

KF810P SB818P F Rigging Guide

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Help and training videos are also available on the EAWVideo YouTube Channel.

# Rigging KF810P & SB818P|F

### **Design with RESOLUTION™ SOFTWARE**

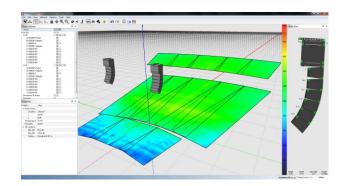


A KF810P, SB818P|F array is intended for use with our Resolution software, downloadable from the Resolution product page on our website (eaw.com).

Resolution's primary function is to determine the configuration providing the best performance for a given application. Various venue dimensions are entered that allow Resolution to calculate the resultant array performance. Resolution can

automatically generate a suggested array or an end user can tailor a Resolution generated array or build a unique array to view array performance.

For complete instructions about operating EAW Resolution, click on the About/Help menu when running software. Instructional videos are also available on the <u>EAW YouTube Channel</u>



#### **Computer Requirements**

Resolution requires 2 GB RAM, 1 GB storage, and Windows ® 7, 8, 8.1, or 10. It is not designed to work with Macintosh® operating systems.

#### **Resolution Features**

- Driven by proprietary FChart acoustics modeling software
- Predict direct SPL levels and frequency response at any point in any venue
- Calculate mechanical load
- Factor environment conditions into the calculations
- Supports multiple EAW products
- Arrays of EAW loudspeakers can be entered manually or created with embedded auto designer

### **Rigging: Mounting / Suspension**

**DANGER:** Mounting or overhead suspension of any heavy load can result in serious injury and equipment damage. This work should be done by qualified persons following safe rigging practices in accordance with all applicable safety and construction standards. Such persons must determine the required load ratings and design factors. They must determine the mounting or suspension method that meets static, dynamic, shock, and any other load requirements. All such work must be done in accordance with and in compliance with all federal, state, and local regulations governing such work.

**CAUTION:** The user assumes all responsibility and liability for the proper design, installation, and use of any rigging and mounting systems for EAW loudspeakers.

**CAUTION:** Accessory items are available from EAW and from aftermarket suppliers to facilitate suspension, wall, ceiling, or other rigging. When using these items, review all enclosed documentation and carefully follow all instructions and safety precautions.

### **Rigging Design Practices**

*Rigging a loudspeaker requires determining:* 

- 1. The rigging methods and hardware that meet static, shock, dynamic, and any other load requirements for supporting the loudspeaker.
- 2. The design factor for and the required WLL (Working Load Limit) for this support.

EAW strongly recommends the following rigging practices:

- 1. Documentation: Thoroughly document the design with detailed drawings and parts lists.
- 2. Analysis: Have a qualified professional, such as a licensed Professional Engineer, review and approve the design before its implementation.
- 3. Installation: Have a qualified professional rigger install and inspect the system.
- 4. Safety: Use adequate safety precautions and back-up systems.
- 5. Consider applying threadlocker to hardware per qualified professionals' recommendation.

### **Rigging Hardware and Accessories**

Rigging EAW loudspeakers will invariably require hardware not supplied by EAW. Various types of load-rated hardware are available from a variety of third-party sources. There are a number of companies specializing in manufacturing hardware for, designing, and installing rigging systems. Because of the hazardous nature of rigging work and the potential liability, engage companies that specialize in these disciplines to do the work required.

# **Suspension Procedures**

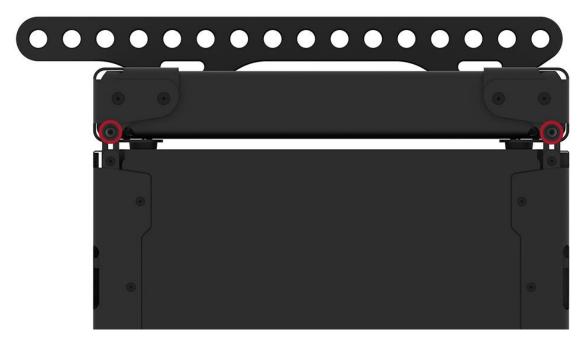
## Flown Arrays with SB818P|F

1. Attach stinger to the frame using 2x M10 bolts w/flat washers and lock nut. NOTE: The stinger is reversible. Position per Resolution 2 software.

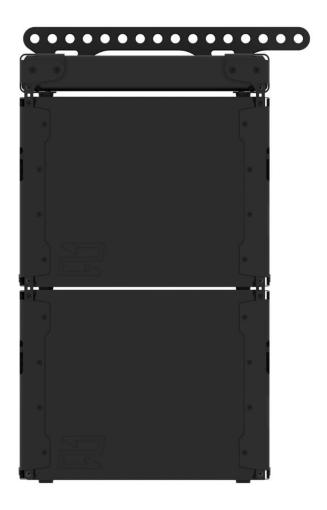
**STINGER** 



2. Place flybar assembly on top of SB818P|F and use M8 X 30 bolts w/flat and lock washer to rig front and rear positions.



- 3. Attach shackle  $(\frac{3}{4}'')$  to desired stinger position and raise array. *Use Resolution for optimal position*.
- 4. Place second SB818P|F on surface underneath array and lower to attach using M8 X 22 threaded bolts w/flat and lock washer to front and rear rigging.

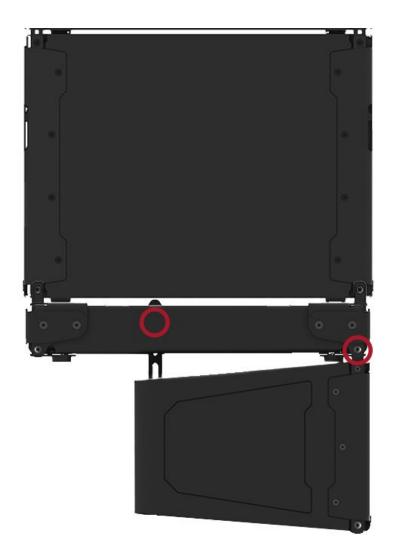


- 5. Repeat to use desired SB818P|F amount in array (See Resolution for array limitations).
- 6. To attach a KF810P, start by attaching frame to bottom of SB818P|F array.
- 7. Do so by laying the frame on a surface, then lowering the SB818P|F array and attach using M8 X 22 bolts w/flat and lock washer to rig front and rear positions.

\*NOTE: Orientation of KF810P adapter "Z" hole needs to be located to the rear of the array.



- 8. Raise array and place first KF810P array item underneath, then lower array to KF.
- 9. Using M8 x 22 bolts w/flat and lock washers to secure front rigging, then M10 bolt w/flat washers and lock nut to secure rear rigging using hole "Z".



10. To connect additional KF810P, use M8 x 22 bolts w/flat and lock washers to secure front rigging, then M10 bolt w/ flat washers and lock nut to secure rear rigging angle (See Resolution for angle).

## Flown Arrays without SB818P|F

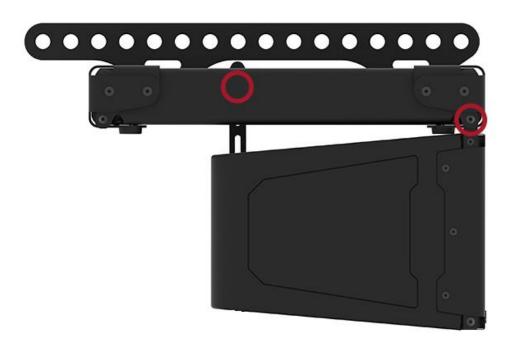
1. Attach stinger to the frame using 2x M10 bolts w/flat washers and lock nut. *NOTE: The stinger is reversible. Position per Resolution 2 software.* 

\*NOTE: Orientation of KF810P adapter "Z" hole needs to be located to the rear of the array.



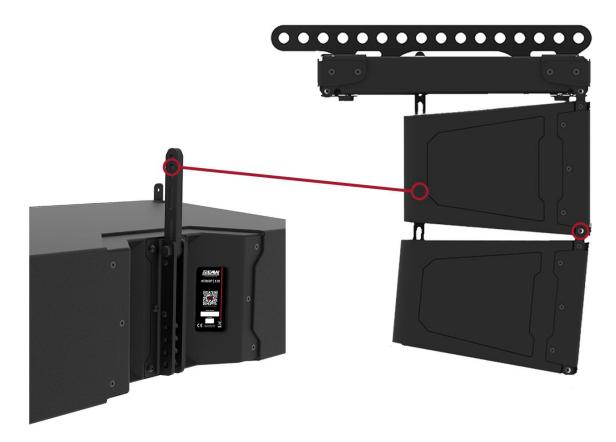


- 2. Place flybar assembly on top of KF810P and use M8 X 30 bolts w/flat and lock washers to rig front position.
- 3. Select 0 deg ("Z") position on rear rigging and use M10 bolt w/flat washers and lock nut to secure.



- 4. Attach shackle (¾ ") to desired stinger position and raise array (*Use Resolution for optimal position*).
- 5. Place second KF810P on surface underneath array and lower.

6. Using M8 x 22 bolt w/flat and lock washers to secure front rigging, then M10 bolt w/ flat washers and lock nut to secure rear rigging angle (See Resolution for angle).



7. Repeat to use desired KF810P amount in array (See Resolution for array limitations).

### **Ground Stacking Procedures**

**WARNING:** Ground-stacked arrays, especially the maximum recommended arrays, requires assembly by personnel qualified to ensure adequate stability from tip over for the particular application. See Section 6 for correct array assembly. Mechanical assistance will be required to lift and position enclosures for arrays taller than approximately 5 feet.

**NOTE**: Low Frequency performance is often highly program or venue-dependent, as well as subjective as to quantity and quality. For this reason, the type, quantity, and disposition of subwoofers may vary considerably with the application. The quantity recommendations below are for general purposes, providing a balanced system for most music applications. Quantities may need to be adjusted up or down for specific situations.

## Ground-Stack with SB818P|F

- 1. Place your SB818P|F on the ground.
- 2. To attach additional SB818P|F, lift on top of SB818P|F beneath and use M8 x 22 bolts w/flat and lock washers to secure front and rear rigging (See Resolution for ground-stack limitations).

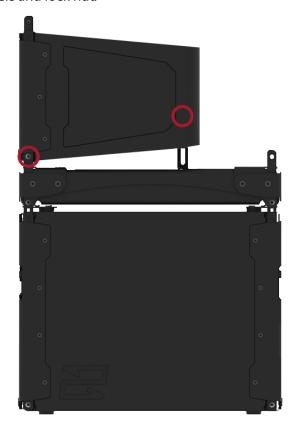


3. To add KF810P, start by placing frame on top of SB818P|F array, and securing front and rear rigging with M8 x 30 bolts w/flat and lock washers. "Z" hole needs to be orientated towards the front of intended array.



4. Place the first KF810P on top of frame, and secure front rigging with M8 x 22 bolts w/flat and lock washers (See Resolution for ground-stack limitations).

5. Using the rigging arm on the frame, choose splay angle between frame and KF810P (refer to ground-stack chart on adapter frame or review in Resolution), and secure rigging with M10 bolt w/flat washers and lock nut.



6. Repeat this process to add additional KF810Ps, with rigging arm on KF810P beneath (See Resolution for ground-stack limitations).

\*NOTE: Refer to chart on KF810P rigging or Resolution for KF810P to KF810P rigging angles.

## **Ground-Stack without SB818P|F**

- 1. Place frame on the ground. "Z" hole needs to be orientated towards the front of intended array.
- 2. Place the first KF810P on top of frame, and secure front rigging with M8x22 bolts w/flat and lock washers.

3. Using the rigging arm on the frame, choose splay angle between KF810P and frame (refer to ground-stack chart on adapter frame or review in Resolution), and secure rigging with M10 bolt w/flat washers and lock nut.



4. Repeat same process to add additional KF810Ps with rigging arm on KF810P beneath (See Resolution for ground-stack limitations).

\*NOTE: Refer to chart on KF810P rigging or Resolution for KF810P to KF810P rigging angles.

## Contact

Have questions? Contact our Application Engineering team. 508-234-6158 800-992-5013 (toll-free) design@eaw.com

Need service? Our service team can help. 508-234-6158 800-992-5013 (toll-free) parts@eaw.com





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