

Atlantic Technology 1400 SR-z Home Theater Height Channel Speakers Review

By Chris Boylan

Overall Rating (out of four): ★★★★★

Atlantic Technology 1400 SR-z Review



Wanna Get High?

Home Theater sound has evolved so much in the last three decades. From simple stereo to matrixed Dolby Surround on VHS tapes to discrete 5.1-channel surround sound on laserdisc, DVD and broadcast HDTV channels, and more recently into the lossless 7.1-channel surround sound options of Blu-ray Disc, the quality of surround sound available to us in our homes has improved immensely in a short time. But really, even the best traditional surround sound set-up is fairly two-dimensional. Sure, sound comes from all around you, but what about above you? Companies such as Dolby and Audyssey have stepped up to the plate here, offering options for height channels to be added to a home theater in order to enhance the sense of immersion and to give our surround soundstage a more three dimensional quality.

The most ubiquitous of the new height channel options is Dolby Pro Logic IIz, an enhancement to the standard Dolby ProLogic surround sound decoding suite which adds a pair of height channels to the mix. Many new receivers from such companies as Onkyo, Denon and Pioneer have added a PLIIz height channel option to their recent home theater receivers, and speaker companies such as Atlantic Technology have designed speakers to take advantage of this opportunity. The Atlantic Technology 1400 SR-z is Atlantic's first speaker designed to be optimized for height channel applications.



Atlantic Technology's 1400 SR-z - shown with and without its removable magnetic grilles.

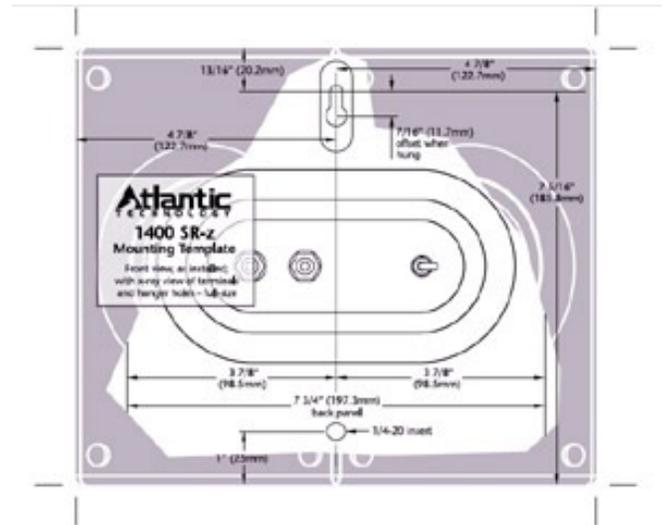
Ideally, you'll want to match your height channel speakers to the brand of your main speakers, so that tonality is consistent across the front of your sound stage, but since the height channels are generally used to create a diffuse and ambient soundfield, you can get away with mixing brands if your main speaker maker doesn't offer a suitable speaker for height channel use. And what is a suitable height channel speaker design, you might ask? Well, since a more diffuse sound is what you're after, pinpoint imaging precision is really not the goal here. And this means that a bipolar or dipolar speaker design is preferred over a traditional front-firing speaker.

The 1400 SRz is actually both bipolar and dipolar: it's switchable between the two modes, depending on your preference. In either case, drivers on each side of each enclosure emit sound in two directions for an immersive height channel effect. In bipolar mode, the two drivers put out the exact same sound in two different directions. In dipolar mode, the sound from one side of the speaker is in phase while the other side is out of phase.

Dipolar configuration will generally create a more diffuse surround soundstage where the location of the actual speakers is difficult to discern (this is particularly good for movies), but because the drivers are out of phase from each other, the overall sonic balance in areas outside the “sweet spot” may be compromised, particularly when you consider that the height channel speakers are being placed directly above the main speakers. In comparison, bipolar speakers create a more discrete soundfield with more localizable sounds, while still maintaining a more diffuse sound than traditional front-firing dynamic (“monopolar”) speakers. For our listening, we set the mode switch on the SRz speakers to “bipolar” as this led to the most enjoyable results in our specific room, with a diverse set of source material. But owners might like to experiment with both modes. If you use dipolar mode, be certain you arrange the speakers properly with the arrows pointing toward each other. Also, keep in mind that the 1400 SR-z also makes a fine surround sound speaker, for rear and side surround channels. And in these applications, you may prefer the sound in dipolar mode (again, some experimentation is always useful).

The Set-Up

Setting up the 1400 SR-z is simple. It comes with a cardboard speaker template for each speaker so you can visually preview exactly where they will be placed on your front wall (complete with mounting holes so you’ll know where to place the mounting screws or nails). Recommended placement is at least three feet above your main front left and right speakers and directly above them or slightly wider. The high quality, gold-plated, spring-loaded speaker terminals don’t accept banana plugs, so just use bare wire or pins and you’ll be ready to rock.



Cardboard mounting templates allow you to mock up where the speakers will go before drilling any holes.

Unleashing the Third Dimension

With all the hype about 3D these days, it’s a wonder that the audio companies haven’t positioned the 3D nature of height channels very much. After all, by definition, height channels take a relatively flat but immersive surround sound experience, and give it a “z” dimension: height. Is it the perfect complement to 3D TV or even to music or plain old 2D movies and TV shows? Well, that depends what you’re looking for.

Currently there is no content -- music, movie or game -- that is encoded with a real matrixed height channel. Height information is currently generated by the processor identifying specific cues in the soundtrack that seem to be well-suited to a height channel. According to Dolby, their PLIIz decoder “identifies and extracts spatial, non-directional cues that occur naturally in all soundtracks.” Ambient sounds such as rain, wind and musical swells are extracted and placed into the height channel to create a more enveloping sonic soundstage.

Switching in the Dolby ProLogic IIz processing on our Onkyo HT-RC160 receiver to engage the 1400 SRz front height speakers did add a pleasant element of spaciousness to some material, both for movies and music. In the rain sequence a minute or so into the opening of “Ratatouille” on Blu-ray Disc the wind comes from all around and above you, while raindrops fall lightly on the leaves of the trees, and on a rooftop above your head. In this segment, there is definitely a more heightened (no pun intended) sense of immersion -- a veritable wall of sound. And in the Extended Edition of “The Lord of the Rings: The Two Towers” DVD set, Disc II, Chapter 3, the Arwen/Aragorn dream sequence takes on an even more spacious and ethereal quality than it has without the height speakers engaged.

Moving onto a musical selection, Celine Dion’s “It’s All Coming Back to Me Now” (track 3 on “A New Day” on Blu-ray Disc), offers some neat height tricks, specifically some percussion that clearly comes from the top left of the soundstage starting around 11:00 into the disc and extending for about 40 seconds. It doesn’t change the whole feel of the song, but it makes the performance seem larger and somehow more weighty.



Although the binding posts do not accept banana plugs, they will make a secure connection with pins or bare wire.

In terms of the sound quality, the Atlantic Technology 1400 SRz is an excellent match for other Atlantic Technology speakers, particularly the System 2400 speakers that we recently had in for review, providing a nice seamless presentation of sound up down and across the front of the room. Because height channel information includes virtually no bass frequencies, the 1400 SRz's crossover-free, single way, two-driver design is perfectly suited to the subject matter. Spending more to get a larger height channel speaker isn't necessarily going to give you any better performance. Maybe more dynamics and slightly higher power handling, but that's about it.

Turn Ons

- Simple set-up and installation
- Excellent fit and finish
- Great sound

Turn Offs

- A little expensive
- Speaker terminals do not accept banana plugs

Final Thoughts

Without any Dolby Pro Logic IIz-encoded material, height speakers are a bit of a tough sell. Certain material can benefit from simulated height channels, extracted from ambient sounds in current movie and music mixes, but the effect is not always that dramatic. But this should not be taken as a knock on these specific speakers, which do a bang-up job reproducing whatever height channel information they are sent. Whenever PLIIz-encoded material does become available -- whether in music, movies or games -- the value of the height channel will make itself more readily known.

If you have a receiver or preamp/processor capable of Dolby ProLogic IIz decoding, then I'd recommend picking up a pair of the 1400SR-Zs and experimenting to see if you like the effect. They make a particularly nice sonic match for other Atlantic Technology speakers, but can be used with other brands as well. And this way, you'll be ready when true PLIIz-encoded material becomes available.

Where to Buy:

- Atlantic Technology 1400 SR-z Height Channel Speakers on Amazon.com

1400 SR-z Specifications (from the manufacturer):

- Speaker Type: Sealed-box dipole/bipole surround speaker
- Drivers: (2) 3-1/2" poly-treated full-range with HFAR (High Frequency Assistive Radiator)
- Frequency Response: 110Hz - 20kHz +/- 3 dB
- Nominal Impedance: 8 Ohms
- Crossover Frequency: N/A
- Sensitivity: 89dB
- Recommended Amplifier Power: 10-100 Watts RMS
- Dimensions w/ grilles (w x h x d): 12.25" x 8" x 5.375"
- Weight (each): 7 lbs.
- MSRP \$425 /pr.

OVERALL

VALUE

PERFORMANCE

FEATURES/ERGONOMICS

