



112 IM™

LIGHT-WEIGHT COPOLYMER-BASED ALL-WEATHER LOUDSPEAKER SYSTEM

ONE SYSTEMS®

The One Systems® 112IM™ is an all-weather loudspeaker system with a lightweight, injection-molded, copolymer enclosure. The 112IM 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 112IM was designed to offer excellent full-range fidelity and superior vocal reproduction and intelligibility as well. The system consists of a single 12-inch One Systems Inside/Only woofer and a large-format ET driver coupled to a fully-rotatable, constant-directivity high frequency horn.

The 112IM system offers a complete selection of optional array and flying/suspension hardware. The system is also available with a 150-watt, 3-tap line-matching transformer. The 112IM transformer version may be ordered with either a 100-V or 70.7-V primary.

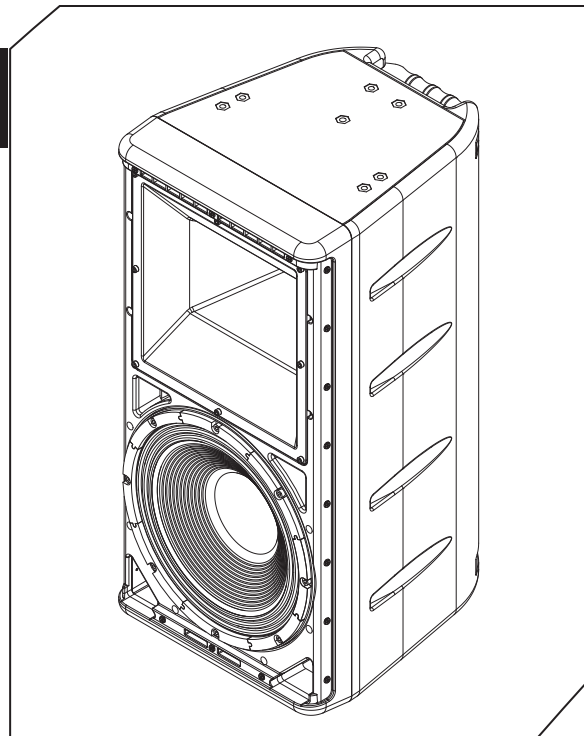
The 112IM is optimized for use in outdoor applications such as football stadiums, baseball stadiums, race tracks and other sports venues where permanent installation is required and direct weather exposure is assumed. The system is also well-suited for outdoor general public address applications. The system is equally suited for general-purpose indoor applications in multipurpose rooms, indoor sports venues and general performance or vocal intensive applications. The 112IM's enclosure is a copolymer that is optimized for high UV exposure and long life in harsh environments. All internal and external rigging and suspension hardware, as well as the metal grill are made of stainless steel or high-strength aluminum.

The grill is a 3-layer "rain shield" design that will minimize direct rain contact with the systems transducers. The system's unique vent design also allows for easy moisture drainage from the interior of the enclosure. The enclosure and grill design are rated to IEC 529 / IP 45 (solid object penetration to 1 mm (0.04 inches) and water jets from any direction). The 112IM's enclosures and components are also rated to Mil Spec 810.

The input section consists of a stainless steel hardware barrier strip and two 4-pin Neutrik® Speakon® connectors. An input weather cover is provided with an integral gland nut connector for use in outdoor applications. In the outdoor configuration, connections are made thru the 4-position barrier strip.

The gland nut is weather proof and is rated NEMA 6P (IP 68). The connector will accommodate cable with outside diameters from 7 mm to 12 mm (0.236" to 0.472"). The maximum diameter of the Gland Nut will accommodate most 2-conductor AWG 12 cable assemblies.

The system's design utilizes a patent-pending high frequency driver that will accommodate a variety of high-frequency radiation patterns. There are two fully rotatable high frequency horns available. Both horns are Equivalent Throat designs that offer extended bandwidth polar control with very low distortion. The standard ET-60/40 delivers a 60 degree horizontal by 40 degree vertical radiation pattern and is also fully rotatable. Although the 112IM is shipped with the ET-60/40 horn installed, an ET-105/60 will be supplied at no charge upon ordering. The ET-105/60 is a 105 degree horizontal by 60 degree vertical pattern and may be rotated to also provide a 60 degree horizontal by 105 degree vertical for down-fill applications. A simple internal jumper optimizes the crossover for either high frequency horn. (For details related to changing high frequency



FEATURES AND BENEFITS

- Direct weather 12" two way system.
- Optimized for high intelligibility and vocal articulation.
- ET Fully rotatable and interchangeable high frequency horns.
- Patent Pending large format titanium/neodymium compression driver.
- Patent Pending large format voice coil low frequency.
- Multiple M10 flying points.
- Available Array Downfill, and "U" brackets.
- Weather cover with gland nut plus stainless steel barrier strip and 2 x Neutrik Speakon input connectors
- Available in black or white finishes with optional 150-watt 3-tap 100V or 70.7V line-matching transformer (112IM-100 or 112IM-70)

SPECIFICATIONS

Frequency Response:	60Hz – 16kHz
Coverage Pattern:	105H x 60V (ET105/60) 60H x 40V (ET60/40)
Passive Crossover Frequency:	1300 Hz (ET105/60) 1800 Hz (ET60/40)
Externally Switchable Bi-amp / Full Range:	See website for crossover presets
Inputs:	4 position barrier or 2 each 4 pin Speakon
System Sensitivity: (1 watt-1 meter)	96dB
Power Handling:	800 watts Continuous 1600 watts Program 3200 watts Peak*
Nominal Impedance:	8 ohms

* All power handling ratings are amplifier headroom dependent

Continued on back »

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horn. (For details related to changing high frequency horns, see the "Tech Papers/Install Guides" section of the One Systems web site, www.onesystems.com)

The patent-pending ET compression driver (full details are available at the One Systems web site, www.onesystems.com) is a unique "equivalent throat" design that allows the driver's radiation pattern to be controlled by the phase plug summation plane rather than the conventional exit diameter at the end of the driver's structure. The ET driver has a large format titanium diaphragm and a close-spaced circumferential ring phase plug to insure extended high frequency bandwidth.

The low frequency driver's design is also patent-pending. The 12-inch 12I/O Inside Only woofer utilizes a unique voice coil wound on the inside of the voice coil's support structure. This design ensures both high magnetic system displacement as well as increased thermal transfer for reduced power compression and higher reliability.

Because the ONE SYSTEMS' 112IM is designed for permanent installation applications, a variety of rigging and suspension options are available. The 112IM has 19 x M10 mounting points. An optional Eye Bolt Kit with 4 x M10 forged-shoulder, 15 mm eye bolts is available from One Systems. The 112IM may be suspended as a single unit using the optional One Systems 112IM-U U-Bracket in either a vertical or horizontal configuration.

There are also two planar array systems available. The One Systems Fly-112IM planar array bracket allows multiple 112IM's or an array of 112IM's and a 212Sub-W subwoofer. This array bracket will allow for 1-deep planar arrays. This array bracket provides 5-degree horizontal aiming increments. There is also a "T" array bracket that enables two-deep planar arrays, where the second row consists of additional 112IM enclosures in a down-fill orientation. The Fly-112IM-T bracket also provides for 5 degree horizontal aiming increments.

The 112IM system also offers a down-fill bracket (DF-IM) that allows a single 112IM to be suspended upside down from either another 112IM or a 212IM. This allows the lower 112IM to be configured for down-fill applications. The DF-IM allows for 5-degree aiming increments in the vertical plane. The 112IM may be mounted in selected installations (when permitted by local codes and appropriate substrates) using a ONE SYSTEMS pan and tilt bracket (PT-70).

The 112IM is also available with an optional built-in line-matching transformer in both 100-V and 70.7-V versions (112IM-100 or 112IM-70). This internal 150-watt, 3-tap transformer offers 150 watt, 75 watt, and 37.5 watt taps.

SYSTEM SPECIFICS

Low Frequency:	ONE SYSTEMS 12 I/O
High Frequency:	ONE SYSTEMS ET Driver
System Tunings (Bi-amp mode):	www.ONESYSTEMS.com
EASE 4.0 data	www.ONESYSTEMS.com
Suspension/Mounting points:	19 each M10
Weather Performance:	IEC 529 IP 45 Mil Spec 810
Dimensions (H x W x D):	749mm x 368mm x 414mm (29.5 in x 14.5 in x 16.3in)
Net Weight:	27.6 kg (61 lb) 70/100V versions 30.9 kg (68.3 lb)
Optional Accessories:	112IM-U "U" bracket kit FLY-112IM FLY-112IM-T DF-IM Downfill Bracket M10 Forged Shoulder Eye Bolt PT-70 Pan & Tilt bracket
Additional Supporting Systems:	212Sub-W subwoofer (Simple and "T" planar arrays)

