

“... stunning ...

## A TRUE TASTE OF THE HIGH END

— and you'll never want to go back.”

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*“... cleaner, airier highs ... seemed to bring me a row or two closer to the sopranos ... delivered the baritones more accurately ... injected more air into the soundfield ... nice balance of specificity and space ... harmonic richness ...”*

by Mark Fleischmann

**PARADIGM'S BACK IN THE RING WITH A NEW VERSION**

I review stuff. Manufacturers have a right to be wary of people like me. And, when I ask for a surround receiver, the first thing they ask me is, “What speakers will you be using with it?” I tell them, “Paradigm Reference Studio 20's.” The sighs of relief at the other end of the phone line are almost audible. More often than not, I get what I ask for.

The Studio 20's have been the mainstay of my reference system for years, when I reviewed them for *AudioVideo Interiors*, pronounced them “close to ideal as reference speakers,” and thereupon adopted them. Since then, they have put countless receivers through their paces (and during off hours, have kept my soul alive with an intravenous drip of music).

So, imagine the excitement—not to mention the trepidation—I felt when I saw the Studio 20's latest iteration unveiled at a trade show last fall. I use an earlier version so I've already missed a whole generation of progress. Of course, I had to try them.

**JUMBO SATELLITE**

Once Paradigm's top line, the Studio Series has since taken second place to the Signature Series. The Studio 20 has always been the baby of the Studio family. Although it is large enough and has enough bass response to run without a subwoofer, it functions as a satellite in most systems.

At 15 inches (38.1 cm) tall, this version has gained a half-inch, although, at 21-1/2 pounds (9.8 kg), it's also 1-1/2 pounds (0.68 kg) lighter.

Starting with the last version of this speaker, Paradigm's sensitivity ratings improved from 86 to 87 dB, or from 90 to 91 dB when rated at room efficiency. That might be a modest concession to greater power demands on receivers. When the first Studio 20 came out, receivers had to power only five speakers, but now they sometimes huff and puff to power up to seven.

The main changes in this version are in the drivers. An aluminum tweeter has always delivered high frequencies in the Studio 20, but it's been a different one in each generation. The latest one is a gold-anodized pure-aluminum dome—Paradigm calls it G-PAL, that hails from the higher-end Signature line. Perhaps more significant is the new woofer, a 7-inch satin-anodized pure-aluminum (S-PAL) cone that's thinner and stiffer—potentially meaning more



pistonc—than the former mica-polymer cone. In the center of the woofer is a phase plug that looks like the nose of a gold-plated aircraft.

I was also struck by the new (to me) enclosure. The tweeter has moved one inch (25 mm) closer to the top of the enclosure, from 2-1/2 inches to 1-1/2 inches (63.5 mm – 38.1 mm). The top of the former rectangular solid now has an arched curve, and there's an extra bulge behind the tweeter. The die-cast aluminum chassis that surrounds and holds the drivers is 0.125 inches (3.18 mm) thicker, and it's carefully ventilated to cool the voice coil. Also, the port has moved from the rear of the enclosure to the front, beneath the woofer.

The impact of these changes on the sound is far from subtle. I heard the differences immediately, even before the speakers had a chance to break in. The new tweeter arrangement's effect was audible as cleaner, airier highs, perhaps also due in part to a diminishment of cabinet diffraction. With the new woofer material and port placement, the aggressive upper bass took a step closer to neutrality. After years of living with the earlier version, I had plugged the ports with foam to reduce the bass bulge. This version needed no such adjustment.

#### FIVE IDENTICAL SPEAKERS AND NOTHING ELSE

I reviewed the Paradigm Reference Studio 20's in a matched set of five. Although I rarely get to review identically matched speakers, I prefer this setup because I find that it makes for a more seamless soundfield. But, if you insist on a horizontal center, the Studio CC-590 is the speaker for you. It replaces the CC-570 and has two 7-inch (178 mm) mineral-filled polypropylene cones, a 4-1/2-inch (115 mm) satin-anodized aluminum midrange driver, and a 1-inch (25 mm) gold-anodized aluminum dome tweeter.

Another unusual departure was my decision to review these speakers without a sub. That wasn't my original intent, but the speakers were so satisfying when I played them full-range that I had to go with my gut. If you choose to use a sub, Paradigm recommends the Seismic 10 or Servo-15.

Other members of my reference system family were as eager to try the new Studio 20's as I was. My A/V receiver is the five-channel Rotel RSX-1065. (The more recent seven-channel equivalent is the RSX-1067.) My main signal source is Integra's DPS-10.5 disc player, which feeds a multichannel analog output of

unimpeachable quality to the Rotel. I used Monster M1.4S speaker cables, biwired, for the front channels and Monster M1.2S speaker cables for the surrounds.

*"Some manufacturers simply turn over their model lines. Paradigm makes theirs better ..."*

Recent pillaging at Tower's going out-of-business sale turned up one of the best choral and orchestral recordings I've ever heard: René Jacobs conducting the RIAS-Kammerchor and the Freiburger Barockorchester in Haydn's *The Seasons*. Having finally overcome my aversion to classical vocal music, I've tried a lot of Haydn's and Bach's choral works recently, but none has the perfect clarity and balance of this Harmonia Munchi CD set. Clear but not bright, acoustically rich but not reverb heavy, it's changed my listening and buying habits. The Studio 20's seemed to bring me a row or two closer to the sopranos (but it didn't hurt a bit) and delivered the baritones more accurately (they were less chesty).

I was initially afraid that Augustin Dumay's violin would fry the tweeters in his cycle of Beethoven's Complete Violin Sonatas with pianist Maria João Pires. There were indeed moments when his often harsh intonation slashed the air, but the tweeters also injected more air into the soundfield than I had previously heard with the earlier version of this speaker. This was the moment I was waiting for—the first intimation that the new Studio 20 might become my new reference speakers. Incidentally, Deutsche Grammophon sells this three-disc set in a bad specimen of the newly popular and economical wallet-style packaging. The discs fit so tightly into the wallet that the slightest piece of grit would induce scratching. I placed the discs in soft sleeves before I shelved the wallet.

Classical crossover artists are few, far between, and frequently annoying, but I can't imagine anyone not loving Gabriela Montero's *Bocli and Beyond*. The youthful, glamorous pianist states, then eloquently wanders away from, the master's great melodies in a way that evokes Keith Jarrett, but without his trying forays into dissonance and repetition. Montero's improvisations are imaginative, not hokey. The EMI Classics recording takes full advantage of her virtuosity with a nice balance of specificity and space, and the Studio 20's

delivered on their potential, with more harmonic richness in the right hand than I recalled from their predecessors.

*Pour Down Like Silver* by Richard and Linda Thompson is an album that's always thrilled me to the marrow, even as it's frustrated me with its elusive, reticent, midrange and airless highs. The new Island Remasters CD is somewhat more intelligible than the original British vinyl, but it's otherwise not much improved over Carthage's initial U.S. CD release. What made me pull out my wallet were the four bonus tracks, including previously unreleased live versions of "Streets of Paradise" and "Beat the Retreat" that must have hit stage and studio almost simultaneously. They're agreeably raw and immediate. In the astoundingly emotional cover of "Dark End of the Street," the Studio 20's kept the low-recorded acoustic guitar from disappearing beneath the luminous vocals. They didn't need a sub to punch through the world-class rhythm section on the extended live version of "Night Comes In."

*"... Studio 20 always had a winning way with brass — singing not stinging — this new version is even better — more detail ... brass section did indeed seem to float and undulate in the air ... greater vocal clarity and presence ..."*

If I heard *Some Skunk Funk* by Randy and Michael Brecker coming out of some doorway at a trade show, I'd be sucked into that room immediately. Telarc's SACD makes full use of the center channel to deliver a tight live performance in 5.1 channels. The effect was most stunning on "And Then She Wept," a slow number with the massed brass of the WDR Big Band Köln floating the trumpet solo. The Studio 20 always had a winning way with brass instruments singing, not stinging and this new version is even better, with the same comfortable feel but more detail. On "Levitae," the brass section did indeed seem to float and undulate in the air. I had no trouble hearing Letterman bassist Will Lee coming out of the 7-inch (178 mm) woofers.

Carlos Franzetti's *Songs for Lovers* frames his baritone with his own timeless orchestral arrangements the Buenos Aires born composer and arranger has also performed the latter

function for the likes of Ruben Blades and Paquito D'Rivera. Chesky's CD was recorded in 96/24 PCM stereo, a departure from the company's recent involvement in multi-channel SACD. There are times when Chesky's reverb-heavy approach doesn't work for me. With their recent stereo SACD of *The World's Greatest Audiophile Recordings*, I had to check to make sure the speakers weren't wired out of phase, but here the reverby sound clicks. It subtly enriches the voice, places it against the warm background of the City of Prague Philharmonic, and perfectly integrates both elements. The new Studio 20 achieved greater vocal clarity and presence without adding any sibilance or other unwanted artifacts.

### PIRATES, SQUIRRELS, AND GANGSTAS

*Pirates of the Caribbean: Dead Man's Chest* has an amorphous Dolby Digital 5.1 soundtrack that's at its best during ship-to-ship battles. In one brief but magnificent moment, the sea swallows a ship with a huge plug. The hyperactive soundtrack—the orchestral equivalent to the story's frantic, trying-too-hard action sequences—sounds great when masses of bass drums accompany jungle chase scenes. Even sans sub, those drums were full of menace, and the center didn't miss a single drunken mumble of Johnny Depp's Keith Richards impersonation.

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through ..."*

I love that squirrel that showboats the opening scene of *Ice Age: The Meltdown*. He'd be worth a movie by himself. The panning effects that follow his pursuit of the acorn have already made the Dolby Digital soundtrack a tradeshow demo classic, and, with matched Studio 20's across all three front channels, the side-to-side motions were seamless. However, CEDIA and CES exhibitors should also use the ritual dance of the sloths, a chunk of 5.1-channel weirdness that recalls a similarly bizarre vocal-effects classic from Pink Floyd's *Ummagumma*, "Several Species of Small Furry Animals Gathered Together in a Cave and Grooving with a Pict." The falling ice masses that punctuate the whole movie could have had more very-low-bass impact with a sub but were nonetheless dramatically effective, thanks to the strong bass response, which is rated down to 54 hertz, plus or minus 2 dB, both on and off axis.

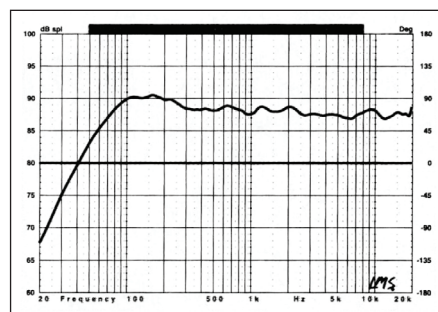
*"... I found my new reference speaker  
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*Idlewild* features "music by Outkast," as the DVD packaging says in lettering bigger than the names of the stars. Andre Benjamin plays the brothel pianist and composer who is trying not to drown in a violent, Darwinian world. The music barely tips the hat to the story's roaring-twenties setting, irreverently spanning the generations from Dixieland to rap. Exuberant and stylish, it's one of the best movie soundtracks I've heard in years. Many scenes feature a vamping jazz drummer who's miked so that he sounds like he's a few feet behind the singing and dialogue. Studio 20 got this spatial detail right and gave the ride cymbal a gentle but realistic metallic hiss.

### MARK'S NEW BABY

The new Paradigm Reference Studio 20 occupies a sweet spot in the speaker market: the low end of the high end. If your only experience with loudspeakers is the mass-market junk sold in many national chain stores, stepping up to the Paradigms will give you a true taste of the high end—and you'll never want to go back. If you've already got the megabucks two-channel rig of your dreams but want something surround worthy for the family's home theater, you'll find value here. I've found my new reference speaker. And, when it gets back from the photo studio, I may not bother to reinstall my subwoofer. Years of fun have just begun.

### HT LABS MEASURES



Paradigm Reference Studio 20 Speaker System  
Sensitivity: 88 dB from 500 Hz to 2 kHz

This graph shows the quasi-anechoic (employing close-miking of the woofer) frequency response of the Studio 20 (purple trace). The passive loudspeaker was measured with its grille at a distance of 1 meter with a 2.83-volt input.

The Studio 20's listening-window response (a five-point average of axial and +/-is-degree horizontal and vertical responses) measures +1.82/-1.13 decibels from 200 hertz to 10 kHz. An average of axial and +/-15-degree horizontal responses measures +1.86/-1.30 dB from 200 Hz to 10 kHz. The -3-dB point is at 9 Hz, and the -6-dB point is at 47 Hz. Impedance reaches a minimum of 4.18 ohms at 174 Hz and a phase angle of -41.77 degrees at 98 Hz.

### BUILD QUALITY

- Woofer upgraded from plastic to aluminum
- Tweeter still aluminum, now gold-anodized
- Thick aluminum chassis holds drivers

### VALUE

- High-end performance at a midrange price
- Small rise in price over previous generations is justified by improvements in materials and performance

### FEATURES

- Large internal heatsink magnets
- Butyl-rubber mounting decouples drivers from box, thus reducing resonance

### PERFORMANCE

- New tweeter material and location help clarify highs
- Neutral midrange, both on and off axis
- Enough bass to go sub-less

### ERGONOMICS

- Larger than average sub/sat set
- Demands away-from-wall placement for best results
- Vinyl finishes

### OVERALL RATING

Some manufacturers simply turn over their model lines. Paradigm makes theirs better. This fourth-generation rethink of my reference speaker uses better materials and deploys them more creatively. Recommended for the discerning listener with a limited budget.