IS7 User Manual
Version 1.0

- Distribution Date: June 1st, 2018
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This manual must be accessible to the person operating this product. As such, the product owner must store it in a safe place and make it available upon request to any operator.

Resale of this product must include a copy of this manual.

If this manual becomes damaged or additional copies are needed, please email support@adamsonsystems.com.

Declarations

CE Declaration of Conformity

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Adamson Systems Engineering declares that the products stated below are in conformance with the relevant fundamental health and safety criteria of the applicable EC Directive(s), in particular:

971-0003 IS7
971-0004 IS7b
992-0010 IS118
992-0011 IS118b

930-0026 IS7 & IS118 Support Frame
930-0021 S-Series Extended Beam
930-0022 S-Series Moving Point Extended Beam
930-0030 IS7 Micro Frame
932-0037 H-Clamp

Established at Port Perry, ON. CA - June 1st, 2017

Brock Adamson (President & CEO)
Safety & Warnings

- Read these instructions, keep them available for reference. They can be downloaded from https://www.adamsonsystems.com/en/support/downloads-directory/is-series/is7. Heed all warnings and follow all instructions.

- A qualified technician must be present during the installation and use of this product. This product is capable of producing extremely high sound pressure levels and should be used according to the specified local sound level regulations and good judgement. Adamson Systems Engineering will not be liable for damages caused by any possible misuse of this product.

- Servicing is required when the loudspeaker has been damaged in any way, such as when the loudspeaker has been dropped; or when for undetermined reasons the loudspeaker does not operate normally.

- Protect the cabling from being walked on or pinched.

- Read the IS-Series Rigging Manual before installing the IS7.

- Pay attention to rigging instructions included in both Blueprint AV™ and the IS-Series Rigging Manual.

- Use only with the rigging frames/accessories specified by Adamson, or sold with the loudspeaker system.

- This speaker enclosure is capable of creating a strong magnetic field. Please use caution around the enclosure with data storage devices such as hard drives.
Product Introduction

IS7 Ultra Compact Line Array

- The IS7 is an ultra compact line array enclosure designed for extended throw capabilities. It has an unobtrusive visual design which blends seamlessly into the surrounding space. It contains two symmetrically arrayed 7” transducers and a 3” compression driver mounted on an Adamson waveguide.

- Up to 16 IS7 can be flown in the same array when using the IS7 & IS118 Support Frame (930-0026) and up to 8 when using the S7 Micro Frame (930-0029). Due to the use of Controlled Summation Technology, the IS7 maintains a consistent nominal horizontal dispersion pattern of 100° down to 400Hz.

- The high frequency waveguide is designed to couple across the entire intended frequency band without loss of coherence. There are 9 rigging positions available, spanning 0° to 12.5°.

- Adamson’s use of proprietary technologies such as Controlled Summation Technology and Advanced Cone Architecture give the IS7 an extremely high maximum SPL level of 138 dB. The nominal impedance of the IS7 is 16 Ω per band, maximizing amplifier efficiency.

- The operational frequency range of the IS7 is 80Hz to 18kHz, +/- 3 dB.

- The IS7 is intended to be used as a standalone system or with the IS118 companion subwoofer, which brings the usable frequency range down to 35Hz.

- The wooden enclosure is made of marine grade birch plywood, and has an aluminum rigging system mounted on each corner. Without sacrificing low resonance to composite material, the IS7 is able to maintain a low weight of 13.2 kg / 29 lbs.

- The IS7 is designed for use with Lab.gruppen’s D-Series line of installation amplifiers.

In an effort to continuously improve its products, Adamson releases updated accompanying software, presets and standards for its products. Adamson reserves the right to change the specifications of its products and the content of its documents with no prior notice.
The IS7 (971-0003) comes with 2x Neutrik Speakon™ NL4 connections, wired in parallel.

The IS7b (971-0004) comes with an external barrier strip.

Pins 1+/- are connected to the 2x ND7-LM8 MF transducers, wired in series.

Pins 2+/- are connected to the NH3-16 HF transducer.

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**IS7 Jackplate**

**IS7b Jackplate**

**IS7 & IS7b Internal Wiring (IS7b only has one input)**
The IS7 is paired with Lab.gruppen D-Series amplifiers. Maximum quantities of the IS7 per amplifier model are shown below. For a master list, please refer to the Maximum Enclosure per Amplifier document, found on the Adamson website.

Use LoadSmart™ verification to ensure that all connections are made properly. On the D-Series line of amplifiers, LoadSmart™ can be accessed through Lake Controller. Please refer to the Adamson Lake & PLM Handbook, which is included in the Adamson Load Library, which can be found on the Adamson website.
Presets & Control

Preset

The Adamson LoadLibrary, found on the Adamson website, contains presets designed for a variety of IS7 applications. Each preset is intended to be phase-linear with either the IS118 or IS119 subwoofers.

<table>
<thead>
<tr>
<th>Preset</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS7 Lipfill</td>
<td>Intended for use with a single IS7</td>
</tr>
<tr>
<td>IS7 Short</td>
<td>Intended for use with an array of 7 or less IS7</td>
</tr>
<tr>
<td>IS7 Array</td>
<td>Intended for use with an array of 8 or more IS7</td>
</tr>
</tbody>
</table>

Control

Array Shaping overlays (found in the Array Shaping folders of the Adamson Load Library) are available so comparisons can be made between the “Array” preset and the “Short” preset. When the “Array” preset is loaded, the “Short” Array Shaping overlay can be recalled in the EQ section of Lake Controller to adjust the contour of the array to compensate for less enclosures.

Tilt overlays (found in the Array Shaping folders of the Adamson Load Library) can be used to alter the overall acoustic response of an array. Tilt overlays apply a filter, centered at 1kHz, which reaches the noted decibel cut or boost at the extreme ends of the listening spectrum. For example, a +1 Tilt will apply +1 decibel at 20kHz and -1 decibel at 20Hz. Alternately, a -2 Tilt will apply -2 decibels at 20kHz and +2 decibels at 20Hz.

Please refer to the Adamson PLM & Lake Handbook for detailed instructions on recalling Tilt and Array Shaping overlays.
Acoustic Data

**12 dB crest factor pink noise at 1m, free field, using specified processing and amplification**

### Frequency Range (+/- 3dB)
80 Hz - 18 kHz

### Nominal Directivity (-6 dB) H x V
100° x 12.5°

### Maximum Peak SPL**
138 dB

### Components LF
2x ND7-LM8 7” Neodymium Driver

### Components HF
Adamson NH3 3” Diaphragm / 1.4” Exit Compression Driver

### Nominal Impedance LF
16 Ω (2 x 8 Ω)

### Nominal Impedance HF
16 Ω

### Power Handling (AES / Peak) LF
500 / 2000 W

### Power Handling (AES / Peak) HF
110 / 440 W

### Rigging
Integrated Rigging System

### Connection
2x Speakon™ NL4 or Barrier Strips

### Height Front (mm / in)
236 / 9.3

### Height Back (mm / in)
122 / 4.8

### Width (mm / in)
527 / 20.75

### Depth (mm / in)
401 / 15.8

### Weight (kg / lbs)
13.2 / 29

### Colour
Black & White (RAL 9010 as standard, other RAL colours on demand)

### Processing
Lake

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**Technical Specifications**