100 SERIES

Owner's manual

AE100i

((AE))
LOUDSPEAKERS

Introduction

Congratulations on choosing the Acoustic Energy AE100*i* — a powerful compact two-way loudspeaker which 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 AE100*i* features a critically shaped polymer-pulp cone mid/bass driver and a soft dome tweeter (treble driver). Significant improvements over the original AE100 have been achieved as a result of realigning and upgrading the components within the crossover including audiophile quality OCC crystal copper wiring to the drive units. Acoustically these improvements give greater transparency with a more neutral treble, a smoother blend between bass and mid-band and an overall more powerful bass with greater speed and clarity. Sensitivity and impedance have also been marginally increased, making the AE100*i* easier to drive. A low diffraction injection moulded grille is now featured as standard.

In addition to conventional, passive driving, the AE100*i* is capable of being bi-wired or bi-amped for optimum sound quality and audiophile performance.

Positioning

AE100*is* 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.

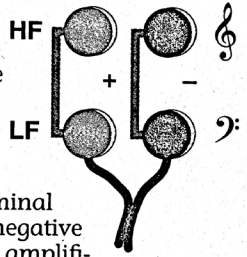
Rigid support is essential for the speaker to develop its full detail and dynamic performance. Rigid stands with spikes, cones or other methods of secure mounting are recommended. 'Free-field' stand mounting gives improved stereo separation and depth. If AE100*is* are shelf mounted the support must be firm; cones are still recommended beneath the cabinets.

Closeness to room boundaries has a major impact on the low frequency performance. 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 the distance away from that wall should not approximate to the height of the stand in use. The speakers should not be the same distance off the ground as from the rear or side wall.

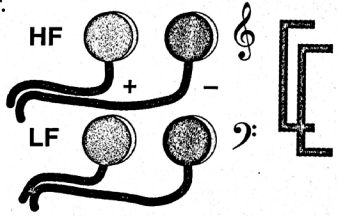
Experiment with the best position to achieve a full, yet clean bass response. Trust your judgement and ears.

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

Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage. The diagrams illustrate 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 offers great 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 HF or treble section and one to the LF or 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.

As regards the loudspeakers, wiring for bi-amping is achieved in much the same way as bi-wiring. Treble amplifier positive (red) terminal 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 bass amplifier and LF terminal pair.

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

Specifications

HF unit	25 mm soft fabric dome, ferrofluid cooled and damped
MF/LF unit	90 mm polymer-pulp diaphragm cone with a 32 mm high-power voice coil
Crossover	5 element 12/6 dB per octave slope at 3 kHz
Power handling	for use with amplifiers up to 100 watts max
Overall frequency response	45 Hz – 22 kHz
Frequency response ±3 dB	75 Hz – 18 kHz
Sensitivity	88 dB/1 w/1 m
Impedance	typically 8 ohms
Minimum impedance	6 ohms at 250 Hz
Cabinet	Precision engineered low resonance enclosure. 18mm MDF throughout with full internal bracing
Terminals	Gold-plated 2-way binding posts bi-wired
Weight	6 kg each
Dimensions (WxHxD)	180x295x250 mm

Warranty

Your Acoustic Energy loudspeakers are guaranteed against original defects in materials, manufacture and workmanship for 5 years from the date of purchase. Please retain all original packaging materials for possible future use.

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 and 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: .....
.....
.....
.....
Date of purchase: .....
Serial numbers: .....

Acoustic Energy Limited
16 Bridge Road, Cirencester
Gloucestershire GL7 1NJ
Tel +44 (0)1285 654432
Fax +44 (0)1285 654430

((AE))
ACOUSTIC ENERGY