

312HC[™]

The 312HC is a very high-output 3-element shaded array loudspeaker system. The 312HC was designed to produce very high sound pressure level vocal range content with superior intelligibility. The 312HC utilizes 316-grade stainless steel (marine-grade) for all structural and rigging points. All associated One Systems rigging accessories are also 316-grade stainless steel. All metal components that are not structural feature a newly developed marine-grade powder coat over 304-grade stainless steel. This allows the 312HC to be used in ocean front and cruise ship applications, as well as in general direct weather installations. **IMPORTANT NOTE:** In ocean front and marine environments, the included “vent plugs” **must** be installed in the loudspeaker vents! The 312HC may be used in direct weather outdoor installations, as well as indoor applications where high vocal intelligibility and accuracy are required. Like all One Systems products, the 312HC was designed to not only offer excellent full-range fidelity, but also superior vocal reproduction and intelligibility. For extended bandwidth applications, the 312HC may be coupled with the 118HSB subwoofer to provide full bandwidth operation at very high sound pressure levels and in a relatively small footprint.

The system consists of 3 each 12-inch direct radiator transducers in a shaded array. The top 12-inch element is also a coaxial system that features a large format compression driver. The 312HC produces full bandwidth response and excellent vertical control. This array produces vertical beam width control to below 200 Hz and maintains a 60 degree vertical included radiation angle to below 300 Hz. This makes the 312HC excellent for reverberant indoor spaces such as gymnasiums, basketball

FEATURES & BENEFITS

- » 3-Element 12” Shaded Vertical Array
- » Marine-grade (316) stainless steel rigging points
- » Very High SPL extended bandwidth response
- » IEC 529 IP 45 (IP 56 with vent plugs)
- » Optimized for high-intelligibility and vocal articulation
- » Multiple M10 rigging points
- » Pan and Tilt (PT76/M), Pole Mount (PM4/M) rigging brackets
- » 312HC-U/M U-bracket available

SPECIFICATIONS

Frequency Response:	75Hz – 16kHz	Low Frequency:	ONE SYSTEMS 12I/O-1 V4 and 12I/O-2 V4
Coverage Pattern:	60 degrees conical		ONE SYSTEMS 12CXVII
Passive Crossover Frequency:	400HZ and 1800 Hz (Shaded Vertical Array)	High Frequency:	Modified large format compression driver
Inputs:	4-position barrier	EASE 4.0 data:	www.ONESYSTEMS.com
System Sensitivity (1 Watt / 1 Meter):	99dB	Suspension/Mounting Points:	19 each M10
Power Handling:	1200 watts Continuous	Weather Performance:	IEC 529 IP 45
	2400 watts Program	Dimensions (H x W x D):	1100 mm x 368 mm x 414 mm (43.3 in x 14.5 in x 16.3 in)
	4800 watts Peak*	Net Weight:	42.2 kg (93.5 lb.)
* NOTE: All system power handling rating are amplifier headroom dependent			
Nominal Impedance:	4-ohms		



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arenas and large general purpose spaces. The extended vertical control is also ideal for outdoor spaces where vertical control must be maintained throughout the entire vocal range. Unlike most high level vocal range systems, the One Systems 312HC is not a series of horns “nested” inside larger horns. These prior art designs suffer from poor vocal intelligibility, are characterized by that traditional “honky” horn sound and poor time domain response. The 312HC is a three-element 12-inch system that uses a single coaxially mounted high frequency horn and large format compression driver in the top 12-inch element that enhances higher frequency vocal information. The vocal fundamentals are reproduced by this 3-element direct radiator design that does not suffer from the traditional colorations found in horn systems.

The 312HC system offers a complete selection of flying/suspension hardware. The 312HC is optimized for outdoor applications such as football stadiums, baseball stadiums, race tracks and other sports venues where permanent installation is required with direct weather exposure. The system is particularly suited for very high level announcements and general vocal range reproduction. It is equally suited for general purpose indoor applications in multi-purpose rooms, indoor sports venues, as well as general performance or vocal intensive applications.

The 312HC enclosure is a copolymer optimized for high UV exposure and long life in harsh environments.

The grille is a 3-layer “rain shield” design that will minimize direct rain contact with the system’s transducers. The enclosure and grille design are rated to IEC 529 IP 45 (solid object penetration to 1 mm (0.04 inches) and water jets from any direction). The enclosure is rated IP 56 with the vent plugs installed.

The input section consists of a 4-position barrier strip. A weather cover is provided with an integral gland nut connector for outdoor applications.

The gland nut is weather proof and is rated NEMA 6P (IP68). The connector will accommodate cable outside diameters from 7mm to 12mm (0.236” to 0.472”). The maximum diameter will accommodate most 2 conductor AWG 12 cable assemblies.

The 312HC may be suspended using the PM4/M pole mount system or the PT76/M pan and tilt system. The PT76/M is for flat surface mounting only. Additionally, an optional U-bracket, the 312HC-U/M is available.