



THE APOGEE SCINTILLA SPEAKER SYSTEM

Type: three-way full-range ribbon dipole
Frequency response: 30 to 25,000Hz, ± 3 dB
Recommended minimum amplifier power rating:
100 watts/channel

This is probably the most challenging audio product I have attempted to review. At its best, it pushes the state of the art to new heights. In my listening room - with the right electronics, placement, and musical material - it can be the most musically natural speaker I have ever heard, at any price.

The Infinity IRS and WAMMs are clearly superior on some material, but these are audio Nirvana that cost more than ten times as much. For those of us audio cheapskates who have to keep our speaker budget to a piddling \$3500 a pair (or \$35,000, for JGH's new ten-channel sound), the Apogeos can literally, be the Scintilla (or should I say that the Scintillas can be the Apogee?)

The Infinity RS-1Bs and Quad ESL-63s are my favorite rivals in this category, but the Scintillas can provide a degree of total integration and cohesion over a wider range of frequencies and under a wider range of dynamic conditions than can the RS-1Bs. The Scintilla's timbre is acutely sensitive to room placement and drive electronics, but at its best it is more natural than anything I have yet been able to achieve with my Quad ESLs. The soundstage is also more natural in terms of imaging stability and depth.

The bass can also be astounding. I should caution you that I seem to have better luck in the bass with dipole speakers in my, room than most audiophiles; nonetheless, the Scintillas are amazing. They're not very big, and the ribbon takes up a surface area only 12" by 53", but I can get a powerful 25Hz note in my, room at moderate listening levels using a third-octave warble tone generator. This in no sense implies a flat power response under dynamic conditions (all you physicists out there need not write), but it does mean that the note is clearly audible without doubling. And I can get extremely tight and deep bass with music - I can feel it. This is something I have never experienced in my home without the use of subwoofers.

But, don't think the Scintillas are the speaker that will make every audiophile's life a bed of roses. No speaker is more demanding of the right setup. The Scintillas are the ideal speaker for Indiana Jones: you don't just buy a speaker, you begin an adventure. You must be willing to acquire the right electronics to drive this speaker (at 1-ohm), you must be willing to get the right cables (which last month's issue should make you realize is work), you may have to screw endlessly with VTA-and on top of all that you'll need one hell of a lot of patience, and maybe a new listening room! Few speakers can sound worse in the face of determined ignorance. With the wrong electronics and positioning, the Scintillas can easily degenerate into producing an unnatural sound, ending up as little more than a high end curiosity.

They also are not going to be easy to audition adequately outside of your home. The speakers weighs 140lbs each, and they require far more space and care than most dealers can afford to provide. Even in the best dealer showroom I know of - and I cheerfully admit to a horrendous bias and conflict of interest based on the fact that Bobby Taylor of Excalibur Audio is a close personal friend - the Scintillas are demonstrated at a level of performance that only roughly approximates how well they sound in my living room. Most dealers will either

have to sell them on their looks (splendid!) or on the pure technology.

THE TECHNOLOGY

Let me pause for a few words about the technology. The Scintilla is a full range ribbon speaker. The tweeter and midrange are close enough together, tall enough, and thin enough to approximate a line source. The woofer is a ribbon woofer, not some modified form of the well known SeigHeilMagnepEMIW driver pioneered in the 1830s.

"Linesource" and "point source" are mildly useful quasi - absurdities, provided one is sufficiently well informed to know that they both involve such severe compromises that neither condition can seriously be approached in the home. A perfect line source cannot be approximated by extending from floor to ceiling; it would have to extend to infinity through an infinite floor and ceiling in an infinite room and have zero width. A true point source not only would have to have zero diameter but be surrounded by infinite space in every direction which means the listener must be an infinite distance from the point source in an infinite unbounded area. We may have infinite slopes in our crossovers, but we do not yet have an amplifier powerful enough to get the music to a listener who is an infinite distance away!

The Scintilla has no circuit equalization, and the crossover at 500Hz and 6000Hz is not equalized or gimmicked. There also is no transformer or plastic backing to the ribbon. In other words, you get a close approximation of direct drive but this demands one hell of a lot of precisely the right kind of power.

There is one adjustment on the speaker, which can make it vary from exceedingly difficult to drive to merely a somewhat unpleasant load. The owner's manual describes how to alter a variety of straps on the input to the speaker so I won't go into it here. Altering the straps determines whether the woofer ribbons are wired in series or in parallel, and this changes their impedance from 4 ohms to 1-ohms. Similarly, the midrange -tweeter sections are changed from series to parallel, resulting in an impedance of 3-ohms or 1-ohm. See below for my comments on the two different setups.

The Apogee is also a classic dipole. This means that it needs space to function. To put it differently, you need a room where you can keep the Scintillas 8 feet apart, and at least 2 feet from the rear wall and 3 feet from the side walls. You may have to experiment with something like the excellent new sound panels from Monster Cable to fill in archways and doorways, and you'll want to minimize the furniture between you and the speaker (or even near the speaker).

THE LISTENING

This mix of technical characteristics adds up to sound that can be very hard to predict. I have already praised the best sound I got out of this speaker in virtually every meaningful way I had the advantage, however, of Krell amps designed to deliver immense amounts of current into virtual short circuits. I also had the help of both the manufacturer and a dealer in setup, and the help of my wife and daughter in little movements of the speakers to get everything just right.

And each little movement it is. You need to experiment with tilt (use books or cardboard), you need to try different toe-ins (generally as close as possible to parallel with the rear wall while maintaining an image that "floats" naturally in space), you need to move the speakers back and forth by inches to get just the right mid-bass balance, and you then need to adjust your precise seating position to get the best possible soundstage.

The soundstage detail can also be a bit of shock for most cone-driver users. There is so much information! If I had not heard the same transient detail in other ribbons, the Stax ESLs, the Lambda Pros, and the Quad ESLs, I would almost certainly complain that the Apogees were exaggerating transients. Even so, I had to check. I made a tape of a triangle on my Beta Hi-Fi to check the Scintillas realism. I found that the taped transients from the triangle played back much more realistically on the Scintillas - sounded much more like the real thing - than on my Quad ESL-63s. I checked again by having someone play the triangle live in the same spot where the reproduced image was floated. I also got a slightly better square wave from the Scintillas (in my listening position) than with my Quads, square waves being an area where the Quads previously had no rival.

The truth of the matter is that Scintillas ruthlessly reveal multi-miking, dubbing, tape hiss, transistor hardness,

tube softness, and all the rest. On really good source material, they make up for this with a magnificent amount of detail and soundstage realism. But romantic the Scintillas are not; they are revealing. The Quad ESL-63s are definitely far more forgiving, and they can often tell you more about a recording than you really want to know.

The Scintillas do not really work their best on the 4-ohm setting with any amplifier that I had the opportunity to try them with. They, were okay with the Krells, but sounded more dynamic, liquid, and natural in timbre when they were wired for 1-ohm. At 4-ohms, they seem to parody the colorations you normally hear - and add new ones; this can be jarring.

Not only that, the wrong amplifier will give you something that varies from sonic mediocrity to misery. Take a few examples: My PS Audio Elite simply pooped out. My Audio Research D-250 lost all its bass and was slightly bright. My neighbor's Hafler went dull and "tunnelly." The NYAL Mosfet 600 became incredibly romantic, possessing bass power that shook the room and made my daughter (a bass guitarist) frabjous to the slithingtove. (I may not spell like Lewis Carroll, but then my daughter isn't named Alice.) The new Adcom 555 had to be modified to drive the 1-ohm setting on the Apogeos to high volume levels. It never had quite the extraordinary ability to float an image on the 4-ohm setting that makes the 555 such a major sonic advance with other speakers.

Unfortunately, 1-ohm capable amplifiers don't grow on test benches. You tend to be restricted to the Adcom GFA-555, Krells, Belles, and Classes. Sending too little power into the Scintilla at 1-ohm makes them sound recessed in the midrange, muted, and lacking in deep bass. The result is all depth and mid-bass, and no presence. Other than the amps I found, I don't know what to tell you. Every amp will be an experiment. Don't go by the amps ability to drive a 1-ohm resistor; the Scintilla is not a resistor.

If you use improper speaker cables, the soundstage and spectral balance change. I suggest using Tweek, really tight connections, and careful experimentation with Distech, the Straight Wire, Monster Cable Powerline II, and Randall Research. The MIT cable did not work. You will really hear differences between all these cables: the whole upper five octaves shift slightly in balance, and the soundstage width and imaging alter. Straight Wire and Distech give you - speedy-highs and a forward sound; Powerline II gives you a midhall softness with somewhat more natural integration of the lows and midrange-treble.

You'll also find that the Scintillas improve with very short speaker leads, preferably in a bi-amped or bi-wired mode, and, again, only with amplifiers that deliver very high amounts of current into 1-ohm. The closer you come to fulfilling these conditions, the less sensitive the speaker is. The further you move away, the more unpredictable will be any particular combination of amplifier and cable.

So how do we judge the Scintilla - by the difficulty of the journey or the reward once we arrive? If you hate getting your 1982 Rolls maintained or sending your Picasso out to have its cubes rounded, this may not be your speaker.

As for me, I find the Scintillas to be sufficiently good to be worth the adventure I have just described, and I have never had so much support from my family in getting a difficult product to perform. They love what this speaker does in giving them music, and they are willing to put up with my experiments to see if they can get even better sound. My wife also regards the taupe-colored version of the Scintilla to be the best looking speaker she has ever seen.

But, no one can ignore the effort required, the 53500 price tag, the difficulty in getting a good dealer demonstration, the room requirements, and the possible need for new amplifiers. The Scintillas really do push the state of the art!

AHC

JGH Addendum:

I don't quite know what to make of this rave report. The sound Tony describes here is not essentially dissimilar from the sound of the Duettas that I spent a little while with at the CES. And while Tony could listen to those Duettas for six hours, I think half an hour would have been pushing my limits! The sound was relentlessly

detailed in a way you never bear in live music, though I hear that Apogee is now providing a switch to lower the treble about 2dB above approx. 5kHz - which might just do it.

[Back to top](#)

[Home](#)