

Pioneer *sound.vision.soul*

EX Speaker Series

S-1EX

S-2EX

S-7EX

S-W1EX



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.

1997

Pioneer Electronics Technology established its speaker design group in California to create advanced speaker designs for the North America market.

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.

2000

Pioneer's SDC (Speaker Design Center) 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.

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 recognized by audio purists for its remarkable clarity, detail, imaging and dynamics.

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.

Speaking of Excellence

Pioneer has 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 has returned to its origins. The experience and expertise built up through the years culminates in the creation of our masterpiece, the EX Speaker Series. 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, skillfully 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.

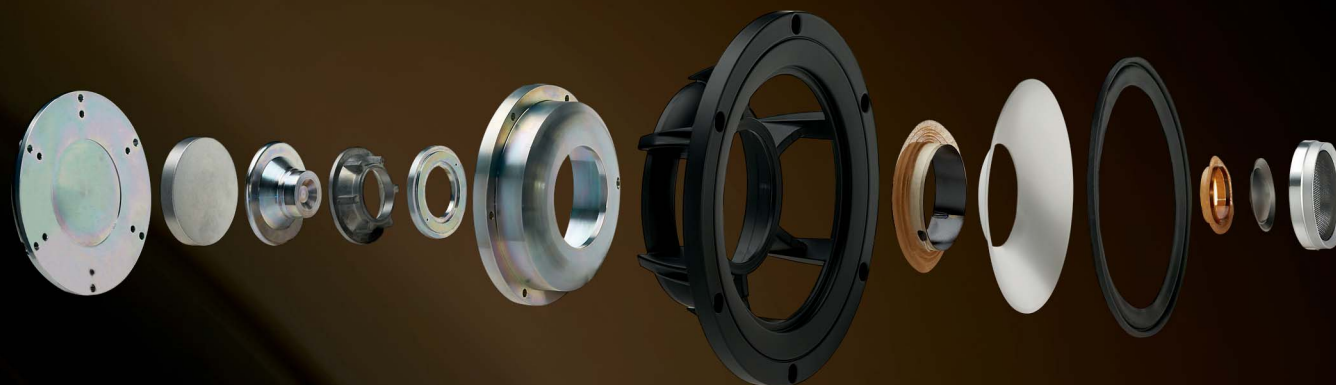
Eight Steps to Excellence

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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 driver. Cutting-edge TAD technologies allow the driver to reproduce exceptionally accurate audio. Every element has been crafted using only the highest-quality materials, ensuring that all frequencies of this wide-range driver are always precise and laser-sharp, boasting extraordinary liveliness and delicacy. Add in the Neodymium magnet's tremendous strength 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 driver: CST-6001
TAD *TAD (Technical Audio Devices)

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 engineering is incorporated into these reference-class drivers. 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 recognized 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; limited distortion or resonance is added to the audio performance. 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.

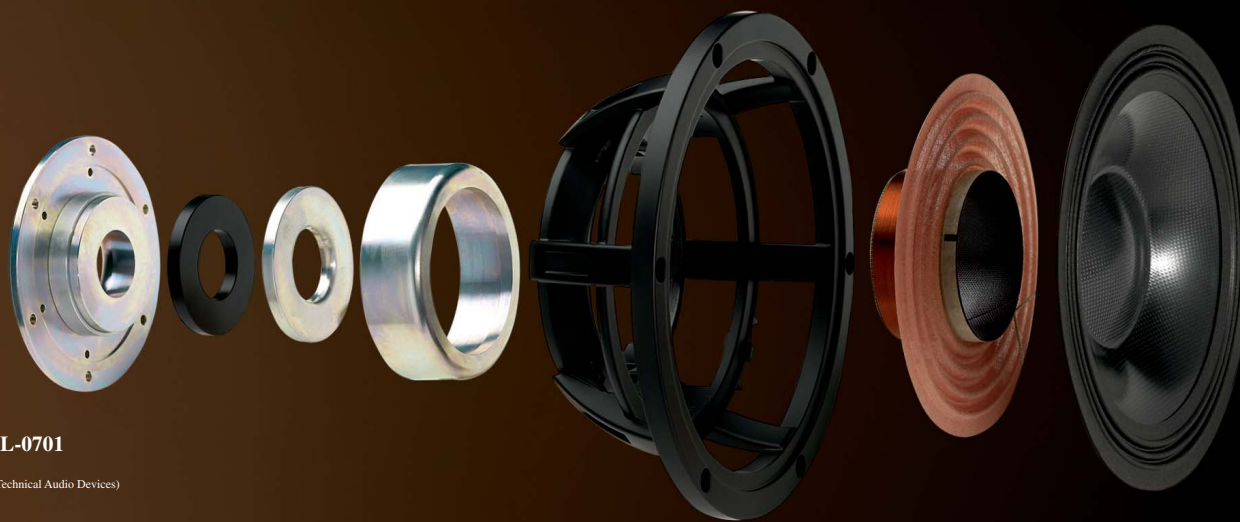
Coherent Source Transducer



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 center 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 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 driver. 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 large voice coil let you effortlessly achieve a smooth response and a fluid in line 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.



TAD driver: TL-0701

TAD *TAD (Technical Audio Devices)

One-piece Cone and Center Cap



Conventional speaker cones have a separate center 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 center cap that was created for the EX

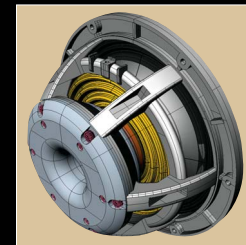
Series' bass driver, combined with the improved rigidity of the aramid fiber structure, produces a much stiffer and more rigid construction. Unwanted cone resonances are pushed beyond the bass driver's operating range, allowing the cone to accurately pass the coil movement on to the air and significantly improve the accuracy of sound reproduction.

65 mm Voice Coil



Typical bass drivers 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



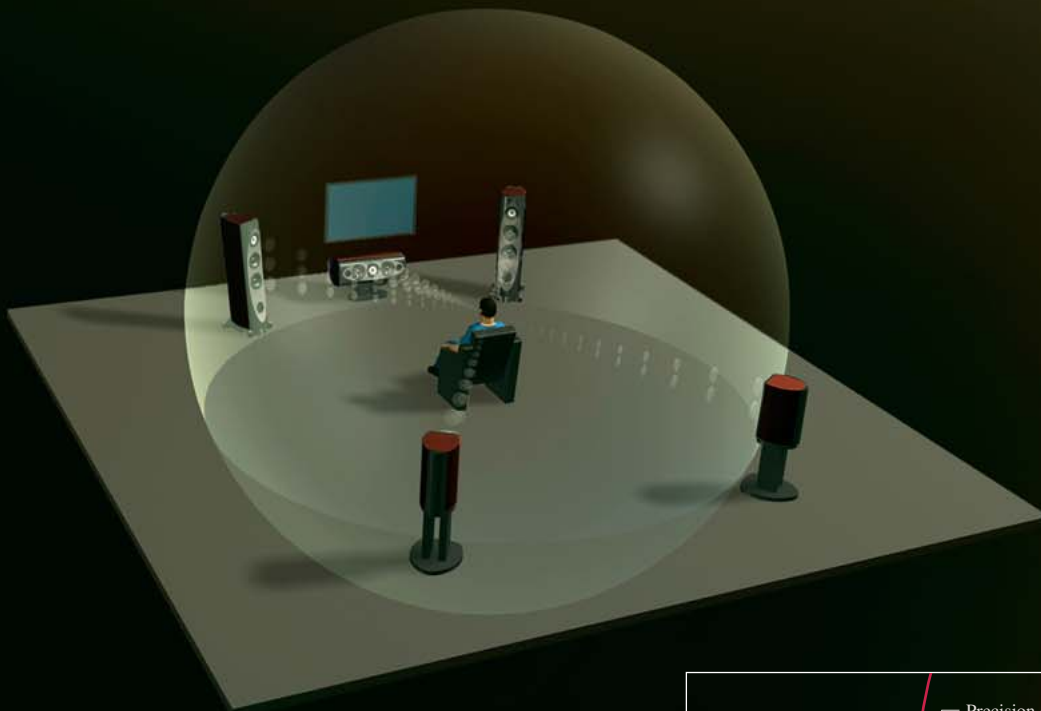
The tweeter/midrange and bass drivers of the EX Series feature novel "air-flow designed" basket frames and magnetic circuits that allow for unrestricted airflow behind the cone and around the voice coil. Even at very high power levels, it prevents sound distortion, offering simply pure and accurate sonic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





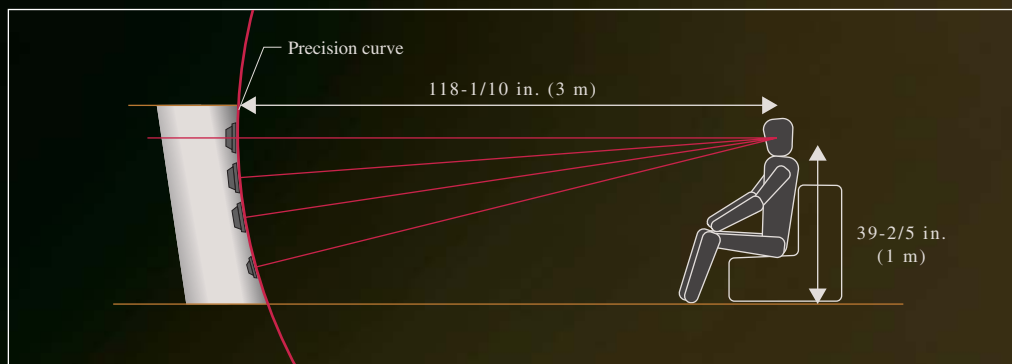
The Science of Sensation

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 Alignment Design. This revolutionary 5-channel solution takes you as close to the sensation of sound perfection as you will ever get.



Precision Curve

In traditional speaker systems, several speaker drivers are aligned on a flat front baffle. Because the sounds from each driver reach the listener from different distances, this composition inevitably leads to a small degree of confusion in the overall sound. With Pioneer's EX Series, a revolutionary baffle with a precise curved surface has been realized to solve this problem. This is the "precision curve." By positioning the speaker drivers on a three-meter radius sphere centered on the listener, the time it takes for the sound to reach the listener's ears from each of the drivers is precisely adjusted.



Coherent Source Transducer

When tweeters and midrange speaker drivers are mounted on a traditional flat baffle, the acoustic centers of the drivers are not aligned. The center of the midrange driver is positioned behind the baffle and the center 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 coloring of the sound. TAD cleverly opted to mount the tweeter in the center of the midrange cone, which not only optimizes sound propagation in all directions, but also guarantees time alignment of the drivers.

Slant Layout Enclosure

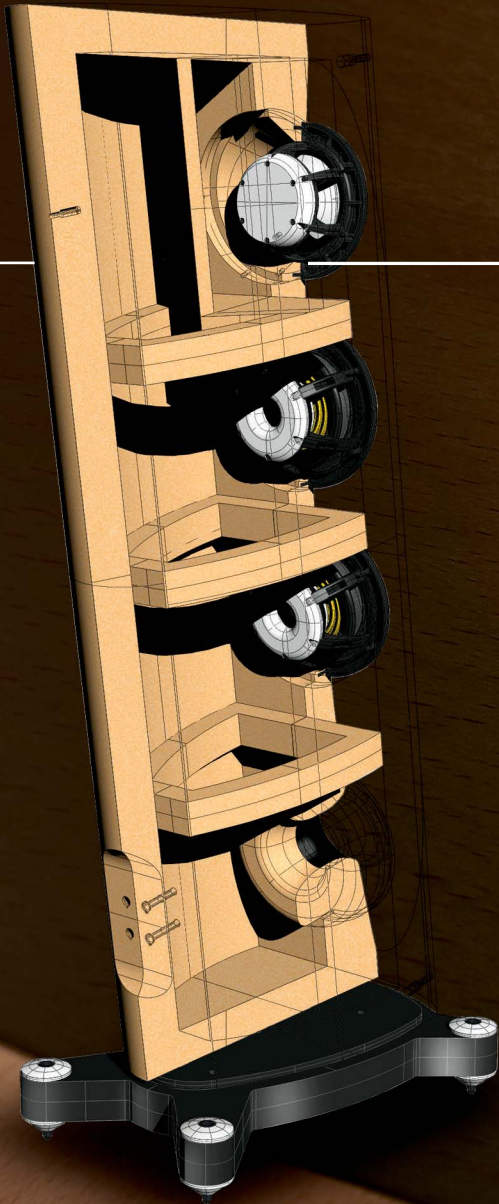
Enclosures have a backwards slant of eight degrees. This brings the speaker's center gravity of the speaker directly over the center of the base of the speaker. This positioning ensures stability of the cabinet and freedom from the effects of speaker vibrations. In combination with the Precision Curves, perfect time alignments of the drivers and at the listening position is guaranteed.

Solid, Strong, Superb

With the tweeter/midrange and bass drivers 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. Along with the curved baffle and radius edges, these enclosures help create an amazingly realistic stage with exceptional clarity and focus.

For a striking appearance, these audiophile-quality speaker systems deserve a fitting finish. The beautiful, trendy, dark wood gives a high-quality finish to the EX Series, which is befittingly called the "highest echelon."

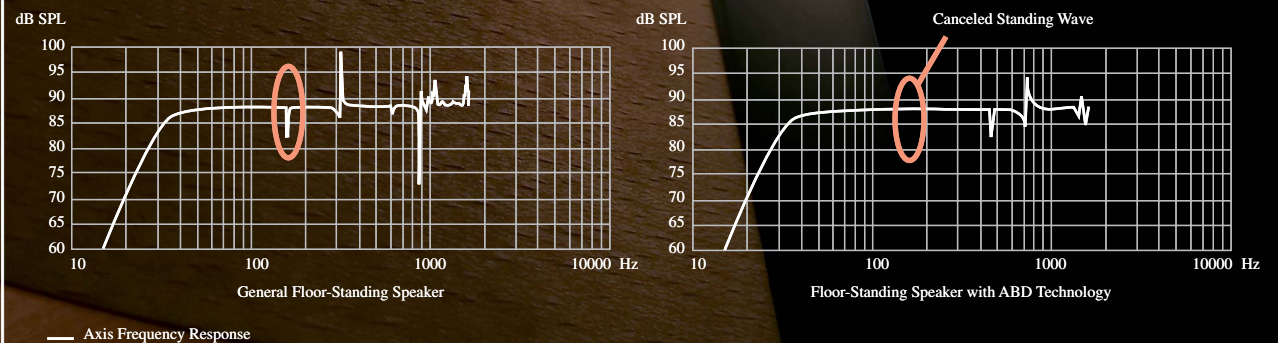




ABD

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 drivers and port locations. Using this software, the port and bass drivers 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 canceled and the influence of the second one to be significantly reduced. The result is precise and dynamic bass with no low midrange coloration.

Acoustic Balance Drive (ABD)



Solid Credentials



Andrew Jones and the TAD-M1

The flagship 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 first-class 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 fulfill 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.





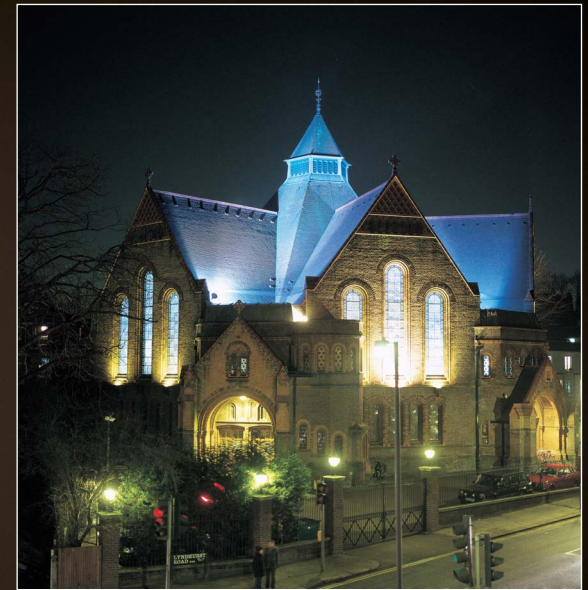
Revolutionary Phase Control



Not only has the latest technology that we have explained above been used in the design of the EX Series, but the latest results of Pioneer's unique research into audio sound reproduction are also being actively used. This is the revolutionary "phase control" technology.

"Phase control" technology is the concept of managing the time and phase response of the speakers, amplifiers and software to realize the dramatic high-quality sound during multi-channel sound reproduction. The most advanced concepts of phase control have been introduced to the EX Series. All the systems use the same CST and woofer drivers, which along with the crossover allows for perfect matching of the phase characteristics of all the speakers. Additionally S-W1EX subwoofer has a low pass filter (LPF) bypass function installed. In combination with the appropriate receiver, the phase response of the complete multi-channel system can be optimized for uncompromising surround sound reproduction.

➤ This "phase control" trademark is attached to products designed for phase characteristic matching recording to reproduction, based on the phase control technology concept developed by the Pioneer Corporation.



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.



AIR Studios and the AIR Studios logo are registered trademarks of AIR Studios, Inc.

S-1EX Floorstander



Angle view

Front view

S-1EX

(Speakers are sold separately)

■ Features

- 1-3/8 in. (3.5 cm) Beryllium tweeter / 5-1/2 in. (14 cm) Magnesium midrange
- CST driver
- 7-1/16 in. (18 cm) Aramid / Carbon composite shell woofer
- Large Neodymium magnet
- Magnetically shielded-design
- Aerodynamic frame and magnetic circuits
- Perfect time-alignment design
- Precision curve
- Round enclosure
- Slant-layout enclosure
- ABD technology
- Phase-control design
- Unleaded solder
- 3-way speaker system

■ Specifications

Frequency Range: 28 - 100,000 Hz
 Nominal Impedance: 6 Ω
 Maximum Power (Input): 200 W
 Dimensions (W x H x D):
 16-5/8 x 50-1/2 x 24 in.
 422 x 1283 x 609 mm
 Weight: 145 lbs. 8oz.
 66.0 kg
 Accessory: Grille, 4 Spikes

S-2EX Compact Monitor



Angle view

Front view

S-2EX

(Speakers are sold separately)

■ Features

- 1-3/8 in. (3.5 cm) Beryllium tweeter / 5-1/2 in. (14 cm) Magnesium midrange
- CST driver
- 7-1/16 in. (18 cm) Aramid / Carbon composite shell woofer
- Large Neodymium magnet
- Magnetically shielded-design
- Aerodynamic frame and magnetic circuits
- Perfect time-alignment design
- Precision curve
- Round enclosure
- Phase-control design
- Unleaded solder
- 3-way speaker system

■ Specifications

Frequency Range: 34 - 100,000 Hz
 Nominal Impedance: 6 Ω
 Maximum Power (Input): 200 W
 Dimensions (W x H x D):
 11-7/16 x 22-1/4 x 16-3/4 in.
 291 x 565 x 425 mm
 Weight: 61 lbs. 12oz.
 28.0 kg
 Accessory: Grille, 4 Spikes

(Shown with option speaker stand CP-2EX)

S-7EX Center Channel



(Shown with option speaker stand CP-7EX)

S-7EX

■ Features

- 1-3/8 in. (3.5 cm) Beryllium tweeter / 5-1/2 in. (14 cm) Magnesium midrange
- CST driver
- 7-1/16 in. (18 cm) Aramid / Carbon composite shell woofer
- Large Neodymium magnet
- Magnetically shielded-design
- Aerodynamic frame and magnetic circuits
- Perfect time-alignment design
- Precision curve
- Round enclosure
- Vertical twin method
- Phase-control design
- Unleaded solder
- 3-way speaker system

■ Specifications

Frequency Range: 34 - 100,000 Hz
 Nominal Impedance: 6 Ω
 Maximum Power (Input): 200 W
 Dimensions (W x H x D):
 32-5/16 x 11-7/16 x 16-3/4 in.
 820 x 291 x 425 mm
 Weight: 86 lbs.
 39.0 kg
 Accessory: Grille, 4 Spikes,
 Base for Center Speaker

S-W1EX Powered Subwoofer



S-W1EX

■ Features

- Silent mount technology structure, to prevent unnecessary vibrations.
- Large 12 in. (30 cm) diameter woofer driver
- Large 12 in. (30 cm) diameter passive radiator
- Phase-control design
- Solid round enclosure
- Unleaded solder

■ Specifications

Frequency Range: 24 - 4,000 Hz
 (Set to BYPASS)
 Power output (RMS):
 250 W / 4 Ω (100Hz)
 Dimensions (W x H x D):
 16-15/16 x 18-14/16 x 16-15/16 in.
 430 x 480 x 430 mm
 Weight: 75 lbs. 14 oz.
 34.5 kg
 Accessory: 4 Bases, 4 Spikes,
 Power Supply cord,
 Ground cord

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Technical Specifications

<i>Specifications</i>	S-1EX 3-way vented box system	S-2EX 3-way vented box system	S-7EX 3-way vented box system	S-W1EX Powered subwoofer	CP-2EX Speaker stand for S-2EX	CP-7EX Speaker stand for S-7EX
Enclosure:	Front-vented bass reflex Floor-standing type	Front-vented bass reflex Bookshelf type	Front-vented bass reflex Center speaker type	Passive radiator Floor-standing type	—	—
Speakers (Tweeter):	Concentric driver: 1-3/8 in. (3.5 cm) Beryllium dome	Concentric driver: 1-3/8 in. (3.5 cm) Beryllium dome	Concentric driver: 1-3/8 in. (3.5 cm) Beryllium dome	—	—	—
Speakers (Midrange):	Concentric driver: 5-1/2 in. (14 cm) Magnesium cone	Concentric driver: 5-1/2 in. (14 cm) Magnesium cone	Concentric driver: 5-1/2 in. (14 cm) Magnesium cone	—	—	—
Speakers (Bass):	7-1/16 in. (18 cm) Aramid cone (x2)	7-1/16 in. (18 cm) Aramid cone	7-1/16 in. (18 cm) Aramid cone (x2)	12 in. (30 cm) Aramid cone + 12 in. (30 cm) Aramid cone passive radiator	—	—
Frequency Range:	28 — 100,000 Hz	34 — 100,000 Hz	34 — 100,000 Hz	25 — 4,000 Hz (Set to BYPASS)	—	—
Sensitivity (2.83 V/1 m):	89.5 dB SPL	86.5 dB SPL	89.5 dB SPL	—	—	—
Nominal Impedance:	6 Ω	6 Ω	6 Ω	—	—	—
Maximum Power (Input) :	200 W	200 W	200 W	—	—	—
Power output (RMS) :	—	—	—	250W / 4 Ω (100 Hz)	—	—
Cross-over Frequencies :	400 Hz 2 kHz	400 Hz 2 kHz	400 Hz 2 kHz	50 — 150 Hz (Continuously variable)	—	—
Dimensions (W x H x D):	16-5/8 x 50-1/2 x 24 in. 422 x 1283 x 609 mm	11-7/16 x 22-1/4 x 16-3/4 in. 291 x 565 x 425 mm	32-5/16 x 11-7/16 x 16-3/4 in. 820 x 291 x 425 mm	16-15/16 x 18-14/16 x 16-15/16 in. 430 x 480 x 430 mm	15-3/4 x 23-3/4 x 20-3/16 in. 400 x 604 x 513 mm (without decoupling spikes)	19-5/8 x 12-3/16 x 16-1/4 in. 498 x 310 x 412 mm (without decoupling spikes)
Weight:	145 lbs. 8 oz. 66.0 kg	61 lbs. 12 oz. 28.0 kg	86 lbs. 39.0 kg	75 lbs. 14 oz. 34.5 kg	39 lbs. 4 oz. 17.8 kg	30 lbs. 14 oz. 14.0 kg
Power Requirements / Consumption	—	—	—	120 V, 60 Hz / 56 W, 90 VA	—	—
Finishes:	Cabinet: Real wood veneer Dark Teak wood (satin finish)	Cabinet: Real wood veneer Dark Teak wood (satin finish)	Cabinet: Real wood veneer Dark Teak wood (satin finish)	Cabinet: MDF with Real wood veneer Dark Teak wood (satin finish)	Stand: Black Plywood (satin finish) Decoupling Spikes: Silver	Stand: Black Plywood (satin finish) Decoupling Spikes: Silver
Grille:	Black cloth	Black cloth	Black cloth	Black cloth	—	—