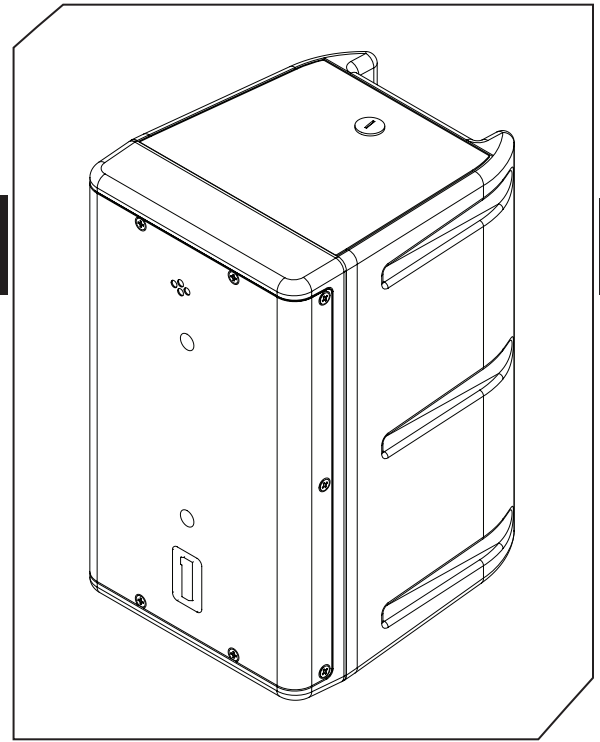


106HTH[™]

DIRECT WEATHER HIGH PERFORMANCE LOUDSPEAKER SYSTEM

The One Systems 106HTH is a universal direct weather loudspeaker system designed for use in both marine environments and in general purpose inland environments. The 106HTH 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 106HTH to be used in ocean front and cruise ship applications, as well as in all other general purpose direct weather installations. The 106HTH also features an installer configurable High Z or Lo Z mode. The High Z mode features a wide bandwidth 50 watt autoformer that presents input taps of 50 Watts, 25 Watts, and 12.5 Watts. The Lo Z mode is 8- ohms. The simple configuration process is found on the third page of this data sheet, or on the One Systems web site (www.onesystems.com). The configuration scheme does not utilize any switches that limit system reliability. The Hi Z mode allows for either 70.7Vrms or 100Vrms operation. The 106HTH offers superb intelligibility and extended bandwidth, as well as superior system dynamics.

The 106HTH is a two-way design featuring a wide coverage pattern of 110 degrees by 70 degrees. This low Q pattern is ideal for short throw applications and near field sound reinforcement applications. The high frequency wave guide provides optimal loading for the true compression driver. The use of a true compression driver allows the 106HTH to produce excellent system dynamics. The high frequency driver features very low distortion and superior upper vocal range intelligibility. The 6.5 inch nominal diameter low frequency component features a very large voice coil



FEATURES & BENEFITS

- » Marine-grade (316) stainless steel rigging and structural support
- » Easily configurable Hi Z (50 watt) multi tap or Lo Z (8-ohm) operation
- » Combined 70.7Vrms or 100Vrms operation
- » Marine-grade (316) stainless steel U-bracket included
- » No performance degrading or dynamics limiting passive protection devices
- » 100 watts continuous, 400 watts peak power handling in the Lo Z mode
- » IEC 529 IP 56 ingress protection

SPECIFICATIONS

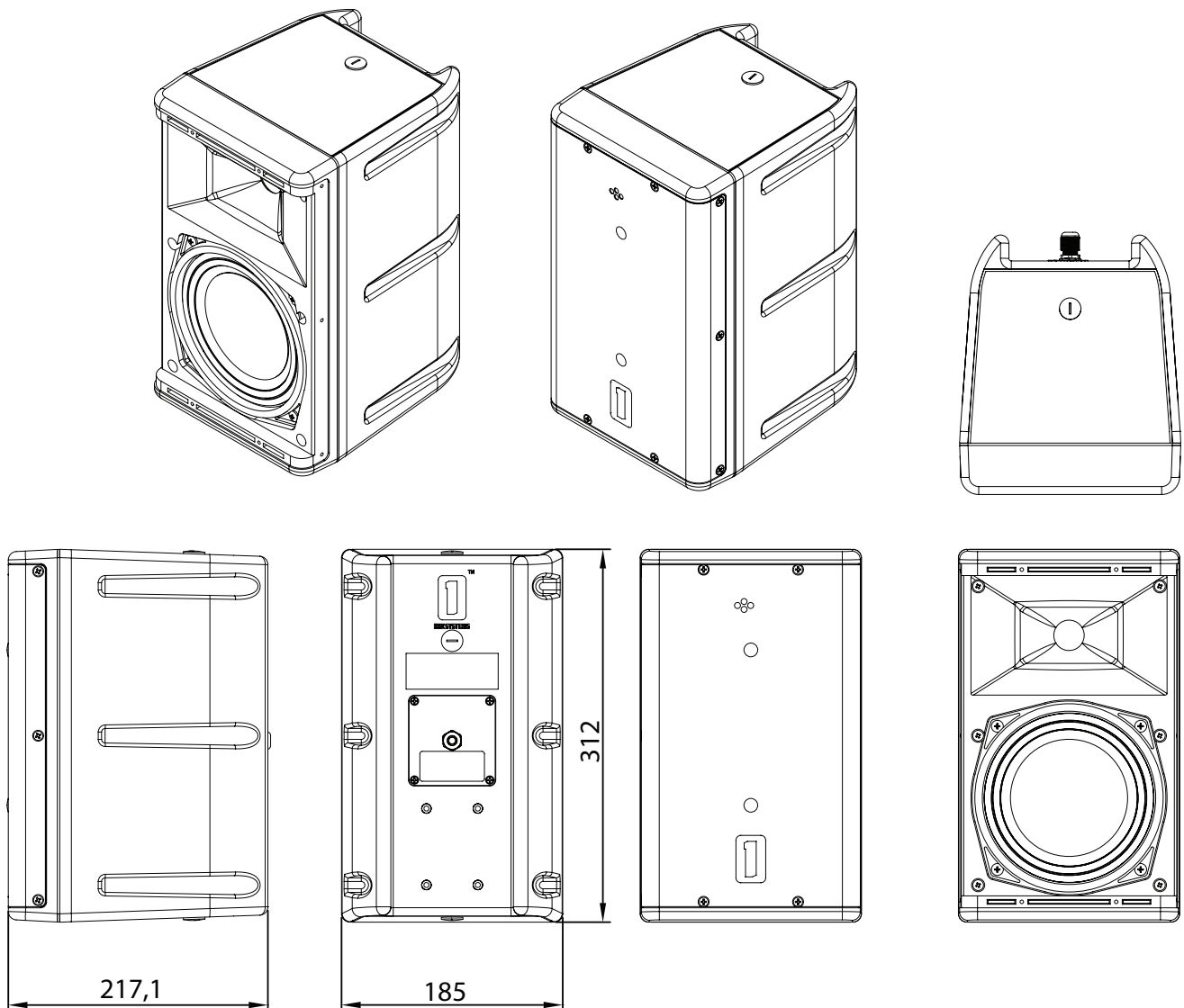
Frequency Response:	80Hz – 20,000Hz	Dimensions (H x W x D) mm:	312 x 185 x 217.1
Coverage Pattern:	110 H x 70 V	Dimensions (H x W x D) in:	12.3 x 7.3 x 8.5
Crossover Frequency:	3000 Hz		
System Sensitivity (1 Watt / 1 Meter):	89dB		
Power Handling:	100 watts continuous 200 watts program 400 watts peak		
Input Impedance (Lo Z):	8-ohms		
Input Taps (Hi Z):	50 Watts, 25 Watts, 12.5 Watts		
Weight:	6.5kg (14.6 lb.)		

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diameter, insures high reliability and excellent linearity.

The One Systems 106HTH includes a 316 (marine-grade) stainless steel U-bracket. The enclosure also features 4 each M5 rigging points on the back of the enclosure. These rigging points may be used with the One Systems PT-10/M or the PM2-M pole mount system. The enclosure is an injection molded design that utilizes a high impact copolymer material that exhibits superior weather resistance. The 106HTH is available in either black or white color. Both color options are stabilized for ultra violet exposure. The 106HTH features a three-layer "rain shield" grille design and an input weather cover with water proof gland nut. The overall ingress protection is rated at IP56.



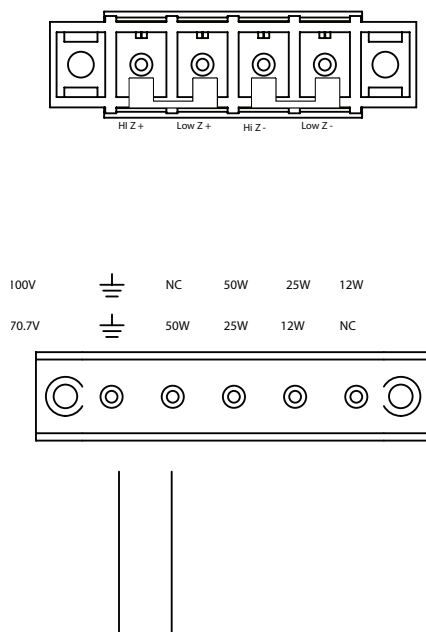
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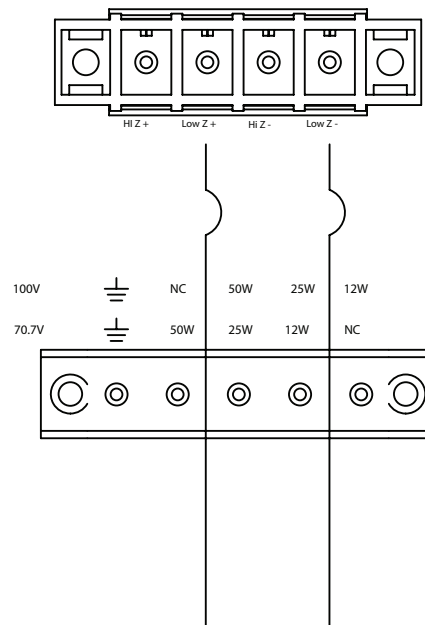
The One Systems 106HTH is designed to be easily configured for either low impedance (Lo Z) 8 ohm operation or Hi Z (70.7Vrms or 100Vrms) operation. The 106HTH is shipped from the factory configured for Hi Z (70.7Vrms or 100Vrms) operation. In this mode the wiring from an amplifier is connected to the lower (5 position) barrier strip. **No** wiring is required on the top (4-position) barrier strip. The two “shorting” links (shown in the image) must be left in place for Hi Z operation. The image on the left represents the Hi Z configuration.

The lower (5-position) barrier strip may be wired for either 70.7Vrms or 100V operation. The specific positions to be used are determined by whether 70.7Vrms or 100Vrms wiring is required.

For Lo Z (8 ohm) operation the two “shorting” links must be removed. **All** wiring for Lo Z -operation is on the top (4-position) barrier strip. The lower (5-position) barrier strip is **not** used for Lo Z operation. For Lo Z operation the “Low Z +” and “Low Z -” positions on the 4-position barrier strip are used. **Do not** wire to the “High Z +” or the “High Z -” positions for Lo Z operation. The image on the right shows the two “shorting” links removed and the amplifier wiring to the “Low Z +” and “Low Z -” positions.



FROM HI Z
AMPLIFIER



FROM LO Z
AMPLIFIER

106HTH[™]

DIRECT WEATHER HIGH PERFORMANCE LOUDSPEAKER SYSTEM

ADDENDUM TO 104/HTH AND 106/HTH ENGINEERING DATA SHEETS

The One Systems 104/HTH and 106/HTH use a high quality autoformer to provide 70Vrms or 100Vrms “high impedance” operation. To insure maximum system performance the system should use a high pass filter. The filter may be either a 2nd order (12dB/oct) Butterworth or higher. A 4th order (24dB/Oct) Butterworth high pass filter is recommended. The high pass filter corner frequency should be no lower than 60Hz. This high pass filter will prevent transformer saturation at low frequencies and substantially improve system performance.

In addition, a high pass filter is also strongly recommended for low impedance (8 ohm) operation.

“NOTE: There are four shorting links installed on the 4 position barrier strip. Two are used in each position and are “stacked” in parallel. ALL four shorting links must be removed for Low Z operation. ALL four shorting links (two in each position) MUST be used for Hi Z (70Vrms or 100Vrms) operation.” Full wiring instructions for Hi Z and Low Z operation are found on the last page of the product data sheet.

The image below shows the position of the barrier strips (in red color). There are two stacked shorting links that connect the H Z+ to Low Z+. There are also two stacked shorting links that connect the Hi Z- to Low Z-. These links must be used for Hi Z operation (70Vrms or 100Vrms). They must be removed for Low Z operation.

