

# XA160 Review by Dr. Poltun

December 1, 2004

Dr. Poltun writes:

In this position I work every day in the presence of a unique living musical tradition, which goes back in a direct line to the giants of our art. Our orchestra - the direct musical descendants of those musicians who actually toiled for Herr Mozart, Beethoven, Brahms, Mahler and Strauss - has made some of the greatest recordings in the history of sound reproduction. Daily we rehearse in a hall that is universally considered to be one of the finest acoustic spaces in the world. This historic hall, the very same physical space where many musical monuments to our western civilization sounded for the first time. With standards at this level, every day the world's finest classical music artists delight us with countless hours of live performance.

It is abundantly clear that the preservation and full realization of this recorded treasure requires reference sound reproduction equipment equal to the finest in existence. In the Vienna Archives, where preservation of a piece of music's lineage is measured in centuries, electronics designed by Nelson Pass have served as the ultimate reference standard for over a quarter of a century. The latest in that incarnation of our choices being the Aleph, X and now XA series.

We truly consider these pieces of Pass Labs electronics part of our requisite collection of fine instruments and thus indispensable tools in our recording evaluation work. The term "instrument" is not used lightly, in a context where we evaluate musical performances on the actual instruments that were utilized by Mozart and Mahler as they conceived their masterpieces.



Dr. Peter Poltun has held appointment as Director of Archives for the prestigious Vienna State Opera/Philharmonic Orchestra since 1992. His office, the Musikarchiv der Wiener Staatsoper, stands as the historic home of the original manuscripts and performance materials for many of the greatest composers in the history of western classical music. This magnificent building was commissioned in 1857 by Emperor Franz-Joseph I to replace the original 1709 structure.

Prior to this appointment Dr. Poltun was American vice-consul for the US Diplomatic Corps stationed in Istanbul. During the Regan administration Dr. Poltun transferred to Geneva, where he was merged into the negotiations around the atomic disarmament between the USA and the Soviet Union, which historically brought Reagan and Michael Gorbachev together at the START and INF talk. These historic dialogs were fundamental to deep nuclear weapons reductions between the two super-powers.

Ultimately his passions for music lead him to exchange avocation for vocation, and thus the move to Vienna and the dramatic career change.

On a day-to-day basis, Dr. Poltun passionately manages one of the most important classical music archives/collections in the world. His charge, the preservation of historically important original music manuscripts (Beethoven, Brahms, Mahler, etc.) and the day-to-day preparation of performance materials for the two performing departments. Dr Poltun holds advanced degrees from the music conservatory in Hamburg and Princeton University and is an accomplished horn player.

My daily exposure to the finest musical instruments in the world leads me to conclude, the design of classic audio equipment is indeed similar to the design of fine musical instruments. Both creations utilize various scientific procedures but ultimately the creative process remaining an art and never reducible exactly to formulas, numbers or specifications. The development of such an instrument, whether by Pass, Bösendorfer or Stradivari, remains the realization of its creator's personal vision, emotions and aspirations. This is a process guided by the same axiomatic principle, which seems to govern the creation of the musical masterpieces themselves: the profoundest ideas invariably require the simplest execution. The works of great musical masters of Vienna all exhibit this principle, as does electronics by Nelson Pass and his small collective of highly creative folks at Pass Labs in the mountains of Northern California.

I want to state unequivocally; at the Vienna Archives we consider Nelson Pass to be a true genius of invention in the area of audio amplification. He has given us some of the most musically inspired designs in audio. For the great composers Brahms, Beethoven and Mahler, achieving the age of 50 meant reaching a stylistic landmark in their creative output.

Pass himself recently turned 50 and has achieved just this synthesis with the XA amplifier. The stated design goal was to combine the finest aspects of the Aleph circuit with the X circuit, both of which individually produced outstanding results in their own way. This is the most musically correct amplifier, which Pass has ever produced and is truly a sonic and visual work of art.

I'd like to note that we are dealing with the very top world-class artists in classical music on a 365-day a year basis and there is no time for "sounds good but doesn't always work".

There is no other institution in the world of classical music that approaches our rigorous recording and performing schedule. Our standards place a high premium on reliability, longevity and perma-

nence. In all of our years of experience no Pass-designed product has ever experienced a failure of any kind and a number of vintage designs are still functioning flawlessly after decades of use.

Our current analog reference source here at the archives consists of a Lyra Titan, Lyra Olympos, 3 Ortofon: MC 7500, SPU-N, Jubilee, Koetsu Platinum Jade with diamond cantilever, Benz Micro LP, Van den Hul Colibri normal and Colibri wood phono cartridges fitted to a SME Series 5 gold tonearm on an SME 30/2 turntable.

Digital source also sonic state of the art, Accuphase DP-85 SACD / CD player and Mark Levinson Reference CD transport for Red-Book CD's feeding a 24/96 Pass Labs DAC.

Pass XONO phono preamp, Pass XO.2 preamp, Pass X600 and XA 160 mono blocks provide signal to Wilson Audio Watt Puppy 7 loudspeakers. The entire system is wired together with Transparent Reference XL, speaker cables and interconnects. All electronics are connected to the mains with Transparent's top power cords and power conditioners.

For testing the XA 160's we used recordings created by our orchestra in house. I have personally been present at almost all of these recording sessions. These contemporary recordings were supplemented by selected older recordings, some of the best ever made in our facility. We all know the sound of our hall and our orchestra, and demand that signature sound in our recorded creative output irrespective of the recording format.

With the very first note I heard from this amplifier I realized that Pass had progressed far beyond the Aleph and X designs. The XA 160 reproduces the actual harmonics, the inner voice of every instrument or human voice the very physical property which makes for the differences between instruments, in the most accurate, palpable manner I have ever experienced outside of the actual live experience.

This amplifier lends each voice an absolutely precise physical weight and presence that was not there before. The actual movement of the air in and around the instrument, the full weighted resonance of the instrument's vibrating body, the spreading of the sound as it moves away from the instrument and the emotional, physical energy involved in producing the sound, the body of the bowing and vibration put into the mouthpiece or reeds. These sonic nuances were always the areas where I found prior to hearing the XA 160 the greatest differences between recorded music and the real thing. Listening to a rehearsal of the Prelude to Tristan, which we recently premiered here, I was curiously struck by the overwhelming wave of energy consisting of over a hundred vibrating instruments. It is this absolutely convincing harmonic weight that until the XA 160 I perceived as missing from our reference system.

And talk about dynamics, imagine a full orchestra playing as softly as possible thru the XA 160 conveying the correct weight and feel of gigantic irrational energy potential, controlled and at rest. This clairvoyance, I have never heard before from any amplifier.

With this amplifier, each group of instruments or voices, whether solo or massed ensemble emerges from the recording space with its own individual voice, intact. I hear thousands of distinctive, instrumental voices and colors emerging from the recording ambient. The attack, sustaining of the tone, the inner expansion and contraction, control of the energy and its termination, the rests -also very much a part of the music. It's all there and its better, more natural than ever I have heard presented before on our archival recordings.

We worry mainly about playing musical masterpieces here in Vienna, but would be remiss by failing to acknowledge that many audiophiles worry about amplifier control and power, particularly as they affect bass performance.

We also, had given some thought as to whether the XA160 would really take adequate control

over our beloved Wilson Audio Watt Puppy 7's, which is well regarded as a very dynamic loudspeaker. This was an area for example where the change from the Aleph 2's to the X600 made quite a difference. The XA160, although having considerably less rms power than the X600, produced far superior bass performance in our reference system.

At a fraction of the available power, how could this be? I source this to the proper handling of the harmonics, and note once again an instance where subjective performance is not adequately reflected in the numbers; numbers which we seem to delight in taking refuge in.

The bass had far more nuance, detail and let's call it intimate intrinsic character than before. Just to be sure, I called over our solo counterbass player for a second opinion on this issue. After one pianissimo plucked note he declared it no contest. The XA 160 was reproducing the inner voice of the instrument, the attack, the tone and its decay more realistically than any audio component we had yet auditioned. If you spend 6 to 8 hours a day with your ear inches from vibrating counterbass strings, believe me, you know this sound when you hear it.

I will let the audiophiles worry about the quest for the final bass octave, which seems to be like Parsifal's search for the Holy Grail, an annual event at the Vienna Opera and like all of Wagner, a very long story. In truth no loudspeaker pulls off the tremendous bass energy of the real thing. Going with the XA 160 means going for highly refined quality of bass. There's plenty of it. It's controlled and it goes down deep but the real difference lies in its quality. Each of those individual bass voices take on a distinguishing character, which gives the entire fundament of the orchestra a multi-voiced refinement of articulation, which it never had before. Brahms, was in the habit of judging any composition by covering every staff and looking only at the bass line: "If that's wrong, it's all wrong." (Recordings [all with the Vienna Philharmonic] used for testing this bass performance were: Mahler Sym-

phony No. 2/Mehta/Decca - CD and LP version, Bruckner Symphony No. 9/Harnoncourt/ Teldec - SACD version.)

To touch two other important performance parameters, I'd like to consider soundstage/depth perception and vocal reproduction. As for the first category, the factory supplied product literature has called it like it is: The only limit to the depth and width of the image produced by the XA 160 are those limitations produced by the recording venue or the listening environment.

Although the X600 produced excellent image depth, the XA 160 has substantially rolled back the boundaries. We have moved much further into actually sensing the physical size of the hall or studio; the XA 160 is reproducing a 3D space second to none.

And yet what a paradox that while we have more depth there is still more intimacy with the individual voices within that space speaking with those harmonically rich, tonally right voices. They may appear to be further back in the image but emotional connection with them is more intimate. We just recently recorded all 9 of the Beethoven Symphonies here with Simon Rattle (EMI/Angel - CD). This set is already earmarked as a future classic. The aural memory of these marathon sessions was very fresh in our ears. Several of our musicians who came for a listen to the XA 160 noted the incredible capability of this amplifier to reproduce the actual air and boundaries of the recorded space of our home concert hall on these recordings. These were live recordings and the sound changed during the 10 day recording period depending upon humidity/temperature conditions, number of people in the audience, orchestra set up for a particular symphony, etc. It was truly uncanny how the XA 160 clearly delineated each acoustic environment image.

As for evaluating actual human voices and to enlist yet another pair of local golden ears for a look at the XA 160, we had world famous singer Thomas Hampson, stop by for a listen to some of the

famous Mahler recordings he made with our orchestra and Leonard Bernstein. (Recordings listened to with Thomas were: Mahler: "Kindertotenlieder" (LP version), "Rückert Lieder" and "Songs of a Wayfarer" (both of latter on CD) All with the Vienna Philharmonic/Bernstein).

As with our bass player, the XA 160 immediately got Thomas' attention. Never had his voice been reproduced with such physical presence and naturalness. No matter how much dynamic Mahler and Bernstein demanded from him, the character remained, tonally controlled, warm, resonant and what wonderful harmonics!!! The secret to all the XA 160's strength is a sound that in all registers never gets hard, no matter how dynamic or expansive it becomes.

So what we really have in the XA 160 is a new music lover's instrument. This is the amplifier for the person for whom intense, close listening to music both live and at home is an important, regular emotional experience. It's the amplifier for hour upon hour of sustained listening pleasure. It's realistic warmth and lifelike nature brought us closer to the real thing than we have ever been before. The other X's and Alephs did a great job in these most important categories as well but the XA provides a true synthesis of the previous styles to achieve something greater than both - closer to musical truth. (I might add that the X600 remains a very excellent amplifier and might be the product of choice for the individual whose loudspeaker or room conditions require the additional power which that design provides. With the XA 160 another masterpiece has arrived at the Vienna archives and we are proud to have been one of the first to experience this outstanding product.

Peter Poltun  
Musikarchiv der Wiener Staatsoper  
Opernring 2 A-1010 Wien  
Austria  
Tel: 011-43-1-514-442-545  
[peter.poltun@wiener-staatsoper.at](mailto:peter.poltun@wiener-staatsoper.at)