

# Helium

Reference manual 1/2022



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Introduction
Thank you for choosing Amp
Your new speaker is based which world's top sound eng products as room friendly and by the beauty of sound regard get in touch with us or your d design, best possible materia craftsmen are used in order t
Joy is best when shared. Plea or those close to you enjoy yo
Now unpack, connect, sit ba
Anssi Hyvönen Founder & Managing Directo

phion.

d on the same advanced acoustical engineering, ngineers trust and enjoy daily. We have made our nd natural as possible, so that you can be touched rdless of what you listen to. Kindly do not hesitate to dealer in order to get most of investment. Timeless rials and the skilled hands of experienced Finnish to ensure years of daily pleasure.

ease let us know via email or social media how you your Amphions.

ack, and experience them. Enjoy!

tor, Amphion Loudspeakers Ltd.

## Warranty and support

Warranty

Amphion Enjoy products come with a five-year warranty against defects in materials and our workmanship. For warranty or out-of-warranty service, in the first instance please contact your original dealer, and provide a copy of the original sales receipt. If you require additional assistance, please contact your local country distributor. If you have difficulty making contact with either of the above, please contact our headquarters. For proper unpacking, installation, positioning, and maintenance instructions, please first check this manual thoroughly.



Please do not return/ship any product to amphion nor its resellers without prior authorisation.

Handmade in Finland



Amphion Loudspeakers Ltd. is awarded the right to use the Association for Finnish Work's Key Flag Symbol mark of origin. This mark is granted to Finland-based organizations that manufacture their products in Finland, having a minimum domestic content of 50 percent.

## About us Amphion Loudspeakers Ltd. was established in 1998. and preferences. Follow us amphion.fi Social media www.facebook.com/AmphionLoudspeakers twitter.com/amphion fi y www.youtube.com/user/AmphionLoudspeakers F www.instagram.com/amphion loudspeakers

Company profile

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We design and build loudspeakers that are characterised by high-resolution, unstrained low-level reproduction and pure driver integration. Our affordable solutions are rather insensitive to room acoustics and fill any space with a wide and even dispersion. A timeless yet flexible approach with regard to aesthetics and application make Amphion products easy to match with individual styles

All products are handmade in Finland to ensure enduring listening quality.

Amphion Sounds, corporate newsletter www.amphion.fi/en/enjoy/signup

## Helium line

Story

#### Superb sound in any space

Helium is your first step on the road to a truly rewarding audio experience. Whether you're listening to music, using streaming services, or watching a movie with family or friends, the clear, natural sound quality brings it all to life. Regardless of where a Helium speaker is placed in the room, its controlled dispersion delivers pleasing, neutral audio – even at low volumes.



Helium speakers are available in Full White, Standard White, Black and Walnut veneer. Grids available in the RAL-colours of your choice.

Monochrome

Full white

• White with black grids

Standard white

Black

Wood veneers

Walnut









Helium520

#### Colour grid options



- Stone grey Beige brown
- Turquoise blue



- Sky blue
- Heather violet



Sulfur yellow



• Yellow green

#### RAL colour of choice (POA)

## Speaker placement

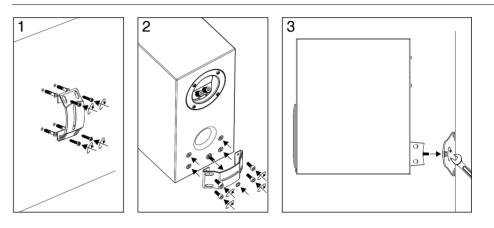
Acoustic centre-point<br/>of the speakersThis is either between the end of the waveguide and driver (single-woofer<br/>product) or tweeter centre (two-woofer product).

Phantom Centre For correct stereo imaging do not place speakers too far apart. Use a vocal track where the singer is in the centre. Move speakers wider apart to hear the "hole" developing in the middle of the soundstage, then move them closer until channels integrate.

**3D | Depth Information** Start by aiming a direct line from the acoustic centre-point to outside your shoulder line. Then "fine-tune" the sound to your liking. Note that highest treble is always directive. Adding higher treble may actually smoothen the audio in the upper-midrange.

Tilting - If Needed Small wedges at either front or back edges of speaker help to align/aim the acoustic centre to the listeners ear. It is not overly critical but helps achieve the required sound.

for Amphion Loudspeakers Ceiling and Wall applications





## Technologies

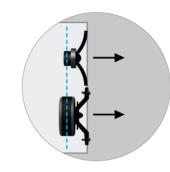


#### What is a Waveguide?

Waveguide: A generic term to describe a structure that directs sound waves, with minimal loss of energy, by restricting their expansion to one or two dimensions. It helps create a wide, even sweet spot - though highest treble is always directive. It solves cabinet diffraction issues, aligns drivers, and makes dispersion-patterns between drivers more even across a wide frequency-band.

Amphion's proprietary waveguide: Amphion is a frontrunner in waveguide technology, and is widely recognised for their use of tweeter waveguides in front of the driver to control directionality - incorporating a technology called U/D/D (Uniformly Directive Diffusion).

Perfecting driver integration: The result is purer, more natural sound that is less interrupted by room acoustics, and helps speakers deliver clarity and naturalness - even when placed close to boundaries eg. walls, bookshelves, desktops, or highly-reflective surfaces. It creates a large, broad sweet spot suitable for busy modern living, where one cannot always sit in the sweet spot.



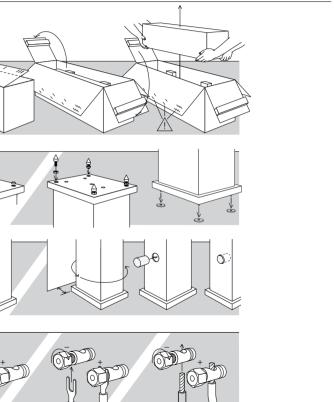
Time-adjusted drivers

All products use time-adjusted drivers and a 1600 Hz tweeter crossover. This leads into point-source-like behavior and seamless driver integration. Rock-solid "phantom" centre, life-like 3D imaging, and an extremely wide and deep sweet-spot are characteristic of all Amphion products.

## Instructions Helium410 / Helium510 / Helium 520C

Unpacking DO 〔1〕 2 0 Ð (3) Connecting (TC) 040

	Helium520	
Unpacking		
	1	
	2	
Connecting	3	



## Care

Cleaning



- When setting or re-positioning speakers, wear soft cotton gloves.
- To clean, use a soft cotton or microfiber cloth. Do not use excess rubbing-force.
- Use water or CIF Multi-surface Window Cleaner (e.g. JIF, HANDY ANDY, VIM, VISS).
- Spray cleaner onto the cloth first, rather than directly onto the cabinet.
- Test-clean a small area on the back or under the cabinet to check surface reaction.
- When cleaning the walnut-finish, wipe in the direction of the wood-grain.

Individual support

Typically, a wide variety of factors influence loudspeakers' performance. Please contact your local Amphion dealer or sales representative for specification, connectivity and positioning recommendations for your specific system. For more information, you can also be in touch with Amphion headquarters.

## Colour grid options Stone grey Beige brown $\bigcirc$ Turquoise blue Sky blue $\overline{\bullet}$ Heather violet Traffic red Sulfur yellow Yellow green RAL colour of choice (POA)

Amphion loudspeakers come with grids of your colour of choice. Do you want to change the looks later on?

Just pick another colour and replace the grids.

Loudspeaker grids



## Technical specifications

Helium410



#### Physics

Two-way, vented
1" titanium tweeter
41/2" paper woofer
259 x 132 x 220 mm
4 kg (9 lbs)

#### Performance

Crossover point	1600 Hz
Impedance	8 Ω
Sensitivity	86 dB
Frequency response	52 – 25.000 Hz -6dB
Power recommendation	20 – 80 W

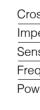
#### Variations

Monochrome Wood veneer Colour grids



#### Helium510





## Variations Monochrome Wood veneer Colour grids

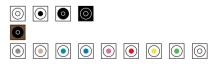
#### Physics

Operating principle	
Tweeter	
Mid / woofer	
Measurements	
Weight	

#### Performance

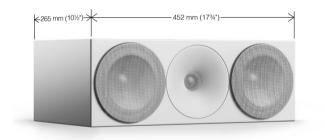
Two-way, vented
1" titanium tweeter
5¼" paper woofer
316 x 160 x 265 mm
6 kg (13 lbs)

1600 Hz
8 Ω
86 dB
48 – 25.000 Hz -6dB
20 – 100 W



## Technical specifications

Helium520C





#### Physics

Operating principle	Two-way, vented
Tweeter	1" titanium tweeter
Mid / woofer	2 x 5¼" paper woofer
Measurements	452 x 160 x 265 mm
Weight	9 kg (20 lbs)

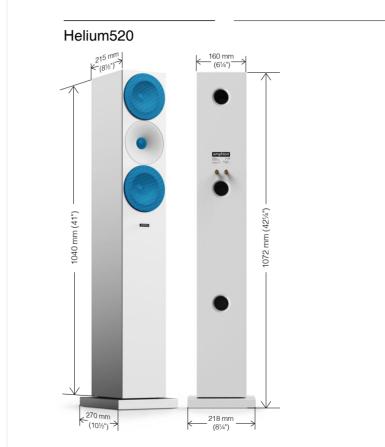
#### Performance

Crossover point	1600 Hz
Impedance	4 Ω
Sensitivity	90 dB
Frequency response	48 – 25.000 Hz -6dB
Power recommendation	10 – 150 W

#### Variations

Monochrome Wood veneer Colour grids





#### Physics

Operating principle
Tweeter
Mid / woofer
Measurements
Weight

#### Performance

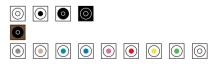
#### Variations

Monochrome

Wood veneer Colour grids

Two-way, vented
1" titanium tweeter
2 x 5¼" paper woofer
1072 x 218 x 270 mm
17 kg (38 lbs)

1600 Hz
4 Ω
90 dB
40 – 25.000 Hz -6dB
10 – 150 W



#### Amphion Loudspeakers Ltd.

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