

User manual

Congratulations. You have chosen high quality Amphion Ion loudspeakers to be part of your audio system. Setting up your new loudspeakers is an easy and simple task. Please, read the manual thoroughly and follow the instructions. Switch on your system and enjoy of the prime sound quality of your new Amphion Ions.

Loudspeaker placement

Amphion products are more directive than traditional speakers and therefore the positioning in the listening room is an easy task. They can be placed on a bookshelf, mounted to the wall or ceiling by brackets or placed on speaker stands. Due to higher directivity speakers interact with the room less and reflections from ceiling, floor and walls are easier to control than with traditional speakers usually and therefore first class sound quality can be achieved even in acoustically challenging listening rooms.

The best sound quality is achieved when the speakers are placed far enough (minimum 60 cm/2 ft) from the walls and corners of the room. Optimally the acoustical centre point of speaker is vertically at the same level with ears. Acoustical centre point of speaker is in the middle of the waveguide and bass unit and thus in the midpoint of the speaker itself. If the speakers are placed up to the wall or near to ceiling they should be tilted towards the listener so the line from the acoustical centre point is pointed towards the ear.

The speakers should be positioned so that they are located at equal distance from listener and the distance between speakers is approximate the same as distance from speakers to listener (picture 2). The speakers can be placed so that they are facing directly onwards, or they can be turned slightly towards the listener (picture 2). In most cases the best result is achieved by turning the speakers so that horizontal axis goes slightly outside of shoulders. Adjustment of horizontal axis works as certain kind of treble level adjustment. Aiming speakers directly towards the listener to increases the treble level and respectively turning speakers away from listener decreases the treble. Every listening room has its unique shape, volume, materials and decoration, which all shape the acoustical properties of the room. Therefore the placement instruction can act as a rough guideline only and optimal positioning is found solely experimenting and listening.

Mounting to a stand and wall bracket

Mount the speakers to the stand or to wall bracket always according to the instructions of the manufacturer. Speakers can be attached to stands by using adhesive tape, blue-tack or screws. Wall- and ceiling brackets must be mounted by following the instructions provided with the mounts. If you use screws, make sure that they are meant for MDF- board and can handle the weight of the product. When drilling the holes for screws take care not to drill the holes through the wall of speaker. Wall thickness is 19 mm (3/4").

Connecting to amplifier

CAUTION ! Always make sure that the amplifier is switched off before making any connections with loudspeaker cables or interconnects.

The speakers are connected to the amplifier via the connectors at the backside of speaker and by speaker cable. Right speaker is connected to the right channel of amplifier and left speaker to the left channel of amplifier. Similarly the rear speakers and centre speakers are connected to their respective channels. Spade lugs banana jacks are the most commonly used connectors. Non-terminated cables can also be connected directly by stripping the insulation off the end of the wire for about 10 mm (1/2") and setting the stripped plain wire into the speaker connector hole. Turn the connector top open so that the hole aside the connector base can be seen. Set the plain wire into the hole and tighten the connector. Do not use any tools for tightening to avoid damaging of connector. Connector which is marked with black is (-) and red connector is (+). Always connect (+) marked wire to (+) connector of amplifier and (-) marked wire to (-) connector of amplifier.

NOTE! Note that (+) and (-) connectors, plain wires or cords does not touch each other at any situation – this can cause damage to the amplifier. Tighten the connectors carefully to avoid the cables from loosening and causing a short circuiting of the amplifier. Always read the amplifier manual before make any connections.

Blocking the reflex tube / venting hole

The speakers are delivered with foam plugs for blocking the reflex tubes / venting holes of the speakers if necessary. The blocking of venting holes is recommended if the speakers are placed near the wall and/or the bass reproduction is elevated. If the Amphion Impact- series subwoofer is used with the speakers the blocking of venting holes is always recommended.

Cleaning of loudspeakers

Clean, dry microfibre cleaning cloth is recommended for the cleaning of Amphion speakers. Difficult to remove dirt or stains are cleaned by adding a little water to the towel and using mild soap water- solution if needed. Before using any stronger detergents you should test these first to the bottom of the speaker to ensure it does no damage the surface of speaker.

Fault situations

All Amphion products are always measured, tested and checked by skilled craftsmen before they leave from factory. However, if some malfunction occurs, speakers should be returned to the authorized dealer where they were bought from.

The most common fault situation is caused by improper cable connections. Make sure that cabling and connections are properly done. If one speaker is silent you can change that speaker to another channel which works. If speaker works after the switch the problem lies elsewhere in the signal chain. If the speaker still remains silent it is possibly damaged.

Warranty

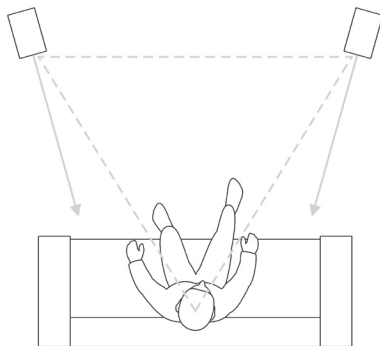
Warranty of the speakers is 5 years from the day of purchase. The warranty covers all faults related to manufacturing and materials. Warranty does not cover faults caused by misapplication or mistreating of speaker. The most common misapplication is damage for tweeter-unit caused by too high listening levels. The bass unit can be also damaged when too high listening levels are used.

If the sound is distorting the level of volume should be lowered immediately. Warranty does not cover damages caused by too high listening levels.

The disassembling of speaker units, connector panel or any other part of speaker causes warranty to be void. The grid of bass unit is meant to be permanently mounted and should not be removed.



Picture 1. The acoustical centre point of the speaker is in the middle of waveguide and bass-unit.



Picture 2. Position the speakers symmetrically

Technical specifications

Operation principle:	2-way vented
Tweeter:	1"
Bass:	4½"
Crossover frequency:	1600 Hz
Impedance:	8 ohm
Sensitivity:	86 dB
Frequency response:	55 – 20 000 Hz, -6dB
Recommended power:	20 – 120 W
Dimensions (h x w x d):	10½" x 5¼" x 8¾" (268 x 134 x 220 mm)
Cabinet material:	Painted ¾", (19mm)MDF
Weight:	10½ lbs. (4,7 kg) per piece

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