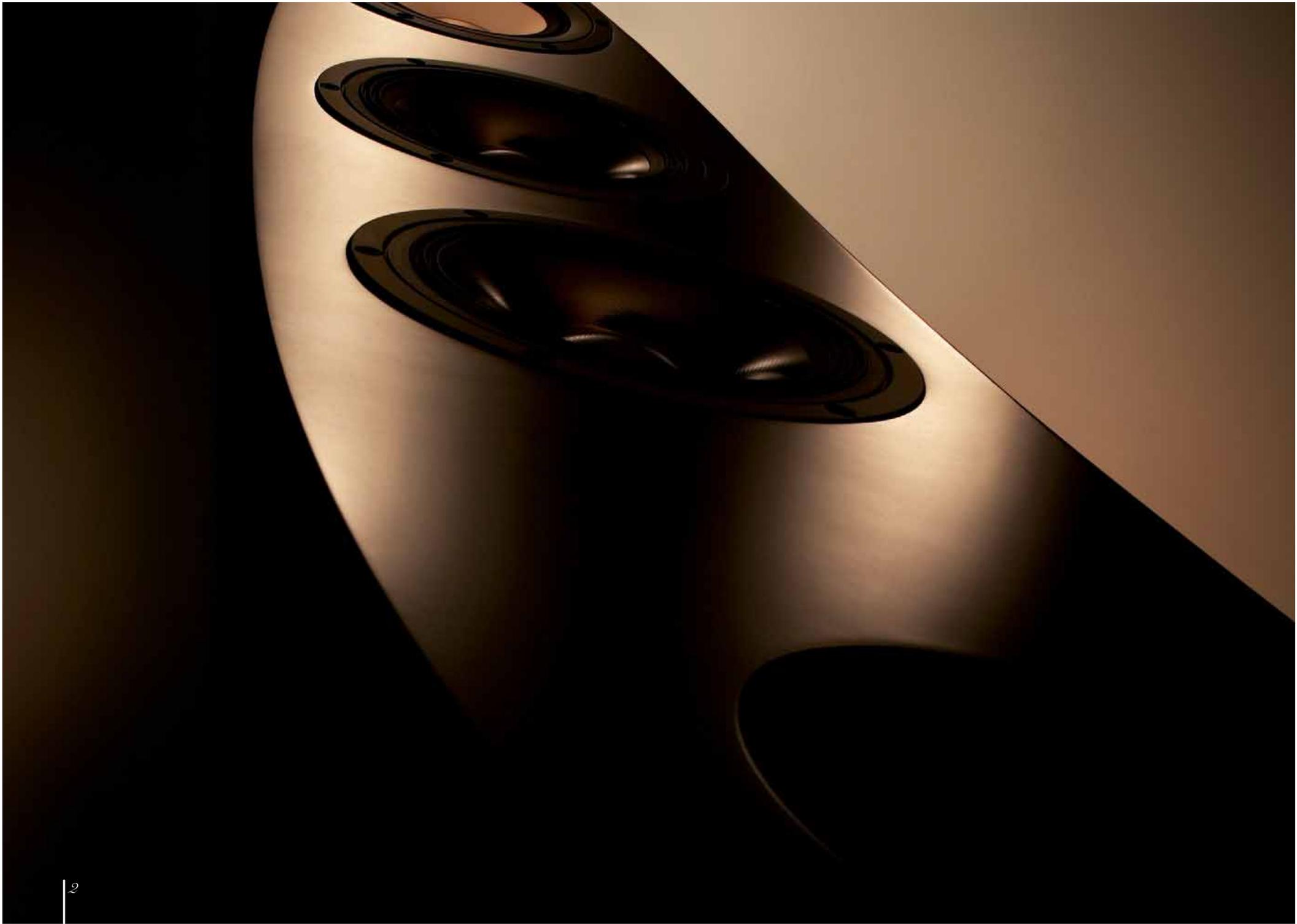


**Pioneer** *sound.vision.soul*

*EX Series Speakers*  
*S-1EX*  
*S-2EX*  
*S-7EX*



## *Speaking of Excellence*

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*As a true Pioneer, we have been breaking the boundaries of first-class entertainment for decades. Through the years, we have grown, flourished and changed with our customers and their aspirations, earning ourselves a top-ranked spot among the classics. It all began with the design and production of dynamic speakers. For this unique speaker collection, Pioneer returned to its origins. The experience and expertise built up throughout the years culminates in the creation of our masterpiece, the EX Series Speakers. The superb, natural sound and accuracy of these premium speakers ensures that they are the absolute pinnacle of true sound quality. Designed by the world's leading experts, skilfully crafted from the highest quality materials and passing rigorous sound testing with ease, the EX Series provides a superlative sound experience. Every step of the design process has been meticulously undertaken to ensure that the prestigious EX Series really does deserve its status. Turn the page, and embark on a journey to discover how this exquisite speaker collection came into existence.*

## *The Evolution of Sublime Sound*

*1937*

In the year of our foundation, Pioneer brings the A-8 dynamic speaker to the market. The clear vision we had then — to bring a new level of sound quality to a wider public — is still true today as we continue to aim ever higher.

*1975*

TAD (Pioneer's Technical Audio Device department) develops the TAD Pro Audio monitoring drivers. They are acknowledged as 'best of the best' in the professional audio industry.

*2003*

Derived from the legacy technology of TAD Pro Audio speakers, the TAD-M1 takes home audio reproduction to new levels. Considered to be one of the best speaker systems in the world, this speaker is recognised by audio purists for its remarkable clarity, detail, imaging and dynamics.

*2000*

Pioneer's SDC (Speaker Design Centre) is established in Paris in order to stay up-to-date with European trends and new technologies. A cosmopolitan team designs and develops Pioneer speakers based on the results of market research.

*2004*

Pioneer initiates the EX project: to create a new high-end speaker system for worldwide markets.

*2005*

The EX Series is born. A flagship model for Pioneer's speaker systems around the world, this speaker collection uses many of the technical specifications of the highly acclaimed TAD-M1. The EX Series showcases Pioneer's knowledge and ability to create a premium speaker system with incredible design and astonishing sound quality.



*Seven Steps to Excellence*

- |    |                        |
|----|------------------------|
| 6  | Tweeter/Midrange Unit  |
| 8  | Bass Unit              |
| 10 | Perfect Time Design    |
| 12 | Enclosure              |
| 13 | Acoustic Balance Drive |
| 14 | Credentials            |
| 15 | ↓ Air Studios          |



## *Witness the Creation of Superior Audio*

The first step in the painstaking development of Pioneer's premium speaker series is the creation of an outstanding concentric tweeter/midrange speaker unit. Cutting-edge TAD technologies allow the unit to reproduce exceptionally accurate audio. Every element has been crafted using only the highest-quality materials, ensuring that all frequencies of this wide-range unit are always precise and laser-sharp, boasting extraordinary liveliness and delicacy. Add in the Neodymium magnet's tight power handling and the result is fluent and consistent sound at a superior level of true-to-life detail, ideal for DVD-Audio and SACD reproduction. Sit back, close your eyes and be swept up in a world of sonic perfection. Open your eyes and you'll see that ideal sound is so much more than just a dream — it can be your reality.



### *TAD Speaker Design*

**TAD** Only the very best speaker components were considered for Pioneer's new audio masterpiece: the EX Series. So it's no surprise that TAD (Technical Audio Devices) speaker design is incorporated into these reference-class units. They were crafted with extreme precision by TAD experts, and adhere to their rigorous standards. TAD professional studio monitoring loudspeakers are the first choice in recording studios across the globe. They have set a standard for audio excellence and reliability, as recognised by many world-famous performers and professional sound engineers. The legacy began 30 years ago, and now TAD speakers can be found wherever the highest sound quality is required: studio monitors, concert hall speakers, cinema audio systems and more.

### *Beryllium Tweeter Diaphragm*



The tweeter diaphragm is composed of Beryllium metal, which is extremely light and rigid. This has resulted in an ultra-strong tweeter diaphragm with perfectly solid piston performance. It precisely reproduces the audio signal; absolutely no distortion or resonance is added to the audio performance. No other high-end audio loudspeaker today can match the damping characteristics of these speakers. This pure and solid performing diaphragm makes Beryllium tweeters ideal for reproducing the high frequencies of DVD-Audio and SACD, up to 100 kHz. These revolutionary audio formats recreate sound as it actually exists in the real world, with all its original artistic qualities intact.

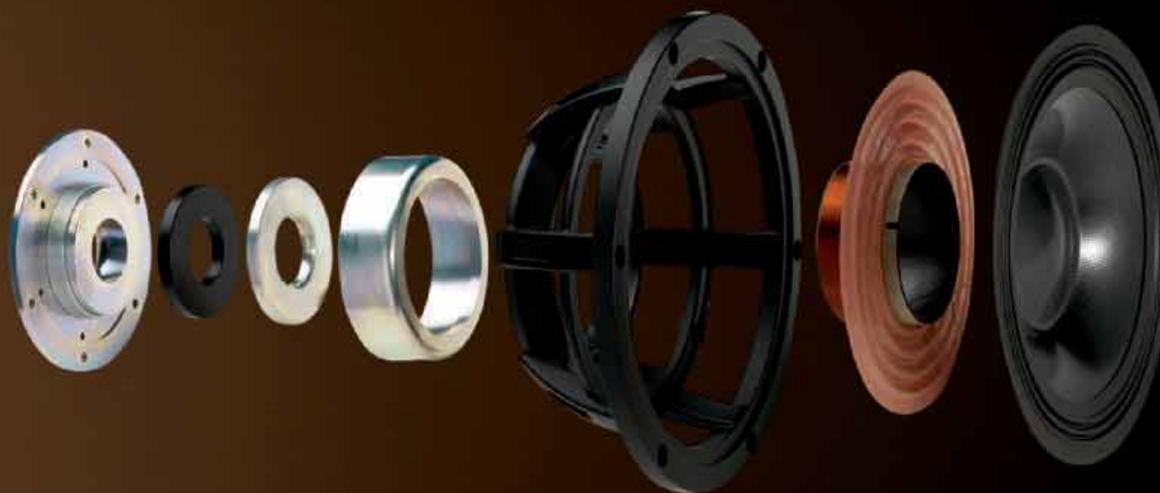
### *Coherent Source Transducer*



To ensure that all sound — direct and reflected — arrives at the listening position with identical timbre, the EX Series employs TAD's exclusive CST (Coherent Source Transducer) driver technology. The Beryllium tweeter is mounted in the centre of the magnesium midrange driver, allowing the sound directivity to be precisely controlled at all frequencies. The resulting aligned sound delivery is extremely smooth and coherent. Unlike with conventional drivers, the problems with phase and off-axis frequency response have been totally eradicated.

## *Give Deeper Meaning to Sound*

The next element to be developed is the EX Series' meticulously designed bass unit. Also packed with TAD technology and first-class components, it guarantees superior sound performance, even at very low frequencies. The extremely rigid and solid cone structure creates more stable and uniform cone movement, as well as enhanced damping properties. Unnecessary reaction and resonance are significantly reduced by the specially designed basket frame. The ultra-strong neodymium magnet and wide voice coil let you effortlessly achieve a smooth response of the desired frequency and a fluent transition to the higher frequency drivers. But a perfect listening experience is about more than the highest quality materials and technologies. It involves your own passions and beliefs, your reactions to the sounds that surround you. Pioneer's EX Series amplifies those passions and provides the most exquisite platform from which to create a new world of special moments.



### *One-piece Cone and Centre Cap*



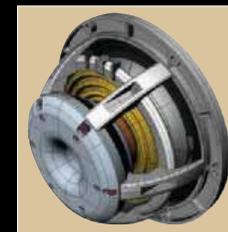
Conventional speaker cones have a separate centre cap, to make it easier to attach the cone to the voice coil. However, this design weakens the cone's mechanical integrity. The unique one-piece construction of the cone and centre cap that was created for the EX Series' bass unit, combined with the improved rigidity of the aramid fibre structure, produces a much stiffer and more rigid construction. Unwanted cone resonances are pushed beyond the bass unit's operating range, allowing the cone to accurately pass the coil movement on to the air and significantly improve the accuracy of sound reproduction.

### *65 mm Voice Coil*



Typical bass units have relatively small voice coils, which, at high power levels, mean reduced power handling ability and loss of efficiency. At a huge 65 mm, the voice coil of the EX Series has considerably greater power handling capability, producing outstanding dynamics, even at high sound levels.

### *"Air-flow Designed" Basket Frame*



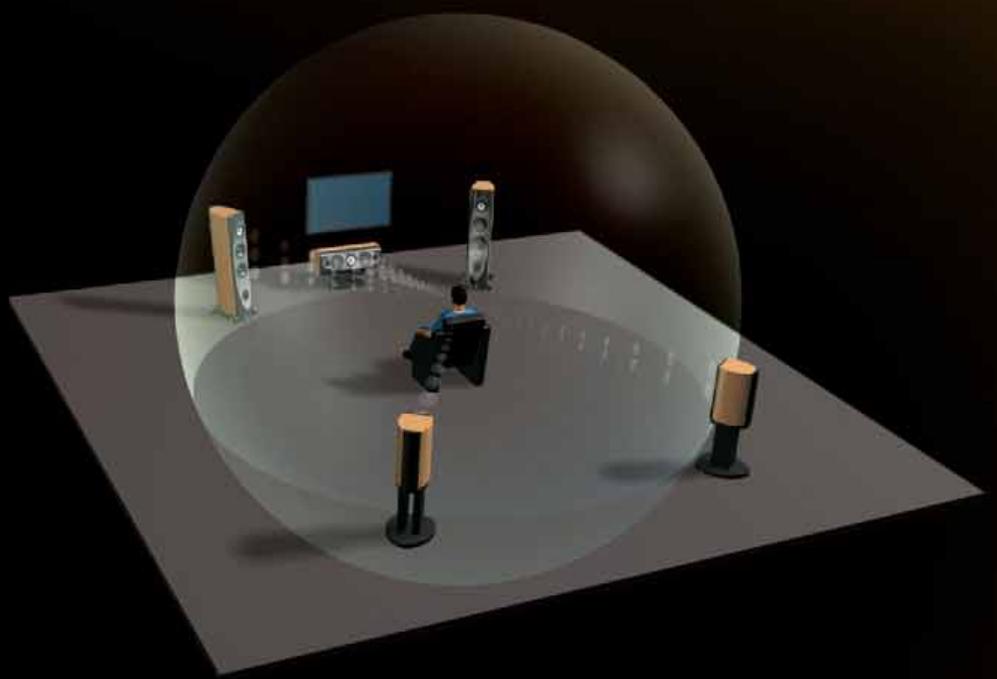
The tweeter/midrange and bass units of the new EX Series feature a novel "air-flow designed" basket frame and magnetic circuits that allow for unrestricted airflow behind the cone and around the voice coil. Even at very high power levels, it prevents sound distortion, offering simply pure and accurate sonic pleasure.





## The Science of Sensation

In our eternal quest to offer you unrivalled sound perfection, we have taken innovative design further than ever before. In sound perception, every element must be considered. Even the slightest detail can make a world of difference. With an ideal system, all sounds produced by the loudspeakers arrive at the listeners' ears simultaneously. If that doesn't happen, the feeling of truly aligned performance is lost. The effect is even worse in multi-channel systems, where the impression of being immersed in the performance space disappears. Pioneer has developed the perfect answer: Perfect Time Design. This revolutionary 5-channel solution takes you as close to the sensation of sound perfection as you will ever get.



### EX Speaker Stands

Two classy speaker stands have been created to help precisely direct the sound towards the centre of the virtual sound sphere. The CP-2EX is designed especially for the bookshelf speakers, while the CP-7EX supports the centre speaker.



S-2EX bookshelf speakers on CP-2EX speaker stands.



S-7EX centre speaker on CP-7EX speaker stand.

### Perfect Time Design

In traditional speaker systems, several speaker units are aligned on a flat front baffle. Because the various frequencies from each driver unit must cross different distances to reach the listener, this composition inevitably leads to a small degree of confusion in the overall sound. Pioneer's new EX Series compensates for this effect by using a baffle design that ensures 5-channel perfect time alignment. The speaker units are positioned following a virtual sphere, whose centre is the listener. This means that all frequencies are focused on the listener and take the exact same time to cover the distance from the speaker set to the listener's ear.

### Coherent Source Transducer

When tweeters and midrange speaker units are mounted on a traditional flat baffle, the acoustic centres of the drivers are not aligned. The centre of the midrange unit is positioned behind the baffle and the centre of the tweeter is placed in the baffle's plane. Some manufacturers try to resolve this problem with a stepped baffle, however this results in unacceptable diffraction and colouring of the sound. TAD cleverly opted to mount the tweeter in the centre of the midrange cone, which not only optimises sound propagation in all directions, but also guarantees time alignment of the drivers.

### Precision Curve

The groundbreaking Precision Curve design is essential in creating perfect time alignment. The EX Series cabinets feature a unique curvature and backward slope of the front baffle. Placing the speaker cabinets equidistant from the listener, in a virtual sphere, precisely aligns both the CST and bass drivers for all 5 channels.



## *Solid, Strong, Superb*

*With the tweeter/midrange and bass units perfected, an equally ingenious enclosure must be created to provide them with a stable base. The EX Series' cabinets are crafted from multiple layers of laminated MDF, ranging from a minimum of 30 mm up to a generous 100 mm, to ensure that they remain inert. Acting as an obstruction to the acoustic field generated within them by rear radiation from the drive units, these intuitively designed enclosures help create an amazingly realistic sound stage. Distortion is reduced, allowing sound efficiency to reach a higher level than ever before, with exceptional clarity and focus.*

*For a striking appearance, these audiophile-quality speaker systems deserve a fitting finish. Opt for the elegant beech high-gloss veneer or for the trendy dark wood finish. Both make the EX Series stand proud in any interior.*

The S-V1EX set consists of two floor-standing front speakers (S-1EX), a centre speaker (S-7EX) and two rear bookshelf type speakers (S-2EX), all of which are magnetically shielded for video use.



Featuring a more space-conscious design, but offering the same high-end performance level, the S-V2EX home cinema speaker set consists of four bookshelf speakers (S-2EX) and a centre speaker (S-7EX).

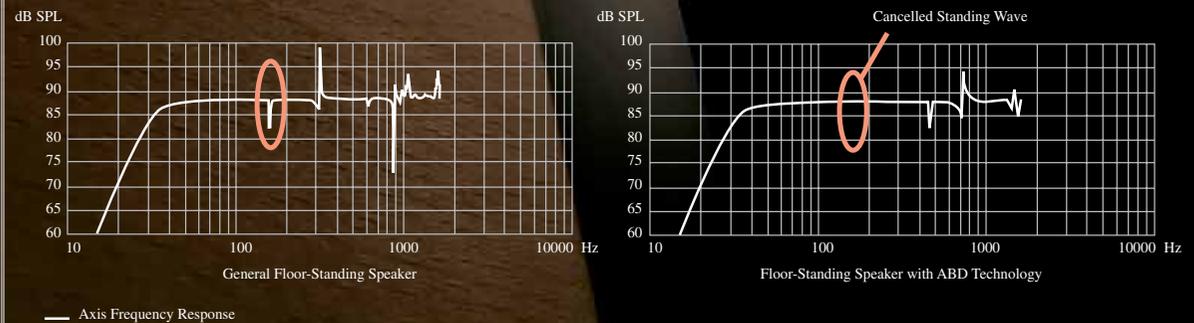




## *The Sonic Equilibrist*

Vertical standing waves are a phenomenon that occurs in nearly all speaker enclosures. Responsible for uneven, boomy or sucked out bass response, vertical standing waves generated inside tall floor-standing cabinets are extremely difficult to control. But not for Pioneer. We have developed unique acoustic simulation technology, ABD (Acoustic Balance Drive), which allows us to calculate the influence of the cabinet's vertical standing waves on the speaker frequency response, taking into account bass units and port locations. Using this software, the port and bass units of the EX Series are placed in the best position to cut this influence to a minimum. This new technology allows the first vertical standing wave to be totally cancelled and the influence of the second one to be significantly reduced. The result is precise and dynamic bass with no low midrange colouration.

### *Acoustic Balance Drive (ABD)*



## *Solid Credentials*



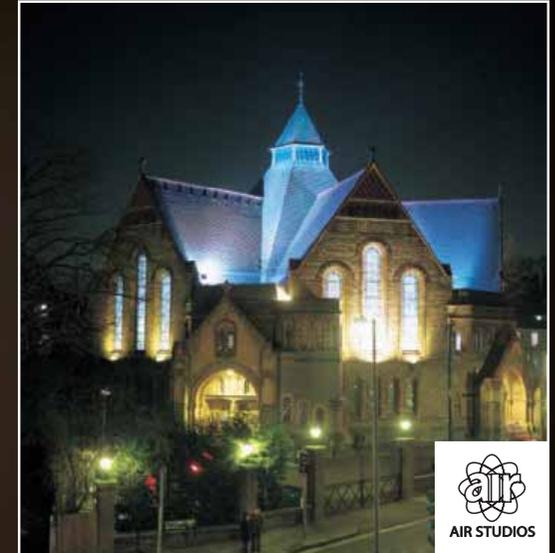
Andrew Jones and the TAD-M1

*Designed in Pioneer's Speaker Design Centre in France, the first-class EX Series has been created by a talented network of high-end audio specialists consisting of only the very best TAD and Pioneer engineers from around the world. They have each added their individual expertise to co-create this flagship model of audio excellence. In addition, Andrew Jones, chief engineer of the TAD-M1, acted as sound advisor to ensure the success of this ambitious project.*

*Pioneer's EX Series was conceived with the aim of creating true sound perfection to fulfil the desires of audiophiles with the most discerning of taste. That's why these premium speakers call not only on the expertise of TAD engineers but comprise many of the technical elements used in the renowned TAD-M1 — widely considered to be one of the premier speaker systems available.*

*You will certainly hear the difference when you listen to SACD and DVD-Audio discs. This superlative speaker collection reproduces today's advanced reproduction formats with flawless precision.*





### *The Mark of Excellence*

*The EX Series has undergone rigorous acoustic testing at AIR Studios in London, one of the world's leading recording studios, and therefore meets its strict studio replay standards. Some of the most talented AIR Studios sound engineers contributed an unquestionable amount of know-how to fine-tune the EX Series. So they can replicate a professional studio sound environment in your home, with ideally controlled acoustics.*

*Sir George Martin, the legendary Beatles producer and an Academy Award-nominated composer, founded AIR Studios in 1969. AIR Studios is now a state-of-the-art recording complex with matchless facilities for film scoring, rock, pop, classical and orchestral work, video game sound design, post-production and live events. Many popular and celebrated musical talents, like Madonna, Paul McCartney, Elton John, Robbie Williams, Oasis and Coldplay have recorded in this unique and inspirational recording environment.*

## Technical Specifications

The S-V1EX set consists of two floor-standing front speakers (S-1EX), a centre speaker (S-7EX) and two rear bookshelf speakers (S-2EX). The S-V2EX set consists of four bookshelf speakers (S-2EX) and a centre speaker (S-7EX).

<i>Specifications</i>	S-1EX 3-way vented box system	S-2EX 3-way vented box system	S-7EX 3-way vented box system	CP-2EX Speaker stand for S-2EX	CP-7EX Speaker stand for S-7EX
Enclosure	Front-duct-bass reflex Floor-standing type	Front-duct-bass reflex Bookshelf type	Front-duct-bass reflex Centre speaker type	—	—
Speakers					
Bass	18 cm Aramid cone (x2)	18 cm Aramid cone	18 cm Aramid cone (x2)	—	—
Midrange	Concentric unit: 14 cm Magnesium cone	Concentric unit: 14 cm Magnesium cone	Concentric unit: 14 cm Magnesium cone	—	—
Tweeter	Concentric unit: 3.5 cm Beryllium dome	Concentric unit: 3.5 cm Beryllium dome	Concentric unit: 3.5 cm Beryllium dome	—	—
Frequency Range	28 — 100,000 Hz	34 — 100,000 Hz	34 — 100,000 Hz	—	—
Sensitivity (2.83 V/1 m)	88.5 dB SPL	85.5 dB SPL	88.5 dB SPL	—	—
Harmonic Distortion	2 <sup>nd</sup> and 3 <sup>rd</sup> harmonics (4 W) 100 Hz — 100 kHz 2 <sup>nd</sup> < 0.7 % 3 <sup>rd</sup> < 0.35 %	2 <sup>nd</sup> and 3 <sup>rd</sup> harmonics (4 W) 100 Hz — 100 kHz 2 <sup>nd</sup> < 0.7 % 3 <sup>rd</sup> < 0.35 %	2 <sup>nd</sup> and 3 <sup>rd</sup> harmonics (4 W) 100 Hz — 100 kHz 2 <sup>nd</sup> < 0.7 % 3 <sup>rd</sup> < 0.35 %	—	—
Nominal Impedance	6 Ω	6 Ω	6 Ω	—	—
Maximum Power	200 W	200 W	200 W	—	—
Cross-over Frequencies	400 Hz 2.2 kHz	400 Hz 2 kHz	440 Hz 2.1 kHz	—	—
Dimensions (W x H x D)	422 x 1296 x 622 mm (with base)	291 x 565 x 427 mm	820 x 291 x 427 mm	400 x 604 x 513 mm (without decoupling spikes)	498 x 226 x 412 mm (without decoupling spikes)
Weight	62.0 kg	29.0 kg	38.0 kg	19.0 kg	13.0 kg
Finishes	<b>Cabinet:</b> Real wood veneer Clear Beech wood (glossy finish) Dark Teak wood (satin finish) <b>Grille:</b> Black cloth	<b>Cabinet:</b> Real wood veneer Clear Beech wood (glossy finish) Dark Teak wood (satin finish) <b>Grille:</b> Black cloth	<b>Cabinet:</b> Real wood veneer Clear Beech wood (glossy finish) Dark Teak wood (satin finish) <b>Grille:</b> Black cloth	<b>Stand:</b> Black MDF wood (satin finish) <b>Decoupling Spikes:</b> Silver	<b>Stand:</b> Black MDF wood (satin finish) <b>Decoupling Spikes:</b> Silver



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