

# 108HSB<sup>™</sup>

## DIRECT WEATHER SUBWOOFER

### APPLICATIONS:

The 108/HSB is a single 8" high output, low frequency subwoofer sound reinforcement system. The speaker utilizes an injection molded enclosure designed for use in direct weather applications. This product is intended for venues where additional low frequency acoustic output is required in conjunction with the 108/HTC, 108/HTH, 106/HTH and 104/HTH One Systems enclosures.

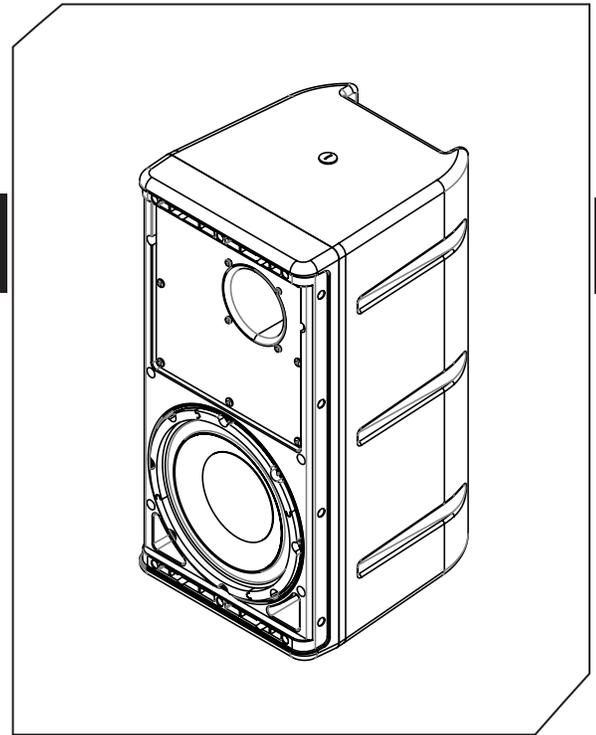
The 108/HSB may be used in outdoor installations, as well as indoor applications where extended low frequency output or additional bass response is required. The unique design of the 8-inch woofer provides an excellent combination of high sound pressure levels and low distortion.

The 108/HSB is designed for bi-amp applications only. The 108/HSB does not include an internal passive crossover.

The enclosure may be configured for either low impedance (8 ohm) operation or 70V/100v high impedance operation. Wiring instructions are found on the last page of this data sheet.

When operated in high impedance mode a 4th order Butterworth high pass filter with a corner frequency of 43Hz is required. A 4th order Butterworth high pass filter is also recommended for low impedance (8 ohm) operation to ensure optimal performance.

**Do not use this product in oceanfront or marine applications!**



### FEATURES & BENEFITS

- » Weather Resistant Eight-Inch Low Frequency Subwoofer
- » Injection Molded High IP45 Enclosure
- » Optimized for use with the 108/HTC, 108/HTH, 106/HTH and 104/HTH
- » 1 x 8 inch ONE SYSTEMS long excursion eight-inch woofer
- » Multiple M8 Flying Points
- » Low impedance (8 ohm) and 70V/100V High impedance operation
- » Barrier Strip Inputs with Gland Nut Weather Cover

### SPECIFICATIONS

<b>Frequency Response:</b>	43Hz – 150Hz	<b>Nominal Impedance:</b>	8 ohms (Low Z mode)
<b>Coverage Pattern:</b>	Essentially Omnidirectional	<b>High Impedance mode:</b>	One Systems 8-inch woofer
<b>Active Crossover Frequency :</b>	Recommended 100Hz (150Hz max)	<b>High Impedance power taps:</b>	150W, 75W, 37W (70Vrms) 150W, 75W (100Vrms)
<b>Inputs:</b>	4 position barrier (Low Z mode) 5 position barrier (Hi Z mode)	NOTE: An active 4th order Butterworth high pass filter with a corner frequency of 43Hz should be used on all systems applications. This applies to both low impedance (Low Z mode) and 70V/100V operation (Hi Z mode).	
<b>System Sensitivity:</b>	88dB (half space) (1 watt-1 meter)	<b>For bi-amp operation the suggested filters are:</b> 4th order Butterworth high pass.....43Hz 4th order Linkwitz-Riley low pass.....100Hz or higher	
<b>Power Handling:</b>	200 watts Continuous 400 watts Program 800 watts Peak*	<b>System Components:</b>	
		<b>Low Frequency:</b>	ONE SYSTEMS 8" (1 each)
		<b>High Frequency:</b>	N/A

\* NOTE: All system power handling rating are amplifier headroom dependent

# 108HSB<sup>™</sup>

## DIRECT WEATHER SUBWOOFER

### SPECIFICATIONS (continued)

<b>Suspension/Mounting points:</b>	7 each M8
<b>Weather Performance:</b>	IEC 529 IP 45 Mil Spec 810
<b>Dimensions (H x W x D):</b>	483.3 x 243.2 x 270.8 (19.05 x 9.56 x 10.66)
<b>Net Weight:</b>	14 Kg and 30.8 lb
<b>Optional Accessories:</b>	108/HTH-U/M PM3/M PT38/M
<b>Additional Supporting Systems:</b>	108/HTC, 108/HTH, 104/HTH, and 106/HTH

The ONE SYSTEMS 108/HSB features a thick wall trapezoidal enclosure that utilizes internal structural supports and 316-grade stainless steel rigging points to enable the enclosure to be used in a wide variety of permanently installed applications.

The grill is a 3 layer "rain shield" design that will minimize direct rain contact with the systems transducer. The enclosure and grille design are rated to IEC 529 IP45 (solid object penetration to 1 mm (0.04 inches) and water jets from any direction).

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 108/HSB may be suspended using the 108/HTH-U/M bracket, the PM3/M pole mount bracket, or the PT38/M pan and tilt bracket.

The enclosure **MUST** be oriented according to the label located on the weather cover. There are drain holes located at the bottom of the enclosure and on one side of the enclosure. For vertical mounting the enclosure must be oriented with the 8-inch woofer (logo) at the bottom and the vent at the top. This orientation applies for all mounting brackets when vertical orientation is desired. If the 108/HSB is mounted horizontally (using the 108/HTH-U/M bracket only), the side with the drain holes **MUST** oriented with the drain holes on the bottom of the enclosure. In the horizontal configuration the woofer must be to the left (logo to the left) and the vent to the right. See graphic on the product weather cover.

The 108/HSB **MUST** also have a minimum down tilt of 5 degrees.

# 108HSB<sup>™</sup>

## DIRECT WEATHER SUBWOOFER

The One Systems 108/HSB is designed to be easily configured for either low impedance (Lo Z) 8-ohm operation or High Z (70.7Vrms or 100Vrms) operation. The 108/HSB 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 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. The weather cover **MUST** be used in all outdoor AND indoor applications.

