

## SFA-16-1100 Instruction Manual



The SFA-16-1100 is manufactured by:

**Polar Focus<sup>®</sup>, Inc.**  
20 Industrial Dr. East.  
South Deerfield, MA 01373 USA  
413-586-4444  
413-665-2444 fax  
<http://www.polarfocus.com>

### 1.0 Introduction:

This patent pending product is designed for use as a tool for professional riggers, and for audio and video technicians trained in rigging for their specific applications. If you do not have this training and/or on the job experience, do not attempt to use this product. Protect the health and safety of yourself, your co-workers, your customers and safeguard your organization's liability by calling in qualified personnel to perform the rigging you require. To find professionals in your area with this expertise, look up Audio Contractors, Sound Contractors, or Riggers in your telephone directory yellow pages. For additional sources to find trained riggers in North America, you may also contact:

International Assoc. of Theatrical & Stage Employees (IATSE)  
Suite 601, 1515 Broadway  
New York, N.Y. 10036 USA  
Telephone (212) 730-1770  
<http://www.iatse-intl.org/home.html>

Or

National Systems Contractors Association (NSCA)  
419 First Street Southeast  
Cedar Rapids, IA 52401 USA  
Voice (800) 446-6722 or (319) 366-6722

FAX (319) 366-4164  
<http://www.nasca.org>

To find trained riggers outside of North America you may contact:

Professional Lighting and Sound Association (PLASA)  
Redoubt House, 1 Edward Road  
Eastbourne, BN23 8AS UK  
Tel: 44 (0)1323 524120  
Fax: 44 (0)1323 524121  
<http://www.plasa.org>

Both NSCA and PLASA can also provide information on rigging training courses in your region.

## 2.0 Important Safety Instructions

- 1: Read these Instructions
- 2: Heed all warnings
- 3: Follow all instructions
- 4: Only use attachments/hardware specified by the manufacturer.
- 5: Do not in any way modify or disassemble product unless instructed to do so by the manufacturer.

## 3.0 Important Safety Warning

- 3.1 The information in this section has been assembled from recognized engineering data and is intended for informational purposes only. None of the information in this manual should be used without first obtaining competent advice with respect to applicability to a given circumstance. None of the information presented herein is intended as a representation of warranty on the part of Polar Focus. Anyone making use of this information assumes all liability arising from such use.

## 4.0 Inspection and Maintenance

- 4.1 Before installing any hardware always inspect all components (enclosure, rigging frames/yokes, mounting brackets, etc.) for cracks, deformations, corrosion, missing, loose, or damaged parts that could reduce the strength and safety of the overall installation. Do not install product until the proper corrective action has been taken. If gear from Polar Focus is deemed damaged or defective, call us immediately at 413-586-4444 to determine appropriate corrective measures.
- 4.2 Suspension and pole mount systems and comprised of mechanical devices, and, as such, they require regular inspection and routine maintenance to ensure proper function ability. Installed systems should be inspected at least annually (or as required by local code). The inspection shall include a visual survey of all load-bearing surfaces for signs of corrosion, cracking, bending, or any other condition that may decrease the strength of the bracket, fastener, etc.
- 4.3 This product's structural tubes are made of powder coated steel or and will not resist corrosion in outdoor environments.
- 4.4 Polar Focus is not responsible for the misuse of its products or the misuse of this information for any purpose. Furthermore, Polar Focus is not responsible for the abuse or misuse of its products caused by avoiding compliance with inspection and maintenance procedures or any other abuse.

## 5.0 SFA-16-1100 Safety Rules:

- 5.1 Do not exceed working load limits (WLL). The SFA-16-1100 will support a total load of 1100 lbs at a 10:1 design factor.
- 5.2 Attachment from the Manufacturer's loudspeaker rigging frame to the SFA-16-1100 shall be made with forged anchor shackles (Sizes 3/8" through 3/4" will fit; in most cases provided by Polar Focus). You must also be aware of the WLL of the supporting structure, and any other load bearing elements in the speaker system you

are using or installing. A chain of rigging products is only as strong as its weakest link. Never exceed the WLL of any rigging component or device!

## 6.0 Installing an SFA-16-1100:

- 6.1 Determine approximate center of gravity (C.O.G) of the array, and what point on the manufacturer's rigging frame will be directly above it when the array is at the desired tilt angle. It is recommended to use the loudspeaker manufacturer's line array software to calculate this for you.
- 6.2 Locate mounting holes on the array frame in front of, and behind the C.O.G point to mount the SFA-16-1100. Measure the distance between the points, and adjust the rear fitting on the threaded rods so the points on the SFA-16-1100 match the measured distance. (See Image 1-1)



Image 1-1

- 6.3 Connect the SFA-16-1100 to the array frame using the appropriate size shackles.
- 6.4 Connect your upper attachment to the center fitting on the SFA-16-1100 using the provided 7/16" or 9/16" bolt and hardware. Depending on which type of rigging frame you are using, you will either have a nylon locknut, or a regular nut and a linchpin. Tighten either nut down to the bottom of the thread and install linchpin through hole in bolt (if applicable). In the photo below, we're using a Zbeam® Lariat (ZB-Lariat1100-B; See Image 1-2). In many cases, the top of your SFA-16-1100 arrives assembled to the next component above it.



Image 1-2

- 6.5 Attach the loudspeakers to the array frame following the manufacturer's installation documents.
- 6.6 When the entire array is built, raise it off the floor and rest an inclinometer on the array frame or top speaker to check the tilt angle. If the angle of the array is too steep adjust the center fitting of the SFA-16-1100 forward; if it's too shallow, adjust the fitting rearward.

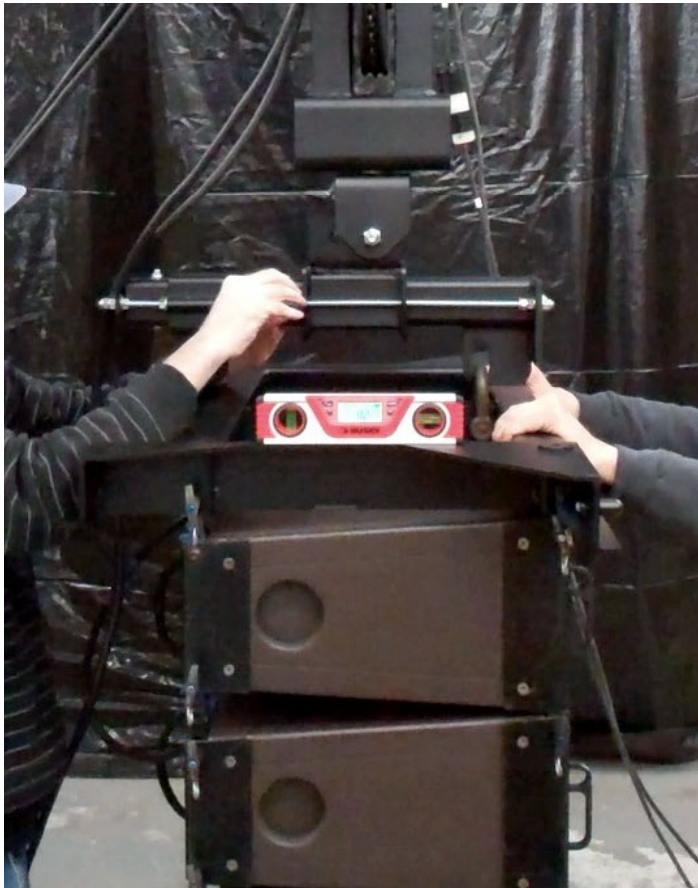


Image 1-3

- 6.7 Double check all hardware is secured properly and all shackles have steel wire tie safety. Fly the array to the desired height. (See Image 1-4) For permanent installations,

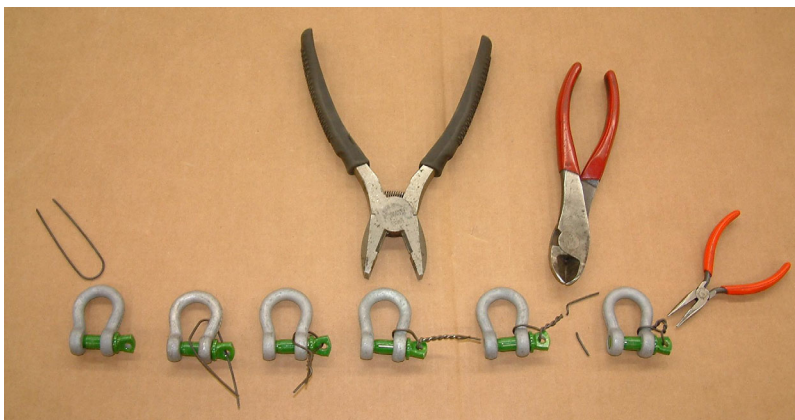


Image 1-4

**7.0 Service and Replacement Parts:**

7.1 In case service is required, call 413-586-4444 to determine if parts are needed, or to get a return authorization number before sending your package.

**8.0 Warranty:**

8.1 Polar Focus® warrants for two years from the date of shipment that all our products are free from defects in craftsmanship or parts. Warranty repairs are made at our warehouse location in South Deerfield, Massachusetts USA. This warranty covers only the cost of repair or replacement of those products, at our discretion. Damages to our products from impacts, abrasion, shock loads, or overloading are not covered under this warranty. Polar Focus is not responsible for incidental or consequential damages caused by misuse of our products.

**Product Datasheet Link**



**Product Web Page Link**

