

# Hyperion + Symbion Series

Elysio Hornspeaker Portfolio



### Introduction

This brochure provides an overview of the Elysio Hornspeaker Hyperion and Symbion Series

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### Approach to Explanation

What the speaker represents, what defines it, and why there's even a dedicated electronics series for it.

## The Hyperion Series : A masterpiece beyond the commercial market.

Unlike many other speakers, the Hyperion Series was not developed for the commercial market. This allowed us to exclude compromises entirely during its development and implementation. From the very beginning, it was clear that we would build a speaker meeting our own high standards. For us, this means delivering sound, design, and craftsmanship at the highest possible level.

## It quickly became evident that a conventional approach was not an option.

Fascinated by horn speakers from an early stage, we decided to adopt this functional principle - the oldest in speaker technology. Yet, we also realized that while there are many conventional horn speakers, truly extraordinary ones are exceedingly rare.

Thanks to the expertise of Manfred and Andreas König - brothers and masters of their crafts - wood and metal merge as signature materials into a harmonious whole. Dietmar Hampel, a mentor and friend of the company, contributes to the development and concepts. Christoph Martin, CEO of Elysio Hornspeaker, shapes the creation of this speaker with his unparalleled sense of sound and design.

The result is a symbiosis of masterful craftsmanship, passion, and an uncompromising pursuit of perfection

#### Sound

Precision, dynamics, fidelity - there are many words to describe the sound of the Hyperion Series, but one statement encapsulates it best:

#### Sound art in its purest form.

The concentric arrangement of the midrange and high-frequency horns ensures precise imaging and exceptional soundstage representation. Every nuance of the music is reproduced with unparalleled fidelity and minimal distortion - even at high volumes.

The outstanding sound quality is driven by optimized driver mechanics and perfectly calibrated horn contours, delivering peak dynamics and unmatched microdynamics. Each speaker is equipped with two perfectly synchronized HD1 compression drivers, one HT25-7040 tweeter horn and two 15" woofers, powered by specially developed amplifiers, ensuring unlimited power reserves

#### The result

An immersive soundscape that brings music to life in its purest form. Emotions become tangible, and the soundstage feels within reach. Here, all the acoustic advantages of horn speakers are redefined - without incorporating the usual drawbacks.

### Design

Functionality meets timeless aesthetics. Form follows function.

The Hyperion Series embodies the principle that exceptional design must always serve functionality. The result is a sculptural, organic, and graceful appearance. Every detail is designed without compromise - from the centrally positioned, elegantly mounted high-frequency horn to the flowing contours that enhance sound projection.

#### Timelessness

In an era where permanence is often sacrificed for transience, the Hyperion Series takes a clear stance, embracing classic design principles destined to endure for generations.

#### Elegance

The perfect balance of form, material selection, and design creates understated, timeless elegance. Subtle hints of Art Deco influence are evident.

This speaker integrates harmoniously into any environment, radiating a distinctive yet reserved presence.







### Hyperion Horn + Atlas X = Hyperion Series

The ultimate combination of sound and design

#### Material Selection

Only the finest materials were chosen to create a symbiosis of aesthetics and function. The combination of wood and metal symbolizes "quality over quantity" - a philosophy reflected in every detail.

### Modularity

Individual customization options make the Hyperion Series unique. Whether analog, digital, or both, the modular design enables tailor-made solutions that perfectly adapt to room layouts and personal preferences. Despite their imposing presence, the speakers integrate seamlessly into smaller spaces. The thoughtful design allows for a large, precise sound image without dominating the room.

### Durability | Investment

The Hyperion Series is more than just a speaker - it is a statement. Sound quality, premium materials, and the highest manufacturing precision make it a long-lasting investment that will stand the test of time, far beyond fleeting trends. Without exaggeration, it is a gift, even for future generations.

Hyperion Series – Design and function form a timeless unity.

#### Closing thoughts before the detailed descriptions

The true driving force behind this development is our love for music. Its ability to touch us emotionally, bring us comfort, and grant us inner peace. Its captivating energy that envelops us and makes us feel pure joy - this is all thanks to the talent of composers, musicians, and artists. With the Hyperion and Symbion Series, we aim to honor this art and make it experienceable in all its power and beauty.







### Hyperion Series - Projection

Details Matter - Hyperion Horn

### Sound demands thoughtful guidance

What could be more fitting than developing a horn contour that expands the sweet spot, benefiting not only the listener in the center?

This concept has been realized with the Hyperion Horn. A wide soundstage is achieved with a horizontal angle of 70°, while a focused depth is created vertically with a 40° angle.

Of course, these properties apply in all directions, but they describe the horn's task well. With a broad, even projection horizontally and focused vertical sound coverage, the Hyperion Horn precisely meets the desired goals of relaxed and pinpoint accurate soundstage depiction in both width and depth.

Why these specific angle measurements?

Let's begin with the  $70^\circ$  horizontal width. This angle was chosen to optimally distribute sound energy evenly within the living space, maintaining an appropriate balance. This brings us to the  $40^\circ$  vertical angle. This angle has the advantage of shifting floor and ceiling reflections to a plane behind the listener.

Both angular dimensions help to avoid sound-degrading first reflections. Additionally, the geometry of the Hyperion Horn provides further advantages. The central guidance of the dual openings ensures an even energy distribution across the required frequency range from 240Hz to over 4000Hz - a feature that only a few horn speakers achieve with such consistency.

This central guidance also makes the coaxial mounting of the tweeter horn possible, allowing it to appear as if floating freely at the center.



### Hyperion Series - Soul

Deteils Matter - HD1 Compression Driver

At the heart of the development stands the Elysio HD1 driver.

The Elysio HDI driver plays a central role in reproducing the important frequency range of 240Hz to 4000Hz, covering the majority of the sound information crucial to our hearing.

This makes it the soul of the speaker.

For the Hyperion Horn, we didn't hesitate to take things a step further, arranging two drivers to further optimize sound-affecting parameters like distortion and power handling.

Destructive distortions like K3 are reduced by half, bringing us to the peak of acoustic potential - hard to surpass.

The entire internal geometry, from the coil to the diaphragm and internal sound guidance, has been fine-tuned to perfection.

Symmetrical coil guidance within an extremely strong magnetic field of nearly 2.2 Tesla ensures optimal impulse behavior and sound reproduction.

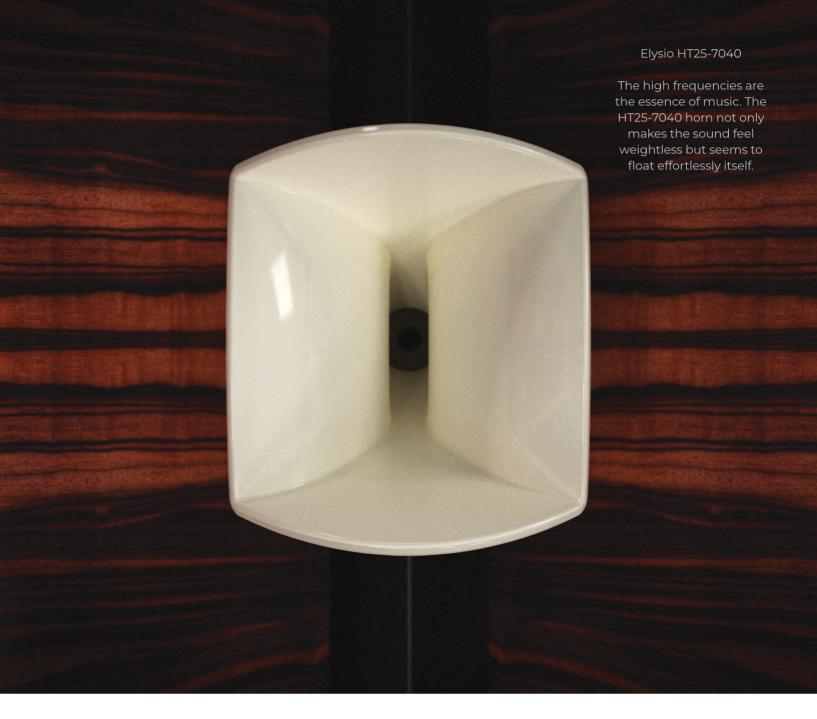
The internal rearward sound guidance ensures a constant exponential sound dispersion, minimizing backward sound energy while still maintaining the necessary back chamber volume.

By the way, we applied the same principle of doubling the area to

the Atlas 2 bass enclosure.

Double the area, double the reinforcement, 3dB more efficiency. Or half the distortion at the same volume.





### Hyperion Series - Air

Details Matter - HT25-7040 Tweeter Horn

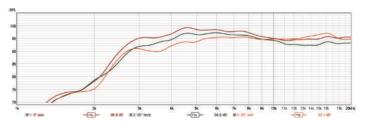
### Acoustic center, or why coaxial arrangement matters.

Unlike many other horn speakers, the tweeter horn in the Hyperion Series is centrally positioned. This offers numerous advantages. First and foremost, it creates a unified acoustic axis, aligning the midrange and high-frequency axes structurally. Combined with time alignment, this results in a configuration that comes closest to a point-source sound.

In simple terms, from 240Hz to over 20kHz, the signal originates from a single source. This acoustic unity produces unmatched depth and detail. Thanks to the horn's 70° horizontal and 40° vertical opening angles, first reflections near the speakers are almost entirely avoided at the listening position, delivering exceptional precision.

With our optimized biradial horn design, we achieve an almost

perfectly even sound distribution across the entire frequency range. (Refer to the HT25-7040 horn diagram.)



The rear side of the tweeter horn is optimized for the sound flow of the midrange horn, effectively preventing reflections within the midrange horn. The result is a beautifully floating sculpture - an elegant side effect that not only allows the coaxial arrangement but also renders the cable routing to the tweeter driver completely invisible!



### Hyperion Series - Foundation

Details Matter - Atlas Bass System

#### If we speak of foundation, we deliver it.

The Atlas Bass System provides what others only talk about – cleanly contoured yet powerful bass. The principle is simple: Bass is only achievable through surface area, and this law cannot be eluded.

That's why we designed the Atlas 2 enclosure as the entry point into the Hyperion world. It accommodates two 15" bass drivers, each actively powered by the specially developed Dyneon amplifiers.

The closed enclosure offers optimal impulse response and dynamic performance, mechanically supporting the bass drivers while eliminating unwanted resonance.

Additionally, it is crafted to form a seamless unit with the Hyperion

Horn. Since the Hyperion Horn is flush-mounted on the top, the result is an outstanding sonic experience that also impresses visually.

Atlas X, on the other hand, offers the unique opportunity to experience directional bass, as it is built in an array and flush with the wall. The result is impressive bass dynamics with efficiency and performance perfectly matching the Hyperion Horn. Atlas X is equipped with a minimum of ten 10" bass drivers per side. Altogether, this creates a unified bass front that integrates the room with minimal issues, delivering unmatched dynamics and precision.

In combination with the Hyperion Horn, which is mounted on a specially designed tripod, the result is a truly immersive sound experience.





### Hyperion Series - Pods

Details Matter - Basspod, Tripod, Wallpod, Spikes

A stand that not only supports natural sound reproduction but also optimally and harmoniously showcases the speaker.

It also offers versatile applications, whether as a standalone [1], on the Atlas 2 enclosure [2], or for wall mounting [3].

1. The Tripod presents the Hyperion Horn freely in the room. 2. The Basspod is designed for the Hyperion Horn on the Atlas 2 enclosure 3. The Wallpod enables wall mounting, making optimal use of limited space.

### Modularity for any room situation.

Lastly, Spikes that not only decouple the horn but also add an elegant touch.

All these stand variants allow for the perfect positioning. Whether

it's to make full use of valuable but limited space or to position the Hyperion Horn with the Tripod as a true sculpture within the available room.

With the Basspod, we've also integrated mechanical decoupling of the Hyperion Horn from the Atlas 2 enclosure to eliminate the minimal vibrations of the bass enclosure at high levels.

Each of these variants enhances the acoustic quality of the Hyperion Horn and creates an exceptionally well-thought-out

foundation.



### Hyperion Series - Connection

Details Matter - Perfect Connection

All of the previously mentioned aspects and capabilities are only optimal if the signal connections are appropriate. Therefore, we do not shy away from breaking conventions here as well, offering the right connection for each application.

For example, in the case of the semi-active/passive version, a fully equipped connection panel is mounted. From professional, highly robust Speakon inputs to massive WBT screw terminals for the outputs to the HD1 drivers and HT25-7040 high-frequency horn.

All of this, combined with a mechanical signal level adjustment that allows you to flexibly set the mid and high frequencies from -4dB to +2dB. This is achieved not with resistors, which would only bring disadvantages to the speakers, but with a specially developed step-down transformer that achieves loss-free attenuation in terms of sound quality.

Of course, everything is implemented with measure and reason, which means that the fully active version has a 4-pole Speakon input, thus controlling each bass with its own amplifier. This is a feature that is rarely found in loudspeakers.

Bass, midrange, and high-frequency drivers are directly controlled by our 4-channel Dyneon amplifiers.

\*

This draws an arc from signal transmission to signal processing and amplification - seamlessly linking the speaker to the accompanying electronics.

On the following pages, we introduce our **Symbion Series**, which guarantees maximum sound quality.







### Syncron + Dyneon = Symbion Series

Guarantee of unlimited sound quality

To create a flawless connection between speakers, signal, and space, we made no compromises. Based on the acoustic and electrical properties of the Hyperion Series, we developed the active crossover preamplifier Syncron and the amplifier Dyneon – a solution that guarantees precision at the highest level.

### Why an active crossover?

With our active crossover, available in either analog or digital, we can fine-tune the characteristics of each component with much greater precision. This also allows us to significantly reduce room acoustic challenges such as disruptive room modes. This technology opens up a range of possibilities to precisely adapt the sound quality to the conditions of your listening space and create an optimal listening experience.

To maintain consistency, we developed the Dyneon amplifiers as the ideal link between the Syncron crossover preamplifier and the speakers. Ample power reserves for bass thanks to Class A/B circuitry and the ability to remain in Class A operation up to 5 watts allow for tailored amplification for every nuance in the midrange and high frequencies.

### Electroacoustic Symbiosis

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The Symbion Series offers a variety of features and equipment that are rarely found in this combination. However, this brochure is far from enough to fully highlight all the features of this series. We invite you to download the upcoming Symbion brochure, where we will present each detail in-depth.





## Hyperion Series Specification

#### Basic Data and Informations

Operating Principle:3-Way SystemEnclosure Materials:30mm beech multiplexFrequency Range:20hz - 20.000hzLayered19mm Wood - lead sandwich

Crossover Principle: Fully active, semi active / passive

Filter Type:

Efficiency: °°

Bass AtlasX

Midrange

Crossover Frequencies: B - 240hz - M - 4000hz - T Surfaces: Veneer

Number of Drivers per Pair : Bass Atlas 2 4x 15" Lacquer, oil, wax

Midrange 4x HD1 Powder coating

High Frequencies 2x HT25-7040

Bass AltasX 20x 10" Special Features: 3 different mounting options

Bessel Basspod, Tripod, Wallpod
1W/m up to 106dB Removable dust cover

\*Power Handling: Max. 200 - 15Watt / 80hm System Requirements: \*\*Min. Dyneon 2

Acoustic Coverage: Midrange Horn Inputs: 2 ch, \*\*I ch Speakon Neutrik

horiz. 70°, vert. 40° Outputs: \*\*2x WBT Terminals

High Frequency Horn

horiz. 70°, vert. 40° Adjust. Mid/High Freque. \*\*-4dB bis +2dB

Positioning: Bass

Wall-mount. / close to the wall Note: In the semi active / passive variant

Midrange Horn
Tweeter horn is not time - aligned.

Tripod, Basspod, Wallpod
Midrange is phase - aligned to the bass,

High Frequency Horn
but can be physically time - aligned

Coaxial in Midrange Horn with the Tripod.

Dimensions: W/H/D cm Hyperion + Atlas 2

84/145/56 Tripod can be optionally ordered

Hyperion + Atlas X for Atlas 2 bass cabinet

84/138/75 + 140/250/30

Weight: kg Hyperion + Atlas 2 Particularly Noteworthy! With DSP variant, full temporal and

acoustic control.

Hyperion + Atlas X Maximum sound quality is achieved

Min. 400

\* Maximum Power Used :

Bass Atlas2 Per Bass Max. 200W / 80hm °° Efficiency Topic: Strongly dependent on variant

Max. 30 W/80hm and positioning

High Frequency Max. 15 W / 80hm \*\*Only semi active / passive variante

Per Bass max. 50W / 80hm

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Website Configurator Manuals / Downloads









# Symbion Series Specifications

### Basic Data and Informations

Syncron Dyneon 4 | 2

Operating Principle :	8-channel preamplifier	Operating Principle:	Class A/B amplifiers
			Class A up to 5 watts
Crossover Principle :	DSP or active analog	Channels:	4 channel   2 channel
Volume Control:	8-channel analog, synchronized	Dyneon 4   2	Dyneon 4
		Power:	2 x 200W / 80hm
Inputs:	4x XLR bal. / 4x RCA unbal.		2 x 50W / 80hm
	a/o 2x optical Toslink digital	Power Supply Capacity:	60.000µF + 40.000µF
Outputs:	8-channel XLR balanced, buffered		Dyneon 2
	2x 12V Trigger		2 x 300W / 80hm
Max Output Signal :	8Vrms	Power Supply Capacity:	60.000µF
		Signal-to-Noise Ratio :	Ref. 1khz, 10W / 4 Ohm
Digital		unweighted	-94dBr
DSP Functions :	24bit / 192khz (internally 32bit)	THD + N, 1khz, 10W/40hm	<0.01%
Slope:	6 - 120db/oct		
	Bessel, LR, Butt., Tsheb.	Dyneon 4   2	Dyneon 4
	Allpass, EQ, H/L Shelf, H/L Pass	Inputs:	2x 2ch. XLR Neutrik
	Notch/PEQ, Time delay, Phase	Outputs:	2x 2ch. Speakon Neutrik
Calibration System:	Stereo calibration / Dual mic		Dyneon 2
	USB-C input - Control	Inputs :	1x XLR Neutrik
Analog		Outputs:	1x XLR Neutrik
Active crossover functions :	Bessel		2ch. Speakon Neutrik
Slope	6 - 24db/oct	Scope of Delivery:	Includes 2 amplifiers
Filter Type :	LP / HP, Subsonic cutoff	Operating Voltage :	110 / 240 V
	LS / HS Filter, Notch filter	Dimensions : W/H/D cm	34/54/29
	Phase correction Allpass 0-180°	Weight: kg	N.A.
		Special Features :	Dyneon 4
Remote Control:	App and/or remote control		2 bass amplifiers with
Note:**	Analog crossover , no time		with integr. active crossover module
	alignment for the tweeter horn		For bass and midrange
Operating Voltage:	110 / 240 V		Dyneon 2
Dimensions : B/H/T cm	47/24/min.30		2 bass amplifiers
Weight: kg	N.A.		2 amplifiers for mid./high freque.

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Website

Configurator



Manuals / Downloads







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Website



Configurator



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