

AESPRIT

300c

Owner's manual

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300c



Introduction

Congratulations on choosing the Acoustic Energy AESPRIT 300c, a powerful compact two-way loudspeaker which features metal diaphragm technology and is capable of outstanding performance. Please take a few moments to read this manual. The advice it contains will enable you to get the very best performance out of your Acoustic Energy loudspeakers.

The AESPRIT 300c utilises metal cone mid-bass drive unit technology, proven in the AE Reference series. The rigid anodised alloy cone ensures pure piston action and also acts as a heat sink for the bonded voice coil. These features provide exceptional clarity, transparency, dynamics and power handling.

The tweeter - or treble driver - is a high-quality neodymium unit with a silk fabric dome integrating smoothly with the rest of the system.

All drive units are fully magnetically shielded so that the speakers can be used in close proximity to a TV screen or monitor for AV applications.

The Acoustic Energy AESPRIT 300c loudspeaker uses quality OFC internal wiring, which enhances detail and transparency.

Positioning

The **AESPRIT** 300c speakers are best heard with the tweeters at, or just below, ear height when the listener is seated. For serious listening the grilles are best removed.

Rigid support is essential for the speaker to develop its full detail and dynamic performance. Rigid stands with spikes, cones or other methods of secure mounting are recommended. 'Free-field' stand mounting gives improved stereo separation and depth. If **AESPRIT** 300c speakers are shelf mounted the support must be firm; cones are still recommended beneath the cabinets.

Closeness to room boundaries has a major impact on the low frequency performances. The speakers should be kept away from corners (which will produce booming). The speakers can be positioned fairly close to a back or side wall but should not be the same distance off the ground as from the rear or side wall.

Experiment with the best position to achieve a full, yet clean bass response. Trust your judgement and ears.

For best stereo imaging the speakers should be as far apart as they are from the listening position.

Connection

Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage. The diagram illustrates one loudspeaker only.

Conventional

Normal passive wiring requires shorting links to be in place between the treble and mid/bass sections. The positive (ribbed) cable from the amplifier positive (or red) terminal should connect with the positive (red) terminal on the loudspeaker. Similarly the negative (smooth) cable should connect the amplifier negative terminal (black) to the negative terminal (black) on the loudspeaker.

Bi-wiring

Bi-wiring separates the bass and treble ground paths in the loudspeaker and offer sound quality advantages. An extra set of cables is required. Note that the shorting links are removed between the treble and mid/bass sections and should be stored for later use if conventional, passive driving is required.

Two pairs of cables are connected to the amplifier terminals. One cable of each pair should connect to the treble section and one to the mid/bass section. The positive (ribbed) cables from the amplifier positive (or red) terminal should connect with the positive (red) terminals on the loudspeaker. Similarly the negative (smooth) cables in each pair should connect the amplifier negative terminal (black) to the negative terminals (black) on the loudspeaker.

Bi-amping

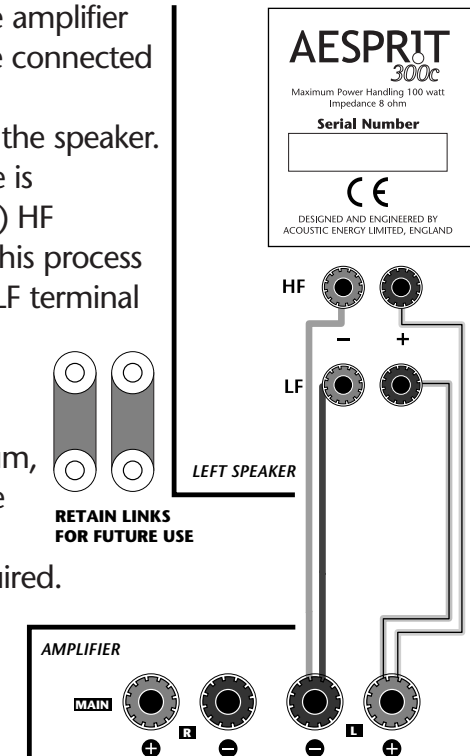
Bi-amping adds a second amplifier to the system. One power amplifier drives the treble section of both loudspeakers; a second drives the mid/bass sections. **Note that the shorting links must be removed. Failure to do so will result in damaging the amplifiers.**

As regards the loudspeakers, wiring for bi-amping is achieved in much

the same way as bi-wiring. Treble amplifier positive (red) terminals should be connected via the ribbed cable to the positive (red) HF terminal on the speaker. Similarly, treble amplifier negative is connected to the negative (black) HF terminal on the speaker. Repeat this process with the mid/bass amplifier and LF terminal pair.

After wiring up

Lower the volume to the minimum, switch on the amplifier, select the signal source and then raise the volume to the listening level required.



Specifications

HF unit	Neodymium tweeter with high dispersion diaphragm. Ferro fluid cooled and damped. Magnetically shielded. Exclusively profiled.
LF unit	110mm die-cast chassis. Lightweight alloy cone with 32mm coil. High-power, long-throw magnet system. Magnetically shielded
Crossover	@ 3.2 kHz, 2nd order LF, 3rd order HF
Power Handling	100W max (undistorted program drive)
Frequency response $\pm 3\text{dB}$	45Hz to 23kHz
Frequency response $\pm 3\text{dB}$	55Hz to 21kHz
Sensitivity	88.5 dB/W
Impedance	8 ohm (6 ohm minimum)
Cabinet	Real wood veneered. 15 mm MDF wrap. Full circumferential brace. Front firing, high power, low turbulence bass reflex ports. 30 mm MDF front baffle.
Terminals	Gold-plated 4-way binding posts.
Weight (excl. packaging)	6kg
Dimensions (WxHxD)	186 x 291 x 231 mm

Warranty

Your Acoustic Energy loudspeakers are guaranteed against original defects in materials, manufacture and workmanship for 3 years from the date of purchase. 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.

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. Claims and enquiries under the warranty for AE products purchased outside the UK should be addressed to the local importers or distributors.

If you have reason to claim under the warranty please contact your dealer in the first instance.

Dealer's name:.....

Address:.....

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Date of purchase:.....

Serial numbers:.....

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