

AHSUB15-BSG

AH Series Stadium Subwoofer



**Atlas
Sound**

1601 Jack McKay Blvd. • Ennis, Texas 75119 U.S.A.
Telephone: 800.876.3333 • Fax: 800.765.3435



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SAFETY INSTRUCTIONS

Please Read Carefully Before Installing or Operating

- Read all instructions carefully
- Heed all warnings
- Assure that the speaker is securely mounted

Hearing Damage

CAUTION: All professional loudspeaker systems are capable of generating very high sound pressure levels. Use care with placement and operation to avoid exposure to excessive levels that can cause permanent hearing damage.

SUSPENSION & MOUNTING

Suspension or "flying" speaker systems requires training and expertise. Improper rigging of a flying speaker may result in injury, death, equipment damage, and legal liability. Installation **must** be carried out by fully qualified installers, in accordance with all required safety codes and standards at the place of installation.

A **5:1** design factor is a generally accepted minimum standard. However, legal requirements for overhead suspension vary by municipality, please consult your local safety standards office before installing any product. We also recommend that you thoroughly check any laws and bylaws prior to installation.

Loudspeakers flown in theaters, nightclubs, conference centers, or other places of work and entertainment must be provided with an independent, correctly rated and securely attached secondary safety — in addition to the principle suspension point(s). This secondary safety must prevent the loudspeaker from dropping more than (6") should the principle suspension device fail. If you lack the skills, training, and proper ancillary equipment to fly a speaker system, do not attempt to do so.

For additional information regarding the suspension of loudspeakers or to purchase rigging materials, please contact our friends at
ATM Group, Inc., 1635 E. Burnett St. Signal Hills, CA 90755.
www.atmflyware.com
Telephone (562) 424-1100 and Fax (562) 424-3520

- Always assure power is off to amplifiers before making any connections
- Assure that all electrical equipment is properly grounded
- Keep instructions for future reference
- Should any questions arise after reading this document, please call Atlas Sound Tech Support at 800-876-3333



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AH SERIES STADIUM SUBWOOFER SYSTEMS

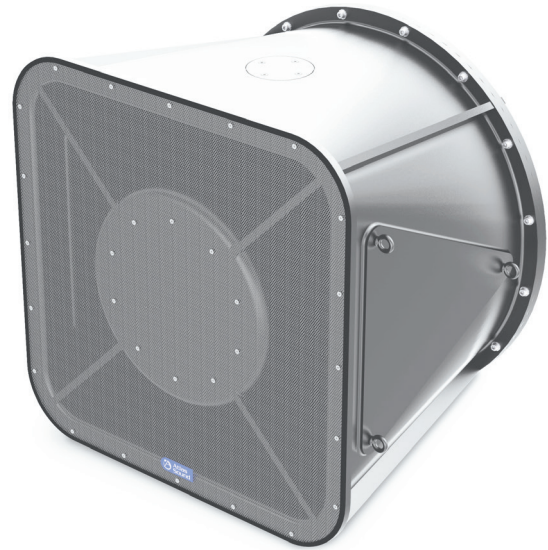
Thank you for your purchase of an Atlas Sound AH Series loudspeaker system. We have designed this product to be a reliable and versatile solution to your needs for years to come.

The AHSUB15-BSG subwoofer system features high output and amazing low frequency response for indoor and outdoor applications including football stadiums, sports arenas, baseball fields, and large auditoriums.

Unit features an efficient low frequency woofer loaded into a durable, weather resistant, rear firing enclosure

FEATURES

- Impressive efficiency rating of 103dB 1Watt/1Meter makes the AH series a perfect choice for low frequency augmentation of high energy music playback at sporting events.
- Weather & rodent resistant. Rear firing woofer cavity and mesh screen over the enclosure front protects the speaker from weather and/or rodent damage.
- Easy installation. Secure surface mounting or suspension installation is possible via the integral forged eyebolts.



AHSUB15-BSG
(Front and Back View)



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GROUND INSTALLATION

General considerations and hardware recommendations

Excellent results may be achieved by mounting the AHSUB15-BSG under bleacher seating. Electronic delay is suggested to approximate time alignment of full range speakers with subwoofer(s) to the listener locations.

CAUTION: The AHSUB15-BSG weighs 181 pounds (82.1kg). A fall from almost any height could result in serious injury or death. Assure that the speaker is firmly mounted to an object that can handle the weight. For on ground installation a 36" square 2" thick (minimum) concrete pad is suggested. If this pad is to be poured concrete, rebar anchors are suggested to allow chain or cable securing of the AHSUB15-BSG for theft resistance.

Overhead Suspension Installation

Remember that wind will add considerable torque to the point of attachment. The mounting surface the speaker is being attached to should be able to handle five or more times the weight of the AH speaker (7x recommended for locations subject to high wind forces).

The installer must ensure that the surface is capable of safely and securely supporting the load. The hardware employed must be safely and securely attached both to the loudspeaker and the surface in question. A general rule for soft surface installations (wood beams) is to multiply the corresponding working load limit by 75%: the result will be an approximate working load strength.



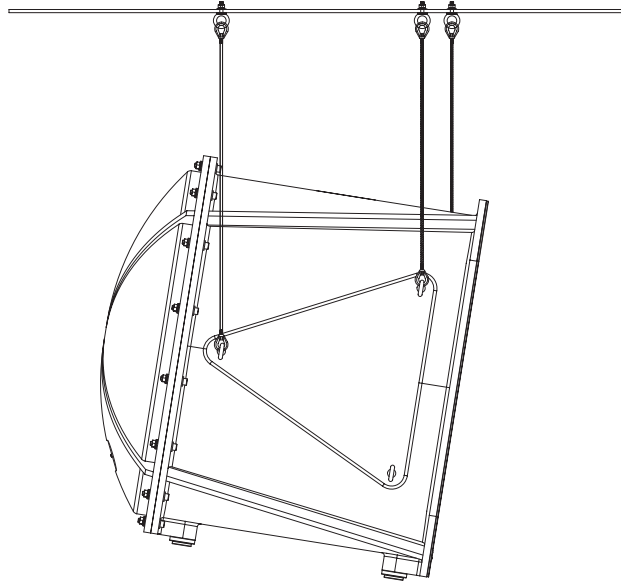
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SUSPENDED INSTALLATION VIA EYEBOLTS (INCLUDED)

Using 1/4" Diameter Wire Rope

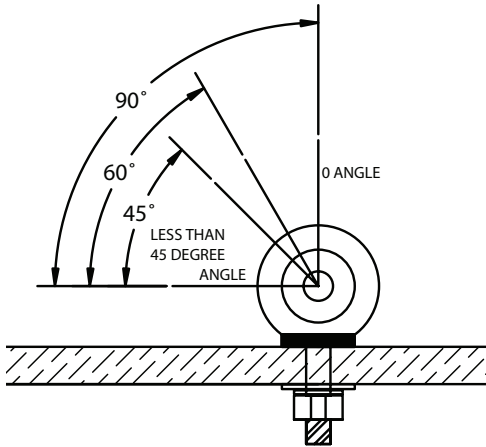


Note: Use of 1/4" load rated wire rope is suggested to provide a static working load limit of 1400lbs (635kg) and moving load limit of 875lbs (397kg) per point. 1/8" cable is not recommended as load limits are reduced to 400lbs (181kg) static, and 250lbs (113kg) moving.

Considerations for overhead suspension using AH Series eyebolts and wire rope:

- 1. Always apply the load to the eye in the plane of the eye.
2. Always use shoulder eyebolts for angular lifts.
3. Always tighten eyebolts securely against the load.
4. Apply first load to test the assembly. This load should be of equal or greater weight than the loads expected in use.
5. Use wire rope compression fittings & thimbles whenever possible and prepare terminations only as instructed by the manufacturer.
6. If wire rope clips are used, check and retighten to the manufacturer's recommended torque.

Table with 2 columns: Angle and Working Load Limit. Rows include 90 degree (650lbs/295kg), 60 degree (420lbs/191kg), 45 degree (195lbs/88kg), and Less than 45 degree (160lbs/73kg).



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SPEAKER CABLE RECOMMENDATIONS AND CONNECTION INSTRUCTIONS

Wire Gauges

For very short distance speaker cable runs (less than 25') #16-gauge, stranded, twisted pair speaker cable may be used. For speaker cable runs between 25' and 75', #14-gauge, stranded, twisted pair speaker cable is recommended. For speaker cable runs greater than 75', #12-gauge, stranded, twisted pair speaker cable is necessary. For runs exceeding 150', please contact tech support for proper wire gauge.

Input connections are provided on a convenient recessed terminal block located on the bottom of the loudspeaker. This terminal block includes a clear weather resistant cover which should be re-installed after terminating the speaker cabling to prevent corrosion in outdoor applications.

Allow an adequate service loop for this connection to allow tilt of the loudspeaker. If the speaker is tilted above parallel to the ground, water may collect in the speaker cabinet causing damage — the product should not be installed tilted upwards!



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AMPLIFIER CONSIDERATIONS

Consult your amplifier owner's manual to confirm power output at the rated impedance.

The **AHSUB15-BSG** exhibits an 8 Ohm (nominal) impedance.

(x2) AHSUB15-BSG paralleled will present a 4 Ohm load to the amplifier.

(x3) AHSUB15-BSG paralleled will present a 2.66 Ohm load to the amplifier.

(x4) AHSUB15-BSG paralleled will present a 2 Ohm load to the amplifier.

ATLAS SOUND speaker system specifications list **RMS power** handling.

As a reference, **peak power = RMS x 1.414**.

These ratings should be considered in selecting the best amplifier to power the speaker system.

For general use, amplifier output should match or exceed the **RMS rated power** of the speaker system (250 Watts).

For increased headroom and dynamic reproduction, the amplifier's output should match or exceed the **peak power** rating of the speaker system (354 Watts).

In situations where experienced professionals are operating the speaker system with proper limiting and frequency control devices inserted into the signal path and adjusted properly, amplifier output may meet, **but should not exceed 2x the RMS** power rating of the speaker system (500 Watts).

Utilizing the Atlas Sound model CP700 power amplifier will allow you to easily match required power ratings for most any installation. Visit www.AtlasSound.com for more details on this product.



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SPECIFICATIONS

MODEL	POWER RATING RMS	FREQUENCY RES. ± 5 dB	SOUND LEVEL		DISPERSION	IMPEDANCE	DIMENSIONS	WEIGHT
			RP/1M	1W/1M				
AHSUB15-BSG	250 Watts RMS	55Hz to 120Hz	127dB	103dB	Omni	8 Ohms	30.56"H (776mm) 30"W (762mm) 28.1"D (714mm)	181 lbs (82.1kg)

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
There is no sound	Power off. Equipment setting is wrong. Volume set too low.	Assure that power is applied to all equipment in system. Check that routing (input/output) controls are set correctly. Check that volume level is above minimum.
	Loose connection.	Check system from start to finish for crossed wires, loose connection, etc. On the AH location check for correct connection.
Low sound level	Setting/volume control is set too low. Connection is shorted or bad.	Check volume levels or amplifiers and related equipment (equalizer). Check that connections aren't partially shorted/corroded.
Sound cuts in and out	System overload/oscillation intermittent connection.	Check for overload condition or bad connection.
Distortion at increased levels	Amplifier/speaker overdriven.	Check that power to speaker isn't over limits. Check that amplifier isn't overdriven. Reduce power to amplifier slightly.
Speaker makes "buzzing" noise	Hardware loose or speaker damaged.	Make sure speaker grille is tight. Check other hardware connections. Check speakers for loose parts or speaker damage.

Call Atlas Sound tech support at 1-800-876-3333 with any additional questions.



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Limited Warranty

All products manufactured by Atlas Sound are warranted to the original dealer/installer, industrial, or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. "This warranty shall extend from the date of purchase for a period of three years on all Atlas Sound products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty." Atlas Sound will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our return policy set forth below. When products returned to Atlas Sound do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any non-warranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLAS SOUND SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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