

# S7p 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 <a href="https://adamsonsystems.com/support/downloads-directory/s-series/s7p">https://adamsonsystems.com/support/downloads-directory/s-series/s7p</a>

### 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** 967-0011 S7p (70x40) 967-0012 S7p (100x50)

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

934-0033 Ultra-Compact Point Source Horizontal Bracket 934-0036 Ultra-Compact Point Source Vertical Bracket 932-0045 Point 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/en/support/downloads-directory/s-series/S7p



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.

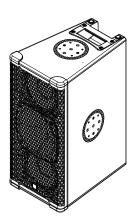
Use only with the rigging frames/accessories specified by Adamson, or sold with the loudspeaker system.

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 products and the content of its documents with no prior notice.

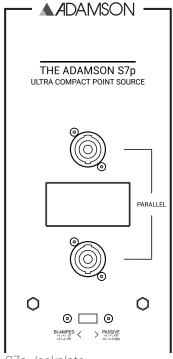
## S7p Ultra Compact Point Source



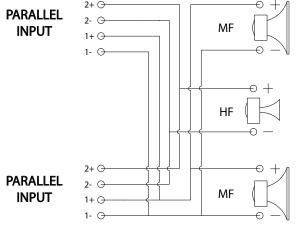
- The S7p is an ultra-compact, full range point source enclosure designed with high output level and high clarity in mind. It contains two symmetrically arrayed 7" transducers and a 3" compression driver mounted on an Adamson waveguide.
- The high frequency waveguide is rotatable in increments of 90° and is available with dispersion patterns of eiither 70° x 40° (HxV) or 100° x 50° (HxV).
- The S7p can be operated in passive or bi-amped mode, which is user-defined through a switch on the jack plate.
- Adamson's use of proprietary technologies such as Advanced Cone Architecture give the S7p an extremely high maximum SPL of 136.5 dB in bi-amped mode, 135 dB in passive mode.
- The nominal impedance of the S7p in bi-amped mode is 8  $\Omega$  per band, 6  $\Omega$  in passive mode.
- The operational frequency range of the S7p is 80 Hz to 18 kHz, +/- 3 dB.
- The S7p is intended to be used as either a standalone system, or a fill enclosure in tandem with other S-Series products. The S7p is designed to pair easily and coherently with Adamson subwoofers.
- The wooden enclosure is made of marine grade birch plywood, has an inset steel pole mount on the bottom, and steel rigging discs on top and each side of the cabinet. The rigging discs are compatible with several different Adamson rigging accessories. Without sacrificing low resonance to composite material, the S7p is able to maintain a low weight of 17 kg / 37.3 lbs.
- The S7p is designed for use with Lab.gruppen's PLM+ Series amplifiers.

# Wiring

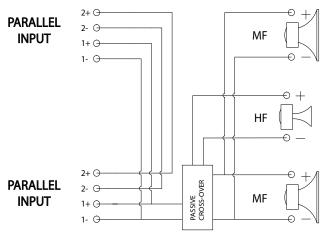
- The **S7p** (70x40 967-0011/100x50 967-0012) comes with 2x Neutrik Speakon™ NL4 connections, wired in parallel.
- In Bi-Amp Mode, pins 1+/- are connected to the 2x ND7-LM16 MF transducers, wired in parallel, pins 2+/- are connected to the NH3-8 HF transducer
- In Passive Mode, pins 1+/- are connected to the internal passive crossover, pins 2+/- are not connected.



S7p Jackplate



S7p Internal Wiring - Bi-Amped Mode



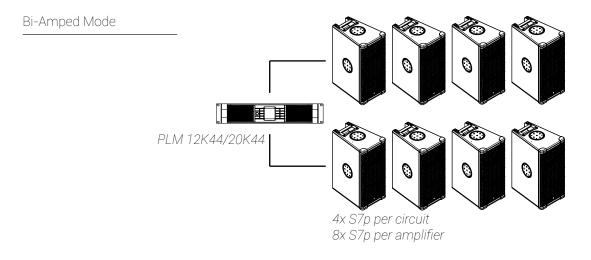
S7p Internal Wiring - Passive Mode

## Amplification

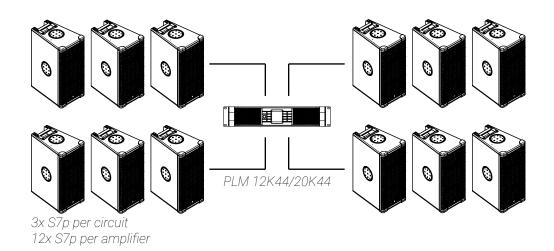
The S7p is paired with Lab Gruppen **PLM+ Series** amplifiers.

Maximum quantities of the S7p in Bi-Amped Mode or Passive Mode per amplifier model are shown below.

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



#### Passive Mode



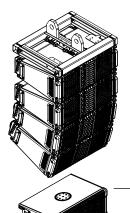
#### Presets

The <u>Adamson Load Library</u>, contains presets designed for a variety of S7p applications, including both Bi-Amped and Passive modes. Furthermore, there are presets designed to pair with either Adamson subs, or Adamson line arrays.

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

Phase alignment with additional cabinets and subwoofers should be measured with suitable software.

### Cabinet Configuration



#### Applicable Preset

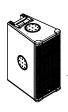


Fullrange Mode Linear Phase response matching Adamson line arrays

#### S7P Xo80

Low cut at 80 Hz for use with S-Series Subwoofers Linear Phase response matching Adamson line arrays

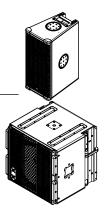
#### CC S7p FR



Fullrange Mode Conventional Crossover Add 5ms of delay for alignment with speakers using Adamson linear phase presets at the same distance

#### CC S7P Xo80

Low cut at 80 Hz Conventional Crossover Add 5ms of delay for alignment with S-Series subwoofers at the same distance

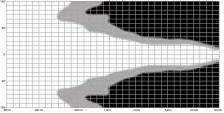


### **Cabinet Configuration**

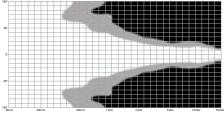




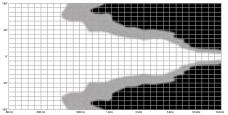
# Dispersion



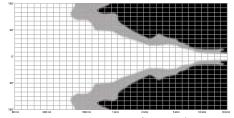
S7p Horizontal Pattern (70x40)



S7p Horizontal Pattern (40x70)



S7p Horizontal Pattern (100x50)

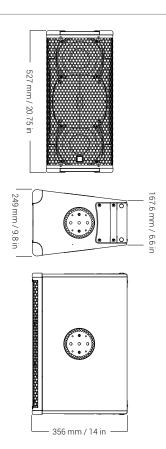


S7p Horizontal Pattern (50x100)

# Technical Specifications

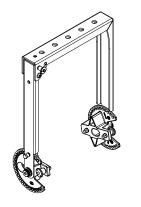
Frequency Range (+/- 3dB)	80 Hz - 18 kHz
Nominal Directivity (-6 dB) H x V	70° × 40° / 100° × 50°
Maximum Peak SPL**	136.5 dB (135 dB in passive)
Components LF	2x ND7-LM16 7" Kevlar® Neodymium Driver
Components HF	Adamson NH3-8 3" Diaphragm / 1.4" Exit Compression Driver
Bi-Amped Nominal Impedance LF	2 x 16 Ω (8 Ω)
Bi-Amped Nominal Impedance HF	8 Ω
Passive Mode Nominal Impedance	6 Ω
Bi-Amped Power Handling (AES / Peak) LF	500 / 2000 W
Bi-Amped Power Handling (AES / Peak) HF	110 / 440 W
Passive Power Handling (AES / Peak)	500 / 2000 W
Rigging	Integrated Rigging System Built-in Polemount Socket
Connection	2x Speakon™ NL4
Height (mm / in)	527 / 20.75
Width Front (mm / in)	249 / 9.8
Width Back (mm / in)	167.6 / 6.6
Depth (mm / in)	356 / 14
Weight (kg / lbs)	17 / 37.5
Processing	Lake
**	

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



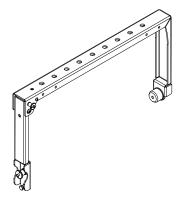
### Accessories

There are a number of accessories available for the Adamson S7p point source cabinets The list below is only a few of the many available accessories.



Ultra-Compact Horizontal Bracket (934-0033)

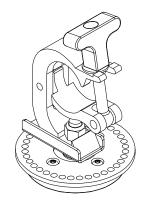
S7p/CS7p Horizontal Yoke



Ultra-Compact Vertical Bracket (934-0036) S7p/CS7p Vertical Yoke

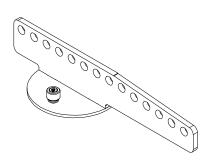
> Point Source H-Clamp (932-0045)

Horizontal articulator clamp



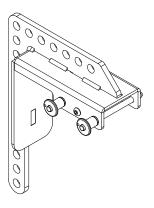
Point Source Sight Mount (934-0035)

Circular disk with multiple angle bar



Point Source Super Sight Mount (934-0039)

Used with the Sub and Ultra-Compact Horizontal Brackets to achieve greater articulation



Point Source Articulator (934-0038)

Used with Sub and Ultra-Compact Horizontal Brackets to achieve articulation between two point source cabinets

