

**AESPRIT**  
308

**Owner's manual**

**AESPRIT**  
308

**(( AE ))**

**ACOUSTIC ENERGY**

# Introduction

---

---

**Congratulations on choosing the Acoustic Energy AESPRIT 308, a powerful, active subwoofer loudspeaker which is capable of outstanding Hi-Fi and home cinema 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 loudspeaker.**

The AESPRIT 308 is capable of handling 200 watt RMS with a clean bass response extending to 25 Hz in the listening environment. Flexibility in its operation and connection mean the AESPRIT 308 will compliment a wide range of high quality hi-fi and home theatre systems.

Correctly installed the sense of power and weight of its bass output can add substantially to the enjoyment of high quality music and prove indispensable for thrilling and realistic home theatre sound.

## **Before applying power**

The AESPRIT 308 is available in two main power versions to enable this product to be used globally, one to operate from 220-240V AC line main power and one from 110-120V AC line main power. Please ensure you have the correct version that relates to your country's main power before use.

**NOTES:** Our warranty does not cover damage caused by using the incorrect version relative to the main power supply. The grille is designed to protect the bass unit from possible damage and should not be removed.

# Safety

---

---

Please read all operating and safety instructions before use retaining them for future reference. Adhere to all warnings on the product or in this manual.

**Power sources** - *The subwoofer should be connected only to a power supply of the type described on its rear panel. If you are not sure consult your dealer or a qualified electrician.*

**Power cord** - *Power supply cords should be routed so as not to be walked on or caught under or against items.*

**Ventilation** - *To ensure reliable operation and to prevent the subwoofer from overheating, ensure good ventilation. Do not cover the subwoofer and do not place it closer than 10cm from walls or soft furnishing. Do not use in a built-in installation unless proper ventilation is provided. Consult your dealer.*

**Water and moisture** - *The subwoofer should not be used near water, i.e. near a washbowl, basin, in a wet basement or swimming pool area.*

**Temperature** - *The subwoofer may not function correctly at extremely low or freezing temperature. The subwoofer should also be sited away from heat sources such as radiators or other electrical equipment that produces heat, including other amplifiers*

**Electric shock** - *Care should be taken so that objects are not inserted into connectors or other apertures and that liquid does not spill into the enclosure. Do not insert objects into the reflex port. Never attempt to dismantle the subwoofer as serious electric shock might occur if the internal parts are touched.*

**Cleaning** - *Unplug the subwoofer from the wall power outlet before cleaning. Use only a clean, dry cloth. Do not use cleaners, liquids or solvent-based preparations to clean the cabinet.*

**Smells** - *If an abnormal smell or smoke is detected, immediately turn the power off and unplug the subwoofer from the wall power outlet.*

# Operation

## FRONT PANEL

### 1. Crossover frequency knob

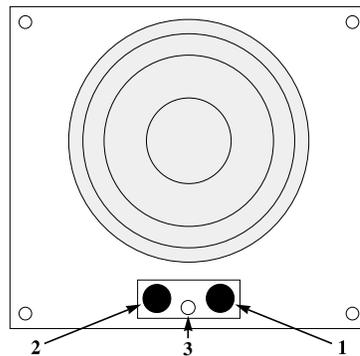
Adjusts the balance at the crossover point between the bass (low frequencies) from the AESPRIT 308 and the treble (high frequencies) continuing to the main stereo front speakers.

### 2. Sub level volume control knob

Adjusts the volume level output of the subwoofer, allowing you to balance the volume of the AESPRIT 308 to blend in with your main stereo speakers. Turning the knob clockwise increases the volume level, and turning the knob counter clockwise decreases the level.

### 3. Infrared sensor

The sensor must be kept clear to ensure proper working of the remote control.



## BACK PANEL

### 4. Power switch

Switches the power ON and OFF. By switching to AUTO the power is automatically switched ON when a signal is applied to an input.

### 5. Power indicator light

This indicator lights green when the power is switched ON, and lights red when in STANDBY mode.

### 6. Power cord socket

Connect the cord supplied to a 110-120V or 220-240V AC main power outlets.

### 7. Phase switch

The normal setting for the phase is the 0° position. Switching to 180° will change the subwoofer phase and vary the tonal quality of the bass, which is also dependant on the location of the AESPRIT 308 relative to your main stereo speakers

### 8. Line in jacks (RCA-type pin-plug)

Used to connect the subwoofer to the PRE-OUT jacks of the amplifier.

### 9. Line out jacks (RCA-type pin-plug)

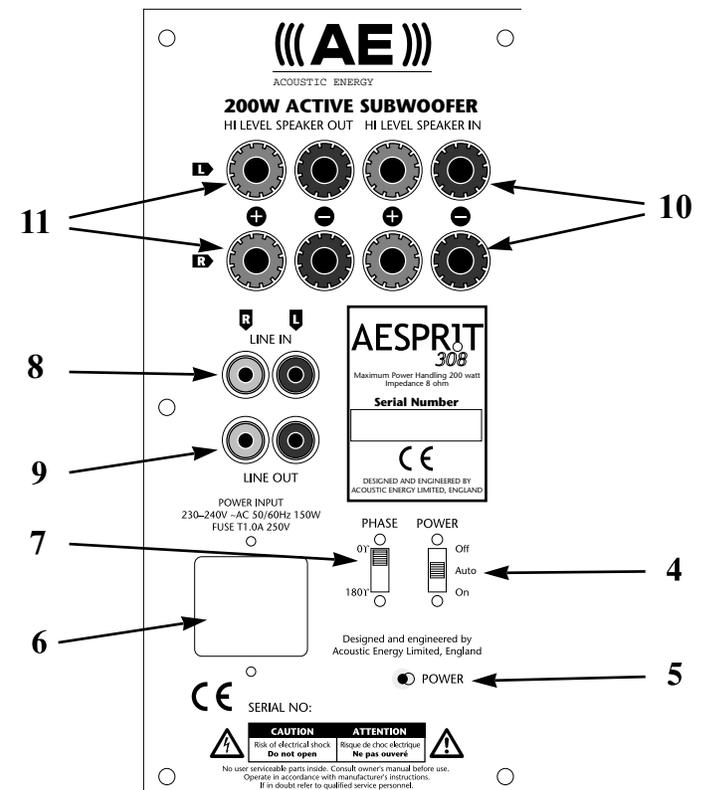
Used to connect back to the power amp inputs on your amplifier.

### 10. From amplifier-Hi-level speaker in terminals

Used to connect the FRONT SPEAKER terminals of the amplifier to this unit.

### 11. To speaker-Hi-level speaker out terminals

Used to connect the front speakers with this unit, via the 75 Hz 1st-order crossover.



# Positioning

The AESPRIT 308 is virtually omni-directional, so it can be positioned in almost any location in the room. For the best performance in the ideal room the subwoofer should be positioned in a corner of the room or near a back wall. In certain circumstances the addition of a second AESPRIT 308 located in another position in the room helps to achieve a more uniform bass.

The use of two subwoofers often provides a greater than expected increase in sound quality and bass dynamics, worth more than the additional cost would suggest. If two AESPRITs 308 are used, they should ideally be positioned in the corners near the respective units of the stereo loudspeaker pair.

This subwoofer may be installed using the four rubber feet or spikes with lock nuts, both supplied. It may not be placed directly onto the floor since the reflex port is firing to the ground.

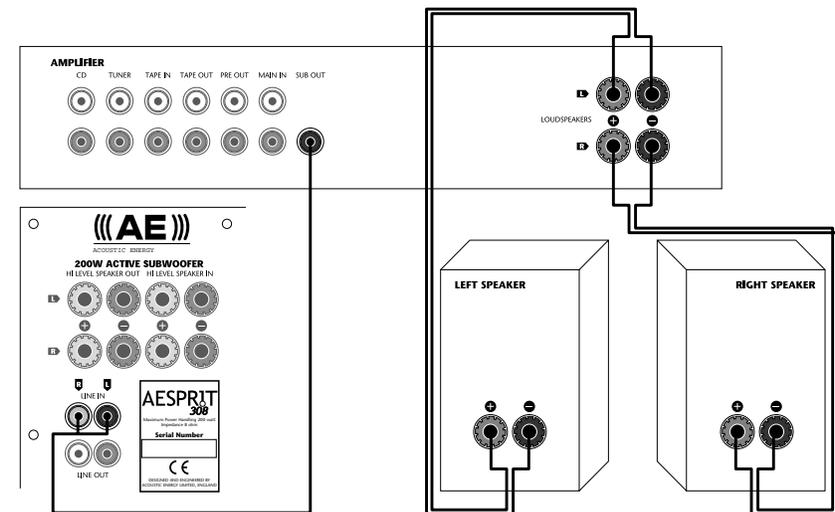
*When positioned correctly ensure space is left to the rear of the subwoofer since all operation switches are on the rear panel.*

# Connections

Check that both your amplifier and subwoofer are switched off before connection. Failure to do so may result in speaker or amplifier damage. It is sometimes recommended that over-long low cost cables are used initially to facilitate experimentation with positioning, and only then purchase and install using the final cable choice.

## 1. For use with amplifiers having a subwoofer Out jack:

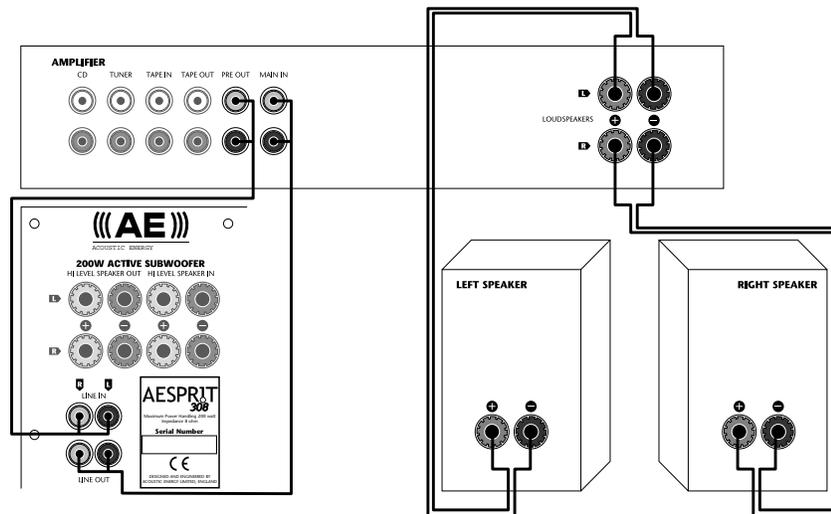
Connect from the dedicated subwoofer line output on the amplifier to the line input(s) on the AESPRIT 308. (A single lead to either input or a 'Y' connector to both inputs may be used). The stereo speakers are run direct for higher definition.



# Connections

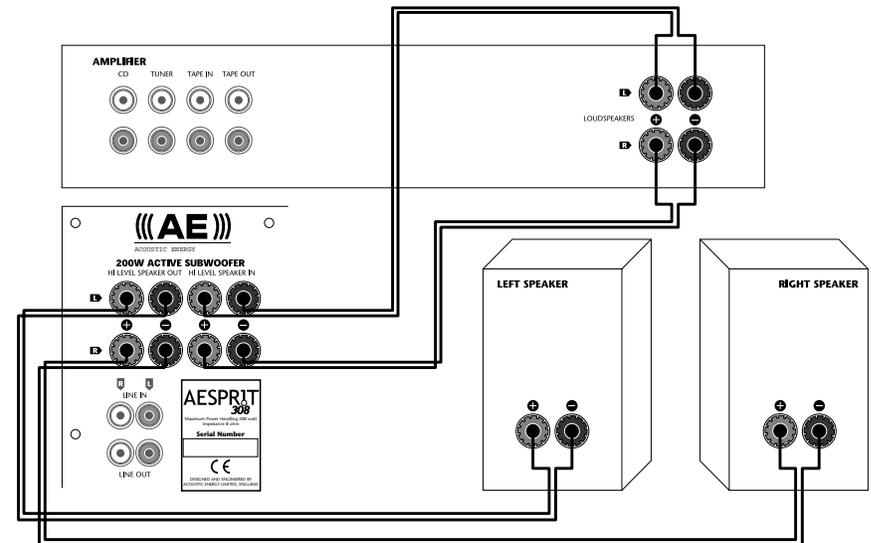
## 2. For use with amplifiers having line level pre-amp jacks:

The pre-amp outputs of your amplifier can be connected to the line-level inputs on the AESPRIT 308. The line level outputs on the AESPRIT 308 are then connected back to the power amp (main) inputs on your amplifier. This provides the greatest power handling for the stereo speakers.



## 3. For use with amplifiers not having either a subwoofer Out jack or Line level pre-amp jack

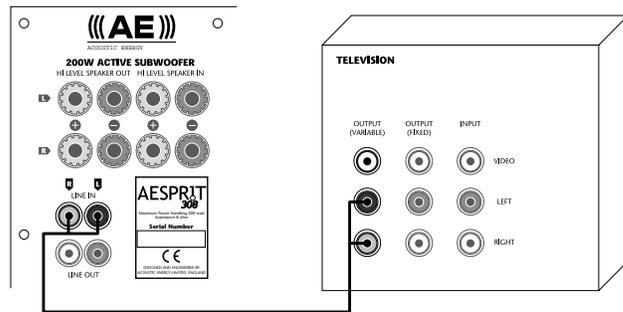
Using speaker cable from the speaker terminals on your amplifier, connect to the Hi-level speaker input terminals on the AESPRIT 308, and then a further set of cables from the Hi-level output terminals to your main stereo/satellite speakers. (The stereo speakers receive the original amplified signal minus the frequencies used by the subwoofer). This provides greatest power handling for the system with good overall performance.



# Connections

## 4. For use with televisions with a variable audio output.

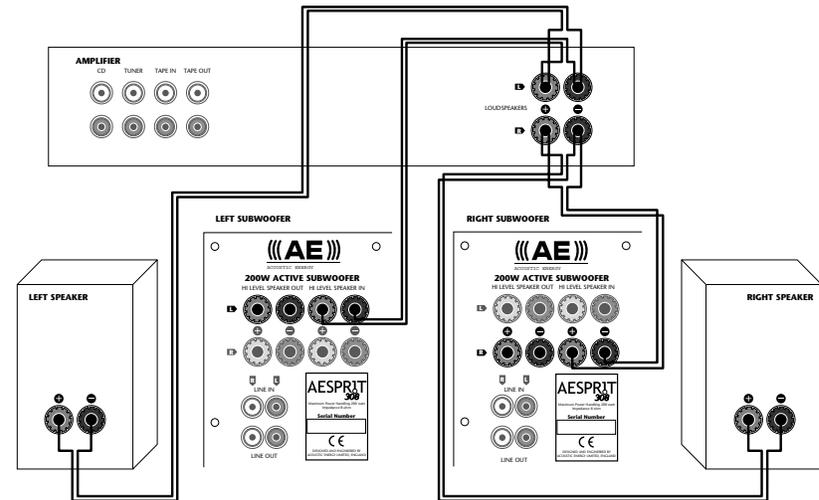
Some of the latest televisions are equipped with variable audio outputs. These can be connected directly to the line level inputs on the AESPRIT 308 to enhance the bass response of the television's built-in speaker.



## OPTION:

## 5. For use with two AESPRITs 308

Using parallel speaker cables from the speaker terminals on your amplifier connect to the High level speaker inputs on the corresponding left/right AESPRIT 308.



The diagrams show only the most common applications of the AESPRIT 308 and the associated wiring for each. Specific needs will vary and these diagrams should act as a guide only.

# How to use the controls

---

## How to use SUB VOLUME CONTROL knob, CROSSOVER FREQUENCY knob and PHASE switch.

The volume control, frequency knob and phase switch can be adjusted to match the condition of the listening room and/or the characteristics of the left and right front speakers.

Due to the positioning of the subwoofer in the room and the associated room boundaries, the available bass response from the existing speakers and whether or not the filtered connection (nominally 100 Hz) is used, the actual settings used on the subwoofer control panel will vary considerably.

The Sub volume control and the crossover frequency knobs should be used together when setting the correct bass response required. For example, raising the volume level will also raise the effective system crossover point, while reducing the volume has the converse effect of lowering the frequency range of the subwoofer. This is caused by the way the various responses and outputs blend together in the listening environment.

Initially set the crossover frequency fairly low, e.g. 50-60Hz, and use the volume control knob on the sub to set the low bass level required. When the correct balance is almost achieved, the crossover level, volume level and phase setting may be adjusted together to fine tune the sound and achieve the cleanest, most extended and suitably powerful bass.

*The ideal is for a seamless blend of extended low bass from the subwoofer leaving the clean upper bass response of the stereo system largely undisturbed.*

FRONT SPEAKER	CROSSOVER	PHASE	SUB LEVEL
Large speaker	40-60Hz	0	
Medium speaker	60-80Hz	0	
Small speaker	80-100Hz	0	

### Caution

An excessive input level to the subwoofer may impair the sound quality or damage the unit. Do not increase the output of the amplifier to a high-level while the low-frequency level is enhanced by the amplifier's tone control or loudness control.

# Specifications

---

<b>Amplifier</b>	200 watt RMS into 8 ohm
<b>Unit</b>	One front facing 220mm pulp cone unit
<b>S/N ratio</b>	>75 dB
<b>Crossover frequency range</b>	35-180 Hz
<b>Connections</b>	Line level gold-plated RCA phono jacks 8 way binding posts.
<b>Cabinet</b>	Real wood veneered. 15 mm MDF wrap. Full circumferential brace. High power, low turbulence, ground firing bass reflex port. 30 mm MDF front baffle.
<b>Remote control</b>	Infra-red, volume level and crossover frequency controls
<b>Weight</b> (excl. packaging)	23kg
<b>Dimensions</b> (WxHxD)	410 x 369 x 295 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:.....

.....

.....

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

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



**ACOUSTIC ENERGY**