

“Chalk up one more

for the **LEGENDARY**

Canadian **VALUE.**”

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by Brian Florian

WHO CARES?

“Can you hear that?” my wife whispers to me with an urgency that causes me to freeze and listen.

Time passes. I hear nothing.

“Guess it was just something outside,” she says. The anti-climactic gravity of the statement is suppressing.

Later that night, we're watching *Lord of the Rings*. I reach my hand in front of her and declare, just above the sound of swords flailing and torches dying, “Listen!”

One of the black drop-ceiling tiles in our new theater room is resonating. I thought I had them all licked, but one is still marching, or should I say vibrating, to its own drummer, or should I say LFE channel.

My loving wife turns to me and, with a combination of understanding and

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frustration only a spouse of 8 years can conjure, reassures me, “You're hearing things.”

This is the same woman who hours ago heard “something” outside of our highly insulated Canadian home.

This sort of thing is commonplace in our daily lives, so I know both my wife and I “can” hear. The difference is what exactly we care about hearing.

The hi-fi world has plenty of sins. At one extreme, we have boutique brands charging ungodly sums of money for speakers of dubious performance, albeit gorgeous looks. At the other end of the scale are mass market names selling one-box “stereos” with more R&D in the flashing front panel lights than anything else.

Along with the flashing panels come cheap speakers intended to meet an interior decor code of ethics. It’s no great secret that they suck in the sonics department. If a certain big-time brand name is on it, it will sell, but that’s no excuse for bad sound.

The fact that mass market names have for years “gotten away with” selling poor sounding speakers is testament to the fact that the esthetic demand for such a thing is very real. Drop into your local electronics and appliance warehouse, and the “*Home Theater in a Box*” craze appears to be in full swing. Some of them are actually pretty good, but some are terrible. Are stylish people sonically ignorant? Hardly. They’re just misinformed and fall prey to clever marketing.

With the confidence of a mythic warrior, Paradigm’s speaker catalogue is only 1/3 product info and 2/3 a crash course in how to shop for speakers. It’s a grounded primer which is worth the read even if you’re an old hand at it. If the multitude of tiny speaker owners had taken the time to listen to what they were getting, they may have found their way to a Paradigm dealer and listened their way out of the sonic mire of distortion and into responsible audio reproduction. They would, if I may be so bold, have cared about sound quality.

INTERIOR DECOR MEETS HIGH FIDELITY

Almost 3 years ago, while at CES in Las Vegas, Mark Aling, Paradigm’s marketing go-to guy, was eagerly showing me the proverbial “What’s New” from the company. I watched as he went over the in-wall speakers and paid polite attention

as he showed me the first Cinema speaker models. I listened to the requisite demo featuring a brash scene from “*The Matrix*”, but in all honesty I was much more interested in the then new AVM 2 processor which was waiting for me in another room.

“... I hope not only the casual home theater enthusiast is reading: Staunch audiophiles would do well to pay attention too.”

Giving the Cinema speakers a serious listen was not even a consideration at the time. Sure I had faith in the Vandermaerel boys, but “Who would want these?” I thought to myself. They’re not really any cheaper than the company’s other budget speakers like the Micro or the Atom, they’re just smaller.

The point, which I completely missed, was exactly that (quality in a small size).

Fast forward to present day. I’ve pulled my head out of the proverbial hole in the sand and have come to appreciate that several, perhaps many, home theater enthusiasts:

- A) Don't have space for a “full blown” speaker system.
- B) Don't want a “full blown” speaker system.
- C) Don't need a “full blown” speaker system.
- D) Can't afford a “full blown” speaker system.

But most importantly:

- E) Still want dynamic, distortion free sound.

The Cinema Series represents Paradigm’s successful essay at taking their established speaker design principles and fitting them inside a dainty package. Beyond just the size consideration, a speaker that fits one’s lifestyle has to find its place in the room with as little intrusion as possible. Part and parcel of the Cinema line therefore is an array of mounting systems all focused on simplicity and discreetness.

SCIENCE, ERGONOMICS, AND ECONOMICS

The Cinema series is actually quite a departure for Paradigm in that these are the first speakers specifically designed to *need* a subwoofer. Even the company’s Micro, a speaker not much larger than the Cinema 90, can stand on its own, with miraculous bass for its enclosure size.

On the surface, the design challenge is simple: make tiny drivers which perform and stuff them in as small an enclosure as possible. Out goes the whole wood cabinet thing, in comes the polymers.

Although manufactured overseas under the eyes of Paradigm’s people, the design of the series was all done at their Ontario, Canada facility. There, Paradigm has invested heavily in plastics manufacturing equipment over the years. Elegantly, this investment permitted them to experiment with various plastics until they came up with their own proprietary one for the Cinema series, i.e., enclosures that include materials to stiffen the product, and others to damp resonance. In practice, the enclosure is not exactly dead, but it is *stuffed* with mineral fiber.

The tweeter, consistent across the line, is another Paradigm original. Quoted as CPC (“Coated Polymer Composite”) the tweeter’s diaphragm is a very thin plastic, coated with ceramic to make it more rigid.

If the mid/bass drivers look like metal, it’s because they are ... sort of. MPC (Paradigm does get carried away with their acronyms, and yes, they have a marketing department too) stands for “Metallescent Polymer Cone”. In plain English these are plastic cones embedded with metal particles to increase rigidity (the nifty appearance is a cool side effect).

In addition, a strong, long life rubber surround is used.

Next time you’re at the warehouse store, ask what sort of driver technology is in that home theater in a box. What’s that? They have no idea? Of course not. There’s nothing in the literature other than fancy pictures of families having an incredible amount of fictitious fun. If you crack

open one of those mass market satellite speakers, odds are you will find generic paper cone drivers like the ones in your 20 year old boom box, and tweeters, if even there are any, would likely be the ubiquitous Mylar stuff, or worse, more paper cones.

“... the PDR-10 is very satisfying ... natural and musical ... does not disappoint by any measure ... try as I might, I could not dislike any of what I heard.”

Paradigm did not grab some drivers off the OEM market, slap them into a wood cabinet from who knows where, and then spend the money on marketing. They thought about this, researched it, built what it takes from scratch, and now offer it at a more than fair price. Chalk up one more for the legendary Canadian VALUE.

With the review set that I received, came two pairs of X-40 stands comprised of a nice heavy base and a very slender, contoured post. A 14 gauge speaker cable is easily passed through the shaft, protruding right where the binding posts of the speakers are. Any Cinema model gets fastened to the ball type fitting at the top of the shaft. Other available hardware includes a similar ball-joint wall mount or a flush mount system appropriate for the surrounds.

ARE THEY ANY GOOD?

Well sir, let me think.

My first impression with the set in our living room and bedroom was that they felt a little spicy in the top end. Not bright per se but certainly a little tingly. We at *Secrets* have noted this before on Paradigm speakers and as such I'll take a little license here and give it some reflection.

Paradigm's measurement and design stems from their remarkable anechoic chamber which I'm sure is the envy of

many a speaker manufacturer. The root of this ideology comes from the famous research done by the Canadian government years ago that concluded that A) You don't need “educated” golden ears to know what sounds good, and B) What is perceived as good sound is consistently coincident with flat frequency response. When comparing Paradigm (and others like them) to more typical speakers, the flat response tends to strike the listener at first as being bright. Having had many different speakers, including a wide variety of Paradigm models, in four very different spaces in my home, I can tell you the speakers are most always “right”, but the speaker/room combination is frequently “wrong” ... if I may be so bold.

“... it's almost as if the front speakers are optimized for dialogue ... unusual clarity for the money ... a satisfying sonic experience.”

Typical living rooms, even subjectively large ones, sustain high frequency energy more than perhaps they should. The reverberation intervals are short and intense. An appreciably flat speaker (like most of Paradigm's) in a typical room will not be bright, but the top end is likely to come across as ... well ... spicy. Go figure.

My recently completed “serious” screening/listening room includes a couple dozen square feet of 3” Studio Foam acoustical wedges. Guess what: the “spice” in the Cinema speakers was conspicuously gone, and the treble turned from “good” to “exquisite”. Go figure again.

The point here is that if past experience with Paradigm speakers is any indication, there is nothing wrong with the Cinema tweeter's rendition of the top end. Rather, it simply rewards a subjectively good acoustic space and exposes a compromised one.

The mid/bass drivers are so small they are almost true midrange drivers. This happens to go hand in hand with the

crossovers being on the high side, between 2.5 kHz and 3 kHz. A bass-capable driver would begin to beam at such frequencies, but that's clearly not the case with these more midrange-ish units.

In practice, it's almost as if the front speakers are optimized for dialogue. They have what I'd describe as unusual clarity for the money. On the whole I found the Cinema speakers to be a satisfying sonic experience. One has to be way off center before the CC's sound combs, and in most real world settings it will be a non-issue.

“The Cinema series represents Paradigm's successful essay at taking their established speaker design principles and fitting them inside a dainty package.”

The ADP models I am particularly enthusiastic about. With but a few exceptions, the other good tiny speakers on the market simply duplicate the front pair as surrounds. While dipoles are not a panacea, and some seating arrangements preclude their effectiveness, I consistently advocate them. Paradigm manages to squeeze the double complement of drivers into the compartment by inverting their arrangement on one side. With it so tight in there, splitting the chamber in two (necessary for dipole design) would have been impossible. Instead, Paradigm put an internal “cap” over one of the mid/bass drivers, sealing it off from the air-space of the other. At first I was concerned about the two having a dramatically different response as I could even feel one driver was tighter than the other. None of Paradigm's ADP speakers are truly dipole though. The crossover is tweaked such that, at midrange and treble frequencies, the two sides are out of phase, but by the time you get down to the upper bass region, the drivers are in phase and the output of the two dissimilar acoustic suspensions is complementary (or so we are told).

By definition, the Cinema speakers NEED a bass module at the very least. If said module can sub-woof in addition to woof,

so much the better. With the best place for a subwoofer system being in corners, behind plants, and generally out of the way, Paradigm did not need to create a Cinema Series Sub per se. They already have a wide selection of subwoofers which are selling just fine. Pick one that is appropriate for your room size, and voila, the proverbial 5.1 set. Mark was going to send their PDR-8 to be part of the set, but when it comes to subs, I'm old school: The bigger the driver the better so he sent the PDR-10 giving an extra 2" of diameter on the driver.

The PDR-10 is a basic ported design with an amp quoted as 100 Watts. Stereo speaker level inputs and a mono line-level input are provided along with the requisite gain control and variable low pass filter.

"They [Paradigm] thought about this, researched it, built what it takes from scratch, and now offer it at a more than fair price."

Within the context of its price, the PDR-10 is very satisfying. What I mean by that is simply that it naturally can't hit the pedal notes. You have to be willing to spend two to three times the floor space and/or price to get that sort of depth. For the range it is designed for, I describe the sound as natural and musical. With placement effort, we were able to get a solid 30 Hz, and its output maintained composure to well over 100 Hz, which it will have to do if coupled with the Cinema speakers.

For near field situations or modestly sized rooms, the PDR-10 does not disappoint by any measure.

CAREFUL NOW ...

It's hard to gripe or nit pick about speakers this inexpensive, and try as I might, I could not dislike any of what I heard. The only "issue" is that the system needs a relatively high crossover between satellite and subwoofer. 100 Hz would be good. I certainly would not want it any lower than the

90 Hz crossover in the Yamaha receiver we used for most of the listening tests.

A high crossover in and of itself is not a "bad" thing, but it does bring two stipulations: A) The subwoofer really must go in the front of the room (which is generally preferred anyway), and B) Extra special care must be taken when adjusting the splice between sub and satellite. It was unusually easy to get subjectively bad performance from the system, resulting in a very fat, bloated sound. Run the sub too lean, and the Cinema set will have a hollow, empty character. Run the sub hot and you'll have irritating one-note bass.

With 99.9% of surround sound processors these days providing their own high-pass / low-pass combination, I recommend starting with the PDR-10's own low pass dialed to the max and calibrate its level with AVIA. With the sub in the a-typical room corner, the bass will likely sound fat if the crossover is high (which it should be for these speakers). LEAVE the level there! By ear, bring the subwoofer's low pass down until the sound smoothes out. If you have to go much below the SSPs low pass, recalibrate the level and continue to adjust the low pass. Yes, the two filters (one in your SSP, one on the Sub) will interact, bringing phase issues to the table, but it is better to adjust this way than ride a subwoofer level knob all day.

CONCLUSION

No, I'm not to going replace my magnificent Reference Studio models with these Cinema speakers. Be realistic. However, I would sincerely buy this set for my father who would like surround sound added to his DVD player, but who is not interested in, nor has the room for, big boxes. I would recommend anyone looking at home theater in a box type stuff pause for a second and seriously consider what they are getting into. That \$500 electronics warehouse special might seem fun at first, but a couple weeks or a couple months later, your ears will get tired of the distortion, and you'll lose interest in this wonderful facet of home entertainment. Go with a basic receiver and this speaker set, and though you'll be

spending a little more, you'll be getting dramatically more.

Having said that though, I hope not only the casual home theater enthusiast is reading: Staunch audiophiles would do well to pay attention too.

*"Real fidelity.
Real small. Real cool."*

For five years my wife has wanted my "stuff" (a.k.a. home theater) out of "her" living room (even though she watches movies right along side me). Comically, no sooner had I moved everything to "my" dedicated screening/listening room, than she mused, "*Can't we somehow have music in the living room?*". Sheesh! How about a pair of Cinema 90s, the Sub, and a modest receiver with a CD player? That would make a great sounding but discreet looking music system, good for a den or office too.

What do you get the Home Theater aficionado who has everything? A basic 5.1 receiver and a Paradigm Cinema set for his or her PC! Overkill? Not for some computer gamers. No "computer" speaker set at any price has anything on these little gems. We tried them for a couple of weeks in the computer room where I logged a few dozen hours playing *Neverwinter Nights*, *Combat Flight Sim*, and *Mechwarrior*. A slightly leaner setup would be a pair of 90s, the sub, and a basic integrated amp. Yummy!

What about the bedroom? My wife and I have the pleasant habit of winding down at the end of the day by watching a little TV in bed. It's the first place we tried the Cinema set, and quite frankly, I don't know how we're going to do without. Dialogue is infinitely clearer than the TV's built-in speaker, and having a soundstage wider than 13" is obviously preferred. At the same time, the Cinema set does not make our bedroom look like a home theater with a bed in it. I dare you to try and sell your significant other on the idea of a full size 5.1 speaker set in the bedroom. Ouch!

Paradigm Cinema Speakers: Real fidelity. Real Small. Real Cool.