

## S118 User Manual

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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.

This manual can be downloaded from

https://adamsonsystems.com/support/downloads-directory/s-series/s118

### 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 992-0009 S118

Directive 2006/42/EC: Machinery Directive

930-0021 Extended Beam 930-0025 Ultra-Compact Support Frame 930-0033 Moving Point Extended Beam 932-0043 Extended Lifting Plates 932-0047 Line Array H-Clamp



Signed at Port Perry, ON. CA - August 15, 2022



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### Safety & Warnings



Read these instructions, keep them available for reference. This manual can be downloaded from

https://adamsonsystems.com/support/downloads-directory/s-series/s118



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.

View the S-Series Rigging Tutorial video and/or read the S-Series Rigging Manual before suspending the product.

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

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

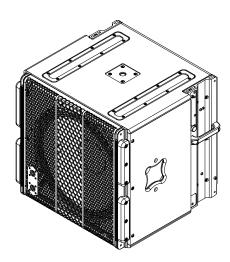
This speaker enclosure is capable of creating a strong magnetic field. Please use caution around the enclosure with data storage devices such as hard drives.

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

Adamson reserves the right to change the specifications of its products and the content of its documents with no prior notice.

## S118 Ultra-Compact Subwoofer

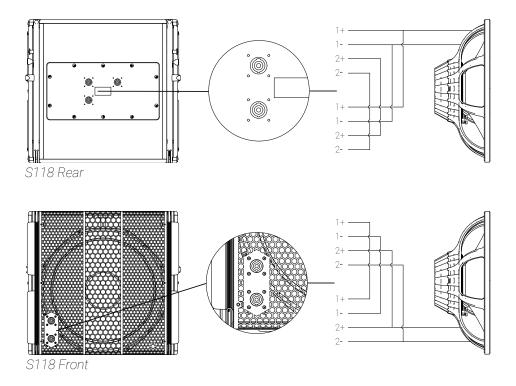


- The S118 is an ultra-compact subwoofer enclosure designed for extended LF capabilities. It contains one ND18-S 18" LF driver.
- Up to 16 S118 can be flown when using the Ultra-Compact Support Frame.
- The S118 can be flown or stacked in the same array as the S7 without the need for additional rigging hardware between the two types of cabinets.
- Adamson's use of proprietary technologies such as Advanced Cone Architecture give the S118 an extremely high maximum SPL level of 133 dB.
- The nominal impedance of the S118 is 8  $\Omega$ .
- The operational frequency range of the S118 is 35 Hz to 100 Hz, +/- 3 dB.
- The S118 is intended to be paired with other S-Series products with a crossover frequency range of 80Hz.
- The wooden enclosure is made of marine grade birch plywood, and has an aluminum and steel rigging system mounted on each corner, and a pole mount on top. Without sacrificing lowered resonance to composite material, the S118 is able to maintain a low weight of 31 kg / 68.4 lbs.
- The S118 is designed for use with Lab.gruppen's PLM+ Series amplifiers.

## Wiring

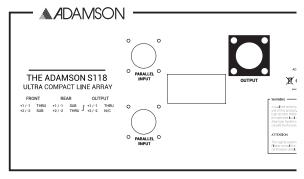
The **S118** (992-0009) comes with 5x Neutrik Speakon™ NL4 connections.

The 2 rear 'Parallel' NL4 connections pass pin 1 +/- to the driver. The 2 front NL4 connections pass pin 2 +/- to the driver.



There is one rear 'Output' connection.

The rear NL4 Parellel connection pins 2 +/- is passed thru the NL4 Output connection pins 1 +/-.



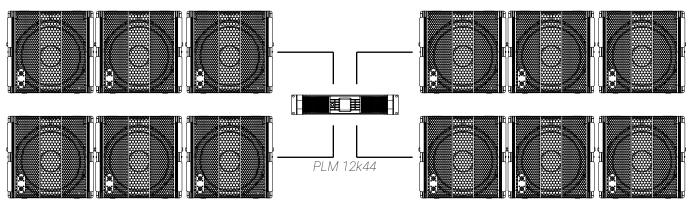
S118 Jackplate

## Amplification

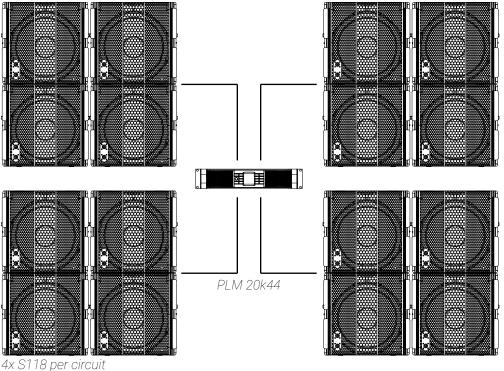
The S118 is paired with Lab Gruppen PLM+ Series amplifiers.

Maximum quantities of the S118 per amplifier model are shown below.

For a master list, please refer to the Adamson Amplification Chart, found here on the Adamson website.



4x S118 per circuit 12x S118 per amplifier



4x STT8 per circuit 16x S118 per amplifier

### Presets

The <u>Adamson Load Library</u> contains presets designed for a variety of S118 applications. When flown or stacked in the same array as an S7, all S118 presets contain the inherent delay needed to be properly phase-aligned.

For a master list, please refer to the Adamson PLM & Lake Handbook.

When flown or ground stacked separately, S118 subs should be phase-aligned using measurement software.

All S118 presets are also available in CC (Conventional Crossover) versions minus 5 ms delay.

### Subwoofer Configuration

### Applicable Preset

### Subwoofer Configuration



S118

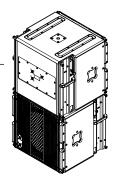
All S118 forward facing

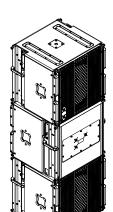
Omni pattern

#### S118 FB

Bottom S118 forward facing, top S118 reversed

Cardioid pattern





#### S118 FBF

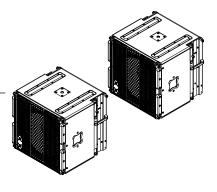
Bottom and top S118 forward facing, middle S118 reversed

Cardioid pattern

#### S118 FF40

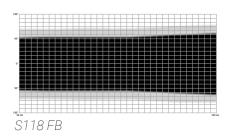
End Fire 40" / 100 cm Distance between Front Screens

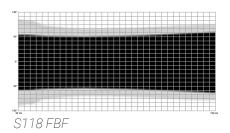
Cardioid pattern

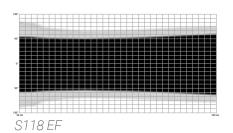


# S118

## Cardioid Dispersion



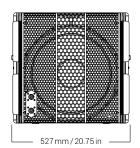


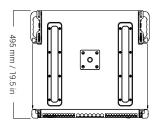


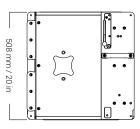
## Technical Specifications

Frequency Range (+/- 3dB)	35 Hz - 100 Hz
Maximum Peak SPL**	133 dB
Components LF	ND18-S 18" Kevlar Neodymium Driver
Nominal Impedance LF	Ω8
Power Handling (AES / Peak) LF	500 / 2000 W
Rigging	Integrated Rigging System
Connection	5x Speakon™ NL4 (2x Front 1+/1-, 2x Rear (2+/2-, and 1x Rear Output (Pin 2 to 1))
Height (mm / in)	508 / 20
Width (mm / in)	527 / 20.75
Depth (mm / in)	495 / 19.5
Weight (kg / lbs)	31 / 68.4
Processing	Lake

 $<sup>^{\</sup>star\star}$  12 dB crest factor pink noise at 1m, half space, using specified processing and amplification





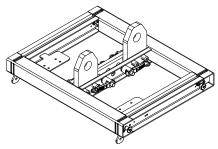


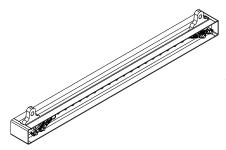
### Accessories

There are a number of accessories available for the Adamson S118 subwoofer cabinets. The list below is only a few of the accessories available.

# Ultra-Compact Support Frame (930-0025)

Support frame for S7, CS7, S118, and CS118 enclosures



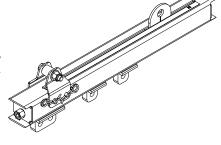


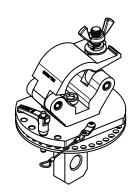
#### Extended Beam (930-0021)

Accomodates greater array articulation

### Moving Point Extended Beam (930-0033)

Extension beam with continuously adjustable pick point



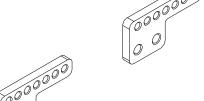


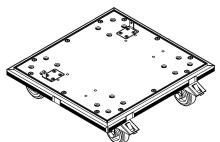
#### Line Array H-Clamp (932-0047)

Horizontal articulator clamp to be used with S-Series/CS-Series/IS-Series line array rigging frames



Lifting plates with fine resolution pick points for single point hangs





## Ultra-Compact Subwoofer Dolly (938-0023)

Transports up to 2x S118 or CS118