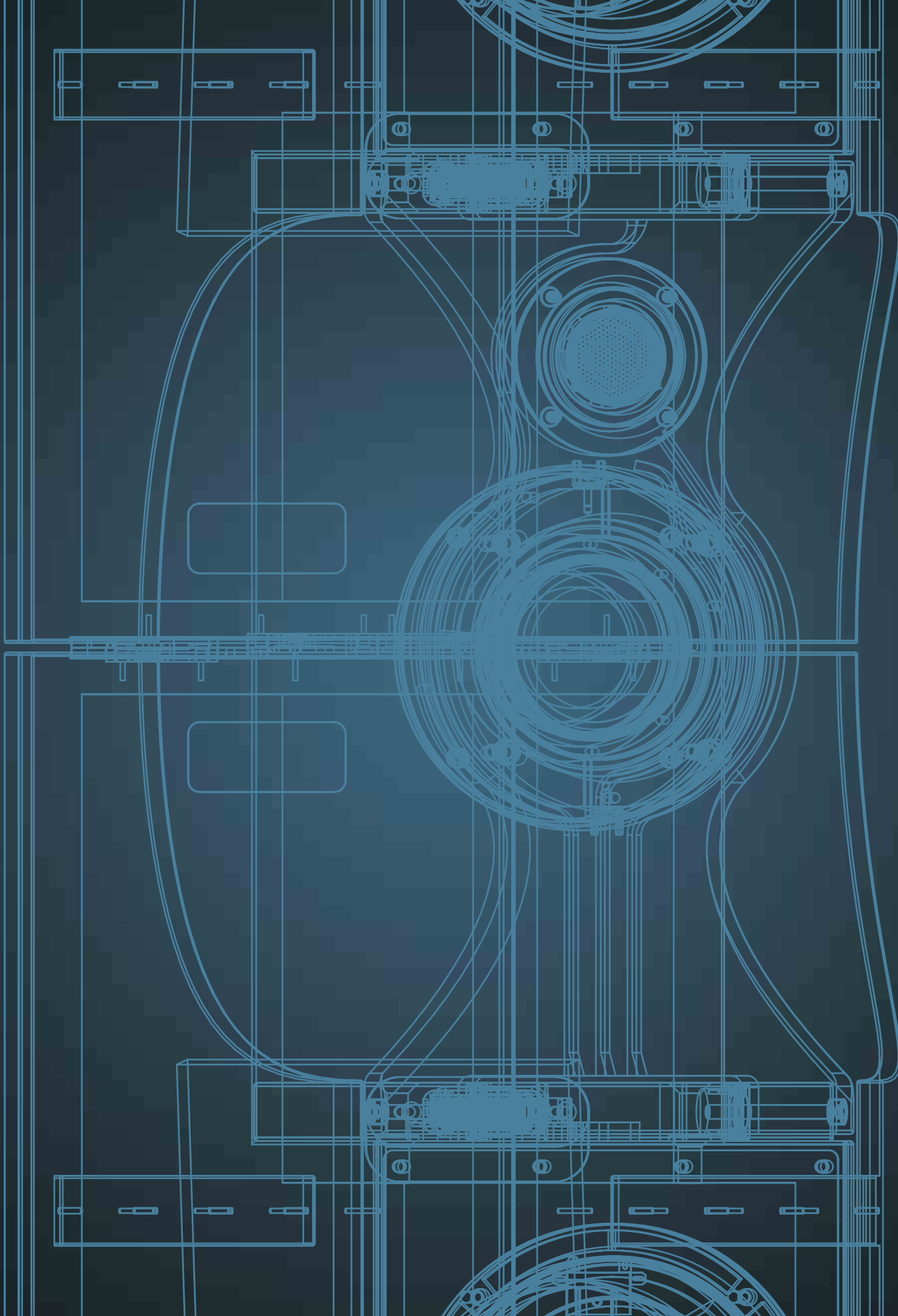


**PMC**<sup>®</sup>

**factfenestria**  
user guide

NOTHING  
BUT  
MUSIC



# THE SPEAKERS THAT MAKE MUSIC



## CONGRATULATIONS

You have joined the elite. You're a PMC user.

Our loudspeakers can be found in all the world's best listening environments, from audiophile living rooms to internationally renowned recording, mastering, broadcast and post-production studios. Our Emmy-award-winning systems are used to create everything from smash Hollywood soundtracks to hit albums by artists including Coldplay, Kraftwerk, Elton John and Adele, as well as audiophile jazz and classical recordings on Deutsche Grammophon, Decca, Philips and Harmonia Mundi.

Whether you listen to our speakers in world-class studios in LA, London, Berlin or Tokyo, or in your favourite listening room at home, you will hear the music exactly as the artist intended it.

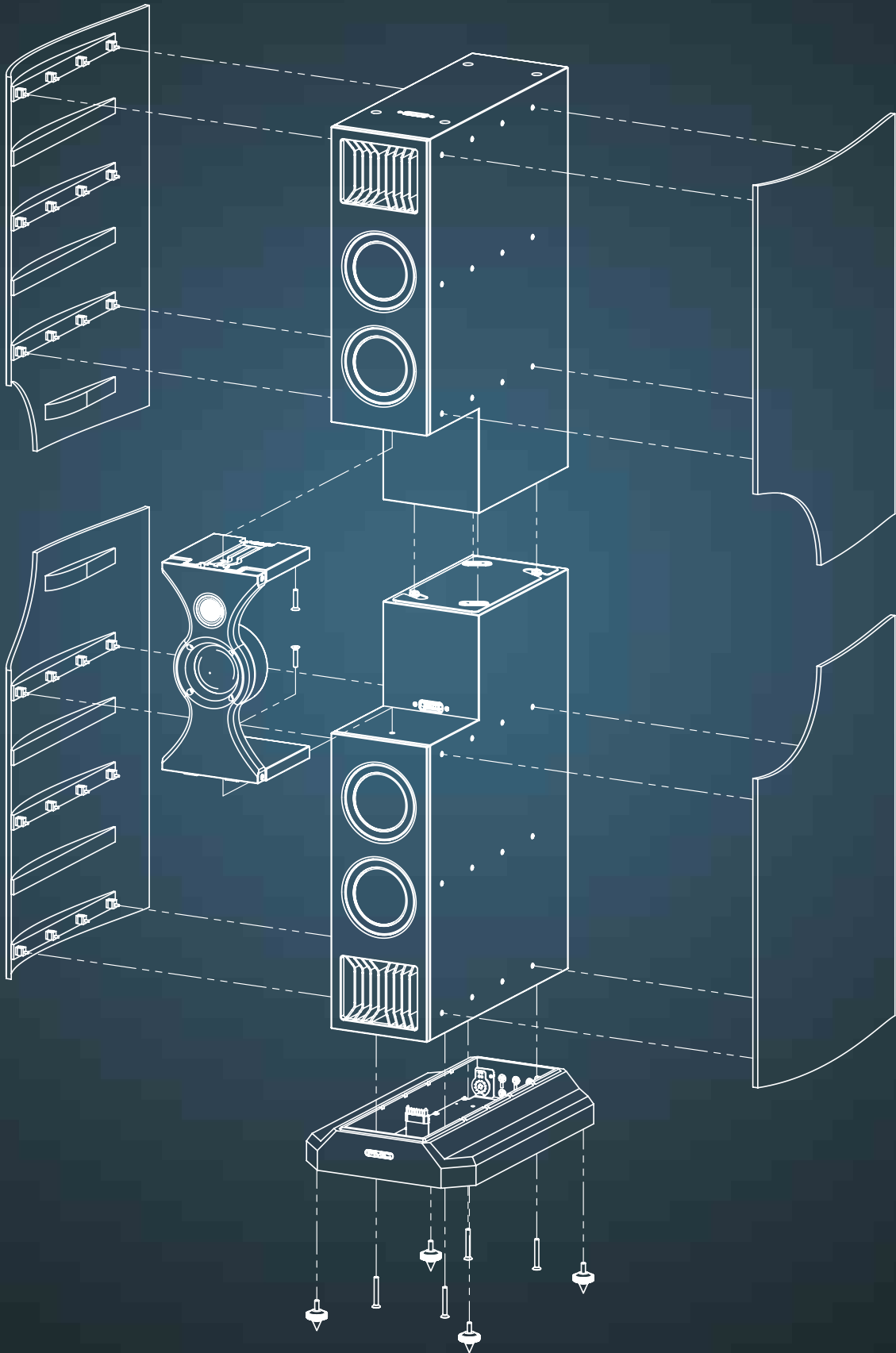


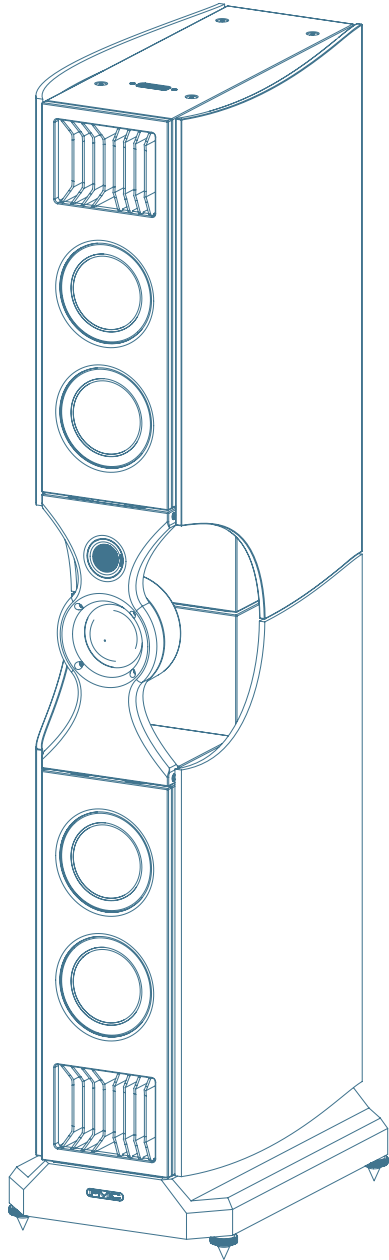
PMC's Emmy® award  
©ATAS/NATAS

Register your  
**fenestria**



at: [www.pmc-speakers.com](http://www.pmc-speakers.com)





INTRODUCING

# fenestria

Designed entirely in-house from first principles at PMC's UK headquarters, fenestria breaks new ground in terms of style and design innovation. A three-way passive loudspeaker, it features twin PMC ATL™ bass cabinets and the elegant nest, a distinctive central module which, in a perfect marriage of form and function, provides a stylish housing for the high and mid-frequency drivers, whilst also protecting them from unwanted colouration. The loudspeaker sets new standards for lifelike, vivid reproduction at all listening levels, eliminating the unwanted resonances and vibrations that can reduce the clarity and precision of sonic imaging in other designs. What remains? Nothing but music.

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# GUIDELINES & POINTS OF NOTE

- Read these instructions and keep them in a safe place for future reference.
- Heed all electrical safety warnings, including any on the loudspeakers themselves.
- Do not use the loudspeakers near water.
- The cabinet should only be cleaned with a dry, lint-free cloth. Do not use solvents, abrasives, waxes or liquids, as they may be detrimental to the finish.
- The supplied floor spikes are sharp; treat with great care during installation and use.
- Do not install near any heat sources such as radiators, ovens or other equipment that produces excessive heat.
- Unplug this product from both source and power during electrical storms, or when unused for extended periods of time.
- High-volume audio signals, however short their duration, have the potential to cause hearing damage. Use care when setting the system volume level to ensure playback sound pressure levels remain within safe, comfortable limits.
- Do not attempt to service the equipment. There are no user-serviceable parts inside. Please refer all servicing to PMC authorised personnel.
- Servicing is required when the apparatus is damaged, exposed to moisture, or exhibits a distinct or sudden change of operation or audio performance.
- PMC has made efforts to provide accurate installation information and good quality fixings. PMC will not be held responsible or liable for injuries or property damage — direct, indirect or consequential — arising out of use or inability to use this product safely and properly.
- fenestria loudspeakers contain very powerful magnets and may have a detrimental effect on nearby magnetically sensitive items.
- Before beginning fenestria assembly, please remove all watches, rings and other personal jewellery that might cause damage. We advise that you wear the protective gloves supplied during assembly, and avoid touching the drivers.
- Please note that when correctly mounted, the fenestria's planar wings should 'float' flexibly at the sides of the loudspeaker cabinet, leaving a gap between cabinet and wing. Rather than being pressed too firmly 'home', they should remain easily removable and free to vibrate for optimum performance.
- Should fine-tuning of your loudspeakers' position be required after assembly, we advise that the planar wings and top cabinet of each loudspeaker should be removed during relocation. Your fenestria should then be repositioned while holding the speaker by the plinth, and fully reassembled afterwards. Do NOT attempt to move it by holding or turning the cabinet alone.
- Do not use fenestria's Laminair vent or nest as a grip to lift the loudspeaker — this may result in damage.
- PMC employs real wood veneers, which, like all natural materials, will gradually change in colour over time, especially with exposure to sunlight.
- This product complies with international directives, including RoHS (the Restriction of Hazardous Substances in electrical and electronic equipment) and WEEE (the disposal of Waste Electrical and Electronic Equipment).

## UNPACKING

We recommend that you retain your packaging so that you can safely transport your loudspeakers in the event that they need to be relocated or returned for servicing. If you do dispose of it, please do so in a safe and environmentally friendly manner.

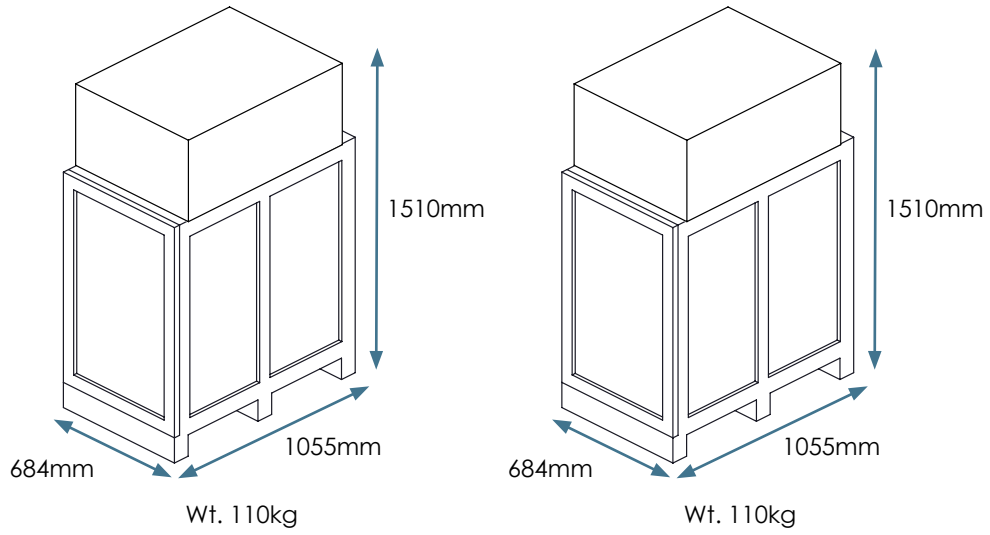


Packing materials can pose danger to animals, the young and vulnerable. If retained, ensure they are stored safely.

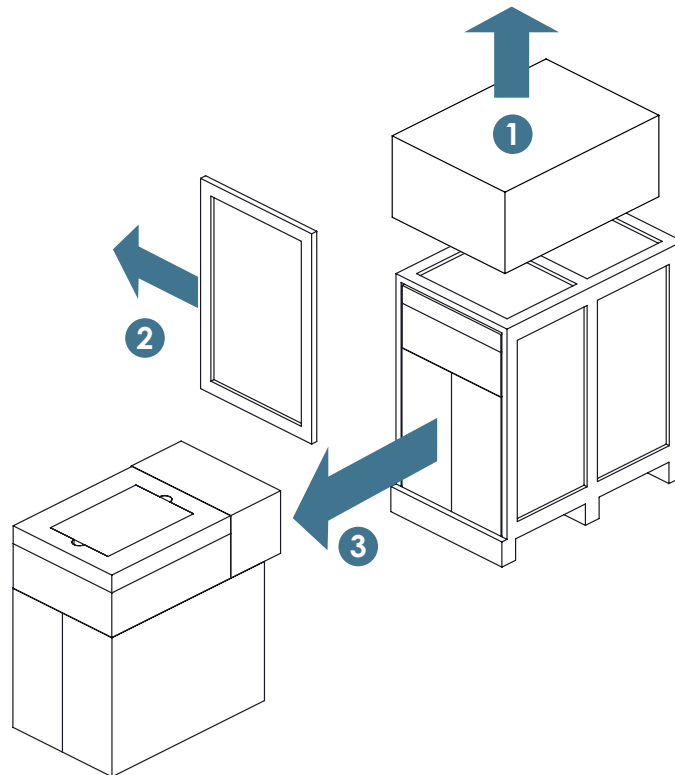
# INSTALLATION GUIDE



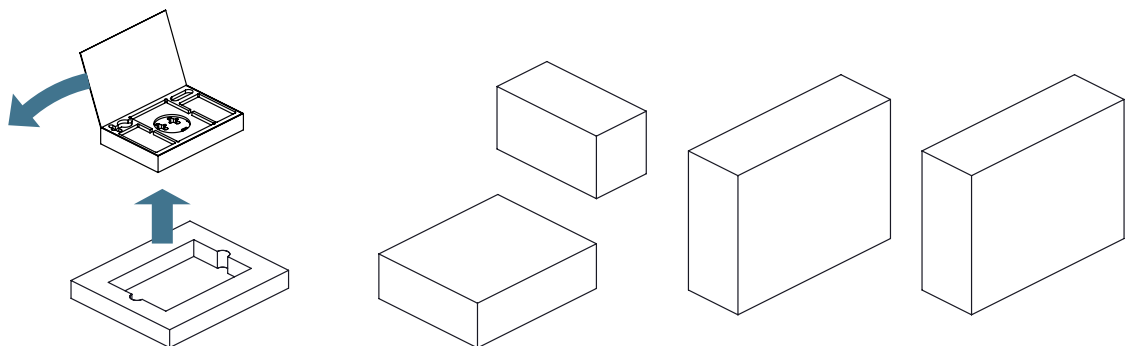
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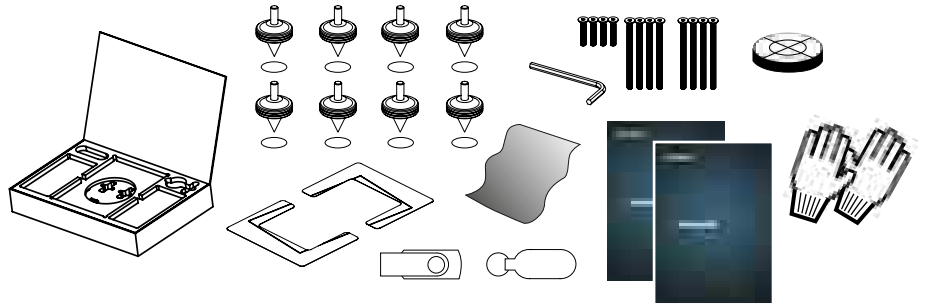


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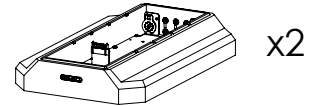
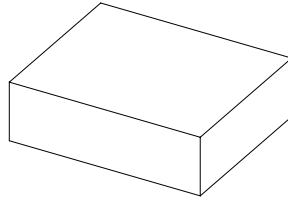


# WHAT'S IN THE BOXES?

Accessories box

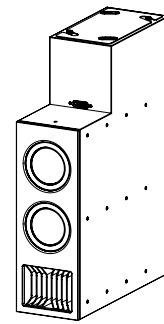
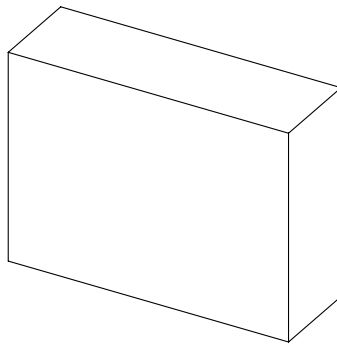


Plinth



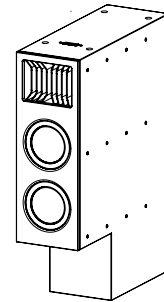
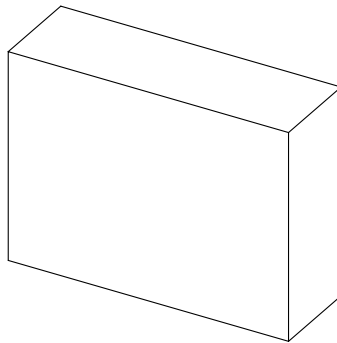
x2

Lower cabinet



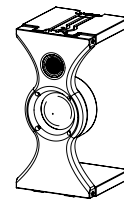
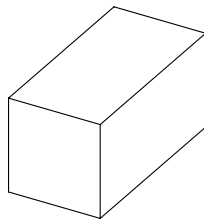
x2

Upper cabinet



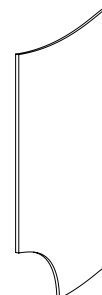
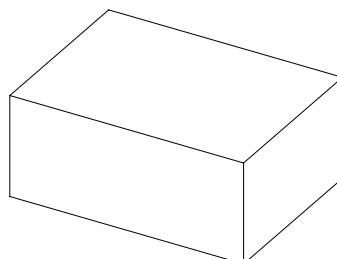
x2

Nest



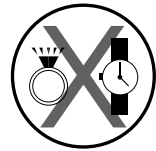
x2

Planar wings



x8

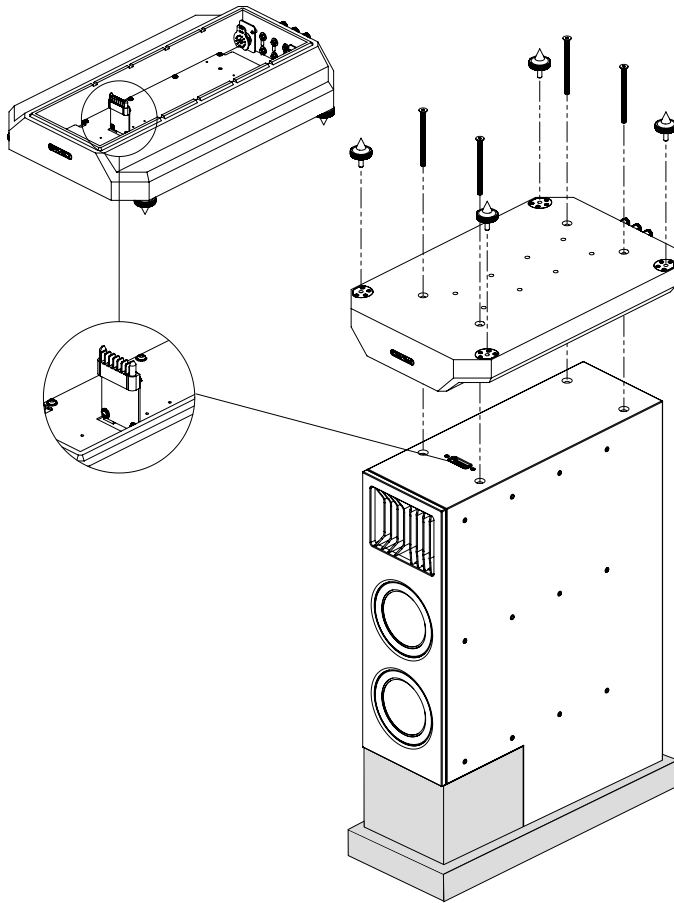
# CABINET ASSEMBLY PART I



4

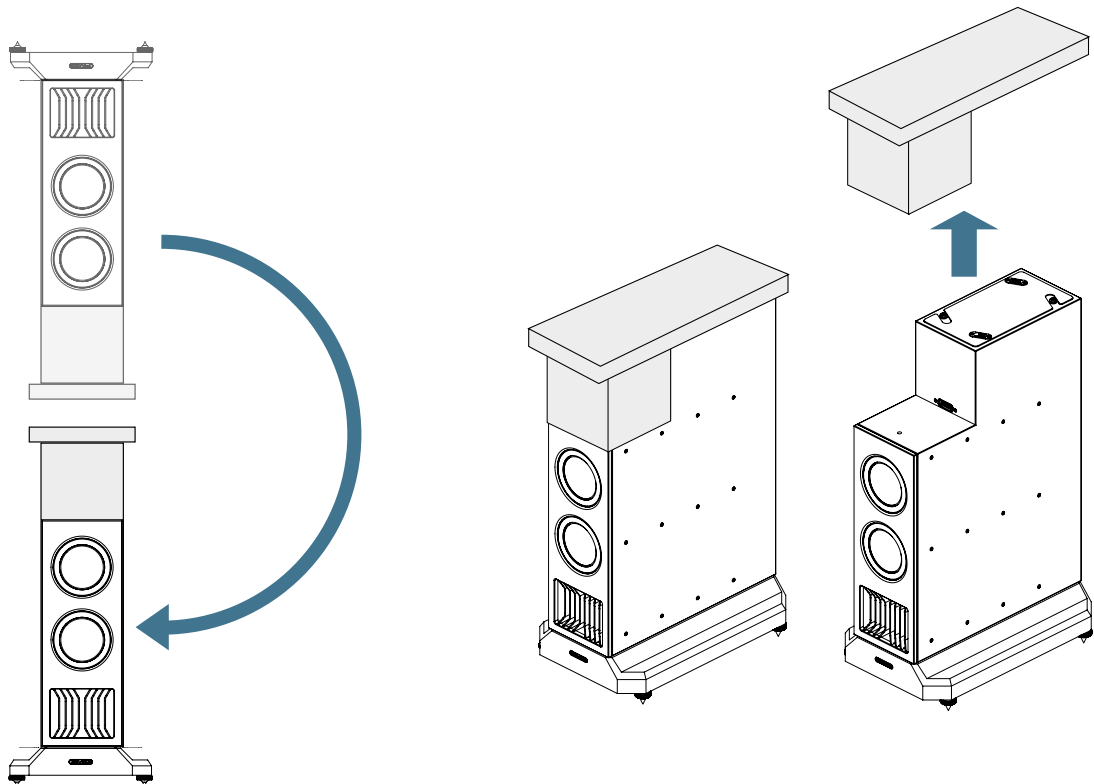


Connect with care



Floor spikes are extremely sharp. Fit with care. Protect hard flooring with supplied pucks

5

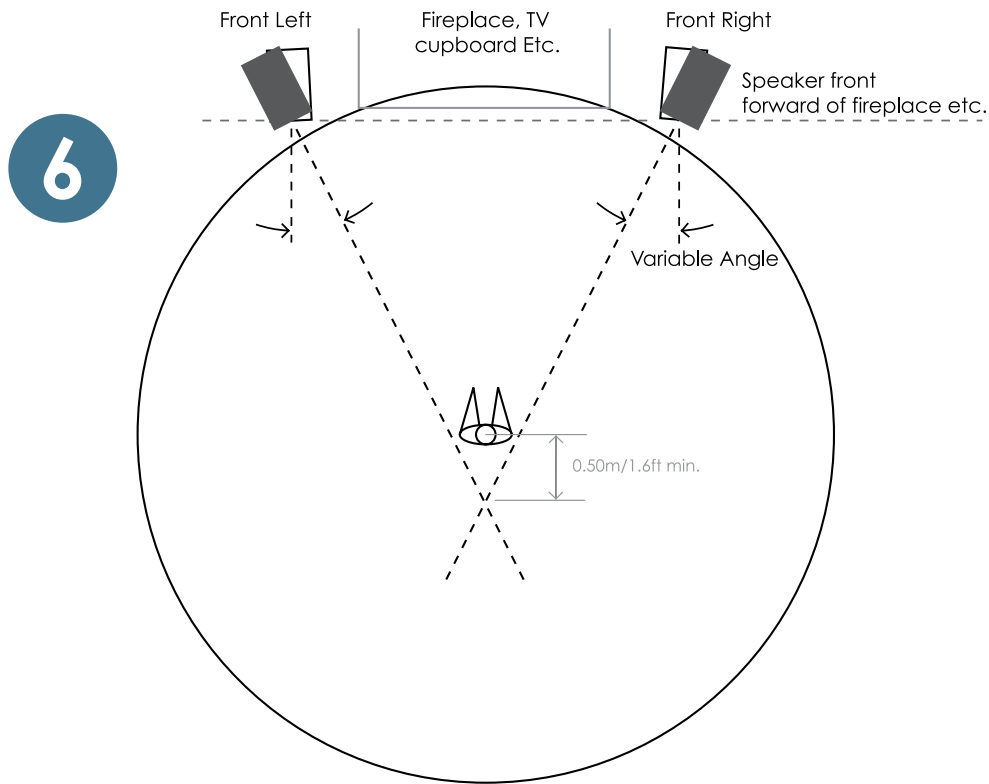


Repeat assembly for second loudspeaker base

# POSITIONING FENESTRIA



Before completing fenestria assembly by adding the top cabinet and planar wings, we suggest that the loudspeakers be placed as close as possible to their final listening position, as the weight of the completed fenestria makes post-assembly repositioning inadvisable.

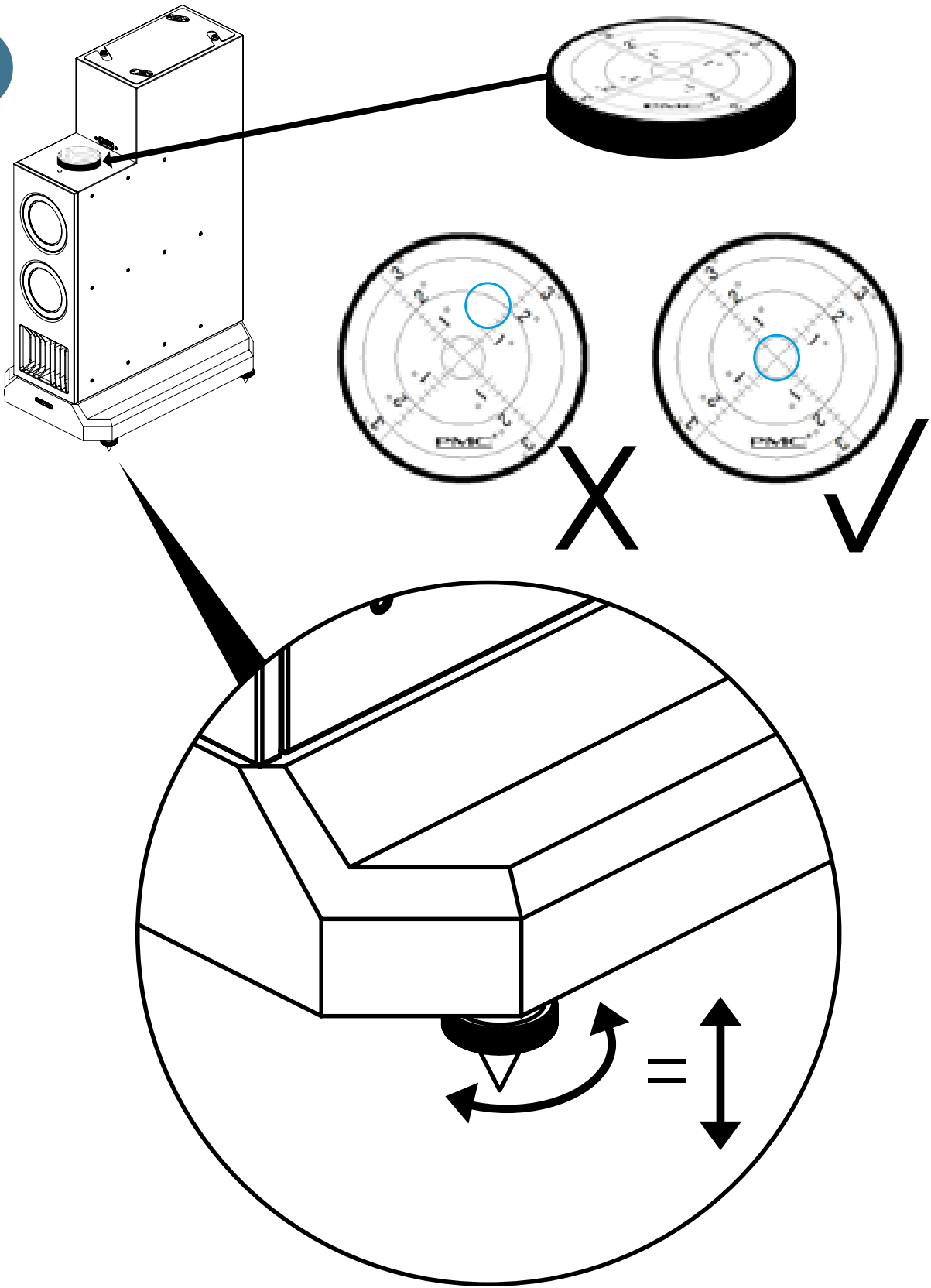


Thanks to its Advanced Transmission Line design, wide dispersion, ultra-low distortion and smooth bass roll-off, fenestria is more forgiving when it comes to room placement than conventional loudspeakers. We anticipate that you will be able to achieve a superb sound throughout your room with little effort. The following guidelines, and the stereo set-up diagram above, will also help.

- When loudspeakers are placed close to solid boundaries such as walls, ceilings and floors, low frequencies will sound louder. However, adjustments can still be made to the perceived bass level after speaker placement by means of the fine-tuning controls in fenestria's plinth (see page 23).
- Begin by placing the speaker so the front face is slightly forward of any large object that protrudes into the room – this could be a fireplace, bookcase or television for example.
- Ensure that both loudspeakers are equidistant from the listening position.
- The distance between your left/right speakers and the listening position should ideally create an equilateral triangle. As a general rule, the width of the audio picture will be narrow if the speakers are too close together. If they are too far apart, the picture will be wide but there will be less central definition.
- To further enhance the audio picture or soundstage the speakers can be angled or 'toed-in'. Start with the speakers angled so they will cross approximately 0.50m/1.6ft minimum behind the listening position, as shown in the diagram. Varying the speaker angle will also subtly affect the vividness of the audio picture.
- Before adding the top cabinets, use the included spirit level to ensure that both assembled plinths and lower cabinets are completely level (see opposite).
- Once the speakers are assembled, use a well-recorded vocal track to assess the overall imaging and sound (see page 23).

# LEVELLING

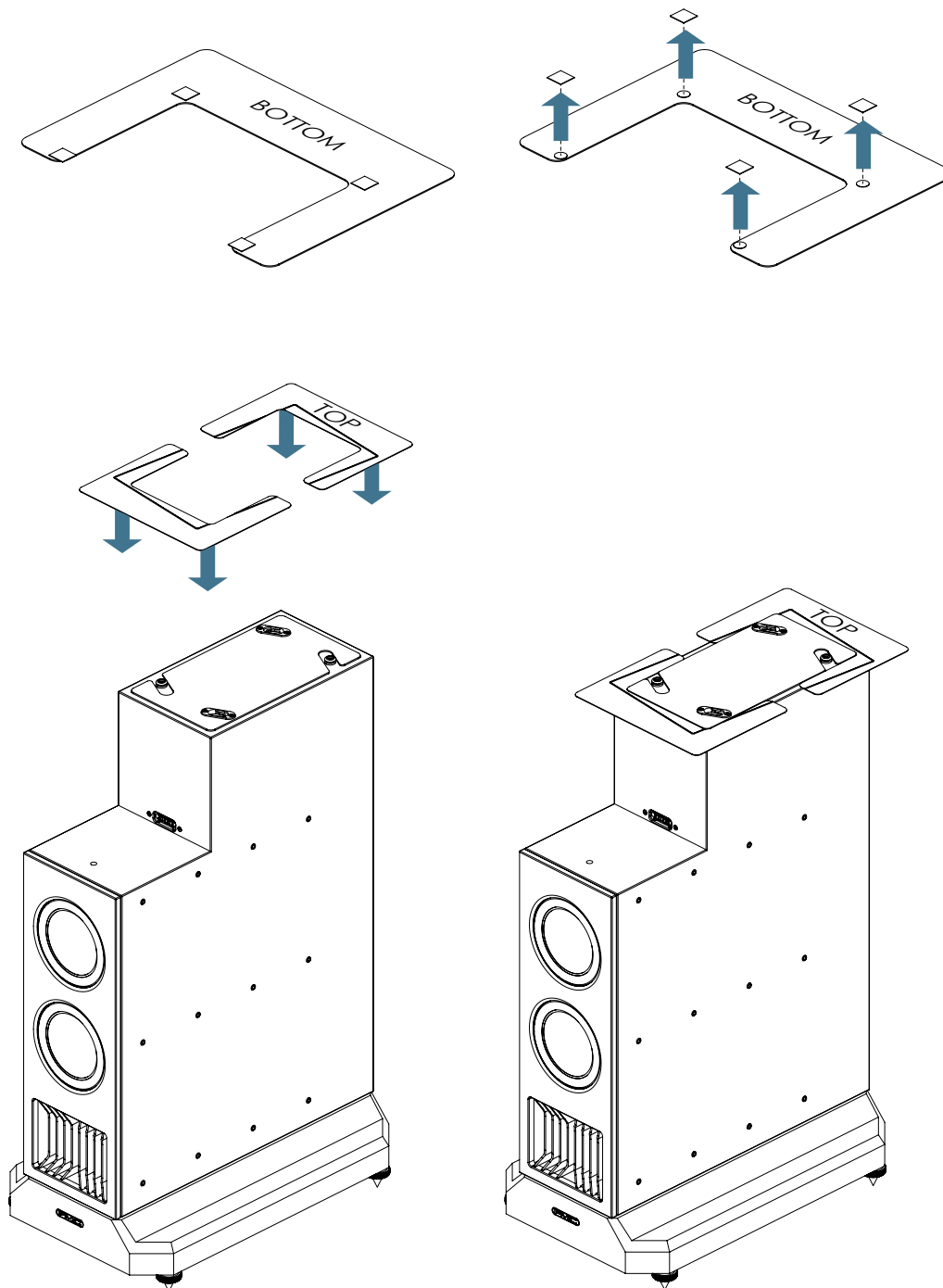
7



## CABINET ASSEMBLY PART 2

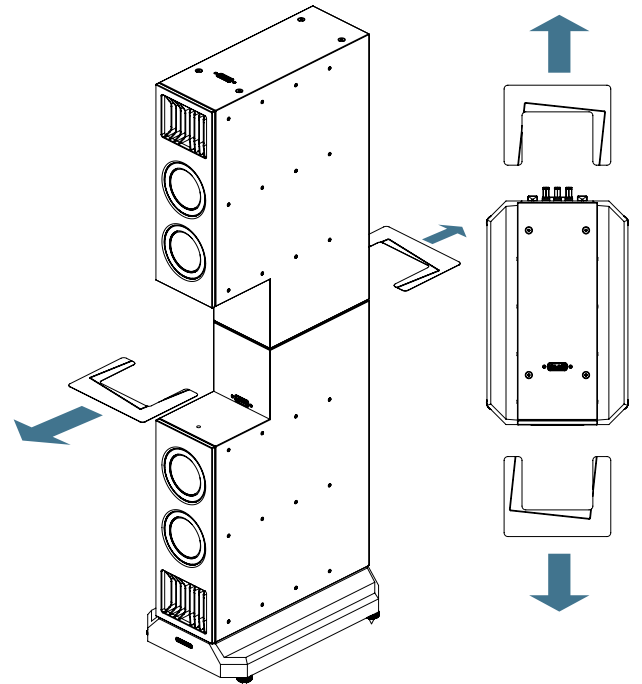
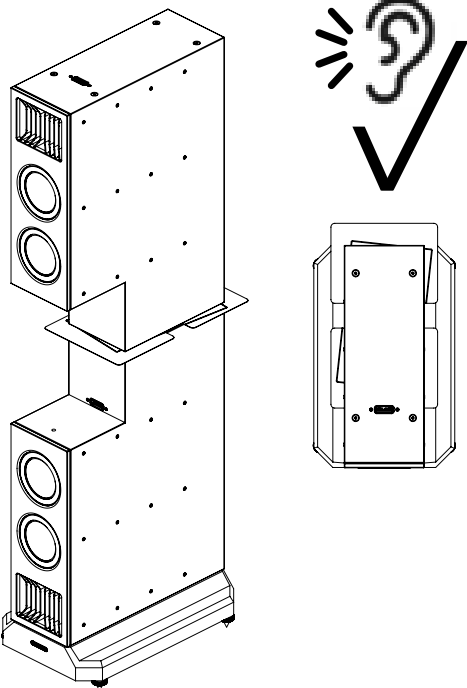
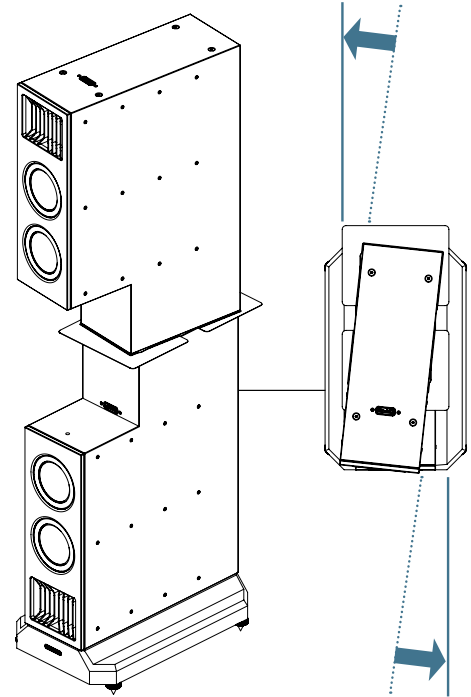
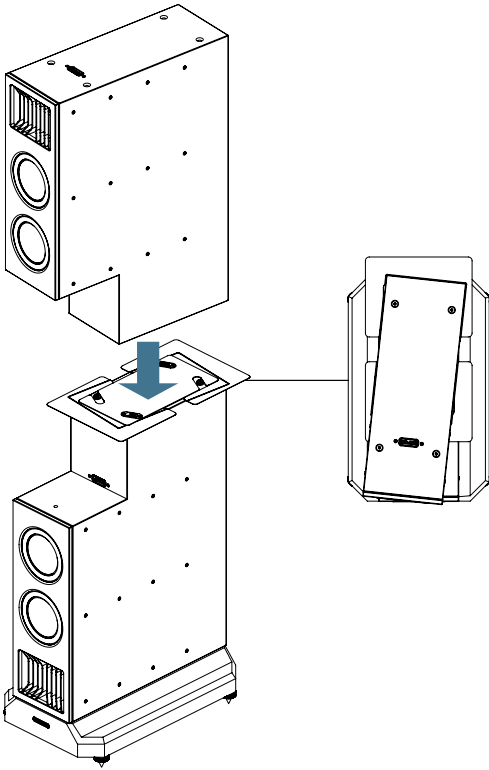
8

Taking the alignment templates from the accessories box, remove the pieces of protective film from the four glue spots and place the templates, adhesive side down, on the top face of the lower cabinet.



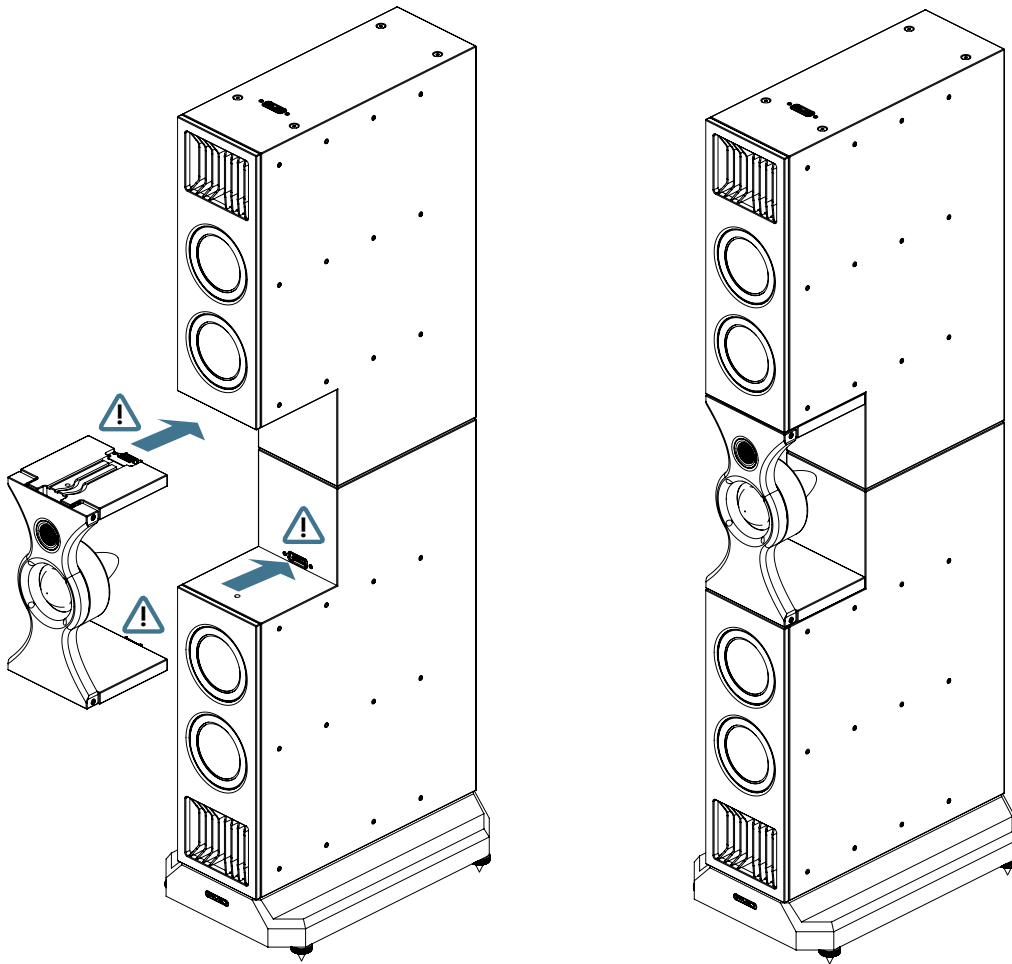


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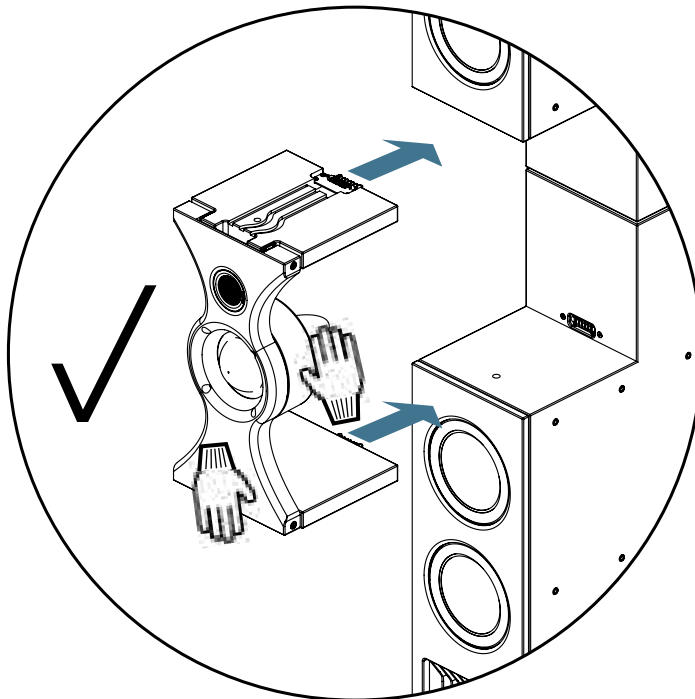


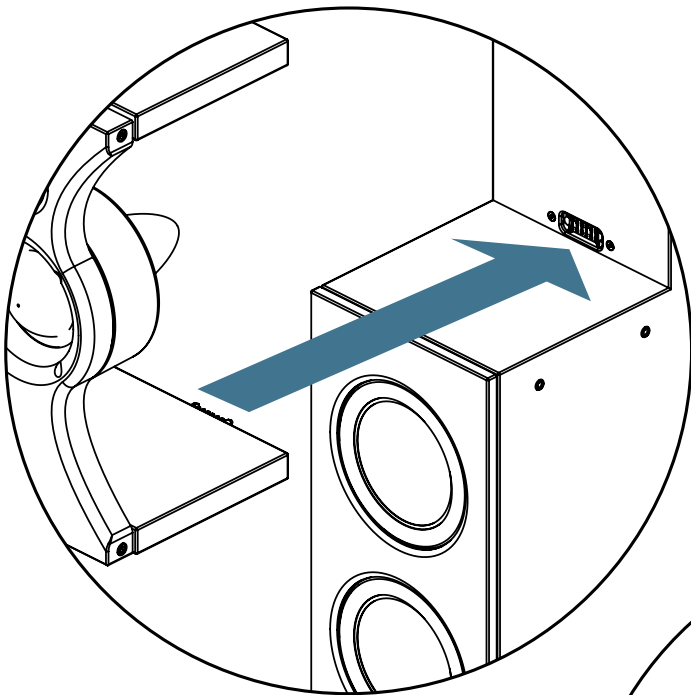
# INSTALLING THE NEST

10

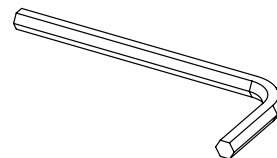
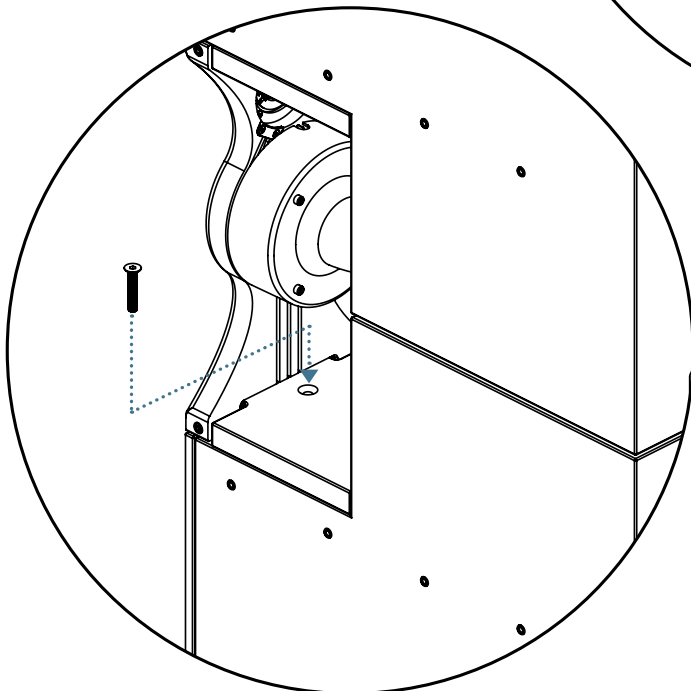
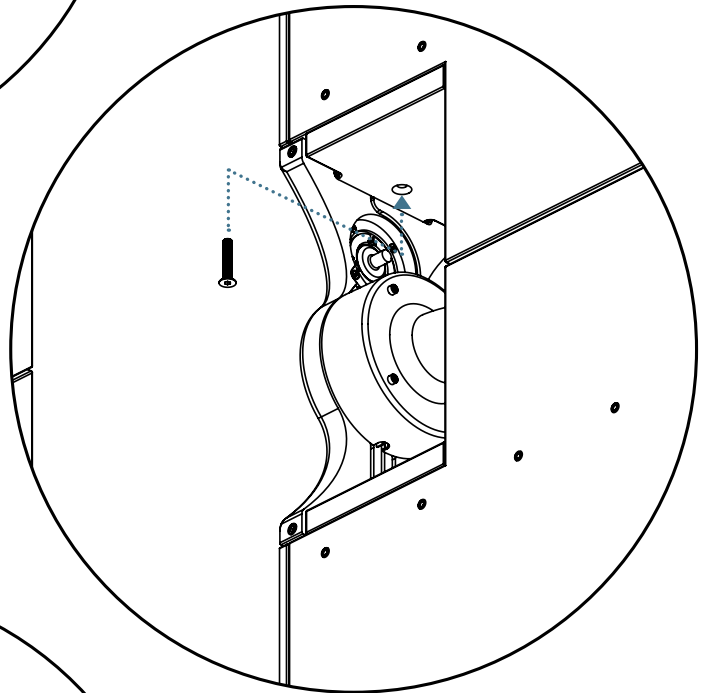


Do not touch the drivers. Hold by metal parts.





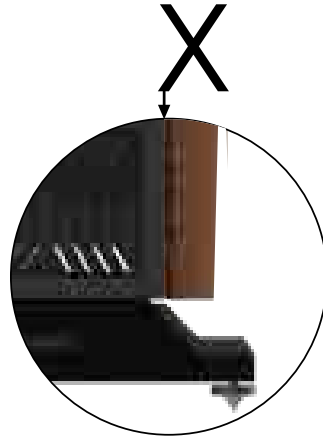
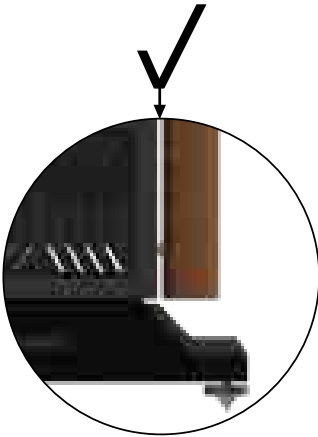
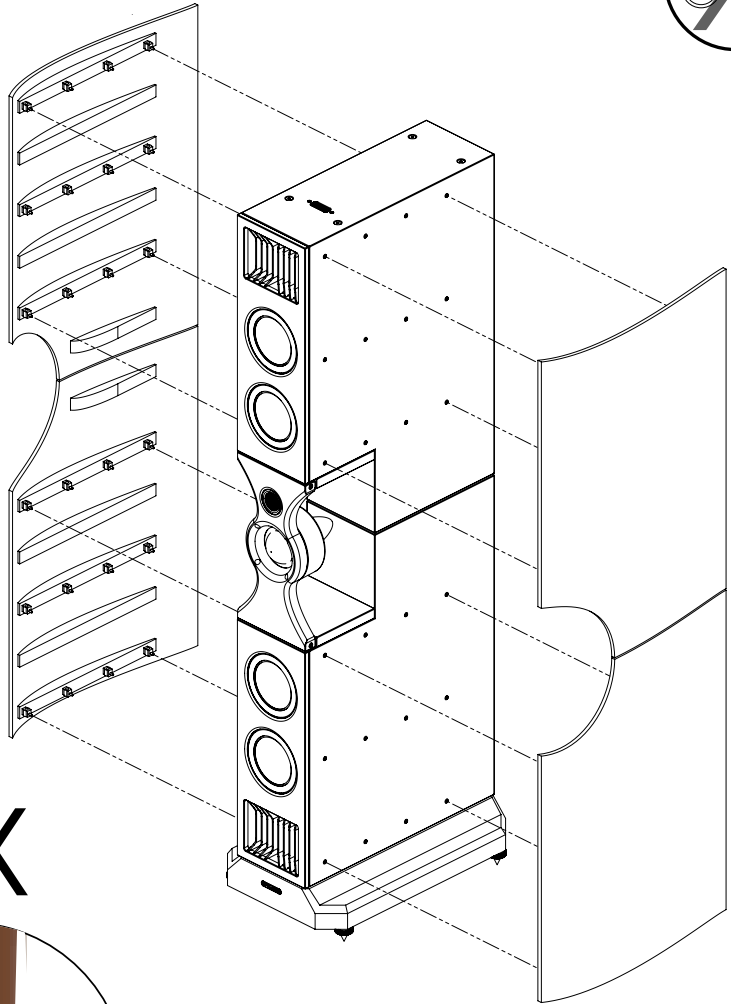
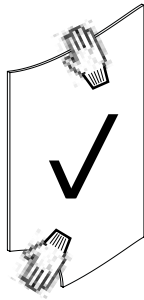
Connect  
with care



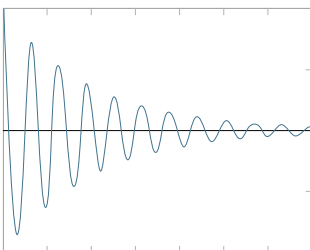
# INSTALLING THE PLANAR WINGS



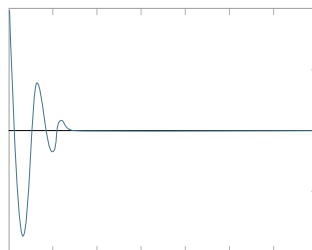
11



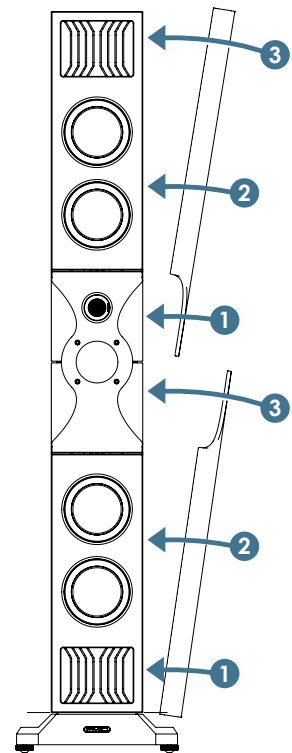
The diagrams below show how unwanted cabinet vibrations, left untreated, continue to resonate and distort speaker output, and, by comparison, how the vibrations are cancelled by planar wing mass damping in fenestria.



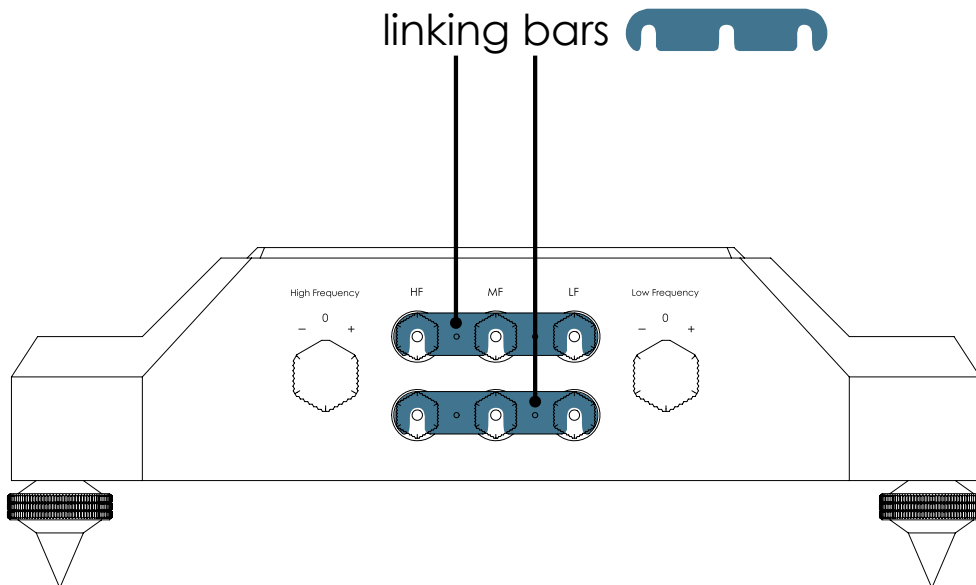
Without planar wing mass damping



With planar wing mass damping



# CONNECTIONS – STANDARD WIRING



To avoid potential damage, please ensure that your power amplifier(s) or receiver is turned off before connecting or disconnecting your loudspeakers.

## Cable & connectors

When selecting cables for use with your fenestria loudspeakers, ensure that their construction is of a high enough standard to withstand the rigours of everyday use and that they are suitably terminated. While bare wire can be accommodated by the fenestria binding posts, we recommend the use of either spade lugs or 4mm 'banana' plugs in order to maintain an electrical connection of the highest integrity and avoid the possibility of short circuits. Please consult your dealer for more information regarding cable lengths and termination options.



In some countries with unshuttered mains supply sockets, 4mm banana plugs are considered a potential safety hazard, because they may be inserted into mains supply sockets in error, with potentially grave consequences. If you are using fenestria in any country where banana plugs could be erroneously inserted into the mains as described, you should ensure that your cables cannot be used in an unsafe manner by minors or other uninformed persons.

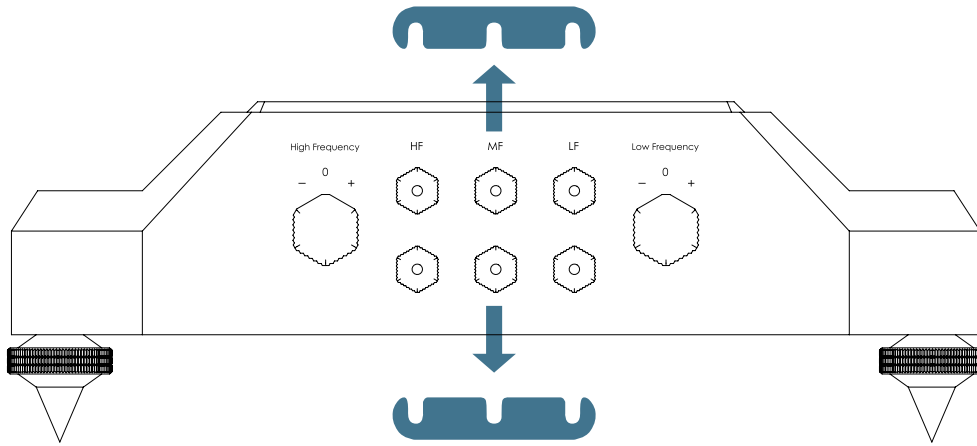
## Polarity ('+' and '-')

It is of vital importance to observe the polarity markings and maintain positive-to-positive and negative-to-negative connections from amplifier or receiver to the loudspeaker. The fenestria terminals are colour-coded to aid in their identification: positive terminals are red, negative terminals are black.

## Standard/Single-wiring amplifier connection

Connect using any of the three pairs of RED+/BLACK- terminals. Ensure the linking bars are secure and the binding posts are finger-tight.

# CONNECTIONS – TRI-WIRING OR TRI-AMPING



To avoid potential damage, please ensure that your power amplifier(s) or receiver is turned off before connecting or disconnecting your loudspeakers.

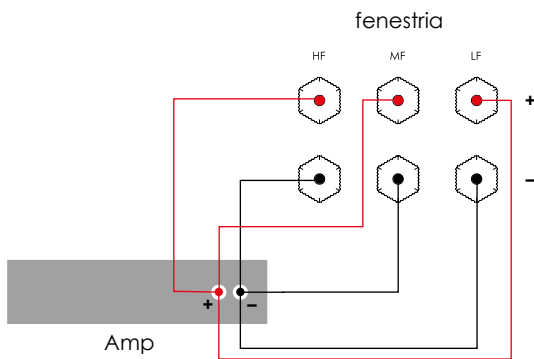
## Tri-wiring or tri-amping

fenestria can also be tri-wired or tri-amplified. By loosening all six rear binding posts, the linking bars can be removed so separate signals can be fed to the LF (Woofer), MF (50mm Dome) and HF (Tweeter) drivers. Ensure the binding posts are re-tightened after the linking bars are removed.

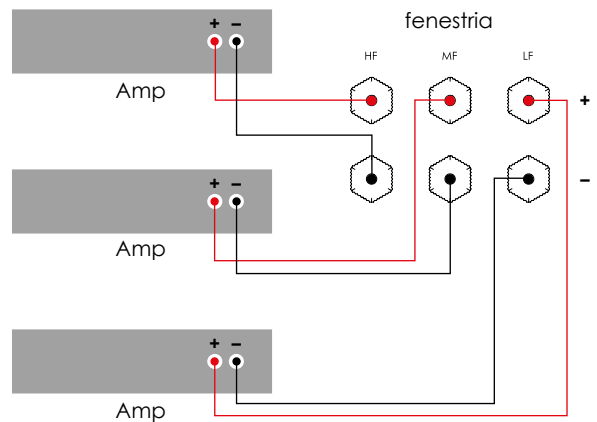
Tri-wiring and tri-amping use three lengths of cable per speaker. Tri-amping uses three separate amplifiers, one for each driver.

## Terminal identification

- Left pair of terminals = HF / High Frequency
- Middle pair of terminals = MF / Mid Frequency
- Right pair of terminals = LF / Bass Frequency



TRI-WIRING



TRI-AMPING

# FINE-TUNING FOR THE PERFECT SOUND

Once your fenestria is assembled, connected and optimally placed in its listening environment, it can be fine-tuned using the precision bass and treble response controls in the plinth of each loudspeaker. These allow you to adjust the bass response to compensate for the speakers' position relative to room boundaries, and to tailor the speakers to your room's acoustics. These will depend on how many hard, reflective surfaces and soft furnishings your room has, whether the room is carpeted, and so on.



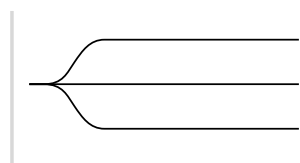
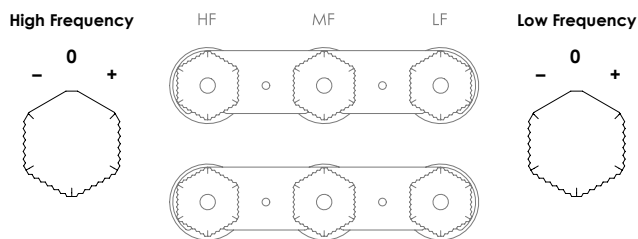
Always mute your amplifier whilst adjusting the HF & LF controls

## HF (Treble) adjustment

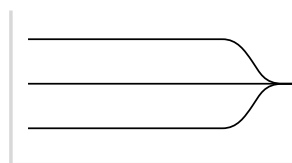
- High-quality vocal/speech recordings or broadcasts are good tests for correctly adjusted HF controls.
- Play a suitable vocal or speech recording through your speakers.
- Adjust the treble response using the HF response switch.
- When the HF response is correctly set, the speech or vocals should sound defined, completely natural. Adjust further as required.

## LF (Bass) adjustment

- Remember that more bass isn't necessarily better.
- Play a track through your speakers with a regular, well-defined beat.
- Adjust the bass response using the LF response switch.
- Check that the bass sounds clean, clear and well-defined on a variety of different styles of music. Adjust further as required.



HF - High Frequency



LF - Low Frequency

## RUNNING IN



50  
HOURS

All loudspeakers attain their optimum performance after a short 'running in' period. As the soft material surrounding the dome or woofer cone is flexed, it eventually reaches optimum compliance, allowing the drive unit to move more freely. This translates to greater accuracy and speed of attack in the bass region, and a truer, more vivid audio picture in the mid and high frequencies.

## CARE & ATTENTION

Your fenestria loudspeakers have been designed and hand-built with care and attention by fastidious people at the PMC facility in the UK, where every single component is measured and graded. Every detail, from the individual elements on the crossover and in the drive units right up to the cabinet, has been tested to ensure it meets our exacting standards for performance and reliability. This ensures each new model is a duplicate of the reference design. What's more, during manufacture, the precise value of each component in every loudspeaker, together with the response of the system as a whole, is recorded. If one of your speakers should ever require a repair, we can be certain that any replaced parts will exactly match the performance of those originally included in your specific loudspeaker. Such is the confidence in our work that we offer an unparalleled 20-year warranty on all passive consumer loudspeakers.







*“Computers don’t tell the full story. As well as a full frequency analysis, we listen to each speaker we make — and run a benchmark BBC speech and musical test on every single one”*

# WARRANTY - PART 1

Please complete and RETAIN this page for your own records

## YOUR COPY TO KEEP

**Product**

**Serial Nos**

**Date of purchase**

**Dealer name**

**Dealer address**

**Town**

**County**

**Postcode**

**Dealer Telephone No**

**Servicing and warranty issues – Please read the following carefully.**

### **Non UK clients**

Contact your local dealer/distributor for the details of warranty repairs - see [www.pmc-speakers.com](http://www.pmc-speakers.com) and click on distribution for their details.

### **UK clients**

In the unlikely event of a fault occurring with your PMC product, first contact your dealer where the product was purchased. Do not return a product to PMC without first contacting our technical dept. If the product must be returned for service you will be issued with a Returns Authorisation number.

If a product is returned to PMC and subsequently is found to have no fault or a non-warranty fault it will be subject to a minimum of £50.00 plus the carriage for its return.

Proof of purchase is required for any claim covered by this warranty.

This product is warranted for a period of 20 years from the date of purchase or upon receipt of 'our copy' (opposite) or on-line registration within ten days of purchase or receipt.

The warranty covers defects due to faulty materials or workmanship but does not cover defects arising from accidental damage, misuse or wear and tear. The warranty is void if any attempt has been made by persons not authorised by PMC to dismantle, repair or modify any part of the product.

Products must be returned using original packing material. This warranty does not cover damage in transit.

Note that the cost of the carriage to PMC is not covered by the warranty.

Returned products that are defective and covered by warranty will be repaired or replaced at the discretion of PMC.

Allow minimum of 14 working days for return of warranty repairs.

This warranty does not affect your consumer rights under statutory law. This warranty certificate is only valid in the United Kingdom.

## WARRANTY - PART 2

If you do not have access to the Internet, please complete and return this section to:  
PMC, Holme Court, Biggleswade, SG18 9ST, United Kingdom. Alternatively, complete the on-line registration at [www.pmc-speakers.com](http://www.pmc-speakers.com) and click on 'register product' at the top of the home page.

### OUR COPY

Product

Serial Nos

Date of purchase

Purchased from

Your Name

Your email address

Your address

Town

County

Postcode/Zip code

# DON'T FORGET!

Register your  
**fenestria**

at: [www.pmc-speakers.com](http://www.pmc-speakers.com)



The registration page is available in English, French, German, Spanish, Italian, Chinese, Dutch and Polish.



# GLOSSARY OF TERMS

**ATL™:** Advanced Transmission Line. PMC's unique bass-loading technology creates more bass from a cabinet of a given size, while ensuring a consistent tonal response at all listening levels and a cleaner, more detailed mid-range. For more information, see: [www.pmc-speakers.com/technology/atl](http://www.pmc-speakers.com/technology/atl)

**Bass/Low Frequency/LF:** The lowest part of the audible sound spectrum. Usually considered to range from approximately 500Hz down to around 20Hz.

**Crossover:** This essential element of any multi-driver speaker ensures that the speaker performs optimally, by dividing the incoming signal from an amplifier into several signals with frequency ranges best suited to reproduction by each of the loudspeaker's drive units. Fenestria's crossover, for example, divides the input signal into three (treble, mid-range and bass) and routes them to the appropriate drivers.

**dB (decibel):** A logarithmic unit expressing the relative loudness of a sound. A doubling or halving of audio signal voltage equates roughly to a 6dB change in output up or down respectively.

**Driver:** see Transducer.

**Dynamic Range:** The range between the quietest and the loudest sounds a device can produce, usually expressed in specifications in dB (see above).

**Hz (Hertz):** Unit of frequency, expressed as the number of cycles taking place per second.

**High-frequency driver:** Also known as the Tweeter, HF or treble driver, this is the smallest of a loudspeaker's drivers, designed to handle only the highest frequencies and tones. Treble drivers usually output frequencies from around 1.8kHz upwards, to beyond the limits of human hearing at around 18-20kHz.

**Laminair™:** Aerodynamically optimised vents at the ends of fenestria's twin Advanced Transmission Lines. The Laminair™ design eliminates air noise and reduces resistance and air turbulence, increasing maximum bass output and improving LF dynamics and timing. For more information, see: [www.pmc-speakers.com/technology/atl-laminair](http://www.pmc-speakers.com/technology/atl-laminair)

**Low-frequency driver:** Also known in loudspeaker circles as a woofer, LF or bass driver, this is usually the largest driver in a loudspeaker and handles the lowest tones — generally from around 500Hz downwards, and sometimes as low as 20Hz.

**Mid-range:** The frequencies of the audible spectrum to which the human ear is most sensitive. Usually considered to range from approximately 500Hz to around 2kHz.

**Mid-frequency driver:** Also known as the mid-range driver or simply mid, in a three-way loudspeaker this is the middle driver. In a two-way loudspeaker, the mid is omitted or combined with the low-frequency or bass driver. Mid-range drivers generally handle frequencies from 400Hz to around 3-4kHz.

**Nest:** In PMC's fenestria, the solid aluminium central module which houses the mid- and high-frequency drivers, and which is mechanically isolated from the rest of the loudspeaker.

**Planar Wings:** The side panels of the fenestria speaker, the planar wings are fitted on compliant mounts, which allows them to vibrate in polar opposition to the cabinet and act as tuned mass dampers (see below), eliminating unwanted vibration.

**Stereo Imaging:** The sound from a system as it appears between the speakers of a hi-fi system. Imaging relates to both width and depth. If imaging is good, it is easy to locate individual performers and instruments in the reproduced stereo soundstage.

**Transducer:** A device that converts energy from one form to another. A microphone, for example, is a transducer that converts mechanical vibrations (sound) to electrical energy. A loudspeaker is a transducer that does the opposite.

**Treble/High Frequency/HF:** The highest frequencies in the audible sound spectrum — broadly speaking, tones like bells and transient-based percussion. Usually considered to range from approximately 4kHz to the limit of human hearing at around 18-20kHz.

**Tri-amplification:** The practice of connecting three channels of amplification to a loudspeaker, to power the bass (LF), mid-range (MF) and treble (HF) drivers independently.

**Tri-wiring:** The practice of connecting three cables from the same amplifier to individual bass (LF), mid-range (MF) and treble (HF) connections. Tri-wiring should not be confused with tri-amping (see above), in which separate amplifiers are used for each driver,

**Tuned Mass Damper:** A large mass added to the top of skyscrapers as an earthquake-proofing measure. If the building begins to vibrate due to a seismic disturbance, the tuned mass damper oscillates in opposition, cancelling out the destructive seismic resonance. The same principle is applied to unwanted cabinet resonances in fenestria, with the planar wings (see above) acting as the tuned mass dampers.

## SPECIFICATION

<b>Type:</b>	3-way passive, twin cabinet, plus MF/HF nest module
<b>Crossover frequency:</b>	380Hz & 3.8kHz
<b>Dimensions including plinth:</b>	<b>H</b> 1700mm (66.9") x <b>W</b> 370mm (14.6") x <b>D</b> 623mm (24.5") including binding posts. Spikes add 50mm (2") to height.
<b>Drive units:</b>	<b>LF</b> — 4 x 6.5" transverse-weave, carbon-fibre, multicellular-core piston driver <b>MF</b> — 75mm rear-chambered, soft-dome driver isolated in nest mount <b>HF</b> — 19.5mm, SONOMEX™ soft-dome, ferro-fluid-cooled driver with 36mm wide surround, neodymium magnet, micro custom chassis, silicone Aureole™ isolation mount
<b>Effective ATL™ length:</b>	2 x 2.4m (7.9ft)
<b>Frequency response:</b>	23Hz - 25kHz
<b>Impedance:</b>	4 Ohms
<b>Input connectors:</b>	Hex-Rhodium 4mm binding posts (3 pairs) accepting 4mm plugs, spades & bare wire
<b>Sensitivity:</b>	86dB @ 1W, 1m
<b>Weight:</b>	80kg (176 lbs) each, including plinth
<b>Recommended amplifier power:</b>	200W - 1kW

### Finishes:



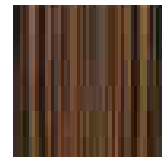
White silk



Rich walnut



Graphite



Tiger ebony

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# factfenestria

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Item no. 967/PMC stock code 15771/August©2018