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Editor's Important Notice – by Mr. Y.K. Chan

## **TENOR CLASSIC 75 Tube Amplifier**

(Retail Price HK\$ 160,000.00)

### **Foreword**

Let's go straight – I had to point out that the Canadian made TENOR Classic 75 is the best craftsmanship and sounding equipment I ever heard in my life, I am a serious tube enthusiast, had collected over dozens of classic tube amp and new made, including Marantz 9, McIntosh 3500, Brook 10C, Venture Reference etc..., based on my 1 month A/B comparison to these all time classics, I confirm that Tenor's performance is way beyond ANY tube amp in the market. Every pair of loudspeakers driven by Tenor had amazing results, in fact, the Tenor will take those loudspeakers to reach a higher level of reproduction, if the industry really had something called "Magic Design", I'm sure that Tenor is the one who had that "Magic" – they had the ability to make every loudspeakers sounded extremely good.

### **First Impression**

I got a good first impression from Tenor partly because they were highly rated from a few high-end magazine in America, mainly because they're highly recommended by Rockport Technologies designer Andy Payor, as you'd know, Rockport made the world's best phono player and loudspeakers, Andy is extremely critical to equipment, designs & accurate reproduction, once he'd tried Tenor, he confirmed that it's the best amp he'd ever listened. At the recent CES Show, Tenor demonstrate their amplifier with Rockport Hyperion Loudspeakers, during my stay to the show, I didn't had a chance to visit the Rockport room, and, after, it proved that I miss it. It's simply because quite a few high end reviewers all agreed that it's the best system they've ever heard at the CES – all time, and Robert Harley even said that's his favorite system after 30 years of search.

Recently, the first pair of Tenor Classic 75 had arrived HK, I was kind of surprise when I first saw the unit – it looks larger and more elegant than the photos on the brochure, the Tenors are 100% heavy duty design, and, it's

outer case is made from the best Canadian cherry wood with extremely fine craftsmanship, by the time that base plate opened up, I was shock to see such beautiful workmanship on the circuit board, I must admit, since Marantz 9 & McIntosh MC 275, I never seen any tube amps with such excellence & fine craftsmanship. I then took a quick listen to the Tenor driving Audio Physic Virgo III loudspeakers, the result is simply fantastic, I then decided to audition these amps clearly at my own listening room.

## **Sound Characteristics**

In our Soundroom, I first use the same system for playback (Herron VTSP-1A + Tenor Classic 75 + Audio Physic Virgo III), I was totally shock by the superb performances, and I started to realize why this "reasonable" priced loudspeakers was rated "Class A" and "Best Buy" in Stereophile Magazine, I'll report to you all how great is the Virgo III in future issues, without questions, Virgo III driven by Tenor reproduced extremely musical sound, enormous inner detail, it's low frequency had very deep extensions & powerful energy, it's the best sounding amplifier we'd even heard in our own Soundroom since it built 5 years ago. In order to learn more clearly about the sound characteristic of the Tenor, we prepared a few reference amplifier to A/B it. After test, we found that the Tenor is like a grouping of the best part of all reference amp I got. Tenor's high and transparency is almost 90% similar to the Venture Reference amp, and it's rich midrange and dynamic is very similar to the Marantz 9, it's ultra lows and power reserve will not be anything less superior to a Jadis JA-500, In general, Strings and Saxphone reproduced by Tenor gave me an "Autumn Field, golden yellow, clear, clean and fast" feeling, it's sound character is more closer to the Marantz 9's side. Since I'm not too familiar with the sound of the Virgo III, I decided to use Tenor to drive 2 pairs of small loudspeakers that I knew well. – TAD TSM-300 & KEF LS-3/5A.

## **TAD TSM-300**

The TAD TSM-300 is best match with single ended amplifier, we used to have the best result by using Venture Reference monoblocks with 10 watts output. With the Venture, the TAD create a large spacious sound stage, very fine detail, musical & powerful & we had no complaint at all. Right after we use Tenor instead, we discovered that the TAD still had room for further improvement, which is not available from the Venture. On the Tenor, we heard David Oistrakh's violin had more detail, Janos Starker's double bass had better transient extension and control, it proved that although the Venture single ended 10 watts amp is good enough to drive the TAD, but during playback on some extensive information recording, there's some

drawback with the Venture. By comparison, the Tenor's 40 watts Class A (Obviously it had more than 40) had the advantage, and performance wise, the Tenor is way ahead of the Venture.

## **KEF LS 3/5A**

The BBC design LS 3/5A is one of my all time favorite small loudspeakers, it's reproduction of violin and vocal are so real and hard to beat. Based on my comparison with other LS 3/5A such as Rogers, Chatwell, Harbeth etc., I keep a pair of black piano finish KEF LS 3/5A for my reference.

Since efficiency of the LS 3/5A is much lower than the TAD, my reference amp for LS 3/5A used to be a Marantz 9 or McIntosh MC 275. But after I heard the playback from Tenor and LS 3/5A, I was shocked by the extreme fine detail & inner detail, the 3/5A can play louder than it used to with good damping and controlled, Without the Tenor, I won't be able to know that the LS 3/5A can still improved further.

## **Basic Design**

Tenor is a small scale high end manufacturer, 3 partner (including designer Michel Vanden Broeck) are serious audiophiles. Classic 75 is an OTL (output transformerless) design. Theoretically OTL is the most ideal tube amp design, the specialty of OTL is clean and transparent, fast transient & quite background, whoever audiophile listened to OTL amplifier will be very difficult for them to go back to the standard tube amp, due to the noisy background and slow transient. But there's no easy way to design a good / perfect OTL amps. Historically, there's very few successful OTL amp available in the market. Back at the old days we have the Futterman's garage made, after that we have New York Laboratories based on Futterman's circuitry (I still own one of each), recent ones we have Atmosphere and Graaf, based on my judgement, Tenor Classic 75 is the best sounding and best craftsmanship OTL amp ever made. Each channel consist of 4 x Russian 6C33C, 6 x small tubes including 12AX7, 6H6P, 6H30P, the bias adjustment for the Classic 75 is user friendly, the tube does generate a lot of heat, due to the fine extensive engineering of the amp, I discovered that they're extremely reliable and stable, I've been playing the Classic 75 for 6 to 7 hours per day and I found that the performance is very stable, there's no questions about the reliability of these amps.

Tenor Classic 75's sonic performance and craftsmanship simply reach the "peak" of amplifier design, in fact, you might not be able to see such magic even you wait 10 years and see what the market is going on... I've been

swear to myself that I'll not buy anymore new tube amps (because I got a lot of classic and had no time to enjoy it), but, Tenor's attraction is hard to resist, it seems very much that these pair of 75 will be kept at my home and be the best match for my JBL 4350.....

YK Chan

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**Tenor 15 Wi OTI Monoblocks** - Inner Ear Report. Volume 14, # 1 - 15, 16, 17, 18

This Canadian company was formed in 1998, but preliminary design work did not begin until 1997, when "2 die-hard audiophiles and a talented electronics engineer decided to bring the OTL circuitry performance envelope to a higher level". The company's first prototype, a 15 watt integrated unit with passive volume control and input selector, was built and compared to many known reference amplifiers, matching some and outperforming others. Tenor Audio then decided to further develop the prototype into a commercial product line.

The principal owners share responsibilities with Francois Lemay as general manager, Robert Lamarre in charge of distribution and sales and Michel van den Broeck as technical development manager. Lemay has more than 15 years experience as testing manager for the Quebec government consumer protection office. Lamarre is a professional engineer and has designed the unique Lamhorn horn speakers. Van den Broeck, an electronics engineer, moved to Canada in 1988 from Belgium where he began building tube gear at the age of 14. While still in Belgium, he opened his own shop building and modifying vacuum tube amplifiers for musicians. Shortly after his migration to Canada Van den Broeck was gainfully employed designing navigation systems for airports, which involved RF and microwave technology, skills he has since been able to apply to consumer audio designs. As well, he began customizing tube preamplifiers and amplifiers. He has a fixed interest in OTL designs and is convinced that power supply regulation plays an important role. Thus, Michael developed a design program based on a set of very precise objectives. The program ran for about three years at a cost of a half million dollars and included methodical research, circuit simulation and quality parts selection, not to speak of very critical listening sessions. The first new generation OTL was presented in January 2001 in Las Vegas, where some of our staff members actually had a look and listen to the amplifiers, which brings us to their...

## **Appearance:**

These monoblocks are outright stunning. They also look important as size here is incorporated with brawn and elegance. Each monoblock is 17.25 inches wide, 23 inches deep, stands 11 inches high and weighs 69 pounds. The front and side panels are made of polished wood—a very handsome grain has been chosen. The front panel accommodates a selector switch on the left and again control on the right, as well as two small toggle switches for mute and line input selection. The knobs match the appearance of the wood panel and hints at a touch of European styling. However, the arrangement of the vacuum tubes on each unit's chassis and the input transformers have a North American touch. Looking down on the amps, the large input transformers are near the rear, followed by heat sinks and the tube array. DC and bias switches are on left and right sides and can be adjusted with a small screwdriver with the help of a VU meter located between the transformers. On the rear of the amps, four inputs can be chosen; inputs 1, 2 and 3 are connected to the gain control, while input 4—one RCA and one XLR(balanced)—is a dedicated preamplifier connection. A pair of massive gold plated binding posts, the (detachable) power cord well, the fuse and the main power switch complete the rear panel. Each amplifier stands on large rubber feet and it's important to place them on a hard surface to assure proper ventilation and to clear the openings for the bottom-mounted cooling fans. For our evaluation sessions, we placed these large amplifiers on 2-inch ceramic cones, well above our carpet-covered floor, which brings us to the nitty gritty...

## **Technology:**

OTL stand for "output transformer-less" technology—pursued by many, perfected by few. The company states that their circuitry is based on fundamental electrical engineering principals and science. The topology is essentially a fully symmetrical balanced Circlotron type OTL and OCL output stage driven by a two gain driver stage. A unique feature is the use of high power solid-state regulation on all 10 voltages supplied by the two beefy 750 VA custom made power transformers. This method assures unconditional stability and can be found in many laboratory-grade power supplies. This stability enabled Tenor designers to control signal and power conditions to enable the vacuum tubes to operate at their optimal linearity. It also allows the basic circuit to deliver an unprecedented level of dynamic power reserve of 6 dB, while providing a high level of stability even on highly capacitive loads. Under these circumstances, the designers state that a signal's Harmonic Structural Integrity (HSI) can be maintained in all conditions and

at all power levels-the foremost condition to preserved the musical essence of a recording.

The amplifiers' vacuum tube complement includes (per pair) four 6C33 output tubes, four 6H6P, four 6H30P and four 12AX7A input tubes. Rated power at pure Class A is 15 watts into 16 ohm loads, 15 watts into 8 ohm loads and 10 watts into 4 ohm loads. Bandwidth is quoted from 2Hz to 160kHz (good for super tweeters and SACD players); harmonic and intermodulation distortion is less than 0.5%; signal to noise ratio is 100dB ('A weighted'); input impedance is 40kohms; output impedance is 0.7 ohms; input sensitivity is 700mV balanced and unbalanced. A "soft start" and mute function delays operation for about 60 seconds.

### **The Sound:**

Our in-house Wyetech Opal preamplifier was used to drive the Tenor monoblocks. A Cary CD player (to be reviewed in our next issue), an Audio Aero Prima CD player (reviewed in Voi. 13 #4) and a Magnum MD 108 tuner served as source components. All wiring was accomplished with Nordost Valhalla interconnects and speaker cables. For our auditioning sessions, we used the Tannoys and StudioLAB speakers (both reviewed in this issue), the Energy Veritas 2.4 (reviewed in our last issue) and the JMLab Micro Utopias (reviewed in Voi. 13 #3). This "international" mix of loud speakers (a pair from Scotland, two pairs from Canada and one pair from France) allowed us to observe the amplifiers' reaction to different loud speaker designs. However, we found that the Tendre behaved almost identically with all loudspeakers, thereby authenticating the company's claim to unconditional stability. We had not expected this as synergy should have been another element to consider.

All loudspeakers reacted to the amplifiers in a positive manner, introducing full-bodied, highly resolved information from down yonder (30Hz) to the highest limit of the Tannoys with the Super-Tweeter (54kHz). The amplifiers' sonic character imprinted itself upon all system configurations, adding harmonic texture, an expansive richness and warmth to the loudspeakers' performance. The Tenors also offered imaging accuracy; the recreation of size and locations of instruments astonished all listeners. Focus, front-to-back dimension, horizontal and vertical reach took aback seat to none. We noticed that the sound stage shot up by as much as two feet when we disconnected other amps and connected the Tenors. It is almost pointless to describe the amplifier's sound, but old habits don't die! The highs are as smooth as a baby's bottom and remain effortless in character, even when burdened by dynamic passages or almost deafening sound pressure levels.

Midrange is a statement of clarity and offers the kind of finesse necessary to extract the most subtle musical information. That's inner detail at its best whereby sonic subtleties within complex program material are highly resolved without restricting data in the high or low frequency ranges. The bass region-all of it from 100Hz down to the loudspeakers limitations-is superabundant, but also introduces listeners to resolution. This is a rare listening experience, almost a lecture on how it's done right.

We thought that the best system configuration was achieved with the Tannoys, though even the rather inexpensive StudioLABs took on that certain high-end glow, not usually found in medium priced systems. The Energy speakers-superb mid-priced gems never sounded better. The JMLabs (smallish enclosures with deep bass restrictions) almost sounded like their more expensive siblings, the Mezzo Utopias. All in all, these amplifiers are great and in all likelihood will improve the performance of most (good) loudspeakers.

What we haven't told you is that these monoblocks can be used as integrated amplifiers, as they offer enough inputs on the rear to connect four source components through a single volume control. Thus, we connected the tuner and CD players and found that the sound was extremely good, but not as precise and airy as with the use of our (great) preamplifier. While the "direct connect" function allows using the amps without a preamplifier-often resulting in better sound than most preamplifiers can muster-we recommend looking for the best preamplifier money can buy, for only then can the amplifiers' performance really be appreciated.

### **Synopsis & Commentary:**

It seems that Tenor has put a lot of thought and planning into their design. Interestingly, their research laboratory is in the old Canadian RCA building in Montreal where the first turntable and vacuum tube amplifiers were made back in the early 1900s. Ironically, vacuum tube amplifiers are likely the hottest high-end designs in the current consumer electronics market and various technologies are pursued. We see merit in most designs whether they are single ended (SE) or push-pull (PP) or both (SEPP). Output transformerless (OTL) are a bit different and one may ask what advantages an OTL amplifier has over a conventional one with an output transformer? As some output transformers currently used are difficult to wind to achieve the best possible performance, some designers have chosen to eliminate the transformer altogether. Nevertheless, circuitry, tubes and peripheral parts must be chosen to complement such designs, as tubes have relatively high output impedances (compared to transistors). In OTL designs tubes with

large cathodes and high peak emission capability are used. A well designed OTL amplifier is capable of the best audio performance available today. However, OTLs usually require more maintenance and care than transformer-coupled amps, which may be why OTLs have often been criticized for unreliability. This was a problem with some low-cost designs where shortcuts had been taken (most low-end OTL manufacturers have since gone out of business). We'd like to assure our readers that a well designed OTL, such as the one under review, can be just as reliable as a transformer-coupled amp, and offer outstanding musical audio high-end audio at that. The folks at Tenor state that their philosophy is simple and straight forward: "to produce products only when they offer a completely new level of listening pleasure". While many manufacturers have made similar statements (marketing hyperbole), only a handful have actually achieved this objective. We believe that with the design of the 15 Wi monoblocks, Tenor has positioned themselves in the high performance category-the rank where performance and price actually relate and result in great audio.

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**AUDIO HEAVEN, QUEBEC STYLE:  
THE TENOR AUDIO CLASSIC 75AMPLIFIER**

It's not the water. Is it the culture? Whatever the reason, Lars discovers another outstanding high-end audio product from the French speaking province of Quebec. BY LARS FREDELL

Ultimate components

**Audio Heaven, Quebec Style.  
The *Tenor Audio Classic 75 Amplifier***

## **BY LARS FREDELL**

I consider myself a pretty serious audiophile. I think that I might always have been one, even prior to the past 40 years of my conscious submersion in the fine art of music reproduction. So, while the music certainly is the priority, I must also confess my dedication to the high-end audio paraphernalia and its optimized use. I've traveled the road of tubes, vinyl, high-speed tape, dynamic and electrostatic speakers, solid state, digital, passive components, room treatments, more cables and tweaks than I care to remember, AC conditioning, single-ended triodes, high resolution digital, et al. And now, finally, I'm standing at this audiophiles' version of Heaven's Gates... the OTL (output transformer less) amplifier!

Some of you are bound to disagree with this characterization and that's fine with me. You may never have heard what I have experienced. Or, maybe you've heard something 'that's even better, beyond my gates. Many years have taught me that there is always something better. ...or there soon will be.

The Canadian province of Quebec is unusual in many ways. For starters, they prefer the French language there, a cultural rarity on the North American continent. In many respects the Quebecois are also more style conscious and eat better food than the rest of us, at least compared with this part of the world. And then there is LeSon. Few places can boast of a more intense interest in sound reproduction, including a thriving cottage audio industry, than Quebec. The local provincial government has even stepped in with financial support at times. I became aware of this audio hotbed when, among many other well known locally produced high-end audio products, I first noticed the Oracle turntable, Classe electronics and, of course, my much loved Verity Audio loudspeakers, which were my first taste of true audio heaven, Quebec style. To this I can now add the astounding, and absolutely breathtaking, Tenor Audio OTL amplifiers.

## **LA RENAISSANCE**

OTL amplifiers generally have suffered an undeservedly poor reputation; at least it is not warranted in recent times (the history of OTLs is said to go back all the way to the 1920s). Several decades ago perhaps, during the mid-1950s through the late 1970s, earlier generations of modern-day OTLs had some problems with reliability, stability and speaker compatibility (speakers were notoriously inefficient then, and OTLs were not suitable amplification for them). But, such difficulties are now long past. Components

and speakers are so much better today and the OTL design concept is consequently resurging. The early New York Audio Laboratories' Futtermans have been succeeded by Ralph Karsten's outstanding AtmoSphere designs and by entries from Croft of the UK and Graaffron Italy, among others. Tenor Audio of Canada is a relative newcomer to this illustrious group of artisans in the finest of audio crafts, and what an auspicious debut it is!

Tenor Audio is the brainchild of three Montrealers, Robert Lamarre (also known for his Lamhorn speakers), Francois Lemay and the designer-extraordinaire Michel Vanden Broeck. The latter is responsible for the design of the Tenor Classic .75 amplifiers that have now replaced the Lamm ML2 in my room. Let me explain this early *on*: While I still feel that the Lamm ML2 is the best single-ended triode amplifier I've heard, it is no match for the Tenor in several, for me critical, areas. The same goes for the unbelievably cost-effective and better than-they-have-the-right-to-be Aloia solid-state amplifiers that I have fondly waxed about in recent issues of *UA*. It simply boils down to this: I've just never experienced anything like what these OTL amplifiers can do. Call it heads-over-heels infatuation. In building my reference system, I have diligently followed a strict credo: Whatever sounds best to my ears (after exhaustive comparisons) stays. This is my way of assuring that my reference is evolving into an ever-refined producer of music in my home. Nowadays, there are relatively few changes (unfortunately!) and they occur less frequently (thankfully!).

ULTIMATE AUDIO, SPRING 2001

### **Tenor Audio**

However, one way or another I now have to bite that bullet again. These amplifiers will remain in my listening room. Michel Vanden Broeck is a transplanted Belgian electronics engineer who started building single-ended tube amplifiers at the early age of 14. He found a good teacher in an aging audio engineer who taught him many of the finer points, and he was an eager student. For a while he had his own shop in Belgium modifying tube amplifiers for musicians. After landing in Canada in 1988, Vanden Broeck got involved in the professional side of audio. This eventually led him to work on designing navigation systems for airports, providing a valuable experience in RF and microwave technology which he has since been able to transfer to his consumer audio designs. Vanden Broeck also started building custom ordered preamplifiers and push-pull amplifiers on the side. He's had a longstanding interest in OTL designs, and when a customer asked him to build an OTL amplifier, it gave him a welcomed opportunity to immerse himself in this technology. Vanden Broeck quickly became convinced that regulation would

play an important role in his OTL designs, and he utilized a proprietary regulation circuitry that he had previously created for push-pull applications. As we shall see below, this is a crucial element in the success of Vanden Broeck's OTL designs.

## **LA PURETE**

Vacuum tubes are generally considered excellent amplifying devices. They have wide bandwidth with relatively low distortion and thus require little, if any, feedback. Traditional tube amplifier design holds that an output transformer is needed to convert the high impedance of a vacuum tube to a lower impedance necessary to drive a speaker, as well as to decouple a speaker from these thermionic devices. Otherwise, the speaker could be severely damaged if something goes wrong with, for instance, an output tube. Likewise, it is also recognized that such an output transformer puts a lot of passive "conductive metal" between the amplifying device (the tube), and the transducer (the speaker) and that this invariably has a negative effect on the signal and thus the sound reproduced. Even in the finest single-ended or push-pull designs the output transformer is a weak link.

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## **Tenor Audio**

Today's better speakers tend to have steady load impedances in the range of 4 to 8 Ohms or a little higher. Rarely do you find full-range speakers that dip down much below 4 Ohms (smaller monitors that are asked to produce extended low frequencies can sometimes dip down to the 2 to 3 Ohm level). Since OTL amplifiers prefer relatively even impedance curves and don't like to see very low impedances, this now makes the OTL a very viable alternative for the purist, especially if his speaker presents such an even load to the amplifier over the applicable frequency range. So, the OTL-type amplifier can be said to be a "pure" tube amplifier, producing the sound without the limitations of an output transformer.

What can one expect from this "pure" tube amplifier? Well, if properly designed, many audiophiles feel that this is the most refined amplifying device extant. It is capable of exquisite refinement, great beauty and delicacy. This is perhaps better recognized internationally than in North America. Both in Europe and Japan there have been thriving interests in OTLs, as well as for single-ended triodes, for decades.

## LA PROCLAMATION

The Tenor Classic 75 integrated OTL amplifier that is now chained to my listening room, with little hope of escape, is a powerful and technically advanced design. It produces the best sound that I have hit her to heard here or elsewhere. Big statement, indeed, and meant to be exactly that. It has delivered such a substantial improvement over my fabulous and venerable Lamm ML2 that my choice is fairly easy. While not inexpensive at \$18,600 for the pair of Tenor monoblocks, it is considerably less than one would have to pay for a pair of Lamm ML2s. In addition, of course, the Tenors are much more powerful, and thus able to handle speakers of lower efficiency than the Lamms can credibly do. A good thing for a reviewer!

My review pair of Tenor 75s came straight from the 2001 CES show so they were well burned-in. I'll never forget my initial listening session with them! With incredible clarity and dynamic vividness they presented the familiar music with such beauty and natural immediacy that it stunned me. After a while I started, as I typically prefer to do, to try to analyze the sound against my immediately preceding reference. I'm one of those reviewers who really believes in early impressions of differences between equipment and I find that I rarely change them later on (cave at: This, of course, presupposes that the equipment is well "aged" before the initial listening).

What I first noticed after inserting the Tenors in my reference system was deductive in nature and entirely new to me a unique absence of what I like to refer to as the "halo" around instruments and voices. In my 40 years in this hobby I've always heard "halo" effects to varying degrees, but I've never experienced the purity of the complete absence of the "halo." Let me try to explain this: Even with the finest equipment that money can buy I have always felt that an individual musical image has somewhat diffuse edges surrounding it.

Also, during very concentrated listening it is hard to identify the exact outline of an instrument or a voice. Obviously, instruments radiate their sound, but this is not the effect that I'm referring to. I'm talking about a general diffusion of sonic images. It varies in extent depending on the quality of the components involved, but it has always been there for me. This diffusion, or "halo," however insignificant it may be in an outstanding system, robs the soundspace of definition and dynamics and this has an unfortunate negative effect on its perceived transparency and clarity.

The sudden, and unexpected, absence of the "halo" was both exciting and stunning, and I knew that there must be a reason for it. Within the hour I

was on the phone with the Tenor people to see if they could shed some light on my experience. "It is the result of being able to stabilize and fixate the amplifier's DC operating point," I was told. "If an amplifier's DC operating point is drifting, even slightly, you end up with diffusion of the image. Our design uses extensive regulation which steadies the DC operating point regardless of output power variations" (see Technical Highlights). To my ears, this "clarifying" effect produced by the Tenor OTL amplifiers puts them in a league all their own. No other amplifier that I've heard can reduce the "halo" to this degree, or even eliminate it entirely. The reason I'm making such a big deal out of this aspect of the Tenors is that I've just never experienced it before. Nor, dare I say, have you.

Further listening to the Tenors revealed more elements of excellence. Frequency extremes are rendered with exemplary extension and naturalness. High frequencies are absolutely clear and grain free and the bass is impactful, yet nuanced and vibrant. The stunning clarity of these amplifiers produces a soundspace of extraordinary proportions and accuracy. It's more open with better acoustics than I have ever experienced. Small localization clues become quite obvious and help to produce a "you-are-there" sense that is utterly compelling. Frequent readers will know how much I enjoy the excellent *Beyond the Missouri Sky* by Charlie Haden and Pat Metheny, especially the "Message to a Friend" cut. This recording is exquisitely detailed with all kinds of ambient clues in spite of the larger-than-life instrumental images. For instance, at the one-minute time mark there is a turning of a page in the sheet music. On most systems it might be fairly difficult to hear this at all, and virtually impossible to hear in which direction the page is turned. Not so with the Tenors in my system.

Dynamic shading, which is so critical for a natural sound, is right on; giving instruments and voices an unmistakable natural tone. Interestingly, Michel Vanden Broeck has independently developed some of the same theories that have so successfully guided Vladimir Shushurin of Lamm. Both maintain that there is a very intricate relationship between distortions and frequency/amplitude that permit the human brain to perceive and interpret the sound as natural. Vanden Broeck believes that harmonics can either mask or enhance distortions and he has developed the theory that a good balance in harmonic distribution will give maximum neutrality and transparency with absence of coloration (see Technical Highlights). Judging from these amplifiers there is no doubt that he's on the right track here.

## **LA STABILITE**

Another somewhat surprising aspect of the Tenor amplifiers is their amazing stability. OTL detractors have always told me that such amplifiers are prone to great instability with sometime dramatic expressions and fiery results as tubes fail. This is not the case with the Tenors at all. It seems that the extensive regulation of the power supply makes the Tenors virtually immune to AC fluctuations. Once the bias has been set and stabilized it remains very stable and requires little, if any, maintenance. I've always had to struggle with this aspect of my single-ended triodes because of my varying AC supply here in southern Connecticut. So, this is a welcome and gratifying experience.

The Tenors do run hot but their silent and effective fans, with attached filtration system, keeps temperatures under control and undoubtedly extend tube life. Tube biasing is very simple and monitored through a built-in meter with individual trim pots for each 6C33C-B output tube. There is a selector switch for these tubes on the top cover as well as a fine-tune pot for DC offset. On the low, elegantly curved wood front panel there are two knobs; one is a stepped volume pot and the other is an input selector for the four inputs (of which one is "direct" and bypasses the volume pot by the flip of a toggle switch under the selector). Beneath the volume pot there is a toggle switch to mute the outputs. The back panel has four single-ended inputs (RCA) and a balanced input as well as a main fuse holder. The AC cable is detachable.

So here I am, at the threshold of audio heaven with the gates thrown open. Who would have thought that an OTL amplifier from Canada would bring me to this point? I'd expected it to be something more dramatically different. The Tenor design is based on sophisticated technical application of good engineering that has been meticulously executed. The result is a product of very unusual merit.

Without any question, these are unique amplifiers. Their strengths are so obvious and profound that it becomes very difficult to critique. Most of the time while listening to them I was just sitting there in awe, spellbound, with my critical faculties temporarily suspended. And so it remains today. Never have I heard familiar music like this! I can't find anything wrong with these amplifiers at all, except perhaps that I can't easily afford them. And yet, I'll propose to you that in the typical high-end world of diminishing returns on investment, they represent excellent value for money. They do very special things for music reproduction that I thought not to be possible. And, in that they are truly unique. How do you put a price on this for an audiophile?

Me gushing? Nah... it's springtime and i'm in love with a Quebec Tenor!

Tenor Audio Classic 75 Amplifier, Tenor Audio, 1001 lenoir Avenue 81521, Montreal, Quebec, Canada H4C 2Z6. Tel.: (514) 93815556. Fax: (514) 938-4567. Web site: [www.tenoraudio.com](http://www.tenoraudio.com). Designer: Michel Vanden Broeck. Description: Output transformerless (OTL) power amplifier. Tube complement: Input tubes (pairs): 12AX7A, 6H6P, 6H30P; Output tubes: 4 x 6C33C18. Frequency response: 3 Hz to 155 kHz (13 dB). Power rating: 75 W (16 and 8 Ohms) or 55 W (4 Ohms); Class A Power: 40 W. Dynamic headroom: 6 dB. Input sensitivity: 700 mV for full power. Damping factor: Typically 20 (re: 8 Ohms) and 10 (re: 4 Ohms) from 20 Hz-20 kHz. SIN ratio: 1100 dB. Input impedance: 40 K. Output impedance: 0.4 Ohms. Weight: 70 lbs. Dimensions: 17" x 11" x 23 inches (w x h x d). Price: \$18,600 per pair.

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## **Absolute sound**

Now for the piece de resistance. Every year I bring the same small bunch of CDs to the show. Some manufacturers may be tired of hearing them (I know some reviewers, who walk the show with me year in and out, are). But I bring them for a specific reason. They are all "tough cases." Each one is capable of sounding extraordinarily "realistic" when properly reproduced-and ordinary to downright unpleasant when not.

At shows, I feel lucky when one or two of these discs sound as "real" as they do in my so-called "reference" system. I've never heard a show system that reproduces more than one or two with equal realism. At least, I hadn't before this year. In the Tuscany hotel, at T.H.E. Show (the outboard rival to CES), I encountered the best stereo system I've ever heard at a trade show. In fact, it may be the best stereo system I've heard, period. There is great hi-fi, and there is magic. The \$85,000 Rockport Hyperion loudspeakers, powered by Tenor Audio's fantastic OTLs, were magic. Disc after disc not only sounded the way I know they can sound when everything is working just right; disc after disc sounded better than I'd heard them-airier, breathier, more detailed, more dynamic, more dense in color, more natural in sound-staging, more like the real thing. Indeed, in terms of sheer realism (and utter beauty), this was it for me-and for many very experienced listeners who accompanied me to the Rockport room. The most flawlessly realistic big (and it is huge) loudspeaker system I've heard. Whether there was some incredible synergy

going on between the Rockports and the Tenor amps (which Rockport's Andy Payor used to "voice" the Hyperions), I'm not sure. But I will find out, because I am slated to get both for review. If what i get in my room is as good as what i heard in Vegas, the quest for the absolute sound may, after better than 30 years, have finally ended for this listener.

Although there was much good sound at this year's show, the best (by a fair margin) was a system comprising Andy Payor's **Rockport** Hyperion speakers (\$86,500/pair), **Tenor Audio** OTL amps (about forty grand for the vertically biamped pair), and the **Audio Aero** Capitole, a \$6,300 French-made CD player. Rounding out the system and making it look tweaky enough for an audiophile's dream.

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## **Stereophile- April 23, 2002**

### **Best Sound at Show?**

I was so busy chasing analog leads that I didn't get to hear as much as I would have liked. I flat-out had to skip rooms I really wanted to hear, but couldn't because I knew they contained no analog. Of what I did hear, easily the best sound was in the Rockport Technology (speakers)/Tenor Audio room. Second was the Halcro/Wuson Audio MAXX display, third the Halcro/Clearaudio/Revel Salons, fourth the Immedia RPM-I table/Helikon cartridge/Audio Physic Avanti III speaker/Audio Physic monoblocks room, fifth the VPI TNT IJMW 2.5I Joule Electra/Merlin room (what else is new?), and sixth the Rega room (which surprised the hell out of me), featuring four Axon monoblocks and the Cursa preamp, Jupiter CD player, and Ela speakers. At about \$8000 without the P9 turntable, the Rega system wasn't cheap, but it sounded like the "poor man's" tricked-out NAIM system. Beyond those, though there were some other fine-sounding rooms, it all turned into a blur for me ~ as it probably has for you, having read this report!