

 WHARFEDALE

ELYSIAN Series



User Manual

ELYSIAN 1 ELYSIAN 2 ELYSIAN 4 ELYSIAN CENTRE

Important Safety Information

Before installing this product read all these instructions!



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Read these instructions. Keep these instructions. Heed all warnings. Follow all instructions.

Before making any connections, switch all the units in your system off at the mains.

Set the volume control at minimum when you switch on your system or change sources, and turn the level up gradually.

DO NOT use your amplifier at full volume.

Ensure that all loudspeakers in the system are correctly wired.

DO NOT subject your loudspeakers to excessive cold, heat, humidity or sunlight.

Loudspeakers should not be placed directly facing other hi-fi units, or share the same shelf or cabinet.

DO NOT place heavy objects on top of loudspeakers.

Some manufacturers forbid the placing of objects on top of their TV sets. Check your TV handbook before installing the speaker directly on your TV set. Consult your TV dealer if you are in any doubt.

DO NOT connect speaker terminals to the mains supply.

DO NOT dismantle the loudspeaker. There are no user serviceable parts inside it and you will void the warranty by doing so.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

One For The Connoisseur; One For The History Books

Founded in 1932, Wharfedale's founder, Gilbert Briggs, had one goal in mind –
to bring music into the home by designing loudspeakers
that conveyed the impact, thrill and emotion of performance
in an entirely natural and realistic way.

Thus he created the first true hi-fi experience for connoisseurs of music in the home
and continued to introduce technology that would enhance the listening experience –
like the first commercial crossover, foam surrounds and the slot port system.

Today Wharfedale engineers follow the same dictum,
utilising technology where it truly matters to develop loudspeakers
that reveal the passion and excitement behind the musical performance.

With that end in mind Wharfedale is proud to introduce ELYSIAN,
a no-holds-barred technological achievement
that is devoted to involving you in the music
in a thrilling and exciting way.

 W H A R F E D A L E

BRITAIN'S MOST FAMOUS LOUDSPEAKERS



Designed and engineered
in the United Kingdom.

Revealing the Passion and Excitement of the Musical Performance

Wharfedale ELYSIAN is a new flagship loudspeaker series that pushes the boundaries of capability and performance from a speaker at this price-point.

A genuine example of luxury audio, ELYSIAN offers indulgence in design, materials aesthetic and performance. A thorough and no compromise approach has led Wharfedale engineers to create a benchmark in affordable, audiophile-grade luxury loudspeakers. Cutting edge design and class-leading technology are combined to deliver musical reproduction that will proudly challenge the world's finest loudspeakers.

ELYSIAN AMT

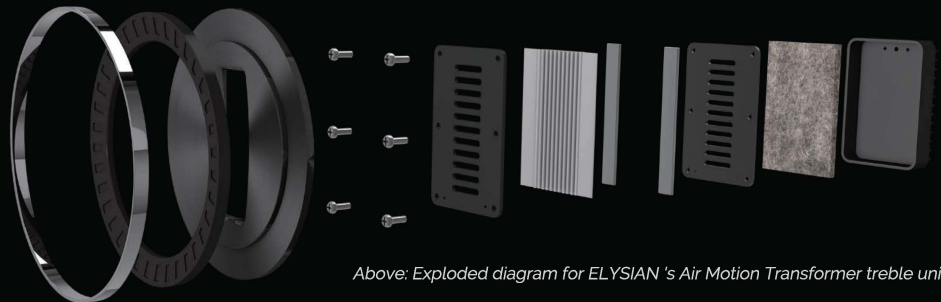
In the 1940s, Wharfedale's founder, Gilbert Briggs, developed the first two-way speaker for domestic use, radical for its separate treble and bass drivers combined via a crossover. Early treble units, such as Briggs's famous Super 3, resembled small cones as the necessity for reproducing high frequencies demanded the use of low-mass diaphragms. It was subsequently realised that the dome in the centre of the cone was doing most of the work and this gave rise to the now ubiquitous dome tweeter.

Dome treble units have dominated the hi-fi scene for decades, but they are not necessarily the ideal way of reproducing the exact harmonics of the musical waveform. In order to reduce moving mass, the dome has to be small and use ultra-thin materials, both of which counteract its efficiency and accuracy.

The AMT (Air Motion Transformer) is a radically different way of moving air, using a large, pleated, lightweight diaphragm driven across its surface by rows of strategically placed metallic strips immersed in a strong magnetic field. The pleats in the diaphragm contract and expand under the influence of the musical drive, squeezing the air between them to form the desired waveform. This imparts high velocity to the air molecules near the diaphragm and is responsible for the remarkable transient performance of this type of treble unit.

Not only is this an efficient way of moving air, it is also a highly accurate as the diaphragm is under close control of the motor system at all times. The result is a wide bandwidth transducer that achieves extremely low distortion and wonderful musical detail, with scintillating speed and dynamic ability.

The development of this AMT unit was a key part of the ELYSIAN/EVO4 project. The ELYSIAN AMT is larger and of higher specification than the one used in the EVO4 Series, featuring an ultra-lightweight diaphragm material called PET and an acoustically damped rear chamber that absorbs the back wave from the diaphragm, delivering even more spell-bindingly clear and sweetly extended high frequencies.



Above: Exploded diagram for ELYSIAN's Air Motion Transformer treble unit

Designer's Notes

ELYSIAN MIDRANGE

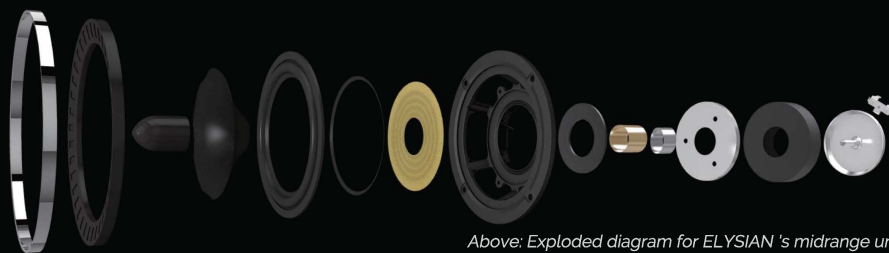
In the spirit of Gilbert Briggs, who was well known for experimenting with new driver materials, Wharfedale investigated a range of options to match the sensitivity and accuracy of the AMT treble unit.

The designers settled on a proprietary woven glass fibre matrix, formed into a 150mm cone. This provides a superb combination of low mass and high strength, with the addition of a high-plasticity coating to control its acoustic behaviour. With such a low-mass cone, only a low-damping, foamed, rubber-like material would match for the surround - again, coated for durability.

Drive energy for the cone comes from a 25mm, 2-layer voice coil centred in a magnetic gap fitted with an aluminium ring to control eddy currents, linearise inductance and so increase bandwidth and reduce distortion. The whole assembly is fitted to a die-cast aluminium basket with large ventilation windows below the spider to improve transient response.

A central phase plug is specially shaped to linearise the output across a wide bandwidth, even off-axis, enhancing a natural response to the music which can be heard anywhere the listener wishes to sit.

This midrange driver enables the ELYSIAN speakers to deliver voices and instruments with astonishing realism. Vocalists seem to be present in the room with the listener - simply close your eyes and listen to the palpable presence of singers in the acoustic space.

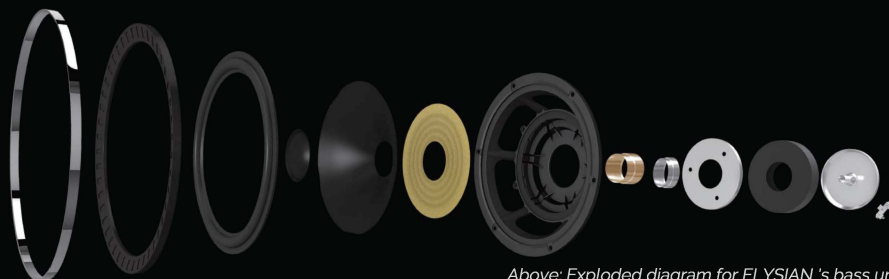


Above: Exploded diagram for ELYSIAN's midrange unit.

ELYSIAN BASS

The midrange unit is matched with a glass fibre matrix cone for the bass unit, in this case terminated with a highly flexible rubber surround and driven by a specially developed low-distortion motor system. Mounted on a die-cast aluminium chassis, the magnet system features an aluminium ring for eddy current control, immersing the 17.5mm long, 38mm diameter voice coil in high flux over 12mm of linear excursion.

In order to plumb the depths of the lowest frequencies in recorded music, the 220mm bass units - one in the ELYSIAN 2, two in the ELYSIAN 4 - are capable of reaching down below 28Hz in-room, revealing the full body and impact of percussion, stringed and wind instruments.



Above: Exploded diagram for ELYSIAN's bass unit.

ELYSIAN CROSSOVER

The bass units are loaded by an advanced version of Wharfedale's signature slot-loaded port. Christened SLPP (Slot-Loaded Profiled Port), it ensures that the rear output of the bass units is not wasted. Instead, the lowest frequency energy is vented to a slot at the base of the speaker, specially profiled to equalise the high internal pressure to the low pressure in the room.

This reduces the distortion that is typical of bass reflex system and increases the port's efficiency. In addition, because the air is dispersed uniformly in the room, the speakers are less fussy about siting.

In combination, the bass units and SLPP bass reflex system provide the massive foundation upon which the rest of the musical performance sits, letting you feel as well as hear the full impact of thunderous low-frequency information. High overall system sensitivity, in the region of 92dB for 1 Watt of input, allows any amplifier to reveal the full dynamic range of the music fed to it, without strain or limitation.

Combining the outputs of the drivers is an advanced computer modeled crossover that has been developed over hundreds of hours of listening tests, fine tuned to make sure that the blend between the drive units is seamless. Crossover slopes have been modeled on each individual driver's acoustic response, matched to Linkwitz-Riley characteristics, with the crossover frequencies chosen to maximise the optimum, linear performance of each drive unit.

Of particular note is the phase consistency across the drive unit output, allowing a wide range of seating position and encouraging the power response to be highly linear throughout your listening room.

Crossover components have been chosen for their transparency, with silicon-iron cored coils for bass and midrange featuring low DCR that allows the amplifier excellent control of the drivers, plus air core coils in the treble and low ESR, Polypropylene capacitors throughout the signal path, ensuring that you hear all the musical detail with nothing held back.



Designer's Notes

ELYSIAN CABINET

For ELYSIAN we wanted to create a cabinet that enhanced the acoustic output of the drivers as well as providing a piece of furniture of which the owner can be justly proud. Hand crafted, exotic veneers are mirrored by true piano finish lacquers, hand polished to six levels of depth to give a truly beautiful finish.

Underneath the veneer, working unseen, is a sandwich of different woods designed to reduce panel resonance to below audibility. This multi-layer construction, PROS (Panel Resonance Optimization System), has a further benefit – it inhibits the leakage of unwanted sound energy from inside the cabinet which would otherwise interfere with the forward output of the drive units.

You'll hear the full body of instruments like cello and bass guitar, without straining to enjoy the complete dynamics of the musical recital. Whether you are listening to solo piano, full orchestra or a jazz trio or multi-instrument rock performance, ELYSIAN is more than capable of bringing the thrill and excitement of the performance into your listening room.



A stylized, handwritten signature in white ink, reading "Peter Comeau". The signature is fluid and cursive, with a long horizontal line extending from the end.

PETER COMEAU
Director of Acoustic Design
IAG Group Ltd

ELYSIAN Air Motion Transformer

- Radically different transducer for wide bandwidth and wonderful musical detail

ELYSIAN Midrange

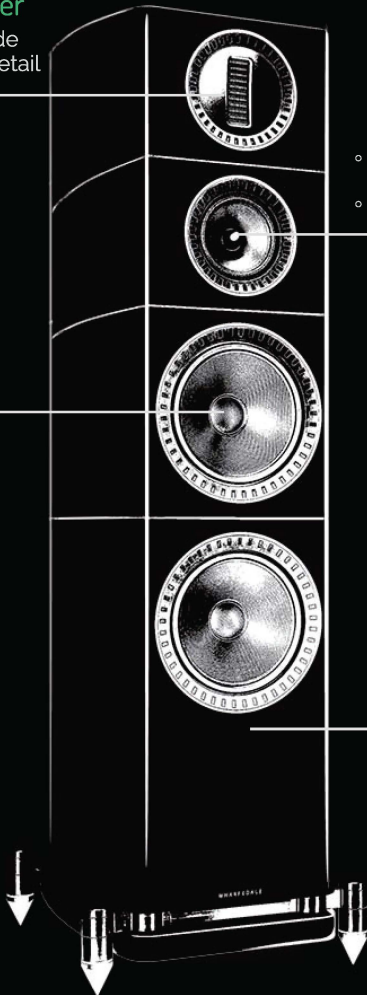
- Unique woven glass fibre matrix cone
- Astonishing reality for voices and instruments

ELYSIAN Bass

- Glass fibre matrix cone
- Reaches down to 28Hz for full body and impact

ELYSIAN Cabinet

- The most advanced Wharfedale slot loaded bass port
- Improved dispersion of bass energy for thunderous impact



Loudspeaker Installation

Unpacking Your Loudspeakers

- Please read this manual as soon as you have opened the carton.
- Lift the loudspeaker carefully out of the packing. Do NOT try to lift the loudspeaker using the cloth bag.
- Unpack any accessories carefully.
- If there is any sign of damage or if the contents are incomplete, report this to your dealer as soon as possible.
- Retain the packing for future safe transport of the product. Dispose of the packing with respect to any recycling provisions in your area.

Attaching the Spikes to Floorstanding Model – ELYSIAN 4

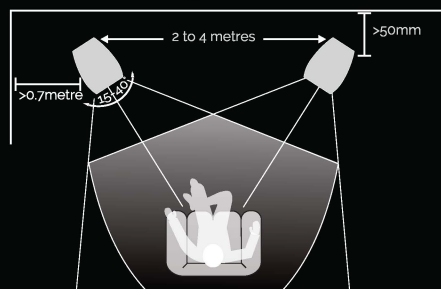
- Make sure you have plenty of unobstructed working space and assistance for lifting and moving the speaker.
- Place a soft cloth or protective material on the floor to protect the loudspeaker.
- Invert the loudspeaker onto the cloth or protective surface.
- Thread a locknut onto each spike and loosely fix it up the thread.
- Thread the spikes into the spike inserts. Tighten them by hand until tight (do not use mechanical or power assisted tools for tightening)
- Invert the loudspeaker to the upright position. Be careful not to damage the floor with the spikes.

Levelling the Loudspeakers

- When the speaker is upright, with the spikes on the floor, you may find that the speaker is not completely level and/or one spike is not in full contact with the floor.
- In this instance; simply adjust the spikes by loosening or tightening as required.
- Spike seats are included in the accessories box for use with ELYSIAN 4 feet, or corresponding ELYSIAN standmount speaker stands.
- Spike seats are for use on wood or stone floors etc. Simply place these underneath each spike to isolate the spike from the floor.

Positioning Stereo Loudspeakers

- If you are sitting within 2m of the speakers, the distance between the speakers should be the same as between you and the speakers.
- Otherwise site the speakers between 2 to 4 metres apart, clear of rear walls and room corners.
- If the loudspeakers are placed too close to the walls the bass will increase but may be boomy and indistinct. If the loudspeakers are placed further away from the walls, the inward angle ("toe in") may be increased by up to 30%. As personal taste and room acoustics play a large role, experiment with different configurations and play a wide range of programme material before finalising the position of your speakers.
- The optimum listening position is in an area between the speakers broadly known as the "sweet spot". The more extreme the angle of toe-in the narrower the sweet spot. Wharfedale loudspeakers are designed to cover a wide sonic perspective so there should be no need for extreme settings. A mild angle inwards will cover a wide range of seating positions.
- The grilles are provided to protect the loudspeaker drive units from accidental damage. For critical listening, please remove the grilles.



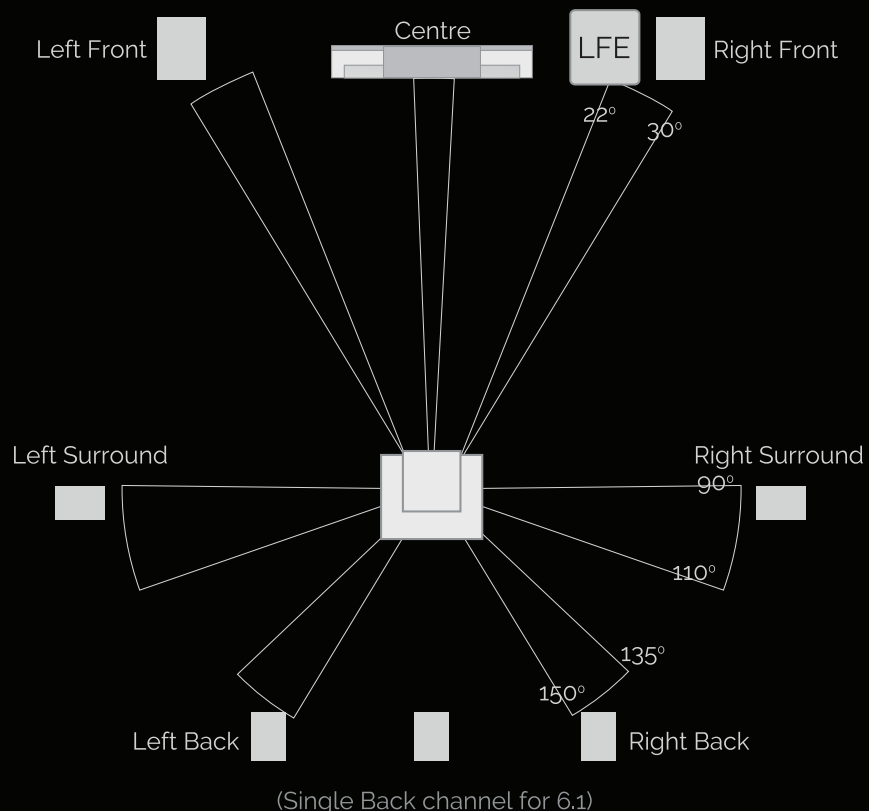
Loudspeaker Installation

Setting Up a Home Theatre System

- Front and Effects Channels: The front loudspeakers are placed on either side of the television screen, 2 to 3 metres apart. The speakers should be angled slightly so they are aimed towards listeners. We recommend placing the rear effects speakers in a high position, behind the listener's head. If the rear or side walls are a long way from the listening seat, consider stand mounting the loudspeakers. If the centre loudspeaker is very high or low, angle it towards the listener's ear level.
- The front faces of the centre and surround loudspeakers should also be in line as far as possible.
- Subwoofer: As the ear is unable to detect the direction from which deep bass originates, you have freedom to position the unit. Varying the distance from the wall alters the bass. Placing the subwoofer across a corner boosts the bass but may impair clarity. The performance of a home theatre system can be enhanced by using two subwoofers.

6.1 and 7.1 System Placement

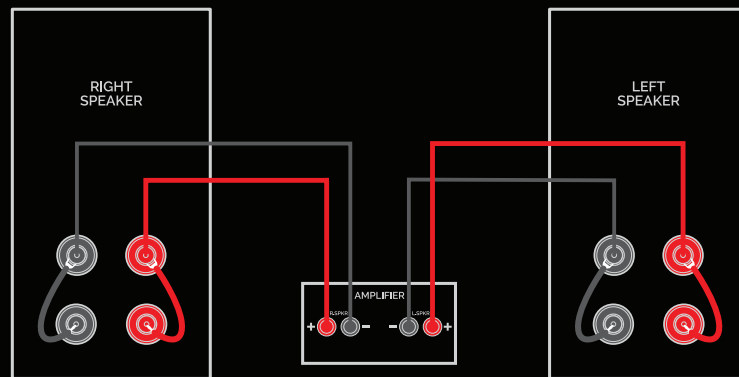
- Dolby Labs, DTS and THX offer 6.1 and 7.1 format. Although the precise configuration of these systems will depend on the capabilities of your processor and you should be guided by those instructions, we would make some observation.
- For 6.1 and 7.1 formats the listening seat should not be too close to the rear wall.
- Optimising the time delay so that information from all speakers arrives the listening seat coherently is critical of the benefits of these systems are to be fully realised.
- Dolby Labs Recommended Placement for Multichannel Home Theater Systems.



Loudspeaker Installation

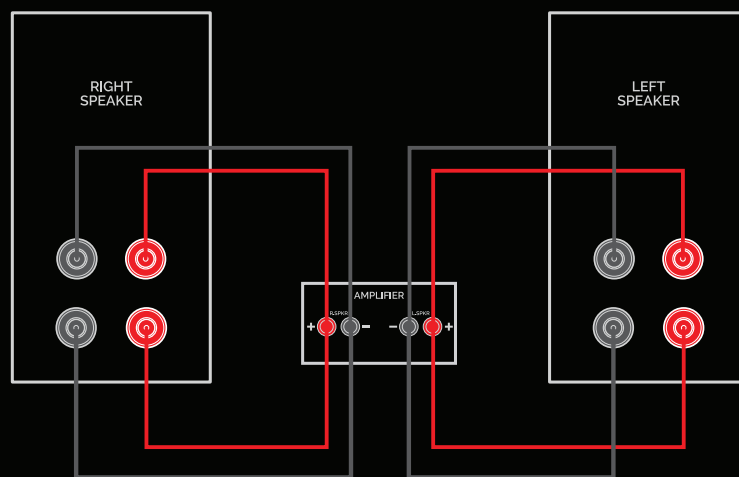
Standard Connection

- Connect the supplied link cables (from the accessories box) to the terminals of the loudspeaker.
- Choose a suitable length of twin core speaker cable for each channel and prepare the ends. Unscrew each terminal a few turns. Connect the red positive (+) terminal of the Left loudspeaker to the corresponding red positive (+) amplifier terminal. Connect the black negative (-) terminals similarly. Tighten the terminal securely.
- Repeat this procedure for the Right Channel. If you are standard wiring make sure the terminal links are securely in place.



Bi-Wiring Connection

- Unscrew each terminal a few turns. Connect the cables between the amplifier and the loudspeakers as indicated above and re-tighten all the terminals securely.



Looking After Your Loudspeaker

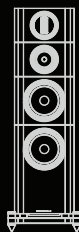
- This speaker is hand-finished with a genuine Piano-Lacquer. As with all real wood furniture finishes; exposure to direct sunlight, heat, cold and varying humidity can affect the natural properties of the speaker cabinet. We advise protecting the speaker from extreme variances in temperature and environment conditions.
- We advise that you do not place anything on the surface of the cabinets, to protect from damage. Treated with care, the genuine Piano-Lacquer finish will last a lifetime. They will age naturally and subtly, retaining the properties of the beautiful high gloss finish.
- Your Wharfedale loudspeakers use a specially hardwearing sealed finish. They should not be waxed or treated with spray polishes which will smear and dim their lustrous finish. Polish them with a dry or barely moist cloth to remove dust and finger marks, etc.
- Occasionally, remove the loudspeaker grilles and brush them gently with a soft brush before replacing them carefully.
- Avoid getting any liquid behind the grille. If you accidentally spill liquid on your loudspeakers, take them to your dealer for attention before using them again.

Servicing

- Do not open the speakers; there are no user serviceable parts inside. Never touch the driver units either with an object or your hands.
- In the unlikely event of your unit develops a fault you should return it to your Wharfedale dealer using the original packing to ensure safe shipping.
- The terms of your guarantee may vary in different countries. However, in all cases the guarantee excludes:
 - Liability for damage or loss occurring in transit to or from the purchaser.
 - All damage caused through accident, misuse, wear and tear, neglect, incorrect installation, adjustment or repair by unauthorised personnel.
- Wharfedale will not be liable for any consequential damage, loss or injury, arising from or in conjunction with this equipment.
- For technical support, servicing or product queries and information, please contact your local retailer or the office below:
Address: IAG House, 13/14 Glebe Road, Huntingdon, Cambridgeshire, PE29 7DL, UK
Tel: +44 (0) 1480 452561
Email: service@wharfedale.co.uk
- For information on other authorised service centres worldwide, contact Wharfedale International, UK. A worldwide distributors list is available on the Wharfedale website: www.wharfedale.co.uk

Technical Data

Specifications



ELYSIAN 4

3-way floorstanding speaker
bass reflex
3-way
8.5" (220mm) coated fibre glass
matrix cone x 2
6" (150mm) coated fibre glass
matrix cone
27 x 90mm AMT
No
92dB
15-250W
110dB
4Ω (compatible 8Ω)
3.2Ω
30Hz ~ 22kHz
24Hz
340Hz, 3.1kHz
38L, 79.4L

General Description
Enclosure Type
Transducer Complement
Bass Driver

Midrange Driver

Treble Driver
AV Shield
Sensitivity (2.83V @ 1m)
Recommended Amplifier Power
Peak SPL
Nominal Impedance
Minimum Impedance
Frequency Response (+/-3dB)
Bass Extension (-6dB)
Crossover Frequency
Cabinet Volume (in litres)

Dimensions (mm)

Height (on plinth) 1188mm
Width (on plinth) 402mm
Depth (with terminals) (432+30)mm
Carton Size 1285 x 595 x 480
Net Weight 49.5kg/pcs
Gross Weight 55.8kg/ctn

Materials:

Columns
Top Plate
Base Spikes

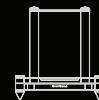
Dimensions (mm):

Height (on plinth)
Width
Depth (with badge)



ELYSIAN 2

3-way standmount speaker
bass reflex
3-way
8.5" (220mm) coated fibre glass
matrix cone
6" (150mm) coated fibre glass
matrix cone
27 x 90mm AMT
No
89dB
25-250W
109dB
4Ω (compatible 8Ω)
3.6Ω
35Hz ~ 22kHz
28Hz
360Hz, 2.9kHz
17.5L, 43.6L



ELYSIAN 2 Stands

High carbon steel tube
High carbon steel
Hardened high carbon steel

428mm
402mm
435mm

Specifications



ELYSIAN 1

General Description
Enclosure Type
Transducer Complement
Bass Driver

2-way standmount speaker
bass reflex
2-way
7" (180mm) coated fibre glass matrix cone

Midrange Driver

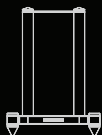
Treble Driver
AV Shield
Sensitivity (2.83V @ 1m)
Recommended Amplifier Power
Peak SPL
Nominal Impedance
Minimum Impedance
Frequency Response (+/-3dB)
Bass Extension (-6dB)
Crossover Frequency
Cabinet Volume (in litres)

27 x 90mm AMT
No
89dB
25-175W
108dB
4Ω (compatible 8Ω)
3.8Ω
49Hz ~ 22kHz
44Hz
2.6kHz
21.6L

Dimensions (mm)

Height (on plinth)
Width (on plinth)
Depth (with terminals)
Carton Size
Net Weight
Gross Weight

490mm
263mm
(285+30)mm
690 x 445 x 625mm
15kg/pcs
33.2kg/ctn



ELYSIAN 1 Stands

Materials:
Columns
Top Plate
Base Spikes

High carbon steel tube
High carbon steel
Hardened high carbon steel

Dimensions (mm):

Height (on plinth)
Width
Depth (with badge)

476mm
340mm
287mm

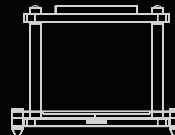


ELYSIAN Centre

3-way centre speaker
bass reflex
3-way
8.5" (220mm) coated fibre glass matrix cone x2
6" (150mm) coated fibre glass matrix cone

27 x 45mm AMT

No
91dB
25-250W
110dB
6Ω (compatible 8Ω)
3.5Ω
35Hz ~ 22kHz
27Hz
360Hz, 2.9kHz
5.7L, 64.0L



ELYSIAN Centre Stands

High carbon steel tube
High carbon steel
Hardened high carbon steel

496mm
618mm
372mm

Revealing the Passion and Excitement of the Musical Performance