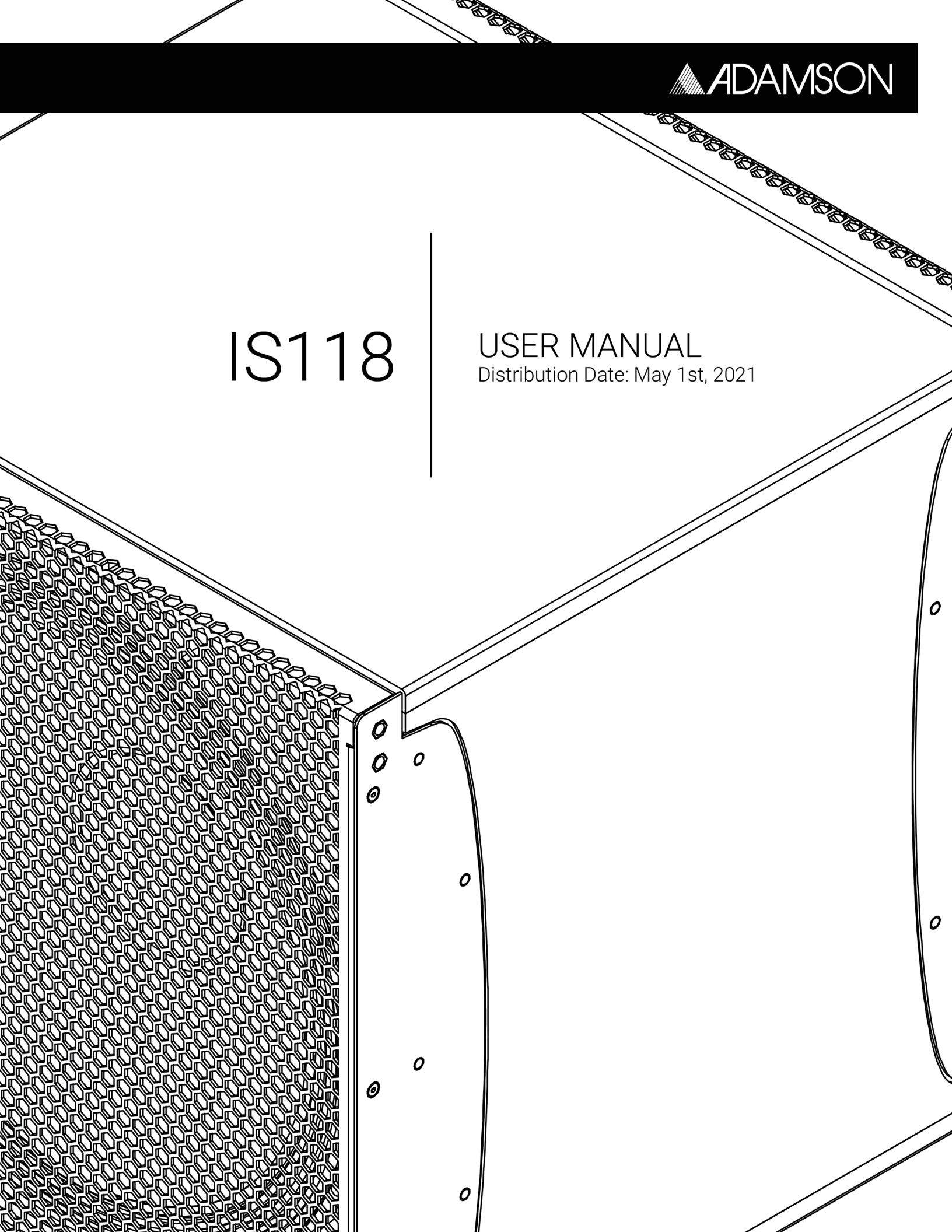


IS118

USER MANUAL

Distribution Date: May 1st, 2021



# IS118 User Manual

Distribution Date: May 1st, 2021

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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.

This manual can be downloaded from

<https://www.adamsonsystems.com/en/support/downloads-directory/is-series/is118>

## Declarations

### EU Declaration of Conformity

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 2014/35/EU: Low Voltage Directive

IS118 - 992-0010, 992-0011, 992-0013,  
992-5010, 992-5011, 992-5013

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

IS7/IS118 Rigging Frame - 930-0026, 930-5026  
Extended Beam - 930-0021, 930-5021  
Moving Point Extended Beam - 930-0033, 930-5033  
IS7 Micro Frame - 930-0029, 930-5029  
Extended Lifting Plates - 932-0043  
Line Array H-Clamp - 932-0047



Signed at Port Perry, ON, CA - May 1st, 2021

A handwritten signature in blue ink, appearing to read 'Brock Adamson', is written over a horizontal dashed line.

Brock Adamson (President & CEO)

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# Table of Contents

1.	<a href="#">Safety &amp; Warnings</a>	3
2.	<a href="#">Product Introduction</a>	4
3.	<a href="#">Wiring</a>	5
4.	<a href="#">Amplification</a>	6
5.	<a href="#">Presets &amp; Dispersion</a>	7
6.	<a href="#">Weatherized</a>	8
7.	<a href="#">Technical Specifications</a>	9

## Safety & Warnings



Read these instructions, keep them available for reference.

This manual can be downloaded from

<https://www.adamsonsystems.com/en/support/downloads-directory/is-series/is118>



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. Inspect your products regularly for any visual or functionality irregularities.

Protect the cabling from being walked on or pinched.

Read the appropriate IS-Series Rigging Manual before installing the product.

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

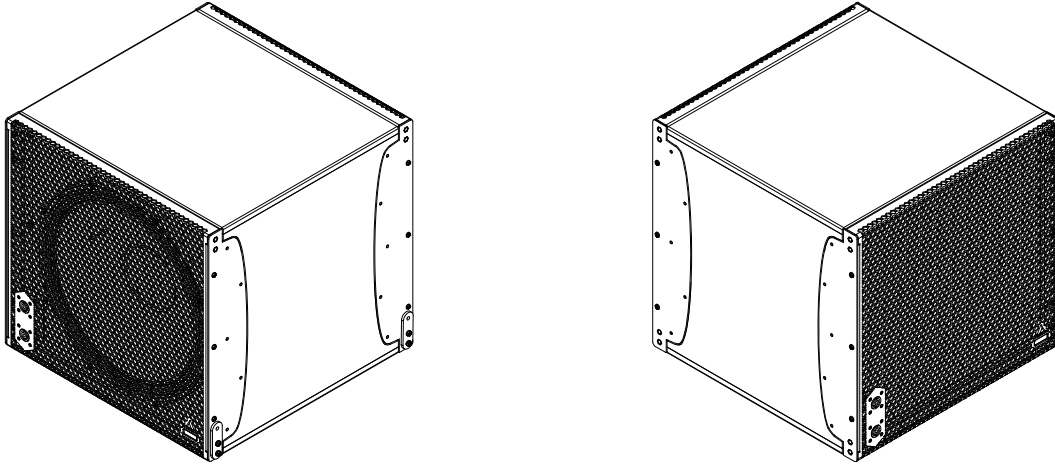
Use only with the rigging frames/accessories specified by Adamson, or sold with the loudspeaker system.

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.

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.**

# IS118

## IS118 Ultra Compact Subwoofer

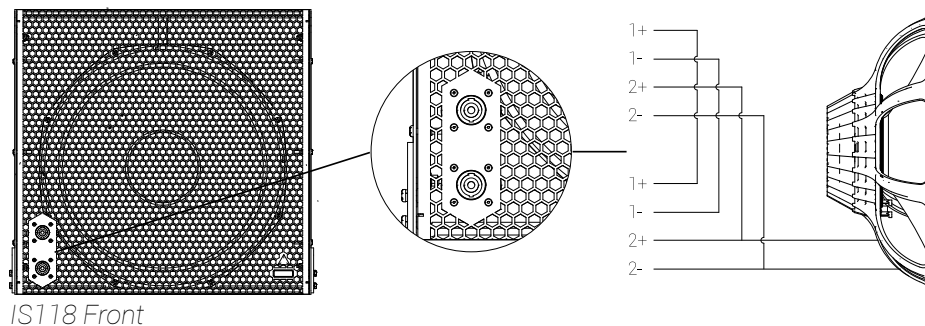
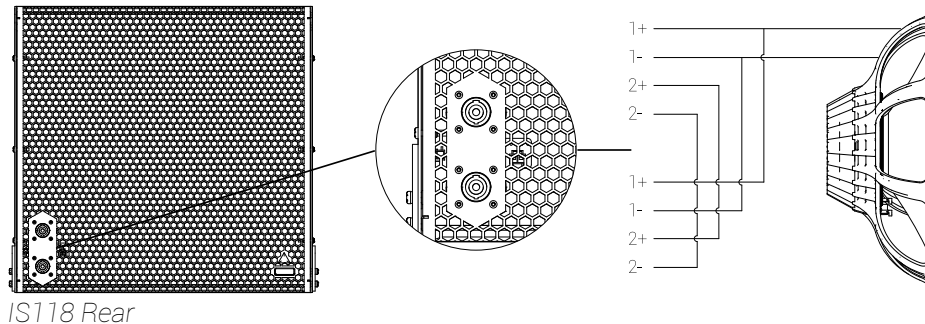


- The IS118 is an ultra-compact subwoofer enclosure designed for extended LF capabilities. It contains one ND18-S 18" LF driver.
- The operational frequency range of the IS118 is 35 Hz to 100 Hz. The use of proprietary technologies such as Advanced Cone Architecture give the IS118 an extremely high maximum SPL level.
- The enclosure has an unobtrusive visual design which blends seamlessly into the surrounding space, including identical grills at the front and back so cardioid deployments appear identical to non-cardioid. It is made of marine grade birch plywood, and has an aluminum rigging system mounted on each corner. Without sacrificing lowered resonance to composite material, the IS118 is able to maintain a low weight of 39 kg / 85 lbs.
- Up to sixteen IS118 can be flown when using the IS7 & IS118 Support Frame and can also be flown in the same array as the IS7 when using an additional IS7 & IS118 Support Frame. Always consult Blueprint AV™ and the IS-Series Line Array Rigging Manual for correct rigging positions (including ground stacking options) and installation procedures.
- The IS118 is intended to be paired with the IS7 Ultra Compact Line Array with a crossover frequency of 80 or 100 Hz, depending on the preset used.
- The IS118 is designed for use with Lab.gruppen's D-Series line of installation amplifiers. The nominal impedance of the IS118 is 8 Ω.

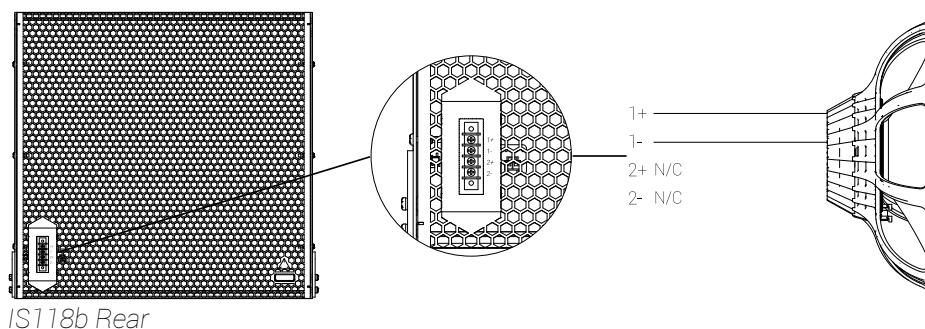
# IS118

## Wiring

The **IS118** (992-0010, 992-5010) comes with 4x Neutrik Speakon™ NL4 connections, wired in parallel. The 2 rear connections pass pin 1 +/- to the driver and the 2 front connections pass pin 2 +/- to the driver.



The **IS118b** (992-0011, 992-5011) comes with an external barrier strip mounted to the rear grill. Terminals 1, +/- are passed to the driver, terminal 2, +/- are not connected.



To operate the IS118b in FB or FBF cardioid mode, swap the front and rear grills by:

1. Removing the six screws holding each grill to the side rigging pieces
2. Unclipping the grill with the barrier strip from the rear PCB, and swapping the grills
3. Re-clipping the grill with the barrier strip to the front PCB and affix with the same screws

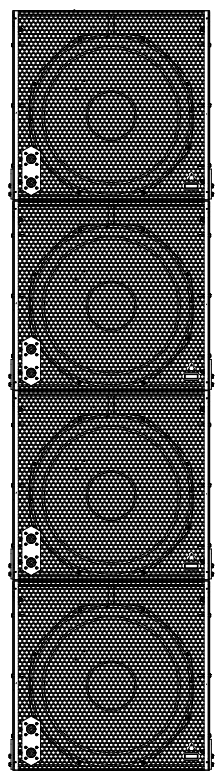
# IS118

## Amplification

The IS118 is paired with Lab.gruppen **D-Series** amplifiers.

Maximum quantities of the IS118 per amplifier model are shown below.

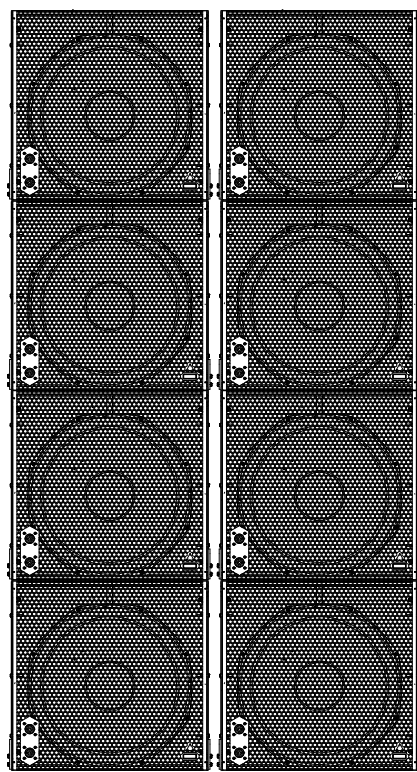
For a master list, please refer to the Adamson PLM & Lake Handbook, found on our website.  
<https://adamsonsystems.com/support/downloads-directory/design-and-control/e-rack/283-amplification-chart-9/file>



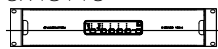
4x IS118



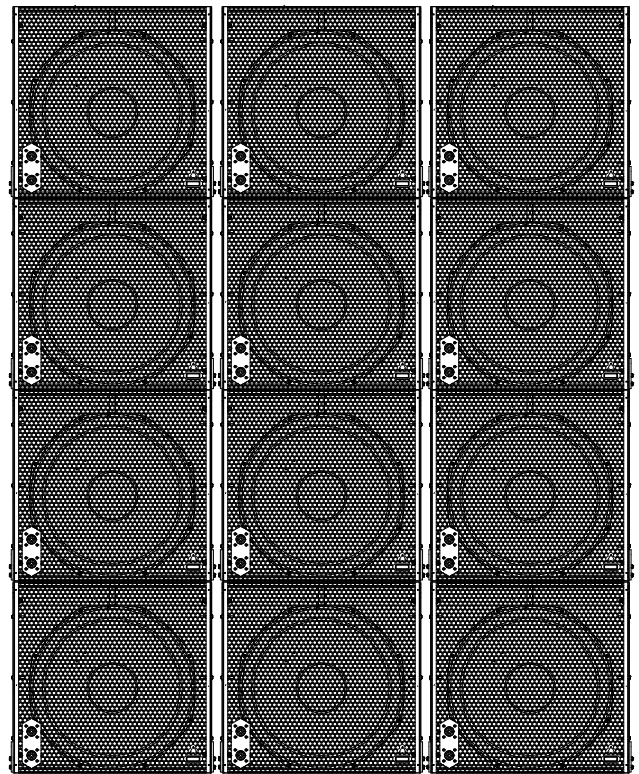
D40:4L



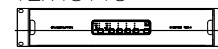
8x IS118



D80:4L



12x IS118



D120:4L

# IS118

## Presets

The Adamson Load Library (<https://www.adamsonsystems.com/support/downloads-directory/design-and-control/e-rack/245-adamson-load-library-5-0-1/file>) contains presets designed for a variety of IS118 deployments.

For a master list, please refer the Adamson PLM & Lake Handbook, found on our website. <https://adamsonsystems.com/support/downloads-directory/design-and-control/e-rack/205-adamson-plm-lake-handbook/file>

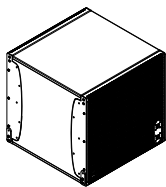
When flown in the same array as an IS7, all IS118 presets contain the inherent delay needed to be properly phase-aligned.

When flown or ground stacked separately, IS118 subs should be phase-aligned using measurement software.

### Subwoofer Configuration

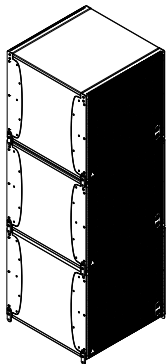
### Applicable Preset

### Subwoofer Configuration



**IS118**  
*All IS118 forward facing*

*Omni pattern*



**IS118 FB**  
*Bottom IS118 forward facing,  
top IS118 reversed*

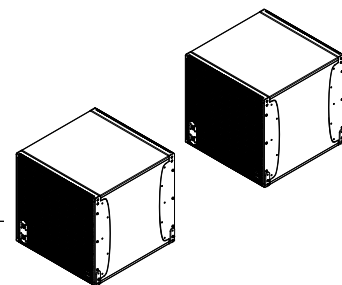
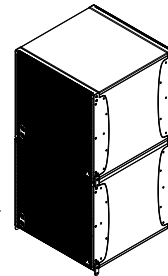
*Cardioid pattern*

**IS118 FBF**  
*Bottom and top IS118 forward facing,  
middle IS118 reversed*

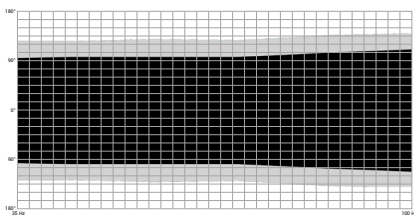
*Cardioid pattern*

**IS118 EF40**  
*End fire 40"/100cm Distance  
from Front Screens*

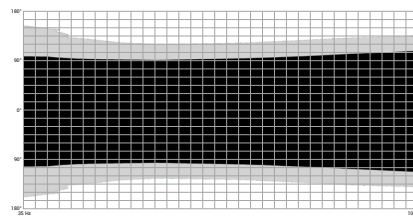
*Cardioid pattern*



## Cardioid Dispersion



IS118 FB



IS118 FBF

IS-Series weatherized models add an additional layer of environmental and corrosion protection to Adamson's already durable cabinet design. Weatherized enclosures are ideal for marine and coastal venues, outdoor stadiums, open-air performance spaces, and other permanent outdoor installations.

IS-Series weatherized cabinets feature the following additional protective features.

### **Corrosion resistance**

Corrosion resistance extends the lifetime performance of your system in outdoor venues where water, salt and acidity can impact durability and function.

All structural steel elements of Adamson weatherized cabinets – including rigging and rigging links – are made of a high yield strength stainless steel alloy that offers 100% corrosion resistance.

Cabinet hardware is made of non-plated stainless steel, designed to provide exceptional rust and corrosion resistance, particularly in high-saline environments.

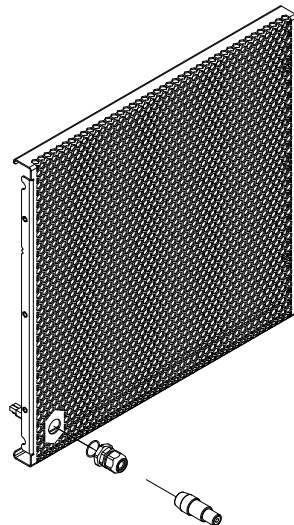
### **Environmental sealing**

Additional protection of the cabinet helps ensure that loudspeaker performance isn't impeded by the harsh environments in which your system is deployed.

To guard against water and particle intrusion, the same two-part polyurea coating that gives Adamson cabinets their life-extending exterior protection is applied to the interior of the enclosure, creating a complete seal. Weatherized models feature an exterior coating with a distinctive smooth finish that allows for easy cleaning and removal of contaminants like dirt, grime, salt water or sand.

To protect against dust and other particles, a fine stainless steel mesh has been added to all points of entry including behind the front grille screens.

Cabling for the IS-Series weatherized cabinets is pre-wired and protected inside a gasket-sealed jackplate, with gland nuts in place to seal the connection points.





# IS118

## Technical Specifications

Frequency Range (+/- 3dB)	35 Hz - 100 Hz
Maximum Peak SPL **	133 dB
Components LF	ND18-S 18" Neodymium Driver
Nominal Impedance LF	8 Ω
Power Handling (AES / Peak) LF	500 / 2000 W
Rigging	Integrated Rigging System
Connection	4x Speakon™ NL4 (2x Front 1+/1-, 2x Rear (2+/2-) or Barrier Btrips
Height (mm / in)	507 / 19.95
Width (mm / in)	527 / 20.75
Depth (mm / in)	529 / 20.81
Weight (kg / lbs)	39 / 85
Colour	Black & White (RAL 9010 as standard, other RAL colours on demand)
Processing	Lake

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

