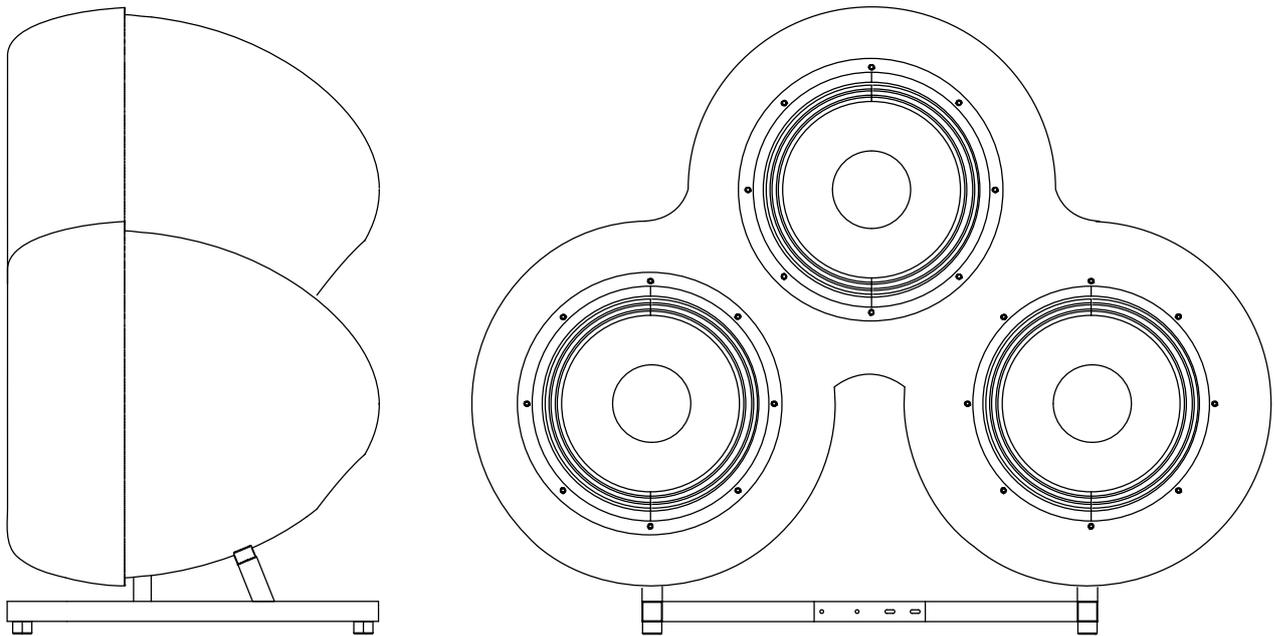


CERBERUS 12.1

3x18" Bass reflex subwoofer



User guide

CERBERUS 12.1

3x18" Bass reflex subwoofer

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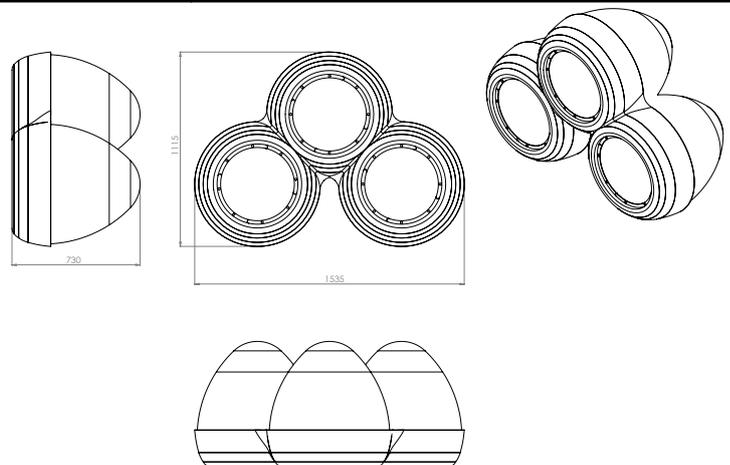
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1 Technical Specifications

The Cerberus system is a bass Reflex subwoofer consisting of 3 18-inch long-excursion woofers housed in three ovoid volumes structure connected and fused to form an extremely light and rigid monolithic structure. The total power of the system is over 10000 Watts, having very high sensitivity (102 dB / W / 1m) With a total radiant surface equivalent to a 32-inch diaphragm. The composite material by which it is composed allows for high stiffness and avoids the triggering of resonances of the speaker walls. Compared to a traditional subwoofer made of wood, the Cerberus system does not present harmful structural vibrations, as well as having very high resistance to atmospheric agents. The shape itself without parallel walls avoids the formation of internal standing waves with considerable advantages for having a clean and precise sound. The Cerberus system is suitable for creating full-range systems with high acoustic impact. Ideal for forming a system with Shockwave, Polyphemus, and Kona products, where quality and power are achieved through a compact Subwoofer, compared to the considerable power itself expressed. Although the 3 18-inch woofers can be driven individually with 3 amplification channels (version with 4-ohm impedance for each 18-inch, Cod.CERB04), we recommend the setup in a parallel.

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TYPE	Bass reflex subwoofer in tri-ovoidal structure
FREQUENCY RESPONSE	35 Hz - 1 KHz
TOTAL SENSITIVITY	102 dB 1W/1m
NOMINAL IMPEDANCE	CERB08 : 2 Ohm (parallel connection) or CERB04 : 4 Ohm x 3 (4ohm for each 18" woofer)
POWER HANDLING	5100 W nominal, 10200 W power continuous program
MANAGE	2 Ch amplifier to a couple of Cerberus +DSP to match to satellite. Otherwise 3 ch amplifier to one Cerberus, each 18" driven individually. High-pass filter @25Hz, 24 dB/oct. But Low-pass filter @100-120Hz, 24 dB/oct. LR
RECOMMENDED AMPLIFIER	2 channel around 10000W amplifier, on each channel @ 2 ohm stable 3 2 channel 10000W amplifier, one channel on each cone @4Ohm
DISPERSION	Omnidirectional
CONSTRUCTION MATERIALS	Fiber-reinforced composite, stainless steel
FINISH	all ral color and texture on order
PROTECTIVE GRILLES	Cerberus is usually sold with this grid made of stainless steel
CONNECTORS	3 (6) x Neutrik NL4 or custom preference
DIMENSIONS (with support)	(W) 1535 mm (H) 1200 mm (D) 730 mm (W) 60,5 inch (H) 47,2 inch (D) 28,7 inch
WEIGHT	84 Kg (185 lb)



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2: Unboxing

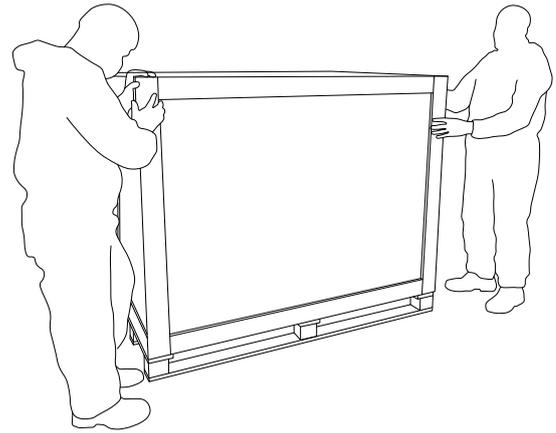
The Cerberus, like every other Pequod product, is built with high standards of control and quality. At the end of the production process and before packaging, each system is tested: acoustically measured and recorded in our company database. For each Cerberus serial number, we have the related test files 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:

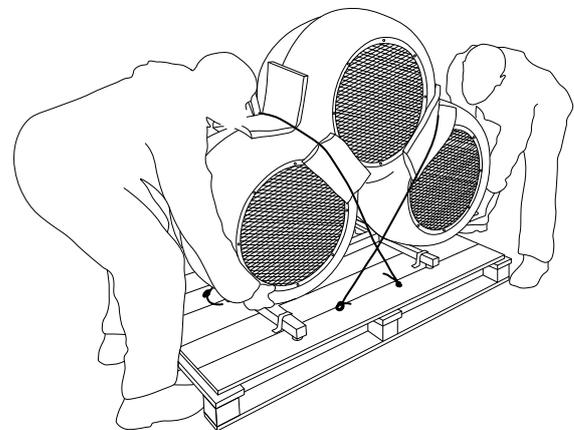
The Cerberus weighs 84 Kg (185 lb) each, and is taken from the box simply following the steps shown here.

Keep the packaging for further storage or transportation, unless units are to be permanently installed.

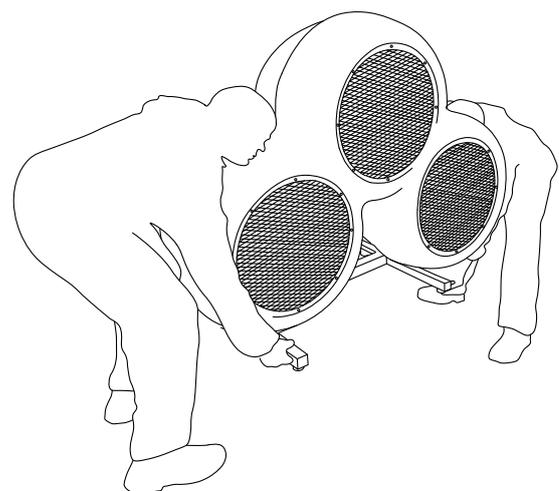
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1: Carefully open the wooden packaging box



2: Remove packing materials and save for re-use



3: Lift speaker body and base together, with both hands when ready

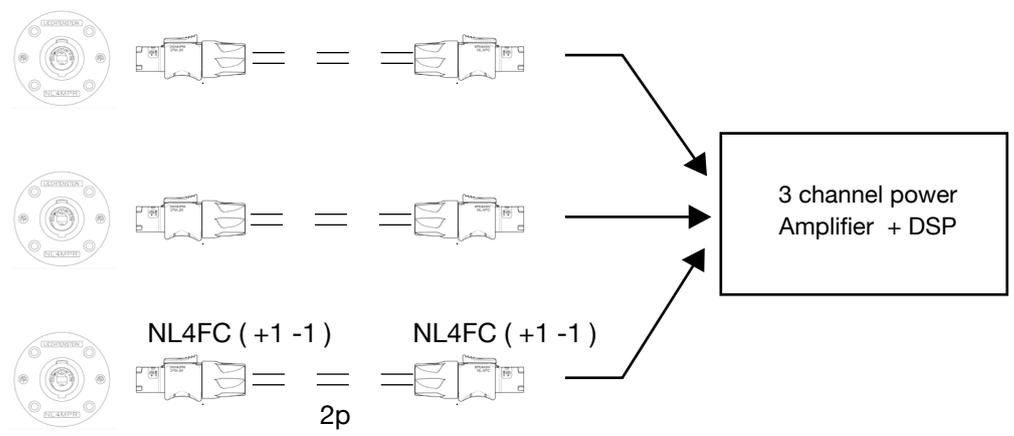
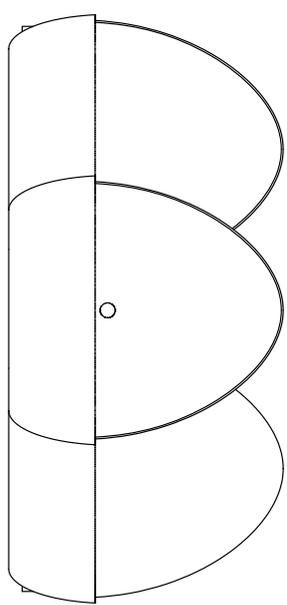
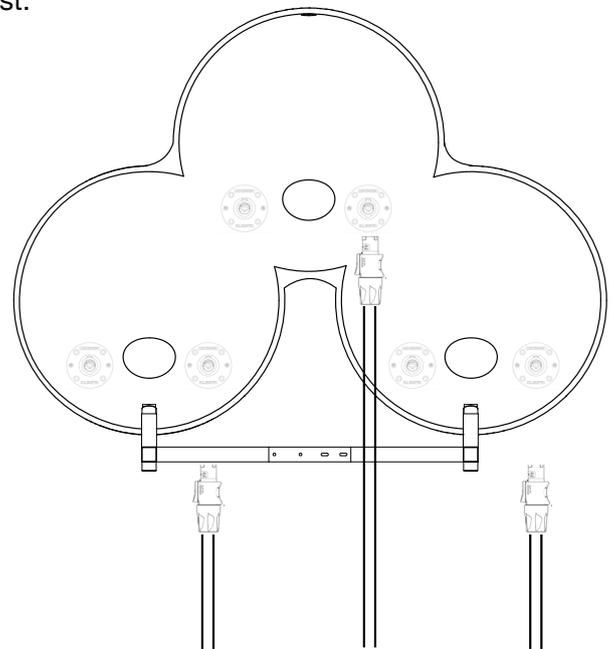
Cerberus has inputs made with connectors NL4 female. Through a dedicated cable and terminated with 2 male NL4Fc connectors it is connected directly to the output of the power amplifier. The connectors are standard NL4 (+ 1 / -1 connected + 2 / -2 empty) or water proof on request.

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 over 15 meters between Cerberus and amplifiers, we recommend increasing the section of the cable poles to 4 sq mm, to avoid excessive emission level losses. For lengths less than 15 m, you can use 2-pole cables, each with a section of 2.5 sq mm.

Connection diagrams:

A) Single connection for every 18 “(3 identical cables in total, see fig. Below): Cable between each sub Ovoid and amp (not supplied): 2-pole cable (2.5 sq mm minimum section per pole up to cable length of 15 m, over we recommend switching to 4 mmq per pole), terminated with male connector NI4Fc (+ 1 / -1 connected and corresponding to +1 red and -1 black on the amplifier, + 2 / -2 empty) to connect at the input of each Ovoid sub, which has an NL4 female connector, standard or WP on request.



B) Total connection (in parallel) (see fig. Below):

1x Main cable between Cerberus and amp, made with 2-pole cable. Terminals made with male NL4 connectors (+ 1 / -1 connected + 2 / -2 empty), terminal towards the amplifier made with male NL4 connector (+ 1 / -1 connected to +1 red and -1 black on the amplifier and + 2 / -2 empty). Sections of poles: 2.5 sq mm minimum section per pole up to a cable length of 15 m, in addition we recommend switching to 4 sq mm per pole.

2x Secondary cables, 2 poles, which connect the 3 sub Ovoids together. Terminals made with male NL4 connectors (+ 1 / -1 connected + 2 / -2 empty). Sections of the poles: section 2.5 mmq per pole and cable length of 1.5 m

DSP general settings:

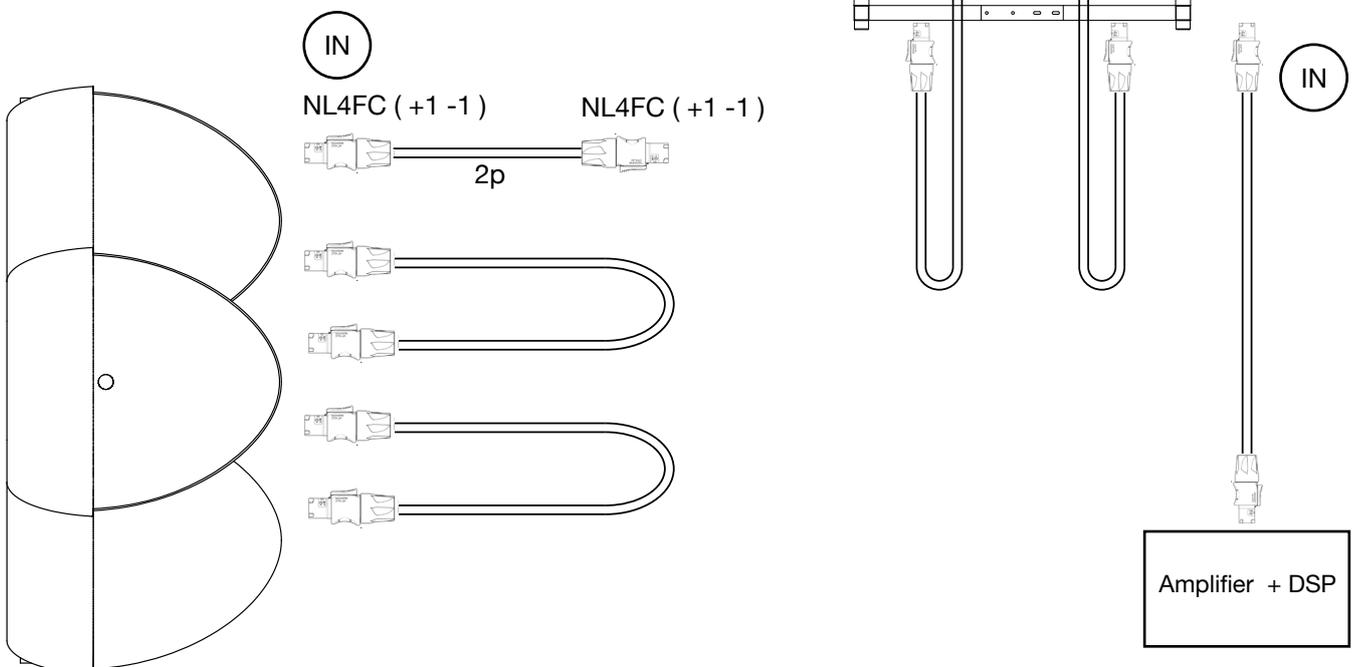
Band pass:

High-pass filter @25Hz, 24 dB/oct But.

Low pass filter @100-120Hz, 24 dB/oct LR.

Gain and Time Alignment : it depends on Satellite utilized

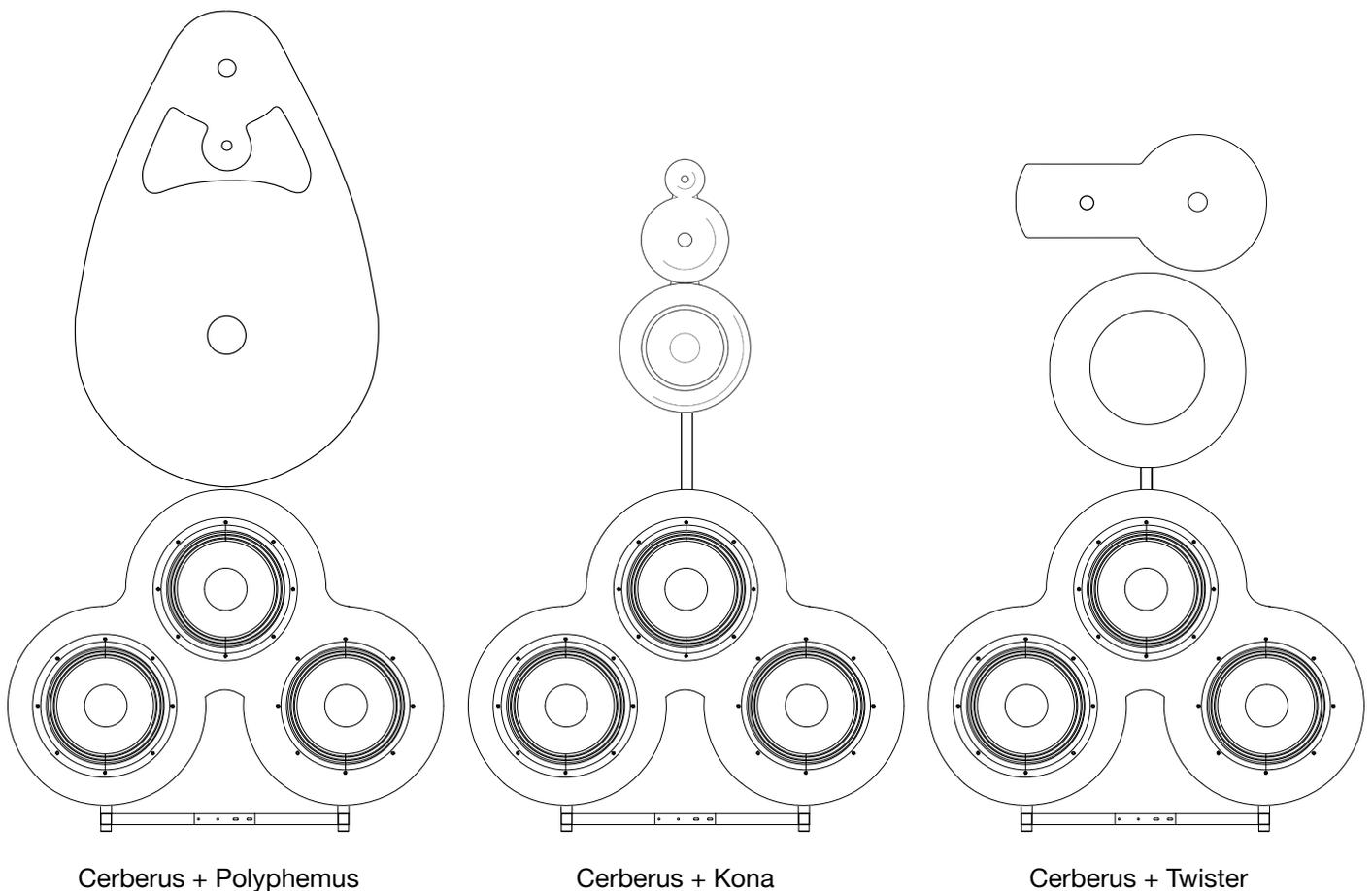
Parallel Connection



Cerberus can typically be used as a very high quality system for sounding listening areas, such as a dance floor or for an audience of a live concert. In all cases it is necessary to use suitable satellites (Polyphemus, SWave, Kona, Twister available from the Pequod catalog) to have a full range system. Cerberus represents the optimal choice as a subwoofer to be combined with the Polyphemus or Swave (or With Kona Storm, Twister, Ostro, having a surplus of power right on the subwoofer), to have a full range system, of high quality and global sensitivity.

The figure shows the typical combination, with Polyphemus, Kona and Twister.

Refer to the Polyphemus, Kona, and Twister manual for further details.

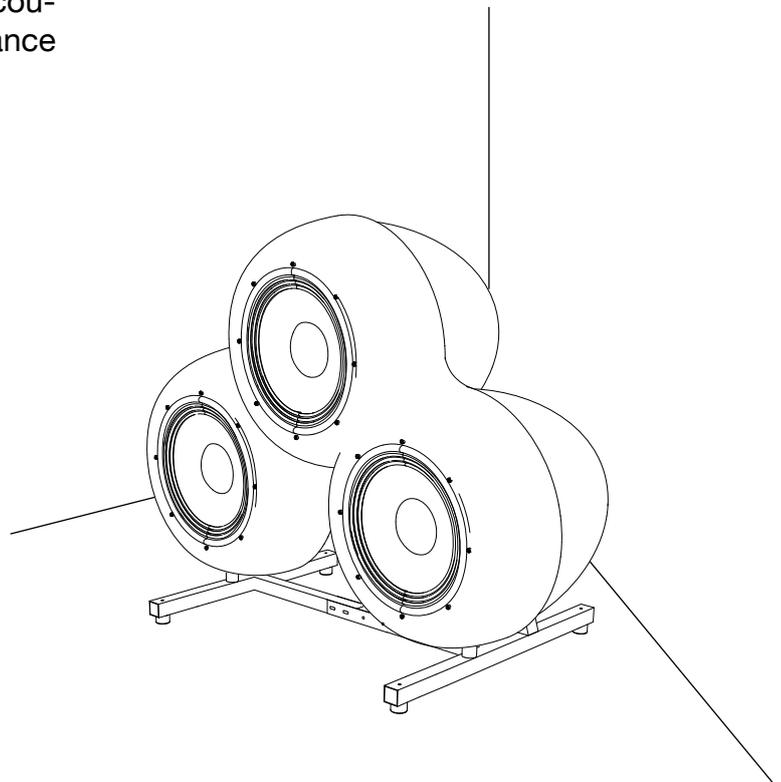
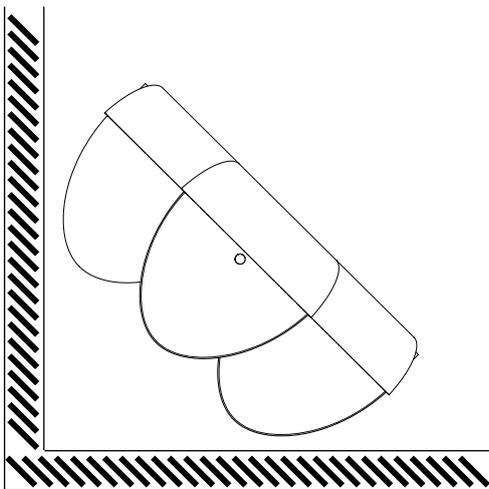


In Indoor systems:

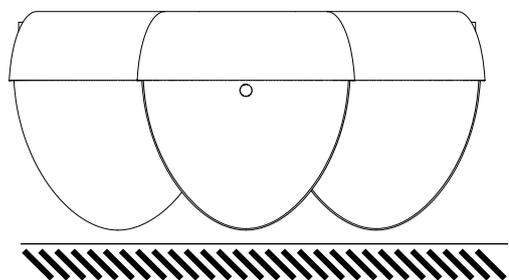
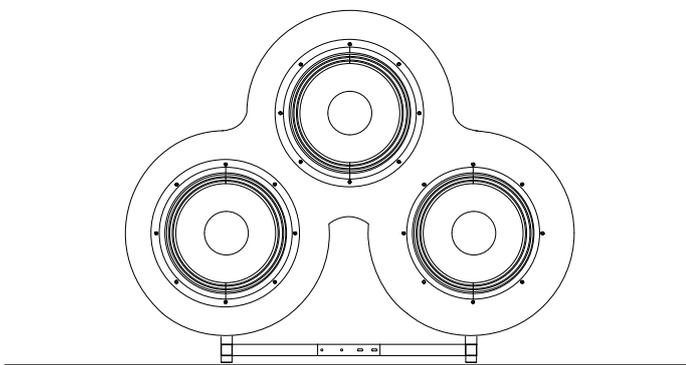
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In Indoor systems we recommend placing the Cerberus against the wall (wall position) or in a corner position, to avoid harmful (for the purposes of emission regularity) reflections of acoustic waves and increase the overall performance of the system.

Corner Position



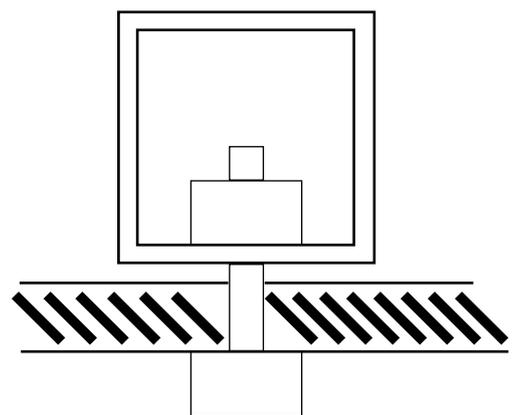
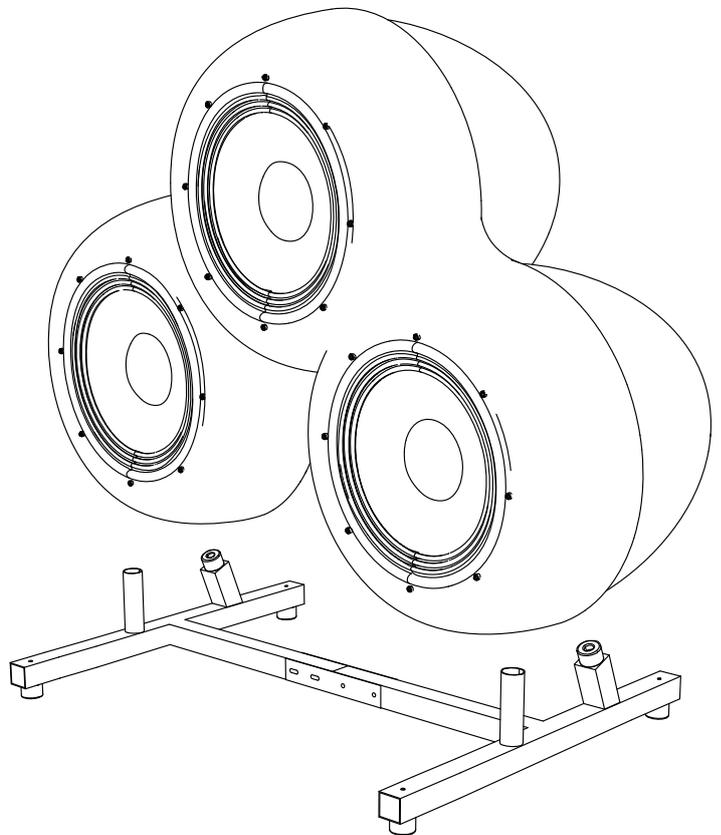
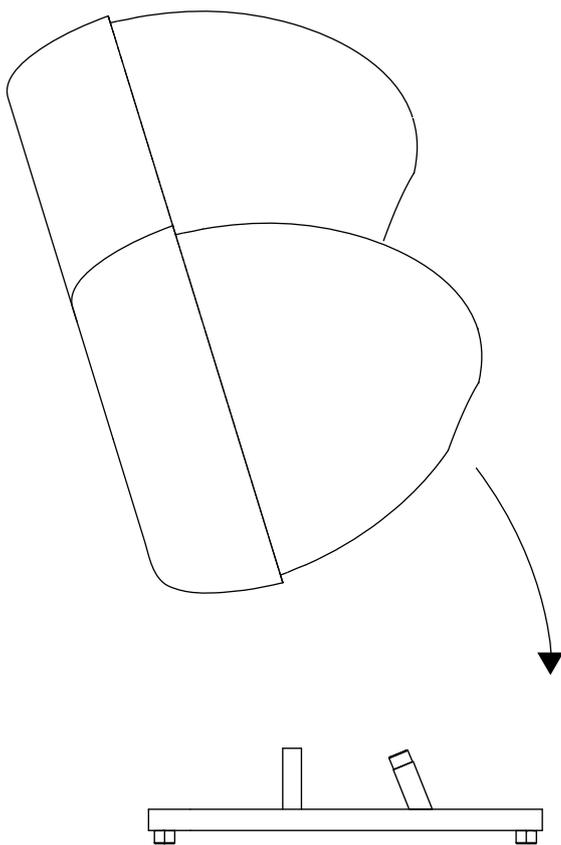
Wall Position



Assembly + anchoring:

As for the assembly and possible anchoring of Cerberus during installation, the subwoofer must be placed in its frame, inserting the tube in the lower seat of the sub. If necessary, there is the possibility of anchoring the feet of the frame to the ground, by means of screws, metric thread M6, screwed between floor and M6 threaded insert, placed in each foot of the product.

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5: Accessories

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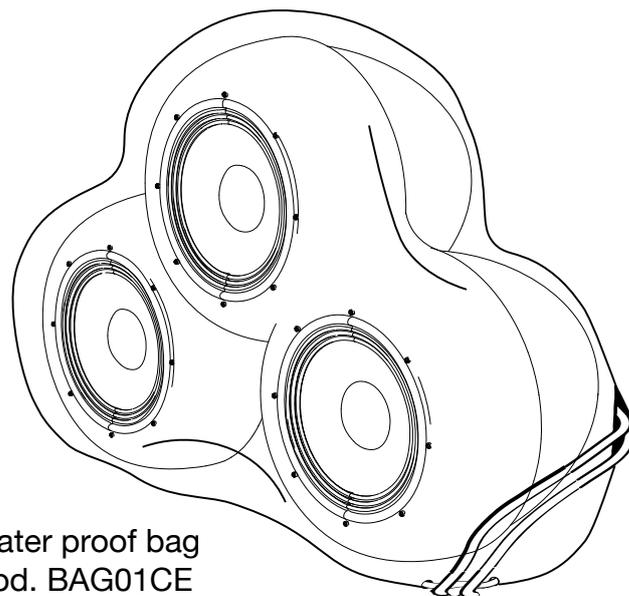
In the Pequod catalog there are some accessories to be used with Cerberus.

Cod. BAG01CE: Protective PVC Bag sized for Cerberus, waterproof soft finish to protect from scratches and weather

Cod. GROV: Front Protection Grille of the 18" woofer, made of stainless steel. Usually included as standard component in most orders, delete option is available when protection is not needed

Cod. BSCE: Stainless steel base for Cerberus

Cod. TBBOV: Interconnection pipe, stainless steel diameter 35mm for sat. (Length: 350, 550, 650)

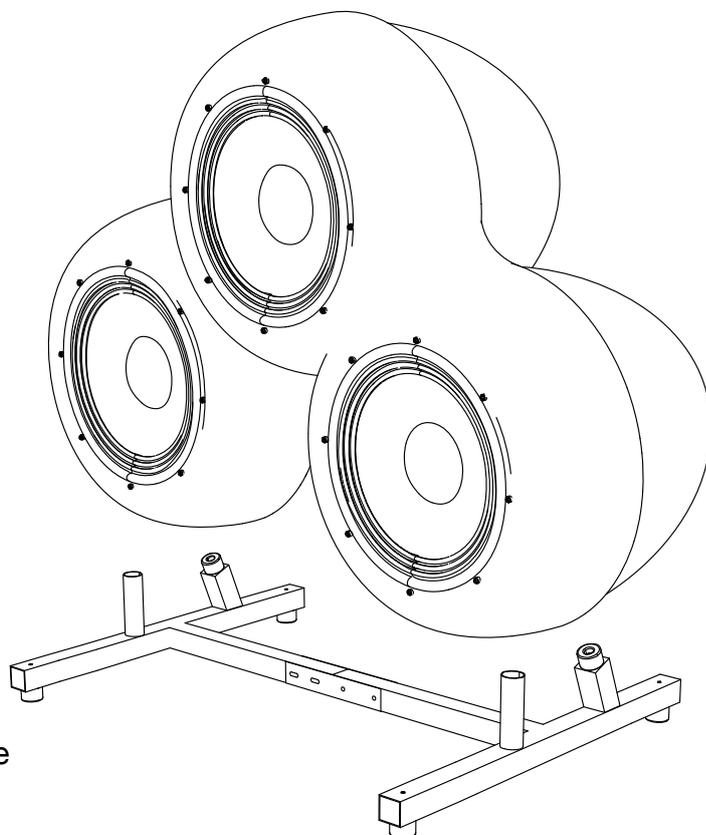
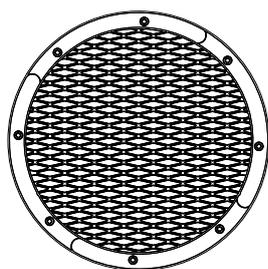


Water proof bag
Cod. BAG01CE



Cerberus connection
pipe Cod. TBBOV

Steel Mesh grille
Cod. GROV



Stainless steel base
Cod. BSCE

6: Maintenance and Surface Protection

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.

Warning: All Pequod products are polished by hand, by a specialized operator, one by one, before being packaged in their box.

Any traces or residues of wax (opaque white) may be present on the surfaces of the products. They are obviously easily removable with a soft cloth and in no case do they represent a qualitative defect, but rather evidence of a polishing process carried out by hand, with high quality waxes.

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).

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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.