

Polyphemus 14.1

3 Way passive, fully horn-loaded system



Introduction

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



Features

- Full-horn passive loaded, three way system
- High power sound emission
- Extreme sensitivity
- High energy efficiency with huge sound
- Unbeatable listening dynamics
- Excellent sound quality at all levels of listening
- Perfect adaptability to any musical genre
- Faithful and transparent reproduction at all frequency levels
- Weather resistant
- Engineered for easy maintenance and repair
- Technologically advanced design
- Light weight for easy transport
- Simple installation and interface
- Customization of color and surface
- Simple acoustic calibration
- Unique design
- Reduced energy consumption compared to other powerful systems
- Heavy duty composite construction, resistant to scratches and bumps

Applications

Large club spaces
Outdoor events
Medium or intimate-scale live events requiring high sound quality
Max Size of audience within the range of dispersion
Indoor 1700
Outdoor 1200
(recommendations will vary depending on the quantity and type of subwoofer)



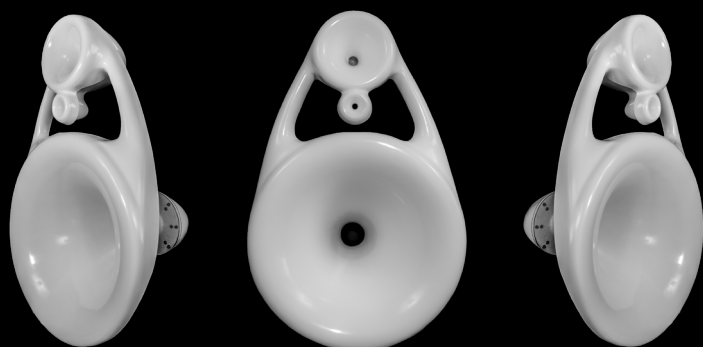
Architectural Specifications

The loudspeaker Polyphemus is a high performance passive full-horn, three-way system. It is Built from high quality composite materials, which make it highly resistant to damage from scratches and impacts. As well as being resistant to rain and sun. All metal parts are built from stainless steel. Mid-bass frequencies: large round horn, full frontal (112cm diameter), equipped with 12" midbass woofer; continuous power handling 500W; sensitivity (coupled to the horn) 109dB 1W/1m; nominal impedance 8 Ohm; Medium frequencies: round horn full frontal, equipped with 2" compression driver; continuous power handling 160W; sensitivity (coupled to the horn) 110dB 1W/1m; nominal impedance 8 Ohm, 70° dispersion. High frequencies: round horn , equipped with a 1" compression driver; continuous power handling 120W; sensitivity (coupled to the horn) 110 dB 1W/1m; nominal impedance 8 Ohm; dispersion 70°. The system can be driven in the three horns, completely passively through a dedicated inner crossover. The frequency response of the system, managed by the dedicated passive filter in a neutral environment, is linear and uniform, with no need for equalization corrections via DSP. Continuous power handling with this passive filter is 800 W 4 Ohm stable. A Full Fat audio FFA 6000 is the recommended amplifier partner for this solution. 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. The suspension loads are minimal 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). Size of the audience within the range of dispersion would be 1700 pp indoors, or 1200 pp in outdoor setting. This varies depending on the quantity and type of subwoofer and musical preference. Subwoofers are sold separately.

Warning:

this is a professional audio system with a very high efficiency and sensitivity that delivers acoustic emissions that could potentially cause hearing damage. Installation and use intended for experienced and qualified personnel. Safety DSP devices with a limiter function are recommended.

TYPE	Three ways passive full-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)



Pequod Acoustics Phone: +39 055 66 43 46

via del Madonnone, 25 Florence. Italy Mail: info@pequodacoustics.com Web: www.pequodacoustics.com

