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Show Preview Inside!



Exploring Two Budding TV Technologies: OLED and 4K Ultra HD

Reviewed Issue!

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with Aurum Altan VIII Speakers



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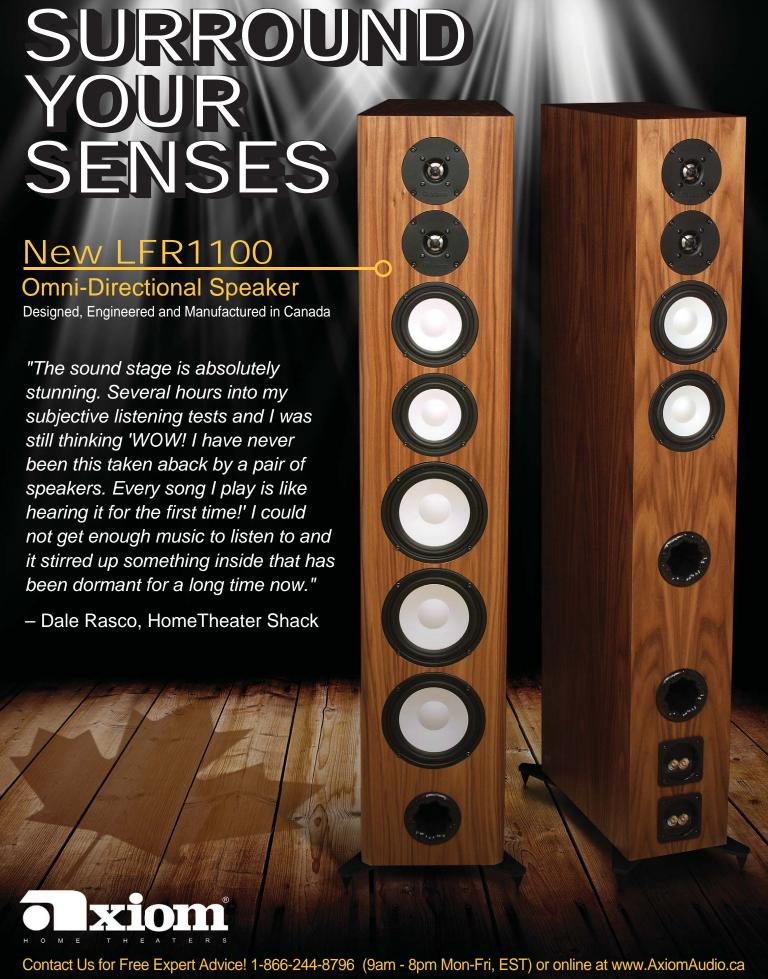


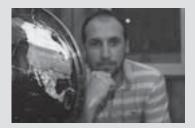
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CANADA HIFI

october/november 2013

forward >>>

This fall promises to deliver some of the most anticipated consumer electronics to market in many years. After so many years in development and so many teases, big screen OLED TVs are finally arriving. This is a truly revolutionary TV technology that will hopefully quickly make its way into just about all devices with screens. It maybe a couple more years before the prices of big screen OLED TVs come down to a more reasonable price point and I certainly can't wait to set one up in my living room. 4K Ultra HD TV technology is of course the other hot topic this year. Many TV manufacturers already have their latest 4K sets on the store shelves and numerous new models will be released this fall/winter. Malcolm Gomes examines both these technologies in this very issue.

Whether you're a casual or hardcore video gamer, you probably already know that both Sony and Microsoft will be releasing their next generation gaming consoles this November. The next generation games and graphics should be pretty spectacular. I know I'll be picking up one of the new consoles for sure, maybe even both.

Finally, I would like to invite all CANADA HiFi readers to the upcoming Toronto Audio Video Entertainment Show (TAVES) this November 1-3. TAVES 2013 is shaping up to be the best edition of the show yet and I sincerely hope most of you can come to check it out. You'll be able to see demonstrations of all of the products and tech mentioned above and so much more. The only device that had not been confirmed for launch at the show is the Xbox One (as of this writing.. but hopefully that will happen too). To learn all the details about TAVES 2013, please read the featured article I wrote on page 12 of this issue. For an audio video enthusiast, the show should be a blast!

S. hylu

Suave Kajko Publisher / Editor in Chief

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productnews

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Monitor Audio Silver Series Speakers

The new Silver series unities the company's latest engineering and styling, and promises an exceptional balance of performance, lifestyle appeal and value. There are a total of eight new models - including two bookshelf, three floor-standing, a centre channel, a surround speaker and a subwoofer - available in various real wood and high gloss piano finishes. Based on the RX series, the new Silver models offer numerous features originally introduced in the Platinum and Gold series speakers, now refined for this series. Unlike conventional cones, which incorporate a center aperture for the voicecoil, the dimpled RST (Rigid Surface Technology) C-CAM cones deployed by the Silver series take the form of a continuous uninterrupted radiating dish having inherently greater strength and area. The voice coil sits beneath and is coupled to a larger motor by an innovative, more efficient drive assembly. The results are increased excursion and power handling while reducing distortion for a more dynamic and accurate response. Distortion from air compression at the back of a tweeter

dome has been eliminated by Silver's new 1" C-CAM tweeter design, which vents internally around the outside of the magnet system into a large rear-loading chamber, producing much lower resonance and better overall damping. The frequency response from the new tweeter is more accurate at lower frequencies for a smoother more natural handover with the mid/bass driver. Look out for a review of a couple of models from this series in the next issue of CANADA HiFi. \$749-\$2,899. Distributed in North America by Kevro International | 905-428-2800 | www.monitoraudio.ca

COPLAND CTA 405-A Integrated Amplifier

Like dozens of other consumer electronics products, the CTA 405-A integrated amplifier will be unveiled for the very first time at TAVES 2013, this November 1-3, inside Reference 3A's Suite 851. The output power and basic characteristics of sound from this Adesignated model are similar to the previous CTA 405 model. However the new model offers greater power, capable of driving speakers of lower efficiency or impedances at high volume - due to the higher current capacity of the KT120 tubes and the bigger power transformer. In order to reduce the increased heat from using the KT120 valves, a fan running at low speed has been installed inside the amplifier. The noiseless fan is mounted with shock absorbers on a plate made from machined aluminum in order to eliminate vibrations from being transferred into the chassis. An upgrade-kit will be available next month allowing owners of the previous CTA 405 to upgrade it to the A-model. \$5,990. www.copland.dk. Distributed by Divergent Technologies | www.divertech.com | (519) 749-

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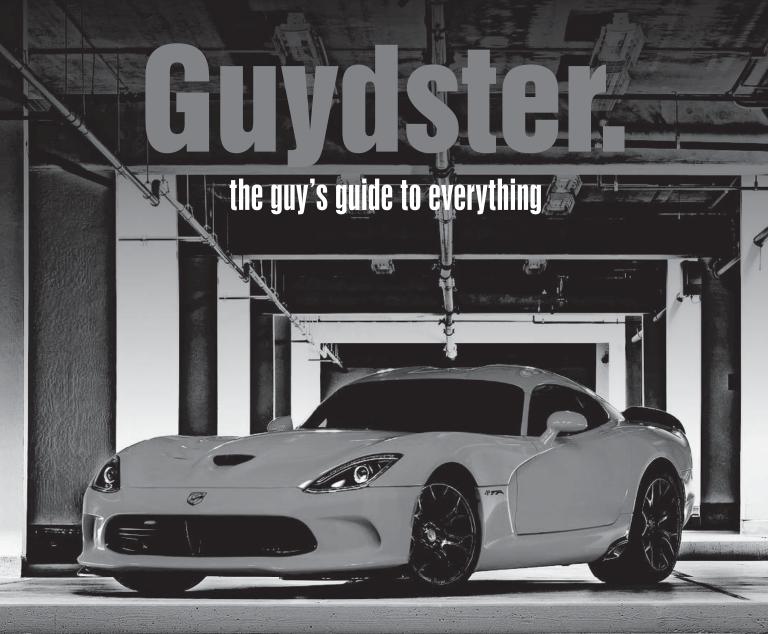


New Product Spotlight [Monitor Audio Radius Speakers]

The Monitor Audio Radius series is designed to meet the demands of today's style-conscious audio fans. The series consists of eight brand new models, including a soundbar and two subwoofers. The key performance enhancements come from the all-metal C-CAM mid-bass drivers, previously available in the high-performance Gold GX range, and now available in the Radius series for the first time. Unlike conventional cones, which incorporate a centre aperture for the voice-coil, the new Radius bass cones take the form of a continuous rigid surface, coupled to a longer voice coil and larger motor by an innovative, more efficient drive assembly. Supported by HiVe port reflex loading, the Radius bass drivers offer greater producing cleaner, more extended and accurate bass tural speakers, the Radius tweeter vents internally

RadiusONE Compact Soundbar, both which are now just 2.5" deep. Topping off the series are entirely re-engineered Radius subwoofer cubes which offer a dramatic leap in performance over their predecessors. Powered by generously up-rated amplifiers, they feature newly developed dual driver systems of sidefiring active and passive ABR C-CAM drivers, colourcoded to match cabinet finish. \$399 to \$1,299. Distributed in North America by Kevro International 905-428-2800 | www.monitoraudio.ca





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Samsung GALAXY Gear Smart Watch

A modern guy gal is not very modern unless they are equipped with one of the latest phones, smart and the same might soon be if true smart watches take off



with the masses. The GALAXY Gear smart watch connects with your existing GALAXY smart phones and tablets and is capable of notifying you of incoming calls, texts, emails and alerts. It delivers a preview of those messages on the screen and lets you accept or discreetly ignore them. If the incoming message requires more than a quick glance, you can pick up your other GALAXY device and the content will appear on its larger screen instantly, thanks to a feature called Smart Relay. A built-in speaker will let you make hands-free calls without touching the screen - which can be useful when your hands are occupied, carrying shopping bags for example. The Gear's Memographer feature lets you capture life's quick moments thanks to its 1.9 Megapixel camera which can record both photos and video, while a Voice Memo feature lets you quickly record ideas and conversations. Finally, you can also control music playback from your GALAXY device on the Gear's screen. Did we mention that this thing is also a fully functional watch? \$299 US. www.samsung.ca

Bryston Model A Loudspeaker Series

The Bryston Model A Series leverages the same design principals as the Model T Series and aims to minimize distortion and compression during music and home theatre applications. The series relies upon an array of newly designed drivers including a premium quality 6.5-inch woofer which achieves startling musicality from a more compact, décor-friendly form factor than the Model T series. The Model A line-up will initially launch with a bookshelf speaker called the Mini A as well as three floor-standing towers called the Model A1 Tower, Model A2 Tower and Model A3 Tower. All four of these loudspeakers will become available



beginning Q4, 2013. Bryston will be adding a matching Model A Center Channel, Model A Surrounds and matching Model A powered Subwoofer in the coming months. The new Mini A bookshelf speaker features a 6.5 woofer, a 3-inch midrange driver and 1-inch tweeter in a threeway configuration. \$1,200-\$3,250. www.bryston.com

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SEARCH RESEARCH

Toronto Audio Video Entertainment Show (TAVES) 2013 Preview

Be One of the First In Canada To See Samsung OLED Curved Screen TVs, the PlayStation 4, Sony's New 4K Ultra HD TVs and Much More!

November 1st-3rd







Suave Kajko

The Toronto Audio Video Entertainment Show (TAVES), presented by The New Classical 96.3 FM and Import Hifi, promises to be the hottest Canadian consumer electronics show of 2013 in Canada. If you would like to get an up-close sneak peak at the newest emerging consumer electronics products and technology, TAVES 2013 is the place to visit. The show runs between Friday, November 1st and Sunday, November 3rd. For complete details about the show and to purchase your ticket, please check out www.taveshow.com.

TAVES is quickly becoming the definitive event for Canadians to see demonstrations of cutting edge consumer electronics products and leading new technologies. year's show will allow visitors to experience more mainstream products than ever before, many before they even hit the stores. Some of the crowning jewels of TAVES 2013 include Samsung OLED Curved Screen TVs, the PlayStation 4, Sony's New 4K Ultra HD TVs, Samsung's gigantic 85-inch LED TV and even some of the latest Harley-Davidson motorcycles with their infotainment systems. The show is the ultimate playground for those who love music, movies, video games, technology - and this year even motorcycles. At the same time, it is one of the best places to learn about all of these product categories by speaking with product experts and sitting through various free seminars. In addition to what

might seem like an endless sea of 2-channel music systems, this year's show will feature the largest number of home theatre demonstration to date - nearly 20 percent of the demo rooms will host a home theatre system. Other interesting product categories you'll be able to experience this year include headphones/earphones, high-quality wireless speakers capable of streaming music from your smartphone/tablet, as well as multi-room audio systems.

Of course there will also be lots of goodies to purchase at the show such as audio and video cables, headphones, earphones, CDs, records, concert Blu-rays, and much more. Now going into its third year, TAVES 2013 will be held between November 1-3 (Friday to Sunday), at the King Edward Hotel in down-

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Alan Sircom, HiFi+ Issue 99

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town Toronto. We are very pleased to feature The New Classical 96.3 FM radio station for the very first time at TAVES who will conduct a live-to-air broadcast from the show floor on Friday, between 11am and 3pm, and interview some of the key exhibitors throughout the live four hour program.

If this will be your first time at-

If this will be your first time attending a show like TAVES, you might be a little surprised that the show is hosted in a hotel rather than a convention centre but there's a very specific reason for this. You see, the rooms inside a hotel allow exhibitors to setup the music and home theatre systems in 'home like' environments so that they can demonstrate them to visitors. The King Edward Hotel is a fantastic venue for TAVES thanks to its larger than average hotel rooms, and solidly constructed walls between them.

One of the key goals of TAVES is to educate visitors about the various consumer audio video product categories so that everyone can make an educated decision before making a purchase. In addition to an astounding number of product demonstrations at TAVES, this year's show will offer more free seminars than ever before. The seminars are presented by some of the top industry experts, including Canada's television personality Marc Saltzman as well as CANADA HiFi's own Mike Osadciw. From wide-appeal home theatre topics to advanced audiophile subjects, TAVES seminars should satisfy just about every show visitor. Whether you have a burning question or simply would like to learn about a brand new topic, TAVES is the place to get all your questions answered. Please check out the descriptions of each seminar that will be hosted at this year's show, following this article. The TAVES website contains a full schedule of dates and times.

Now, let's take a closer look at some of the TAVES 2013 highlights - at least the ones we're able to reveal before the show.

One of the largest exhibit rooms



this year will host the "Home Theatre of the Future... Today" show feature showcasing some of the very latest audio and video gear available today. This room will also double as the main TAVES seminar room. In between the various seminars, one hour sessions will be held inside this room demonstrating PlayStation 4 games, various movie clips and music tracks. Some of the products you can expect to find inside here include Samsung's Curved Screen OLED TV, Sony's PlayStation 4, Sony's latest 4K TV sets, Samsung's 85-inch LED TV, a brand new app-enabled AV receiver and a cutting edge 5.1-channel speaker system. Although not confirmed at the time of this writing, we also hope to show the Xbox One inside this room (pending availability of units at show time). Experts will of course be on hand to answer all your questions about these products.

In addition to showing their products inside the "Home Theatre of the Future... Today" show feature, both Sony and Samsung will also be hosting their own rooms at TAVES 2013. Sony will demonstrate its latest 2-channel audio components and speakers in one room, as well as its TVs and home theatre gear in another room. Samsung will focus on its latest television sets but also plans to show some of its other consumer electronics (its complete list was not finalized at press time).

As mentioned above, TAVES 2013 will be hosting the largest number of multi-channel home theatre demonstration rooms to date. Hence

this year's show should be the perfect place for anyone looking to research, listen to and view some of the latest, high quality home theatre gear. So sit through all of the movie and concert disc demos and have some fun, after all TAVES is all about home entertainment! Some of the companies confirmed to setup home theatres in their rooms at the time of this writing include Sony of Canada (Sony's latest 4K TVs and Sony's ES line of electronics), Kevro (Monitor Audio), Erikson Consumer (ARCAM electronics and Revel speakers), Kennedy HiFi (PSB speakers and NAD Master Series electronics), SVS Sound (set to feature both a home theatre and a 2-channel system), Audiopathways (JVC projectors as well as Acurus and Aragon electronics), new Canadian manufacturer Adsum Audio and of course the above mentioned "Home Theatre of the Future... Today". While we know that Samsung will be showing several of its latest TV sets, the company could not confirm at press time whether its room will feature a full home theatre system - you'll just have to see them at the show! Check the official TAVES program, handed out at the show, for a complete listing of home theatre demos at the show.

Something else that we are very excited about this year, is that retailer Kennedy HiFi will launch a new Canadian brand called Bluesound (www.bluesound.com) – a premium brand dedicated to wireless streaming of digital audio to multiple rooms in your home. Bluesound components range from

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an all-in-one wireless speaker system to components (with and without built-in amplifiers) capable of streaming highres lossless music to your existing stereo. All these components can be controlled by your smartphone and tablet.

As you might expect, TAVES 2013 will feature a vast number of high quality audio manufacturers, distributors and retailers demonstrating the very latest home audio components from both Canadian and international brands - including digital sources, turntables, amplifiers, pre-amplifiers, tube components, loudspeakers and cables. Among some 250 audio brands represented at the show will be Bryston, Monitor Audio, AR-CAM, Cambridge Audio, SVS Sound, Naim Audio electronics and speakers, Revel speakers, Mark Levinson, Focal speakers, PSB speakers, Sony electronics and speakers, and NAD Electronics. And this is just a very small taste. For a complete list of brands, please see the TAVES website at www.taveshow.com

Music listeners that enjoy being literally surrounded by music, should be delighted to visit Canada's own exaSound at the show who will be demonstrating the world's first multichannel DSD DAC, the exaSound e28, in its multichannel room setup. Visitors will be able to listen to an in-orchestra soundstage

with multichannel recordings from 2L, Channel Classics and Peter Gabriel.

TAVES 2013 will also offer three major distributor multi-room "zones" this year presented by Tri-cell Enterprises, Plurison and Rutherford Audio. Although the exact list of brands to be shown by each of these companies was not available at press time, we anticipate the companies to show some of the following - Tri-cell Enterprises (Accustic Arts, ASW Loudspeakers, Brinkmann Audio, Cardas, Chario, Clearaudio, Joseph Audio, Modwright Instruments and Unison Research); Plurison (Focal, Cambridge Audio, Wharfedale, Naim Audio, Devialet, Rega, Martin Logan, Pathos and Siltech); and Rutherford Audio (Burmester, ELAC, Vertere, EAT, Primare, Genesis and April Music).

As during the previous two years, we are always ecstatic to introduce TAVES visitors to new companies and this year the show will do exceptionally well in this department. Not only will numerous companies exhibit for the first time at TAVES, a few brand new companies will revealed themselves for the very first time in front of the industry and Making their inaugural consumers. appearance at TAVES will be companies that include Sony of Canada, SVS Sound, Erikson Consumer, Legacy Audio and Linar Audio. Sony of Canada plans to wow visitors with two separate systems - one showing its latest generation 4K Ultra HDTVs, ES-line AV receivers and speakers; while the other setup will focus on Sony's cutting edge 2-channel music components. Sound and Erikson Consumer will also show off 2-channel and home theatre setups at the show. Showcasing their companies for the very first time at any show will be Muraudio, a new Canadian maker that will reveal a unique, 'out of this world' new speaker design; Adsum Audio, a new Canadian speaker manufacturer that will show both 2-channel and multi-channel setups; and Wynn Audio, a new Canadian distributor that will introduce everyone to SW Speakers Magic Flute and Reimyo electronics among other products (take a look at the amazing looking Magic Flute speakers photo on this page).

If you love live music, you'll definitely

also want to check out a local Toronto group called the Ray Montford Trio, who will perform three live shows at this year's event. The group consists of Ray Montford on guitars, Ben Riley on drums and Glenn Olive on bass. The Ray Montford Trio offers original jazz-bluesrock-roots-urban compositions, with emphasis on melody and feel. These diverse influences are sure to capture and engage many TAVES visitors. The Ray Montford Trio will perform one show on Friday, November 1 (7pm) and two shows on Saturday, November 2, 2013 (1pm and 5pm). Admission to these performances is free with the purchase of a TAVES ticket. Ray Montford has released six, very well recorded studio albums, all of which will be available for purchase at the show. The recording quality of these albums makes them perfect for enjoyment on a high quality audio system. To get a taste of the trio's sound, please visit www.raymontford. com.

The above is but a mere sampling of what you can expect to see and experience at the 2013 Toronto Audio Video Entertainment Show. Whether vou come for one day or all three, I guarantee that you'll be very well entertained. We invite you to bring along a friend or a family member and have some fun. The 2013 TAVES will take place at the King Edward hotel in downtown Toronto from Friday, November 1st to Sunday, November 3rd. Tickets can be purchased at www.taveshow.com or directly at the show. For the latest developments about the show, please 'LIKE' the TAVES Facebook page at www.facebook.com/ taveshow or visit www.taveshow.com.

Please take a look below at the list of seminars and their descriptions that will be featured at TAVES 2013. Please note that some of the topics covered by these seminars may change slightly by show time. For up to date seminar information, please visit the TAVES website or refer to the TAVES 2013 Show Guide, handed out at the show.

TAVES 2013 SEMINAR LIST

• "The Home Theatre of the Future...

Today" Presented by Marc Saltzman

This seminar, presented by tech expert

and TV personality Marc Saltzman. will talk about and demonstrate cutting edge home theatre components available today. It will also make predictions about what the future has in store. The seminar will explain the benefits of the latest 4K and OLED TV technologies and how they work. Sony's brand new 4K 3D LED TV. the PlayStation 4. and Samsung's hot-off-the-production-line 55" curved screen OLED TV will be demonstrated during the seminar. Marc will discuss how 4K content is currently stored and delivered to 4K TV owners. Is there a new 4K disc format in the works? What about 4K OLED TVs, are any manufacturers working on developing this technology? Marc will also discuss some of the latest exciting features offered by AV receivers and explore the world of controlling your home theatre components using a smartphone or tablet. The seminar will also talk about the new PlayStation 4 and the Xbox One, from both the technology and gaming standpoints. Marc will explain how both these new devices aim to be the hub of your home entertainment experience. Finally, the seminar will also look at where the future of the home theatre is heading.

Speaker Setup and Optimization (Sponsored by The Audio Beat and Nordost)

Last year, The Audio Beat seminars concentrated on maximizing the performance of your electronics by applying a consistent cable, support and grounding strategy. But the departure point for those demonstrations was having your speakers perfectly placed – otherwise you wouldn't be able to hear and appreciate the benefits. Which was fine, except that a lot of people asked exactly how to achieve proper speaker set-up...

There's an old adage in audio that when it comes to adjusting loud-speaker placement the last 5% delivers 50% of the music. This year, Roy Gregory (European Editor of TheAudioBeat.com and founding

editor of Hi-Fi+ magazine) will be showing you just how true that is! The seminar will demonstrate how to place speakers from first principles, how to optimize their alignment and how to maximize their performance. But it doesn't stop there, showing how speaker placement can have a hidden impact on upgrades and other aspects of system performance. Speaker positioning has a crucial influence on system performance and simply improving speaker placement and/ or set-up delivers a huge potential upgrade that's completely free. Can you really afford to ignore it?

• Recording Classical Music – Healey Willan's "The Reproaches"

In this seminar, Frank Lockwood of Lockwood ARS, a Toronto based company which specializes in the creation of classical music recordings, will detail the process of recording Healey Willan's "The Reproaches". Aficionados of classical music recordings have long known that the process used to record this music differs significantly from that used for popular music, in that classical music is almost exclusively recorded on location where suitably reverberant acoustics can support and enhance the sound. When the opportunity arose to record the music of Healey Willan in the Church of St. Mary Magdalene, Toronto, where he held the post of music director for nearly fifty years, the pairing of those unique acoustics with his music was the only logical way to proceed.

In tandem with the recording of music on location, classical music has traditionally been captured using a minimum of technological intervention – minimalist microphone techniques coupled with a "purist" signal path which introduces a minimum of coloration. With the advances in audio processing made available by modern digital audio workstations, certain limitations – unavoidable in the past – can now be addressed, and artistic choices

which were unavailable even fifteen years ago, can be accommodated with relative ease.

The recording of Willan's "The Reproaches" made use of several techniques which greatly enhance the listening experience. Acoustic noise reduction and intrusive noise removal coupled with the restoration and enhancement of ambience were just the beginning, as what was originally a static performance from a single point of view was transformed into antiphony, revealing the composer's original intent, framed within the acoustic environment he loved and where he created for so long.

• High-End Audio: From Production to Playback

Presented by award-winning audio engineer and producer Mark Waldrep (Dr. AIX), this seminar will focus on the most critical stage in the release of a new recording...the actual recording process itself. Audio equipment manufacturers and music enthusiasts often overlook the importance of the recording philosophy of the record producer AND technical skills and experience of the audio engineer responsible for capturing the sounds the musicians create. Dr. Waldrep has been an audio engineer for more than 35 years and has engineered projects for artists/ensembles as diverse as Bad Company and The New Jersey Symphony Orchestra or Wallace Roney and Willie Nelson. He has engineered recordings in commercial studios, live concert venues, chamber music auditoriums and the dusty back roads of Haiti.

DSD DACs and High-End Computer Audio (Presented by exaSound)

In case you haven't been paying attention to DSD, there are revolutionary breakthroughs for fine audio in this domain. DSD decoupled from the optical SACD media and downloaded over the Internet makes high end audio more affordable and more convenient. Best of

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all these technology improvements don't come at the expense of sound quality. High-resolution DSD 256 offers more detail, dynamics and realism than any other audio format available today. To bring you up to date on what's happening, exa-Sound will present a brief introduction of the technologies, equipment and music sources that will bring recording-studio quality to your listening room.

For those interested in leading edge technologies, and for the adventurers looking for new thrills exaSound will be proud to demonstrate the world's fist multichannel DSD DAC – the e28. Music lovers will enjoy an in-orchestra soundstage with award-winning multichannel recordings from 2L, Channel Classics and Peter Gabriel. You will experience computer audio at its best and you will learn everything you need to become a Computer Audiophile.

Advanced Turntable Setup (Presented by Richard Mak of TONEAudio, Sponsored by Tricell Enterprises)

In this seminar, Richard Mak, contributing writer for TONEAudio, will be presenting a comprehensive 3 part seminar on advanced analog setup. Many audiophiles are willing to spend thousands of dollars on a turntable, yet very few possess the necessary hands-on skills to perform a perfect setup for maximum performance. In the past 3 years alone, Richard Mak has performed over 600 turntable setups and probably thousands in his lifetime. His setup skills are hands-on based rather than text book based. Richard will go into great details on perfecting every area of analog setup, from cartridge alignment geometry, VTF, VTA, azimuth, Anti-skating, using spectrum analyzers as well as computer software. The seminar is geared towards individuals who already possess the basic knowledge and terminology of analog setup, and are looking to further advance their setup skills.

• The Future of Hi-Fi (Sponsored by Plurison)

Dematerialized music is definitely the most convenient way to purchase, store and playback music. In this seminar you will learn why you should consider a dedicated network for your music collection. The presenter will also make comparisons of music stored on a computer versus a dedicated music server. Finally, you will also learn how to optimize your iOS devices for Bluetooth streaming.

• Analogue: How To Get the Most Out of Your Vinyl (Sponsored by Plurison)

This seminar, designed for newbies and long-time vinyl listeners, will focus on what to look for when purchasing a turntable and offer tips on how to fine tune and upgrade a turntable. It will also discuss phono preamplifiers – how to choose the right one for your turntable and whether you should go with a moving magnet (MM) or moving coil (MC) model.

• Nordost Seminars Introduce Visitors To Two New Product Lines at TAVES

Nordost's own product specialist and representatives. Paul Ritchotte and Bruno de Lorimier, will be demonstrating, performing live comparisons and taking questions about two exciting innovations that will be introduced to the Canadian market this year at TAVES. One of these featured products is the Valhalla 2, Nordost's newest range of Reference Cables, which boasts the revolutionary Dual Mono-Filament technology as well as their proprietary HOLO:PLUG connector. In addition to V2, Nordost will also be revealing the latest addition to their Sort System: The Sort Füt. This mechanically tuned resonance control device improves upon the standard spikes and stabilizers that are provided with loudspeakers and racks by eliminating unwanted, residual vibrations. Nordost invites you to stop by room #888 to experience the musical color, focus and dynamic range your system could be capable of. Nordost seminars run throughout the day, all three days of the show. Please look at the signage outside the room for the next show time.

- Cutting Edge TV Technologies 4K Ultra HD and OLED (Presented by Mike Osadciw of the CANADA HiFi Magazine)
- IMAX History and the Personal Home Theatre (Presented by Nader Elm of IMAX)
- How Does Acoustic Treatment Benefit Your Listening Room

TAVES Exhibitors (so far...)

Sony of Canada

Samsung Electronics

Harley-Davidson Canada

The Classical 96.3 FM Radio Station

Plurison

Bryston

Kevro International Inc.

Rutherford Audio

Tri-cell Enterprises

Liberty Trading

Erikson Consumer

Worldwide Wholesales

Audioscape

The Inner Ear Magazine (Ernie Fisher

seminar room)

Divergent Technologies (Ref 3A)

TubeMagic Audio Systems

Wynn Audio

SVS Sound

Update TV&Stereo

Coherent Speakers

Nordost

Euphoria Speaker Design

Muraudio

Kimber Kable

Audio Eden

Crown Mountain Imports

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Simaudio

Exploring Two Budding TV Technologies:

4K Ultra HD and OLED



Malcolm J. Gomes

On March 25th, 1925, when Scottish inventor John Logie Baird gave the first public demonstration of televised silhouette images in motion at Selfridge's Department Store in London, England, little did he know that his rudimentary contraption would be the forerunner of the television set, the device that would hold center stage of the consumer electronics industry for the next hundred years or so. On January 26th the next year, Baird went on show off another device that is widely regarded as the world's first demonstration of a working television system, to members of the Royal Institution and a newspaper reporter. It had only 30 lines of resolution that was barely enough to reproduce a recognizable human face.

That is a far cry from the 1080p high definition television sets of today which reproduce moving pictures that come amazingly close to film quality. However if you thought that 1080p would remain the pinnacle of television technology, think again. We are now seeing the advent of new television technologies that represent a quantum leap in picture quality and over the next decade, we are likely to see these technologies duke it out for the position of top dog in this mammoth industry.

In terms of technology, over the past few decades we saw standard definition television sets give way to 480p enhanced definition models which then moved to 720p high definition and then eventually to 1080p which became known as Full HD.

So what's the deal with the new technology television sets now being touted by the major brands? Generally speaking, they can be categorized into two camps; the 4K Ultra HD camp and the OLED camp. Some brands offer both 4K and OLED television sets and a few have revealed prototypes that incorporate both technologies.

Does this mean that your 1080p set is soon going to become obsolete? Not really. A well designed, well built 1080p television set, fed with a full HD signal, delivers very good picture quality but if you plan to upgrade to a television set that is 55 inches or bigger, you would be well advised to seriously consider a 4K television set. But I am jumping the gun here. Let me lay out what the new technologies offer so that you can make up your own mind.

4K Ultra HD Tech

Let's begin by taking a peek at what 4K offers. A 1080p television set displays 1,920

pixels horizontally and 1,080 pixels vertically. The latter figure combined with the progressive scan mode classifies the set as a 1080p television set. In comparison, a 4K television set doubles the number of pixels both horizontally and vertically to 3,840 X 2160 which results in the number of pixels on the screen going from 2 million pixels of a 1080p set to 8 million in a 4K sibling. The name 4K comes from the fact that the horizontal pixel count is almost 4,000.

Going from 2 million to 8 million pixels is obviously going to make the picture a lot sharper with much greater detail that approaches the holy grail of 35 mm film. The further away you are from the screen, and the smaller the screen, the lower the number of pixels you need for the human eye to perceive a clear and sharp image. What this means is that the superiority of 4K television sets is going to be a lot more evident in screen sizes of 55 inches and larger.

At the moment, there is a limited amount of native 4K content that is available. However, when 1080p technology made its debut, native 1080p content was also quite limited. As that format became more popular, the market forces of supply and demand kicked in and flooded the market

with native 1080p content. Hopefully, it will be the same with 4K content. Professional video cameras that record in 4K resolution are already widely available which will help the situation.

It is encouraging to see that some of the recent movies like The Amazing Spiderman, Prometheus and District 7, have been shot in 4K resolution. In fact, The Hobbit was shot in even higher 5K resolution. In this regard the player in this segment that has a significant advantage is Sony. That is because it also produces movies. They are now in the process of scanning the negatives of films in their library to make digital files of over a hundred movies in native 4K. At the time of writing this, ten Sony produced movies have been made available in 4K mastered Blu-ray discs and many more are expected to be made available going forward. To optimize the performance of Blu-ray discs mastered in 4K, you need a Blu-ray player that supports the wider colour range and the extra picture information.

Of course, there is always the option of streaming 4K content via on-line providers like Netflix. They are rumoured to have plans to get into 2K streaming, which can then be upscaled to 4K by suitably equipped 4K television sets. The huge bandwidth required by 4K means that a consumer quality 4K movie hogs an incredible 80 to 100 gigabytes. In fact the 4K content distributed to movie theatres uses an exponentially higher data rate. For example the CineAlta F65 system has an astounding data rate of around 16 gigabytes for every minute of content material. What this means is that even with consumer quality 4K movies, unless you have an unlimited bandwidth plan with your ISP, if you intend to stream 4K movies via the Internet, you are likely going to hit the bandwidth ceiling of your ISP plan faster than you can say "Clear as a BELL" or "ROGER that".

Sony has attempted to transcend this hurdle of limited native 4K content by offering a 4K video distribution service with their 4K television sets. They also offer a media player, which comes preloaded with ten movies and short clips in native 4K. Consumers who invest in this media player will also be able to use it to download more 4K content through a paid service that Sony plans to launch soon.

Regrettably, both the video distribution service and the media player are currently only available in the United States. Hopefully, their availability will be extended to Canada in the not too distant future.

One option that could help alleviate the massive bandwidth of a 4K signal is to come up with a lossless compression system in the same way as FLAC, AIFF and others have compressed high resolution WAV audio signals while maintaining the bit-perfect integrity of the original signal. Sony has designed many production codecs (compression/decompression systems) to work with 4K material. One of them, the XAVC is the codec that they have chosen for use with their first 4K prosumer Handycams.

The other bottleneck for 4K is the bandwidth of the 1.4 version of the HDMI cable, which is limited to 10 Gbps and 30 frames per second. Thankfully, the HDMI Forum has acted in a timely manner and has developed an upgraded version called HDMI 2.0, which is capable of 18 Gbps and 60 frames per second. Unfortunately, not all HDMI cables labeled with the 1.4 and 2.0 monikers pass muster in accommodating the full 10 Gbps/30 frame or 18 GBPS/60 frame signals respectively, so it would behove you to get these cables from a reputed manufacturer.

It is expected to be quite some time before mainstream television broadcasters start offering native 4K on a regular basis. In Europe and South Korea they have begun broadcasting in 4K but only on a couple of channels. The United Kingdom's BBC has plans to air a few documentaries in 4K while in the United States, a six-month trial has been scheduled but it is rumoured to be restricted to just the Baltimore area. The 2014 World Cup Soccer Championship Final in Brazil will be broadcasted in 4K, but at the moment it looks like only satellite viewers in Japan will be able to access it, although there is a chance that a few American broadcasters may decide to jump in and carry this 4K feed to their viewers.

The exponentially greater bandwidth of 4K will also present a challenge for satellite-based telecasters. It will require them to upgrade their infrastructure to support 4K signals. This would include the need to either launch new satellites or to reduce the number of HD channels being offered.

They will therefore need to do some thorough due diligence to figure out if the added revenues from telecasting 4K would justify the added investment required and generate better overall return on investment (ROI).

Content owners are also exploring ways to offer 4K on an upgraded Blu-ray format. At the time of writing this, discussions were underway to figure out if 4K Blu-ray discs would need to be backwards compatible with the current Blu-ray players so it is unlikely that the upgraded format would make its debut before 2014. Sony has taken the initiative to offer Bluray discs that are mastered in 4K. These 1080p Blu-ray movies have been sourced from 4K masters and modified to work with existing Blu-ray players. You can view these discs via a conventional Bluray player on a 4K television set but the picture image you will get is an upscaled version of 1080p rather than a native 4K signal. Having said that, this methodology is highly desirable because Sony have used technology that delivers picture quality that is surprisingly close to what you get with a native 4K signal.

Despite the current lack of native 4K content, it still makes a lot of sense to consider investing in a 4K television set because of the fact that most 4K sets offer an engine that upscales normal 1080p and lower resolution video content to a higher resolution in the same way as some of the better Blu-ray players upscale DVD resolution to Blu-ray's higher resolution. Upscaling is a great option because it allows 4K television owners to enjoy higher resolution from various sources including DVD and Blu-ray discs, broadcast television and non-4K streaming services. The problem is that it is a huge challenge and takes really advanced technology to upscale in a manner that brings lower resolution signals close to native 4K quality and this is what separates the men from the boys in the world of 4K television set production. In fact, inferior upscalers can actually degrade the picture quality quite significantly.

Sony XBR-65X900A Review:

A Closer Look

Of all the 4K television sets I have viewed, two brands seem to stand out in upscaling technology, LG and Sony. LG



uses a four-step analysis data that process enhances the details of all broadcasts, movies, sports and games. Sony's latest television range, which it has named Triluminos Display, uses what it calls the 4K X-Reality PRO chip which incorporates proprietary technology to upscale signals with



1080p and lower resolutions, even You-Tube clips. Having closely analyzed the upscaling capabilities of the leading television brands, to my eyes, Sony's technology seems to have an edge, which prompted me to get in a Sony XBR-65X900A, 65" 4K television set, for a review.

Sony sent me a native 4K content generator with a lot of varying content from footage of soccer action to movie clips to scenery to shots of inanimate objects. When I viewed this footage 4 to 5 feet from the screen, it all looked quite stunning on their 65" 4K television set. The picture image has outstanding depth and solidity and the colours are distinctly more richly saturated with a colour palette that is the most nuanced that I have seen to date. With some of the footage it was almost akin to looking through a window at a real live scene. Colours, especially reds and greens are more true to life, skin tones are amazingly natural and colours truly pop. In one scene of a soccer field, I could actually discern individual blades of grass, which is quite extraordinary. This model has a 'vivid' setting that may appeal to some but to me it took the colours from natural to artificially enhanced. Sony claims that its dynamic edge LED backlighting with local dimming delivers darker blacks and brighter whites by boosting the contrast only in the areas required.

This model also incorporates speakers on the sides of the screen which deliver 65 watts of sound with fidelity that is a step up from what we have come to expect from the built-in speakers of flat screen television sets. Each side has a tweeter and two mid-bass magnetic fluid speaker technology driver units in a D'Appolito configuration. Sony claims that its S-Force Front Surround 3D simulates 5.1 sound and also widens the sweet spot so more viewers in the room are able to enjoy simulated surround sound. To my ears, the audio is not exactly high fidelity but definitely one of the best I have heard from speakers built into a flat panel television set. The mid range is delivered with a good degree of presence and depth but this set will definitely benefit greatly from a connection to a 5.1 or 7.1 true high-fidelity home theatre system.

LCD based television sets are known for judder when reproducing fast moving action but this set incorporates what Sony calls Motionflow XR 960 technology. This helps transcend refresh rates to some extent, to smooth out the picture for less blurry movement. It is definitely a step up from what I have seen in the better LCD based television sets but it does not totally eliminate the annoying smear and judder. Motion flow options include clear, clear plus, standard, smooth and impulse. With fast moving action I preferred the smooth setting.

This television set comes with two menus, a comprehensive one and a simplified version that controls only the most used functions. The navigation protocol is not as intuitive as I would like but after a while I did get a hang of it. The on-screen tutorial is a very useful feature and is well planned and easy to understand.

Sony's 65" 4K model can also connect wirelessly to your home's Wi-Fi after which you can stream entertainment from the Internet or your home network. This gives you full access to even 1080p entertainment, 3D content and apps like Netflix, Pandora, You-Tube. Facebook and others.

Behind the set I found a plethora of

connections including two analog audio inputs an optical audio output, a component and a composite video input, an Ethernet connection, 4 HDMI connections including an HDMI PC input, a headphone output and three 2.0 USB ports. These should provide all the connectivity that you need for most applications. I connected the optical audio output to my Calyx Femto DAC and enjoyed truly spectacular sound quality through my reference two-channel audio system. This television's HDMI input is designed to handle 1.4 cables but with a software update, it can also handle HDMI 2.0.

With a 65" screen there is no mistaking this for anything but a LARGE screen television set and it should be big enough for most homes. It comes in a mammoth package that measures approximately 67" x 38" x 9". The television set itself is around 66" x 35" x 4" (16" with the stand). The delivered package weighs 53 kg and the television itself is 45 kg (46.4 kg with the stand).

As I mentioned before, since there is limited true native 4K content currently available, a 4K's upscaling capability is of paramount importance. Having realized this, Sony used a series of computers to take a database of thousands of images of various kinds, compress and then decompress them and compare the results. Through trial and error they then adjusted parameters and developed special algorithms for decompressing different kinds of content. Based on this they created a number of databases in 2K. They then



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used a proprietary chip that recreates the original image based on what they learned from their pattern database. The 2K databases were then integrated into the original X-Reality Pro Processor to achieve superior real-time performance. For 4K, Sony used a new set of databases to upscale. This attention to detail accounts for the fact that their 4K upscaling performance is significantly superior to generic processors.

I ran this set through its paces to see how well it upscales video signals of varying resolutions. With 1080p signals via my Blu-ray discs the results were surprisingly close to native 4K. 720p and 1080i television broadcast signals were not too far behind. Picture quality took an easily discernable step down when I switched to 480p broadcast signals. With 480i content, the quality went below the threshold of what I would consider satisfactory picture quality.

What this means is that if most of your viewing is done via Blu-ray discs, broadcast and cable signals with 1080i and 720p resolution, you are going to be thrilled with the upscaling performance of this television set. On the other hand if most of your video viewing pleasure comes from watching DVDs and television broadcasts and cable signals of 480p and 480i resolution, this set may not be your cup of tea.

Aesthetically, Sony's 65" 4K set is as handsome and elegant as anything else in the market and a lot easier on the eyes than most of its competition. Its circular stand is the epitome of understated elegance and it is fully equipped for wall mounting if you invest in the appropriate brackets.

At \$5,999, the price of this set is not exactly chump change for most of us, so is it the right time to invest in one? If you are an early adopter who needs to have the very best technology as soon as it breaks out of the starting gate, this 65" 4K television set is a no brainer. However, if you are the wait and see kind of consumer who prefers to see how things play out, then it might behove you to wait a while and closely watch developments in the OLED sphere. To get you started on that quest, let me give you the inside track of current OLED technology.

OLED TV Tech

OLED is an acronym for Organic Light

Emitting Diode. This technology has already made very successful inroads into gear with smaller screens like smart phones, video cameras and tablets. some cases they have been marketed as AMOLED where the AM stands for Active Matrix due to a variation in the way the screen is configured, in that, the display controller chip tells the matrix of pixels when to light up and when to shut off. One brand has tried to raise the marketing stakes by calling their system Super AMOLED. This refers to their system where its display has a touch digitizer integrated into the display instead of being placed on top of it.

Unlike LCD television sets where a light is shone through a series of filters and a liquid crystal blocks some of the light when required, in an OLED set, special polymers are used which emit their own light when an electrical charge is applied to them. Structurally, this makes for a much simpler configuration because all you need is three kinds of polymers, emitting red, green and blue light respectively when a thin grid of electrodes applies a charge to them. The higher the charge applied, the brighter the polymers shine.

This configuration eliminates the need for a backlight, which allows the OLED screen to be jaw droppingly thin. The blacks are also truly jet black because unlike an LCD where light has to be blocked to achieve black, in an OLED television set, no light is emitted at all resulting in the blackest of blacks. The whites are also whiter, the colours are deeper and more accurately reproduced and the contrast ratio is far superior to rival configurations.

The other advantage of OLED is that the polymers react with lightning speed in changing colour. This significantly reduces judder, blurring and smearing when objects move across the screen at high speed. Finally, the OLED configuration also widens the effective viewing angle to an extent that no LCD TV has hitherto been able to achieve. The malleability of OLED screens allows them to be curved, which at the moment is a novelty factor but could give it an advantage in future applications.

Despite all of OLED's advantages, there are still quite a few technological kinks that need to be ironed out. Generally, OLED screens are a lot more expensive to manufacture than their LCD counterparts.

Smaller OLED screens can be produced at a cost that the market can bear but there is a significant jump in cost when manufacturing larger OLED screens.

There is also a problem with longevity, especially with the polymers that emit blue light, which typically start losing their effectiveness after just a few thousand hours of operation. When this happens it results in colour shifting. On gear like cell phones which consumers replace every few years, that is not a big deal, but for home based television sets which are typically used for 7 to 10 years, it is a significant problem. Technological advances over the recent past have minimized this kink and hopefully continued progress in this sphere will resolve it totally.

In Conclusion...

Given all the advantages and disadvantages of both 4K and OLED, it is anyone's guess as to which configuration will ultimately prevail. In my opinion, OLED has a bit of an advantage in that it does not have any content issues that 4K is grappling with and so can happily live in a 1080p dominated market where it can produce picture quality superiority beyond just higher resolution.

Eventually, the two technologies are expected to merge with the development of 4K OLED television sets that should offer the best of both worlds. However that is some way off and the first generation of such sets are likely to be beyond the reach of all but the top 1% income group. Prototypes of such sets have already been shown at major consumer electronics shows and, like concept cars at motor shows, they look quite breathtaking.

The good news for consumers is that the advent of the new OLED and Ultra HD/4K television sets is quite likely to put further pressure on prices of the good old 1080p television sets, thus presenting non-hardcore movie buffs a great opportunity to grab some good bargains in the not too distant future.

Be sure to come check out the latest 4K and OLED TV sets with your own eyes this November (1st to 3rd) at the Toronto Audio Video Entertainment Show 2013. Also, to read a more in-depth review of the Sony XBR-65X900A/XBR-65X850A 65-Inch 4K Ultra HDTV (by Mike Osadciw), please visit the REVIEWS section on www.canadahifi.com.



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productreview

Reference 3A Nefes Loudspeakers

Malcolm J. Gomes

There is little doubt that most audiophiles regard crossover networks in loudspeakers as a necessary evil. A few hate them with such a vengeance that they opt for panel or single driver speakers just to avoid the downsides of crossovers. Advances in crossover designs over the past decade have minimized and in some cases eliminated many of their inherent ill effects but I do not know of anyone who has yet come up with a crossover network that does not in some way distort the signal being delivered to the driver units. Bad as it is with two-way speakers, it tends to get significantly worse with three-way and four-way speakers.

Some speaker designers have opted to transcend the disadvantages of a crossover by doing away with them completely and instead, utilizing full range driver units. However, here again, there are unavoidable compromises like anemic reproduction or total absence of the bottom octave of the audible frequency spectrum.

Every once in a while, we find a speaker designer that decides to take up the challenge of designing a multi-way dynamic loudspeaker system with no crossover. I have auditioned a few of these valiant efforts but hitherto, although I have found them to have benefited in some respects from eliminating the crossover, there were far too many tradeoffs in terms of sonic performance to tip the overall balance in their favour.

This being the case, when Suave Kajko, the publisher of CANADA HiFi requested me to review another loudspeaker system with no crossover, I was a bit skeptical. However when he mentioned that this model, under the Reference 3A moniker, has been designed by Tash Goka of Divergent Technologies, it perked up my interest. I have a lot of respect for Tash and I thought that if anyone could successfully pull off a loudspeaker design without a crossover, Tash could. This loudspeaker



retails for \$9,950/pair and answers to the name of 'Nefes', which means 'breath' as in the "the life giver" to the wind instruments used in Sufi music. I wondered if the Nefes would be the first loudspeaker

system without a crossover that would take my 'breath' away.

The Reference 3A brand has its roots in France where in 1959 it was set up by Daniel Dehay under the name 3A, which stood

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demonstration at TAVES inside the Kennedy HiFi (#834), Update TV & Stereo (#892/893) and Crown Mountain Imports (#907) rooms. for Applied Acoustic Arts. The company was then relocated to Switzerland in the late 1980s where the name was changed to Reference 3A. After changing ownership a few times, Dehay once again acquired the company in 1992. The company is currently located in Kitchener, Waterloo in the Canadian Province of Ontario and is managed by Tash Goka.

design features

Tash and a colleague delivered the Nefes to my auditioning facility, which is just as well because although they are not extremely heavy (130 pounds), they are a bit too large (10 X 16 X 45 inches) for a single person to carry alone. The set-up was quite straightforward and the height-adjustable feet made it quick and easy to achieve perfect alignment.

This speaker is equipped with two 8-inch, full-range, hyper exponential woven carbon fiber drivers that have been developed specifically for the Nefes and which are directly coupled to the amplifier. These are complemented with a pure Beryllium tweeter assembly in a 'D' Appolito' array. The cabinet is reassuringly rigid and inert. The overall design goal was to eliminate the crossover network altogether in order to avoid possible signal interruptions and phase errors for a more coherent sonic performance.

To compensate for the lack of a crossover network, the Beryllium tweeter is protected by a high quality non-inductive silver-in-oil capacitor that acts as a highpass filter. The tweeter is mounted behind an exponential acoustic wave-guide to achieve better time alignment and more uniform dispersion.

The core center of the woofers is equipped with a patented surreal acoustic lens which is designed to dissipate any vortex that could form as a result of air turbulence, thus minimizing any related noise that could be generated by the cone shaped drivers. According to Tash, eliminating this vortex allows the driver units to perform with enhanced clarity, natural tonal balance and wider dispersion.

The inside of the Nefes binding post connectors have a patented magnetic conduction signal wave-guide. This is a first in Reference 3A speakers. The strong magnetism of this wave-guide keeps the electrical signal flow aligned. It also minimizes the random pathways for electrons within and along the conductor and promotes signal transfer where resistance to the signal is highest and where the greatest losses can occur. According to Tash, this has been done to deliver a more dynamic, open and spacious sound with greater detail retrieval.

The internal wiring comprises specially selected, cryogenically treated, OCC single crystal pure copper conductors with Teflon dielectric. These wires have been precisely calibrated to optimize signal transfer to the drivers.

The Nefes cabinet is finished in a durable anthracite coloured, suede textured Nextel coating, which absorbs not just sound but also light, rendering the cabinet acoustically and optically quiet. This cabinet finish is very workmanlike and will not appeal to everybody. It is also likely to have a lower wife acceptance factor. Both my wife and daughter felt that it looked like an unfinished surface.

The inside of the cabinet comprises of very dense panels and several perforated braces at critical points on both the horizontal and vertical planes. The vertical spine brace is off centered to cancel out potential resonance noise. The drivers are anchored to this vertical spine with large brass bolts, which mechanically ground them. The vertical braces are perforated to avoid contact with the cross braces and also to increase the surface areas that dissipate vibrational energy. The cross braces are also perforated with different size openings and are arranged so that they are not parallel to the side panels. This minimizes unwanted sound wave deflections. To avoid corner nodes as well as to improve rigidity, solid planks of triangular gussets have been placed on all the inside corners of the cabinet. To spread out any potential thickness related resonances. board materials of different thicknesses have been employed.

All this extra attention to the internals of the cabinet is meant to reduce superfluous vibration energy inside the enclosure so as to allow the speaker to deliver better clarity. To free the main drivers from sympathetic frame vibrations, the mechanical grounding system has been configured to drain mechanical vibrations from the drivers thus allowing them to perform at their optimum level.

Upon completion of the production of each Nefes speaker system, they are placed on a break-in rack and fed high-level test tones for a minimum of seventy-two hours. This is followed by several tests during which the two speakers are matched to tight tolerances to try and squeeze out the most realistic renditions of harmonics and spatial sonic images.

performance

I auditioned the Nefes connected to my reference system which consists of the Bryston BP26 preamp, the Ayre V3 (SS) power amp as well as the Ars Sonum Filharmonia integrated tube amp. My sources included the NAD C565BEE (SS) CD player and the Bryston BDP-1 digital player, connected through one of my DACs which include the Calyx Femto, the Mytek Stereo 192-DSD and the Resonessence Labs Concero.

All this attention to detail enables the Nefes to sound surprisingly good right out of the box but I followed Tash's suggestion that the speakers be broken in for another 200 hours to help them reach their peak performance level.

The Nefes is capable of delivering a frequency response of 28 Hz to 40 kHz plus or minus 3 dB. It has above average efficiency of 92 dB. It also presents amplifiers with an easy impedance load of 8 ohms with very little deviation irrespective of the frequencies it is fed. It can handle up to 150 watts RMS per channel. These speakers come with a five-year parts and labour warranty against manufacturing defects.

Based on guidelines from Tash, I positioned the Nefes well away from the back and side walls of the listening room and at a distance of around three meters from the sweet spot, with the listening position and the two speakers forming an equilateral triangle. The speakers were toed-in to have the tweeters pointing at the sweet spot. The metal stabilizers and the height adjustable brass floor spikes with a locking ring make it easy to perfectly level and align the speakers. The speakers are supplied with a protective grill, which I chose not to use during the audition as they did adversely affect the transparency and definition of the sound.

Before I get into details of the Nefes sonic performance, I need to disclose that I





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have a preference for soft (preferably silk) dome tweeters to metal dome tweeters because, to my ears, they tend to integrate better and sound more natural. In contrast, metal dome tweeters be they aluminum, titanium or beryllium, tend to sound harsh if not implemented well.

Of the three, beryllium generally sounds smoother because this metal allows for domes that are lighter while still offering superior rigidity and damping. They also break up much higher in the audio band. Beryllium is around seven times more rigid and propagates sound waves around three times faster than titanium or aluminum. Beryllium tweeters are also quite expensive and usually found in higher priced speakers. During the recent past, I am glad to see many of the better known speaker brands switch from aluminum and titanium tweeters to silk or beryllium dome tweeters.

I must say that the tweeter in the Nefes is one of the best implementations of a beryllium transducer that I have heard. It reinforces my view that a huge part of a beryllium dome tweeter's performance is in its implementation. Kudos to Tash for delivering the smoothest, most precise and coherent performance that I have hitherto heard from a beryllium tweeter.

My first impressions of the Nefes performance is their sound stage, which is wider than any other speaker that I have auditioned in this price range. What is also remarkable is their ability to sonically disappear, despite their large cabinet size. The tone and timbre is very natural and will appeal to those who are looking for a neutral speaker but may be less appealing to those looking for a more euphonic sound or bass that is exaggerated.

This speaker is very adept at retrieving micro details in the recording without sounding overly analytical. They can also play surprisingly loud before I could detect any hint of compression or distortion. They have one of the best mid-range reproductions of any speaker in the very crowded \$10,000 price point, although I have heard a few similarly priced speakers with more saturated and fuller mid and upper bass.

The Nefes delivers a very good rendition of the piano, which is one of the most difficult instruments for a speaker to get right. I played the piano for a rock band

for many years and so I have a very good mental reference of what a piano should sound like and whoever voiced the Nefes probably tickled the ivories as well, to have gotten it so right.

This speaker is very capable of producing male vocals, which it does with amazing palpability. Female vocals are also rendered with a good deal of finesse. Acoustic instruments sound taut and crisp while string and wind instruments come through with a degree of presence that is, at times, quite startling. Though not congested by any stretch of the imagination, I would have liked a little more air between and around the instruments and voices.

The Nefes is particularly adept at connecting you emotionally with the artiste. When listening to Aus Misa Criolla Kyrie by Jose Carreras, I could easily feel the incredible emotion in his voice as he belted out this well recorded track. When I played Die Tanzerin (The Dancer) by Ulla Meinecke, although the song is in German, which I cannot understand, I totally enjoyed the experience because the emotions of the lyrics came through in spades. Track after track, the Nefes delivered rich harmonics, accurate tonality, precise imaging, well fleshed out timbre and soul satisfying musicality.

The clean and relatively artifact free sound that you hear from the Nefes makes it the 'I told you so" speaker for the audiophile segment that is not partial to crossover networks. The ease and effortlessness of delivery gives this speaker a very low fatigue factor and I was able to listen to it for hours without feeling I have had enough.

The leading edges of music notes might be a tad too prominent for some, while the presentation is a smidgen on the forward side though never in your face. Dynamic contrast is well above average compared to other similarly priced speakers.

The Nefes needs a good-sized room to realize its full potential. A room that is less than 4,000 cubic feet will cramp its style. It also deserves very high quality and very neutral front-end components and good speaker cables and interconnects. Tash provided me with Reference 3A speaker cables and interconnects and although they worked well with the Nefes, I heard distinctly smoother, more coherent and better-defined sound when using

the Tellurium Q Black Interconnects and Ultra Black Speaker Cables.

The Nefes bass reproduction would satisfy the vast majority of audiophiles but for those who find music incomplete without the bottom octave, a superior subwoofer would be a good partner for this speaker. I tried mating the Nefes with a pair of JL Audio Fathom f112 subs and the results were most satisfying, providing a great foundation to the overall sonic image, improving definition and authority in the bass while adding exponentially more depth to the sound stage.

If you are looking for a pair of speakers in the \$10,000 range and have neutral upstream components and a good sized listening room, don't pull the trigger till you have heard the Nefes. As its name suggests, it just might take your breath away.



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Experience



productreview

ELAC BS 244 Black Edition Bookshelf Speakers

Phil Gold

These are small speakers with a big sound. Their size might lead you to think they are imaging champions with a limited maximum output and you'd be half right. Their imaging is near miraculous. If you close your eyes you really can't tell where they are in the room. But despite their small size, just 33cm high, 20cm wide and 28cms deep, they can easily fill a big room. There's obviously some pretty impressive technology at work here. Let's take a look inside the box.

design features

The front baffle gives us the first clue. The tweeter is a Jet III design, common to the majority of the ELAC range. This derives from Dr. Oscar Heil's Air Motion Transformer, first introduced in 1993. It features a lightweight folded foil membrane driven by a magnet system of neodymium rods which provides high efficiency and strong dynamics. The bass/midrange driver is also unique to ELAC. It's an 18cm AS-XR cone featuring a crystal membrane. The design is a recent refinement of ELAC's AS aluminum-paper sandwich cone first introduced in 1993. More precisely the aluminum foil stamping is faceted like a gemstone rather than smoothly finished as in more conventional designs. This increases the stiffness of the cone, reducing resonances which results in lower colouration and increased dynamic range. The voice coil is attached to the rear paper cone and also to the bottom of the aluminum dome, a technique which ELAC says will increase the transmission range by a full octave. The rubber surround is wider than normal, allowing for a very long throw which provides high maximum sound pressure and smooth production of deep bass.

A quick glance will confirm meticulous attention to detail throughout the design of this speaker. For example, the four high quality binding posts at the back of each speaker are recessed and angled up for ease of access, the cabinet is exquisitely finished with rounded edges to reduce diffraction. and stands are slim and elegant. They can sit happily on a carpeted floor or on a hard surface, offering both spikes and soft rubber feet in a fully configurable design. Fabric grills are supplied but the tweeters are protected from prying fingers so I left them off for best sound. They are very easy to fit, brass pins sliding into bushings and held in place by magnets.

The regular BS 244 runs \$2,400 and comes in white or black high gloss. But the review pair is from the new upscale Black Edition

which sells for \$2,800. The Black Edition covers more than the cabinet and stand finish. It extends to a black finish for the crystal driver membranes and for the Jet tweeters. At rear the name plate is aluminum instead of just an adhesive label used on the standard edition. More importantly, ELAC has upgraded some parts for better sound. The wiring is now Val den Hul Skyline Hybrid, plus upgraded air cored foil capacitors and resistors in the crossover.

The speakers are pretty fussy about room placement, at least in my room. It took quite some effort to get them to show their full potential. I asked Bruno de Lorimier from Unison Sales Resources for help in stetting them up and he quickly found out why I was not hearing them at their best. Not only did I have them too far from the rear wall, but my demo pair was missing



some accessories which would normally be in the box. Most importantly, there were no spikes, so I couldn't get a strong coupling to the floor in my carpeted room. He also added a fabric dispersion control ring to the tweeters, which were otherwise a bit too lively in my setting, and he experimented with different port control inserts to optimize the bass response. Some speakers are a lot less fussy about setup, but the good thing is that ELAC supplies these multiple physical adjustment options in the box so you can get the best out of them in any room. Your dealer should be able to help you with this process or perhaps do the setup for you.

The BS 244 BE is a fairly sensitive speaker at 88 dB but it has a low impedance of 4 ohms which may be a problem for some amplifiers optimized for an 8 ohm load. ELAC claims a frequency range of 38 to 50,000 Hz, which compares

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favourably with other small speakers. The similarly sized Totem Ember (\$4,200) which I enjoyed so much recently claims a bandwidth of 43 Hz to 25 kHz. Of course the ear cannot hear above 20 kHz so I wouldn't start worrying just yet.

In case the name ELAC is not familiar to you, I should add that the company is based in Kiel, Germany where all their speakers and drivers are made. The company can trace its history back to 1926 when it began research into sonar technology and the passage of signals and sound through air and water. Loudspeakers became their focus in 1985 and their exclusive domain in 1997. Their six strong development team is led by Rolf Janke.

performance

Once properly set up, I could now focus on the listening. I paired the speakers with a Meridian G08 CD Player, an EMM Labs Pre 2 preamplifier and the powerful KWA 200SE Power Amp from ModWright, linking them all with Nordost Valhalla cables. Bruno positioned the speakers about 8 feet apart and just under a foot from the rear wall, well away from corners. He inserted a hollow foam ring into the rear port as well as the tweeter dispersion ring for best sound. Several characteristics were immediately obvious. First the tweeter is indeed exceptionally smooth and extended, with an enormous capacity for peak loads. Your amplifier will give up before the speakers will. Second the speaker has been designed to be as uncoloured and neutral as possible. Thirdly it throws a really big image, which together with its considerable bass extension makes you think you are listening to a much bigger speaker.

The toughest challenge for small speakers is usually with large scale music, and so it proved here. I threw at it the full weight of a large orchestra in the form of Shostakovich Symphony No. 10 [Naxos 8.572461] from the marvellous new recording from Vasily Petrenko and the Royal Liverpool Philharmonic. The speakers had no problem keeping up with the very rapid pace of the famous second movement (a musical portrait of Joseph Stalin) and offered spectacular imaging. However there was a lack of body in the strings, the brass was a little tamer than ideal and the dynamics did not have as much range as I would like, leading to a general diminution of

the excitement level. Mozart's wonderful Divertimento [Philips 5144852], a much smaller scale piece but with wide ranges of expressiveness, brings a similar story. Wonderful imaging, slightly thin string tone, excellent timing but less than ideally dynamic.

They did very well with jazz. "You'd be so Good to Come Home to" on Art Pepper meets the Rhythm Section [Contemporary OJCCD-338] highlights the fine tweeter performance with exquisite results on the strong percussive leads, and a delicious sounding alto-sax from the temperamental Art Pepper. This is an exceptional sounding disk from the early days of stereo (1957), and the Rhythm Section in question is Miles Davis' own, the best in the business. The bass is fast and tuneful although shaded down somewhat compared to larger speakers. There is a superb balance and no sense of strain whatever the volume level. An excellent achievement all round. Diana Krall's "Boulevard of Broken Dreams" from her early album All for you [Justin Time JTR 84582] usually brings out the best in speakers and in this case the presentation is gentle with an excellent vocal track showing a lot of subtle detail. The image is very intimate and the guitar sings like another human voice. The piano has sparkle and attack while lacking a little in body.

I was present at Ali Farka Toure's last concert tour before his retirement and have always held him in high regard. From his crossover album Talking Timbuktu with Ry Cooder [World Circuit HNCD 1381] I selected the opening track "Bonde". The response speed of this speaker is truly remarkable here, and it's not just the tweeter but the main driver too that shines. Imaging remains top notch and the strong heartbeat propels the music along. The presentation, as in the classical recordings, is on the cool side, no sugar added.

You can't help but be moved by Eric Clapton's "Tears in heaven" from his Unplugged album [Reprise CDW 45024]. The low level triangle notes are clearer and cleaner here than almost any other speaker can manage. Deep bass is strong but a little loose, while transient response is clean and quick. You hear that familiar soulful voice but coming through a little lighter than usual. A strong showing overall. Switching to Paul Simon's 2011 album So

Beautiful or So What [Hear Music HRM 32814-02] I picked two tracks, "Getting Ready for Christmas Day" and "Dazzling Blue". The ELAC could not match the punch of the floorstanding Monitor Audio Silver 8 which I will be reviewing next, but the vocals were stronger and the all important midrange more prominent. The level of detail is good, the exotic rhythms very effectively reproduced (there's that tweeter again) while the deep bass is at a reduced level and lacks the precision of the Monitor Audio.

The ELAC BS 244 BE is the larger of two bookshelf speakers in the range, the smaller being the BS 243 BE (\$2,200), and the range also includes 3 floorstanding models, the BS 247 BE (\$4,200), BS 248 BE (\$6,400) and the top model BS 249 BE (\$8,000). You can get a matching centre channel model, the CC 241 BE for \$1,550. All models share similar technology and can be used together to build a formidable A/V setup.

This is a speaker I have grown to respect and appreciate over its extended stay in my system. Once dialed in, it proved to offer good value for money, excellent performance for its size and to have standout abilities in terms of the refined nature of its top end, its pin point imaging and its ability to produce a big sound without distortion. As always, try to hear it in your own home and see how well it does there rather than in the store. There are a number of excellent speakers at this price point each with its own strengths and weaknesses. One may be warmer, another may dig deeper, some may offer greater dynamics, but this model with its superb imaging and high build quality may be just what you are looking for.

quickinfo

ELAC

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productreview

Paradigm SHIFT Soundtrack System

George de Sa

Paradigm Electronics Inc. (Paradigm) has over 30 years of experience in audio / video products. Its products come under four main collections: the Signature collection, Reference collection, Classic collection and the SHIFT collection. The SHIFT collection is the newest, launched in 2011, with a focus on compact, portable, easy-to-use products. The Paradigm SHIFT Soundtrack System (\$799), which began shipping recently, clearly fits into the SHIFT mantra with its compact size, multi-driver powered soundbar and wirelessly connected powered subwoofer.

design features

The Soundtrack System arrived in a large box in which I found the components neatly and well packed. Amid the soundbar and subwoofer were the following accessories: wall-mounting brackets; soundbar slide-in feet; a power supply and power cords; a set of analog RCA interconnects; an optical (Toslink) digital interconnect; and a low-profile mini remote. In addition, there were feet for horizontal positioning of the subwoofer, as well as a cradle and a 90-degree RCA adapter for optional upright placement. Last but not least, I found a printed set-up guide and owner's manual.

The set-up guide was very useful, with simple diagrams and instructions that allowed for a setup, with the subwoofer wirelessly connected in less than 15 minutes. I chose to sit the soundbar on top of my audio-video rack using the feet provided and I set the subwoofer flat using its screw in feet. Wall-mounting and/ or a wired subwoofer connection will undoubtedly take more time but you can expect an easy setup, regardless of the alternative you choose.

The Soundtrack System was svelte in form, with curved edges that made the soundbar and subwoofer look even small-



er than their modest dimensions. Build and finish was good, though not extravagant. The body of both the soundbar and subwoofer are constructed of molded black ABS plastic, having a satin texture. Other than the small silver Paradigm name

badges on both pieces, there was little in the way of adornment. I'm sure Paradigm has taken this straightforward approach to styling to ensure the Soundtrack system looks as neutral as possible - increasing its ability to integrate within any décor and avoiding undue attention. The soundbar sports a removable (magnetically affixed) fabric covered grille that conceals an array of 6-drivers (two 4.5" mid-bass drivers with two 4" passive radiators, all made of mineral-filled polypropylene and a pair of 1" satin-anodized pure-aluminum dome tweeters). The grille fits precisely and securely. Removing the grille revealed a contoured front baffle with integrated waveguides. An LED status indicator glowed when the soundbar was plugged in - "red" for standby and "blue" for go. Atop the soundbar were a few tiny silver buttons for power on/off, input select, wireless sync and system volume. Sadly, these buttons felt imprecise and were not in keeping with the otherwise robust construction - they had me constantly second guessing my presses. On the back of the soundbar was a power jack, a 3.5 mm stereo input jack (for mobile devices), a stereo set of RCA input jacks and a digital optical input jack (however, no HDMI). With the addition of Paradigm's optional BD1 Bluetooth receiver, the Soundtrack system can stream audio from a smartphone, tablet or laptop. Moving to the subwoofer, there was an 8" laminated composite cone woofer on the underside and twin circular horizontally aligned ports on one end of the enclosure. Next to the woofer there was a power status LED, a switch for selecting wired/wireless operation, a master bass volume control and an RCA input jack for an optional wired connection. I experimented with the master bass volume but found that the marked 12 o'clock factory set position provided the most even balance and more than sufficient output. The remote was a tiny card-like IR type - which I found didn't work effectively, as it needed to be pointed dead-on to the soundbar, had limited range and required very deliberate presses. To the remote's credit, it is a full-function model with power, input selection and volume buttons, and can be programmed to control basic functions of most TVs and cable boxes.

The Soundtrack system is a two box af-

fair - with a soundbar and a wireless subwoofer. The soundbar houses twin leftright channels, both 2-way with 3-drivers (1" tweeter, 4.5" mid-bass and 4" passive) with a frequency response of 140 Hz to 20 kHz. The integrated amplifier is 2 x 25 Watts (RMS) / 2 x 50 Watts (Peak). The soundbar measures 5-5/16" (H) x 36-3/8" (W) x 2-15/16" (D). The subwoofer utilizes a single 8" woofer in a bass-reflex enclosure, powered by a 120 Watt (RMS) / 240 Watt (Peak) Ultra-Class D amplifier. Paradigm uses digital signal processing (DSP) and a soft-clipping circuit to ensure that clarity is maintained at the highest volume. Low frequency extension is 33 Hz / -3 dB in a typical room. Dimensions are: 14-3/16" (H) x 18-5/16" (W) x 6-5/16" (D). I should mention that the wireless range between the soundbar and subwoofer is 50' / 15 meters using a 2.4 GHz uncompressed digital signal.

performance

With the Soundtrack System hooked up to my Panasonic VT25 HDTV, using the supplied digital optical cable, I took a quick listen. I was cautious not to prejudge, after-all, the manual even pointed out the need for several hours of break-

in. What I can say is that, right out of the box, speech was clear, though I did notice some treble hardness. At 12 hours or so, I gave it another listen and heard a smoother, more open and relaxed top end, as well as a more cohesive tonal structure. I gave Soundtrack System over 100 hours of run-in before taking any notes for this review. In my room, I sat the subwoofer in the front right corner, about four feet from the front wall and one foot from the side wall,

sitting directly on the hardwood floor. This position garnered the best result from my primary seat, which sat dead centre and 13 feet away from the soundbar. With the soundbar sitting on my equipment rack, the centre point of the tweeters was approximately 26" off the floor. Though the specifications for the soundbar indicate no roll-off at up to 30-degrees off-axis, I took the precaution of tilting the soundbar up with some foam rubber wedges to ensure the tweeter was on-axis with my ears - a 36" height at my primary seat. In addition, I put the soundbar's face flush with the front edge of the top shelf of my rack, to avoid any chance of reflection off the face of the shelf and ancillary distortion.

Playing with the volume control, I discovered it had 51 steps from the lowest to the highest setting, as counted by way of the flashing blue LED on the soundbar. Sound just became audible at 10 blips up; 20 to 25 steps was low; 35 medium and 40 to 45 produced room filling sound with full dynamics – perfect for focused movie watching. At above 45, a noticeable compression began to set in though distortion was still well controlled. I did not listen at above 45 since such a setting resulted in mechanical movement of the subwoofer



and audible clatter between its feet and the hardwood floor. I would expect a rug, carpet or cork feet would serve to quell much of this. I do wish there was some sort of simple visual indicator of volume level — it would have saved me all the counting.

I did some listening to music channels through my cable TV provider - jazz, acoustic rock and even atmospheric spa stations. I noticed that the sound was overall pleasant, carrying even a touch of warmth but with a good measure of detail, especially in the upper midrange. The subwoofer was surprisingly adept at delivering bass texture from an upright acoustic bass. Here I was quite surprised because virtually every home-theatrein-a-box system I've heard comes with a noticeable bump in bass around 60 Hz, resulting in opaque and indistinct bass notes no such issues with the Soundtrack System. Rather, the Soundtrack System delivered bass articulation and dynamics with aplomb, even more astounding given its humble size and low price point. Vocals were clear, though a little forward in the mix, with some occasional slight excesses in sibilance. Continuing on the music theme, I hooked up my Rega Apollo CD player to the Soundtrack via its digital optical out thus, relying on the Soundtrack system's internal digital-to-analog converter (DAC). Listening to an album I know only too well, Melody Gardot's Worrisome Heart - Melody's voice on the title track was portrayed very clearly with a touch of warmth and a slight extra focus on sibilance. The bass had good body and a very respectable measure of detail. Imaging (depth, horizontal and vertical positioning) and soundstage size was quite limited - with Melody's voice a little lower than usual and all elements in the track centrally located. On another note, the Soundtrack system was more than adept at filling my 16' x 17' family room with music. By that I mean, it provided virtually any spot in front of the soundbar with a fairly even frequency response and steady sonic performance. I have to attribute this to a very well-engineered dispersion pattern, perfect for a home theatre product, as it makes every seat a good seat. I did experiment with connecting my CD player to the Soundtrack System using the RCA analog inputs, which provided a smoother and richer expression of this

track, with less sibilance, suggesting that a source with a high-quality internal DAC, like that in my CD player, might be better to connect using the analog RCA input.

Moving back to my Panasonic VT25 HDTV, as the optical digital source - I began flipping through Netflix, and came across King Kong, the 2005 version. Watching the movie, I took note of the ship moving across the screen, its engine sound chugging and noticed that panning of sound from left to right was minimal. Despite that being the case, a number of high frequency sound-effects did eerily cast away from centre - reaching, up to two feet, left and right of the soundbar and even occasionally gaining some perceived height. Bass frequencies did add scale and apparent depth to the soundfield, making for an immersive experience. The tonal qualities of the Soundtrack system seemed quite natural and balanced, yet maintaining a distinct midrange that added to the intelligibility of spoken words. I was continually enamored by the refinement of the highest frequencies, as they sounded silky with an airy quality that I've never counted on getting from compact, affordable lifestyle systems. The lower treble / upper midrange did occasionally bare a little extra edge but I found that this served to define consonants on spoken speech, making words a little easier to understand. Moving around the room I took note again of the great dispersion; an evenness of tone across a wide range of positions. The Soundtrack System not only plays for one but for an audience. In King Kong, as the ship faced a storm on arrival at Skull Island, the Soundtrack system was called to action. Here I found the ominous thumping of drums to be tight and solid, and I noted that the bass frequencies were strong yet still well textured. The crashing of the ship against the rocks was produced in a dynamic and convincing manner and the system was able to literally shake the floor of my home. The overall soundstage was generous, if not cavernous and I found myself transfixed by the action – always a good sign. On Skull Island, at the first meeting with the indigenous people, the eerie sounds and whispers were very spacious – again and again I was impressed with the finesse in which the Soundtrack system could deliver the top treble.

I was also able to watch Star Trek, Into the Darkness during my time with the Soundtrack System. The opening chapter included an engaging scene with the Enterprise emerging from an ocean, as well as an aggressive impending volcano eruption. This scene was produced with impressive dynamics and weight - way above what it had the right to given its meager size. It was not only the quantity of bass and its apparent depth but the quality that had me wondering - how have they managed this? This is not one of those typical feeble mini-systems. In Star Trek, I was able to get a good sense of how well the Soundtrack could handle speech, music, low-level detail and explosions. I took note of the brilliance in the clinking of metal, noticeably crisp and clear. Though I found speech very clear, I did note that on a couple deep male voices, like those of Kahn and Pike, in some specific scenes, the Soundtrack System seemed to disconnect between the bass and lower midrange - making these voices sound boxedin. With all the action I took note of the Soundtrack System's ability to deliver transients with speed and punch, making for an exciting experience and all this was done with the subwoofer connected wirelessly, without a hitch.

The Soundtrack System is a well-built, well-engineered, compact home theatre system that is easy to setup. It provides a level of performance that had me amazed, given its price, simplicity and size. Though it can't quite provide the immersive experience of a well-designed 5.1 home theatre system, it is very capable of providing a captivating experience, while being both décor and budget friendly. If you're looking for a home theatre system with a high-performance-to-price ratio, a small footprint and virtually no wiring, there may not be a better pick than the Paradigm SHIFT Soundtrack System.

quickinfo

Paradigm Electronics Inc.

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Paradigm SHIFT Soundtrack System

Price: \$799 CAD





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productreview

Vincent SV-237 Integrated Amplifier with Aurum Altan VIII Speakers



George de Sa

Vincent is a house-brand of the German audio product company SintronVertriebs GmbH, more simply known as Sintron. Along with Vincent, Sintron owns the brands - T.A.C. (Tube Amp Company) and Dynavox. Vincent was established in 1995 and encompasses a large array of amplifier products, all of which are designed and engineered in Germany, though Vincent has taken advantage of manufacturing in other locations, outside of Germany, to meet its objective of producing highvalue oriented products. Vincent today has a number of product lines, including thepremiumLine; solidLine; tubeLine; onsetLine; powerLine; cableLine; speakerLine and even a rackLine.

design features

Vincent's most successful amplifier to date has been their SV-236MK integrated tube-hybrid amplifier. Recently, in 2013, Vincent introduced a successor to their SV-236MK- this successor dubbed as the SV-237 (\$2,500). The new SV-237, follows in the footsteps of the SV-236MK, being an integrated hybrid (tube/solid-state) stereo amplifier that sits within Vincent'stubeLine of products. Rather

than an update to a successful design, the SV-237 is purported to be a complete revision of the original SV-236MK circuit design that lifts performance to a new level, particularly in the areas of musicality, transient response, signal-to-noise ratio and dynamics.

Unboxing the SV-237, its bold and masculine lines began to make an impression on me. If you are looking for a component with a lithe form, to hide within a room, look elsewhere, as the SV-237 is anything but. I would even go so far as to say that the SV-237 has almost a sinister look to it, especially in the studio black of the review sample. A slightly softer persona might be achieved by opting for the silver finish but the stealth black suited me just fine. In fact, I found the aesthetics reminiscent of 1940's war-time military electronics - a genre that my Grado SR80 headphones also call to mind. A solid aluminum faceplate with slightly rounded corners hosts a horizontal furrow in which a tone defeat button, loudness button, power button and blue LED input selection lights reside. Four knobs, with circular chrome surrounds are provided for control of treble, bass, input selection and volume. By far, the most distinctive and interesting feature was the single round porthole



that was centred on its fascia. Through this porthole the SV-237 bared tribute to times past, as there, seemingly just for my viewing pleasure within a mirrored alcove was seated one of its three vacuum tubes. When powered on, this tube could be seen faintly aglow; however, Vincent obvi-



kudos



















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ously wanted to make a stronger impression, as the SV-237 incorporates a dimmable orange backlight that significantly increases this 'tubey' effect - tastefully, I might add. The metal panels of the amplifier were surprisingly sturdy and resisted the rattles that I've only too often heard lesser specimens reveal when faced with my firm raps. To its sides the SV-237 possessed a full set of gill-like cooling fins - of a healthy gauge. Turning to the back, I found robust five-way binding posts and RCA input jacks. Overall fit and finish on this Vincent integrated was definitely beyond its price level. The SV-237's chassis is full-sized at 17" wide, 6" high and 17" deep and its weight of 45 pounds made me take it even more seriously. Convenience came in the way of an IR remote but not one of those plastic throw-aways; rather, here was a full-function wand of exceptional quality - solid, weighty and made of thick gauge aluminum that gave me control over volume, mute, dimmer, input but sadly, not power/stand-by.

The SV-237 provides five stereo RCA line inputs, one USB input (limited to 16bit / 48 kHz), one stereo RCA record-out, one pre-out, two remote power triggers and two full sets of left and right five-way binding posts for running two pairs of stereo speakers. However, no phono-stage input. As mentioned, this is a hybrid amplifier, where pre-amplification is vacuum tube based (uses three tubes 1 x 12AX7 and 2 x 6NIP-EV), while power-amplification is fully solid state, in the attempt to marry the best of both worlds. Frequency response is specified as being 20 Hz to 20 kHz, with a power output capability of up to 2 x 150 Watts (8 ohms) and 2 x 250 Watts (4 ohms). Amplification stays in ClassA up to 10 Watts/ch (8 ohms) before switching to ClassAB. Finally, total harmonic distortion is 0.1 % (1 Watt, 1 kHz) with a signal-to-noise ratio of 82.8 dB.

Mok and Martensen Inc., the Canadian distributor for Vincent, recommended pairing the SV-237 with the quadral (spelled in lower case) Aurum Altan VIII (\$3,000) stand-mount loudspeakers. At the 2013 Salon Son & Image show in Montreal, I was taken by the exacting sound of the much more expensive quadral Aurum Titan VIII (\$24,000) floorstanding speakers, driven by Vincent premiumLine components - so I happily accepted the offer

of the Altan VIII. The Altan is designed and built by quadral in Germany. The German electronics and speaker company - quadral, has been around since the early 70's and produces a number of loudspeaker lines and models – Aurum is quadral's flagship loudspeaker brand. When I received the Aurum Altan VIII, I was enamored by its clean finish and sedate lines; dressed in a high-quality cherry real-wood veneer. The look was austere, though softened just a touch by gently contoured side panels. These speakers also had an integrated base that raised the speaker's bottom panel up by about 0.25" atop four barely visible cylindrical metal pedestals common amongst base ported speakers; however, the Altan is a rear-ported design.

The Aurum Altan is a 2-way standmount bass-reflex model that combines a quadral designed-and-built Kapton membrane magnetostatic tweeter with a proprietary 6.7" alloy (ALTIMA: aluminum, titanium and magnesium) cone mid-base driver. Power handling is up to 120 Watts and frequency response is a very respectable 38 - 65,000 Hz. With a sensitivity of 87 dB/1W/1m and impendence range of 4 to 8 ohms the Altan calls for good amplification. The Altan measures 16" (H) x 8.75"(W) x 13.5" (D) and weighs 27.75 pounds. The magnetic grills fit wonderfully and left no trace of their existence on the speaker front baffles - kudos to quadral on this attention to detail.

performance

The SV-237 came to me partially broken in; however, I gave both the integrated amplifier and the Aurum Altan speakers a solid 300+ hours before beginning to evaluate them. In my evaluation of the SV-237, I used both the Altan and my resident Audio Physic Sitara 25 loudspeakers, both of which I connected using KimberKable's 8TC speaker cable. I also switched in my reference Bryston BP6 / 4BSST2 amplification from time to time. Music came from my Squeezebox Touch, playing both CD-ripped and hi-resolution audio files via a Bryston BDA-1 DAC on loan from a friend - thanks Great Chief (Suave Kajko).

I listened to a CD-rip of the Fourplay album "4" and the track Sexual Healing. This is a slow paced song with a firm groove and great bassline, as played by

Nathan East. The track, with the Altan in step, had a delightful sparkle and healthy upper-extension, revealing a feathery lightness, much like I've come to expect from well-designed exotic tweeters. Noteworthy, is the fact that the SV-237 did not disappoint, despite the obvious transparent nature of the Altan. I got a little carried away, given the ease of this track and its catchy bass strings, turning the volume up to 3/4 on the dial for a totally immersive experience. Even at this very high volume the track remained punchy and dynamic with a taut bottom end and crisp though smooth treble. Only on the heaviest notes did I perceive any dynamic restraint and hardening of sonics, which I attribute more to the speakers reaching their power limits than the SV-237 running short on reserves. Hooking up my Sitara 25 loudspeakers produced an increase in transparency, detail, and texture, across the spectrum, which I expected, given that they are almost twice the price. There was also some further opening up of the soundstage in all dimensions. Vocals were a little fuller providing for a more in-the-room experience - some likely the result of the Sitara's larger cabinet. With both speakers the SV-237 showed its proficiency with imaging. The Vincent integrated was capable of discretely holding elements in the track in place, across the volume range. To shed light on this experience, I can say that vocals were layered – with the lead singer clearly forward of the back-up vocals, a high-hat was firmly planted just inside and behind the left speaker, with an electric guitar playing deeper and farther to the left, again independent of the speaker. The bass guitar strings were solidly planted low and centre and ambient synth sound-effects floated noticeably higher to both the left and right. The soundstage was moderately deep but enveloping. The SV-237 could obviously handle dynamics and produce solid bass extension with a good measure of finesse in the high-frequency realm. It also could clearly demonstrate nuances in performance between the two pairs of high performance speakers that I had at my disposal.

I moved to one of my favorite albums and a staple for equipment reviews, given its combination of a full symphony with electronic instrumentation and ef-

fects - none else than the "Tron Legacy Soundtrack" by Daft Punk. The dynamic track Rinzler was first up. The heavy, quick strikes on the tympani drums were visceral, dynamic, quick and full. The weight of the electronic bass notes filled my room and produced an immersive soundstage. The feeling I was given was that of grace under pressure – unlike many integrated amplifiers that sound lovely at low volumes, the SV-237 was capable of remaining composed at very high levels. The Vincent integrated was also able to drape a consistent level of warmth and maintain musicality at volume levels that typically become steely and harsh with lesser examples of affordable audio components -demonstrating the robust and stable nature of the SV-237's output stage and toroidal power supply. Compared to my reference Bryston pre & power amplifier combo - the SV-237 held its own. What was noticeable was the SV-237's fuller and warmer sound. The Bryston combo did produce a noticeably larger soundstage, brought forth an incremental level of delicacy and transparency and extended further at both ends of the frequency spectrum with greater absolute control but the mid-bass weight of the SV-237 provided a more authoritative sound. Moving to the next track, The Game Has Changed, the opening synthesized drum beats were delivered with energetic impact and slam – with no apparent softening. However, as the track picked up and the violins, horns and electronic sound-effects kicked in I did notice a slight sense of congestion, only in direct comparison to my Bryston pairing. To be clear, the SV-237 in no way sounded offensive in this area, rather, it was more that the Bryston duo was able to reach a couple rungs up on element separation, mind you, at three times the price. The SV-237 was clearly able to produce an ample amount of high-quality bass with only a slight give on extreme grip and articulation at the very lowest frequencies. In the arena of bass weight and low-frequency control, I'm confident that the SV-237 will outperform many integrated amplifiers near its price.

I next turned to another one of my more recent go-to albums – "The Imagine Project" by Herbie Hancock, CD-rip. The opening track, Imagine, was enlightening, as it revealed something I had not

heard before from the SV-237, a slight extra liveliness, giving the opening heavy piano notes a little glare - this seemed to be the only instance of this, perhaps due to a combination of factors - the precise pitch, the room...however, I did hear it with both sets of speakers and not with my Bryston amplifiers. Moving on, I noted Pink's opening vocals had an earthy fullness, sounding complete in tone and very present - the sense of her being in my room definitely came across - just short of being able to see her tats and mascara. I took note of the reverb of her voice against the surrounding venue walls that helped to define a well-sized soundstage. The plucks of the bass guitar expressed the string tension and effectively drove the rhythm. On the track, Don't Give Up, piano keys were revealed with natural detail, carrying with it a good measure of bloom, sparkle and reverb, something I'm accustomed to hearing with my reference setup. Vocals again had an organic richness supporting realism. I moved to the tribute to Bob Dylan's - The Times, They Are A'Changin'. Here piano keys were delivered with a convincing radiance and warmth. Cymbal play on this track involves a lot of light pattering and the SV-237 was up to producing the shimmer with its metallic character intact. Vocals were distinct with natural warmth and next came the Africankora - a string instrument with a very unique sonic signature. Not only was the SV-237 able to lay bare this instrument's inherent string nature but also its characteristic harmonic qualities – making the kora sound like...a kora. The very quick plucks in which the kora is played calls for an amplifier with a quick clean response and correct tone - here the SV-237 proved to be very capable. The Vincent integrated amplifier, through the Aurum Altan, was impressive in its ability to deliver on treble details, while bass reproduction was extended, taught and resolute. I noticed that with the Sitara 25, the SV-237 was able to deliver voices with an even greater level of integrity by more completely revealing midrange body.

I have to admit that when I introduced the Vincent SV-237 into my system I was a little skeptical of its potential to keep me entertained. After all, I've grown accustomed, perhaps a little spoiled, by my reference equipment. However, within

a short while I found myself losing my memory of that which came before and just enjoying the smooth, dynamic, fullbodied and detailed way in which the Vincent integrated served up the music. Was the SV-237 on the same plane as my Bryston amps? I can't quite say that. The SV-237 had a few foibles too – it got quite hot on extended use (not unexpected for a tube hybrid) and the volume with the remote was just too jumpy – these though are nit-pickings. Overall, the Vincent integrated delivered on all measures, whether that be imaging, power reserves, tonality, control, detail or musicality. In fact, the Vincent was bolder in nature than my-Bryston gear- carrying the music with strength and potency. Where the Bryston gear pulled ahead was in its capability to deliver further on subtleties - providing greater frequency extension and control at the limits, more openness/air within a larger soundstage and greater detail, while coming across as more effortless - disappearing from the music rather than carrying it. This though is what high-end is all about, pushing the finer details to the limits. The fact that the Vincent SV-237 comes so close to equipment at three times its price is an undeniable testament to its performance and value. I could only wish that all affordable amplifiers might execute so masterfully.

Honorable Mention: The Aurum Altan VIII proved itself to be a wonderful standmount speaker with amazing top-end extension, detail retrieval and bass reproduction that was well-matched to the Vincent SV-237.

quickinfo

Vincent | www.vincent-tac.de Aurum | www.aurumspeakers.com

Distributed in Canada by Mok and Martensen Sound Distribution www.mokandmartensen.com 514.225.2337

Vincent SV-237 Integrated Amplifier

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Aurum Altan VIII Speakers

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