

“ ... STAND-OUT QUALITY ...

SUPERB ...

... ultra-smooth ... enveloping ... huge sound levels ... ”

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“There are many HTiBs on the market, but we haven’t seen any at this price that give this level of matched performance from all their components.”

Canadian loudspeaker manufacturer Paradigm tags its Cinema 110 CT speaker system as ‘Beyond HTiB’ (‘home theater in a box’). Let’s test that claim ...

EQUIPMENT

In fact, this system is delivered in a single box. A rather large, heavy box to be sure. The weight of the whole package comes to nearly 66 lb (30 kg). And more than half of that is just for the subwoofer with the rest being spread among three compact front speakers and a pair of compact surrounds.

The problem with many HTiBs is that the subwoofer doesn’t measure up in quality to the satellites. However, this system offers a fine match of components.

Consider, with five satellite speakers, you are relying on the subwoofer to deliver not just the low frequency effects content of your movies, but all the bass from all the channels both for music and movies. For that, it needs capacity — which the Cinema 110 subwoofer certainly has.



It’s a mid-sized unit, measuring 6.5” (165 mm) tall, 12” (305 mm) wide, and 15” (381 mm) deep. The cabinet is bass reflex loaded and the driver is mounted on the front, firing out into the room. That driver is a 10” (254-mm) unit with a 2” (51-mm) voice coil. Driving it is an amplifier rated at 150 watts RMS Continuous and 450 watts Dynamic Peak. The latter suggests a head-room of nearly five decibels. It has the usual auto on/off circuit and phase-reversal switch, and features a soft-clipping circuit to reduce harshness if it’s overdriven. The connections are kept simple, with just a pair of line level inputs.

Paradigm says that the subwoofer extends to 30 Hz at -3 dB in a typical listening room.

The front three satellites are identical (save for the location of the company badges on their grilles). Each is 17" (432 mm) in its longest dimension, 4.5" (114 mm) across its face, and 4" (102 mm) deep. All the enclosures are sealed, and made from a sturdy polymer. The drivers are magnetically shielded.

Each enclosure carries two 4.5" (114 mm) bass/midrange drivers with injection-moulded co-polymer cones, and there is a 1" (25-mm) titanium dome tweeter centred between them.

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The surround speakers are small, measuring just 7.5" (191 mm) by 4.75" (121 mm) by 5.25" (133 mm), but carry a bigger driver load, that is, two of the tweeters and two 3.5" (89-mm) bass/midrange drivers. One of each kind is on opposite faces of the sealed enclosure. These are wired in a dipole configuration and, when properly mounted so that the leading edge of the enclosure points towards the listening position, generate a diffuse sound field of the kind recommended by THX.

Paradigm rates the sensitivity of all these satellites at 87 dB, their power handling at 70 watts for the front speakers and 50 watts for the others, and their impedance at 8 ohms. Within a plus or minus 2 dB band, the frequency response is specified for the front speakers and the surrounds as 120 to 20,000 Hz.

PERFORMANCE

We connected the speakers to a high end (140-watts per channel) home theatre receiver and carefully set its subwoofer crossover frequency to 140 Hz. That ensured we obtained full advantage of the ultra-smooth frequency response of the satellites without loading them with unnecessary bass. The

sharp digital filter in the receiver meant that although the 50/70 watt power handling ratings of the speakers seem low on paper, without any bass it was more than adequate to produce huge sound levels (most energy in most music is in the bass).

The twin bass reflex ports for the sub are, unfortunately, situated on the rear. That means that we couldn't tuck the unit as closely into our 'subwoofer corner' as we would have liked, because restricting air flow to the ports would change the enclosure's tuning characteristics.

Nevertheless, the subwoofer produced excellent levels. We agree that around 30 Hz, or perhaps the high 20s, was the limit of the bass extension, but that was a wise design choice because the subwoofer was able to keep up with the satellites at all times, producing evenly balanced sound up to peaks of over 100 dB SPL.

With stereo music, the imaging was of stand-out quality when we had the tweeters precisely at ear level. Off the vertical axis things fell apart, as is the nature of speakers with this driver layout. The surround performance and imaging was exceptional, with the dipole rear speakers enveloping the room in an impressive way.

"... a wise design choice ... the subwoofer produced excellent levels ... able to keep up with the satellites at all times ... evenly balanced sound up to peaks of over 100 dB SPL."

CONCLUSION

There are many HTiBs on the market, but we haven't seen any at this price that give this level of matched performance from all their components