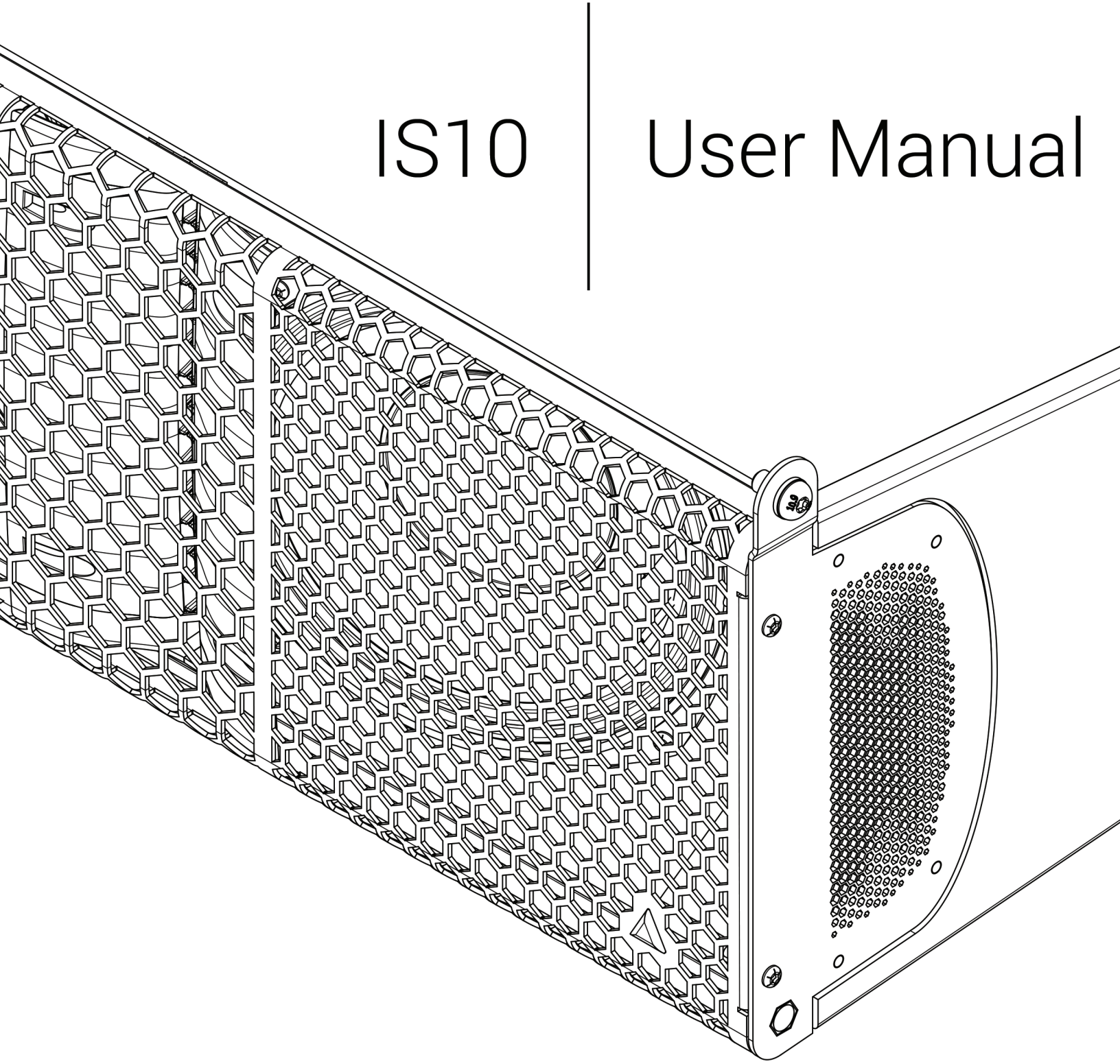


IS10

User Manual



# IS10 User Manual

Version 1.0

- Distribution Date: June 1st, 2018
- Copyright 2019 by Adamson Systems Engineering Inc.; all rights reserved

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](mailto:support@adamsonsystems.com).

## Declarations

### CE Declaration of Conformity

ADAMSON SYSTEMS ENGINEERING, Inc.  
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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:

#### Directive 2006/95/EC: Low Voltage Directive

973-0006 IS10

973-0007 IS10b

994-0005 IS119

994-0006 IS119b

#### Directive 2006/42/EC: Machinery Directive

930-0028 IS10 & IS119 Support Frame

930-0021 S-Series Extended Beam

930-0022 S-Series Moving Point Extended Beam

930-0030 IS10 Micro Frame

932-0037 H-Clamp



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

A handwritten signature in blue ink, appearing to read 'Brock Adamson'.

-----  
Brock Adamson (President & CEO)

The Adamson IS-Series logo, featuring a stylized triangle of parallel lines to the left of the word 'ADAMSON' in a bold, sans-serif font, with 'IS-Series' in a smaller font below it.

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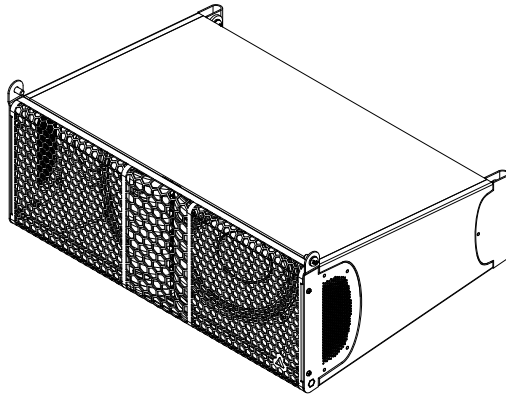
## Safety & Warnings

### 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/is10>. 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 IS10.
- 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

## IS10 Sub Compact Line Array



- The IS10 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 10" transducers and a 4" compression driver mounted on an Adamson waveguide.
- Up to 16 IS10 can be flown in the same array when using the IS10 & IS119 Support Frame (930-0028) and up to 4 when using the IS10 Micro Frame (930-0030). Due to the use of Controlled Summation Technology, the IS10 maintains a consistent nominal horizontal dispersion pattern of 110° down to 250Hz.
- 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 10°.
- Adamson's use of proprietary technologies such as Controlled Summation Technology and Advanced Cone Architecture give the IS10 an extremely high maximum SPL level of 141.3 dB. The nominal impedance of the IS10 is 8 Ω per band, maximizing amplifier efficiency.
- The operational frequency range of the IS10 is 60Hz to 18kHz, +/- 3 dB.
- The IS10 is intended to be used as a standalone system or with the IS119 companion subwoofer, which brings the usable frequency range down to 30Hz.
- The wooden enclosure is made of marine grade birch plywood, and has a steel rigging system mounted on each corner. Without sacrificing low resonance to composite material, the IS10 is able to maintain a low weight of 25.6 kg / 56.5 lbs.
- The IS10 is designed for use with Lab.gruppen's D-Series line of installation amplifiers.

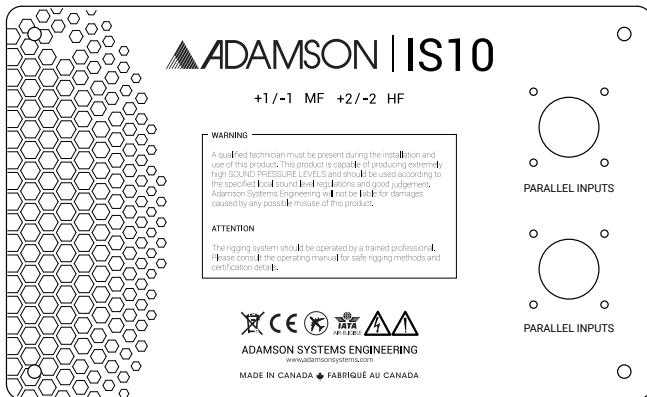
In an effort to continuously improve its products, Adamson releases updated accompanying software, presets and standards for its products. **Adamson reserves the right to change the specifications of its products and the content of its documents without prior notice.**



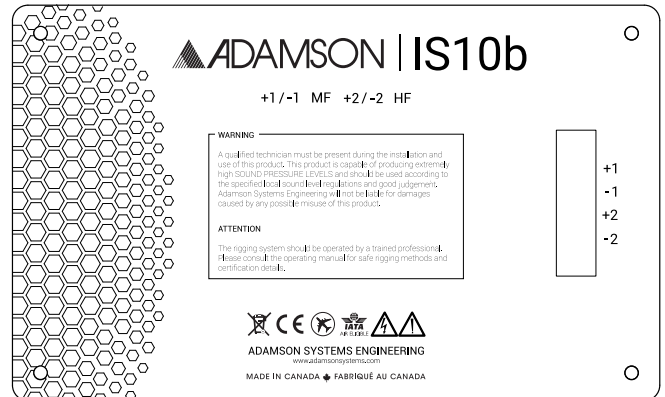
# Wiring & Amplification

## Wiring

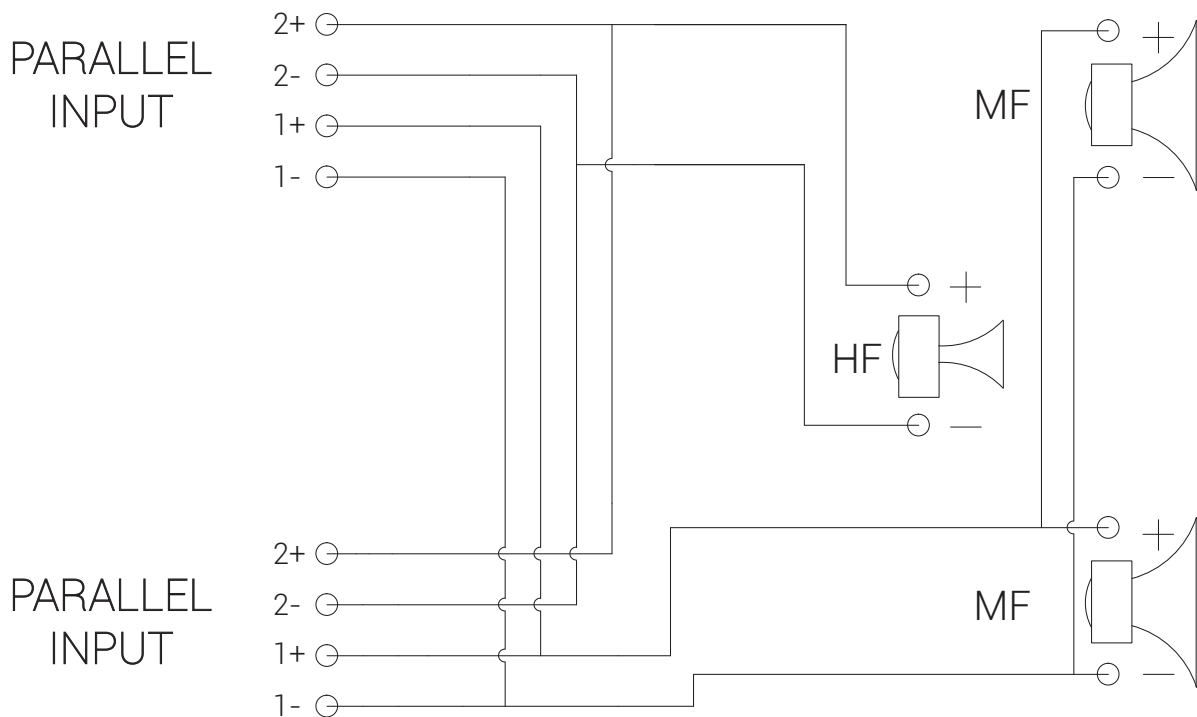
- The **IS10** (973-0006) comes with 2x Neutrik Speakon™ NL4 connections, wired in parallel.
- The **IS10b** (973-0007) comes with an external barrier strip.
- Pins 1+/- are connected to the 2x ND10-LM MF transducers, wired in parallel.
- Pins 2+/- are connected to the NH4TA2 HF transducer.



IS10 Jackplate



IS10b Jackplate

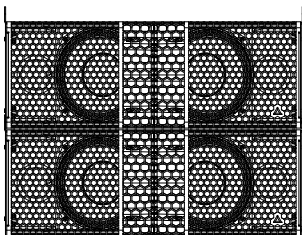


IS10 & IS10b Internal Wiring (IS10b only has one input)

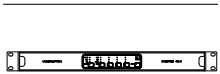
# Wiring & Amplification

## Amplification

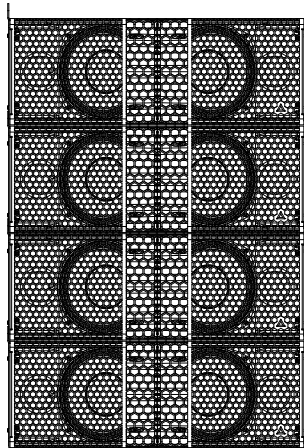
The IS10 is paired with Lab.gruppen **D-Series** amplifiers. Maximum quantities of the IS10 per amplifier model are shown below. For a master list, please refer to the Maximum Enclosure per Amplifier document, found on our website.



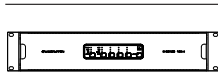
2x IS10



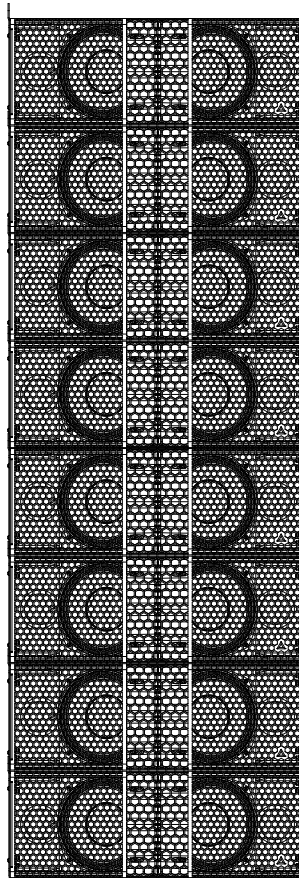
D40:4L



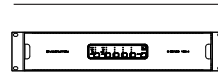
4x IS10



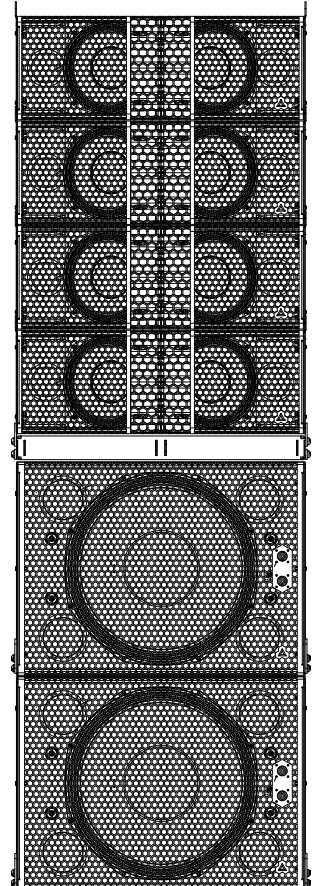
D80:4L



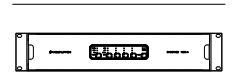
8x IS10



D120:4L



2x IS119, 4x IS10



D120:4L

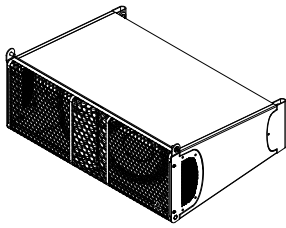
## LoadSmart™

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 LoadLibrary, which can be found on the [Adamson Website](#).

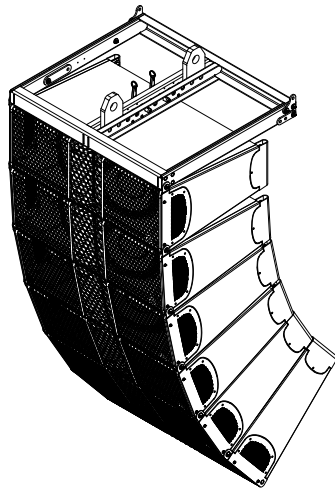
# Presets & Control

## Presets

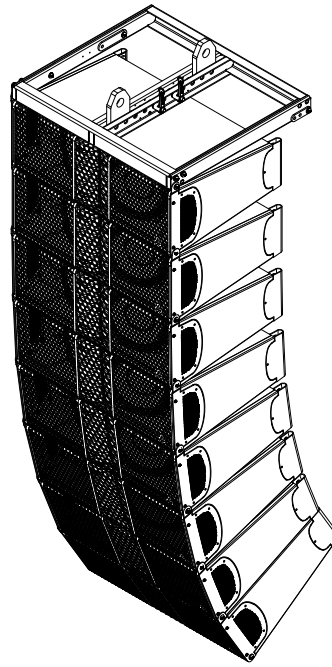
The Adamson LoadLibrary, found on the Adamson website, contains presets designed for a variety of IS10 applications. Each preset is intended to be phase-linear with either the IS118 or IS119 subwoofers when time-aligned. For a master list, please refer to the Adamson PLM & Lake Handbook, found on our website.



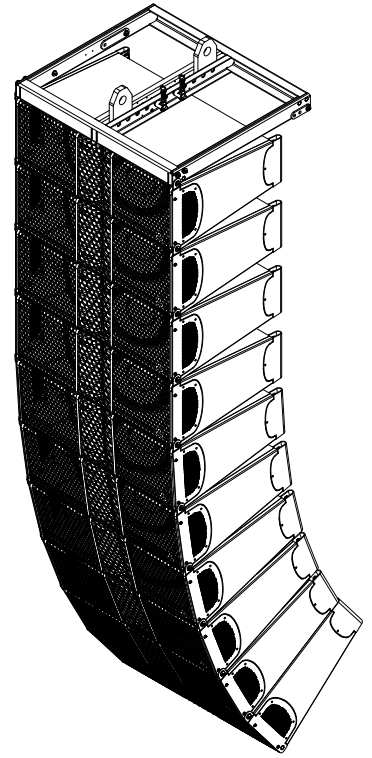
**IS10 Lipfill**  
*Intended for use with a single IS10*



**IS10 Short**  
*Intended for use with an array of 6-7 IS10*



**IS10 Array**  
*Intended for use with an array of 8-9 IS10*



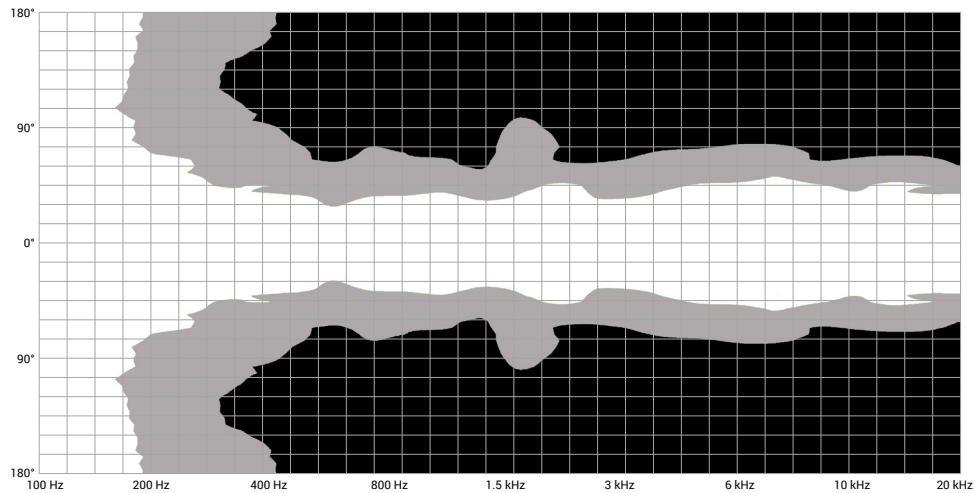
**IS10 Large**  
*Intended for use with an array of 10-12 IS10*

## Control

**Tilt overlays** (found in the **Array Shaping folders of the Adamson LoadLibrary**) 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.

# Acoustic Data

## Dispersion



IS10 Horizontal Pattern - Grey = -6 dB, Black = -12 dB

## Technical Specifications

Frequency Range (+/- 3dB)	60 Hz - 18 kHz
Nominal Directivity (-6 dB) H x V	110° x 10°
Maximum Peak SPL**	141.3 dB
Components LF	2x ND10-LM 10" Kevlar Neodymium Driver
Components HF	Adamson NH4TA2 4" Diaphragm / 1.5" Exit Compression Driver
Nominal Impedance LF	8 Ω (2 x 16 Ω)
Nominal Impedance HF	8 Ω
Power Handling (AES / Peak) LF	700 / 2800 W
Power Handling (AES / Peak) HF	160 / 640 W
Rigging	Integrated Rigging System
Connection	2x Speakon™ NL4 or Barrier Strips
Height Front (mm / in)	300 / 11.8
Height Back (mm / in)	175 / 6.9
Width (mm / in)	737 / 29
Depth (mm / in)	518 / 20.4
Weight (kg / lbs)	25.6 / 56.5
Colour	Black & White (Standard), RAL Colours (On Demand)
Processing	Lake

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

