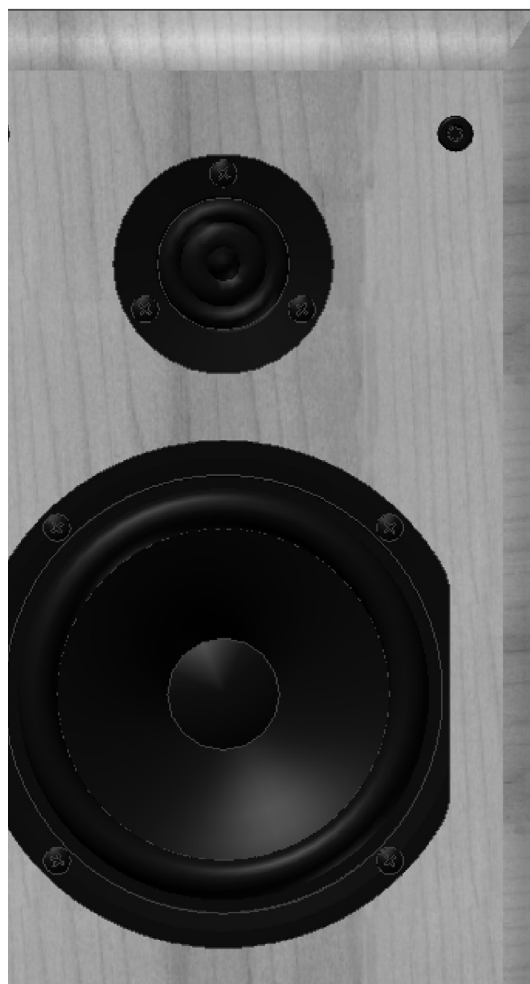


**AEGIS** *NEO*  
SERIES



# 1. INTRODUCTION

Thank you for purchasing this Acoustic Energy product. As a valued customer we would like to keep you up to date with all news and events including new products, exhibitions and exclusive promotions. To enable us to communicate these exciting developments please go to our website - [www.acoustic-energy.co.uk](http://www.acoustic-energy.co.uk) - and complete the ownership registration form.

Perhaps more than any other hi-fi product, speakers are sensitive to installation so please take a little time to read this manual and to follow, as far as practical, the guidelines it contains. Careful installation will help ensure that your Aegis Neo speakers perform optimally. Should you have any questions not covered here we are happy to try and answer them either by telephone or email. Contact information can be found in Section 13.

This manual covers the Aegis Neo One, Three and Centre. Following the introduction, it is divided into sections covering handling, installation,

## 3. NEO ONE INSTALLATION

The Aegis Neo One is intended to be used mounted on speaker floor-stands. Alternative mounting arrangements such as wall brackets are possible although these may result in reduced performance. If wall brackets are to be used they should be as rigid as possible and firmly attached to brick-built walls.

The construction style, rigidity and dimensions of the floor-stands are of critical significance to the performance of the Aegis Neo One. Stands should broadly follow the specification below. Your retailer or distributor will be able to offer advice.

### Recommended Neo One Floor-stand Specification.

<b>Construction Style:</b>	Direct coupled multi-pillar.
<b>Mass Loading:</b>	Preferred.
<b>Overall height:</b>	0.50 - 0.65 m (Aegis Neo One top panel to be just below head height when seated).
<b>Top plate Dimensions</b>	
<b>Minimum width:</b>	140 mm
<b>Maximum width:</b>	180 mm
<b>Minimum depth:</b>	190 mm
<b>Maximum depth:</b>	210 mm
<b>Top plate interface:</b>	Direct coupled tri-point or damped-compliance.
<b>Floor interface:</b>	Floor spikes (M6 minimum).

Thanks to the use of neodymium magnet systems the Aegis Neo One is intrinsically magnetically shielded and can be positioned in close proximity to magnetically sensitive equipment and media.

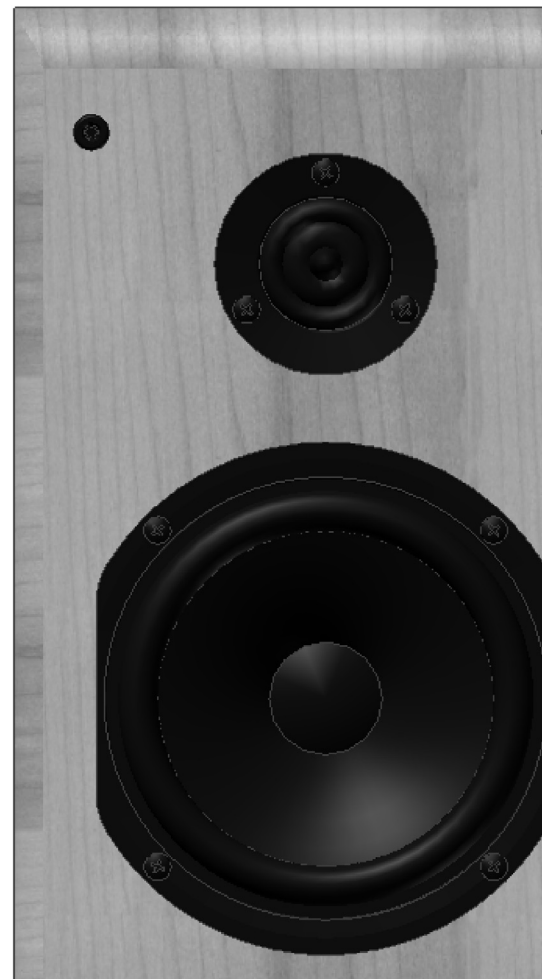
positioning, connection, amplifiers, listening, specifications, warranty and contact information. We recommend that you read at least the first six of these sections carefully before installing and using your speakers.

## 2. HANDLING

Aegis Neo speakers are relatively delicate precision engineered products that can be damaged by inappropriate handling. Please take care when unpacking or moving them not to touch any of the drivers. Damage to a driver will at best degrade performance and at worst result in complete failure.

The enclosure surfaces should also be handled sympathetically. Any cleaning should only require a soft cloth, slightly dampened if necessary. Do not use any polishes or solvent based cleaning agents.

The packaging should be retained for future use.



## 4. NEO THREE INSTALLATION

The Aegis Neo Three is a floor-standing loudspeaker intended to be positioned clear of room boundaries and coupled to the supporting floor through spikes. If spikes are inappropriate for your floor covering, metal protection pads, coins for example, may be used between the spike and the floor.

The separately packed plinths must be attached to the bottom of each Aegis Neo Three before they can be installed. Invert each speaker onto a “protective” piece of material so as not to damage the top of the cabinet. Insert the four screws (supplied in the packaging) through the holes in the plinth and line them up with the pilot holes in the cabinet. Screw them into the cabinet making sure that the plinth is firmly attached. Failure firmly to attach the plinths will degrade the speakers’ performance.

Four M8 floor spikes and lock-nuts are supplied within the Aegis Neo Three packaging. The spikes and lock-nuts should be fitted to the underside of each Aegis Neo Three plinth once the speaker has been moved near its final location. Carefully lay the speaker on its back to gain access to the tapped holes in the plinth. Screw a spike and lock-nut into each hole leaving a length of spike extending beyond the lock-nut so that when the speaker is upright the lock-nuts will “float” just above the floor covering.

Tighten three of the lock-nuts on each speaker with a 13mm spanner leaving one lock-nut finger-tight to aid adjustment once the speaker is upright in its final position. Once the final position of each speaker has been established adjust the length of the loose spike so that the speaker is vertical and does not rock. If the floor is particularly uneven it may be necessary to loosen one of the tightened spikes to ensure that the speaker can be levelled.

Finally, tighten all loose lock-nuts. It may be necessary to re-adjust to minimise rock once the speaker has settled on the floor. Take care when installing floor spikes. They are sharp and can cause injury or pierce electrical cables.

The Aegis Neo Three can be “mass-loaded” in a compartment at the bottom of the cabinet. Mass loading can significantly improve the performance of the speaker. The compartment can be filled with washed, fully dried and non salt contaminated sand, or suitable metal chips, via the access hole in the back panel. A plastic bung is provided to seal the cabinet. If you decide not to mass-load the speakers, we still recommend fitting the plastic bung to avoid unwanted resonance. Be aware that the plastic bung has not been designed to be removable after insertion. You may wish to use a temporary removable plug until you have made a decision whether to mass-load.

Thanks to the use of neodymium magnet systems the Aegis Neo Three is intrinsically magnetically shielded and can be positioned in close proximity to magnetically sensitive equipment and media.

## 5. NEO CENTRE INSTALLATION

The Aegis Neo Centre is intended to be used in a home theatre system located either directly above or below the screen. It can be stood either directly on a furniture unit, integrated within a screen stand, mounted on a dedicated speaker stand or on a wall using appropriate bracket hardware.

Best results are likely to be gained if the Aegis Neo Centre is directly coupled to the floor via a dedicated spiked stand. If the screen stand is to carry the Aegis Neo Centre it is advisable to de-couple it from the screen with the supplied adhesive rubber feet so that it does not disturb the picture. If a wall bracket is to be used it should be as rigid as possible and firmly attached to a brick-built wall.

Thanks to the use of neodymium magnet systems the Aegis Neo Centre is intrinsically magnetically shielded and can be positioned in close proximity to magnetically sensitive equipment and media.

The following section provides further general advice on Home Theatre speaker positioning and room layout.

## 6. NEO ONE AND THREE POSITIONING

The position of speakers within the listening room is likely to have more influence over their performance than any other aspect of their installation. It is worth spending some time experimenting both with the finer points of speaker positioning, as well as the larger scale issues of room layout.

If you are already familiar with the acoustic characteristics of your listening room, and the way speakers perform in it, you may already have a good feel for where to position your new Aegis Neos. However, installing any new hi-fi component provides a good opportunity to review an existing set-up and perhaps make improvements.

The position requirements for a pair of Aegis Neo Ones or Neo Threes installed in an average sized and furnished listening room (say 4m x 5m) are as follows:

- Between 0.2 and 0.6 metres from the rear wall.
- Between 0.4 and 0.8 metres from the side walls.
- Between 2.5 and 3.5 metres apart.
- Clear of corners.
- Angled inward (to a maximum of 15°) towards the listening position.

Don't worry if, thanks to the architecture or layout of your room, it is not practical to follow each requirement. The most important thing is to experiment with the different options that are practical and find the one that works best.

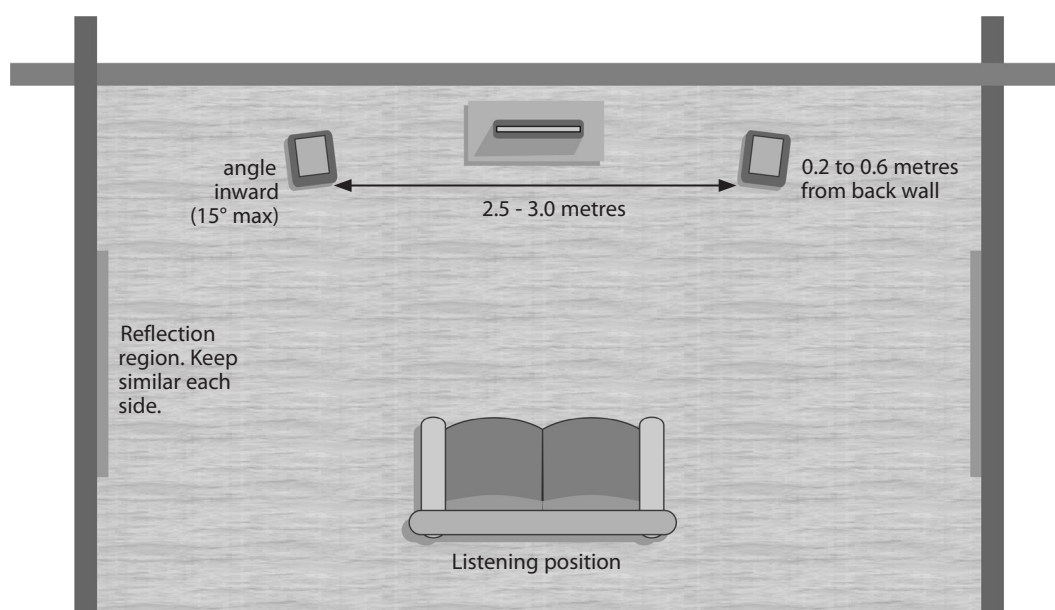
While it is often the first instinct to position a pair of speakers against the shorter wall of a rectangular room, it is often the case that a position against the longer wall will produce better results. This is because the long wall position tends to result in less prominent reflections from the side walls of the room. However, whether used against the long or short wall, it is important that each speaker of

the pair is located in a similar acoustic environment (different environments would be, say, a curtained area and a solid wall). The acoustic character of the side walls of the room in the area where the main reflection between speakers and listening position will occur should also be similar. **Diagram One** illustrates a typical layout.

Once your speakers are connected (see Section 8) and working, and you begin to become familiar with their performance, it is likely to be worthwhile experimenting a little more with their positioning.

Reducing the distance between the speakers and the rear wall will increase the level of bass and low midrange making the speakers sound warmer. The warmth however is likely to be gained at the expense of some mid-range clarity and stereo image focus and depth. Increasing the toe-in angle of the speakers may regain some image focus but again this is likely to be at a cost of image width and openness. Learning through experimentation how speakers behave in your room will help you find the optimum solution.

### DIAGRAM ONE



## 7. NEO CENTRE POSITIONING

The position of the speakers in a home theatre installation will have great influence over its performance. It is worth spending some time experimenting both with the finer points of speaker positioning, as well as the larger scale issues of room layout. **Diagram Two** illustrates an idealised general home theatre speaker layout.

If you are already familiar with the characteristics of your home theatre room, and the way speakers perform in it, you may already have a good feel for where to position your Aegis Neo Centre. However, installing any new speaker component provides a good opportunity to review an existing set-up and perhaps make improvements.

## 8. CONNECTING

Each Aegis Neo is fitted with a pair of binding-post terminals. The terminals can accept either stripped wires, spade connectors, or 4mm plugs. Each of these termination methods is potentially equally effective and the choice is likely to be influenced by the type of speaker cable used. Your dealer, distributor or cable manufacturer will be able to offer advice.

To connect the speakers, simply connect the speaker cable to the terminals ensuring correct **connection polarity** as described below. Take care when connecting cables not to touch the negative and positive terminals together and “short-circuit” the amplifier. Make connections with the amplifier off.

### Connection Polarity.

It is important when connecting speakers to ensure that each terminal is connected with the correct polarity. **Positive** speaker terminals should always be connected back to amplifier **positive** terminals, and **negative** speaker terminals connected back to amplifier **negative** terminals. Performance will be degraded if connections are made with incorrect polarity.

### Cable Choice.

Choice of cable type will be influenced by the characteristics of other components in your hi-fi system and your dealer or distributor will be able to advise.

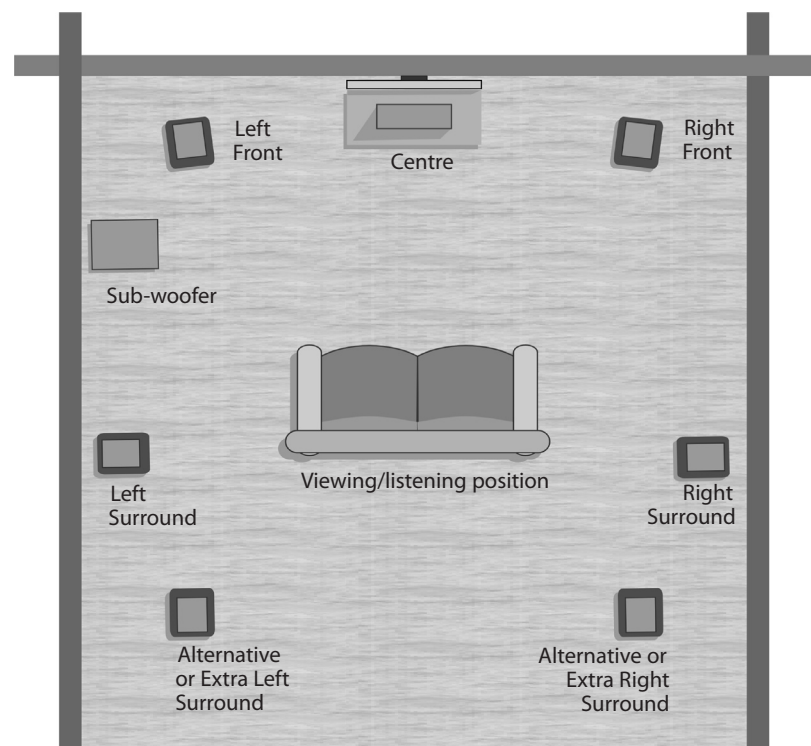
The position requirements for an Aegis Neo Centre are as follows:

- Between 0.05 and 1.0 metres from the rear wall.
- Generally in-line with the display screen.
- Directly above or below the display screen.

Don't worry if, thanks to the architecture or layout of your room, it is not practical to follow each requirement or the layout diagram exactly. The most important thing is to experiment with the different options that are practical and find the one that works best. Aegis Neos are magnetically shielded and can be used in close proximity to CRT screens.

Once your Aegis Neo Centre is connected (see Section 8) and working, and you begin to become familiar with its performance, it is likely to be worthwhile experimenting a little more with its positioning. For example, reducing the distance between the speaker and the rear wall will increase the level of bass and low midrange making the speaker sound warmer. The warmth however is likely to be gained at the expense of some mid-range clarity.

## DIAGRAM TWO



There are however some simple guidelines to consider:

- Cable runs to each speaker should be kept as short as possible consistent with each being of equal length.
- Short cable runs are especially important if the cable is of relatively small cross-sectional area.
- If the cable is advertised as “directional” care should be taken to ensure that its orientation is as recommended.

## 9. AMPLIFIERS

The Aegis Neos are relatively high sensitivity speakers that do not require generously rated power amplifiers for adequate volume levels to be achieved in an average listening room. A minimum of 25 and maximum of 120 Watts into 8 Ohms per channel is recommended. Aegis Neos also offer a relatively easy load to the amplifier and do not make unusually heavy demands on its power delivery.

No overload protection systems are fitted to the Aegis Neos so it is possible to cause damage through over-driving. Such damage can occur whatever the power rating of the amplifier and is not covered by any warranty. If ever the sound at high volumes becomes distorted your speakers are at risk of damage. In such circumstances the volume must be reduced.

## 10. LISTENING

It is wise before listening to your speakers to make one final check of the cables and connections. If all appears well begin listening at a relatively low level to confirm that the system is operating as expected. Only increase the volume if you are happy that the sound at low levels is fundamentally as expected. If you are unhappy, turn the system off and re-check all the cables and connections.

Aegis Neos may take a little time to "run-in", and similarly the system will also perhaps take some time to reach normal operating temperatures. It is unwise therefore to make rapid judgements about the performance of the speakers. Your ears too will take some time to adjust to the new sound, so revisiting the system set-up, speaker positioning especially, is best left for a few days.

## 11. SPECIFICATIONS

Model:	Aegis Neo One	Aegis Neo Three	Aegis Neo Centre
Type:	2-way, reflex loaded.	2.5-way, reflex loaded.	2.5-way, sealed enclosure.
LF Driver	N/A	130mm pressed alloy cone.	130mm pressed alloy cone.
LF/MF Driver:	130mm pressed alloy cone.	130mm pressed alloy cone.	130mm pressed alloy cone.
LF & LF/MF Magnet Systems	Neodymium.	Neodymium.	Neodymium.
HF Driver:	25mm Neodymium Ring Radiator.	25mm Neodymium Ring Radiator.	25mm Neodymium Ring Radiator.
Filter Network:	3rd order at 3.5kHz.	1st order at 200Hz 3rd order at 3.5kHz.	1st order at 200Hz 3rd order at 3.5kHz.
Cabinet:	Braced 15mm MDF carcass.	Braced 15mm MDF carcass.	Braced 15mm MDF carcass.
Frequency Response:	60Hz to 40kHz $\pm$ 3dB	43Hz to 40kHz $\pm$ 3dB	75Hz to 40kHz $\pm$ 3dB
Frequency Range:	45Hz to 45kHz @ -6dB	35Hz to 45kHz @ -6dB	63Hz to 45kHz @ -6dB
Power Handling:	120W peak programme	170W peak programme	120W peak programme
Amplifier Compatibility:	25 - 120 Watts into 8 Ohms	25 - 170 Watts into 8 Ohms	25 - 150 Watts into 8 Ohms
Nominal Impedance:	8 Ohms	8 Ohms	8 Ohms
Sensitivity:	89dB for 1 Watt at 1 metre	90dB for 1 Watt at 1 metre	90dB for 1 Watt at 1 metre
Dimensions (H x W x D):	357 x 182 x 237mm	905 x 203 x 242mm	178 x 480 x 195mm
Weight:	6 kg (single, unpacked)	14 kg (single, unpacked)	9 kg (single, unpacked)

Acoustic Energy reserves the right to modify product specifications.



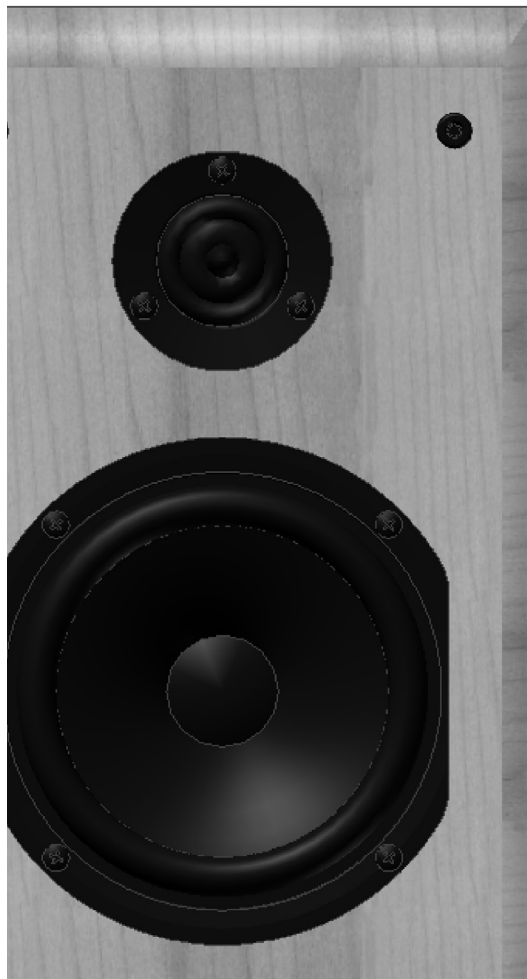
## 1 2. WARRANTY

Your Acoustic Energy speakers 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

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:** \_\_\_\_\_

## 1 3. CONTACT

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**16 Bridge Road**

**Cirencester**

**Gloucestershire GL7 1NJ**

**UK**

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**Web: [www.acoustic-energy.co.uk](http://www.acoustic-energy.co.uk)**

Products that display the crossed-out wheeled bin logo cannot be disposed of as domestic waste but must be taken to a facility capable of re-cycling them and appropriately handling any waste by-products. Contact your local authority for details of the nearest such facility.





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