

Hydra 8.1

Super horn-loaded folded subwoofer



Introduction

Super horn loaded subwoofer with circular section development, characterized by extreme sensitivity, dynamics and emission power, made with an incredibly rigid and light structure in durable composite materials. Unlike all other alternatives currently available, this low frequency loudspeaker has been realized without technical and dimensional compromises, being fully developed both in terms of length and radiating surface. Thus it achieves maximum acoustic performance combined with an elegant design and personality, always keeping dynamics and control front and center. Nearly scratch proof surfaces and resistance to atmospheric agents combined with extremely high efficiency and world class sensitivity allow the Hydra to perform favorably compared with any product from the main competing brands. Hydra 8.1 guarantees the perfect loading of low frequencies in sensitivity, depth, control and SPL expressed by the usage of few watts. The most common subwoofers on the market (wooden box type) are horn loaded speakers with several internal turns, non-optimized sections and reduced length, leading to lower sensitivity, reflections that create distortions and ripples, and uneven loading. Therefore they need corrections by DSP with consequent mechanical stress caused by the excursion of the transducer, which creates more distortions while using the enormous amount of energy needed by the amplifier to obtain SPL. Hydra 8.1 uses a single hi-quality transducer of 18" (460mm). The structure is rigid, very light (considering the whole weight and the rate dB/Kg) The scenic impact is extraordinary and absolutely exclusive and unique on the professional sound market. The Hydra 7.1, vertical version, has a straight first part of the horn. Hydra 7.1 (vertical) and Hydra 8.1 (folded) have similar acoustic performance.



Features

- Super impact horn
- Very high power sound emission
- Very limited rear emission problems
- 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
- Heavy duty composite construction, resistant to scratches and bumps
- All 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
- Unique design and appearance
- Reduced energy consumption compared to other powerful system
- Cost per dB of SPL very reduced

Applications

Large club spaces

Outdoor events

Medium scale live events requiring high sound quality

Impact events

Max Size of audience within the range of dispersion with two

Hydra 8.1: Indoor 1500

Outdoor 1000

(recommendations will vary depending on the musical genre)



Architectural Specifications

Hydra 8.1 is a super horn-loaded subwoofer that achieves very high performance. Built from high quality composite materials, highly resistant to damage from scratches and bumps. Absolute resistance to rain and sun. All metal parts are built from stainless steel. Hydra sensitivity starts from 110 dB 1W/1m, reaching the sensitivity of 114 dB 1W/1m depending on the configurations of the external environmental loading such as walls etc. Hydra 8.1 use a single high-quality transducer of 18" (460mm). All of this with a deep and controlled quality to the bass frequencies, with a reduced excursion of the 18" transducer that decreases distortion and mechanical stress. The woofer is an 18" (460 mm) Neodymium inside slug, 8ohm or 4ohm (depending on the versions); 1700w nominal power handling , 3400w power on continuous program. Hydra 8.1 has a specific efficiency ratio 1.37 dB/Kg with 1W, and huge sensitivity 110 (114) dB 1w/1m; power ratio for 1024 W RMS = 140dB. The above statistics show clearly a very low cost per dB of SPL. The frequency response, in a neutral environment, is linear and uniform, with no need for equalization corrections via DSP. Continuous power handling is 3400 W, 8 Ohm or 4 Ohm (depending on the versions), is the recommended amplifier power to exploit, fully, the transducer without any clipping in the amplifier. A Full Fat Audio FFA 10000 is the recommended amplifier for this solution (with Hydra 4ohm version). Size of the audience with two Hydra 8.1 would be indoor 1500 pp, outdoor 1000 pp. This varies depending on musical preferences.

Warning:

this is a professional audio system with very high efficiency and sensitivity with 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	Super horn-loaded subwoofer
FREQUENCY RESPONSE	28 Hz - 140 Hz
TOTAL SENSITIVITY	110 dB 1W/1m
NOMINAL IMPEDANCE	8 Ohm or 4 Ohm (depending on the version)
POWER HANDLING	1700 W nominal, 3400 W power continuous program
MANAGE	2 Ch amplifier to a couple of Hydra+DSP to match to satellite. High-pass filter @25Hz, 24 dB/oct. But ;Low-pass filter @100-120Hz, 24 dB/oct. LR
RECOMMENDED AMPLIFIER	Full Fatt Audio FFA 10000 (Hydra 4 ohm version)
DISPERSION	Specialized for frontal, reduced posterior
CONSTRUCTION MATERIALS	Fiber-reinforced composite, stainless steel
FINISH	all ral color and texture on order
CONNECTORS	1x Neutrik NL4 or custom preference
DIMENSIONS	(W) 1420 mm (H) 2760 mm (D) 2100 mm (W) 55 inch (H) 108 inch (D) 82 inch
WEIGHT	80 Kg (176,37 lb)



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HAND MADE IN ITALY