

Estelon X Diamond Mk II Loudspeaker

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Review by Fernando Andrette

Several times readers have approached me asking which type of test is the most complicated to write about. There is no doubt, dear reader, that the most difficult tests and reviews are those about components that break paradigms, or that behave entirely like a 'point out of the curve'.

Testing components of this level of excellence requires thoroughly reviewed preparations, and that the entire setup is up to the product evaluated.

Fortunately, for the test of the Nagra HD power amps (read test in our April issue), and now for the test review of the Estelon X Diamond Mk II, we had both available for enough time, allowing a proper break-in period and a careful evaluation.

I suggest that you also read the HD Power Amp review, as well as the Estelon XB Diamond MkII (edition # 279) and Estelon YB MkII (edition #281), in which I comment on the company's philosophy, the founder's and lead designer Alfred Vassilkov history, and how he developed the shape and concept of his speakers.

If I comment on everything again, this review will be too long.

However, in consideration to the new readers we gain every month, I'll give a brief overview of Alfred's work.

After working for 25 years for various audio companies, CEO Alfred Vassilkov spent five years developing the concept of a loudspeaker that could faithfully reproduce music into any type of home listening room.

To achieve such a huge goal, he used all his knowledge on acoustics, cabinet design and materials. He concluded that he would only be successful if he could develop a high-mass, very rigid damped cabinet, with no parallel internal or external surfaces.

His solution was to create a cabinet made of marble-based composite material, with the shape that, to me, resembles a stylized 'bishop' in a chess game. The 1-inch diamond tweeter sits at the top, which is the narrowest part of the cabinet, and just above, a 7-inch Accuton ceramic cone midrange driver. At the base of the enclosure, a 11-inch Accuton Ceramic woofer. Depending on the ambient light, their exquisite silhouette seems to create movements that, depending on the listener's viewing angle, become even more attractive.

As I had already written in the reviews of models YB and XB Mk II, the main virtue of these speakers is that the music does not sound as being radiated from the speakers, even if we are at a short distance from them. This psychoacoustic phenomenon is essential for our brain to relax and always focus intensely and precisely on the music. There is no doubt that this possibility was explored to the fullest by Mr. Vassilkov.

Yet the Diamonds go far beyond this 'magic disappearing sound act', by allowing us to hear all the intrinsic qualities of each recording, in well-tuned systems.

In this respect, I fully agree with Jonathan Valin from Absolute Sound, when reviewing the X Diamond Mk II, who wrote: "Whether because of its highly engineered, artfully sculpted, exceptionally 'invisible' enclosure, its ultra-smooth blend of highly neutral

and linear drivers, or a combination of both, the X Diamond does not break the spell of listening to music seemingly played in a different space and time than the here and now of your room. It is an amazing feat of engineering prowess that makes for wondrous stereo."

I've never listened to any original Diamond version, so I can't compare this new version Mk II with the previous one.

According to the manufacturer, the main differences are: a new 25 mm diamond tweeter from Accuton with an extended bandwidth up to 60 kHz, a new 11-inch ceramic sandwich woofer, a new 7-inch midrange driver with ceramic diaphragm cone, new Mundorf Supreme resistors and Mundorf Silver Gold Oil film capacitors. Finally, a new top-of-the-line Kubala-Sosna cabling, a new third-order crossover between the woofer and the midrange driver and a second-order crossover between the midrange and the tweeter.

The technical specs we had access to are: the X Diamonds Mk II are suitable for rooms from 25 to 80 square meters, their weight is 86 kg, their frequency response from 22 Hz to 60 kHz, impedance of 6 ohms (with a minimum of 3.5 ohms in 50 Hz), minimum indicated power of 20 Watts, and sensitivity of 88 dB (2.83 V).

For the test we used our Reference System and also the Nagra HD AMP monoblocks. Digital sources: in addition to the Nagra TUBE DAC, also the MSB Reference. Kubala Sosna Realization 20-amp power cables on HD power AMPS.

Other reviewers who had the chance to hear the new X Diamond, described their experiences similar to Jonathan Valin's when trying to describe the soundstage and the transparency of sound images. Their remarks go in the same direction: "The X Diamond Mk II is among those rare speakers that you can hear from any distance and have no chance of figuring out where the left and right speakers are, and how many drivers each speaker has. Even in near field listening, and despite its size, it completely disappears and, with eyes closed, there was nothing to indicate that the sound was coming from them."

And finally, SoundStage reviewer Jeff Fritz's description: "Lana Del Rey was portrayed with a three-dimensional presence on a palpably tangible soundstage. Most impressive was the almost visible image of Del Rey as she sang right in the middle of the stage. The stage was magnificently deep, extending far beyond the described plane and beyond the walls. The auditory images were precisely delineated. With female and male voices sounding neutral and clear in terms of tonal accuracy, that was all I could ask for." Those who often read me know how much I avoid citing other reviewers and, many times, I even refuse to read them before coming to my own conclusions. But as these testimonies fully agree with my conclusions, I decided to make an exception.

So, on to our review. Remember that in the HD Power AMP review, I wrote that there would be (Verdade Sonora) "Sonorous Truth" parts 1 and 2. And that the 'symbiosis' between the HD Power AMP and the X Diamond was so impressive, that the most correct would be to use the same cover title used in the HD Power AMP review, published in Audio Video Magazine #283, in April 2022.

Well, this decision goes far beyond mere 'metaphorical symbolism'. Because even though they are different products, both manufacturers seem to have the same vision of what to look for in superlative audio!

By this I am in no way saying that both need to work together, but when they do, the result is a magnificent 'Sonorous Truth'!

As I read about the impressions of other reviewers who had the chance to test and listen to these speakers, the more I read, what came to my mind was the difficulty that each one had, within their level of experience, to faithfully convey to what the X Diamond Mk II provided them in terms of listening pleasure. And all were emphatic enough to convey to their readers how much Estelon positively surprised them.

In my case, I dare say that the situation was a little different, as the impact of testing two Estelon models is still fresh in my memory. And honestly, I thought that the X Diamond Mk II would have a little more 'refinement' than the XB and, therefore, the 'Estelon effect' was already sufficiently assimilated.

I also made the same mistake when testing the Nagra HD Power AMP, thinking it would be a more improved extension of the Classic, and "I ran out of steam" (I promise not to make that mistake again, dear reader, because twice was more than enough).

So I found myself in a tight spot to describe my observations of the X Diamond Mk II, as to say that it is only superior to the XB Mk II would be an irreparable mistake. Indeed, they are from different pedigrees, although both have the same sound DNA and apparently what makes them different are just a few details in size.

We always try to rationally create answers that seem 'sensible' theoretically, but that in practice prove to be imprecise and often poorly formulated. For the question is not how different they are, but what makes them different.

And only after a lot of listening did I come to some interesting paths, and I will try to share these conclusions with you.

The first conclusion was so obvious that could only come first, is that in our testing room the XB Mk II had limited performance in two aspects: macrodynamics and bass response (both in air displacement and in weight and energy). But from that conclusion the other features and differences are no longer so obvious.

And I start here by explaining a psychoacoustic phenomenon much more evident in X Diamond Mk II than in XB. I called it: "Bokeh Sound Effect". Anyone who likes photography has certainly heard and made use of this effect to get better images in their photos. For the unfamiliar, I'll try to explain: Bokeh is a Japanese word that tries to describe the smoothness and quality of a photograph's background blur by making an image with a shallow depth of field (i.e. where the background is as present as the main image). To achieve the desired effect, the photographer smoothly blurs the background, making everything around the main image smoother, more pleasant and harmonious. This technique is often used in field shots and nature portraits, in which the 'disturbing' background is separated from the main image.

In my articles and reviews, I always warn of the danger of excessive transparency taking away our concentration from the whole event, and leading us to get stuck in details that are not the main event. And this problem is much more 'sonically permissive' when certain frequencies stand out in music reproduction. Countless setups suffer from this problem, and speakers even more so!

This occurs for numerous reasons, and for a long, long time it was even a source of pride for many audiophiles, to show how the treble of their latest speakers sounded in relation to their previous reference. Or the bass, the bigger the impact and scares, the better its appeal. And, finally, the middle region, which was so precise and

transparent, gave listeners little scares, with 'recording noises' that had little to do with musical discourse.

How many times have I heard huge speakers with a response capable of making the hem of my pants tremble by a drumbeat, and when voices or woodwinds came in, the bodies of these instruments were huge (I once even quoted in an article an audition that I made in a very expensive speaker where the voices sounded the size of a hippo's mouth). Or that triangle at the back of the orchestra, competing with the soloist as if it had the same relevance!

Nothing against it, if this turns you on sonically, in your current stage in the search for perfection. But if you want a system that makes your brain actually forget you're listening to electronically reproduced music, these 'sound fetishes' will never fool your brain. And believe me, there are dozens of audio manufacturers working hard to give you the opportunity for your brain to relax and just listen to the music and nothing else.

So, going back specifically to the speakers, getting that difficult balance between transparency, naturalness, musicality and realism, is one of the most complex challenges to solve. But, when two or three of these objectives are achieved, and the balance between them is not ideal, nor is the one that the designer pursued so much, when moving from the theoretical to practical level.

Those who have taken our Auditory Perception Courses, will remember the first tip I always gave everyone: if you are going to start a system from scratch, start with the speakers and assemble the electronics to extract the best from the sonic signature of the chosen speaker. Speakers are the closest part of the system to a musical instrument!

Music students have great difficulty choosing their first instrument, so have beginner audiophiles. And asking for help or guidance is no shame!

However, as I move towards the end of my career, I realize that many 'seasoned' audiophiles don't have the confidence to choose their ultimate speakers. Because many are still stuck with 'pyrotechnics effects' and certain sound characteristics, which make this final search much more complex and expensive.

Not to mention the number of excellent speakers available nowadays, to make the choice even more exciting and diverse.

So, my advice, which I have shared for years, still stands: if you are going to start from scratch, start with the speaker, as it will give the sonic signature of your system and will be a safe 'north' for choosing and fine-tuning the other components of your chosen setup.

And, don't ever forget that every speaker has the signature of its designer, so before choosing, it's necessary to know what the designer imagined for his product, and hear if what I'm looking for in my 'ultimate' speaker is what that designer also sought.

And the X Diamond Mk II has a set of features that are very different from every speaker I've heard, owned, and tested. Of course, my choices will always be very different from those of you, readers, since everything I buy has the main function of being a work tool to improve our Test Methodology.

On the other hand, those who appreciate that Methodology, and find it a safe haven for final choices, will certainly take into account our choices and the reason we followed a certain path.

From this perspective, the X Diamond Mk II has one of the most important qualities of our Methodology: combining transparency with naturalness, realism and musicality, like no other speaker we ever tested before.

But, if the reader imagines that this balance was achieved by 'expanding' these four characteristics to the extreme of the technological possibility that exists today, forget it, because this was not the path taken by Estelon. They've struck that balance by referencing the way music is recorded, mixed and mastered. If captured, mixed and mastered in an exemplary way, this recording will sound impressively realistic! If the capture, mixing and mastering was average, the result will be identical!

This leads us to another question (the same as for neutral cables, remember?): how much the audiophile appreciates putting together a system free of coloring or entertaining 'artifacts'. And how capable are they of not interfering in what doesn't sound magnificent, without purging these recordings from their listening choices?

Well, I dare say that if these audiophiles, who have stamina, could hear a correctly balanced system in conjunction with the X Diamond Mk II, they would be surprised how much the headroom, precision and the balance available in those superlative systems are capable of doing for technically limited recordings - and would never give up on any of their recordings that they love artistically.

In Internet forums, I always heard from many audiophiles (and even from reputable speaker manufacturers), that beryllium or diamond tweeters make the highs bright, with false timbre, etc. And I always replied that this is not a rule, and currently I would venture to say that the designer must be very unskilled not to know how to use these tweeters and explore their enormous resources.

Over the past few years, some of our reference speakers had various types of tweeters, silk dome tweeters, ribbon, diamond, silk dome tweeters again, but none of our previous speakers ever had the beauty, range, clarity, definition and realism of the X Diamond MkII in the highs.

And I'll go even further: none came close to the tonal resolution of this speaker in the high frequencies! It's hard to acknowledge this, because I'm referring to excellent speakers that we had, and that two of them cost, in the American market, 20 to 30 thousand dollars more than X Diamond!

The same can be said of the mid region, which in the XB proved to be completely superior to all our last speakers, and it was in the XB Mk II test that I started to make the analogy with Bokeh, in which the background of the sound image is there to compose the whole, and not to compete with the central theme!

And after listening and testing three models from this manufacturer, I understood the importance of the cabinet design, the choice of the drivers, the concept, and the genius of the X Diamond designer. He managed to put into practice what every great speaker designer wants: fidelity without imposing any personal sound signatures!

While everyone wants to leave their mark and be recognized for their works, it seems to me that Alfred Vassilkov wants his recognition to come from his ability to provide the listener with the closest to reality achieved today in electronic reproduction. And that is impossible to aim for, when products impose a sonic signature!

Do you notice the subtlety and change of perspective?

By seeking not to impose a sonic signature, he is liberating, and emphasizing what every superlative level speaker should be! And that, my friend, I guarantee that it doesn't even cross the mind of the overwhelming majority of audiophiles on the planet. It is necessary to listen to understand the depth of this concept, the way of reproducing recorded music with the greatest possible fidelity!

There is a Zen poem that speaks of the beauty of clear water that takes the form of the object that receives it without losing its innate characteristics.

In Estelon's catalog, there are some impressive photos of Estonia's natural beauties, such as virgin forests and water in abundance, that were the source of inspiration for designing the X Diamond speakers. I dare say that Alfred (even though he may have never heard this Zen poem) wanted to give his speakers the ideal shape for optimum reproduction of recorded music.

The result is so consistent, I have no doubt that it was not by chance that he achieved such a feat!

Well, just listen to the bass of the X Diamond and wonder how a woofer with only 11 inches can deliver such a precise response, with so much energy and air displacement, reminding us of speakers with two 10-inch woofers and much larger cabinets!

And here, again, it is necessary to remember that it is not about sonic pyrotechnics, but about control, definition and precision.

As a good friend says, "a one ton safe will not fall in front of you and startle you to death", but any low note emitted by a musical instrument will sound masterfully cohesive and correct in tempo, sustain, body and decay.

In terms of soundstage, I think I've already mentioned all the qualities, but one of them that, for me, is more important than having the plans precisely presented according to capture and mixing. I refer to the three-dimensional focus. And here, once again, the 'bokeh sound effect' proves to be perfect, because as the back of the stage does not have the same weight as the soloists, the separation, or rather the outline of the main event, is shocking because it is so precise and realistic.

Listening to duo recordings of various singers, it's amazing how you can even notice when the singers are on the same microphone or on separate microphones, as well as the differences in height, distance of the singers and microphone angle. You literally 'see' what you're hearing in these cases! And all thanks to the background never competing with the essentials.

And when that balance was captured and mixed at intentionally predicted or desired heights, the whole is never lost.

And, as I wrote before, this is a difficult result to achieve with speakers, as it depends on a lot of knowledge, well-tuned crossovers, correct drivers, cabinets, etc. What good is your electronics being able to achieve the feat of keeping the focus, proper tonal integrity, correct plans and ambience, if your speaker has trouble keeping everything in its proper plans?

This is an issue fully resolved by Estelon speakers, apparently throughout its product line.

Textures are also greatly favored by the X Diamond Mk II ability not to impose sonic signature. So we're always listening to the quality of the recording, the virtuosity of the musicians, the intentionality of the composer and the quality of the instruments.

For a texture lover like me, it was glorious to be able to 'rediscover' texture nuances in recordings that have been with me for a lifetime! And at the same time ask myself how I had never observed so much richness and details, that with the X Diamond Mk II are so evident!

When people talk about correct transients, they usually refer to timing and rhythm as an indicator to whether they like it or not. But there is an effect that I have demonstrated since 1999, in our Auditory Perception Courses, which I call 'sound lethargy'. It's like a feeling of "sounding lethargy", which leaves the recording sounding with a certain indifference, causing little interest of our brain in appreciating and listening. I usually play two or three examples for the participants to listen to, how a presentation could sound sloppy or precise with the same recording.

But in X Diamond Mk II, these same examples have a new element that I called 'sonic slips'. It happens when, in a group, one or two musicians are not as engaged as the rest of the musicians. And I've never noticed this in any speaker, let alone any electronics we've tested.

But with the duo Nagra HD Power AMP and Estelon X Diamond Mk II, the 'hesitations' became audibly evident!

Regarding macrodynamics, if you want a kick in the chest, a prostate tickle (which I imagine happens in audiophile rooms with speakers that go down at 20 Hz, surrounded by a pair of subwoofers that go down at 10 Hz and powers of 1000 Watts per channel), forget this speaker. No Estelon, I believe (nor even the Extreme), was made for that kind of 'pyrotechnics show'.

Now, if you want to hear a pipe organ correctly, wide dynamic variations in symphonic works, the last octave of the left hand of a piano sounding in fortissimo, or oriental percussive instruments so that you can stay in the room without risk of having hearing damage, the X Diamond Mk II can provide you with unforgettable moments.

And as for microdynamics, just don't expect it to put more emphasis on noise than music, but everything that's been captured correctly, will be there!

As for the harmonic body, here is another impressive revelation: I have never heard any other speaker (regardless of size or price) reproduce in such detail the differences between a violin and viola, or a cello and a double bass, both played with bow!

It is pleasant to give our brain the possibility to be in doubt whether what is in front of us is real or not!

It is necessary to experience this moment to describe the feelings that these auditions gave us.

Regarding organicity, this aspect is perhaps the 'business card' of all Estelon Diamond - along with the soundstage, of course!

Even average recordings feel more 'materialized' than any speaker we've tested. This makes every recording immediately more interesting and emotional (and who doesn't want that, when investing so much time and money in a system?).

So, put all these qualities together, from each of these seven criteria, and you have the degree of musicality that the X Diamond Mk II can deliver.

On a system that is in the same direction, your listening will be absolutely pleasurable and exciting. And as I've already mentioned, with the degree of headroom of this speaker, even technically bad recordings, which are limited by the errors of the recording engineer or recording room acoustics (especially live shows in open spaces), will have their artistic appeal preserved.

IN CONCLUSION

I hope I managed to make an X-ray close to what X Diamond Mk II provided us.

I felt, many times, as if on a rollercoaster when listening to my esteemed reference records, wondering at the end of these recordings how the X Diamond Mk II manages to convey with such precision what other speakers strive to achieve.

The music just flows without resistance, without barriers, without surprises. It's as if the musical event is being performed right there in front of us in real time. This sensation and this physical materialization occurred with several recordings of different genres and different periods.

For the first time my brain, on exceptional recordings, correlated with that magical moment when I was inside the recording room with the musicians we recorded on CAVI Records. I was also literally transported to 1958, 1961, 1967, 1969, 1971, recording jazz, progressive rock, folk, classical and Brazilian instrumental music.

The problem, my friend, is that it becomes addictive, because everyone who loves music more than systems, wants to immortalize this moment. If you can and want to be with your music in the same space-time in which it was performed and recorded for eternity, Estelon X Diamond Mk II is that portal!!

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STRENGTHS:

The materialization of the musical event.

NEGATIVE POINTS:

The price for having this materialization.