

Xavian Quarta Stand-Mounted Speakers Review

by [John E. Johnson, Jr.](#) | Aug 24, 2020 | [Product Review](#)



In a Nutshell

Xavian is a speaker company that, up until a few months ago, I had never heard of. They are located in Czechia, which used to be Czechoslovakia. In 1993, it was divided into Czechia and Slovakia (Czech Republic and Slovak Republic).

They have come a long way since then.

I discovered Xavian from a marketing e-mail, researched them, and requested a pair of their new Quarta stand-mounted speakers.

They sound great and bench-tested excellent as well.

Expensive? Yes. Worth the price? You bet.

Highlights

Xavian Quarta Stand-Mounted Speakers

- Three-way design
- Custom built drivers
- Very low distortion
- Low phase deviation
- Beautifully finished
- Excellent sound quality

Introduction

Czechoslovakia is a country that was formed at the end of WWI (1918) as part of the dissolution of Austria-Hungary.

It has a huge history, being one of the countries that were invaded in 1939, which set off WWII.

It is now known as Czechia or the Czech Republic, having been divided into two Republics in 1993, with Slovakia or the Slovak Republic being the second one.

It is an advanced economy in Eastern Europe now.

An example of this economy is the company Xavian, which makes high-end speakers.

I discovered Xavian some time ago and decided I wanted to experience these speakers in person, so I requested a pair of their latest models, the Quarta.



XAVIAN STAND-MOUNTED SPEAKERS

SPECIFICATIONS

Stand-mounted speakers

SYSTEM:

Three-way Damped Sealed Enclosure

TWEETER:

29 mm (1.14") Impregnated Silk
Aluminum-clad, Flat Copper Wire Voice Coil

MIDRANGE:

175 mm (6.9") Paper Cone
50 mm (2") Voice Coil

WOOFER:

270 mm (10.6")
Hand-impregnated Paper
50 mm Voice Coil

ENCLOSURE:

30 mm MDF

CROSSOVER FREQUENCIES:

300 Hz, 2.7 kHz

CONNECTORS:

Two Pairs Gold-plated for Bi-Wiring, Bi-amping

FREQUENCY RESPONSE:

47 Hz - 30 kHz, - 3 dB

IMPEDANCE:

8 Ohms

SENSITIVITY:

87 dB, 2.83 V/M

POWER HANDLING:

30 - 250 Watts

DIMENSIONS:

26.8" (680 mm) H
13.8" (350 mm) W
15.75" (400 mm) D

NET WEIGHT:

88.2 lb. (40 kg)

SHIPPING WEIGHT:

105 lb. (47.6 kg)

MSRP (USD):

\$13,543/pair (Euro 11,990)

SECRETS TAGS:

Speaker Reviews,
Speakers, Stand-mounted
Czech Republic

Website: <https://www.xavian.cz/?lang=en>

Design

The Quarta is a three-way design with a 1.14" silk-dome tweeter, 6.9" paper cone midrange, and 10.6" paper cone woofer.

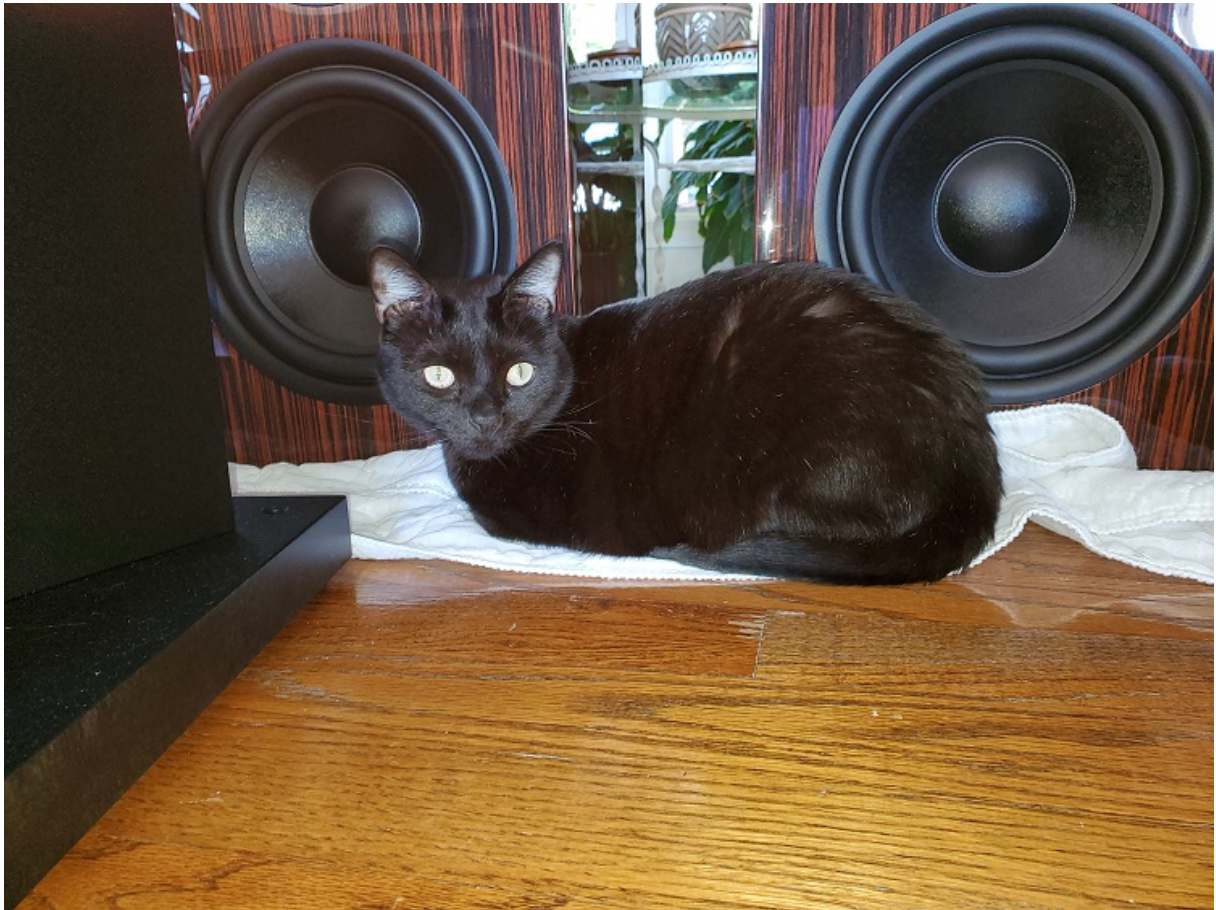
It is a very heavy (88 pounds) speaker and is stand-mounted.

The enclosure is sealed (no port), with a very glossy finish (many coats of polyurethane, with hand polishing each coat), as you can see in the photo below (note the window reflection on the top of the speaker). You can also choose a matte finish if you like.

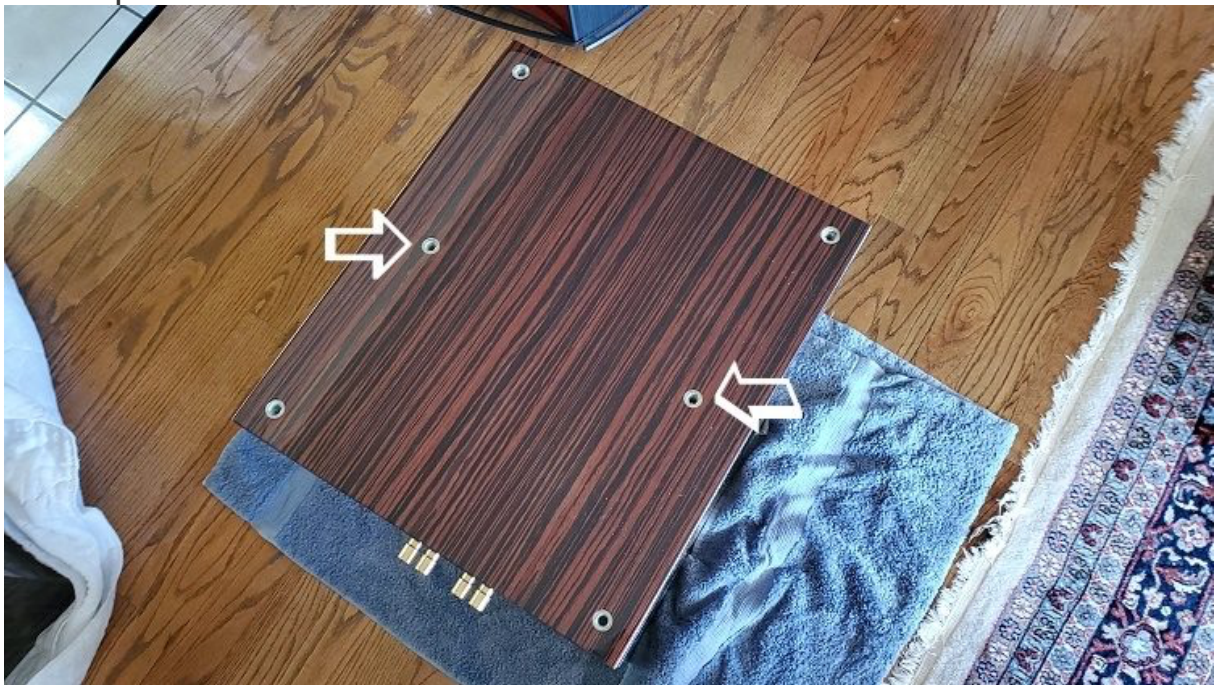


My cat Eby appeared to love them immediately when I was unpacking them.

You can see the large woofers. One of the stands is to the left. These stands are optional (\$1,118). The prices of the speakers and stands include VAT (Value Added Tax). You should not have to pay VAT if you are a customer in the USA or other countries, but there may be an import tax.



Speaking of the stands, there are several screw holes on the bottom of each speaker.



To mount them on the stands, the speaker is turned upside down as in the photo above and then the stand is placed on top of the speaker, lining up the two holes on the side of the stand, shown in the photo below, with the two holes in the center/bottom of the speaker, shown

above. It is a good idea to place the speaker on a towel or blanket when it is on the floor without the stand in order to protect the glossy finish. The other four holes in the bottom of the speaker are used at the factory to hang it during the polyurethane drying process.



Two supplied screws are put into the holes on the bottom of the stand and tightened with the supplied Allen wrench, which locks the speaker to the stand. The speaker is then laid on its side and turned upright. It is best to have two people turning the speaker upside down or back right-side up as it is heavy.



To tilt the stand, an Allen wrench is used to adjust the angle through the holes in the four corner holes in the bottom of the stand which rest

directly on the floor. No screws are needed for this. The tilting elements are already in the four holes.

I highly recommend the stands, and these can be purchased as options from Xavian. They are made specifically for the Quartas.



The drivers are shown in the photo below. The tweeter is a doped silk dome. The midrange driver has a phase plug.



The binding posts are massive. The positive banana plug (red) is connected to the socket on the left, and the negative plug (black) to the right. If you want to bi-wire or bi-amp, you unscrew both sockets and remove the plate that connects them at the rear of the sockets. The cable here is Clarus Crimson.

INFINITE BAFFLE LOUDSPEAKER
NOMINAL IMPEDANCE: 8Ω
INPUT POWER: 30-250W
MADE IN CZECHIA
✓RoHS SERIAL #: 021
LF + HF LF - HF



The inside of a Quarta is shown below. You can see it is very complex. Lots of chambers with natural wool and felt padding. This results in the enclosure having low resonance.



Besides several wood finishes, the Quartas also come in white or black. You can choose the glossy finish, which is what the review units had, or matte finish. I recommend glossy. It is gorgeous.



In Use

I listened to a pair of the Xavian Quartas speakers with a computer (PC) delivering Tidal music streaming via USB input to an OPPO UDP-205 Universal Player, a hard drive connected to the UDP-205 with my entire digital music collection stored on it, VPI-HR-X Turntable with Sumiko Palo Santos MC Phono Cartridge, Manley Labs Steelhead Phono Preamplifier, Pass Labs Xs Preamplifier, Pass Labs Xs 300 Power Amplifiers, Wireworld XLR cables, and Clarus Crimson speaker cables. I used a Clarus Concerto Power Conditioner for the computer, OPPO UDP-205, Manley Labs Steelhead Phono Preamplifier, and Pass Labs

Xs Preamplifier. There is no power conditioner out there that will handle the two Pure Class A 300 watt Pass Labs Power Amplifiers, especially when the computer, universal player, and preamplifier are also plugged into it. In particular, the Xs 300s are wired for 240 volts because they are huge-demand amplifiers weighing 300 pounds each. I placed the two Xavian Quartas about 10 feet apart, angled inward at about 15 degrees. I listened at about 12-15 feet from the speakers.

Complete List of Reference Components: OPPO BDP-105 Universal Player (4), OPPO UDP-205 Universal Player (2), VPI-HR-X Turntable with Sumiko Blackbird MC Cartridge and Sumiko Palo Santos MC Cartridge, Manley Labs Steelhead Tube Phono Preamplifier (2), Balanced Audio Technology VK-5i Pure Class A Triode (Tube) Stereo Preamplifier (2) (Fully Balanced), Balanced Audio Technology VK-500 Solid State Stereo Power Amplifier (Fully Balanced) (250 Watts per Channel), Pass Labs Xs Preamplifier, Pass Labs Xs 300 Monoblock Pure Class A Power Amplifiers (2) (300 Watts/each), [Parasound JC 1+ Monoblock Power Amplifiers](#) (2), Lamm LL1 Signature Stereo Pure Class A Triode (Tube) Preamplifier, MartinLogan CLX Full-Range Electrostatic Speakers (2), Magnepan 20.7 Planar-Magnetic Speakers (2), [Sonus faber Lilium Speakers](#) (2) Paradigm Reference Signature SUB 2 Subwoofers (2), Custom-Built Computer for Audio Analysis, Accupel HDG-3000 Digital Color Signal Generator (1080i capable), Component Video and DVI Output, ColorFacts Pro Video Test and Calibration Software, Version 6.0, Spyder Sensor, SpectraPlus Audio Analysis Software, Audio Precision SYS-2722 Spectrum Analyzer, Staco 3PN2210B-DVM 22 Ampere Variable Transformer (for adjusting line voltage to 120 volts during amplifier power output tests), Pass Labs XP-20 Stereo Preamplifier, Classé SSP-800 Surround Sound Processor, Emotiva XMC-1 Surround Sound Processor, Classé CA-5200 Five-Channel Power Amplifier (200 Watts per Channel), Pass Labs X600.8 Power Amplifiers (4) (600 Watts/Each), Audio Control Phase Coupled Activator (Sub-Harmonic Generator), Carver Platinum Mark IV Ribbon Speakers (2), MartinLogan Summit X Hybrid Electrostatic Speakers (2) (Rear Left/Right), MartinLogan Stage X Hybrid Electrostatic Speakers (3) (Center and Sides Left/Right), Velodyne DD-18+ Subwoofer (3), HiFiMAN HE1000 Planar Magnetic Headphones, OPPO PM-1 Planar Magnetic Headphones, OPPO HA-1 Headphone Amplifier, Bryston BUC-1 USB Converter, Sony VPL-HW55ES 1,920 x 1,080p Digital Projector, 90" (Diagonal) Stewart Grayhawk Projection Screen, Sony 75" UHD (4K) Flat Panel Display, Clarus Audio and Wireworld cables, Clarus Concerto Power Conditioner with Crimson Power Cable.

Music – Tidal Streaming – Camille Saint-Saens – *Symphony No. 3 in C Minor “Organ Symphony”* – Chicago Symphony Orchestra, Daniel Barenboim – Deutsche Grammophon – Released 3/11/2002



The Organ Symphony is, perhaps, Saint-Saens' most recognizable composition. I used it to test the Quarta's capability in deep bass. I was surprised at how good it sounded on these stand-mount speakers. Almost like there was a subwoofer in the system. This is due to the Quartas having an emphasis in the bass region, giving it some real bass "punch".

Music – Tidal Streaming – *Time Out; Take Five* – The Dave Brubeck Quartet – Columbia Records – Released 4/22/1959



This album has probably the most famous drum solo ever recorded, on the track *Take Five*. The drummer was Joe Morello. I heard him in person somewhere around 1970 in New Orleans. An amazing musician. Not to mention the fabulous Paul Desmond on alto sax and Brubeck on piano.

It's available on CD, DSD, and vinyl reissue. This is one of the best jazz albums ever, and it sounded great on the Quartas speakers. If you have a vinyl system and classic jazz is one of your interests, this album is absolutely a *must-have*.

The smooth top end in the Quartas makes for some really easy listening. It has a tube-like sound that is very appealing. Every speaker has its own personality, and the Quartas are soft-edged in the highs and aggressive in the bass. I loved them.

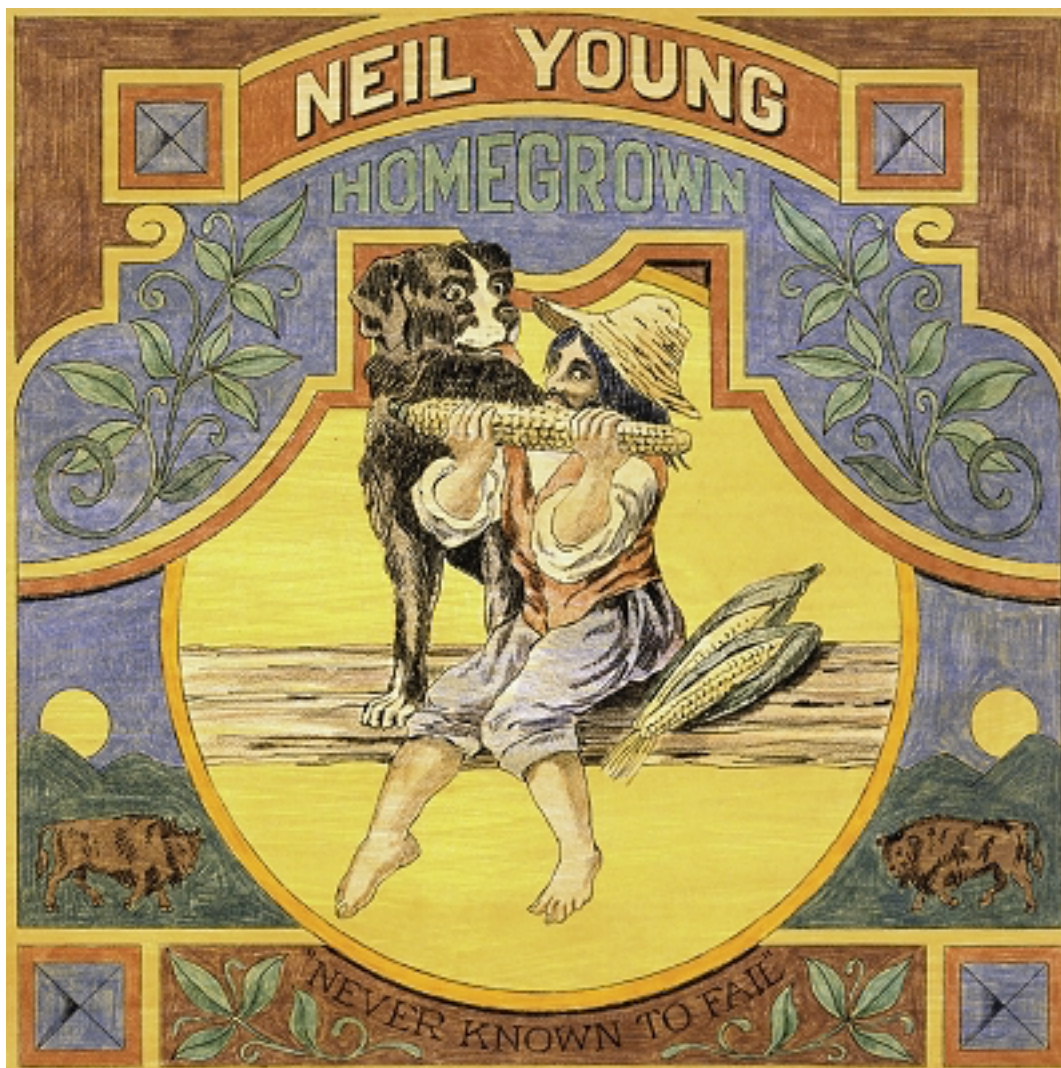
Music – Tidal Streaming – *Diana Krall: Live in Paris* – Verve – Released 10/1/2002



This album ROCKS! And, from the reception she got in this concert in Paris, the French think so too. From the stompin' opening, "I Love Being Here with You," followed by the more ballad-like "Let's Fall in Love," Diana demonstrates why she is one of the best jazz singers and jazz pianists in the world. Everything on this recording sounds incredible on the Quartas. It's the music of Peggy Lee, Cole Porter, George Gershwin, and Burt Bacharach on steroids.

Her voice was very clear, articulate, and natural sounding.

Music – Tidal Streaming – *Neil Young: Homegrown* – Reprise Records – Released 6/19/2020



Neil Young has been around awhile, but he is still a talent to behold in the world of Rock/Indie/Country music.

This album is recorded close-microphoned, so all the instruments are in your face. A challenge for any speaker, and the Quartas were up to the task. Especially the drums; snare and kick!

This version on Tidal is MQA-encoded.

Music – Tidal Streaming – *Madonna: Like a Prayer* – Sire, Warner Brothers – Released 1/1/1989



This is the first Madonna album that I purchased, and it is still my favorite. Like most albums, I don't like every track, but it has several tracks that I do like, such as *Like a Prayer*, *Express Yourself*, and *Till Death Do Us Part*. They, alone, make the album a cherish. The Quarta speakers deliver the punch that this production has, and her voice is sweet and clear.

Music – Tidal Streaming – *Franz Liszt: Historical Hungarian Portraits* – Naxos – Released 1/10/2020

NAXOS

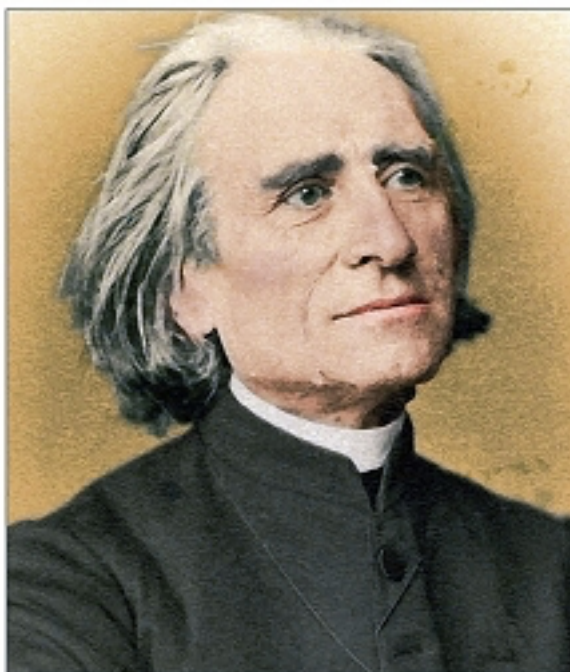
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DDD

FRANZ LISZT

Historical Hungarian Portraits

Jenő Jandó, Piano



COMPLETE
PIANO
MUSIC



VOLUME
54

This new album is very exciting, with deep, pounding piano chords that shake the walls. The Xavian Quartas did their job perfectly. Some of Liszt's compositions are dark and sound like the background music for a Dracula movie. Franz Liszt was born October 22, 1811, in Doborján, Hungary (now Raiding, Austria). Bela Lugosi was born October 20, 1882, in Lugos, Hungary (now Lugoj, Romania). Lugosi played Dracula in the 1931 film by the same name from Universal Pictures. This particular film, in my opinion, is the best of all the Dracula movies, and Lugosi was fantastic.



Music – Tidal Streaming – *Cannonball Adderley: Swingin' in Seattle Live at the Penthouse 1966-1967* – Reel to Reel – Released 1/18/2019

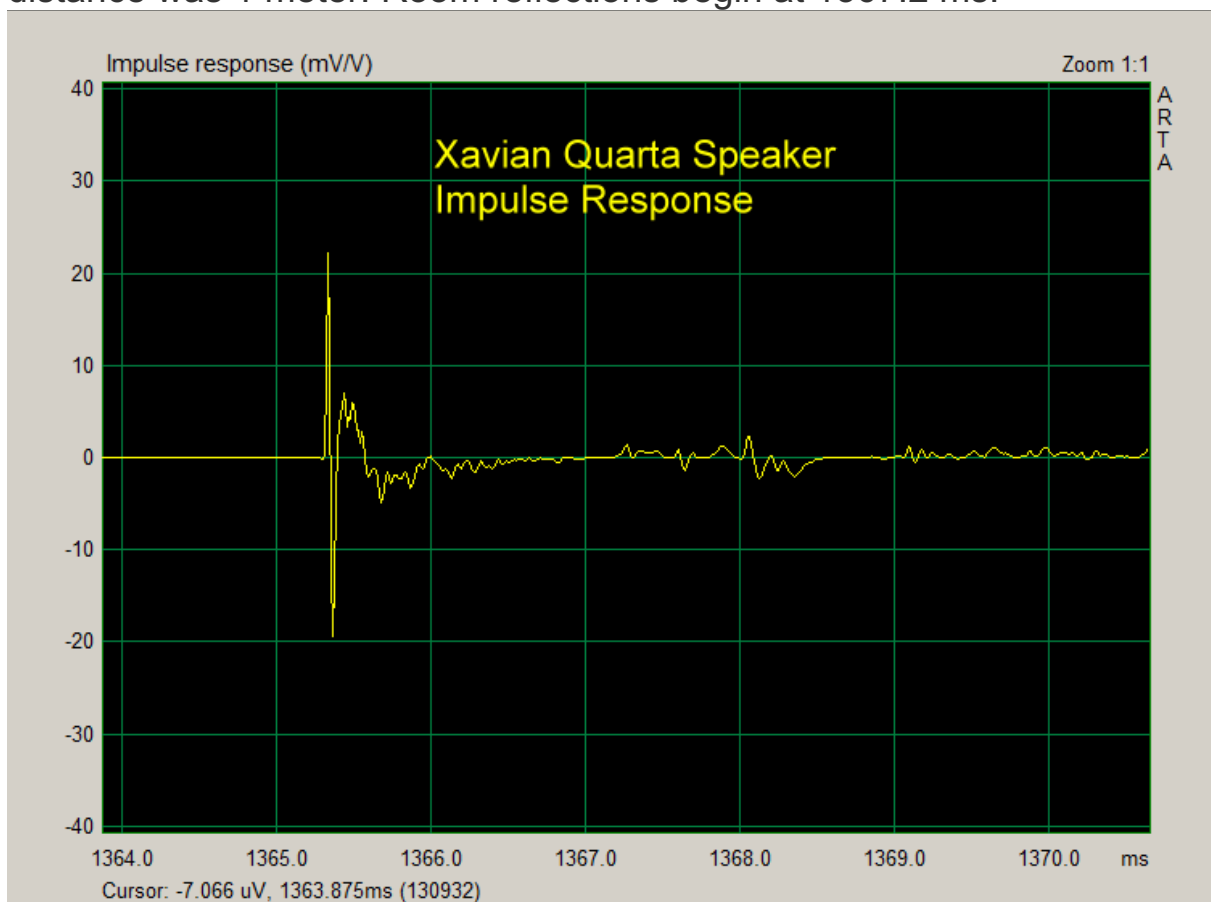


I was married in Seattle, Washington in 1968. I did not hear Cannonball Adderley at the Penthouse there, but I (we) did hear him in San Francisco in 1968 on our honeymoon.

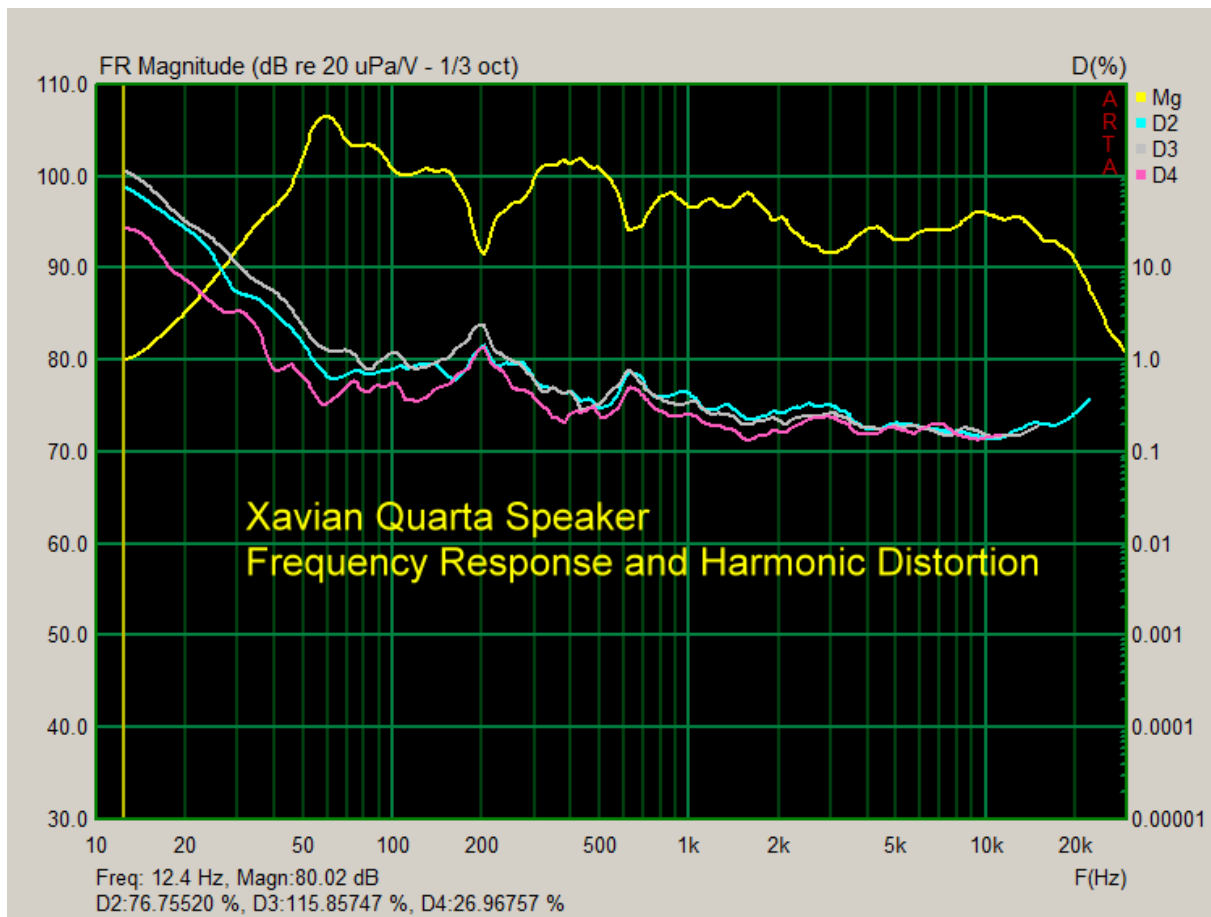
What a musician! And, this album illustrates that in spades. His style is very different than Art Pepper, with a lot of discords, but that was a prominent style for jazz soloists. The melody is not so discernible, just a lot of notes. A *lot*.

On the Bench

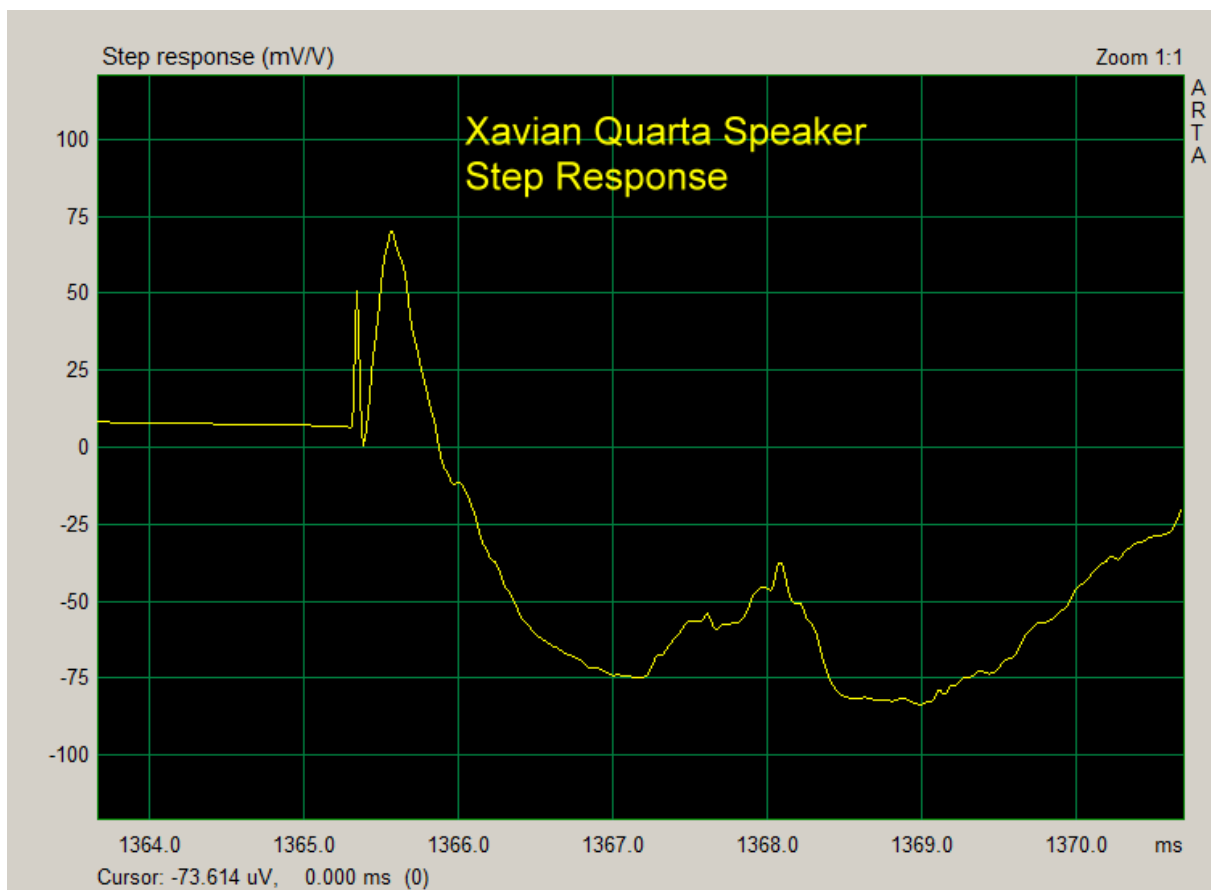
An Impulse Response (IR) is shown below. The speaker-to-microphone distance was 1 meter. Room reflections begin at 1367.2 ms.



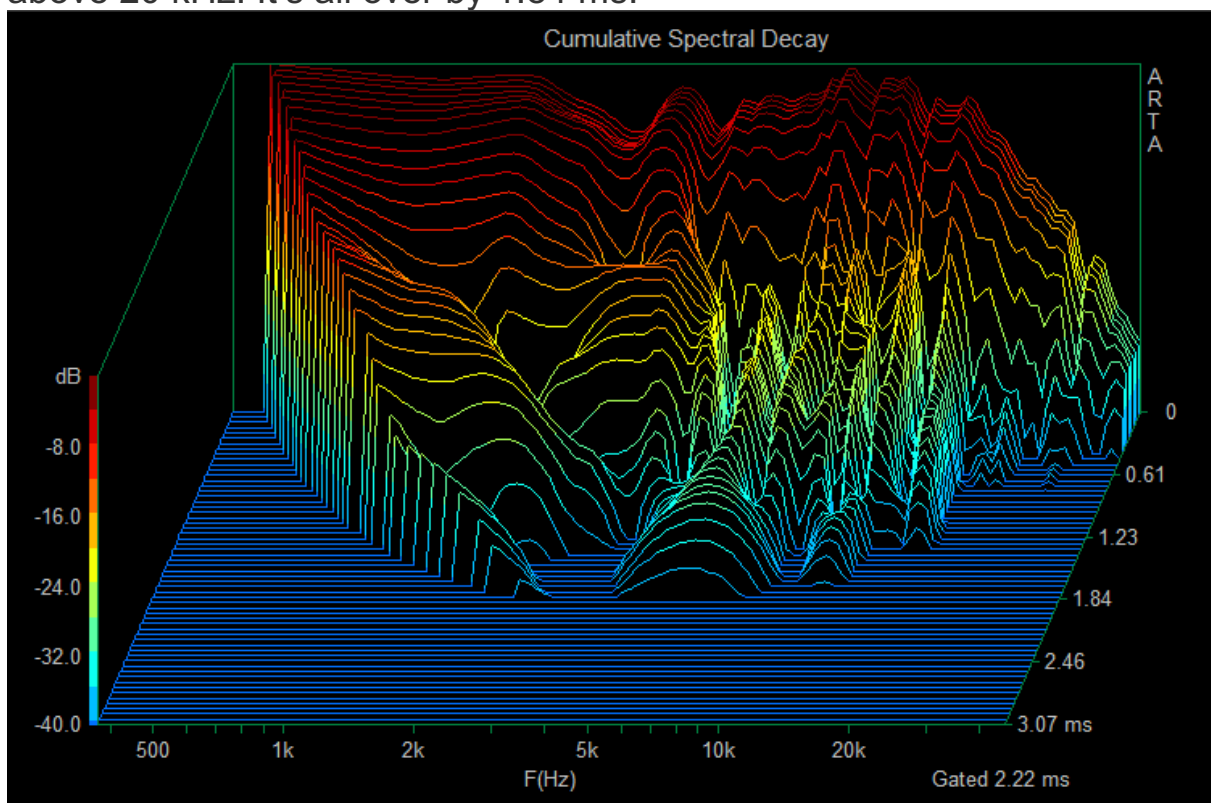
Here is the Frequency Response out to 30 kHz and Harmonic Distortion derived from the IR. You can see that this speaker delivers higher bass (102 dB SPL at 50 Hz) than the treble (92 dB SPL at 20 kHz). Distortion stays below 1% for most of the spectrum, which is very good, as this is rather high volume. The dips at 200 Hz and 625 Hz are room suck outs due to standing wave interference. Every room will have such dips somewhere in the audible band response. They are more noticeable in IR-derived frequency response measurements because room gain is not present for the most part in the response curve.



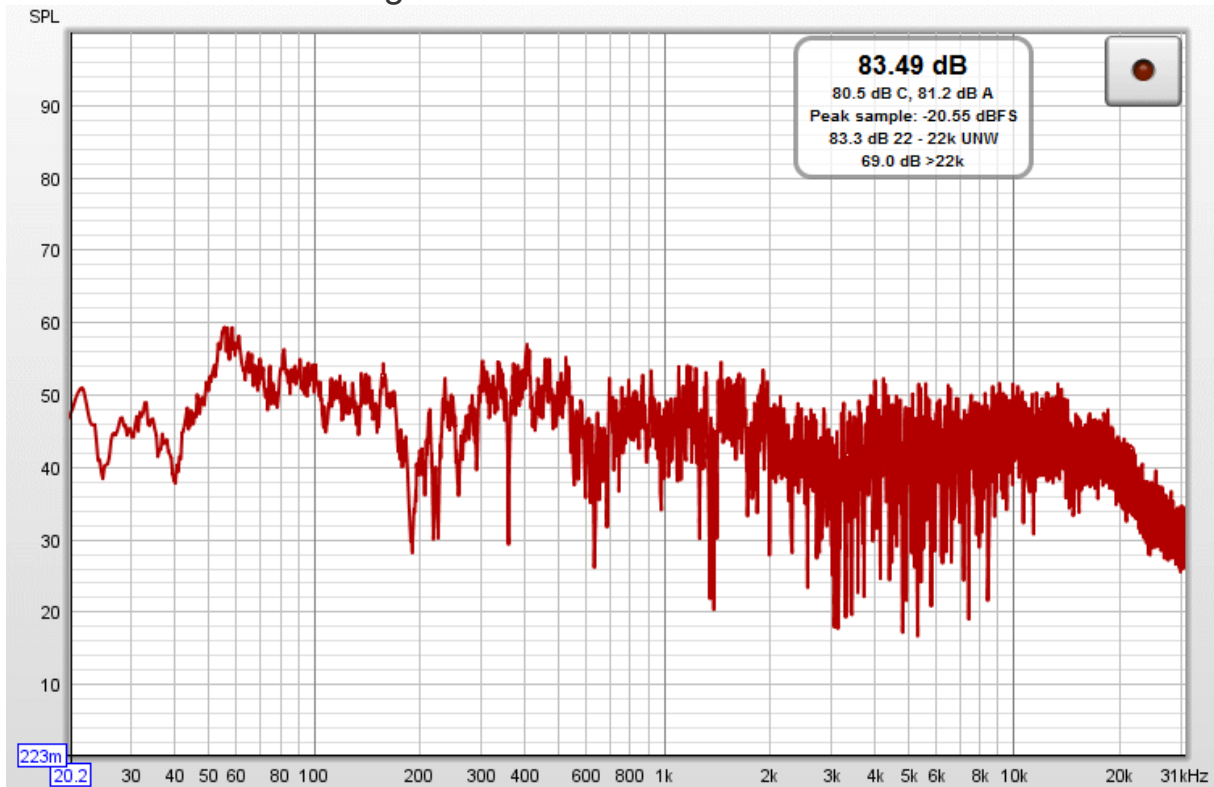
The Step Response is shown below. All three drivers are in-phase. The tweeter fires at 1365.34 ms, the midrange at 1365.57 ms, and the woofer at 1368.08 ms, so there is a 2.74 ms delay between the tweeter and woofer. This is an acceptable response. The midrange is closer to the tweeter in time because it has lower mass than the woofer.



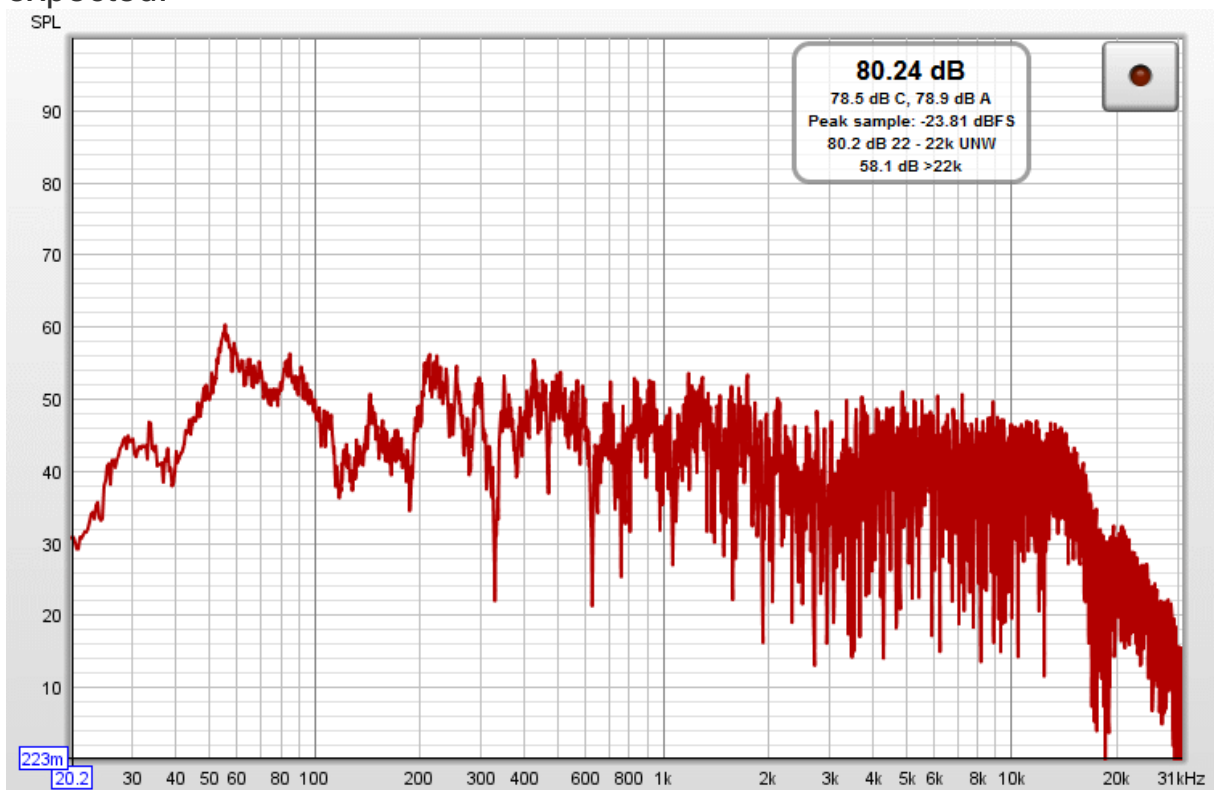
Looking at the Cumulative Spectral Decay (CSD), the cabinet (enclosure) has well controlled resonance. There are some driver modes in the higher frequencies, but overall, this is a good display. Not much above 20 kHz. It's all over by 1.84 ms.



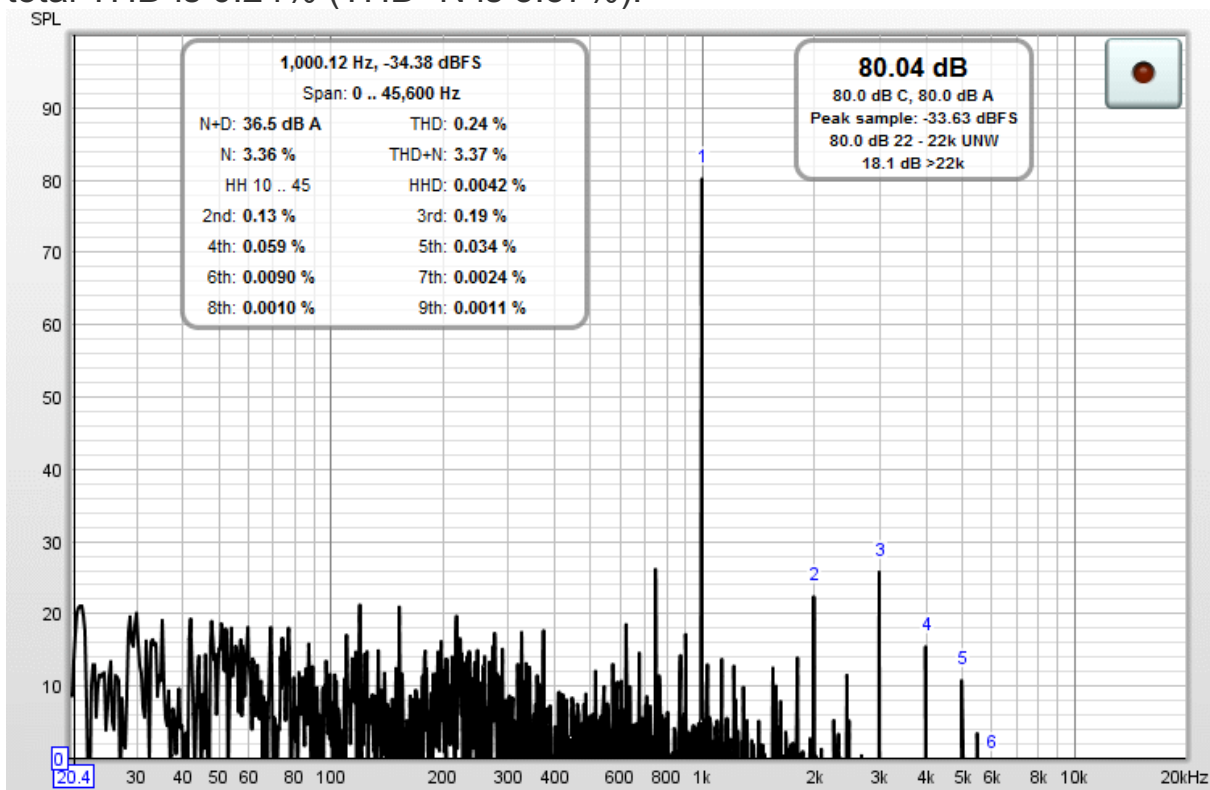
The room response (below) is different than the response derived from the IR because the IR does not have room gain. This response spectrum was taken on-axis using white noise.



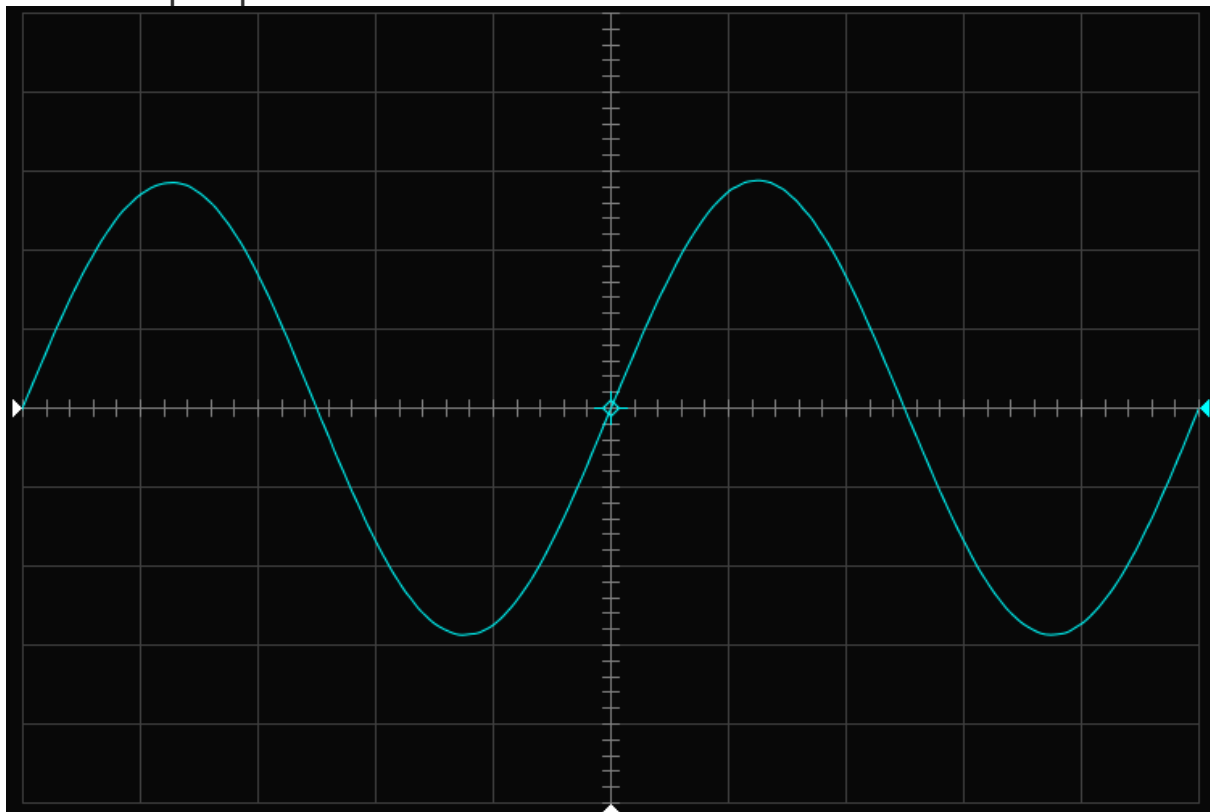
Off axis (45°) shows attenuation below 30 Hz and above 8 kHz. This is expected.



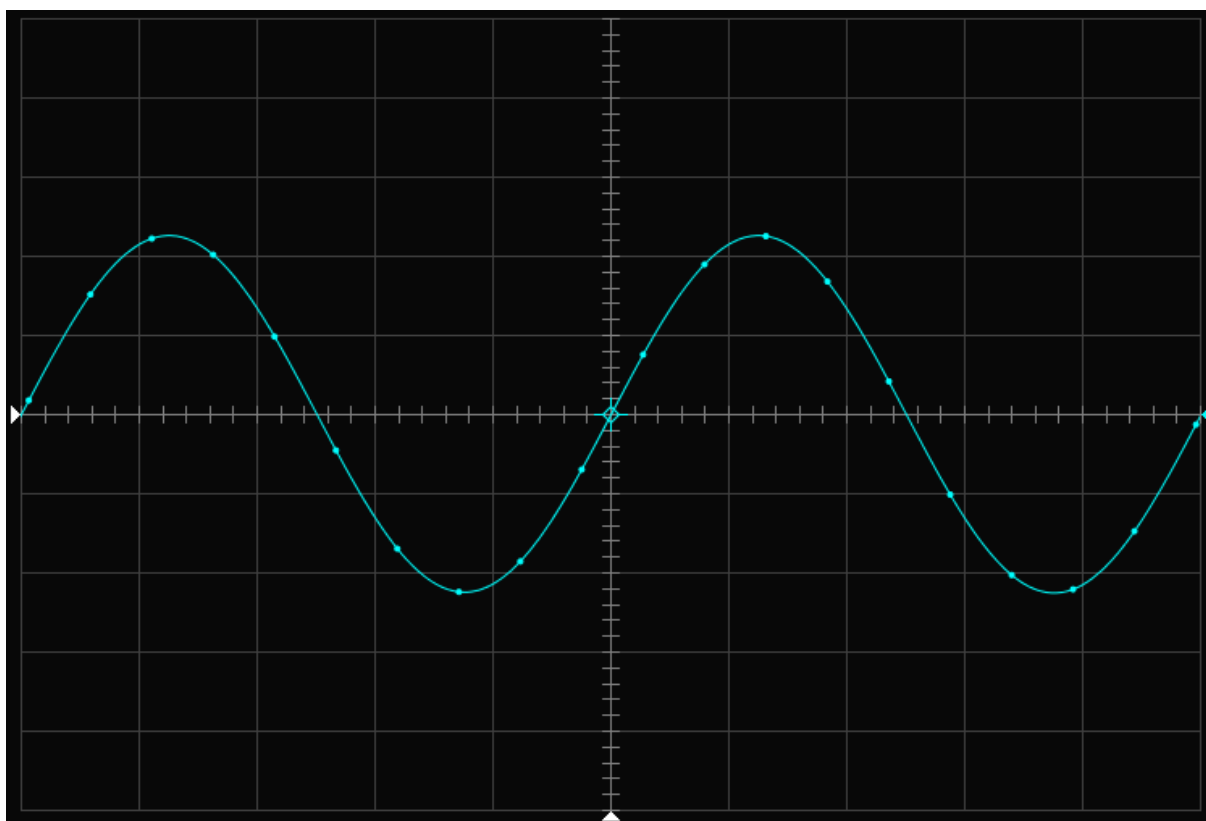
Using a 1 kHz sine wave at 80 dB SPL, we can see the harmonics. The total THD is 0.24% (THD+N is 3.37%).



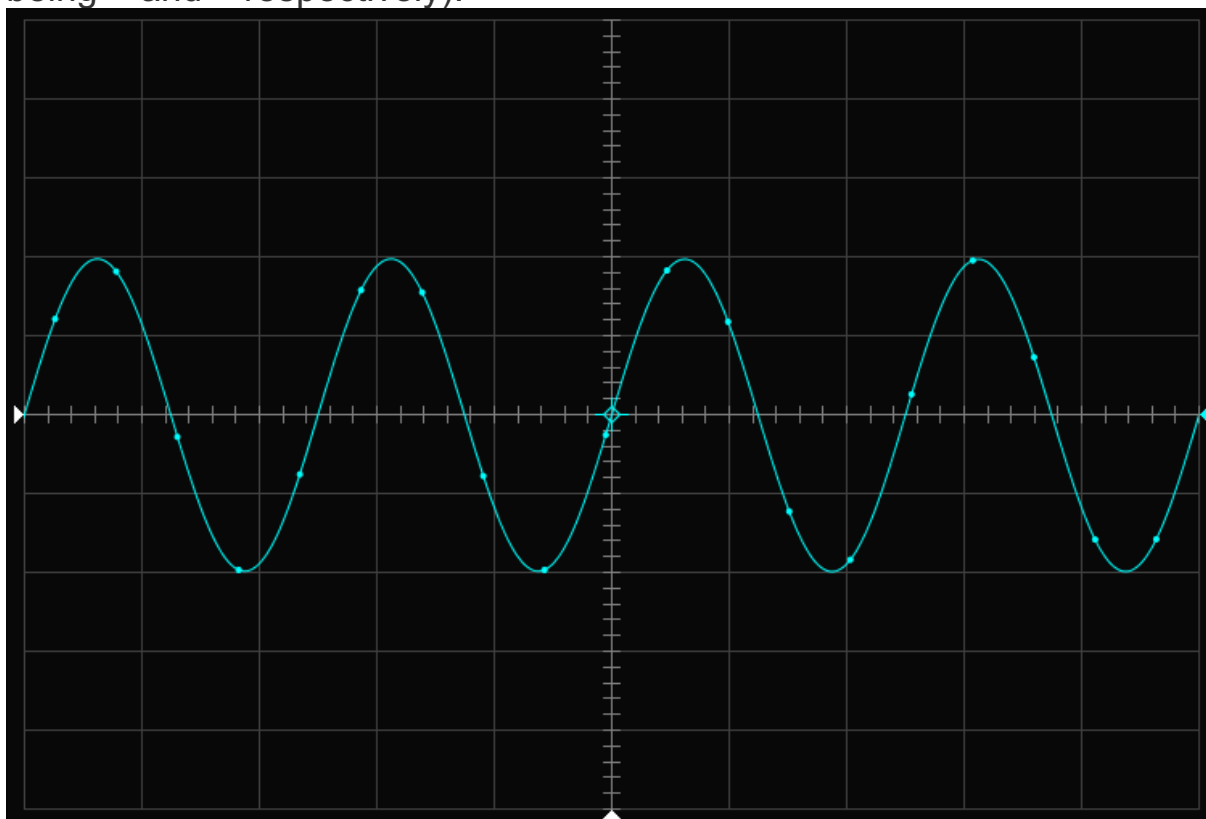
On an oscilloscope, 1 kHz at 80 dB SPL is very clean. All subsequent oscilloscope spectra are also at 80 dB SPL.



The dots show where the digital samples are located in the DSP that is required to create the sine wave in an A to D procedure.



20 kHz (below). Looks good. Notice that the tips of the peaks and valleys are symmetrical, that is, they are at the same voltage levels (except for being + and – respectively).

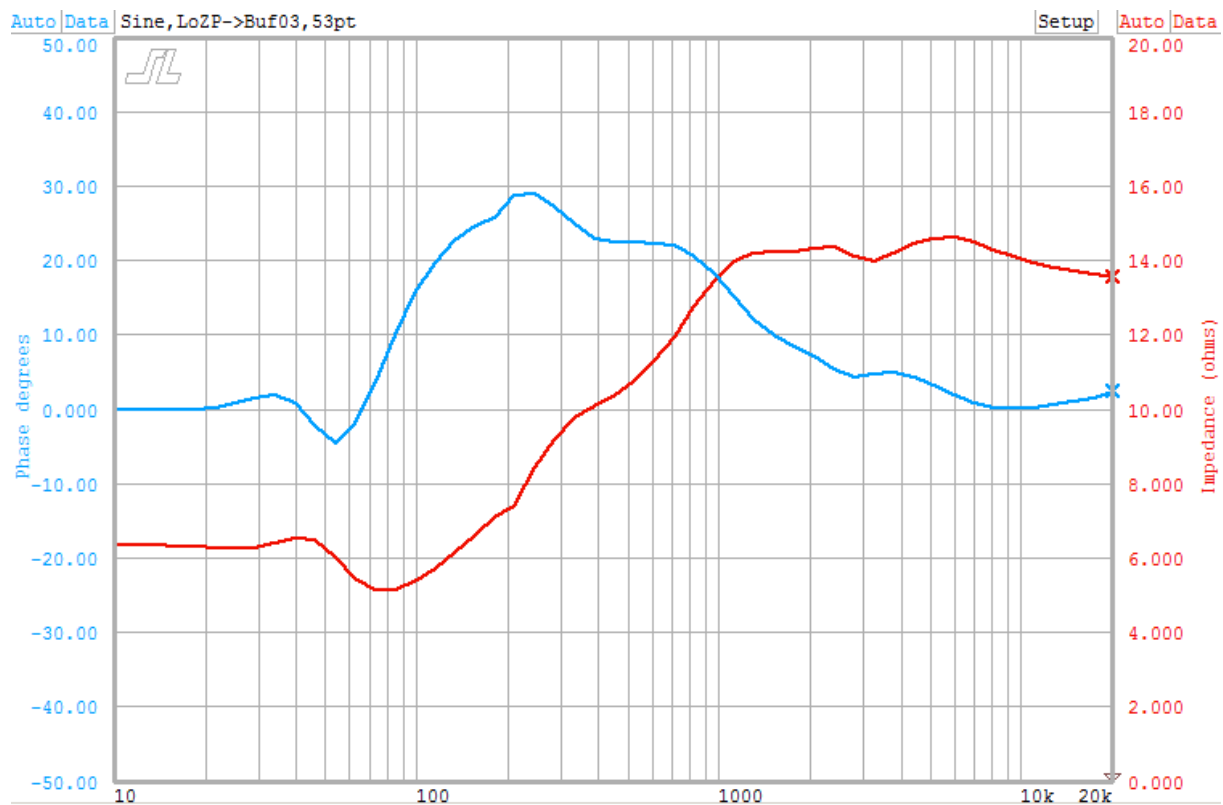


And, 50 Hz (below). As I have found irregularities in low frequency sine wave tests with previous speakers, there are irregularities here, seen at

the tips of the peaks, but also notice that the negative peaks (below the horizontal line in the center) are slightly larger (vertically) than the positive peaks. I suspect that this may represent a tendency for the woofer cone to travel a slightly larger distance in one direction than the other (at low frequencies). I have seen it in all such tests (woofer) that I have performed on other speakers.



The Impedance-Phase plot is shown below. It varies between about 6 Ohms in the low frequencies to 14 Ohms in the highs. Phase deviations stay within $+30^{\circ}$, and do not go much below 0° . This is a superb result.

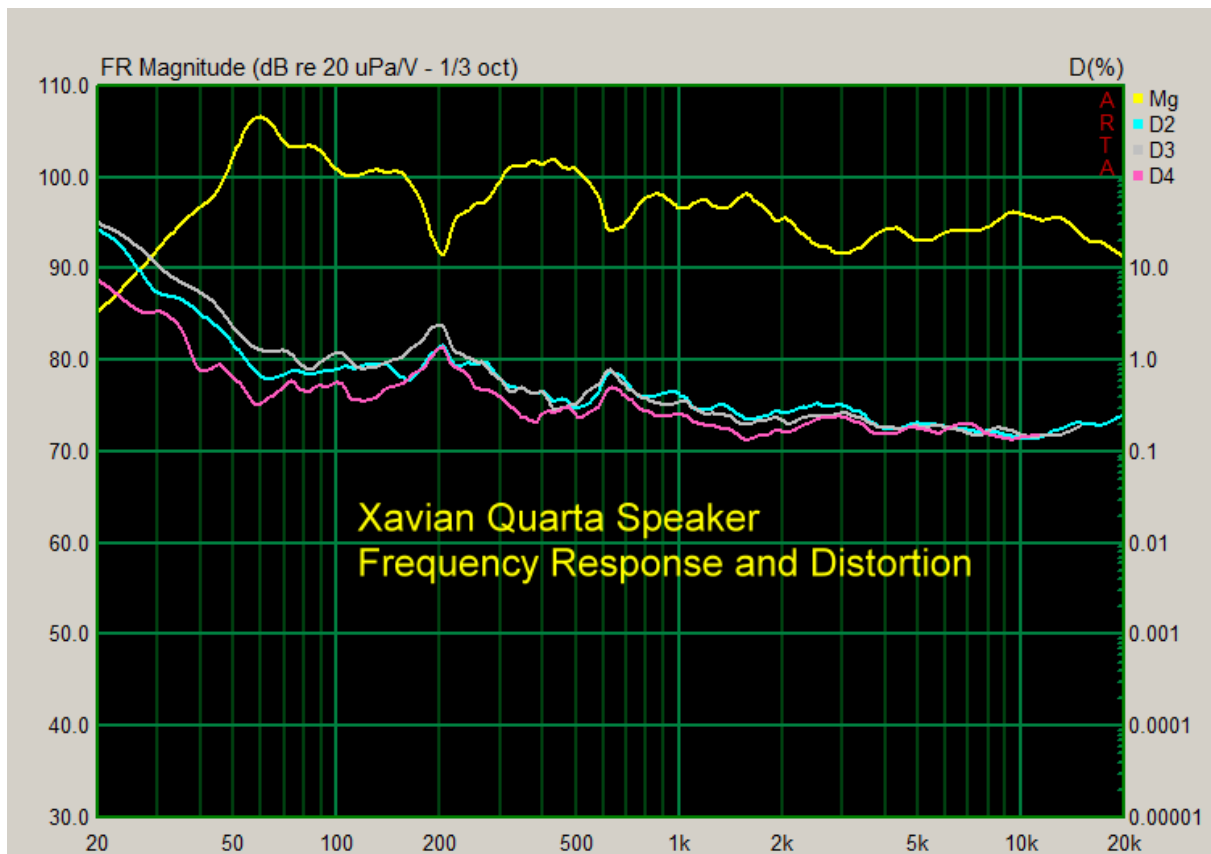


The low impedance in the low frequencies and relatively high impedance in the high frequencies give the frequency response that has a louder response with the low frequencies.

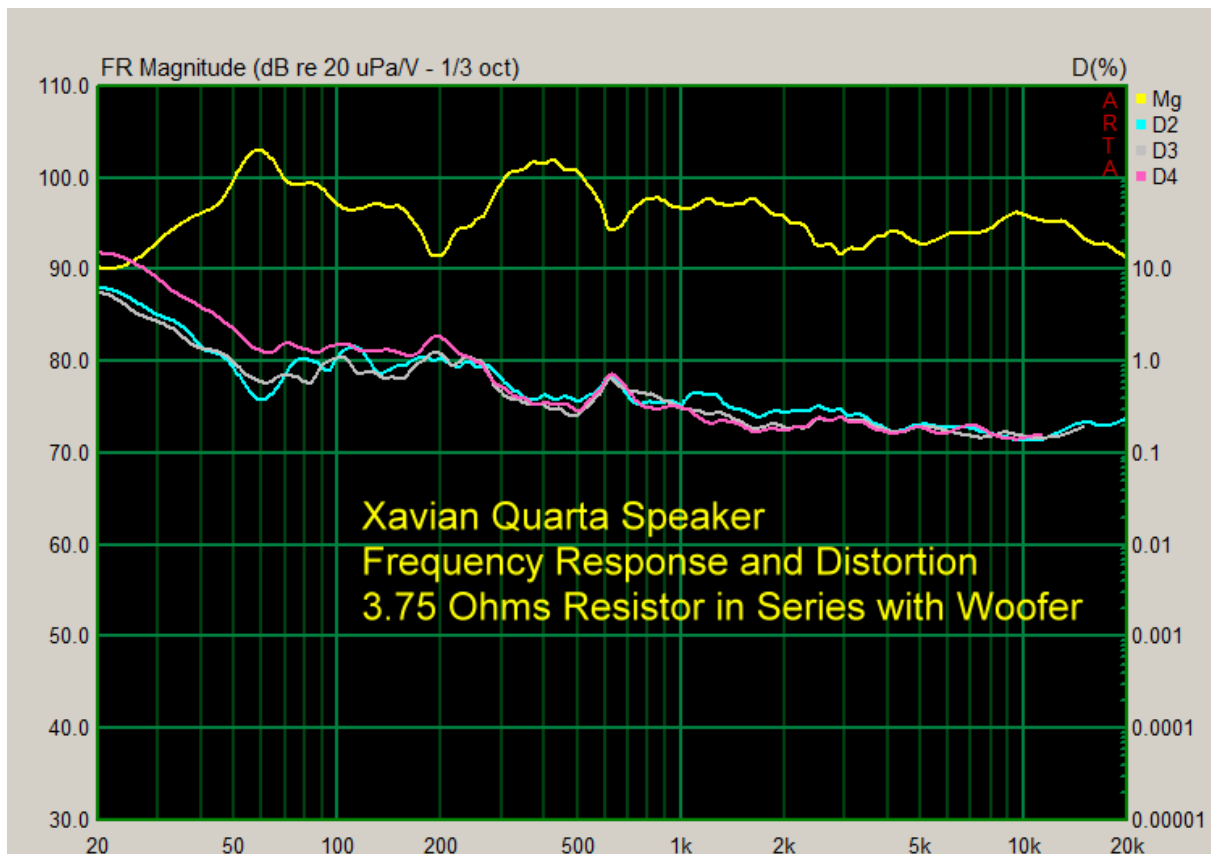
Because the Quartas have bi-wiring/bi-amping capability, I ran a little experiment. I obtained a 10 Ohm – 100 watt variable resistor, and I put it in series with the woofer input, removing the metal strip that connected the woofer and mid/tweeter input.

I played some music and adjusted the resistor until the bass was audibly reduced to a level that seemed to give a tight sound that was more suited to the jazz that I was listening to. It did not “punch” like it did without the resistor, but it was very appealing nonetheless, and I felt it was the kind of thing that could be achieved with bi-amping and would be useful to many consumers.

Here is the IR-derived frequency response without the resistor, as shown several figures above, except that I reduced the X axis scale so that the low end would be more clearly discerned. Note that the response at 60 Hz is 106 dB SPL.



The IR-derived frequency response with the resistor, at 3.75 Ohms, is shown below. The response at 60 Hz has been reduced to 103 dB SPL. In fact, the overall response between 40 Hz and 150 Hz is reduced. This represents a flatter frequency response, and shows the value of having the bi-amping capability. I do not have the setup to do bi-amping, so that is why I accomplished the same (similar) result by using a resistor. Note, however, that a resistor will make the bass slower and a bit less articulated, but it does work as an alternative until one purchases the setup for bi-amping. I had to be careful to obtain a power resistor that was capable of handling moderate power (100 watts) for these tests. There were some very cheap resistors labelled as 100 watts that reviews said overheated because they were probably not truly 100 watt, so caution is warranted.



Conclusions

Xavian appears to be a very good speaker manufacturer. I am really impressed. They are expensive, but everything is expensive these days. Cheetos® are nearly \$4.00 a pound. But they are worth it (both the Quartas and the Cheetos).

LIKES

- Powerful
- Low distortion
- Low phase deviation
- Deep bass punch
- Solid build
- Beautiful finish

WOULD LIKE TO SEE

- Tri-amping capability