

S-Series

User Manual



# Declarations

## Declarations

### CE Declaration of Conformity

ADAMSON SYSTEMS ENGINEERING, Inc.  
1401 Scugog Line 6, Port Perry (ON), L9L 1B2,  
Canada  
T: +1 905 982 0520, F: +1 905 982 0609  
Email: [info@adamsonsystems.com](mailto:info@adamsonsystems.com)  
Website: [www.adamsonsystems.com](http://www.adamsonsystems.com)

Adamson Systems Engineering declares, that  
the products stated below are in conformance  
with the relevant fundamental health and safe-  
ty criteria of the applicable EC Directive(s), in  
particular:

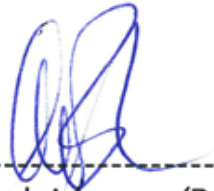
Directive 2006/95/EC: Low Voltage Directive

973-0003 S10  
973-0004 S10i  
994-0002 S119  
994-0004 S119i

Directive 2006/42/EC: Machinery Directive

973-0003 S10  
973-0004 S10i  
994-0002 S119  
994-0004 S119i  
930-0020 S-Series Support Frame  
930-0024 S-Series Install Support Frame  
930-0021 S-Series Extended Beam  
931-0010 S10 Underhang  
938-0019 S10 Dolly  
938-0021 S119 Dolly  
938-0014 Dolly Stacking Legs

Port Perry, June 24th, 2014



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



# Section A

## Warning & Safety Symbols

Throughout this manual the potential risks are indicated by these symbols.



**ATTENTION**

It is compulsory to read this manual before using the S-Series system. Supervision and competency are the responsibility of the system owners and operators. All intersections, joints and rigging hardware must be inspected regularly. Operators must not assume rigging has been inspected prior to use by someone else.

# Section A

## Safety Precautions



### English

- Read these instructions, keep them available for reference, they can be downloaded any time from <https://www.adamsonsystems.com/index.php/support>. Heed all warnings and follow all instructions.
- 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.
- 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.
- Handles are for moving the system only.

### Francais

- Lire les instructions ci dessous, maintenez-les disponibles pour référence. Ils peuvent être téléchargés à tout moment à cette adresse: <https://www.adamsonsystems.com/index.php/support>. Tenez compte de tous les avertissements et suivez toutes les instructions.
- Une maintenance s'avère nécessaire lorsqu'une enceinte a été endommagé de quelque façon que ce soit. Que celle ci soit tombé ou qu'elle ne fonctionne pas normalement pour des raisons indéterminées.
- Protéger le câblage contre l'écrasement.
- Utiliser uniquement les accessoires d'accrochage fourni par ADAMSON ou vendu avec les enceintes.
- Cette enceinte acoustique génère des champs magnétiques intenses. Prenez les précautions nécessaires avec les appareils de stockage de données comme les disques durs.
- Les poignées ne doivent servir qu'à déplacer l'enceinte.

### Espanol

- Lea estas instrucciones y téngalas a mano cuando las necesite. Puede descargarlas cuando desee desde <https://www.adamsonsystems.com/index.php/support>. Preste atención a todas las recomendaciones y siga las instrucciones.
- Debe reparar el altavoz cuando haya algún desperfecto de cualquier tipo, por ejemplo cuando haya caído o en ocasiones indeterminadas en que el altavoz no funcione correctamente.
- Proteja el cableado para que no sea pisado o aplastado.
- Utilice solamente los Rigging Frames y accesorios especificados por Adamson o que vengan con el equipo original de Adamson.
- Este recinto acústico es capaz de generar fuertes campos magnéticos. Tenga especial cuidado al utilizar dispositivos de almacenamiento de datos magnéticos como Discos Duros etc.
- Las agarraderas son solo para mover el sistema.

### Deutsch

- Lesen Sie dies Anleitung und bewahren Sie sie auf. Sie kann jederzeit unter <https://www.adamsonsystems.com/index.php/support> heruntergeladen werden. Beachten Sie alle Warnungen und folgen Sie allen Anweisungen.
- Service ist notwendig wenn der Lautsprecher in irgendeiner Art beschädigt wurde, z.B. weil er heruntergefallen ist oder wenn er aus anderen Gründen nicht ordnungsgemäß funktioniert.
- Schützen Sie die Lautsprecherkabel davor gequetscht oder geknickt zu werden.
- Verwenden Sie ausschließlich das von Adamson für dieses Lautsprechersystem spezifizierte bzw. das zusammen mit dem System erworbene Rigging-Zubehör.
- Dieser Lautsprecher kann ein starkes magnetisches Feld erzeugen. Bitte seien Sie in der Nähe des Lautsprechers z.B. mit Datenspeichern wie Festplatten entsprechend vorsichtig.
- Die Griffe dienen ausschließlich zum Transport des Lautsprechers



# S-Series User Manual

## Table of Contents

### Introduction & Product Details

|                         |    |
|-------------------------|----|
| 1.1 Overview            | 6  |
| 1.2 Predictive Software | 7  |
| 1.3 S10 Spec Sheet      | 8  |
| 1.4 S119 Spec Sheet     | 9  |
| 1.7 Cardioid Subs       | 10 |

### System Configuration

|                           |    |
|---------------------------|----|
| 2.0 E-Rack Description    | 11 |
| 2.1 E-Rack Overview       | 12 |
| 2.2 Configuration Example | 13 |
| 2.3 Wiring Diagrams       | 14 |
| 2.4 Pin Swap Cable        | 15 |

### Rigging

|                                 |    |
|---------------------------------|----|
| 3.0 The 4 Stack Dolly           | 17 |
| 3.1 Rigging Overview            | 18 |
| 3.2 Rigging Sticker Legend      | 21 |
| 3.3 Setting Angles              | 22 |
| 3.4 Attaching the Rigging Frame | 23 |
| 3.5 Extender Beam               | 25 |
| 3.6 Single Point Rigging        | 26 |
| 3.7 Ground Stacking             | 27 |
| 3.8 Lowering the Array          | 30 |
| 3.9 Rigging the S119            | 31 |
| 3.10 Installation Rigging       | 33 |

### Accessories

|                          |    |
|--------------------------|----|
| 4.0 Ground Stacking Legs | 35 |
|--------------------------|----|

# Introduction & Product Details

|  |                  |  |
|--|------------------|--|
|  | 1.0 Introduction |  |
|--|------------------|--|

This manual is designed to give the S-Series user the necessary information to accurately fly or stack S-Series loudspeakers in all the available configurations, as well as the proper deployment and use of S-Series loudspeakers. Safe step by step rigging procedures will be outlined, as well as example system configurations, correct wiring and amplification and transport.

|  |              |  |
|--|--------------|--|
|  | 1.1 Overview |  |
|--|--------------|--|

Whether it is amplification, control, networking and monitoring, the S-Series packaging is built to perform and endure. Our alliances have been made with companies that are leading the industry in their technologies and in their ideologies: Dante-networking, Lake-processing and Lab.gruppen-amplification. After all it's the total system performance that matters.

Low-mid frequency lobing is a common side-effect of traditional 2-way enclosures. To solve this problem, Adamson has introduced Controlled Summation Technology, which reduces the spacing between mid frequency sources by outwardly splaying the drivers and using overlap control between mid frequency and high frequency sources to suppress the interference normally associated with this type of design. Doing this also allows the high frequency sound chamber to retain its exit size, ensuring that it retains its superior directivity control.

Adamson's SlideLock rigging system has been designed to remove operator stress while adding confidence. A single technician can safely and quickly fly the entire rig, setting angles while the cabinets are sitting securely on the 4-up dolly. Once the array is lifted, all cabinets simply align into 1 of 9 incremental splay positions.

# Introduction & Product Details

## 1.2 Predictive Software

### Blueprint AV

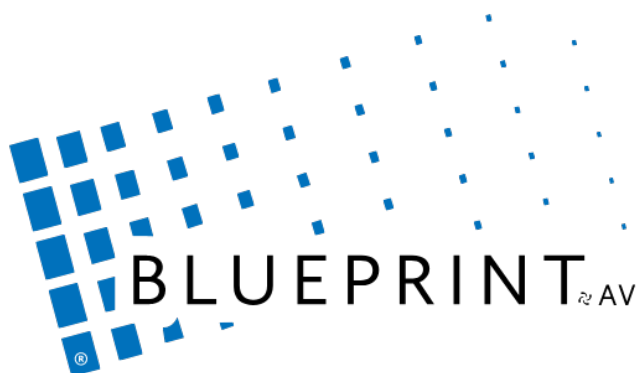
Blueprint AV is a 2D & 3D modeling suite which offers a fast and intuitive work-flow, without sacrificing precision. The S-Series is included, along with all of Adamson's other Line Array products. Design is simple and easy, yet complex simulation options are at your finger tips.

Use basic geometric shapes to design anything from a basic field to a complex structure. Multi-point extrude and revolve surfaces allow for intuitive arena or stadium design.

Depending on your time constraints, Blueprint AV can be easily switched from in-depth 3D operation to streamlined 2D operation, saving on simulation time.

Once your hang is designed, Blueprint gives you all pertinent mechanical information needed to correctly fly the system.

Blueprint AV is now available as a native Java-run program for both PC and Mac platforms. Please contact [blueprint@adamsonsystems.com](mailto:blueprint@adamsonsystems.com) for license information and technical support.



# Introduction & Product Details

## 1.3 S10 Spec Sheet

### S10

The S10 is a 2-way, full range line array cabinet containing 2x ND10-LM Kevlar Neodymium drivers (2x 16 Ω) and an NH4TA2 1.5° exit compression driver (8 Ω). The critically optimized sound chamber produces a slightly curved wavefront with a nominal dispersion pattern of 110° x 10° (H x V). The chamber's efficiency allows for increased vertical dispersion without sacrificing high frequency presence in the far field. Patent-pending Controlled Summation Technology further eliminates low-mid lobing normally associated with 2-way line source systems.

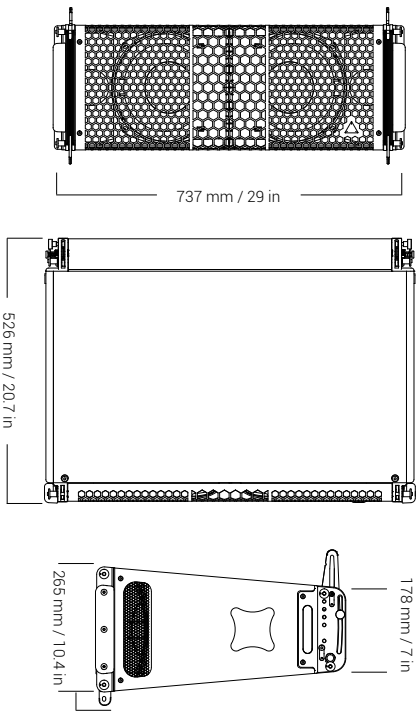
The cabinet construction uses marine grade birch plywood as well as aircraft grade steel and aluminum, and is equipped with two Speakon™ NL8 connectors. The rigging system incorporates the best aspects of previous advancements in our new SlideLock rigging technology.

The S10 is suited to a wide variety of applications. Its full range capability (60 Hz) at reasonable levels qualifies for applications where sub is not required. Increased vertical coverage (10°) enables the S10 to cover theaters, arenas and stadiums with reasonable speaker quantity. Other target applications include dance clubs, medium size festivals, corporate events and contemporary churches.

## 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              | 2 x 16 Ω (8 Ω)   |
| Nominal Impedance HF              | 8 Ω  |
| Power Handling (AES / Peak) LF    | 700 / 2800 W   |
| Power Handling (AES / Peak) HF    | 160 / 640 W  |
| Rigging                           | SlideLock Rigging System, Install Rigging System (S10i)    |
| Connection                        | 2x Speakon™ NL8  |
| Height Front (mm / in)            | 265 / 10.4   |
| Height Back (mm / in)             | 178 / 7  |
| Width (mm / in)                   | 737 / 29   |
| Depth (mm / in)                   | 526 / 20.7   |
| Weight (kg / lbs)                 | 27 / 60, 26 / 58 (S10i)                                    |
| Processing                        | Lake   |

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



# Introduction & Product Details

## 1.4 S119 Spec Sheet



### S119

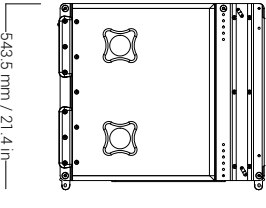
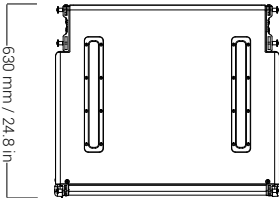
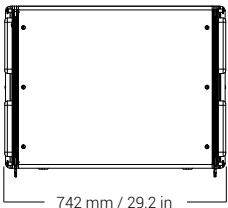
The S119 Subwoofer is the companion subwoofer to the S10. The enclosure is loaded with a light weight, long excursion, 19" ND19 Kevlar Neodymium driver utilizing Adamson's Advanced Cone Architecture and a 5" voice coil for exceptional power handling. It is mounted in an ultra-efficient front-loaded enclosure, designed to reproduce clean, musical low frequency information.

The cabinet construction uses marine grade birch plywood as well as aircraft grade steel and aluminum, and is equipped with Speakon™ NL8 connectors. The integrated rigging system matches the rigging for the S10 and can be flown or stacked in the same array without the need for an adapter frame.

## Specifications

|                                |   |
|--------------------------------|---|
| Frequency Range (+/- 3dB)      | 30 Hz - 80 Hz   |
| Maximum Peak SPL **            | 138 dB  |
| Components LF                  | ND19 19" Kevlar Neodymium Driver  |
| Nominal Impedance LF           | 8 Ω   |
| Power Handling (AES / Peak) LF | 1200 / 4800 W   |
| Rigging                        | Integrated Rigging System, Install Rigging System (S119i)   |
| Connection                     | 5x Speakon™ NL8: 2x Front (Pins 2 +/-), 2x Rear Parallel (Pins 1 +/-) and 1x Rear Output (Pin 2 to 1) |
| Height Front (mm / in)         | 543.5 / 21.4  |
| Width (mm / in)                | 742 / 29.2  |
| Depth (mm / in)                | 630 / 24.8  |
| Weight (kg / lbs)              | 46 / 102, 45.4 / 100 (S119i)  |
| Supported Processing           | Lake  |

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



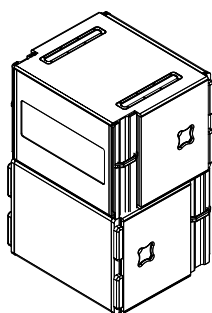
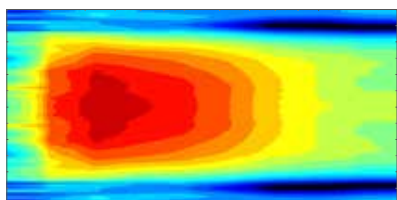
# Introduction & Product Details

## 1.7 Cardioid Subs

Every Adamson subwoofer has specifically designed cardioid presets. Adamson utilizes three configurations ranging from a minimal footprint and minimized rear rejection to larger setups that eliminate virtually all audio energy behind the array. Please refer to the Lake Preset Loading Manual for further instructions.

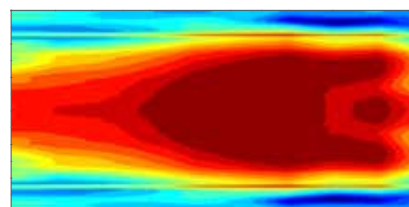
### Front-Back

The FB preset should be used in situations where a minimal footprint is desired. Only 2 enclosures stacked ensures that sightlines will not be impaired.



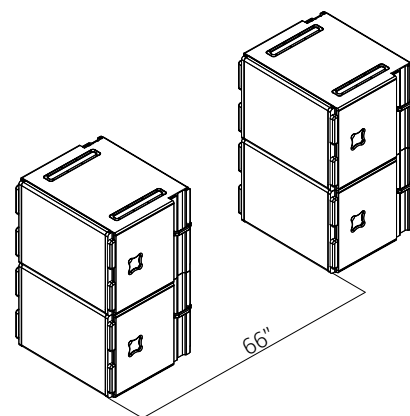
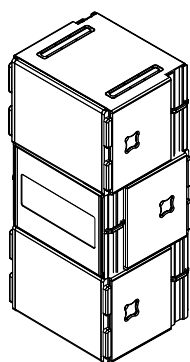
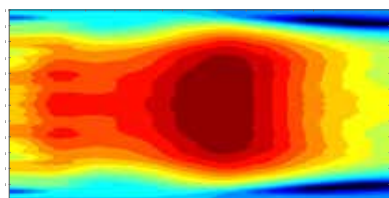
### End-Fire 66

The EF66 preset should be used in situations where the most rear cancellation is desired. Unlike traditional end-fire arrays, Adamson's proprietary preset eliminates a wide range of frequencies in the rear of the array.



### Front-Back-Front

The FBF preset exhibits higher output from the front of the array. A similar footprint to the FB configuration, this stack is 3 enclosures high.





# System Configuration

## 2.0 E-Rack Description

### Adamson Touring Rack

Adamson has developed a unified rack solution, configured to interface seamlessly with our line of loudspeaker products. All E-Racks are equipped with two or three Lab.gruppen PLM+ series amplifiers, featuring Lake processing and Dante audio networking functionality. The Adamson Audio Panel provides Analog and AES inputs, Speakon NL8 and Socapex outputs, and etherCON RJ45 connections, designed for dual redundant Dante setups. A managed Gigabit Ethernet switch and an AC distribution panel available in 120 V or 230 V versions complete the hardware. The entire package fits into a compact and lightweight 10U rack, designed with interior suspension, hinged doors and extra rails for secure & efficient use of space.



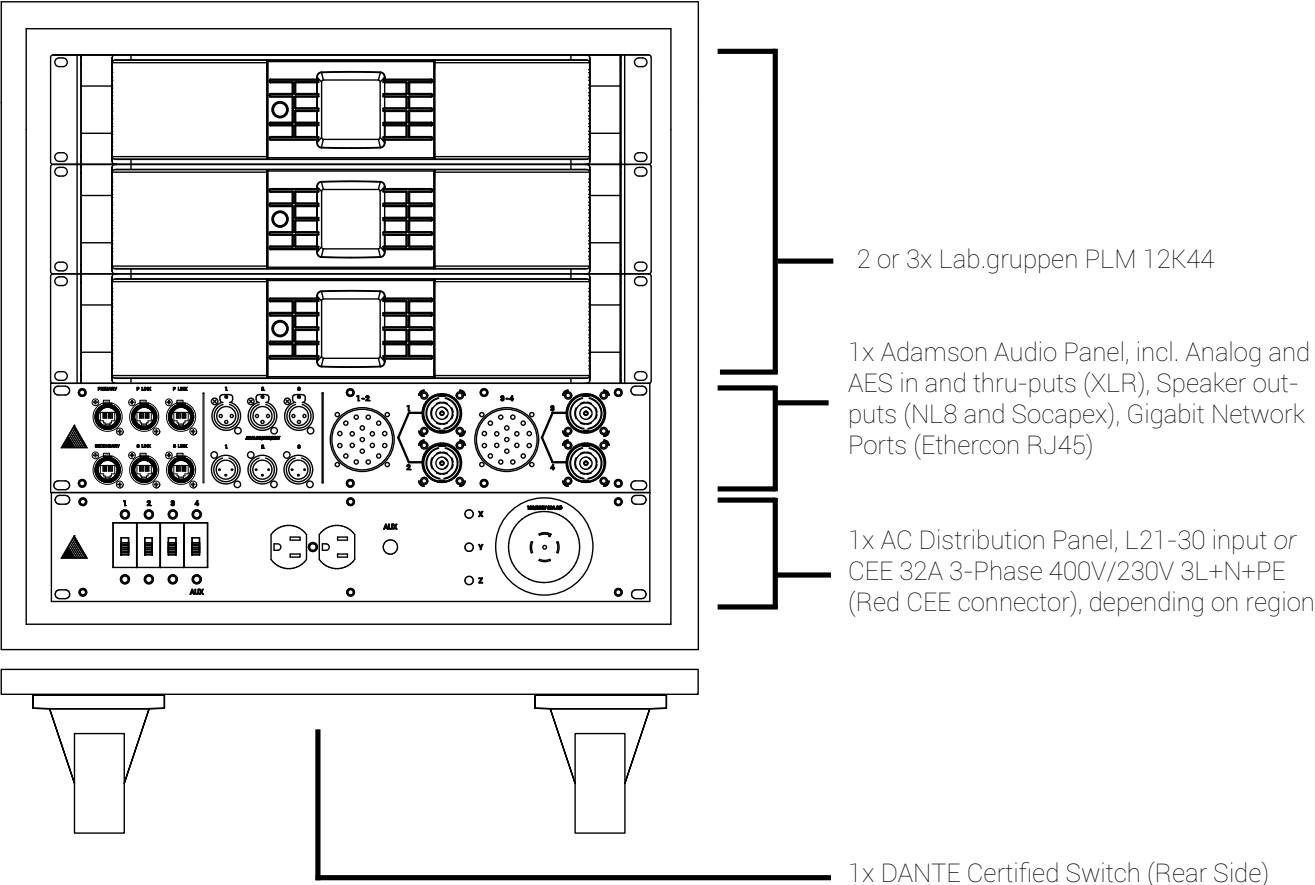
E-Rack elements are comprised of:

- 10U suspended rack with hinged, sliding front and rear doors
- Up to three Lab.gruppen PLM 12K44 amplifiers (8 and 12-Channel versions available)
- Adamson Audio Panel
- Adamson AC Panel, 120 V or 230 V (region specific)
- Cisco SG300-20 managed switch
- Includes one **BLUEPRINT**™<sub>AV</sub> Personal License per rack

# System Configuration

## 2.1 E-Rack Overview

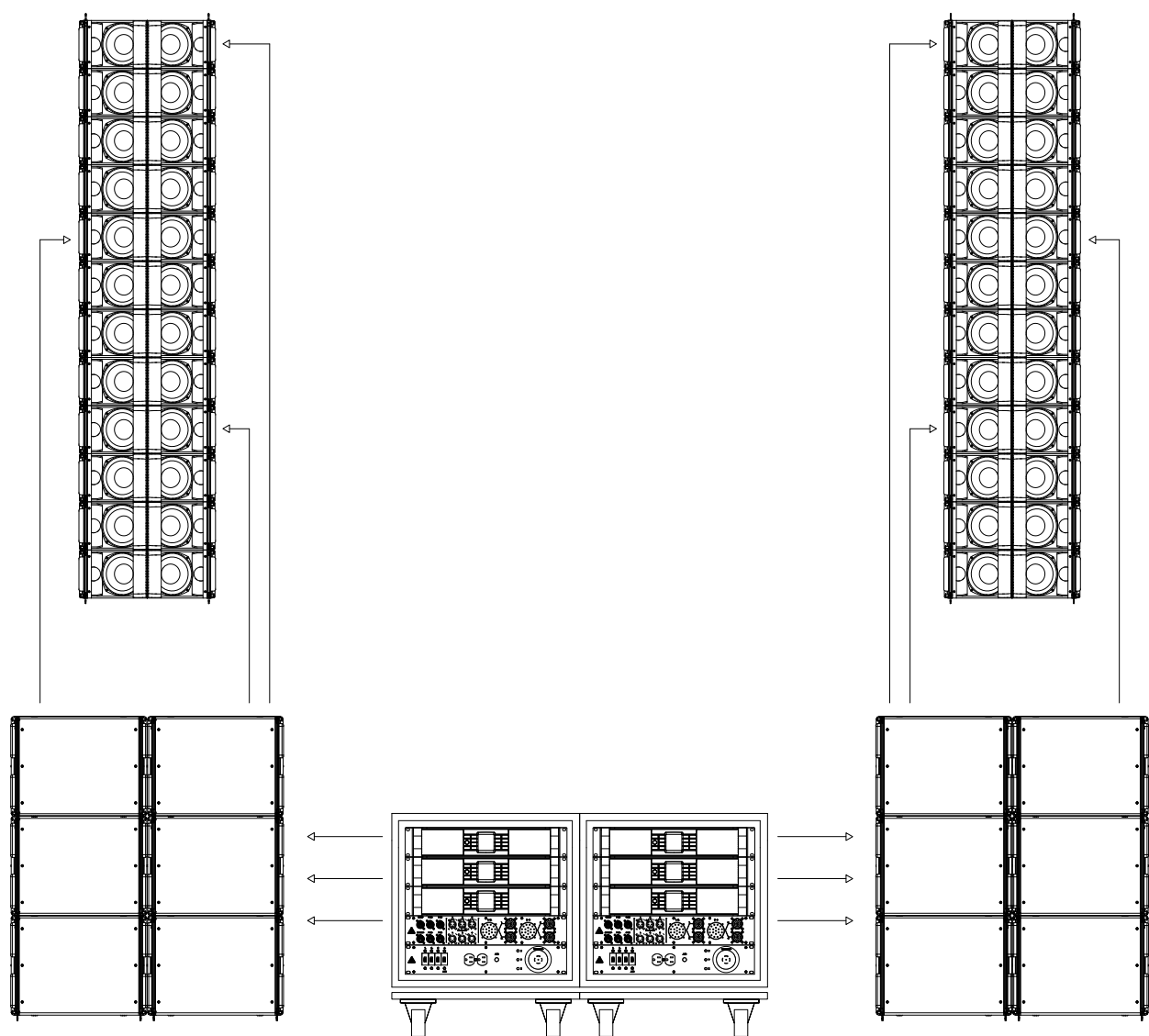
Adamson has developed a unified rack solution configured to interface seamlessly with our line of Loudspeaker products. For more information on the E-Rack, please refer to the E-Rack brochure available on the Adamson Systems website.



# System Configuration

## 2.2 Configuration Example

This example configuration demonstrates the efficiency of the system. For further information regarding configurations, please refer to the Adamson Document [S-Series Configuration Brochure](#).



# System Configuration

## 2.3 Wiring Diagrams

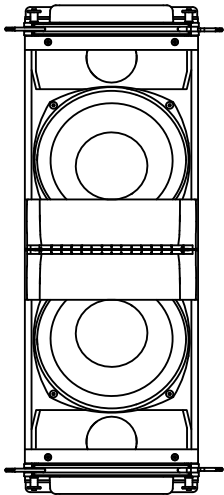
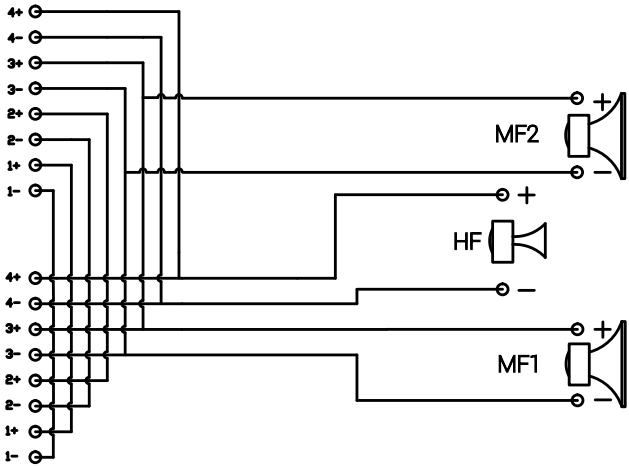
S10  
2-way line source enclosure [973-0003]  
LMF - 2x 10" ND10-LM[940-0025], HF - 1x 4"NH4TA2 [140-0020]  
SlideLock™ rigging system



S10

|    |        |      |        |    |
|----|--------|------|--------|----|
| +1 | ORANGE | THRU | PURPLE | -1 |
| +2 | ORANGE | THRU | PURPLE | -2 |
| +3 | YELLOW | MF   | BLUE   | -3 |
| +4 | RED    | HF   | BLACK  | -4 |

PARALLEL  
INPUTS



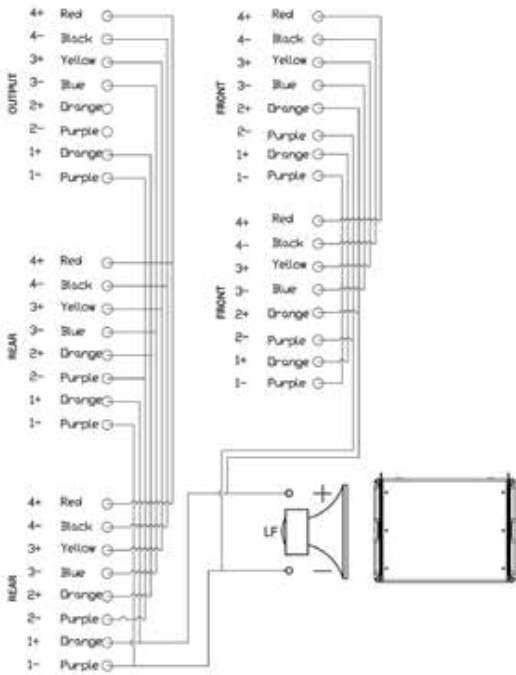
S119  
Subwoofer [994-0002]  
LF - 1x 19" ND19, SlideLock™ rigging system



S119

| FRONT      | REAR       | OUTPUT     |
|------------|------------|------------|
| +1/-1 THRU | +1/-1 SUB  | +1/-1 SUB  |
| +2/-2 SUB  | +2/-2 THRU | +2/-2 NC   |
| +3/-3 THRU | +3/-3 THRU | +3/-3 THRU |
| +4/-4 THRU | +4/-4 THRU | +4/-4 THRU |

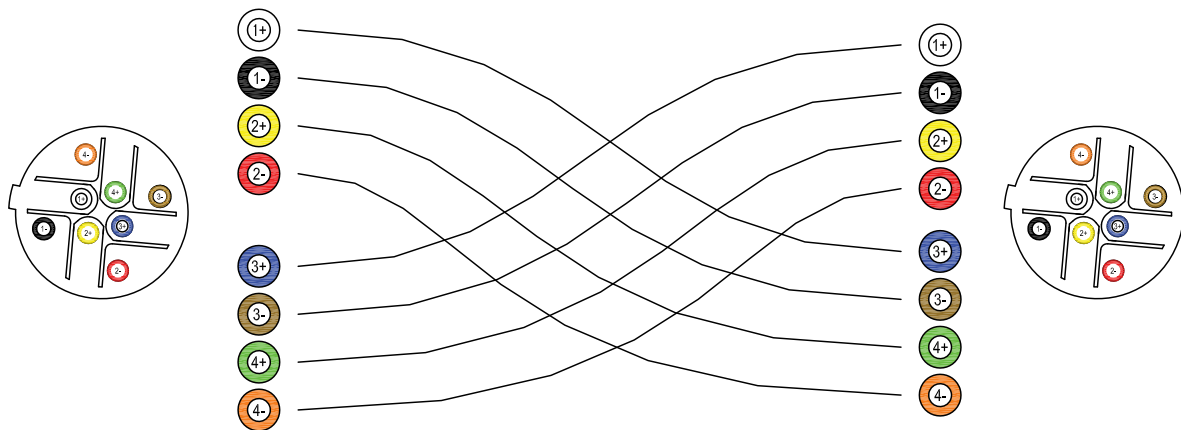
PARALLEL  
INPUTS



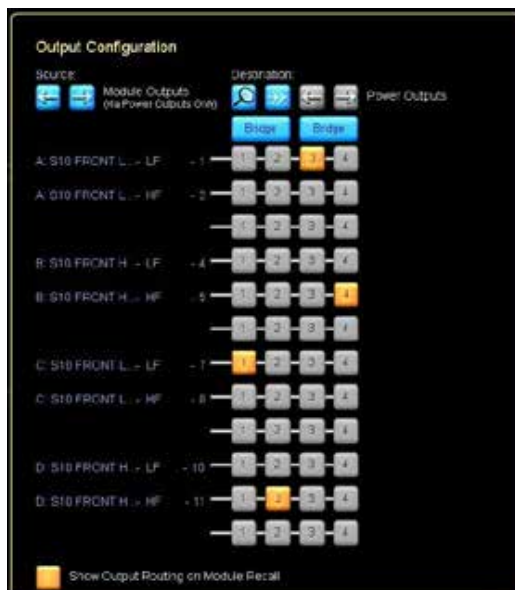
# System Configuration

## 2.4 Pin Swap Cable

A single PLM + amplifier can drive up to 8x S10 enclosures, so long as the NL803 Pin Swap Cable (920-0024) is utilized. This cable is marked with red heat shrink to distinguish it from other NL8 links in a user's inventory.



Pins 1 & 2 are switched with pins 3 & 4 in this cable, allowing S10 users to load all output channels of a Lab.gruppen PLM + amplifier. Here is an example of how to configure the outputs in Lake Controller to make use of this cable:

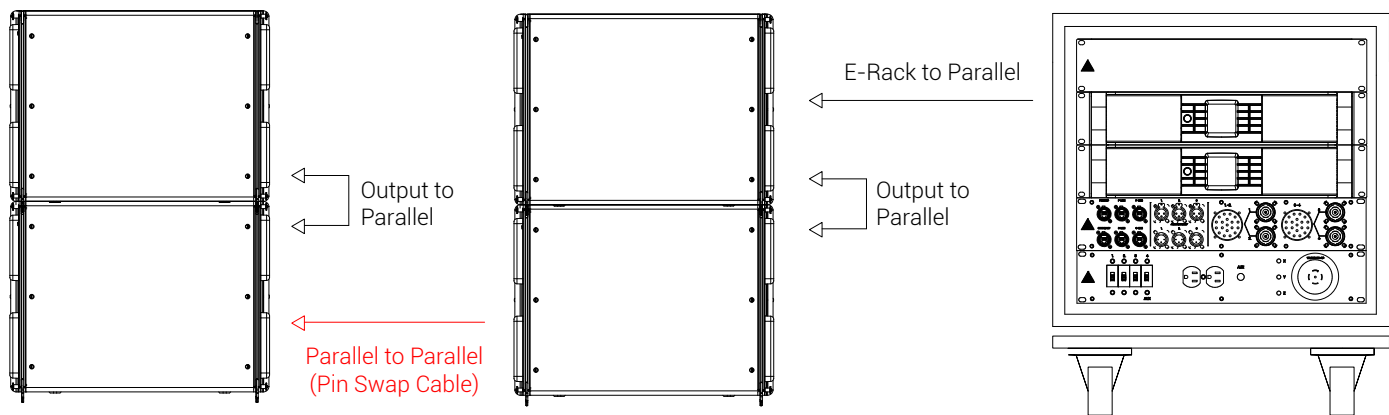


Since the PLM + amplifiers offer four DSP modules, recalling 2x LF and 2x HF modules will allow for greater zone control in an S10 array.

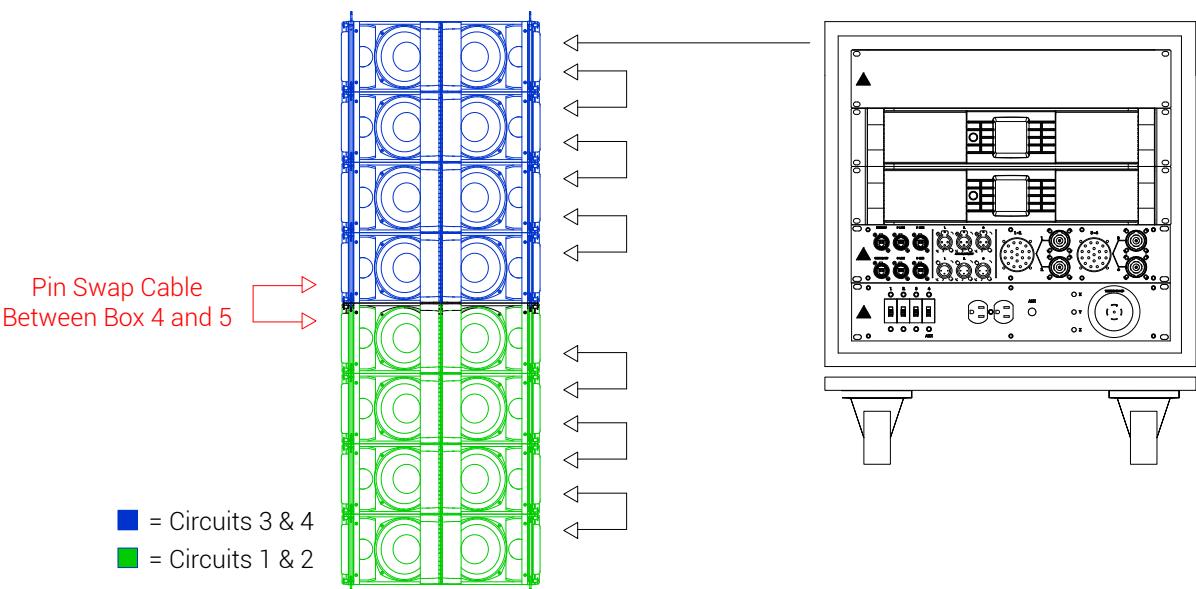
# System Configuration

## 2.4 Pin Swap Cable

Below is a description of how to cable subwoofers when using all four channels of the PLM + amplifier as subwoofer channels.



When cabling the S10s in groups of 8, it is vital to use the pin swap cable between boxes 4 and 5. Any instance where the S10 is using all four channels of amplification requires the use of the pin swap cable.





# Rigging

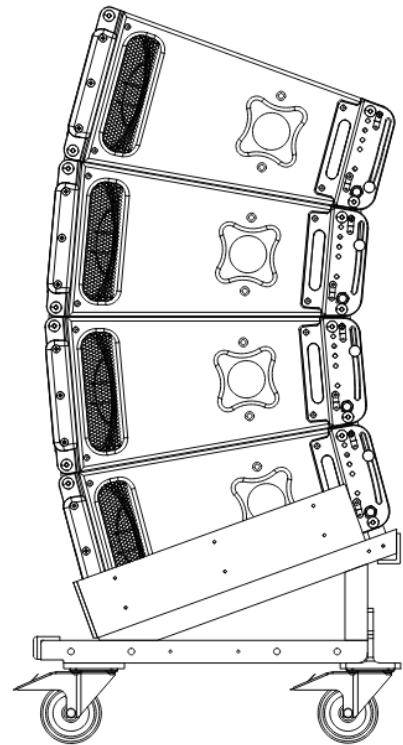
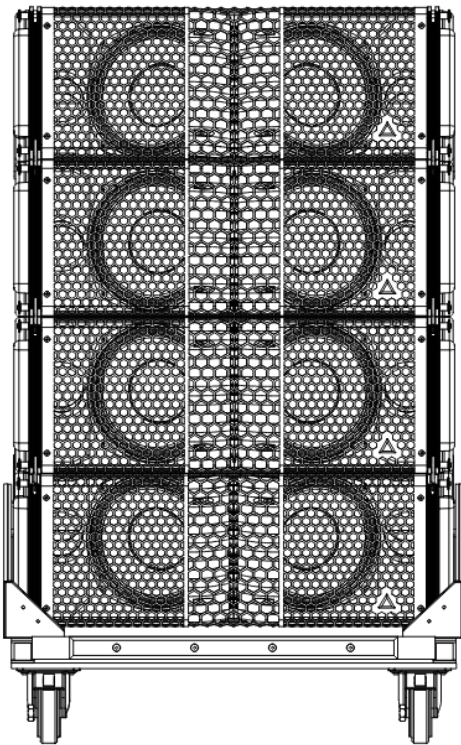
## 3.0 The 4 Stack Dolly



### Transporting the 4 Stack Dolly

There is a tip hazard when transporting a 4 stack on uneven ground or on a ramp. To avoid tipping the dolly, it should always travel with sides of the cabinet to the front or back.

\*On the 4 stack dolly, the bottom cabinet is held in place by the rear, blue push-pin..



# Rigging

## 3.1 Rigging Overview



### The SlideLock Rigging System

The SlideLock Rigging System allows for the operator to set enclosure angles while still stacked on the dolly. A series of push pins maintain angular position and lock in connecting rigging pieces. Caution should be taken while connecting cabinets to ensure hands are out of the way.

The order of operation of the rigging system is: prep angles, remove connection pins, guide into place and secure connecting pins.

There are 9 angles, 0 to 8, and an additional 'Storage' being the 'idle' or 'rest' position, when the rigging hardware is all the way down and the boxes aren't connected. It is applicable when the enclosure is not in use, to protect the rigging hardware from damage. To keep the system intact for transport, leave the angles pinned in.

The angles are numbered as well as color coded to mark which slot should be pinned with the attached push-pin. (Fig. 2) The following rigging positions are equal to the following degrees for the S10 (Fig. 1)

|         |              |
|---------|--------------|
| 0       | 0°           |
| 1       | 1°           |
| 2       | 2°           |
| 3       | 3°           |
| 4       | 4°           |
| 5       | 5°           |
| 6       | 6°           |
| 7       | 6.9°         |
| 8       | 10°          |
| Storage | in enclosure |

Fig. 1



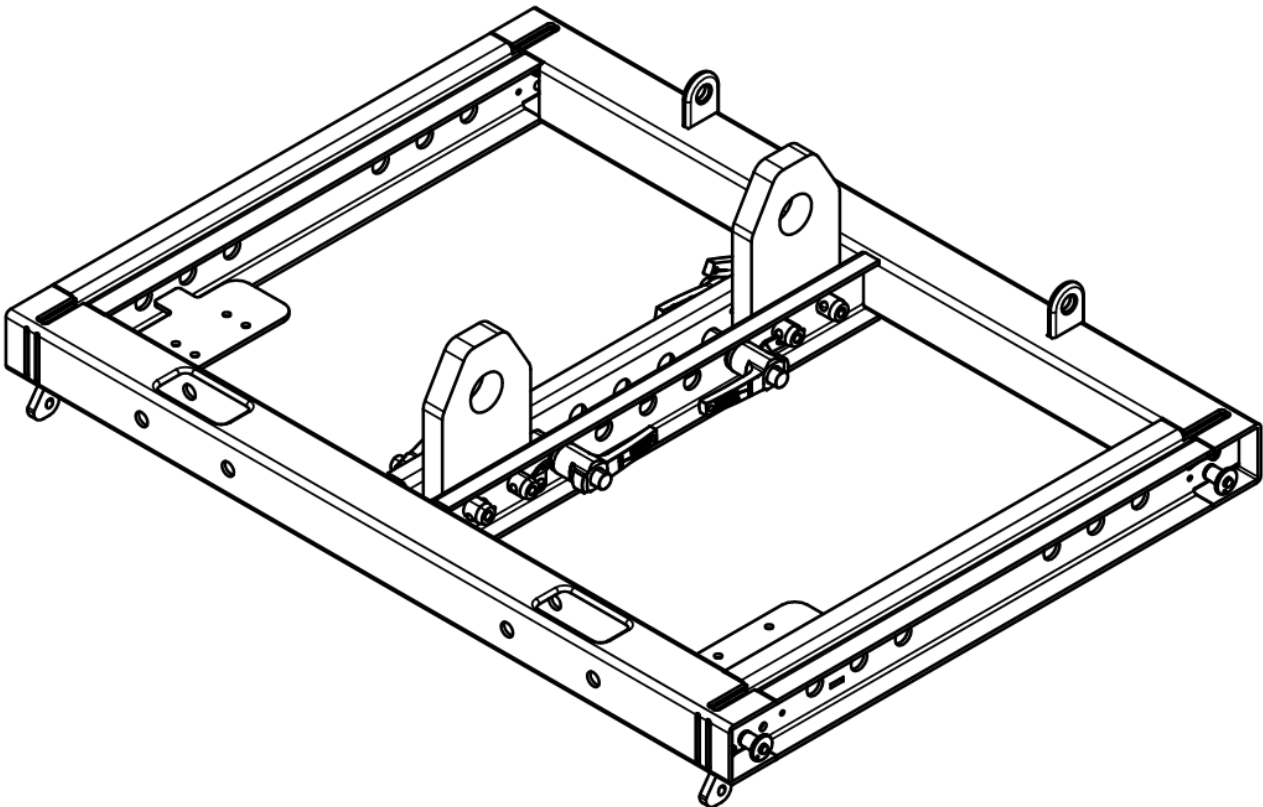
Fig. 2

# Rigging

## 3.1 Rigging Overview



The S-Series Support Frame is designed for use with all S-Series enclosures. It consists of a steel frame and can be paired with the S-Series Extender Beam. **Always refer to Blueprint AV™ for correct rigging instructions.**



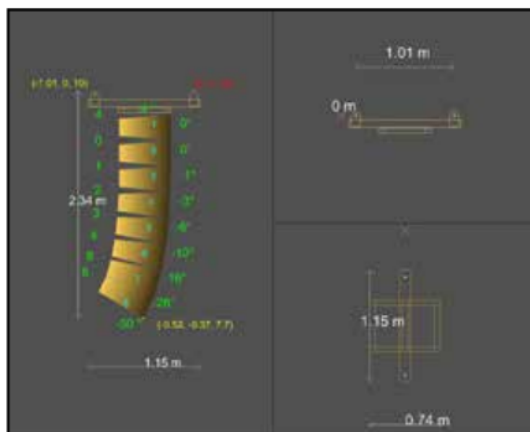
In standalone mode, the frame can be used to lift flat to slightly-angled arrays. Two rigging plates are provided for dual motor operation, and if two motors are not available, one lifting plate may be repositioned towards the center of the frame. Please refer to Blueprint AV™ when determining proper lifting plate location.



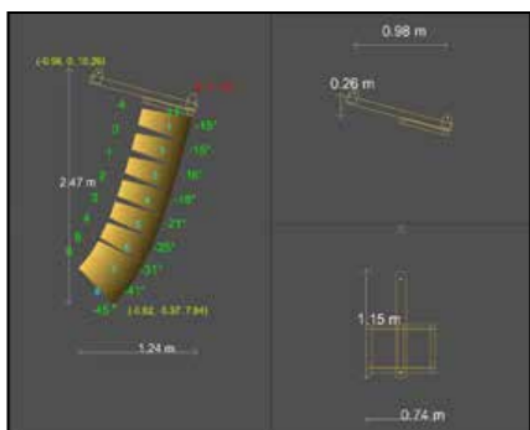
In order to attach the S-Series Extender Beam, the lifting plates must be removed and replaced with Extended Beam plates.

# Rigging

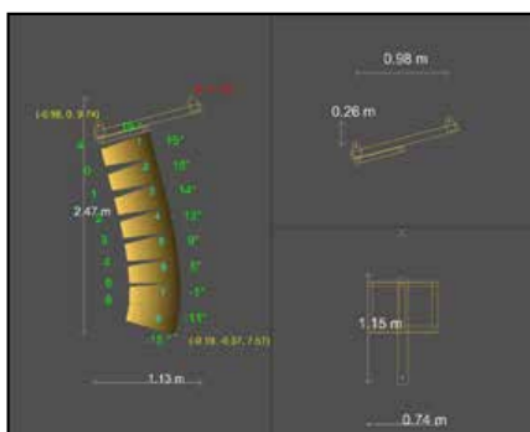
## 3.1 Rigging Overview



For arrays with little to no incline, the S-Series Extender Beam centered will usually provide the best weight dispersion.



For arrays with negative incline, the S-Series Extender Beam positioned towards the back of the frame will provide the best weight dispersion.



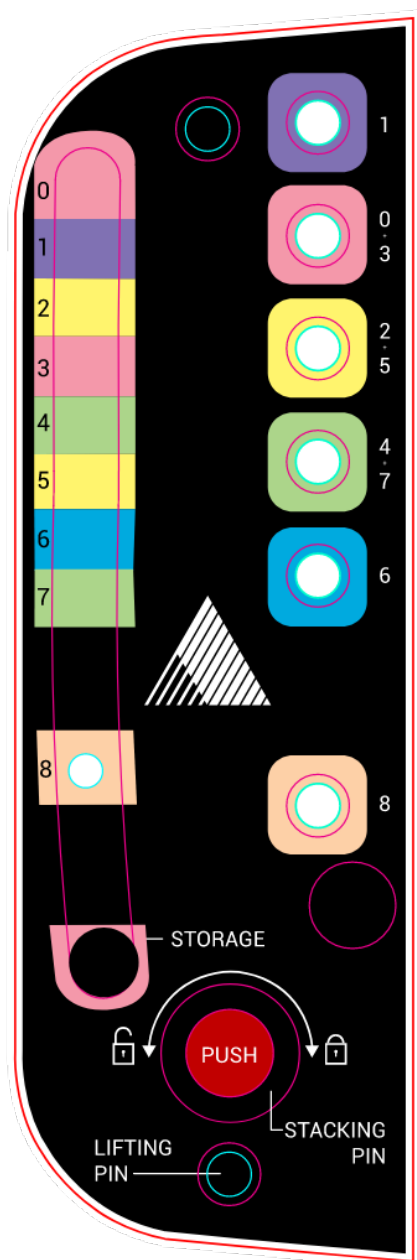
For arrays with positive incline, the S-Series Extender Beam positioned towards the front of the frame will provide the best weight dispersion.

# Rigging



### 3.2 Rigging Sticker Legend

## Rear Slidelock Rigging Sticker Legend



- \* When releasing and pulling the system apart (to enclose rigging bars) let knob slide down to 'storage' position (**magenta**), and place attached push pin to **magenta** slot (above) If you're dividing into 4 stacks, perform this task on every 4th box only.
- \* When needing a zero degrees angle (such as the top boxes of longer arrays) use Position 0, the **magenta** slot. Position 3 also uses the **magenta** slot. Position 1 uses the **purple** slot, positions 2 and 5 use the **yellow** slot, positions 4 and 7 use the **green** slot, position 6 uses the **blue** slot and position 8 uses the **beige** slot.
- \* The S-Series Stacking Pin is to be used when needing to maintain rigid angles either with a ground-stacked array, or an array with a high amount of positive tilt. To engage the Stacking Pin, bring the enclosure to its intended rigging position limit, press the Stacking Pin in and turn clockwise. To release the stacking pin, turn it counter-clockwise.





Setting the angles on all 4-stacks and basic preparation.

Before attaching cabinets together, use Blueprint AV™ to plan your cabinet angles for desired coverage. Prepare all the cabinet angles before beginning to attach and lift the array. The top cabinet, which attaches to the rigging frame is number 1, and the cabinets gain numerically as the descend. Make sure you are setting the correct angle on both sides of the SlideLock rigging system.



Fig. 1

1. Remove the angle pin. (Fig. 1)



Fig. 2

2. Raise the sliding knob to the angle specified by corresponding Blueprint AV design. (Fig. 2)



Fig. 3

3. Place the angle pin in the coloured slot that corresponds to the sliding knob position. (Fig. 3)



Fig. 4

4. Repeat for all enclosures. (Fig. 4)



## 3.4 Attaching the Rigging Frame



The S-Series Support Frame contains 4 link points, all of which need to be attached to the top enclosure in your array. The system ideally uses 2 motors: one in front, one in back of the frame for easy adjustment once the array has been flown. For flying from a single point, you'll need to firmly decide the angle of the frame prior to rigging all the cabinets.



Fig. 1

1. Remove the top front link pins from the top enclosure in the array. (Fig. 1)



Fig. 2

2. Release the front link pins from the S-Series Support Frame. Keep the links in place by placing the pin in the hole shown. Position the frame over the top enclosure of the array. (Fig. 2)



Fig. 3

3. Lower the front links into the rigging channels of the top enclosure of the array. (Fig. 3)



Fig. 4

4. Secure the front links to the enclosure using the top front link pins. (Fig. 4)

# Rigging

## 3.4 Attaching the Rigging Frame



Fig. 5

5. Set the rear rigging of the top enclosure to rigging position 4. (Fig. 5)



Fig. 6

6. Remove the rear link pins from the S-Series Support Frame and lower the frame onto the rear rigging pieces. (Fig. 6)



Fig. 7

7. Place the rear link pin to affix the S-Series Support Frame (Fig. 7)



Fig. 8

8. The S-Series Support Frame is now attached and ready for plate configuration. (Fig. 8)

# Rigging

## 3.5 Extender Beam



When using a highly curved or steeply tilted array, using the S-Series Extender Beam is necessary. Below are the steps needed to attach the Beam to the S-Series Support Frame.



Fig. 1

1. Remove the Lifting Plates from the S-Series Support Frame and pin in place the Extender Beam Plates at either end of the support frame.(Fig. 1)



Fig. 2

2. Lower the Extender Beam onto the Extender Beam Plates. (Fig. 2)



Fig. 3

3. Pin the Extender Beam to the Extender Beam Plates in the corresponding hole configuration as described in Blueprint AV™ (Fig. 3)



Fig. 4

4. A properly affixed Extender Beam. (Fig. 4)

# Rigging

## 3.6 Single Point Rigging



If only one motor is available, moderately curved and tilted arrays can be lifted using only the S-Series Support frame. The same procedure can be implemented using the Extender Beam for arrays with a greater angular and tilt characteristics.



Fig. 1

1. Secure the Lifting Plate to the S-Series Support Frame as described in the mechanical tab of Blueprint AV™. (Fig. 1)



Fig. 2

2. Attach a 5/8" rigging shackle to the top hole of the Lifting Plate. (Fig. 2)



Fig. 3

3. Attach motor clasp to the rigging shackle. (Fig. 3) If needed, use an extra piece of rigging steel to increase distance from the motor to the frame in order to allow room for a chain bag.



Fig. 4

4. Remove the lifting pin keeping the 4-stack in place on the dolly. (Fig. 4)

# Rigging

## 3.7 Ground Stacking



The need for a removable pin when ground stacking no longer exists. A rotatable push pin now ensures that ground stacked systems maintain their rigidity. This section assumes that the S10 is being stacked on an S119. Stacking on the dolly is possible, please refer to section 4.0 for instructions regarding Dolly Stacking Legs.



Fig. 1

1. Remove the angle pin and move the rigging knob to the position specified in the mechanical tab of Blueprint AV™ (Fig. 1)



Fig. 2

2. Place the angle pin in the corresponding hole. (Fig. 2)



Fig. 3

3. Remove the bottom link pin from the S10 to be ground stacked. (Fig. 3)



Fig. 4

4. Place the bottom link pin back in the S10 to maintain the rigging piece's rigidity. (Fig. 4)

# Rigging

## 3.7 Ground Stacking



Fig. 5

5. Remove the top front link pins from the S119. (Fig. 5)



Fig. 6

6. Place the S10 on top of the S119 either by hand or with a hoist. Make sure the rigging pieces are in the respective rigging channels. (Fig. 6)



Fig. 7

7. Secure the front rigging pieces with the S119 top front link pins. (Fig. 7)



Fig. 8

8. Secure the rear rigging pieces with the S10 bottom back link pins. (Fig. 8)



# Rigging

## 3.7 Ground Stacking



Fig. 9

9. Set the proper angle by first lifting the S10 cabinet to it's maximum height, either by hand or with a hoist. (Fig. 9)



Fig. 10

10. With the enclosure still lifted, press in and turn the stacking pins on either side of the enclosure clockwise. (Fig. 10)



Fig. 11

11. With the stacking pins engaged, the array will maintain the intended angles. (Fig. 11)



Fig. 12

12. Repeat as needed to reach the desired enclosure count. (Fig. 12)

## 3.8 Lowering the Array



Fig. 1

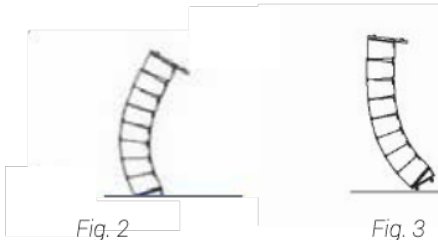


Fig. 2

Fig. 3

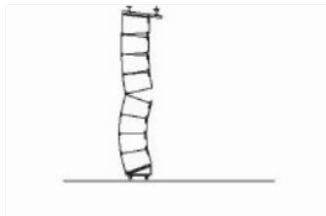


Fig. 4



Fig. 5

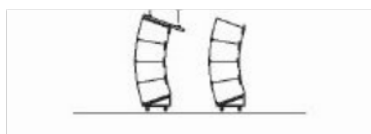


Fig. 6

### To Lower a Steep Angled Array

1. Lower the array until it is just above the floor. (Fig. 1)
2. Make sure the bottom back link pins on the bottom box are removed.
3. Connect the dolly to the bottom cabinet.
4. If the bottom cabinets are at a steep angle and it is unsafe to continue to lower the array, two crew members should be used to support the weight of the cabinet at all times; before the dolly has ground contact, (the dolly should never tip over as in (Fig. 3) push the hang to the front in order to prevent the dolly to tip over, then proceed lowering the array (Fig.2); release the bottom back links pins above this cabinet to free the rear of the bottom cabinet.
5. All front levers should stay connected. This will allow you to raise the motors until the frame is no longer steeply angled. (Fig. 4)
6. Remove the top front link pins on the top cabinet in the 4 stack to release and allow the bottom 4 cabinets to separate from the array.
7. Lift the array just above the 4 stack and wheel 4 stack out from under array. (Fig. 5)

If the bottom cabinet in the array is still at a steep angle - repeat this procedure.

### To Lower a Moderately Angled Array

1. Lower the array till it is just above the floor. (Fig. 1)
2. Make sure the bottom back link pins on the bottom box are removed.
3. Connect the dolly to the bottom cabinet.
4. Lower the array till all the rear angles collapse in the bottom 4 stack.
5. Remove all connecting link pins.
6. Lift the array above the 4 stack (Fig. 5)
7. Wheel 4 stack out of the way

Repeat procedure until done. (Fig. 6)

# Rigging

## 3.9 Rigging the S119



The S119 can be rigged in the same array as the S10 without the use of any adapter rigging pieces. Affixing the S-Series Support Frame to the S119 is completed in the same manner as described in section 3.4, by using rigging position 4 on the top S10 cabinet in the stack.



Fig. 1

1. With the S119 suspended, remove the top front link pins from the top S10 of the 4-stack dolly. Set the rear rigging position to what is specified in the Blueprint AV™ mechanical tab. Set all other rigging positions as described in section 3.3. (Fig. 1)



Fig. 2

2. Remove the bottom front link pins from the S119, allowing the rigging piece to drop. Secure by placing the bottom front link pin back in place. (Fig. 2)



Fig. 3

3. Lower the S119 until the rigging pieces fit into the S10 rigging channels. (Fig. 3)



Fig. 4

4. Secure the front rigging pieces with the top front link pin of the S10. (Fig. 4)

# Rigging

## 3.9 Rigging the S119



Fig. 5

5. Keep lowering the S119 until the S10 rear rigging pieces slide into the S119 rear rigging channels. (Fig. 5)



Fig. 6

6. Secure the S10 rear rigging by using the rear bottom link pin of the S119. (Fig. 6)



Fig. 7

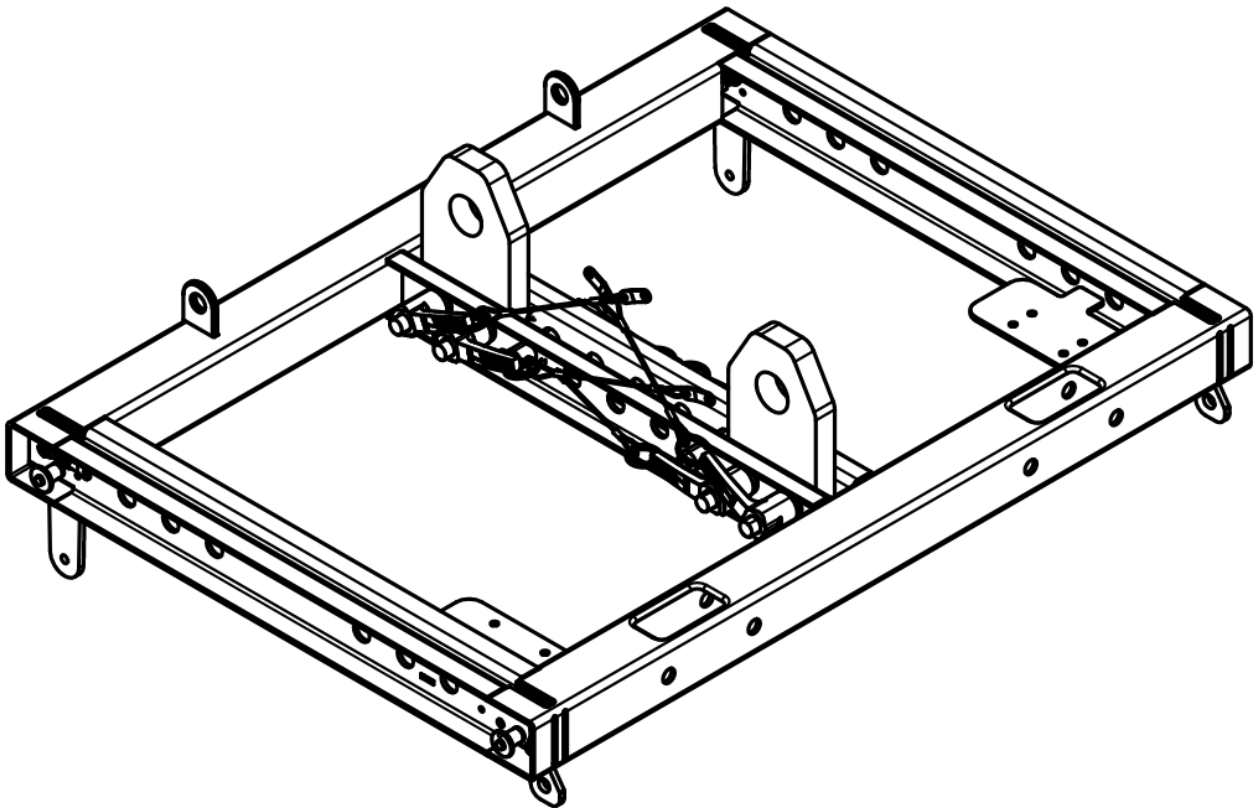
7. Lift the connected array. As you take the weight of each S10, the rigging will fall into the desired rigging position. (Fig. 7)

# Rigging

## 3.10 Installation Rigging



The S-Series Install Frame is designed for use with all S-Series Installation enclosures. It is the same frame as the standard frame, but with the addition of two rear rigging links. It consists of a steel frame and can be paired with the S-Series Extender Beam. **Always refer to Blueprint AV™ for correct rigging instructions.**



Always use position X to attach the rigging link to the enclosure, otherwise the vertical position of the top S10 will not match that of the frame.

# Rigging

## 3.10 Installation Rigging

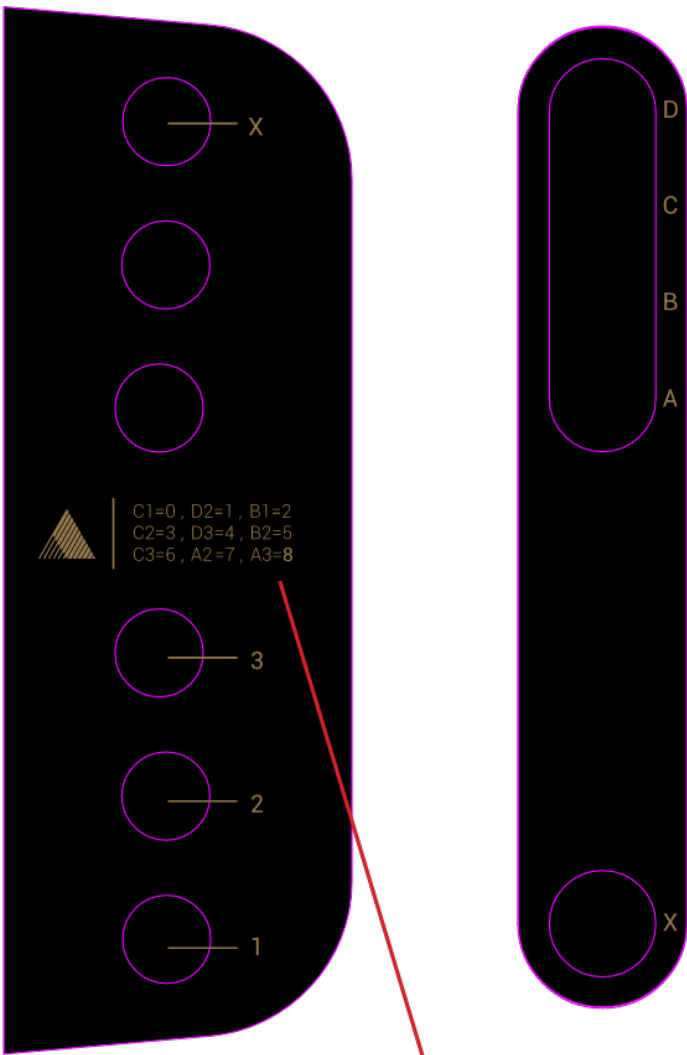


Fig. 1



Fig. 2

C1=0 , D2=1 , B1=2  
C2=3 , D3=4 , B2=5  
C3=6 , A2=7 , A3=8

The S10i rear rigging consists of a positioning system and a rigging link. (Fig. 1) An alpha-numerical chart is printed on the positioning sticker to determine rigging position. (Fig. 2)

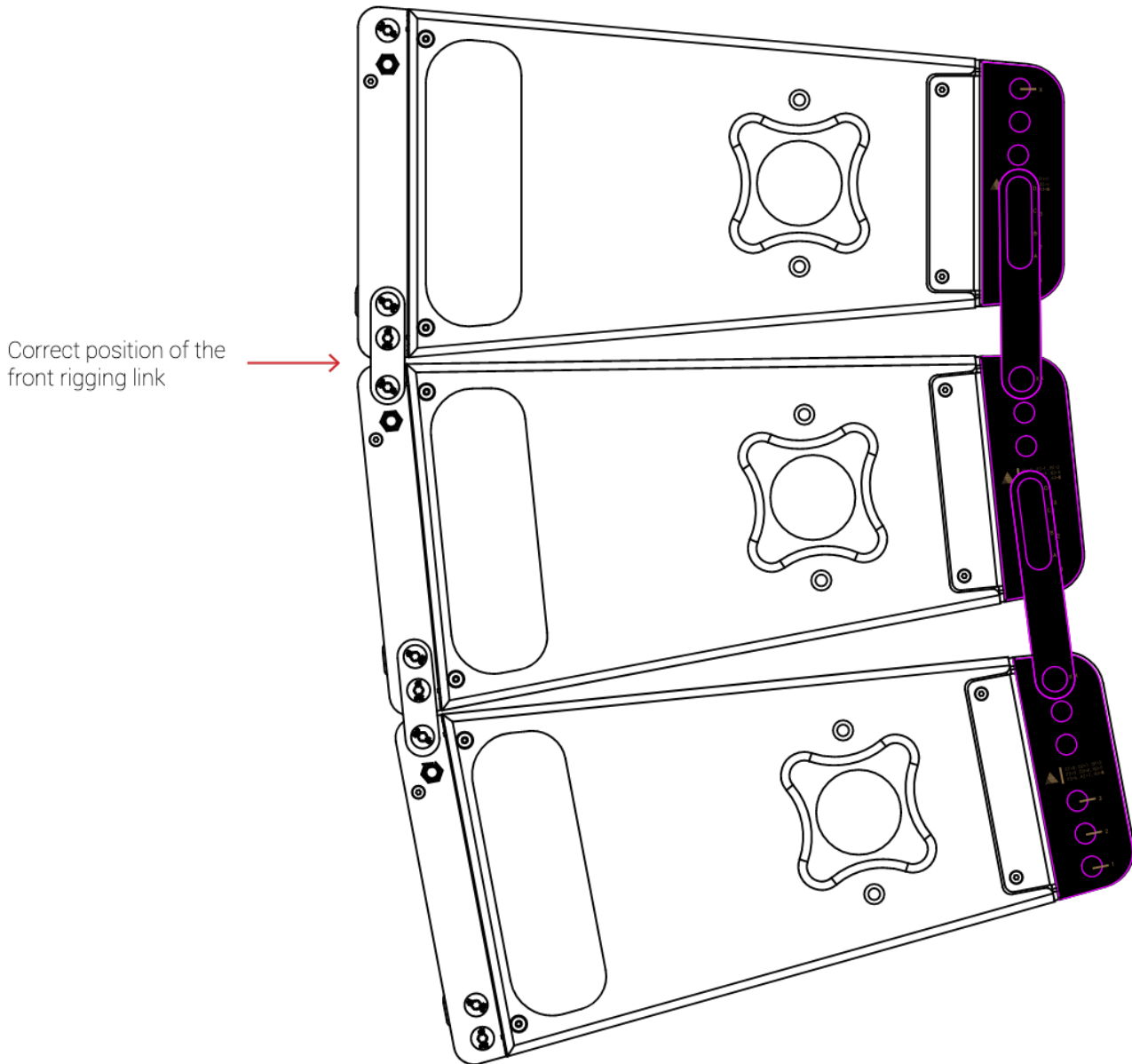
The circular "X" holes on the enclosure's rigging and the rigging link shall always be connected with the screw shipped with the enclosure.

Line up the letter and number holes according to the legend to achieve the rigging position previously determined with Blueprint AV™.



# Rigging

## 3.10 Installation Rigging

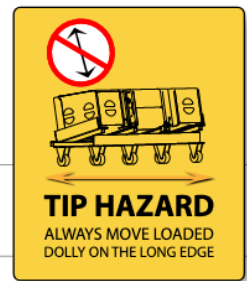


The S10i front rigging utilizes a front rigging link. The link consists of three connection points, two on the top and one on the bottom. Always connect the two connection points on the top to first cabinet (i.e. the above cabinet) and the single connection point to the second cabinet (i.e. the below cabinet).

The above diagram shows what three S10i should look like when connected.

# Accessories

## 4.0 Ground Stacking Legs



### Dolly Stacking Legs (938-0014)



Fig. 1

Available as an accessory, the Ground Stacking Legs allow users to angle the S10 (or E-Series) in positive or negative increments while situated on the S10 (or any E-Series) Dolly.

1. Make sure all wheel locks are engaged and the dolly is situated where the design has specified.
2. Insert stacking leg into rectangular chamber directly above the dolly wheel. (Fig. 1)



Fig. 2

3. Insert first push pin into the hole directly above the dolly wheel. (Fig. 2)
4. Insert second push pin into the hole above and behind the dolly wheel. (Fig. 3)
5. Repeat procedure for all four stacking legs.
6. Turn handle until all stacking legs are firmly planted on the ground. (Fig. 4)
7. If a negative inclination is desired, tighten the back two stacking legs until desired incline is achieved.
8. If a positive inclination is desired, tighten the front two stacking legs until desired incline is achieved.

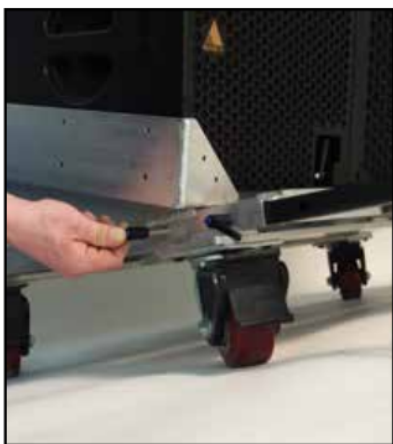


Fig. 3



Fig. 4



**ADAMSON**  
BUILT. STRONG.

[www.adamsonsystems.com](http://www.adamsonsystems.com)  
[www.facebook.com/adamsonsystems](https://www.facebook.com/adamsonsystems)  
CANADA: 905-982-0520  
UNITED STATES: 952-393-4116  
EUROPE: +49 40 7699 9959 0