

# **ZB-Lariat1100 Instruction Manual**



The ZB-Lariat1100 with an <u>SFA-16-1100</u> (Sold separately)

The ZB-Lariat1100 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 patented 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:

1

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.nsca.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 using 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 operation. Do not use 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 ZB-Lariat1100 Safety Rules:

- 5.1 <u>Do not exceed working load limits (WLL)</u>. The ZB-Lariat1100 will support a total load of 1100 lbs at a 10:1 design factor.
- 5.2 Attachment from the loudspeaker manufacturer's loudspeaker rigging frame to the ZB-Lariat1100 shall be made with forged anchor shackles (Sizes 3/8"-3/4"; 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. <u>Never exceed the WLL of any rigging component or device!</u>

#### 6.0 Installing a ZB-Lariat1100:

6.1 Attach the ZB-Lariat1100 to the "TA" fitting on the Polar Focus® rigging frame, 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). The ZB-Lariat1100 is designed for use in conjunction with a variety of Polar Focus rigging products; in this example we have used the SFA-16-1100. (See Image 1-1)



Image 1-1

- 6.2 Attach the eyebolt at the top of the ZB-Lariat1100 to the hook of the chain hoist. Continue to assemble your speaker array according its manufacturer's instructions.
- 6.3 Determine suitable structure in which you can run the tie line off to. Structures that are welded or bolted to the venue, catwalks, etc. are *usually* a good choice for a tie-off point. Things with wheels (amp racks, forklifts, etc), portable staging/truss, and anything that requires your tie-off the pass through a busy travel route for equipment/personnel are *usually* a bad idea. It is critically important to consult the Rigging Supervisor, Production Manager, or the Technical Supervisor for both the touring act <u>and</u> the venue to determine suitability for a tie-off location. If inappropriate tie-off locations are used, personnel and/or equipment can be "clothes-lined" by the rope and a shock load can be applied to the tie-off structure, potentially causing damage to it, and injury to personnel.

6.4 With the array assembled and flying just off the ground, rotate the ZB-Lariat1100 arm so that it's face is perpendicular to the direction your tie line will be running. Connect the end of the tie line to the pear ring on the rope bridle of the ZB-Lariat1100. (See image 1-2)



Image 1-2

6.5 Attach the rope to the tie-off structure. We recommend using a "trucker's hitch" for this connection If you are unfamiliar with the "Trucker's hitch", scan the QR-Code below (or click it if viewing this document in digital form) to view a short video instruction on how to tie it.



Image 1-3

4



QR-Code link to a video showing a trucker's hitch.

6.6 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 <u>forward</u>; if it's too shallow, adjust the fitting <u>rearward</u>. (See image 1-4)



Image 1-4

6.7 Double check all hardware is secured properly. All shackles shall have steel wire tie safety for permanent installations. (See Image 1-5) Fly the array to the desired height. Loosen the trucker's hitch to prepare for raising the cluster. When raising the cluster is at the correct height, re-tighten the trucker's hitch at the tie off.



Image 1-5

6.8 Apply as much tension to the trucker's hitch as possible without pulling the cluster out of plumb. Ensure rope passing through personnel/equipment paths is clearly visible and tagged for safety. (See Image 1-6)





## 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<sup>®</sup> 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



