

Alea-4

Ultra compact mid-high loudspeaker



Herzlichen Dank,
dass Sie ein Voice-Acoustic Produkt gekauft haben.
Seit dem Jahr 2006 entwickeln wir unsere Produkte
in der Überzeugung, dass es auf die Details ankommt.
Wir wünschen Ihnen viel Freude mit diesem Produkt.

Thank you very much,
for purchasing a Voice-Acoustic product.
Since 2006 we have been developing our
products in the firm belief that details matter.
May we wish you a lot of pleasure with this product.

Muchas gracias
por haber comprado un producto de Voice-Acoustic.
Desde el año 2006 estamos desarrollando nuestros productos
estando convencidos, que son los detalles que cuentan.
Le(s) deseamos mucha alegría usando este producto.

Merci beaucoup
d'avoir acheté un produit Voice-Acoustic.
Depuis 2006, nous développons des produits
avec la ferme conviction que les détails comptent.
Nous vous souhaitons beaucoup de plaisir à utiliser ce produit.



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General Safety Instructions

Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when erecting and transporting loudspeakers that they are nowhere near equipment and objects which may be impaired or damaged by an external magnetic field. Persons with cardiac pacemakers must maintain a safe distance.

The minimum recommended safety clearance is 1 m.

Never stand in the immediate vicinity of loudspeakers driven at a high level. Professional loudspeaker systems are capable of causing a sound pressure level detrimental to human health. Seemingly non-critical sound levels (from approx. 90 dB SPL) can cause hearing damage if people are exposed to it over a long period.

All connected cables must be laid in such a way that they cannot be crushed by objects and that nobody can step on them! Replace damaged cables immediately and do not use them!

Use only accessory parts specified by Voice-Acoustic or original accessory parts from Voice-Acoustic. Check all cabinets and accessories regularly for wear and replace them if necessary.

Do not set up the loudspeakers in places where they are permanently exposed to moisture, dust, dirt or direct sunlight.

Care

Wipe the surface of loudspeakers only with a damp cloth and pure water. In case of heavy pollution, repeat the above procedure several times if necessary. Do not use any chemical additives or aggressive detergents, as these may harm and damage the surfaces.

Transport and storage

When transporting and storing the unit, it is important to ensure that the surface and front grill of the loudspeaker are not damaged. Moisture can penetrate through exposed wood surfaces and cause the wood to swell. A bent or broken front grill will no longer adequately protect the sensitive speaker membranes. In addition, appreciable dust deposits may considerably impair the functionality of a loudspeaker membrane. For this reason, the loudspeakers should be transported and stored in a safe, careful, dry and largely dust-free manner.

The following accessory parts for transport and storage are available from Voice-Acoustic:

- Carrying bag for up to 4 x Alea-4 with u-bracket (Art.-Nr. 500042000)
- Heavy duty flightcase for up to 4 x Alea-4 (Art.-Nr. 505003000)

Note: *The original packaging is unsuitable as permanent storage and transport packaging!*

Warranty

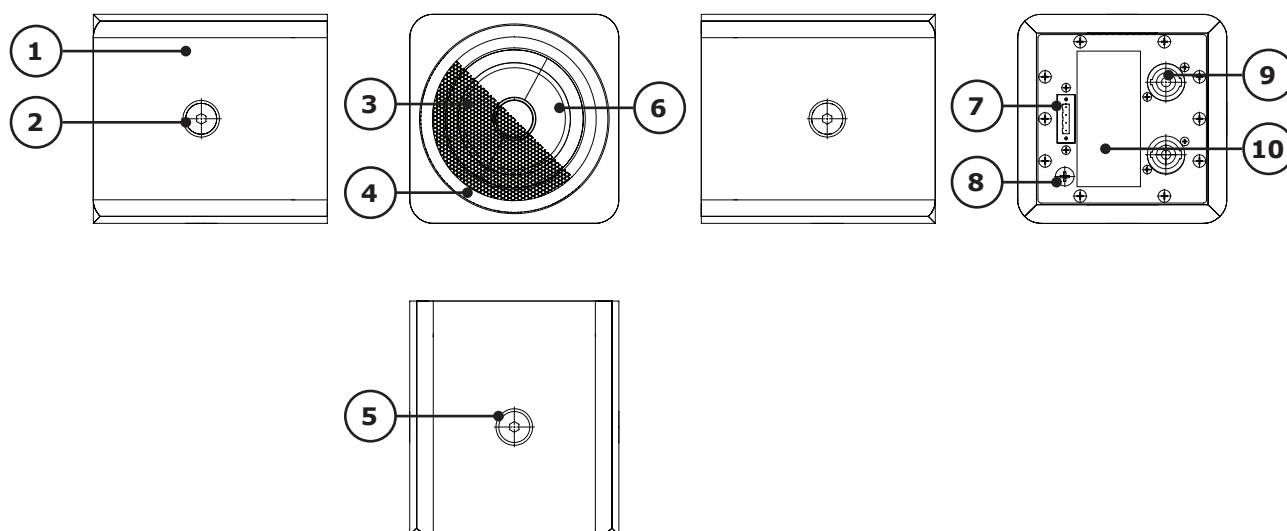
The warranty period is 24 months from date of delivery.

On our choice we will eliminate any lack of conformity with repair or with replacement of the faulty goods. The place of performance for warranty services is Voice-Acoustic headquarters in Dörverden. In case of remedy of defects, the buyer shall bear all costs resulting from transportation of the goods to Voice-Acoustic headquarters in Dörverden.

The ordering party is not entitled to remedy the defect by itself or to organise a replacement and to charge such activities to Voice-Acoustic. In case of self remedy by the ordering party the warranty given by Voice-Acoustic becomes void.

Warranty doesn't apply to parts of wear and tear, such as threaded points, Phoenix Contact connectors and the SpeakON® connectors.

Components



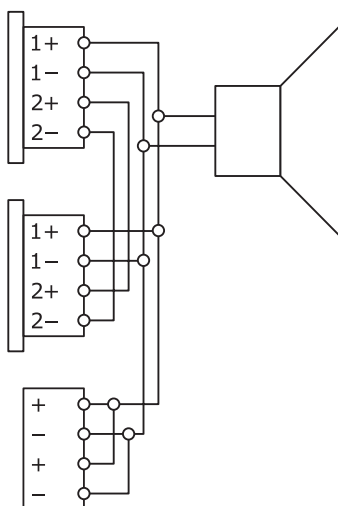
1. 15 and 12 mm multiplex cabinet, Warnex textured paint finish
2. M10 threaded points on both sides for mounting the U-bracket
3. Micromesh honeycomb grille
4. Ornamental ring
5. M10 threaded point on the underside
6. 4" Neodym wideband transducer
7. Phoenix Contact connectors
8. M6 threaded point for safety rope
9. Connector panel with two SpeakON® connectors
10. Type plate with serial number

Technical data

| | |
|-------------------------------|--|
| Components | 4 x 4" Neodym wideband transducer with 0,75" voice coil |
| Frequency response | 161 Hz - 18 kHz (- 10 dB) 210 Hz - 15,4 kHz (+/- 3 dB) |
| Coverage range (h x v) | 70° x vertical directivity is controlled by the angle between the elements |
| Powerhandling | 120 W AES / 240 W program / 480 W peak at 16 Ω |
| Sound pressure | 116 dB SPL AES / 119 dB SPL program / 122 dB SPL peak |
| Dimensions / Weight | 419 (h) x 119 (w) x 160 mm (d) / 3,2 kg |
| Finish | Polyurea coating in RAL 9005, Special colors in Warnex textured paint |

Connections

The speaker has two loop-through Neutrik NL4 SpeakON® IN/OUT connectors. They use the 1+/1- connection pins. Additional loudspeakers can be looped through via the second connector. 1 x Phoenix Contact connections, 4-pin divided into 2 x IN/OUT, through-wired with SpeakON®.



Setup

The Alea-4 loudspeaker is designed for standing, vertical and horizontal operation. A variety of accessories is available from Voice-Acoustic to securely attach the loudspeaker safely on tripods, distance rods or hanging it from on trusses, ceilings and walls. Ensure that the loudspeakers are securely attached to prevent personal injury and damage of property.

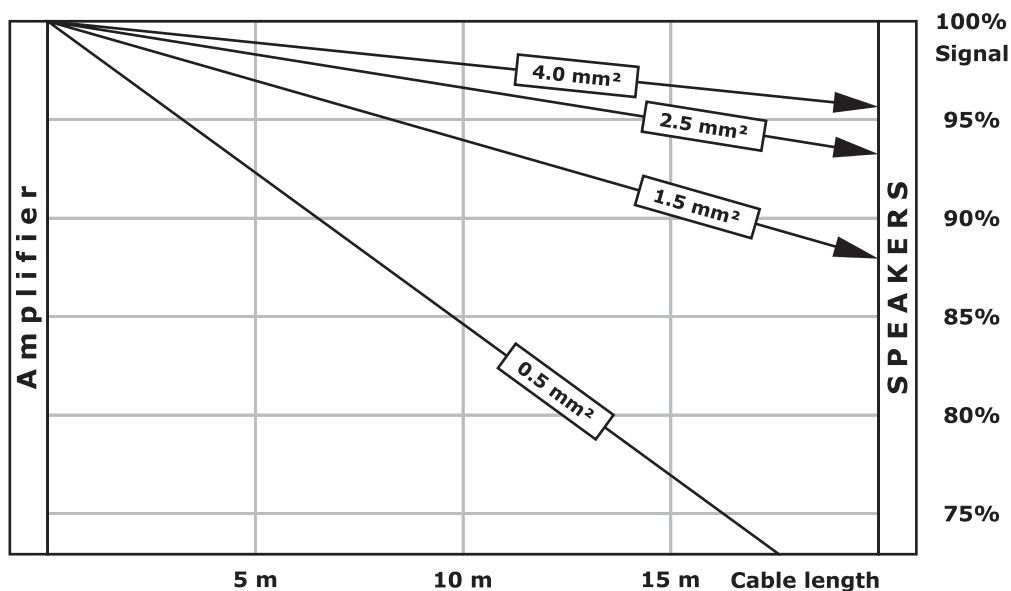
Connecting cables

When connecting the cables to the loudspeaker, ensure that the polarity (+/-) and pin assignment (1/2) is correct. Incorrect connection results in a significant change in the loudspeaker sound characteristics and may damage the compression driver.

The two connection sockets on the back of the loudspeaker can be used to link multiple loudspeakers on a single amplifier. Note that parallel connection reduces the total impedance (Ω) seen by the amplifier. The total impedance of loudspeakers connected in parallel must not drop below the minimum operating impedance of the amplifier.

Voice-Acoustic recommends to use the available 4 x 4 mm² Speakon cables for mobile use.

We recommend wiring the basses with at least 4 mm² in installations. The cables of the tops in installations must be sufficiently dimensioned according to impedance, power and cable length.



Simplified display without consideration of loudspeaker impedances

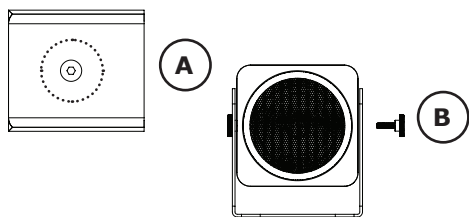
Operation

The Alea-4 is exclusively intended for operation with Voice-Acoustic system electronics with internal DSP controller: the HDSP power amplifiers or powered by the free 800 W amplifier channels of the self-powered subwoofers.

Make sure the appropriate preset has been selected before connecting the speaker to the system power amp or self-powered subwoofer.

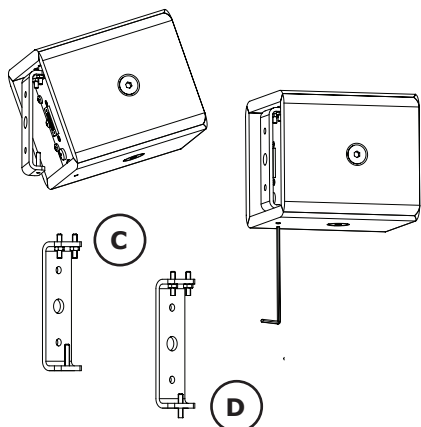
Using the wrong preset can damage parts of the loudspeaker.

Note: If the Modular-10 is not operated on the intended Voice-Acoustic system electronics, the manufacturer's warranty for the loudspeaker expires!



Mounting the U-bracket

1. Remove the M10 countersunk screws (A) on both sides of the loudspeaker.
2. Use the supplied M10 knurled screws (B) including plastic washers to mount the U-bracket.
3. To protect the coatings, place the plastic washers between the knurled screw, U-bracket and loudspeaker.



Mounting wall holder for hidden mounting

To be able to install the loudspeaker flat on the wall, you must use the 4-pin Phoenix Contact connector in the recessed connection panel.

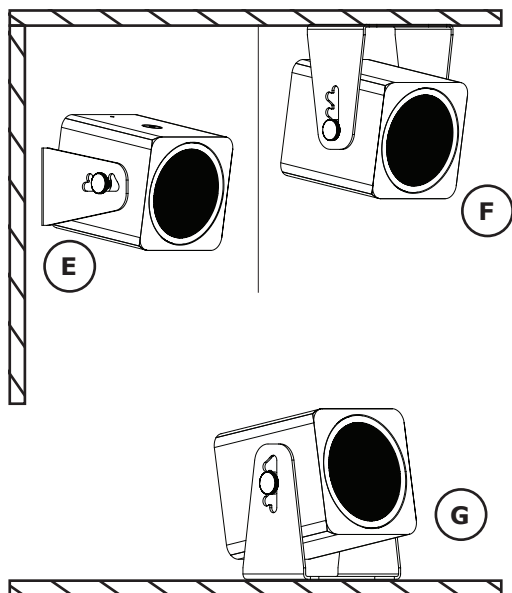
1. Mount the wall bracket at the desired location using the appropriate fixing material. The two M4 x 20 mm grub screws (C) point upwards!

Note: The loudspeaker cables must be led out of the wall in the area of the recessed connection field!

2. Connect the loudspeaker via the Phoenix Contact.
3. Hang the loudspeaker into the two grub screws.
4. Turn the bottom set screw out through the small opening at the bottom (D) until it is flush with the edge of the housing.

Installation with the U-bracket

The U-bracket can be used to install the speaker on walls (E), ceilings (F), floors (G) and tripods.



Overview Accessories

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|---|---|
|  | U-Bracket for Alea-4 (Art.-Nr. 400041001) U-Bracket for Alea-4, white with stainless steel knurled screws (Art.-Nr. 400041002) U-Bracket for Alea-4, special color with stainless steel knurled screws (Art.-Nr. 400041009) |
|  | Aleasub-10 wall holder for hidden mounting (Art.-Nr. 400042001) |
|  | Phoenix Contact Stecker 4-polig, für Alea-4 und Aleasub-10 (Art.-Nr. 997463649) |
|  | Universal Joint with thread adapter for Alea-4 (Art.-Nr. 999919695) |
|  | Quick mounting adapter for Alea-4 (Art.-Nr. 999910001) |
|  | M20 adapter x 1,25 mm for Alea-4 stand (Art.-Nr. 999921950) |
|  | Alea-4 stand with round base 27,5 cm, 3,4 kg, high 1.000 - 1.700 mm (Art.-Nr. 999926125) Alea-4 stand with round base 27,5 cm, 3 kg - pure white, high 870 - 1.575 mm (Art.-Nr. 999926010) |
|  | Carrying bag for 3 x Alea-4 stand with round base (Art.-Nr. 999926019) |
|  | Carrying bag for up to 4 x Alea-4 with u-bracket (Art.-Nr. 500042000) |
|  | Heavy duty flightcase for up to 4 x Alea-4 (Art.-Nr. 500043000) |

Imprint

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All specifications in this manual are based on information available at the time of publishing for the features and safety guidelines of the described products. Technical specifications, measurements, weights and properties are not guaranteed.

The manufacturer reserves the right to make technical modifications according to legal regulations stipulating the continual improvement of product features. For the safe operation of the unit, this manual and all other required information must be available to all users at the time of assembly and disassembly of the unit, and during operation. Assemble or operate the unit only after reading and understanding this manual, and keeping it at hand at all times at the site.

We are happy to receive your suggestions and proposals for the enhancement of this manual.

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