"… absolutely superb …

BIG, BOLD, VIBRANT SOUND

… a bargain-hunting audiophile's dream."

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"… mids were rich and smoooooth … highs, too, sounded terrific — ideally extended … a cleanness and detail I've never heard from speakers costing so little … exceedingly natural …"

by Doug Schneider

In another article this month, "On Getting Good Sound *and* Good Value," I talk about products that establish a benchmark level of performance; that is, components good enough to be used as references to gauge like-priced products against. For many years, I've considered Paradigm's various iterations of its Atom loudspeaker to be just that. At its price, the Atom has long been the one to meet or beat.

The newest version of the Atom, however, has a few new twists. First, Paradigm's done away with the Performance series, of which the older Atoms were members, and has made the new version the lowest-priced speaker in their Monitor series—hence its full name, the Atom Monitor. Second, they've trickled down technology from their higher-priced series and poured it into all of the new Monitor speakers, including the Atom Monitor. Third, the Atom Monitor costs a bit more than the last version, about $20 (USD) more per pair. Does the new, more expensive Atom live up to its pedigree?

DESCRIPTION

I saw the first Atom Monitors come off the line when I visited Paradigm's factory in Toronto, Ontario. It's where Paradigm *makes* speakers, not just assembles them, which is in stark contrast to what happens at other companies worldwide. Many now outsource production entirely, usually to China. But it says "Made in Canada" on the Atom's rear panel, and Paradigm means it.

With its grille on, the Atom Monitor measures 10-15/16″ (22.7 cm) high x 6-1/2″ (16.5 cm) wide x 10-3/16″ (25.8 cm) deep; a pair of them weigh about 23 lb (10.4 kg). Its rather conventional box enclosure is finished in your choice of Cherry, Rosenut, Black Ash, or White vinyl veneer. One surprise was the look and texture of the rosenut finish on my review pair, which some might mistake for real wood. There's nothing cheesy about it.

Under the veneer, however, the cabinet is not all wood. Remove the grille (something you couldn't do with the older Atoms; more on that in a bit) and you'll see the keyhole tweeter-over-woofer shape that Paradigm is known for. This portion of the baffle is made of molded plastic, as is the rear-firing port. The baffle is made like this because it serves multiple purposes: It not only forms the face of the speaker; molded into it are the woofer's basket and the tweeter's special waveguide. This combines a lot of functionality into fewer parts, and thus keeps the cost down. It's the kind of clever design detail that seems to come only from the bigger companies, which have the design skills, materials, and

manufacturing resources to make single parts to serve so many purposes.

Now, about that grille. In earlier Atoms, the grille was permanently attached; you couldn't get past it to see what was underneath. With the latest iteration you can, and from what I understand from Paradigm, making the grille detachable (it's held in place by magnets, not pins) contributed to part of the price increase. However, I'm willing to pay a few bucks for that; I like to get at the drivers and see what's going on.

"… also sounded superb playing quietly … suprisingly full in the bass … astoundingly clean … wonderful … able to give far more expensive speakers a reason to sweat."

Pop off the grille and you'll see a 1″ (25 mm) pure-titanium dome tweeter nestled in that molded waveguide. Paradigm says the tweeter is cooled with ferro-fluid for higher power handling. The woofer is a 5-1/2″ (140-mm) cone of creamy-colored, injection-molded co-polymer polypropylene, with a rubber surround of the same color. The color deserves comment, particularly when mentioned in the same breath as the word *rubber*. On the one hand, the color of the woofer makes quite a statement when the grille is off. I've never seen anything quite like it. On the other hand, the woofer does look as if it's—how can I say this?—wearing protection. Merely an observation …

"… charged up my large listening room with sound … played louder and cleaner than any small speaker this inexpensive could be expected to."

As with every Paradigm loudspeaker, the drive-units are designed and made in-house. Often, high-end companies that offer very expensive loudspeakers make a big deal out of making their own drivers. Here are proprietary drivers in a speaker costing so little. Paradigm says they cross the woofer over to the tweeter at 2.2 kHz, a lowish point that helps to better match the dispersion characteristics of the woofer's top end with the tweeter's low end.

Paradigm has been trumpeting what they're calling the Monitor series' Super-Drive, which is their way of saying that the Monitor series has high efficiency; *i.e.*, they'll play louder with less power. Paradigm also claims lower distortion at high playback levels. I suspect that part of what helps achieve this is the tweeter's waveguide, which horn-loads the tweeter a bit, thus increasing its output level. Paradigm rates the Atom Monitor's in-room sensitivity at 90 dB (87 dB anechoic), and recommends amplifiers with outputs of 15–80 watts per channel. And because you can buy matching Monitor center-channel and surround models to flesh out a full home-theater system, the Atom Monitor is magnetically shielded for use near a TV.

"… so generous down low … roundness and heft that pulsate in the room … I was awed by how authoritative the little Atom Monitors sounded … so robust … big, weighty sound … delivered with good control."

But while the ability to play loud is important these days, particularly with home theater, that's not the most important thing for me. I don't care if a speaker can play loud if it doesn't sound good while doing it. It's like being served a huge portion of lousy food—who needs a double portion when you don't want to finish a single one? However, I know Paradigm well enough to know that they don't just build speakers to meet specs—each design goes through extensive listening tests; the ears are the final arbiters. This is why Paradigm doesn't just claim that the Monitor series plays loud; they also claim that it's "authentically high end," meaning that it's supposed to *sound* good, too. And the only way to judge that is through listening.

SOUND

The first thing I did was place the Atom Monitors atop 26″-high stands and hook them up to my reference-level system, which currently includes Simaudio's outstanding Moon i-7, a 150-watts-per-channel integrated amplifier; Theta Digital's Data Basic CD transport; a Stello DA220 D/A converter; and cables by i2Digital, Nordost, and Nirvana. Such high-priced, high-end gear was overkill for the Paradigms, but I wanted to see what these inexpensive speakers could deliver in my large listening room with the best possible ancillary gear.

The result nearly bowled me over. I'd never expected such a big, bold, vibrant sound from such small boxes. They also came through on Paradigm's promise that they'd play loud. They charged up my large listening room with sound—something that other, much more expensive two-way, stand-mounted speakers have failed to do, even as they distorted and made nasty noises in the process. The Atom Monitors though, held up extraordinarily well to such abuse. (Small speakers such as these are best suited for rooms of small to medium size, not the cavernous space I set them up in.) And while I was able to push the Atom Monitors until they finally began to fail—the midrange began to congest and the highs got hard, and then the bass went awry—they played louder and cleaner than any small speaker this inexpensive could be expected to. You might not want to play Springsteen's "Born to Run" through them at a block party, but when I wanted to impress some friends with what so little money can get you these days, they held up extremely well to U2's *Achtung Baby* [CD, Island 510 347-2].

"… sounded pretty much the same being driven by the little Flying Mole [20Wpc] as when I partnered them with the big Moon [150Wpc] … bass sounded just as big … midrange just as pure … the highs as clean and clear."

The speakers also sounded superb playing quietly—they were surprisingly full in the bass, and astoundingly clean through the midrange and highs. In fact, when I heard how wonderful they were, I knew they'd be able to give far more expensive speakers a reason to sweat. It was also apparent that the Atom Monitor was a step above the older Atoms. Those earlier versions had sounded polite enough, but I don't remember any of them sounding this pure through the midband, particularly with female vocals. When I played Mariza's *Transparente* [CD, EMI 9047], I reveled in how the Atoms conveyed her voice with a hint of tube-like glow. The mids were rich and *smoooooth*, which was totally

unexpected for a speaker at this price. I would have expected some sort of grain.

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The highs, too, sounded terrific—ideally extended, with a cleanness and detail I've never heard from speakers costing so little. Bruce Cockburn's guitar, on his all-acoustic *Speechless* [CD, Rounder 3250], can sound a little brittle, steely, and etched even through the tweeters of quite pricey speakers; through the Atom Monitors, his guitar sounded exceedingly natural, with none of those drawbacks.

But while the speaker's bass and mids were excellent in terms of refinement and cleanness, it was how they delivered the bass that really fleshed out this speaker's special sound. The Atom Monitor wouldn't go super-deep—Paradigm rates its -10 dB point at about 50 Hz—but it sounded so generous down low that I never found myself itching to hook up a subwoofer. This was a total surprise, given that this small speaker has only a 5.5″ woofer. The drums on the Deluxe Edition of Cockburn's *Humans* [CD, True North TND 317], for example, have a roundness and heft that pulsate in the room. I was awed by how authoritative the little Atom Monitors sounded playing this album. Earlier Atoms had had some of this quality, sounding much bigger than their size or price would indicate—but I don't remember any of them sounding so robust at the low end.

That's not to say that the Atom Monitor delivered *truly* deep bass. A sub's big woofer is big for a reason: to move big-bass air. But the Atom Monitor did achieve something quite special down low, something I attribute to the way it's been voiced. I suspect that Paradigm achieved the big, weighty sound by first ensuring that the woofer was up to the task of moving a lot of air without falling apart—odd-looking as it is, the Atom Monitor's little 5.5″ woofer seems something of a miracle worker in that regard. They also ensured that the port was implemented properly. I've listened to the rear ports of many speakers at all price points, and I've been shocked at the non-bass noise they produce. The Atom Monitor had none of that—I heard no noise or chuffing at moderate to high volumes. What bass the Atom Monitor delivered, it delivered with good control. That's important.

I suspect that a frequency-response graph of the Atom Monitor would reveal something of a rise at about 120 Hz—in other words, a boost in the upper bass. Speaker makers often do this so that a speaker that can't go down super-low will still give at least the *impression* of a fuller, weightier sound. I can forgive a little speaker such as this that small departure from strict neutrality—after all, if you don't want to use a sub, and you don't want a speaker that sounds thin, you'll need a fuller sound.

"… extraordinarily clean from top to bottom … uncannily smooth … one of the best speaker values around …"

One thing I feared in partnering the Atom Monitors with an amplifier as exceptional as the Simaudio Moon i-7 was that I might have helped the speakers *too* much. After all, no one is likely to use under-$300 speakers with a $5600 integrated amp. So I replaced the Moon with Flying Mole's CA-S3 integrated, which sells for only $850 and delivers far less power—just 20 watts per channel into 8 ohms, which is barely above the minimum amplification of 15 watts that Paradigm recommends for the Atom. However, this not only allowed me to try the Atoms with something inexpensive that they're much more likely to be paired with, it also allowed me to test Paradigm's claim that the new Monitor series could deliver appreciable output with less power.

Much to my surprise, the Atom Monitors sounded pretty much the same being driven by the little Flying Mole as when I partnered them with the big Moon. The bass sounded just as big, the midrange just as pure, the highs as clean and clear. The biggest difference was that those highs weren't quite as extended through the Flying Mole. (When I reviewed the CA-S3, I pegged it against the Moon i-7 and found that the Flying Mole sounded slightly stunted on top in comparison with every speaker I tried.)

Furthermore, even with the piddly CA-S3 in charge, I could crank up the Atom Monitors to pretty-loud levels, and neither the amp nor the speakers gave out. Sure, I could have pushed them until one or the other broke, but I was pleasantly surprised to hear the Atom Monitors play so loud with such a small amp. This sort of performance could help make these speakers a bargain-hunting audiophile's dream. They delivered absolutely superb sound with very little power; as a result, prospective buyers can pay far more attention to the sound quality of the partnering amp than to how much power it delivers. Heck, I suspect you could drive this little speaker with *tubes*.

But even with all the positive things I can say about the Atom Monitor, it wasn't perfect. While the speaker did nothing that was flat-out *wrong*, there were a couple of areas that didn't bowl me over in the way the things I've already mentioned did.

First, even after I'd played with the setup quite a bit, the soundstaging and imaging were just average—no better than what you'd expect for the price. Music leaped from the Atom Monitors and never sounded confined to the speaker positions, but I couldn't get as precise a soundstage, or the same kind of illusion of depth, that I can with some pricier speakers.

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Second, in terms of resolution and detail, the Atom Monitor wasn't extraordinary. Other, more expensive speakers can open a clearer window on the recording, letting through every nuance of the music. The Atom Monitor sounded extraordinarily clean from top to bottom, and uncannily smooth in the mids, but it didn't reveal the microscopic details of recordings. However, you can't expect the world from a speaker at this low price, particularly one that achieves what the Atom Monitor did.

Our reviews usually include a comparison with a similar product. However, comparing the Atom with anything of similar price was difficult, if not impossible—I haven't found an identically priced speaker that delivers an

overall sound quality to rival it. If you come across a speaker that meets or even beats the Atom Monitor at the price, then I suggest you just buy it—if it can do that, it's not just good, it's great.

More than likely, though, if you want better sound quality—deeper bass, more resolution and detail, improved sound-staging and imaging, etc.—then you'll have to pay a bit more money, whether the speaker is from another manufacturer or one of Paradigm's own. For example, the next model up from the Atom Monitor, Paradigm's Mini Monitor, costs almost 50% more. Yes, there's still reason for pricier speakers to exist; but at the price, there's none I like better than the Atom Monitor.

CONCLUSION

In the article mentioned at the beginning of this review, I talk about getting good sound and good value. Paradigm's Atom Monitor defines that combination of criteria. It is a masterpiece of modern-day speaker design, and a benchmark against which other low-priced speakers should be judged. It's one thing to produce a great-sounding speaker when price is no object; it's quite another to do so for a low price. No other speaker I know of for this price sounds better.

Although the Atom Monitor is the most expensive Atom yet, it's worth it. Given that Paradigm has built its decades-old reputation on delivering sound that many manufacturers can't match even at multiples of the price, the price is a pittance to ask for what is one of the best speaker values around today. It may be the best entry-level speaker that Paradigm has ever produced.