ACOUSTIC ENERGY

REFERENCE
SERIES

Owners Manual

Welcome and thank you for choosing Acoustic Energy Reference Series loudspeakers.

The Reference Series loudspeakers are high performance models that benefit from careful installation. We suggest that you take some time to read this manual before you begin the installation process.

Technical Innovations

As well as featuring the finest construction materials and components, the Reference Series speakers also boast some innovative new advances in loudspeaker technology -

DXT® Lens: Specially chamferred faceplate helps match tweeter dispersion and frequency response to that of the bass/mid driver to give finer in-room integration and more natural sound.

Underhung Bass/Mid driver: Ultra long-throw oversized magnet assembly for lower distortion, greater power handling and linearity.

Composite layer cabinet: Self-damping cabinet with no sonic signature due to advanced, inert rubber layer/MDF "sandwich" construction.

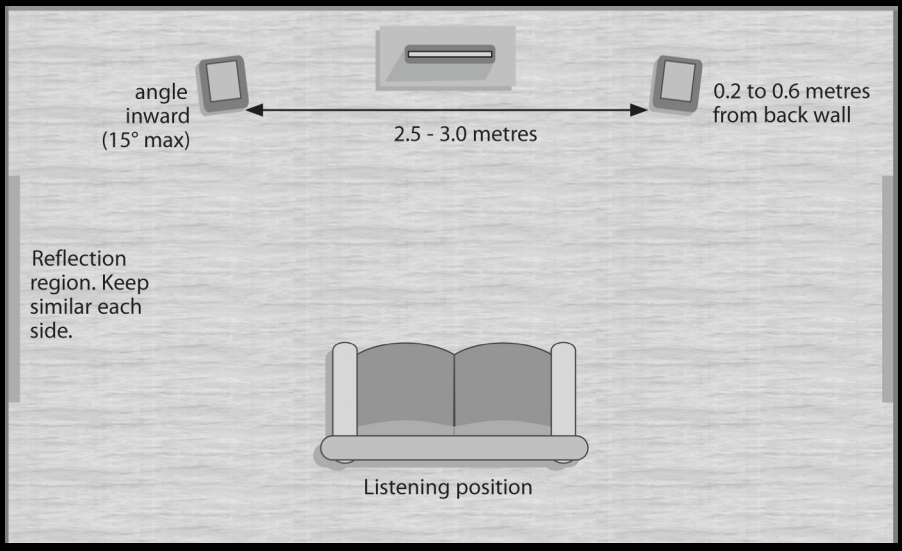
These innovations help put AE's Reference Series at the forefront of modern loudspeaker design whilst retaining a classical, elegant appearance befitting the modern home.

Positioning

Your Reference speakers are primarily designed to be stand-mounted but, if this is not practical, they may be mounted on shelves. Please note: Optimising the speakers' performance by altering their position is far more difficult on shelves than on dedicated stands. Ensure that if shelves are used they are strong enough reliably to support the weight of the speaker. If you have any doubts about installation you should seek advice from your AE retailer.

Note: Eight self-adhesive plastic feet (one to be placed near each bottom corner) are supplied with your Reference speakers for use when placed on shelves.

For optimum performance try to ensure that the immediate surroundings of each speaker are similar in acoustic character. For example, if one speaker is adjacent to bare walls while the other is adjacent to soft furnishings and curtains, both the overall sound quality and the stereo image are likely to be compromised.



Positioning - continued

In positioning your Reference speakers a couple of basic "rules" should be taken into account.

Height: Generally speaking the optimum height for ideal listening should have the tweeter around ear-level when the listener is seated. The Reference speakers are tuned around this position for best crossover phasing between the drive units. The Reference Stand is designed to hold the speaker at the appropriate height for the majority of seating arrangements.

Spacing: The Reference speakers should be positioned between 1.5 and 3m apart and a similar distance away from the listening position. The speakers should be at least 0.2m away from the back wall and at least 0.5m away from any side walls. It may help the stereo image clarity if the speakers are each angled inward towards the listening position slightly, especially if they are relatively far apart. The diagram on the previous page illustrates speaker positioning for stereo usage.

The aim when positioning speakers is to find a happy medium between domestic constraints, tonal balance and stereo image quality. Re-visiting and adjusting the position of your speakers following initial installation will probably further improve the sound quality and is usually worthwhile. More details can be found in the "Fine Tuning" section.

One final consideration to bear in mind is that the speaker drive units create magnetic fields that extend beyond the boundaries of the cabinet. We recommend you keep magnetically sensitive items (CRT-television and computer screens, computer discs, audio and video tapes, swipe cards etc.) at least 0.5m from the speaker. Modern Plasma, LCD and OLED screens are not affected by magnetic fields.

Connection

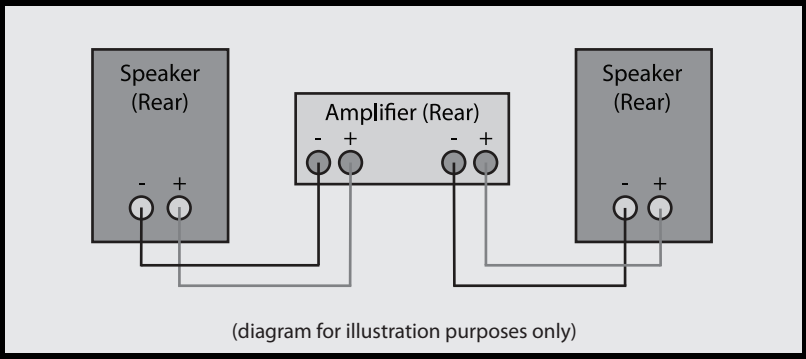
Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage.

The Reference speaker terminals accept a variety of cable terminations: 4mm banana plugs, 6mm and 8mm (1/4 in and 5/16 in) spades, or bare wires up to 4mm (5/32 in) diameter.

The positive cable from the amplifier positive (or red) terminal should connect with the positive (red) terminal on the loudspeaker. Similarly the negative cable should connect the amplifier negative terminal (black) to the negative terminal (black) on the loudspeaker.

After wiring, lower the volume to the minimum, switch on the amplifier, select the signal source and then raise the volume to the listening level required to ensure all is working correctly.

Important Safety Notice: In order to comply with European CENELEC safety regulations, the 4mm holes in the ends of the terminals are blocked by plastic pins. You should ensure that any banana plug style speaker cable connectors cannot be used in an unsafe manner by children or other uninformed persons.



(diagram for illustration purposes only)

Fine Tuning

Before fine tuning, double check that all connections are in place and correct. Balance of the speakers will alter mainly depending on distance from the rear boundary behind them. Closer to a rear wall will result in more bass/mid output but reduced image depth and space, further out into the room the balance will get leaner in the bass/mid region but sound larger in terms of space of image.

The best way to experiment is to play music through the speakers at a reasonable level and carefully manoever them around the general area in which they are to be used until the best balance is found. Even small changes in position can have a large overall effect. When in the desired location stand spikes should be levelled and made secure. It is advised to seek help with this process to prevent personal injury in lifting the speakers, if in doubt about positioning call your AE dealer for advice.

Room environment has a large effect on the sound - If the speakers sound harsh, try increasing the amount of soft furnishings in the room (for example, by use of rugs/beanbags/curtains etc), or reducing them if the sound is too dull. For critical listening the speaker grilles can be removed by gently pulling them by the edges - they are held in place by magnets and will self-align when replaced.

Running-in

The performance of your speakers may alter slightly during the initial “running-in” period, usually settling down to their permanent state after a couple of weeks use. This is due to the mechanical components and materials needing time to settle down and bed in fully. The length of time this takes depends on many factors and is approximate.

The basic character of the speaker will remain the same but there will be subtle differences that the listener should bear in mind when listening over this period. Generally the treble will gradually smooth off and bass will become more fluid & powerful with less “boom”.

Warranty

Your Acoustic Energy Reference loudspeakers are guaranteed against original defects in materials, manufacture and workmanship for three years from the date of purchase.

Under this warranty Acoustic Energy agrees to repair any defect or, at the company's discretion, replace the faulty component(s) without charge for parts or labour. This warranty does not imply any acceptance by Acoustic Energy or its agents for consequential loss or damage and specifically excludes fair wear and tear, accident, misuse or unauthorised modification. This warranty is applicable in the United Kingdom only and does not in any way limit the customer's legal rights. If you have reason to claim under the warranty please contact your dealer in the first instance. Any claims and enquiries under the warranty for Acoustic Energy products purchased outside the UK should be addressed to the local importers or distributors.

Please retain all original packaging materials for possible future use. We suggest that you complete details of purchase now and keep this information in a safe place for future reference.

Name:

Address:

Dealer:

Purchase Date:

Serial Numbers: /

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