

# 103IM™

## DIRECT WEATHER HIGH PERFORMANCE LOUDSPEAKER SYSTEM

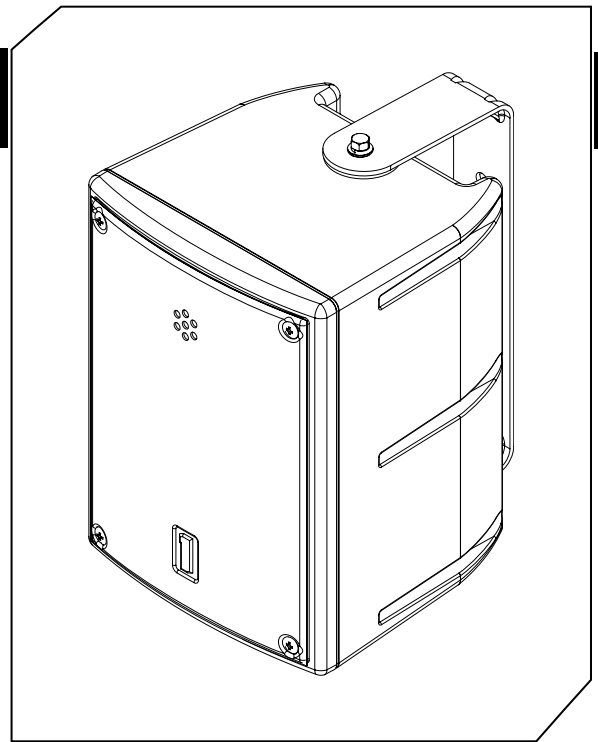
### ONE SYSTEMS®

The One Systems 103IM was designed to provide excellent audio performance, impressive acoustic output for its size and IP 56-rated direct-weather performance for a variety of acoustic spaces. The 103IM is a very high-performance background / foreground system designed for use in all weather conditions.

The 103IM's design includes a high-frequency driver coupled to an elliptical constant-directivity horn. The HF coverage pattern is 90 degrees horizontal by 40 degrees vertical. The high-efficiency HF driver and advanced crossover design delivers high power handling and excellent system reliability without the need for performance-degrading passive protection devices that are typically found in loudspeaker systems in this class. The 3.5-inch (90 mm) high-performance woofer also presents a unique design feature that provides both extended bandwidth response and superior low-frequency power handling. The 3.5-inch woofer features a very large-diameter 1.25-inch (31.8 mm) voice coil design that provides excellent system reliability and superb performance. The combination of the high-efficiency horn-loaded tweeter and very large-format voice coil design in the woofer yields superior system intelligibility, good vocal range integrity and superb music reproduction

The 103IM's enclosure is injection-molded utilizing a copolymer material developed for use in extreme harsh weather environments that also offers a high degree of UV protection for use in direct sunlight. The enclosure has 2 x M5 mount points on the top and bottom of the enclosure for use with the supplied 103IM-U U-Bracket. There are also 4 x M5 mounting points on the rear of the enclosure for use with the optional PT-10 pan and tilt bracket. All 103IM's mounting points are made of stainless steel. The grille's assembly is a 3-layer design that is optimized for both acoustic transparency and protection from windblown particles and water.

The input section features a weather cover with an integral gland nut that is rated to an IP 68 standard. The system's input connectors are a four-position barrier strip. The 103IM is available in both an 8-ohm impedance as well as 70.7-volt and 100-volt versions. The optional transformers are wide-bandwidth transformers with 50-watt, 25-watt and 12.5-watt taps that are accessible through the four-position barrier strip input.



### FEATURES & BENEFITS

- » Direct-weather capable, compact 3.5-inch two-way system
- » 3.5-inch woofer with large-sized 1.25-inch voice coil
- » High-performance tweeter with 90° x 40° waveguide
- » Available in black or white, low-impedance or transformer-coupled versions
- » U-Bracket included
- » Stainless steel grille and rigging
- » No performance-degrading passive protection devices
- » 50 watts continuous, 200 watts peak power handling

### SPECIFICATIONS

<b>Frequency Response:</b>	85 – 20,000 Hz
<b>Coverage Pattern:</b>	90° H x 40° V
<b>Crossover Frequency:</b>	3,000 Hz
<b>System Sensitivity (1watt / 1meter):</b>	87 dB
<b>Power Handling:</b>	50 watts continuous, 100 watts program, 200 watts peak*
<b>Optional Transformer Taps:</b>	12.5 watts, 25 watts, 50 watts
<b>Nominal Impedance:</b>	8 ohms
<b>Weather Performance:</b>	IP56



# 103IM™

DIRECT WEATHER HIGH PERFORMANCE  
LOUDSPEAKER SYSTEM

ONE SYSTEMS®

### SPECIFICATIONS (continued)

**Dimensions (H x W x D) mm:** 211.2 x 156.2 x 130.5

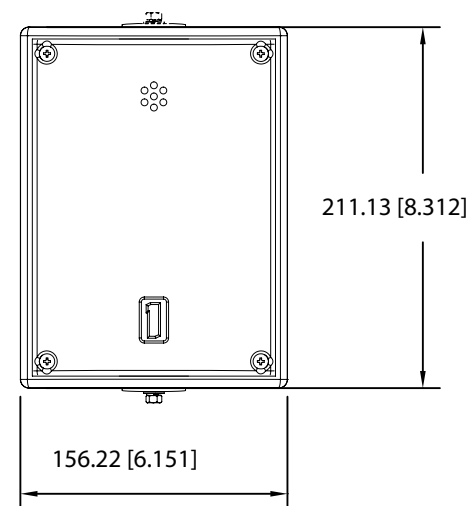
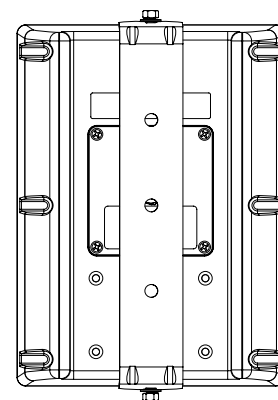
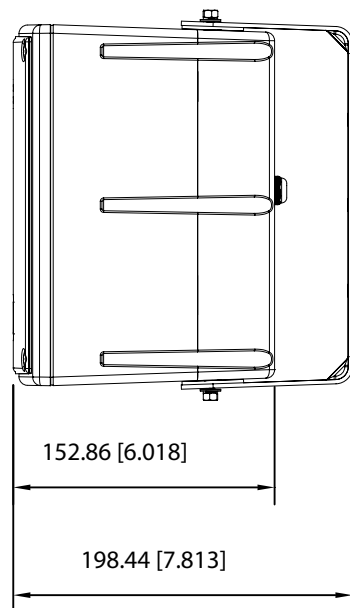
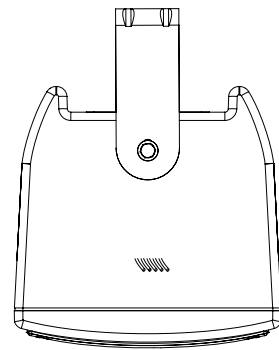
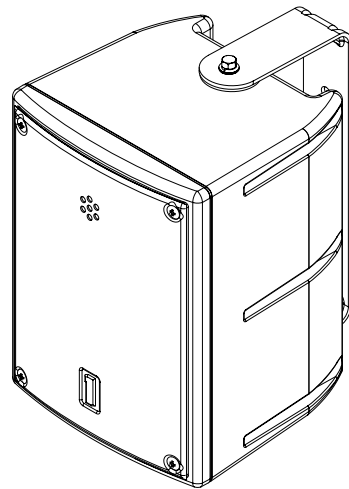
**Dimensions (H x W x D) in:** 8.3 x 6.15 x 5.1

**Net Weight (kg lb):** 3.0 kg / 6.6 lb.

70.7 / 100V Versions: 3.5 kg / 7.7 lb

**Shipping Weight:** 3.4 kg / 7.48 lb.

70.7 / 100 V Versions: 3.8 kg / 8.36 lb



# 103IM™

DIRECT WEATHER HIGH PERFORMANCE  
LOUDSPEAKER SYSTEM

ONE SYSTEMS®

All One Systems models that feature constant-voltage transformers may be wired as shown below. There are two basic versions, a 100-volt version and a 70.7-volt version.

Each model feature three taps at 50 watts, 25 watts, and 12.5 watts. All constant-voltage connections are made via the 4-position barrier strip. The wiring is shown in Table 1.

### Constant-Voltage Transformer Wiring

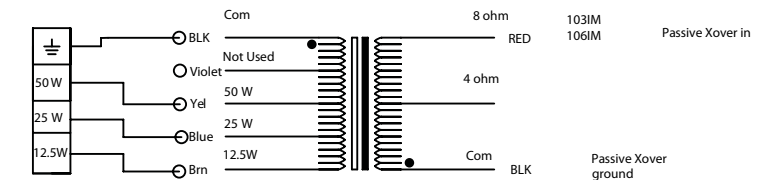
NOTE: The Neutrik Speakon connectors are **not** connected in the transformer coupled systems. Although it is common to parallel the Speakon connectors and the barrier strip in some wiring schemes, it is necessary to use the barrier strip only due to the high voltages present when using the 100-volt and 70.7-volt connections.

### INPUT POWER LEVEL / CONNECTION

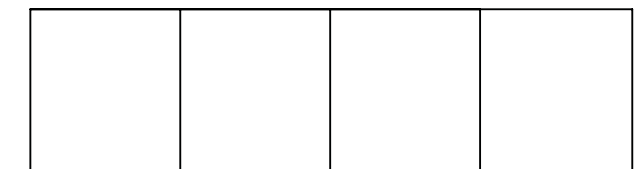
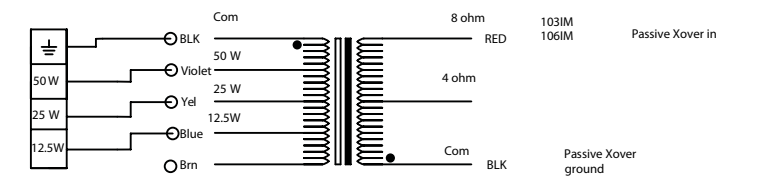
- 1+ Ground
- 1 - 50 watts
- 2 + 25 watts
- 2 - 12.5 watts

CAUTION: The weather cover must be installed (even if the enclosure is not installed in an outdoor venue) after the connections to the barrier strip are made. Installation of the weather cover is mandatory and will isolate the high voltages present on the terminal strip from contact.

### 100V Wiring



### 70.7V Wiring



ONE SYSTEMS®

One Systems USA, Inc • 6204 Gardendale Dr. • Nashville, TN 37215  
One Systems Group- European Division • Mittelsmoorer Strasse 12 • 28879 Grasberg Germany  
One Systems Global Co. Ltd. • 87/114 Modern Town 15th Floor • Sukhumvit 63 Ekkamai Soi 3  
Klongtoey, Bangkok 10110 Thailand

© 2010 One Systems Group, Co. LTD. All Rights Reserved

ONE SYSTEMS®

One Systems USA, Inc • 6204 Gardendale Dr. • Nashville, TN 37215  
One Systems Group- European Division • Mittelsmoorer Strasse 12 • 28879 Grasberg Germany  
One Systems Global Co. Ltd. • 87/114 Modern Town 15th Floor • Sukhumvit 63 Ekkamai Soi 3  
Klongtoey, Bangkok 10110 Thailand

© 2010 One Systems Group, Co. LTD. All Rights Reserved