

Boston *E100*

Reference
Speakers

Altavoces
de referencia

Haut-parleurs
de référence

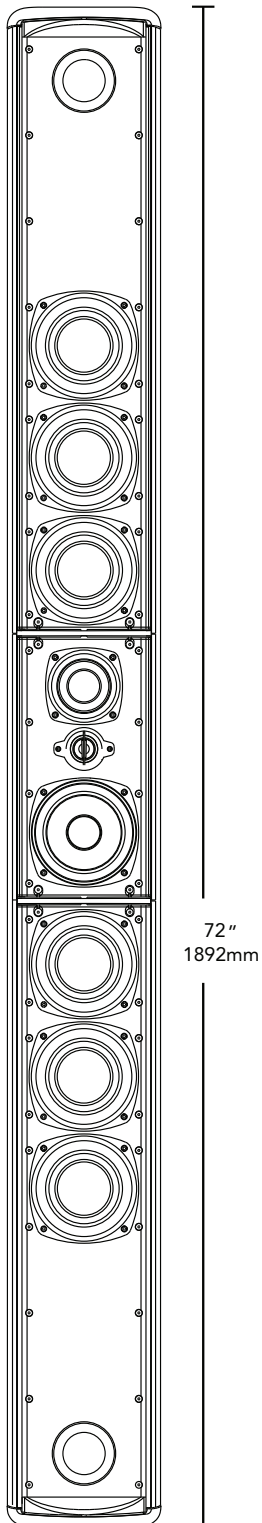
Altoparlanti
di riferimento

Referenz-
lautsprecher

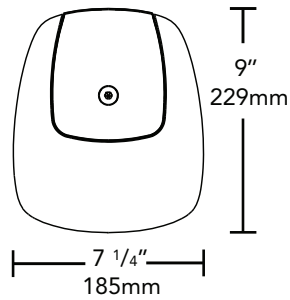
Boston
Boston Acoustics



Front View

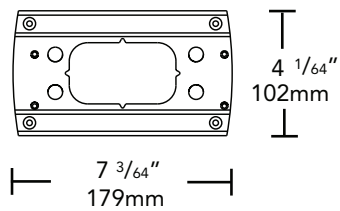


Top View



Wall Bracket

EBR



Boston E100 Series Dimension Sheet

For more information on the E Series or any Boston product, please contact Boston Technical Support at 1.978.538.5000 or by email at: support@bostona.com

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Boston Acoustics® E Series Reference Speakers

While the E Series is Boston Acoustics' flagship home speaker line, with each model combining acoustical performance of a truly superior order with strikingly handsome looks and a high degree of application flexibility that make them perfect for custom installations. The top-of-the-line E100 is something special. It is simply the smoothest loudspeaker ever produced in the 27-year history of Boston Acoustics. Remarkably accurate, neutral, and revealing, it will immediately take its place among the very finest high-end designs available today. What is most unusual, and shared by very few loudspeakers, is its airy spaciousness, resulting from the E100 cabinet's slimness and smoothly rounded corners, which makes all playback utterly natural, floating about the cabinets.

Yet there is more to home audio than superb sound. The E100 uses construction techniques and materials that are not just novel — resulting in a compact form factor — but elegant. The fashionable appearance means it's the perfect solution for stylish home theater applications as well as music-only rooms. The E100 design blends attractively into decors both modern and traditional, and does so almost unobtrusively, too, as it may be oriented either vertically on its base, or even horizontally as a center channel.

The design details tell the tale, and more attention was paid to detail in the development of the E Series than in any previous Boston Acoustics products. The design started with the shape: not plain boxes, the line is complex, curved, thin cabinets using an appealing variety of textures and materials, with the goal of creating audio

objects that are almost jewel-like. Beneath the dazzling finishes are high-performance loudspeaker technologies, cleverly deployed. The E100 uses one each of our world-famous VR 1-inch aluminum-dome tweeter and the new, higher-output **VRHO™** tweeter. Its woofers feature cast-aluminum baskets, oversized voice coils, and neodymium magnets for greater power handling, increased output, and superior reliability. All of these E100 drivers were developed exclusively for this project at Boston Acoustics' leading-edge transducer development facility in Peabody, Massachusetts.



The story of the cabinet begins with a part of the speakers that cannot be seen: the 5mm-thick extruded-aluminum enclosure. Extruded aluminum is extremely rigid, letting the speakers' drivers create The Boston Sound® without competing with energy coming from the enclosure itself. Such an enclosure also facilitates the E100's complex shape in a way that traditional box designs could not. But we did not rely exclusively on the material properties of aluminum to maximize enclosure stiffness. Extensive ribbing and internal bracing increase cabinet rigidity to the point of making it virtually inert; spurious resonances and vibrations that degrade the sound of ordinary speakers are eliminated. Furthermore, the loudspeaker drivers ordinarily would be mounted directly to the front of the aluminum extrusion. However, Boston's engineers discovered that using a dissimilar material would isolate the drivers from the cabinet even more, maximizing output and minimizing coloration, and attached a thick MDF baffle to the front. The overall construction is so special that we applied for a trademark for it: StabiliTek™.

An additional design feature, which is oriented more toward style and flexibility than sound, is its interchangeable GroovLock™ side panels. All models are available with either high-gloss cherry or satin ebony hardwood-veneer side panels. A third option is unfinished side panels, which can be veneered, stained, painted, or covered in cloth to match your exact décor requirements.

The Boston Acoustics E100 is the culmination of almost three decades of extensive experience developing superior loudspeakers, and our proudest achievement. We thank you for your purchase, and we are confident you will enjoy your speakers for decades to come.

Your E100

Your new loudspeaker may be oriented vertically or horizontally, as left, right, center and/or surround channels, and is suited for use on walls as well as its attractive base. Its woofers incorporate our patented DCD™ technology with deep (1½") voice coils for rugged power handling, and the tweeters feature Boston's proprietary AMD™ (amplitude-modification device) for finer highs. The cabinet is slender with smooth edges and corners, which makes for a genuine, audible difference in the spaciousness and clarity of playback. Our MagnaGuard® magnetic shielding permits placement right beside television monitors.

Specifications	Especificaciones	Caractéristiques	Specifiche tecniche	Technische Daten
E100				
Frequency Response (±2.5dB)	35Hz–30kHz			
Recommended Amp Power	75–400 watts			
Nominal Impedance	8 ohms			
Sensitivity (2.83v at 1m)	89 dB			
Woofers	Six 5¼" (134mm) DCD design; neo magnet; 1½" voice coil; vented			
Midrange	Dual 5¼" (134mm) DCD design; neo magnet; 1½" voice coil 3½" (89mm) DCD design; neo magnet			
Tweeter – Front Rear	1" (25mm) VRH.O.™ aluminum dome with AMD™ 1" (25mm) VR with AMD, rear-facing (ambient), switchable			
Crossover Frequencies	150Hz, 600Hz, 2.5kHz			
Width	7¾" (185mm)			
Height	77" (1951mm) on base			
Depth w/grille	9" (229mm)			
Weight	90 lbs (41kg)			

**In keeping with our policy of continual product improvements, specifications are subject to change without notice. Please visit www.bostonacoustics.com for the latest specifications on this products.*

Inspection

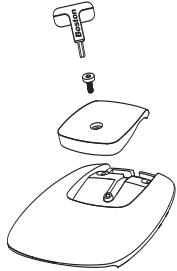
Your speakers were carefully packed at the factory in protective cartons, but be sure to examine both the cartons and the contents for signs of shipping damage. If there is such evidence, don't destroy the cartons or any of the packing material, and notify your dealer immediately. In any case it's a good idea to save the cartons and packing if you can, for doing so will be a great help (to you, to us, and to your dealer) should you ever need to return a unit in the future. Also please save this manual for future reference, and with it your sales slip.

Setup

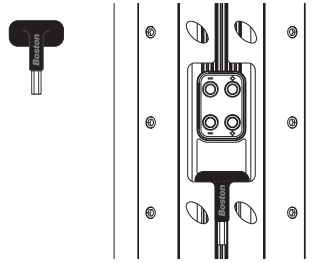
Multiple mounting options are available for the E100.

Vertical

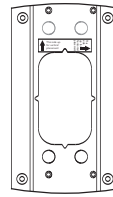
Please refer to the documentation provided with the E100 base. Base installation entails removal of the middle plate [A] in the bottom rounded endcap and attachment of the base. Use the supplied hex wrench [B] (either accompanying this manual or attached to the rear of the speaker).



[A]



[B]



[C]

Wall mounting

For wall mounting, either horizontally or vertically, sturdy brackets [C] (EBR sold separately) are available; refer to the EBR bracket documentation. You will need two pairs of them. Also please note that wall mounting is a two-person job.

Miscellaneous

All E series speakers come with their grilles installed; we recommend not removing any of the E100's three grilles. The Boston Acoustics logo on the middle grille is rotatable, so you may wish to turn it appropriately if should you ever need to reorient your speakers. Rotate the logo by gently pulling it out (it's spring-loaded) and turn it to the desired orientation. Be careful not to scratch the grille with the bottom of the logo.

Wire Management

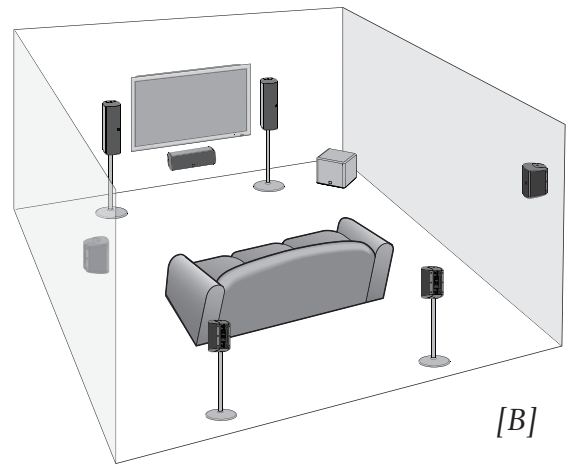
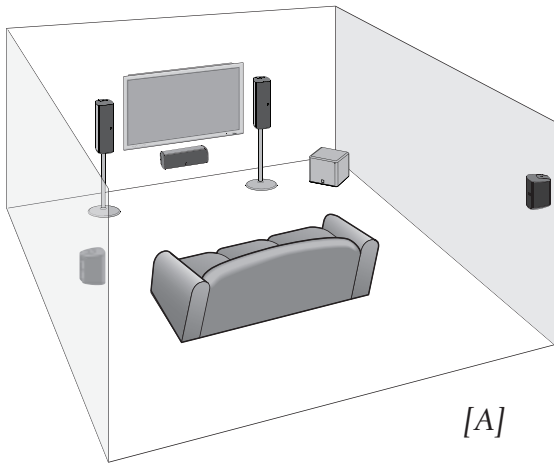
Recessed channels on the cabinet back let you dress the wiring and conceal extra wire.

Placement: Home Theater

For a home theater, you will want to have the left and right front speaker flank your TV. They may be right next to it, for a neat appearance and tightly imaged and focused sound, or spread out from it a bit, for wider stereo separation. If they're right next to the screen, experiment with angling them outward a bit, to increase the width of the soundstage. Also refer to the later subsection on usage of the rear (ambience) tweeter.

A center channel unit can go above or below the TV, using optional E pillows as needed.

As surrounds in a 5.1 system, [A] the speakers should go out to the side of and slightly above the main seating area. They also can be positioned slightly ahead of or slightly behind the center seats. If possible, it's best not to put them behind the main seating area in a 5.1 setup. The 6.1 and 7.1 surround configurations, however, call for an additional speaker [B] (6.1) or pair of speakers (7.1) behind the couch shown in the 5.1 room above.



Placement: Music

For a music-only system, whether 2-channel stereo or surround, the same guidelines apply, although you can have more leeway with the front stereo arrangement. The front speakers can form up to an equilateral triangle with your main seats, or somewhat narrower than that, depending on your taste in imaging and soundstage width.

Staggering distances for smoother sound

Whether video or music playback, for smoothest and most natural tonal balance in the lower midrange, try to ensure that the distances from the E100 center woofer to the front wall, side wall, and floor are not the same. Indeed, if you can do so, make them rather different — stagger them. But as you get used to your new system, always feel free to experiment.

In locating your speakers you also will want to pay attention to any nearby lighting fixtures and similar objects that may vibrate when you are enjoying high listening levels.



The Ambience Tweeter

Whether to turn off the rear tweeter is essentially a matter of taste. It is shipped set to its on position, so you will immediately experience the E100's gratifyingly spacious and natural treble playback when you fire up your new loudspeakers.

If, however, your room is unusually bright or hard-sounding (lots of bare surfaces, like wood or tile floors, windows and mirrors or other glass, etc.), or you simply prefer a drier sound and a tighter image, then feel free to experiment with turning the rear tweeter off.

Similarly if you wall-mount your E100s. The ambience tweeter will be "splashing" against a nearby hard surface, and you may well find this rebalancing (a bit of sizzle, perhaps, assuming the front wall is hard) to your liking, or you may not.

You also will want to experiment with it on and off according to program material — movies vs music, orchestral (or choral or chamber music, or jazz) vs pop and rock, and so on.

You will find that the difference in airiness and detail is subtle but real, and further sets the E100 apart from most other modern high-end loudspeaker designs.

Adding a Subwoofer

The E100 can handle a large amount of power, including low frequencies. Your receiver or amplifier will probably distort before your speakers will. And this power-handling capability extends all the way down to below 39Hz.

However, many modern movies today, and certain kinds of musical program material, contain significant amounts of signal below 35Hz, whether from film-track explosions or from drum, organ, and synthesizer. Assuming you regularly play such movies and music, you will want to add a subwoofer. Boston Acoustics has several models available, the best solution depending on your room size and taste in program material. We even offer in-wall/in-ceiling as well as in-floor designs for low bass that's heard but not seen. (Both require

professional installation.) To discover which options work best for your situation, please consult your dealer.

Conventional Hookup

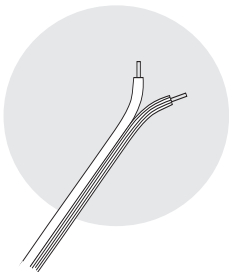
WARNING: To prevent electrical shock, always switch off the amplifier or receiver when making connections to the speaker.

With any speaker system it's important that each speaker channel be wired the same way to your receiver or amplifier, red speaker terminal to red amp terminal and black to black, + to + and - to -. This ensures that the units are driven with the same polarity (in "phase"). Inconsistent connections will result in a poor soundstage image or weak bass.

For the connection to your receiver or amp, use 16-gauge wire. For short runs (less than 10-15'), 18-gauge is acceptable, and for longer runs (more than 25'), 14-gauge wire is preferable but a bit harder to find. "Audiophile" cable from your dealer is fine, too.

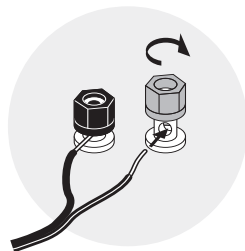
All speaker wire has one conductor side coded to make consistent hookups easier; usually it's a thin ridge, ribbing, stripe or bead running the length of the wire, or sometimes the wire itself is different colors, for example one side silvered and the other plain copper. Our 24K-gold-plate (to prevent corrosion) speaker connectors are what are called five-way binding posts, for several means of fastening. Banana plugs are easiest and simplest, but spade lugs or pins are acceptable, as is bare wire if you avoid frays and strands, make the connection tight, and check it regularly.

In all cases, split the vinyl insulation in the middle of the cable and strip ½" (12mm) off the ends of each of the dual strands, exposing the two wire conductors. Twist the wire and, with the receiver or



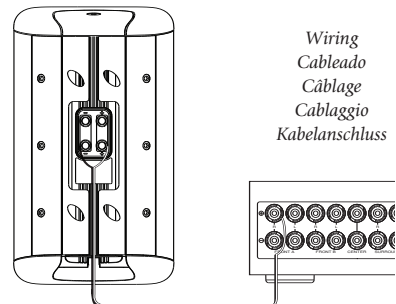
Bare Wire
Cable pelado
Fil nu

Filo nudo
Blanker Draht
Fil nu



Turn Clockwise to Tighten
Para apretar, gire en el sentido
de las manecillas del reloj
Tourner dans le sens horaire
pour serrer

Girare in senso orario per serrare
Im Uhrzeigersinn festdrehen



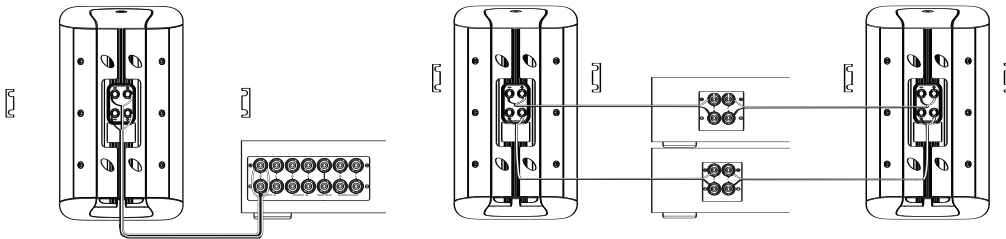
amplifier turned off, make the connection to your connector of choice or simply insert the wire into the hole and tighten, as shown. Leave the jumper plate where it is.

Bi-wiring

Bi-wiring means running a double set of wire from your amplifier or receiver speaker output to each E series cabinet, connecting to the woofer(s) and tweeter separately. The jumper plates must be removed; see figure below.

Bi-wiring increases power transfer and potentially decreases intermodulation of different frequencies. Any improvements are subtle. If you bi-wire, use the same type and length of wire for all connections, and again maintain + to + (red) and - to - (black).

- 1) Loosen all four terminals and remove the jumper straps.
- 2) Connect the wires from the amplifier's speaker output terminals to the sets of terminals on the back of each speaker as shown.



Bi-amplification

Bi-amplification entails separate amplifiers for the woofer(s) and tweeter and can enhance the dynamic performance and the ease of the sound from your system. Splitting the load lets each amplifier work less hard, increasing the power available to each driver.

If you bi-amp, use the same type and length of wire for all connections, maintaining + to + (red) and - to - (black).

- 1) Loosen all four terminals and remove the jumper straps.
- 2) Connect the wires from the dedicated woofer amplifier's speaker output terminals to the bottom set of terminals on the back of each speaker, as shown.
- 3) Repeat for the tweeter: Connect the wires from its amplifier's speaker output terminals to the top set of terminals on the back of each speaker, as shown.

Acoustics

If you like a bright, lively sound, keep the front wall of your listening room bare, and the other walls and the floor, too. While this will also enlarge the sonic image, making it the most spacious, it may be also a little loud and "ringy." Conversely, rugs, drapes, bookcases, and wall hangings produce drier and tighter ("dead" in the good sense) sonics and imaging, which many critical listeners find more satisfactory. A room with a mix of surfaces often works best (and is most pleasant to live and converse in): hard ceiling and carpeted floor, or bare floor and acoustically treated ceiling.

Speakers placed out in the room may sound slightly lean. Locating them right up against the wall will warm up the balance, increasing the lower midrange and bass. You can fine-tune bass and treble tonal balances with your receiver or processor's tone or equalization controls, which you should absolutely feel free to experiment with.

Refer also to the earlier section on usage of the rear ambience tweeter.

Bass Management

When you use your E Series loudspeakers with a surround-sound processor and subwoofer, set the bass management control to "small". Consult your surround receiver or processor manual for instructions on the changing of bass management settings.

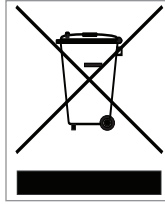
If Service Seems Necessary

First, contact the dealer from whom you purchased the speakers. If that is not possible, write to:

Boston Acoustics, Inc.
300 Jubilee Drive
Peabody, MA 01960 USA

If it is necessary to return your speaker to the factory, contact Boston Acoustics for an RA#.

Phone: 978-538-5000
Fax: 978-538-6240
Email: parts@bostona.com



This symbol found on the product indicates that the product must not be disposed of with household waste. Instead, it may be placed in a separate collection facility for electronic waste or returned to a retailer when purchasing similar product. The producer paid to recycle this product. Doing this contributes to reuse and recycling, minimizes adverse effects on the environment and human health and avoids any fines for incorrect disposal.

Este símbolo que encuentra en el producto, indica que este producto no debe ser desechado en el cesto de basura doméstica. En su lugar, deberá ser depositado en forma separada y en depósitos destinados a esta clase de desechos electrónicos o devueltos a su proveedor con el que regularmente adquiere productos similares. El fabricante pagará por el reciclado de este producto. Haciendo esto contribuimos al reúso y reciclado minimizando de esta forma los efectos adversos al medio ambiente, a la salud de las personas y previniendo el incorrecto desecho.

Ce symbole une fois sur le produit indique que celui-ci ne doit pas être jeté avec les déchets ménagers. Au contraire, il doit être placé dans un lieu séparé collectant les déchets électroniques, ou retourné au lieu de vente lorsque vous achetez un produit similaire. Le fabricant finance le recyclage de ce produit. Ainsi, en incitant à la réutilisation ou au recyclage, les effets négatifs sur l'environnement et la santé publique sont minimisés, et tout risque de poursuite du client pour non-respect de la législation sur les déchets est évité.

Il simbolo sul prodotto indica che il prodotto stesso non può essere smaltito gettandolo semplicemente fra i rifiuti domestici. Esso deve essere smaltito in una struttura abilitata alla raccolta di apparati elettronici oppure, se viene sostituito da un altro apparecchio similare, deve essere consegnato al negoziante presso cui si effettua il nuovo acquisto. Il costruttore ha già pagato per il riciclo di questo prodotto. Seguendo queste raccomandazioni contribuirete a recuperare e riciclare, minimizzando l'impatto nocivo dei rifiuti sulla natura e sulla salute pubblica. Eviterete inoltre il rischio di essere multati per una incorretta procedura di smaltimento.

Dieses Symbol, welches sich auf dem Produkt befindet, zeigt an, daß das Produkt nicht mit dem Hausmüll entsorgt werden darf. Stattdessen sollte es in einen separaten Sammelbehälter für elektronische Geräte, oder zu einem Einzelhändler zurückgebracht werden, bei welchem man ähnliches Produkt kauft. Der Hersteller übernimmt in diesem Fall die Kosten der Beseitigung. Diese vorgehensweise trägt zur Wiederverwendung und zur Wiederverwertung bei, setzt schädliche Wirkungen auf das Klima und die menschliche Gesundheit herab und vermeidet mögliche Geldstrafen für falsche Entsorgung.

Symbolen som återfinns på produkten betyder att varan inte får kastas med hushållsavfall. Vid kassering måste produkten överlämnas till de faciliteter som din kommun erbjuder för återvinning av hemelektronik eller till den återförsäljare där produkten inhandlats. Producenten har betalat för denna återvinningshantering. Genom att följa dessa regler bidrar du som konsument till en effektiv återvinning och minimerar negativa effekter på miljön och vår hälsa samt undviker böter för oriktig hantering av miljöfarligt avfall.

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Boston Acoustics

300 Jubilee Drive
Peabody, MA 01960 USA
978.538.5000
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