

SoundStage!™

Product Review

Focus Audio Signature FS-688 Loudspeakers

by Doug Schneider
das@soundstage.com
March 2003



Review Summary

Sound

"Smooth sound, impeccable imaging, and exquisite detail"; "soundstaging ability is obviously a standout, but [the FS-688's] midrange-on-up magic differentiates it from many speakers large or small"; "I'd wager that the FS-688s' midrange and top-end performance can hold their own against a good number of speakers regardless of price."

Features

Two-way minimonitor that uses very high-quality parts, including Scan-Speak's Revelator tweeter; "the FS-688's wood veneer is drop-dead gorgeous, and the extra-thick clear-coat finish makes it sizzle."

Use

Doug recommends "listening off-axis somewhat, say 15 to 20 degrees, which brings down the top end a tad and makes the whole presentation just a little more natural."

Value

"An audiophile instrument with luxury-good appeal that plays music with great precision."

In 1981, I paid \$400 for my first set of two-way loudspeakers. Today I can name more than a few speakers priced less that can not only clean house on those original speakers but provide sound quality that will impress even the most discriminating audiophile. Speakers have gotten nothing but better *and cheaper* with time. So today when you reach \$2000 for a pair of two-ways, you get so much that it's hard to imagine what more you could want.

Above \$2000, however, a two-way bookshelf speaker has to be pretty darn special to warrant recognition. Unfortunately I've come across many that use parts and technology you can find with speakers a fraction of their price; construction and

finish that are no better than that of sub-\$2k contenders; and sound quality that's often not as accurate as that offered by some of the best lower-priced speakers.

Occasionally, though, a two-way minimonitor makes a successful case for crossing the \$2000 threshold—justifying what is, admittedly, a large chunk of money for a small speaker. Focus Audio's \$2600 USD Signature FS-688 speakers are pint-sized gems that do just this.

Description

With a cabinet that measures 13"H x 7"W x 10"D, the FS-688 is the smallest speaker in Focus Audio's newly revised Signature series; the floorstanding FS-788 and FS-888 models are above it. The compact size of the FS-688 definitely puts it into the *minimonitor* class, and I like this—I find small speakers attractive, easy to place, and no problem to set up in an appropriately sized room. The FS-688, though, is no lightweight—it comes in at 20 pounds and is rock-solid.

While the FS-688's dimensions don't necessarily correlate with its price, the build quality certainly does. Just as a diamond has value that defies its size, a careful look at the workmanship of the FS-688 reveals something that is in a different class than almost all of the two-ways I've seen, regardless of price. The FS-688's wood veneer is drop-dead gorgeous, and the extra-thick clear-coat finish makes it sizzle. The review set of speakers came in what Focus Audio calls piano walnut, and it's *perfect*. Other finishes include piano burr oak and piano black. The FS-688s are finished on all six surfaces, and there's not a flaw in sight. Words, even pictures, don't describe how good these speakers look. You need to actually see them to appreciate them.

Turn the FS-688 around and you'll also notice the attractive way the binding-post area is recessed and finished—flawless again. Same goes for the port, and this surprised me. At worst, ports are just holes on the back of speakers. Most companies, though, at least finish the port with a plastic flange that also

SoundStage!™

Product Review

helps direct the air properly. I suspect that Focus Audio felt that plain ol' plastic wouldn't be good enough, so the FS-688 has the flange shape, but it's carved into the cabinet and finished to the same degree as the rest of the speaker. *Really* nice.

The only gripe I have—the *only* one—is that the snap-on grille is rather ordinary. It's certainly not bad—it's fine, in fact. It's just not something I can say is among the best I've seen, particularly when other companies are finding innovative ways to attach a grille to a cabinet beyond the common pegs and holes.

The tweeter is Scan-Speak's 9900-series 1" silk-dome Revelator—one of the most expensive dome-type tweeters available. Focus Audio says that you won't find a Revelator on a speaker priced less than the FS-688. I can't confirm this claim, but what I do know is that a pair of the tweeters alone retails for more than the speakers I bought in 1981. The woofer is a 5 1/2" Hexacone unit from Germany's Eton with a phase plug Focus Audio says was made specifically for them. The woofer's cone is a combination of the Dupont materials Nomex and Kevlar.

The tweeter and woofer hand off to each other at 2.5kHz, and Focus Audio says that the MultiCaps used in the crossover cost more than the entire crossover in previous models in the Signature lineup. On the back of the speaker are dual sets of Cardas all-copper binding posts with which you can biwire. If you choose to single-wire the speakers, all-copper strips are provided to join the two sets of posts. Again, everything here is top quality, commensurate with the price.

Despite the impressive parts and the beautiful cabinetwork, the specifications are quite normal for a design like this. Sensitivity is said to be a mild 85dB, impedance is reportedly 8 ohms, claimed frequency response is 45Hz to 25kHz +/-3dB, and recommended amplifier power is 20 to 200 watts. While some consumers may be looking for specifications with more gusto, understand that *manufacturer claims* and *real performance* are often two different things. I've encountered speakers whose manufacturers make wildly ambitious sensitivity claims, most likely to convince lovers of low-powered tube amps into thinking the speaker is "tube friendly," only to find out that the speaker is about as friendly as most other speakers out there. What Focus Audio presents seems realistic and rang true in my listening tests.

One performance aspect I found extremely impressive is the speakers' soundstaging ability, something I mention now because it made me check Focus Audio's literature to see if it was part of their design strategy. Sure enough, it was. But the reason they gave for the FS-688's soundstaging performance surprised me.

Focus Audio didn't attribute the superior imaging to the crossover slopes or driver positioning or anything like that; instead, they discussed *pair-matching* the speakers. Focus Audio says that they test *each component* before it gets placed in a speaker,

record the specs, and then match each component so that one speaker is as close in performance to the other as possible. Is this important? Yes. Deviations from one sample to the next are a dirty little secret in audio, and good companies do what they can to ensure all their products are as close in performance as possible. When it comes to loudspeakers, the most important thing is that the left and right speakers are ideally matched. Wouldn't it be disconcerting to know that your left and right speakers each might have better-matched mates playing music at other audiophiles' houses?

There's another side-benefit to this kind of testing: Should you ever need replacement parts, Focus Audio keeps this data on file, so a matched part can be substituted. I like this, and it shows that Focus Audio is going the extra mile with what is decidedly a spare-no-expense two-way speaker.

System

I used the FS-688s with the Simaudio i-3 integrated amplifier, rated at 100Wpc. The i-3 is reasonably priced (\$1695) and certainly had no trouble driving the FS-688s. I used my Theta Data Basic transport and i2Digital X-60 digital cable with two different DACs: the Zanden Audio Model 5000 Mk II and the Weiss Medea, priced at \$9800 and \$13,500 respectively. These DACs offer ever-so-slightly different sonic perspectives, and both can be considered world-class digital components. Power cords, interconnects, and speaker cables were from the Canadian company Maple Audio Works.

The FS-688s were set up on 24"-high stands, although your ideal stand height will depend on your listening-chair height. A little bit of Blu-Tack was used to firm up the speakers on the stands.

Sound

I first cued up the Blue Rodeo's "5 Days in May," the opening track from *Five Days in July* [Discovery 77013]. This is one of this group's best-sounding albums and one of the oh-so-rare pop recordings with a real soundstage. I was impressed by the expansive soundstage that the FS-688s presented—it was huge! Bass extension certainly wasn't overwhelming, but it certainly wasn't underwhelming either. This smallish speaker wasn't tricking me into thinking it was a large floorstander with a woofer twice the size—such speakers have to justify themselves, after all—but it certainly didn't sound all that small, and it certainly didn't sound thin or lightweight either. In fact, the FS-688 had a touch of warmth and weight with a tube-like dimensionality in the mids that was intoxicating.

The overall tonal balance of the FS-688s is spot-on, and the highs are superb overall, with just a few caveats. On-axis, the top end is quite prominent, but the speaker never sounds bright or fatiguing. If you listen with the speakers toed-in directly at your position, the extreme highs are certainly *there* and pronounced, but they are never in-your-face harsh or anything of the kind. The top end is smooth and pristine. I recommend listening off-axis somewhat, say 15 to 20 degrees, which brings

SoundStage!™

Product Review

down the top end a tad and makes the whole presentation just a little more natural. With my setup this meant toeing them in just a smidgen, that's all.

Despite their smallish size, I learned early that the FS-688s can play loud, darn LOUD, and this surprised me. I cranked 'em pretty high with some head-bangerish rock'n'roll and they refused to ask for mercy. Certainly, you can go overboard and break them if you *really* try, but know that these little speakers aren't necessarily delicate little flowers.

The imaging and soundstage presentation flat-out stunned me. Had I stumbled on some great setup trick that resulted in holographic, pinpoint imaging like few speakers I've heard? Not really, although I did set the speakers up carefully. The FS-688s simply image like gangbusters. On the same Blue Rodeo recording, singer Jim Cuddy is firmly in the center with Greg Keelor accompanying him, close by his side. Their positions are a snap to discern with the FS-688s, and their voices are warm, rich, detailed, and distinct in the mix. I then took note of James Gray's keyboard playing as I never had before. On this track he's placed left and to the back of the stage. His position is easy to target, and if I flicked a bottle cap from behind my ear, I could have picked him off in an instant—the soundstaging is *that* precise. When I was drawn to his position in the stage I was amazed by the precision of the image, but it was the sound of those keyboards that then kept me transfixed.

The FS-688's soundstaging ability is obviously a standout, but its midrange-on-up magic differentiates it from many speakers large or small. There isn't a bit of hash, grit, or any other such nasty thing occurring. This makes the FS-688s exceedingly smooth and surprisingly full, and gave Gray's keyboards a warm and weighty glow that occupied space but never sounded bloated or overdone. It also made Cuddy's and Keelor's voices sound rich, present, and natural, but never chesty or wooly. When I said that FS-688 speakers have a tube-like dimensionality, I was talking about a sense of fullness, presence, and liquidity.

Due to the FS-688's smallish size, bass extension and overall output levels certainly aren't going to be this speaker's strengths, but like the ability to play quite loud, these are not weaknesses either. At first I worried that, given the smaller-than-average cabinet size and the 5 1/2" woofer, versus a 6 1/2" driver in many similar designs, the speaker would sound light—*bass shy* some would say. No way. In fact, this small speaker sounds weightier than some other two-ways with slightly larger woofers—enough so that the FS-688s had me rushing for musical favorites just to see how well they could do down low.

Except for a tinge of digital-at-middle-age crispness, Lou Reed and John Cale's 1990 release *Songs for Drella* [Warner Brothers 26205] is recorded well—robust and weighty, with excellent clarity and detail. The first track, "Smalltown," has Reed's voice rock-solid in the center. The FS-688's imaging is tight, precise, and unwavering. The second track, "Open House," is more

thunderous-sounding than "Smalltown," though with quite a lot of bass, and it's more of a test of what a speaker can do down low.

To the FS-688's detriment, the bass on "Open House" certainly isn't as deep as that of much larger speakers you can buy at the same price—I'm talking floorstanders and the like. But this is not all that surprising, and certainly isn't what the FS-688s are about. The FS-688s are small speakers that concern themselves almost exclusively with clarity, detail, and refinement, for the most part forgetting that there is bass below 50Hz or so. That's why subwoofers were created. Still, the low point these speakers reach makes them room-filling *enough*. As a small-speaker lover, I wouldn't risk mucking up the sound by trying to integrate a sub.

Now I can't say that I was blown away by how the FS-688s handles nasty, edgy rock'n'roll, but I can say I was pleasantly surprised that they certainly didn't fall flat on their baffles, as some audiophile minimonitors can. Steve Earle's "Ashes to Ashes" (*Jerusalem* [Artemis 751147]) is a straight-to-the-bone song that would be most at home played at 1:00 a.m. in one of those bars with beer-stained wood-plank floors that haven't been refinished, or even cleaned, since the Beatles broke up. It's raw, it's visceral, and it makes you feel as if you need a shower after you play it—and the refined-sounding FS-688s handled it all quite well.

You can certainly find cheaper and larger speakers that can play this type of music louder and edgier—so that you can *really feel* what it's like to be in that bar at 1:00 a.m. with closing/pickup time just around the corner. So, if this is your main type of music, I encourage you to look at a number of other speakers that can provide this kind of reproduction—most likely not a two-way bookshelf job at all. But what the FS-688s give you is a surprising look *into* the recording: more microscopic, more intimate, and more detailed. The FS-688s allow you to *analyze* the track, not necessarily *live* it.

So while super-deep bass, gut-wrenching impact, and ultra-high output levels aren't really the FS-688s' strengths, smooth sound, impeccable imaging, and exquisite detail are. And when music plays to those strengths, the FS-688s shine like few speakers I've heard.

Two songs I really like on John Prine's *The Missing Years* [Oh Boy OBR-009D], "Daddy's Little Pumpkin" and "Jesus the Missing Years," are sparsely recorded and feature only Prine and his acoustic guitar. In particular, "Pumpkin," with Prine's rapid guitar plucking, can exacerbate problems in tweeters that manifest in a steely, hard, and edgy sound. As good as some of the very low-priced two-ways I've had here are, a number of them do exhibit some of these problems, particularly when driven hard. Even Revel's \$2000 Performa M20s, while certainly not hard or edgy, can sound a little clinical and dry. There's nothing nasty about the FS-688s. Prine's guitar has vibrancy and richness,

SoundStage!™

Product Review

much like Gray's keyboards on the Blue Rodeo album, and the extension is all there without a hint of steeliness, even at very top. The FS-688s are exceptionally detailed, but they're also very pleasing (providing, of course, that you are not directly on-axis).

Then there's Norah Jones' *Come Away with Me* [Blue Note 32088]. I discovered this wonderful album about a day after it was released, long before she became Blue Note's version of Britney Spears and scooped up more Grammys than J.Lo has had husbands. Nevertheless, even after the millionth time that I've now heard this album—at the mall, in the gym, at the grocery store, and just about everywhere else people who fit the demographic for "adult contemporary" go—I still like it. Played through the FS-688s, Jones' voice has such clarity and immediacy, and her piano has such a robust and majestic presence, that the CD is the next best thing to Jones being in the room. On "Shoot the Moon," her voice is up front and the drums are far behind. The distinction and space of the stage are easy to unravel. Each musician is carved into his or her own discernible, unique chunk of space. A musical moment to be sure.

Comparisons

A pair of minimonitors that cost \$2600? Who's fooling who? But the FS-688s have strengths that justify their price.

First, there's the build quality. The FS-688s' veneer is done to such a high standard that I know of no speakers around their price, and most certainly none below, that approach the workmanship. Revel's Performa M20 and Amphion's argon2—my references at and under \$2k respectively—are certainly nice, but their wood veneers are not to FS-688's level. The closest speaker I know of is Verity's floorstanding Tamino with its nicely done piano-black finish. They're also in my house for review, but they're \$5000 per pair, and this should tell you something.

Then there's the sound. First, it's obvious you can buy speakers that go deeper. In fact, I can quickly name a dozen speakers that can whomp the bass home with more force than the FS-688s. Heck, at the FS-688's price you can get floorstanders, and in the bookshelf class, the Performa M20 and argon2, with their slightly larger woofers, seem to go deeper, if only by a little bit. The FS-688s, however, are not light-sounding, and that's what's key in deciding whether they'll be the right small speakers for you.

The highlight of FS-688's performance is the exceptionally clean sound they deliver and their gorgeous *midrange-on-up*. The FS-688s can show amazing detail, but always remain pleasant-sounding—a tough line for a speaker to, ah, walk. It's hard to quibble with Revel's M20, but if you want to complain, you can say that it's a touch clinical in the top end and somewhat lean in the mids. The FS-688s, on the other hand, are sweeter in their delivery but without compromising

detail or extension. This is also where the FS-688s show their muster against pricier competitors.

I went back and forth between the FS-688s and Verity's almost twice-the-price Taminos. Certainly the FS-688s can't match the ample weight of the floorstanding Taminos, but the FS-688s edge the Taminos out in top-end sweetness and midrange palpability. In fact, if I had more expensive speakers in-house, I wouldn't stop the comparison there. I'd wager that the FS-688s' midrange and top-end performance can hold their own against a good number of speakers regardless of price.

Then there's the soundstaging and imaging, which are in a league of their own. Recording after recording I was amazed not only by how precisely the FS-688s could image, but how each image occupied space and how well the instruments were delineated from one another. The Taminos and the M20s are both very good in these departments too—good to the point that they would be considered strengths for these speakers—but as good as they are, the FS-688 goes beyond. With the FS-688s, it's as if you could get up and walk within the stage blindfolded and know exactly where to go to get between the musicians. The stage they set is *that* well rendered.

Conclusion

The FS-688 is an audiophile instrument with luxury-good appeal that plays music with great precision. Flawless? No, but I don't expect them to be. These are small speakers, after all, with limits that I outlined, but what they *can* do, they do extraordinarily well.

The FS-688 is designed for the person who wants something *better* than the crowd. So its finish is better than any comparable speaker near its price, and certain aspects of its performance—particularly the pristine top end, the tube-like midrange, and the stellar soundstaging and imaging—outclass a good number of speakers regardless of their cost. So given these sonic strengths *plus* the outstanding build quality, my arbitrary line for two-way bookshelf speakers has shifted a little. From now on, if minimonitors cost more than \$2600 per pair, they had better have the looks *and* sound to justify their price.

Company Info

Focus Audio Signature FS-688 Loudspeakers

Price: \$2600 USD per pair

Warranty: Five years parts and labor

Focus Audio

43 Riviera Drive, Unit #10

Markham, Ontario L3R 5J6 Canada

Phone: (905) 415-8773

Fax: (905) 415-0456

E-mail: contact@focusaudio.ca

Website: www.focusaudio.ca

SoundStage!™

Product Review

Focus Audio responds:

Thank you for *SoundStage!*'s review of the Focus Audio FS-688 speakers. Doug said it all. The FS-688 is designed to be "An audiophile instrument with luxury-good appeal that plays music with great precision."

When I stood in front of the cabinetry masterpieces of the Hall of Mirrors in Versailles, I said to myself, "That's what I want." My target to make Focus Audio speakers sound truthful to the musical event is proven by the use of Focus Audio speakers by Grammy-winning recording engineer Richard King and the McGill University music recording department for professional monitoring.

Doug knows speakers. His recommendation to listen 15 to 20 degrees off-axis is exactly the toe-in I used when I tuned the FS-688. Doug's conclusion that "The FS-688 is designed for the person who wants something better than the crowd" made me think of the Patek Philippe watch—a class of its own.

Kam Leung
Focus Audio

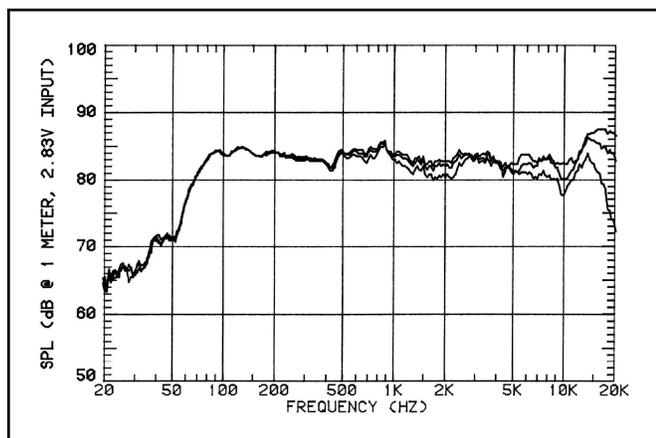
Loudspeaker Measurements

Measurements taken in an anechoic chamber at Canada's National Research Council.

Microphone measuring position: tweeter, no grille.

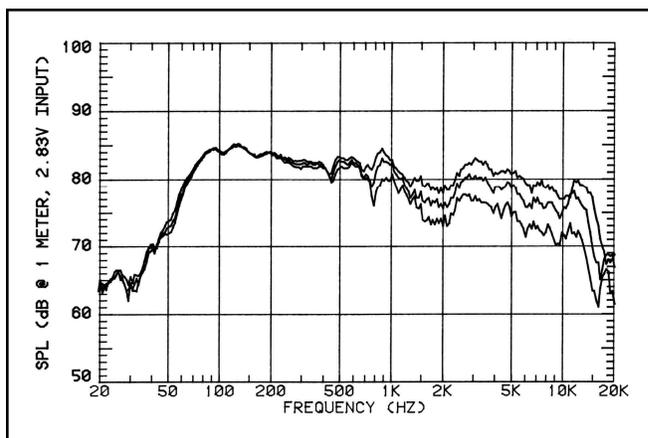
Sensitivity: 83.0dB (averaged 300Hz-3kHz, 2.83V/1m).

Frequency Response #1, 20Hz - 20kHz
(measured @ 2m, plotted @ 1m)



Top curve: on-axis response
Middle curve: 15 degrees off-axis response
Bottom curve: 30 degrees off-axis response

Frequency Response #2, 20Hz - 20kHz
(measured @ 2m, plotted @ 1m)



Top curve: 45 degrees off-axis response
Middle curve: 60 degrees off-axis response
Bottom curve: 75 degrees off-axis response

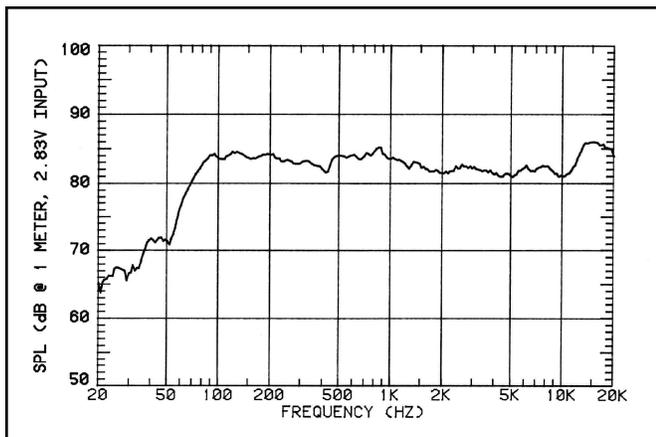
SoundStage!™

Product Review

Loudspeaker Measurements (cont'd)

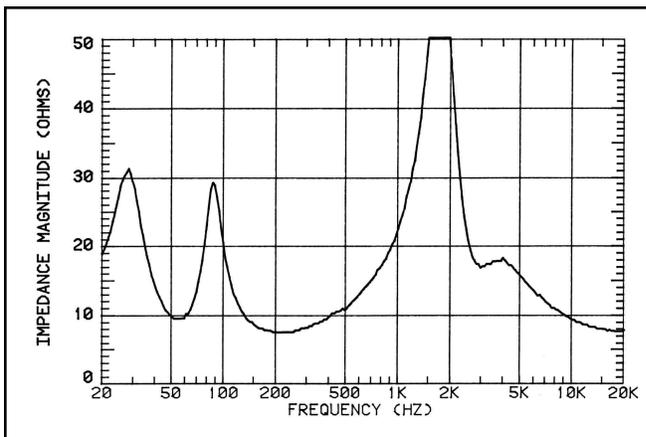
Listening Window

(measured @ 2m, plotted @ 1m)



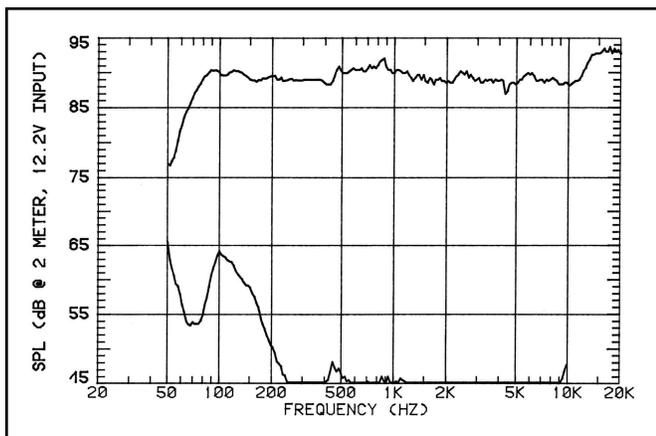
Response curve is an average of five measurements:
on-axis, 15 degrees left and right off-axis,
15 degrees up and down off-axis

Impedance Curve



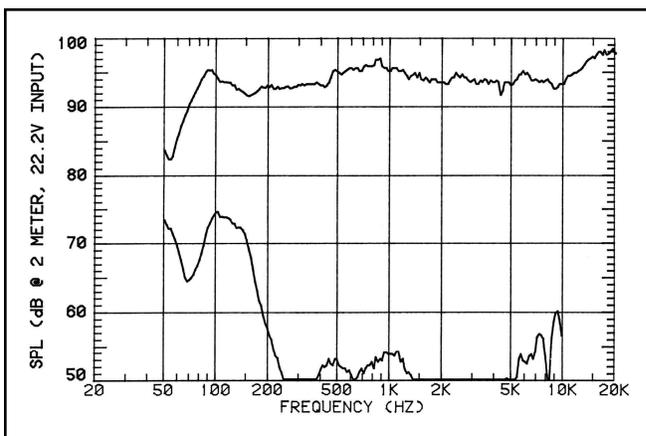
Vertical axis: impedance
Horizontal axis: frequency

THD+N @ 90dB, 50Hz=10kHz (measured @ 2m)



Top curve: frequency response @ 90dB SPL
Bottom curve: THD+N @ 90dB (50Hz-10kHz)

THD+N @ 95dB, 50Hz=10kHz (measured @ 2m)



Top curve: frequency response @ 95dB SPL
Bottom curve: THD+N @ 95dB (50Hz-10kHz)