

ADAMSON S7 Audio Box User Manual

Home » ADAMSON » ADAMSON S7 Audio Box User Manual



Contents

- 1 ADAMSON S7 Audio Box
- 2 S7 Ultra Compact Line Array
- 3 Wiring
 - 3.1 S7 Jackplate
- 3.2 S7 Internal Wiring
- 4 Amplification
- **5 Presets**
 - 5.1 S7 Lip Fill Intended for use with a Single S7
 - 5.2 S7 Short Intended for use with an array of 4 to 6 S7
 - 5.3 S7 S7 Array Intended for use with an array of 7 to 11 S7
- 6 Control
 - 6.1 Array Shaping overlays
 - 6.2 Tilt overlays
- 7 Dispersion
 - 7.1 S7 Horizontal Pattern
- **8 Technical Specification**
- 9 Accessories
 - 9.1 Ultra Compact Support Frame 930-0025 Support frame for S7, CS7, S118, and CS118 enclosures
 - 9.2 Ultra Compact Line Array Micro Frame 930-0027 930-0027 Frame for up to 8x \$7or CS7
 - 9.3 Ultra Compact Pole Mount Adaptor Frame (930-0034) Pole Mount adaptor for S7 or CS7
 - 9.4 Extended Beam (930-0021) ACComodates greater array articulation
 - 9.5 Moving Point Extended Be am (930-0033)
 - 9.6 Line Array H-Clamp (932-0047)
- 10 Documents / Resources
 - 10.1 References
- 11 Related Posts





Safety & Warnings

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.

S7 Ultra Compact Line Array

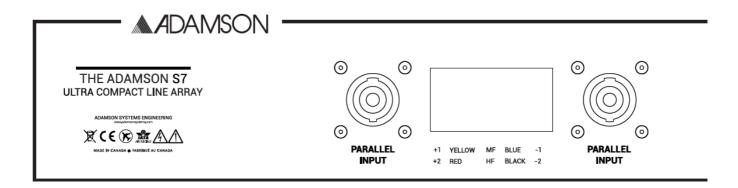
- The S7 is an ultra-compact, 2-way, full range line array enclosure designed for extended throw capabilities. It contains two symmetrically arrayed 7" transducers and a 3" compression driver mounted on an Adamson waveguide.
- Up to 16 S7 can be flown in the same array when using the Ultra Compact Support Frame (930-0025) and up to 8 when using the Ultra-Compact Micro Frame (930-0027).
- Due to the use of Controlled Summation Technology, the S7 maintains a consistent nominal horizontal dispersion pattern of 100° down to 400Hz.
- The high frequency waveguide is designed to couple multiple cabinets across the entire intended frequency band without loss of coherence.
- There are 9 rigging positions available, spanning 0° to 12.5°.
- · Always consult Blueprint AV and the S-Series Rigging Manual for correct rigging positions and proper rigging

instructions.

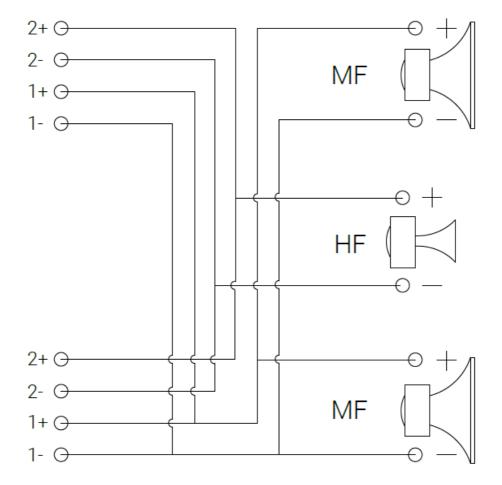
- Adamson's use of proprietary techologies such as Controlled Summation Technology and Advanced Cone Architecture give the S7 an extremely high maximum SPL.
- The nominal impedance of the S7 is 8 Ω per band.
- The operational frequency range of the S7 is 80Hz to 18kHz, +/- 3 dB.
- The S7 is intended to be used as a standalone system or with other S-Series products.
- The S7 is designed to pair easily & coherently with Adamson subwoofers.
- 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 S7 is able to maintain a low weight of 15.9 kg / 35 lbs.
- The S7 is designed for use with Lab.gruppen's PLM+ Series amplifiers.

Wiring

S7 Jackplate



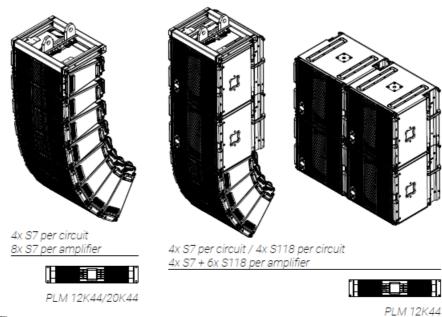
S7 Internal Wiring

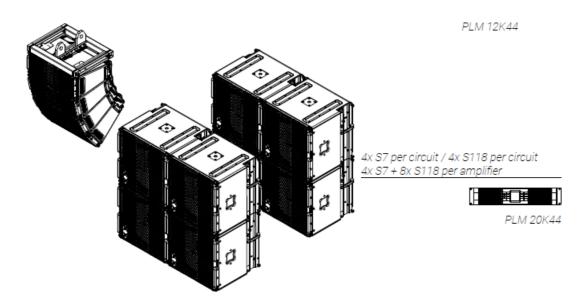


- The S7 (971-0001) comes with 2x Neutrik Speakon NL4 connections, wired in parallel.
- Pins 1+/- are connected to the 2x ND7-LM16 MF transducers, wired in parallel.
- Pins 2+/- are connected to the NH3-8 HF transducer.

Amplification

The S7 is paired with Lab Gruppen PLM+ Series amplifiers. Maximum quantities of the S7, or S7 paired with S118 per amplifier model are shown below. For a master list, please refer to the Adamson Amplification Chart, found here on the Adamson website.

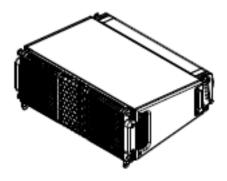




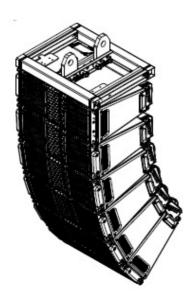
Presets

Adamson Load Library Contains presets designed for a variety or Sf applications. Each preset is intended to be phase-aligned within the EQ overlap region with either ST|8or SI19 subwoofer's. For a master list, please refer to the Adamson PLM & Lake Handbook When cabinets and sub woofers are positioned separately, phase alignment should be measured with suitable software.

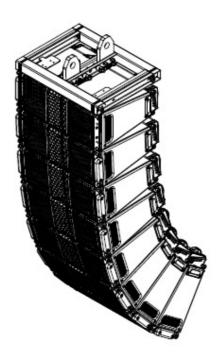
S7 Lip Fill Intended for use with a Single S7



S7 Short Intended for use with an array of 4 to 6 S7



S7 S7 Array Intended for use with an array of 7 to 11 S7



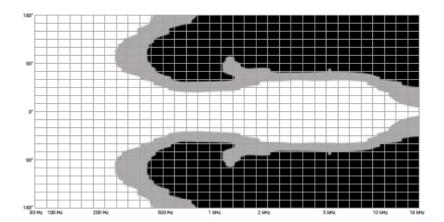
Control

Found in the Array Shaping folders of the Adamson Load Library) can be recalled in the EQ section of Lake Controller to adjust the contour of the array. Recalling the appropriate EQ overlay or preset for the number of cabinets being used provides the standard Adamson frequency response of your array, compensating for different low-frequency coupling.

Tilt overlays

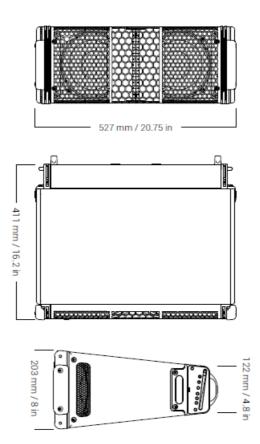
Found in the Array Shaping folders of the Adamson Load Library can be used to alter the overall acoustic response of an array. Tilt overlays apply a filter, centered at 1kHz, which reaches the noted decibel cut or boost at the extreme ends of the listening spectrum. For example, a +I Tit will apply +1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

Dispersion



S7 Horizontal Pattern

Technical Specification

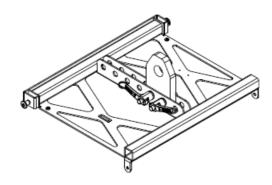


| Frequency Range (+/- 3dB) | |
|--|----------------|
| 80 Hz – 18 kHz | |
| Nominal Directivity -6 dB | |
| H x V00° x 12.5° | |
| | |
| Maximum Peak SPL** | 138 dB |
| Components LF | |
| 2x ND7-LM16 7Kevlar Neodymium Driver | |
| Components HF Adamson NH3-8 3 | |
| Diaphragm / 1.4 Exit Compression Driver | |
| | |
| Nominal Impedance LF | |
| 2 x 16 Ω (8 Ω) | |
| | |
| Nominal Impedance HF | 8 Ω |
| Power Handling AES / Peak LF 500 / 2000 W | |
| Power Handling (AES / Peak) HF 110 / 440 W | |
| Rigging Slide Lock Rigging System | |
| Connection | 2x Speakon NL4 |
| Height Front mm / in 203 / 8 | |
| Height Back mm / in | 122 / 4.8 |
| Width mm / in 527 / 20.75 | |
| Depth mm / in 411 / 16.2 | |
| Weight kg / lbs 15.9 / 35 | |
| Processing Lake | |

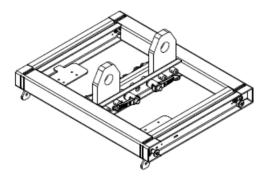
Accessories

There area number of accessories available for the Adamson S7 line array cabinets. The list below is only a few of the accessories available.

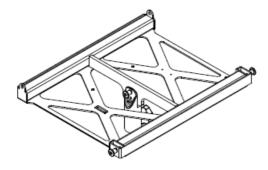
Ultra Compact Support Frame 930-0025 Support frame for S7, CS7, S118, and CS118 enclosures



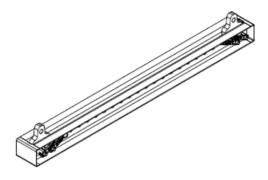
Ultra Compact Line Array Micro Frame 930-0027 930-0027 Frame for up to 8x \$7or CS7 enclosures

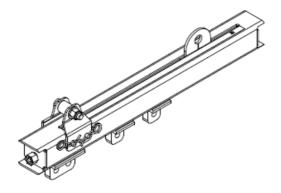


Ultra Compact Pole Mount Adaptor Frame (930-0034) Pole Mount adaptor for S7 or CS7



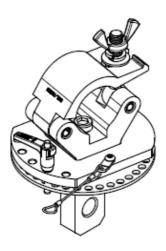
Extended Beam (930-0021) ACComodates greater array articulation





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 gaging Trams.

Documents / Resources



ADAMSON S7 Audio Box [pdf] User Manual S7 Audio Box, S7, Audio Box

References

- <u>A Adamson Systems Engineering Pro Audio & Live Sound Reinforcement</u>
- <u>A S7</u>

Manuals+,