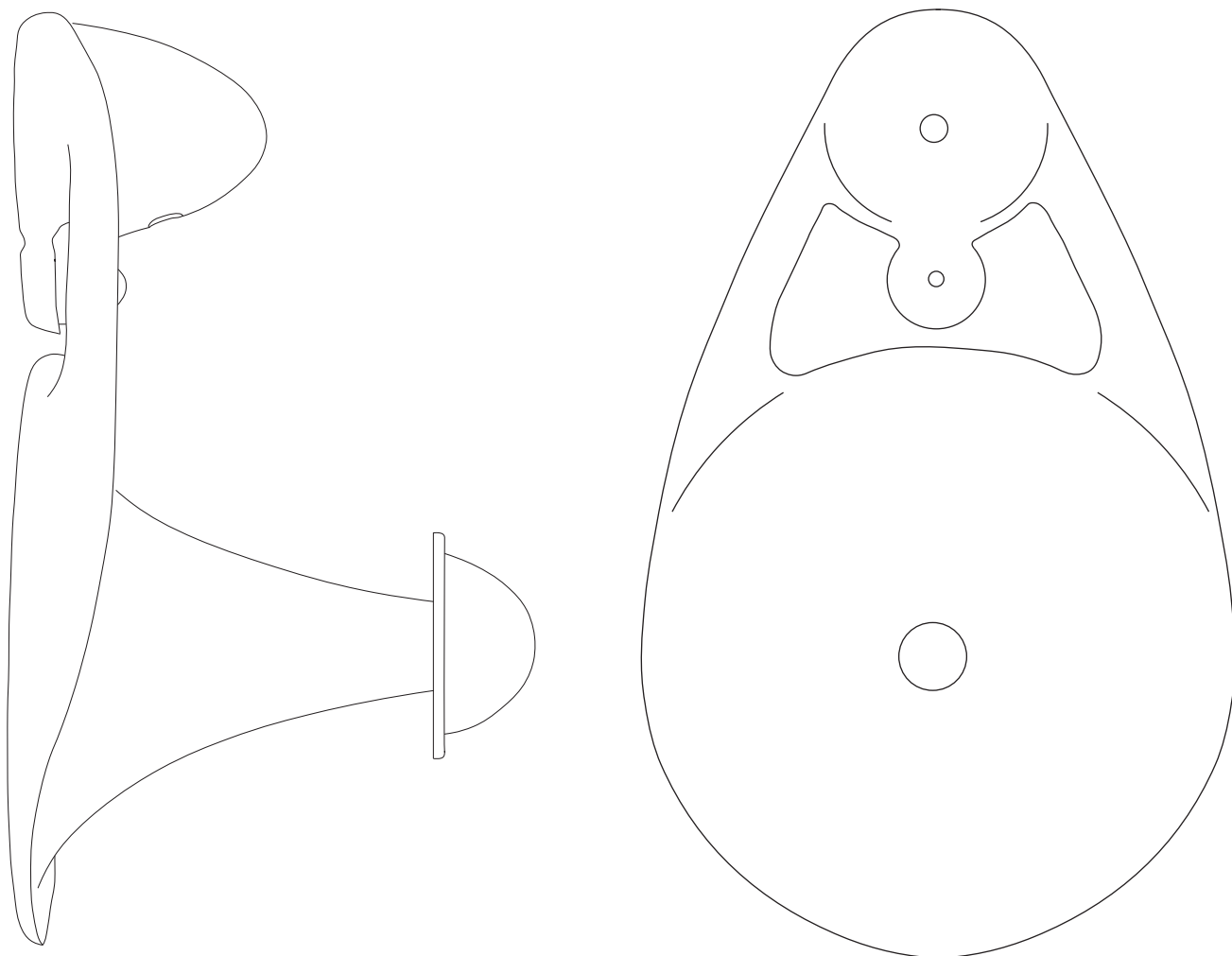


POLYPHEMUS 14.1

3 Way passive, fully horn-loaded system



User guide

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1 Technical Specifications

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Polyphemus is a high performance, passively amplified, full-horn, three-way system. A professional HI-PRO three-way audio system with horn-loaded speaker technology. Polyphemus is designed to seamlessly integrate the dedicated transducers with composite horns for elevated sensitivity, dynamics, definition and durability. By providing wide angle coverage of a highly controlled sound field, it has the ability to reach sound levels at the limits of human tolerance with no perceptible distortion. The system is thus characterized by extraordinary sound quality while reaching elevated sonic pressures. Assembled it forms a triptych of large horns in frontal development. The Hf and mid range horns are brought together in a single group, with a development such as to create spherical emission waves, great integration between high and medium frequency and wide, symmetrical and uniform acoustic coverage. They have levels of efficiency and sensitivity that are truly out of the ordinary. This allows for excellent dynamics that distinguish the entire system from the first listen. The midbass-horn uses its superior dimensions to achieve, with a powerful 12" midbass woofer, extraordinary performances. The LF driver is protected by a water resistant cone. Mid range, mid bass transducers and hf compression drivers all represent world class quality, without commercial or technological compromises. Due to its elevated sensitivity, the system requires limited amplification power, and therefore permits an extreme simplification of the line of inputs for playback. The system can be driven, in all three routes, completely passively through a dedicated inner crossover. A Full Fat audio FFA 6000 (+ external DSP) is the recommended amplifier partner for this solution. It requires a subwoofer to have a full range system

TYPE	Three Way passive fully horn-loaded
FREQUENCY RESPONSE	120 Hz - 19 KHz
TOTAL SENSITIVITY	109 dB 1W/ 1m with passive crossover
MID-BASS FREQUENCY	12" (320 mm) 8 Ohm 250 W nominal 500 W peak
MEDIUM FREQUENCY	2" (50 mm) MF compression driver 8 Ohm 80 W nominal 160 W peak
HIGH FREQUENCY	1" (25 mm) HF compression driver 8 Ohm 60 W nominal 120 W peak
NOMINAL IMPEDANCE	4 Ohm with three way passive crossover
POWER HANDLING	recommended amplifier 800 W @ 4 Ohm
MANAGE	2 Ch amplifier to a couple of Polyphemus loudspeakers (inner passive crossover provided, in each Polyphemus)+DSP to match to subwoofer. high-pass filter @ 120Hz, 24 dB/oct LR.
RECOMMENDED AMPLIFIER	Full Fat Audio FFA 6000 2 Ch with external DSP to match to subwoofer
DISPERSION	70° horizontal, 60° vertical
CONSTRUCTION MATERIALS	Fiber-reinforced composite, stainless steel
FINISH	all ral color and texture on order
CONNECTORS	1x Neutrik NL4 or custom preference
DIMENSIONS (with trolley)	(W)1100 mm (H)1800 mm (D)1000 mm, (W)43,3 inch (H)70,8 inch (D)39,3 inch
WEIGHT	54 Kg (119 lb) w trolley, 44 Kg (97 lb)

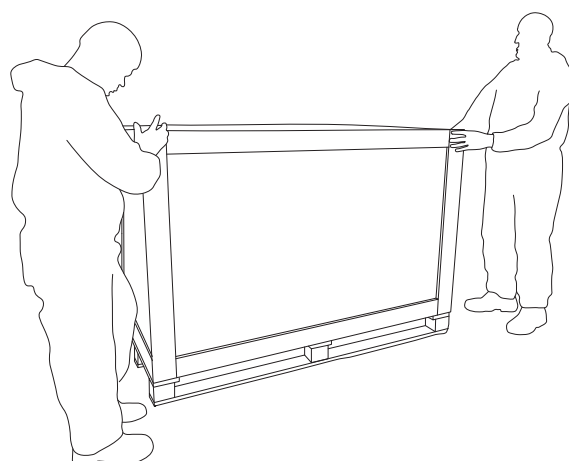
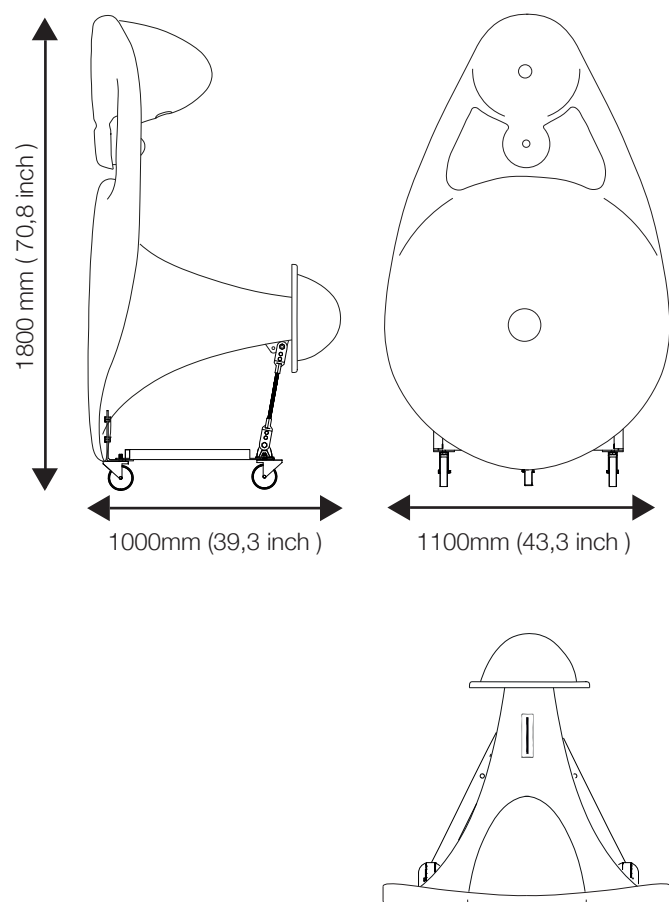
2: Unpacking

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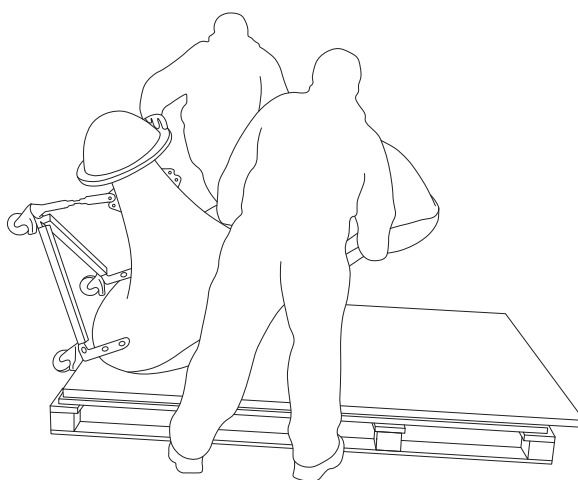
The Polyphemus, like every other Pequod product, is built with high standards of control and quality. At the end of the production process and before packaging, each system is tested: acoustically measured and recorded in our company database. For each Polyphemus serial number, we have the related test files recorded in the archive. Before being packed in its box we complete an inspection of surfaces and structures. Units are packed into wooden crates or heavy cardboard boxes with internal foam padding before shipping.

Extraction from box:

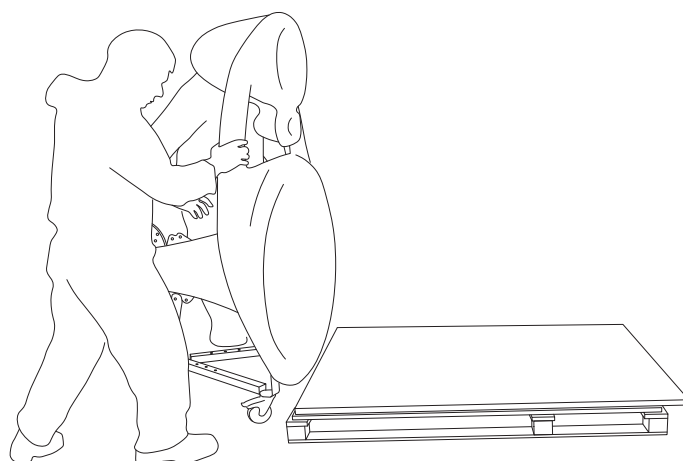
The Polyphemus weighs 54 Kg (119 lb) w trolley, 44 Kg (97 lb) w/o trolley each, and it's being shipped contained inside suitable wooden packaging box. Its extraction from the box is achievable by two operators, at least.



1: Carefully open the wooden packaging box



2: Remove packing materials and save for re-use. Lift speaker body with both hands when ready



3: put the loudspeaker on the floor

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3 Wiring and Settings

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The Polyphemus has an input made with a female NL4 connector. Through a dedicated cable and terminated with 2 male NL4Fc connectors it is connected directly to the output of the power amplifier. The 3-way passive crossover, made without compromise with high quality components is housed inside the Polyphemus itself, and provides a ventilation hole to allow adequate thermal dissipation. The connectors are standard NL4 (+ 1 / -1 connected + 2 / -2 empty) or water proof on request. In case of custom realization by the installer of the connection cables, we recommend specifying installation-grade Low Smoke Zero Halogen (LSZH) cables for permanent installations. The cables should use Oxygen Free Copper (OFC) of grade C11000 or above. For distances of more than 15 meters between Polyphemus and amplifiers we recommend increasing the section of the cable poles to 4 sq.mm, to avoid excessive emission level losses. For lengths of less than 15 m, you can use 2-pole cables, each with a section of 2.5 sq.mm.

Connection diagrams:

A) Cable between Polyphemus and amp (not supplied): 2-pole cable (2.5 sq.mm minimum section per pole up to 15 m cable length, in addition we recommend switching to 4 mmq per pole), terminated with NL4Fc male connector (+ 1 / -1 connected and corresponding to +1 red and -1 black on the amplifier, + 2 / -2 empty) to connect to the Polyphemus input, which has an NL4 female connector, standard or WP on request.

B) Cable between subwoofer and amplifier (not supplied): as point A

DSP general settings:

DSP general settings:

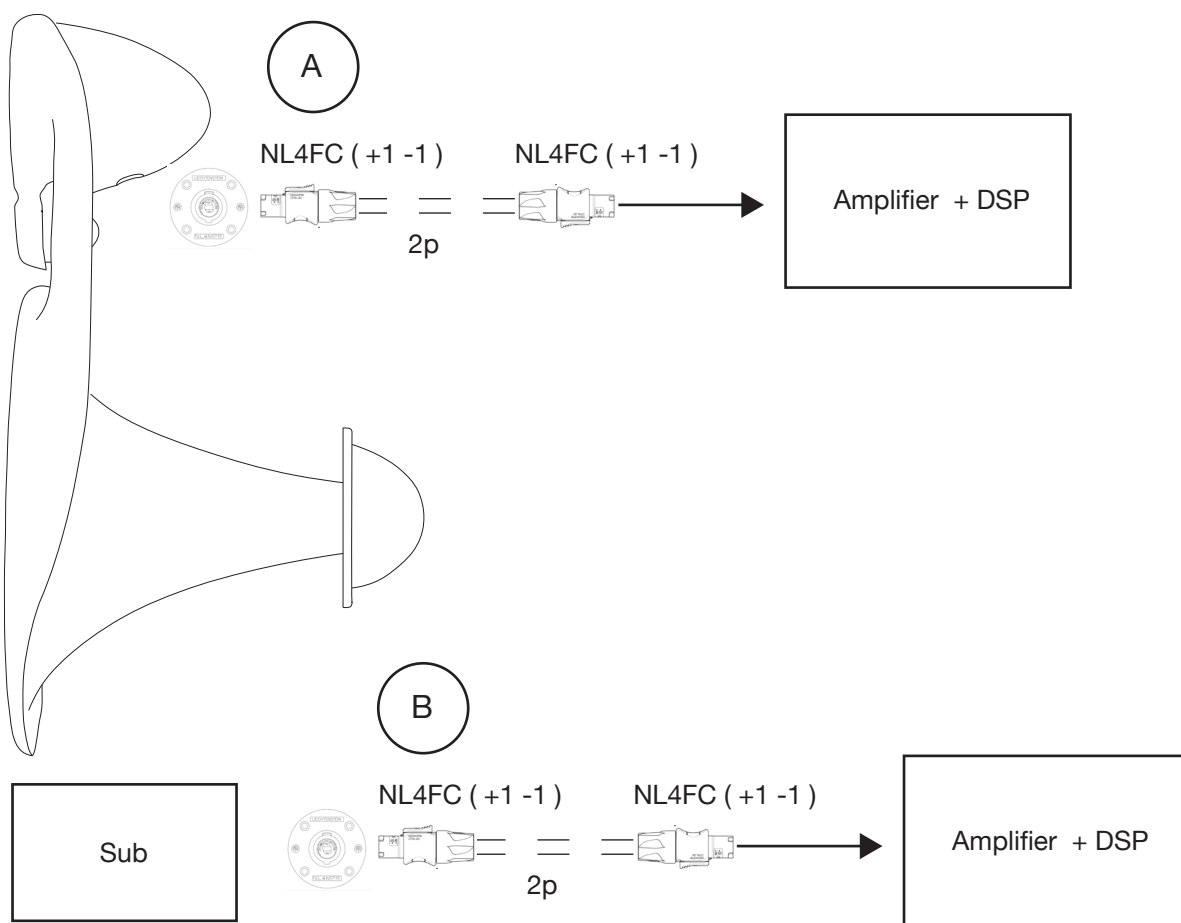
*1) High-pass filter @120Hz, 24 dB/oct. LR
Subwoofer

*2) Band pass:

High-pass filter @20Hz, 24 dB/oct. But

Low pass filter @120Hz, 24 dB/oct. LR

Gain and Time Alignment : it depends on Subwoofer utilized



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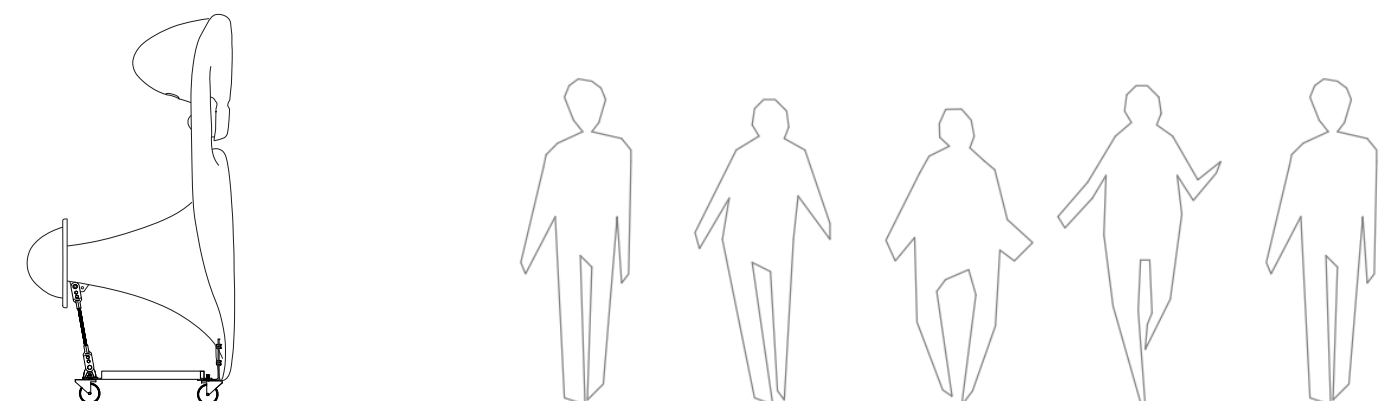
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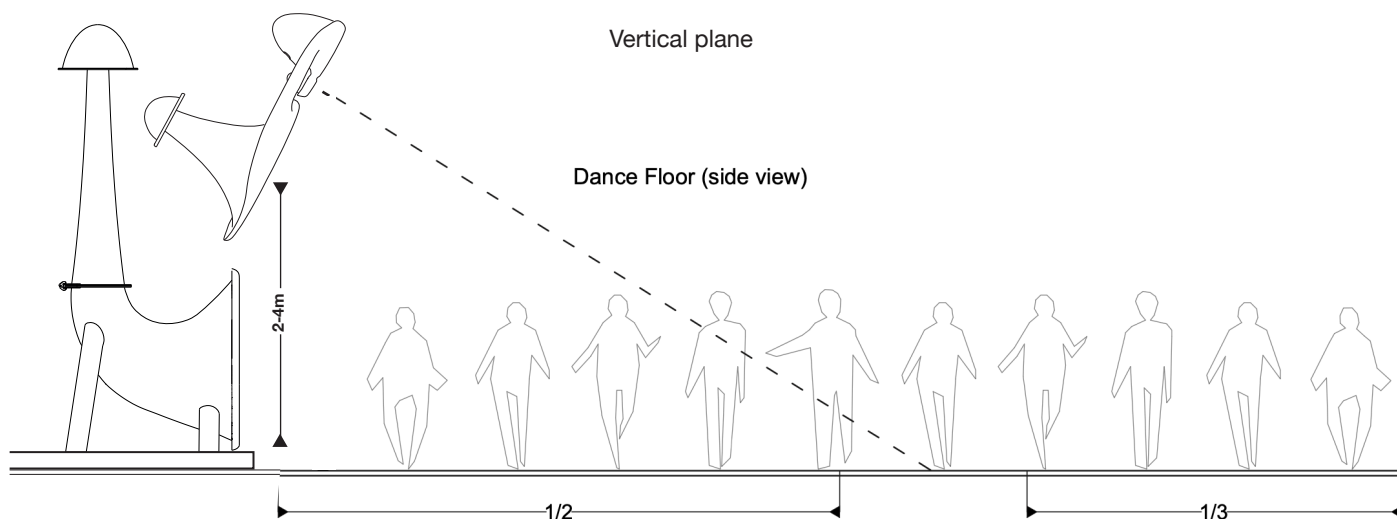
Polyphemus can typically be used as a very high quality system to sonorize listening areas, such as a dance floor or for an audience of a live concert. In all cases it is necessary to use suitable subwoofers (Ovoid or Hydra available from the Pequod catalog) to have a full range system. Hydra represents the optimal choice as a subwoofer to be combined with the Polyphemus, to have an all horn loaded full range system, of high quality and global sensitivity.

For on stage installation facing an audience, they can be housed on their mobile frame, for easy handling.

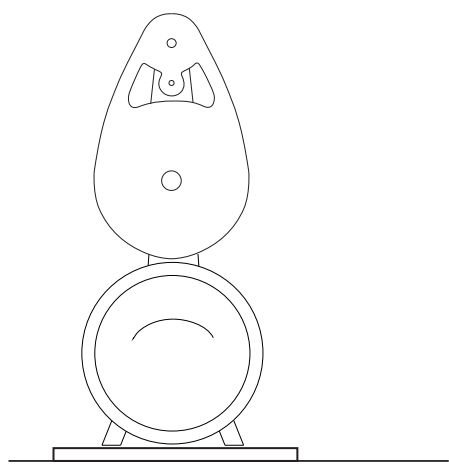


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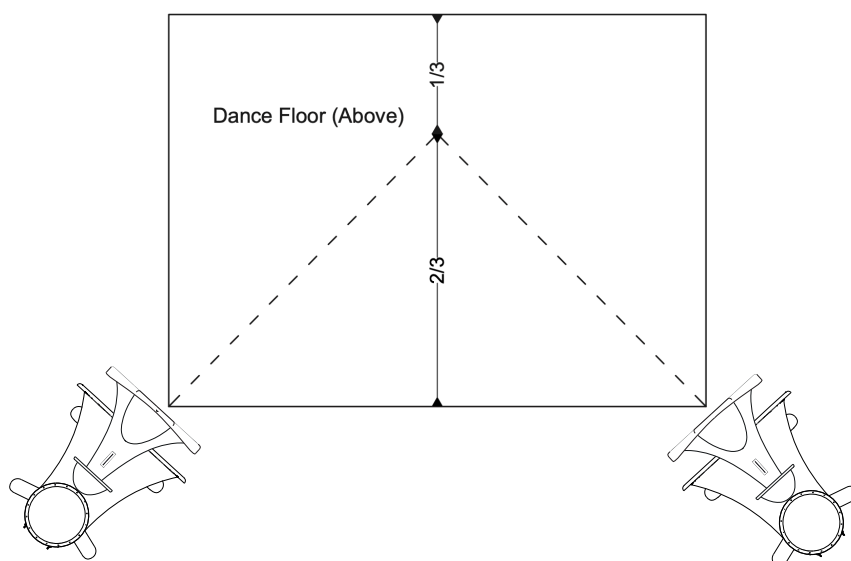
For the installation of Polyphemus facing a wide audience, it is necessary to take into account that optimal acoustic coverage is obtained by lifting the Polyphemus 2/4 m from the ground on the vertical plane, tilting them towards the audience, so that the ideal axis coming out from the HF horn, is oriented in an area placed between $1/2$ and $2/3$ of the depth of the area to be soundtracked (dance floor or audience). On the horizontal plane, it is also necessary here to orientate the ideal axis coming out of the Polyphemus in an area that is located at about $2/3$ of the depth of the area to be covered, on the center line of the area itself.



Front view

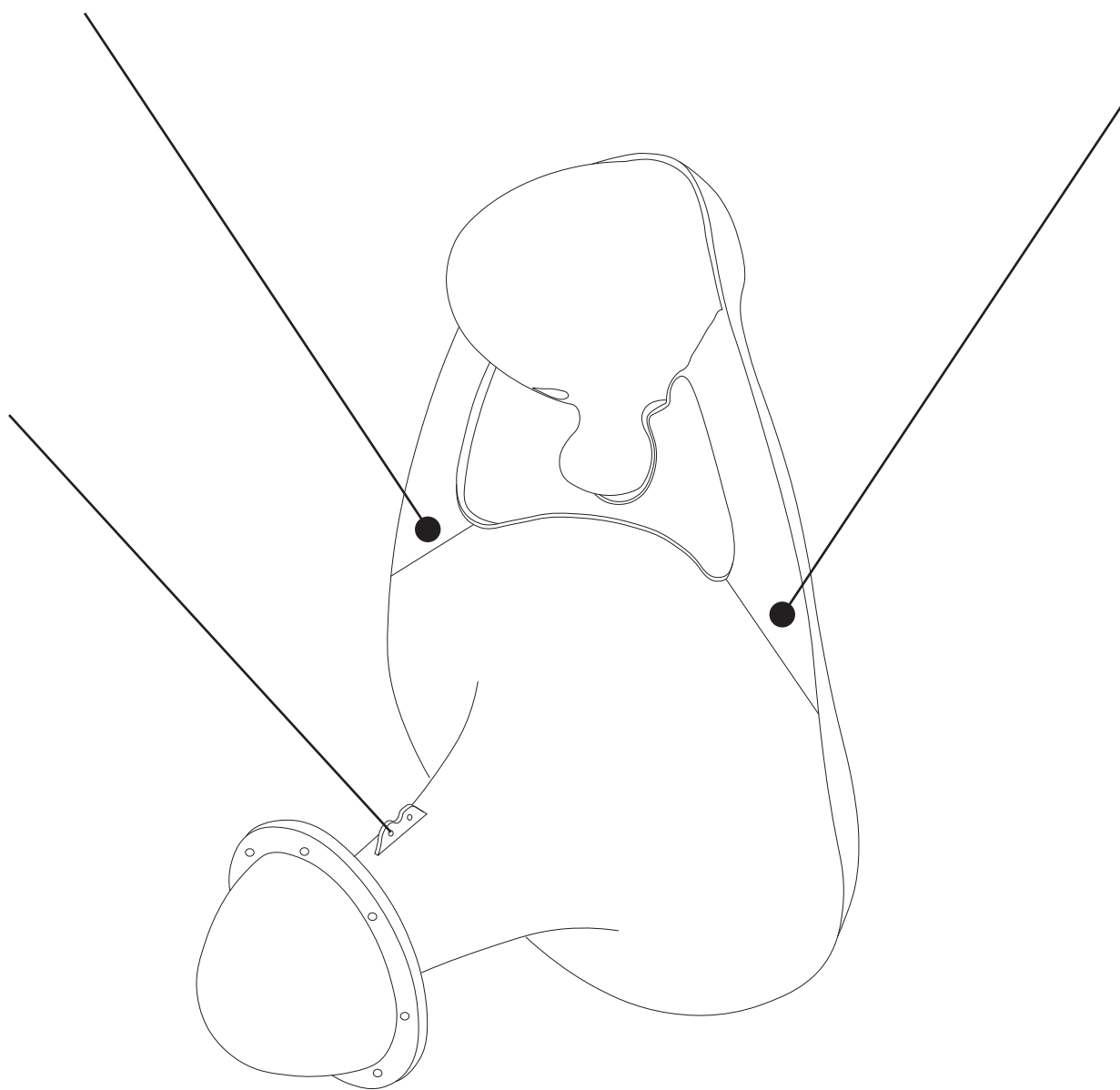


Horizontal plane



The system can be easily suspended with chains or cables in steel or synthetic technical fiber. The system is equipped with rings and suspension eyebolts (see pic below). The suspension loads are very small for the suspension points. You can refer to the weights indicated in the table (we recommend a multiplicative safety factor in operation equal to 5).

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5: Accessories

In the Pequod catalog there are some accessories to be used with Polyphemus.

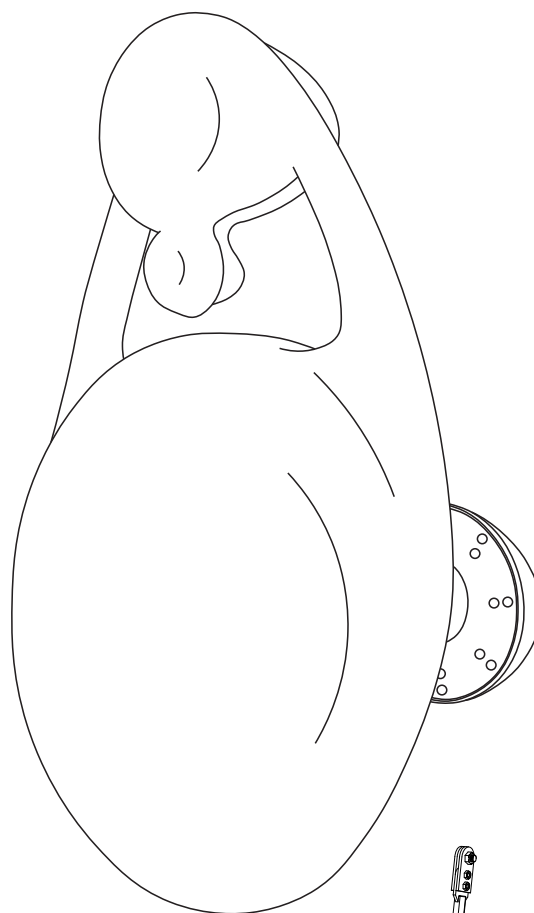
Cod. BAG01P: Protective PVC Bag sized for Polyphemus, waterproof soft finish to protect from scratches and weather

Cod. BS3WP: stainless steel base for Polyphemus, with 3 wheels.

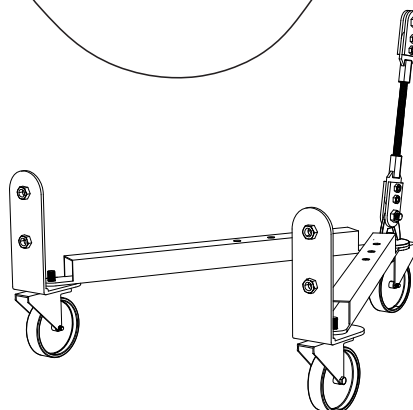
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Waterproof Bag ,
cod:BAG01P



Stainless steel base
cod: BS3WP



6: Maintenance and Surface Protection

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All Pequod units are built from a unique high quality composite material which is inert to atmospheric agents and requires minimal regular maintenance, just a simple cleaning of the surfaces with a soft cloth dampened with alcohol.

For best practice in long term care of the composite components, and to obtain or restore a truly professional level of surface finish, we recommend using the 3M "Perfect It™" line of Gelcoat cleaners and protective waxes (above right).

Follow the instructions provided to ensure the best possible finish for your Pequod composite speaker bodies and accessories.

Many installations require Stainless Steel support structures or armatures to complete mounting and assembly of different Pequod units. For these components, we recommend cleaning with 3M™ Stainless Steel Cleaner and Polish (right).



Pequod Acoustics offers a guarantee to the original owner (person or company who purchased the product brand new) of each new Pequod product (provided it was purchased directly from Pequod or through a Pequod Acoustics Authorised Dealer/ Distributor) that it is free of defects in materials and workmanship and that each product was tested in the factory to meet or exceed all specifications declared. Each model has a test file recorded in our database, related to its serial number.

The period of limited warranty is three (3) years from the date of delivery to the original purchaser (as shown on the original invoice or sales receipt; a copy may be required as proof of warranty dates)

Pequod Acoustics will repair or replace (at its discretion) all defective parts at no charge for labor or materials; subject to following provisions:

Pequod Acoustics shall take no responsibility for repair or replacement under this warranty if:

- a) The damaged product has been subject to misuse, accident, neglect or failure to comply with normal maintenance procedures
- b) There are improper alterations or unauthorized parts or repairs.
- c) The serial number has been altered, defaced or removed and the original owner won't be able to give information related to our Anti-counterfeit authentication system (see below, section 8)

Pequod Acoustics will remedy any defect, regardless of the reason for failure (except as excluded above) by repair or replacement. Pequod Acoustics will ship the product within a reasonable time after receipt of the defective product at a Pequod Acoustics Authorised Service Centre.

How to obtain service under warranty:

If a Pequod Acoustics product requires service, the original owner must contact the Pequod Acoustics dealer who supplied the product, to receive our Return Authorisation Code (RA code), and instructions on how to return the product to the Pequod Authorised Service Centre, or to Pequod Acoustics.

The original owner must give information about:

- Problems with the product
- Serial number
- Original invoice or sales receipt
- Anti-counterfeit system (see section 8)

After receiving the RA code the owner can pack the unit in the original factory packaging if possible. Please include a note describing the problem packed together with the product. Do not send it separately.

All products being returned to the factory or service center for repairs must be shipped prepaid. Ensure safe transportation of your unit to the authorized service center

Pequod Acoustics (or an Authorised Service Centre) will initiate corrective repairs upon receipt of the returned product, in order to complete the repairs and ship back the product within a reasonable amount of time.

If the repairs made by Pequod or a Pequod Authorised Service Centre are not satisfactory to the owner, they are instructed to give written notice to Pequod.

The original owner is not entitled to recover from Pequod any incidental damages resulting from any defect in the Pequod product. This includes any damage to another product or products resulting from such a defect.

The warranty is not extended by the length of time which the owner is not engaged in active use of the product. Repairs and replacement parts provided pursuant to the warranty will be covered only by the non-expired portion of the warranty.

8: Authentication and Anti Counterfeiting Measures

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Each product by Pequod Acoustics is carefully hand made using high quality components that are, by themselves, difficult to replicate. But we also protect our products using special marks on the inside and outside, which are unique and serve to authenticate original Pequod products.

Thus, each individual product has a special mark, placed in a unique position. For each product (each serial number) we keep a record of the exact position where we placed this mark.

When warranty claims are made, or other requests that require authentication of an individual Pequod product, we will ask the owner to provide a description of the identifying marker as further proof of originality.