" straight ahead, and got good results, but ended up toeing them in toward the listening seat in an effort to make the imaging better for others who aren't seated optimally in the room. The only real effect on the sound at the "hot-seat" was to (very slightly) tighten up and narrow the soundstage, while the effect elsewhere was to allow a better reception of the "far" speaker. The dispersion pattern of the Studio/100s is good enough that this technique is only marginally necessary and therefore only makes a marginal improvement. Your room, of course, might differ considerably, I can only report what I found to be true in mine.

BASS:

First of all, I am impressed with the bass response from such small woofers (even though there are a total of four in the two speakers). I went from twin 10" woofers in each speaker (I replaced an old pair of Infinity RS-III-Bs with the Paradigms) to these approximately 7" drivers, and figured the bass response would be reduced. If it was, it was not by much, and the bass was so much tighter and cleaner than in my old speakers that the trade-off was to the Paradigm's advantage. Those drivers can thump when the program source offers thumping material! Using test CDs and DVDs, I determined that the Studio/100s offer useful bass energy to about 30 Hz, which is more than adequate for almost anything you're likely to play through them. There was audible output at 25 Hz, but at a greatly reduced volume; 20 Hz was audible, but barely. I am considering whether or not I will want to add a subwoofer just for Home Theater sound. It certainly isn't necessary for music-listening, and my fear is that, unless I buy a really good subwoofer, that great tautness to the bass would be hidden. Fortunately, my processor allows me to set up the subwoofer to work only on "surround sound" audio, and that would automatically eliminate its use for music (stereo-only) listening, so it is an option I am considering still. One thought though about the bass: I am

driving it with plenty of watts, (270+ per channel) and the Studio/100s seem to suck up watts and deliver more and more sound, so if you are under-powered, you might not get the bass results I got. When the Mac's meters told me there was 200+ watts going to the Paradigms, the bass output was very impressive. The *Acoustic Drum Solo* from the *Stereophile* Test CD-2 showed impact, weight and speed that was very much appropriate to the recording. Bass guitar on Lee Ritenour's *Rit Special* DVD and drums on Fleetwood Mac's *The Dance* DVD was full and warm, solid and convincing as well as exciting to listen to. After they had broken in for several more hours, the bass leaned ever-so-slightly toward "warm," and I then reversed the feet to utilize the spikes—this tightened up (and slightly lessened) the apparent bass level from the speakers.

MIDRANGE:

There is only one way to describe the midrange of the Studio/100: "Sweet." By that, I mean the sounds are reproduced very cleanly and dynamically while at the same time never becoming strident or harsh. Vocals (male or female) come through with lots of detail and emotion to the point I could almost guess the expression on the face of the performer as they "got into" their songs. Acoustic or electric guitars had the right amount of "ring" and presence to make them come alive in the listening room. Piano solo (from the *Stereophile* Test CD-2, on the Brahms *Intermezzo* cut) was as rich and warm and beautiful as it should be. Horns came through clean and bright without being overwhelming. As any audiophile knows, the midrange is where the "rubber meets the road," so to speak. This is where the sounds being reproduced become *music* to your ears. The Paradigm's midrange driver does a nice job of presenting the warmth and emotion of the music (read below for more details on that!) while still being honest with the information on the recording itself. If there's one criticism about the midrange of the Studio/100s, it's that at lower volumes it is almost (but not quite, in my

opinion) too laid-back; it's not until you crank the volume up and give the Paradigms the wattage they demand that the midrange comes alive completely. At the higher volumes, the details of the recorded sounds begin to be heard clearly and the presence and "live-ness" of the sound (if appropriately recorded) wakes up and gets your attention fully, although the sound never gets over-bright, and there is no detectable coloration.

"... these speakers can indeed image "beyond their location" ... Up-front vocals are right in-your-face ... Background sounds (vocals, echoes, synthesized effects) fall back behind and far to the sides ... The sense of depth imaging approached the awesome on some material simply blowing me away with the effects ... quite impressive."

TREBLE:

The aluminum-dome tweeter of the Studio/100 doesn't show a trace of the metallic-edge many of the aluminum-domes of earlier years displayed. The treble is clean and dynamic, yet never strident (after the break-in, that is—right out of the box, they lean toward bright) or "metallic." With solid-state electronics, the tweeter seems to have appropriate roll-off to keep away any brittleness or excessive brightness while still retaining sufficient detail. I haven't heard them with tubed amps, but it is possible one would find them too "soft" for the already-rolled-off treble from the tube power output—if you're thinking of driving them thus, you should audition them carefully to see if this is true or not. Cymbals are clean and ringing like they should, but again, until

at higher volumes, perhaps just a touch too "easy" with the sounds. When played at near-live levels (which is as close as anyone can get within reason in their homes—over 100 dB), the Paradigm's tweeters give out all of the information necessary to let you visualize the brass discs bouncing and ringing away when the drummer smacks them with his stick. Horns (again from *Stereophile's* Test CDs) punch through the other music in a live-like fashion, but again, only at the higher volumes. Again, no coloration or overly-bright output was detected—after break-in.

FREQUENCY BALANCE:

Sure, it plays bass, midrange and treble fine, but do the three *integrate* together well? I pondered that question several times while auditioning in the middle of the break-in period. On certain songs, I thought the bass was too heavy, slightly obscuring the detail of the mid- and high-frequencies, then another song or another CD (or DVD) would be playing, and the bass was just perfect. At other times, I thought the bass might be slightly weak, then another song or CD would convince me otherwise. I never thought there was any noticeable unbalance at the midrange-treble area, however. After complete break-in, (and switching to the "spiked" feet) I decided they were about right as far as bass-to-midrange-to-treble was concerned. I don't have the ability to measure accurately the frequency response, so I have to take the graphs published by Paradigm and a handful of magazines as fact. And those graphs show a pretty flat (for a speaker) response across the 40 Hz–20 kHz range, just like Paradigm says they are (Paradigm has a very large anechoic chamber they use in evaluating their speaker designs, and according to them, this was used in conjunction with listening tests to tweak the response of the Studio/100s to the flattest sound. All I know is I couldn't detect any signs of consistent dips, unevenness, peaks or colorations anywhere across the audio spectrum—or at least that part of it my ears hear!). Voicing of singers or instruments seemed as natural as the

source medium would allow, and the tones were about as neutral as one could hope for in a speaker of this caliber.

IMAGING:

By "Imaging," I mean a combination of "soundstage" and "precise location" of instruments across the stereo presentation stage. I realize to many they are two separate issues, but in my mind they interrelate so completely it is impossible to totally separate them. For those who want them separated, I'll quickly describe them that way: Soundstage is excellent for the size of the speakers and very good for *any* size. Location of instruments is very good, with a fairly precise, stable location presented to most voices or instruments. The exceptions appear to be conditions on the source material rather than the Paradigms. Now for my *real* evaluation, based upon the overall condition of the imaging:

With recordings that were valid attempts to capture the *true* soundstage of a recording, these speakers can indeed image "beyond their location," (although by only about 20-30% of the total soundstage width, which is all one can expect without using "tricks" of electronics or acoustics—both of which I have enjoyed in the past, but ultimately found to be unrealistic; for example: the Carver Sonic Hologram Generator which was able to throw images completely out to the sides in an amazing effect, but only useful to one person sitting in one "sweet" spot). Instruments in the far right or left appear to be located beyond the speakers and that location is stable, those "inside" (between) the speakers are stable as well with accurate placement. Depth of the soundstage is amazingly good with sounds ranging from well behind to well in front of the speakers. On the *Stereophile* Test CDs (again) where someone walks from side-to-side across the stage, talking or clapping or ringing a bell, there is the "acoustic phenomenon" of turning the linear path into the "U-shape" that bends away from you

when they're in the far left or right. I've never heard a speaker that didn't do this, as "distance" to a microphone is translated into "depth" to the speaker—it's just the way these things work. But with the Paradigms, the "U" is wider and the "legs" of the U (the farthest distances) are bent "outward" more than in most speakers (more like "_"). In other words, when the person is to the far left in actuality, they sound as if they are "back" and "slightly left" of the speaker instead of just "behind" the speaker as is usually the case. I understand that in the (huge, expensive) high-end speakers, this effect is more pronounced and therefore considered a "better" soundstage, which is why I say the Paradigms' soundstage is "excellent for the size" of the Studio/100. To all practical considerations, the Studio/100s offer imaging that is very good, precise and stable and one can easily separate instruments or vocalists who were sufficiently separated in the recording. All of these comments relate to recordings that were intended to be "natural" in that they weren't close-miked, studio-mixed, recording engineer's playthings. So what about such recordings which are inevitably out there, especially in popular release? Read on.

The Paradigm Reference Studio/100 loudspeakers seem to be *made* for close-miked, studio-mixed, "up-front," and dynamic presentations, meaning "rock," "pop," and "theater" music/sounds. With these types of recordings, the Paradigms come alive and present you with *great* sound and imaging (again, at higher volumes, which is *the* way to play this stuff anyway). When the engineers have used their "gee-whiz" boxes in the studios to give that "artificial" ambience and effects on the recording, the Studio/100s do an excellent job of imaging: Up-front vocals are right in-your-face, seemingly only a foot or two before you. Background sounds (vocals, echoes, synthesized effects) fall back behind and far to the sides of the speakers (I even heard some echoes, etc. on such recordings—but not all of them, as it depended upon what the engineer did in the studio—coming from

completely to the sides of the listening room, a full 180° apart, even though the effective angle from me to the speakers was about 60°. The sense of *depth* imaging approached the awesome on some material, simply *blowing me away* with the effects. (I realize that such an effect isn't "natural," or "real," but it is quite impressive, and the dramatic effect of this separation is delightful when it works.) "Studio" jazz and rock recordings sometimes were presented on a soundstage almost equivalent to headphone listening or which rivaled what I used to hear with the Carver Sonic Hologram Generator, except that the "sweet-spot" for the effect was several feet wide in my listening room instead of the inches required by the Carver box. Sitting off-center by a yard or so left the effect intact, although the "far" side's effect was reduced in such a case.

"Goosebumps: This is my most "telling" test for a loudspeaker. ... Does the music "get to" me? Do I feel the emotion of the song? Does my heart stir, swell, ache or beat with excitement while listening ...? ... When all else is said about a speaker, this is the first and final test which tells me if the speaker is a "good" one ... the Studio/100s passed — with flying colors!"

On the other hand, listening to "chamber music" or full orchestral passages gave a "good" soundstage/imaging effect. On such recordings, the soundstage was generally behind the speakers and spread in about a 90° wide arc, with only an occasional "lead" instrument (which was probably close-miked) jumping out in front of the speakers. Listening to "classical" recordings resulted in a good

soundstage, but possibly one which a classical-lover would find less awesome than that from a rock-pop-jazz presentation. For this reason, I'd have to repeat that the imaging of the Studio/100s is good to very-good overall, and even excellent for *its size*, as stated above. In all cases, imaging was stable and precise (where the recording presented it that way), and thus, "very good."

DYNAMICS:

This is a category which I think most directly relates to the sense of a "live" presentation when listening to recorded music. Live music is *dynamic*, and to make you "believe" that what you're listening to is a real musical event, recreating those dynamics is important. Without spending a fortune in amplification and speaker drivers, it isn't possible to re-create the full dynamic presentation of a live band in your listening room, so what we get is an approximation in every case. The "approximation" presented by the Studio/100 is very, very good. When the volume is up and they're getting double- or triple-digits of watts driving them, they punch through with correct speed and authority. Again, I have given that "volume" qualification when describing the sound of the Paradigms. I feel compelled to go more deeply into that subject here: These speakers are meant to be played at "solid" (meaning loud, but not necessarily maximum—approximately 25-100 Wpc on the peak hold Mac meters) listening levels. In all cases, playing them at low levels doesn't show what they are capable of doing. I guess each potential purchaser of the Studio/100s will have to decide if this is a plus or a minus to them. In my case, it's a plus. If I want to turn the volume down and have just "background" music playing, the Paradigms fall into the background and reproduce the sounds in a way that makes them clearly audible, but not attention-getting (which is what I mean by "background" listening!) But then, when you want to "get into" the music and

crank the volume up, they come alive and present you with all of the detail and dynamics you're looking for. In my mind, that's exactly what I want them to do, although some might criticize their slightly-laid-back presentation (and slightly subdued response) at the lower levels, I don't think anything which is sufficiently "dynamic" at *low* levels would be at all "listenable" at *higher* ones. That's my opinion and why I like the Paradigms, although they're not alone by any means in this set of characteristics.

GOOSEBUMPS:

This is my most "telling" test for a loudspeaker (or a stereo system in general). Does the music "get to" me? Do I feel the *emotion* of the song? Does my heart stir, swell, ache or beat with excitement while listening to the music?

" ... I am happy with these speakers ... one would have to spend at least double the price to begin to find something that is noticeably "better" ... "

When all else is said about a speaker, this is the first and final test which tells me if the speaker is a "good" one or not. Several times while auditioning these speakers—both in my Dealer's showroom and in my home—the songs that "get to" me, definitely "got to" me! (I don't need to list them here for you, everyone has their own "buttons" that get pushed by different songs, and you know what those are for you, and that's all that matters.) When I heard those, I got *goosebumps*! I don't mean just a little chill that quickly ran down my spine (although I got that too). On some songs, I had goosebumps on my arms and even on my legs, the hair stood up on the back of my neck and I even shivered as the emotion of the song washed over me, involving me with the music in just the

way it has to for me to "believe" the music being reproduced for me. This has less to do with "fidelity" than with "presentation" of the music, but my point here is that with the Studio/100, you get *both*. The ability of the Paradigms to bring me into the music was more than adequate in my opinion, and while they're not the only speaker capable of that feat, they certainly were able to do the trick. I was sifting in the "hot-seat," listening to the song of the moment, thinking "Oh, my God!" It was warm in the room, but the goosebump chills wouldn't go away easily, and almost as soon as they had, they came back at the next stirring moment of the recording. In short, the Studio/100s passed the "Goosebump Test" with flying colors!

CONCLUSION:

The "bottom line" is, I am happy with these speakers. They seem to be a good "fit" with my amplification (I would fear overpowering them with a bigger amp, and something less than 200 Wpc might not give you enough power to make them come alive), my room (a larger room, up to double the size might be the maximum that could be "filled" with the sound from these speakers, a much smaller room would be too small to let them "reach their stride"), and my tastes in music (mostly rock, jazz, folk and small instrumental groups—seldom full orchestra works, and I suspect this might be a slight problem-area with the Paradigms for Classical Buffs). For the price, I don't know how one could do significantly better than the Paradigm Reference Studio/100 loudspeakers. Listen to the rest of the Reference Studio series speakers as well—they have the same basic drivers in slightly different arrangements and lesser numbers, at lower price-points. While they sounded good no matter what variation of setup I tried, there were subtle differences to straight vs. toe-in, feet vs. spikes, distance from front wall, bi- vs. single-wiring, etc. (I didn't try tilting them, but that would easily be possible by careful adjustment of the

spike-locknuts if desired), there were subtle differences to these changes, and I think one could "tweak" these for the precise sound you want—at least to some degree.

I think one would have to spend at least double the price to begin to find something that is noticeably "better," and even then, it might only be better in one or two specific areas which might not fully justify the price difference. In some reviews I read, the reviewer claimed the Studio/100's equaled or outperformed speakers in the 5-10-kilobuck range. My experiences with these loudspeakers gave me no reason to doubt this claim. For a Home Theater setup, I suspect a subwoofer and matching Paradigm center and surround speakers would make the system a very satisfying one (although at present, that is *not* what I have running, so I'm just extrapolating). I hope this review makes it clear to you why I bought them over the other choices out there in Audio Land, and why I am *not* disappointed in that decision.