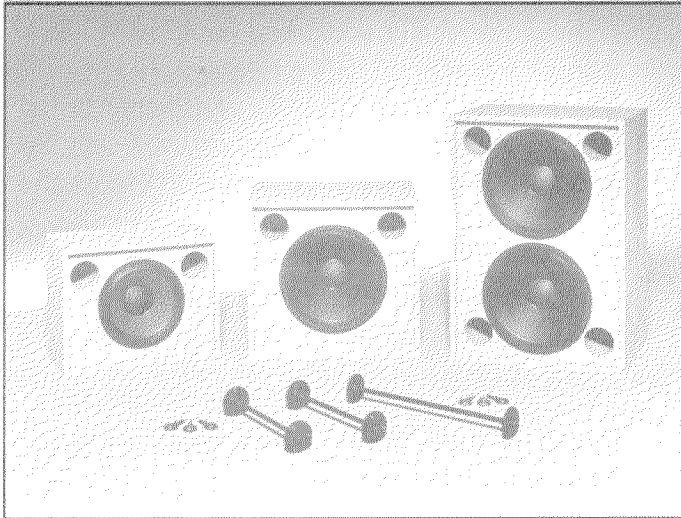




# ASK Series AcoustaBASS™ Suspension Kits



## PRIMARY SPECIFICATIONS

**Material:** Zinc casting  
Structural steel tubing  
Forged steel eyebolts

**Enclosures Supported:** AB2200, AB4500, AB8500

**Tool Requirements:** 3/4 in. socket wrench  
1 3/4in. hole saw  
#8 wood drill  
#10 Phillips-head screwdriver

**Strength Rating:** In Tension = 375 lbs  
In Shear = 175 lbs  
Please refer to "Strength Rating" section for full details.

**Maximum Enclosures Supported:** 3

## KEY FEATURES

- ★ Certified Design
- ★ Flexible Orientation
- ★ Easy Installation
- ★ Safe
- ★ Precision Machined

## CAUTION

For safe suspension of enclosures it is very important that these instructions are followed and all fasteners are correctly attached.

## DESCRIPTION

The Altec Suspension Kits [ASK] are a mounting system specially designed to provide the installer with a certified, yet flexible, system of suspending single or multiple Altec Lansing Enclosures. The ASK system has been professionally engineered to be quickly and easily installed by any Altec Lansing Contractor.

It is the contractor's responsibility to ensure that the uppermost anchor locations have the capability to safely suspend any item from them.

The initial support cables or chains should be as close to vertical as possible and never more than 30° from vertical. None of the hanging chains or cables should touch or rub against the enclosure.

Local codes and regulations, if they exceed Altec Lansing's recommendations should be followed at all times. Altec Lansing recommends that a safety

factor of at least 5:1 be adopted when suspending Loudspeaker Enclosures and ancillary equipment overhead. The conservative design of all ASK systems ensure this requirement is exceeded when they are installed and used correctly. In addition Altec Lansing recommends that all suspended items be inspected at least once a year and any damaged or suspect parts be replaced immediately.

Common principles are followed in all the ASK systems. The first is to put minimum stress on each enclosure. The second is to make each enclosure hang independently of any other.

There are two ways to use the Altec Lansing ASK systems.

### 1. SINGLE ENCLOSURES

A single enclosure with a net weight of less than

175 lbs (80 Kg) may be suspended using this method.

A structural steel tube passes horizontally through the enclosure and is secured to it via two oversize cast brackets. Two commercial cold forged eyebolts are then screwed into the bracket so suitably rated chain or aircraft cable can be attached to suspend the enclosure.

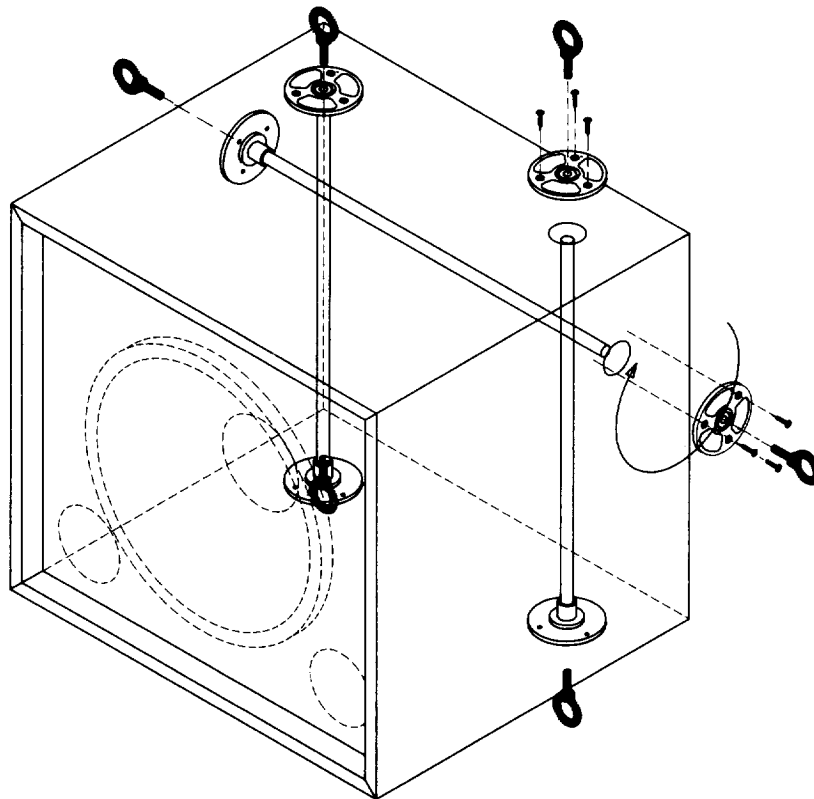
## 2. MULTIPLE ENCLOSURES

Multiple enclosures with a combined weight of less than 750 lbs (340 Kg) can be suspended using this method. No individual cabinet should weigh more than 200 lbs.

Two structural steel tubes pass vertically through the enclosure and are secured to it via four oversize cast brackets. Commercial cold forged eyebolts are then screwed into the brackets so suitably rated aircraft cable or chain can be attached.

Suitably rated shackles or threaded chain connectors can be used to attach the chain or aircraft cable. If Aircraft cable or wire rope is used it is possible to use 3/8-16 bolts and washers to attach them to the bracket. If this method is used a thimble must be used to protect the cable. Do not crush or distort the cable. Altec Lansing does not recommend this method for suspending multiple enclosures. It can be used to suspend a single enclosure and as a means to attach the "pull up" strap. The eyebolt is the preferred method of suspension.

When a single enclosure is suspended, the center of gravity of the enclosure is arranged so the bottom of the enclosure moves forward relative to the top ( the driver is directed towards the ceiling) This means that in order provide a downward projection angle a force must be applied to the bottom of the enclosure. A 3/8-16 threaded insert is provided to allow this.



Model Name	Single Enclosure		Multiple Enclosures*	
	Horizontal	Vertical	Horizontal	Vertical
AB2200	ASK-4000	ASK-500	ASK-500	ASK-400
AB4500	ASK-300	ASK-400	ASK-400	ASK-300
AB8500	ASK-300	ASK-100	ASK-100	ASK-300

\*2 ASK kits needed per cabinet

## STRENGTH RATING

Each individual **ASK** system is conservatively rated at 375 lbs when used in tension. Two **ASK** kits are needed to suspend multiple cabinets so a working load of 750 lbs is obtained. In shear each system is rated at 175 lbs.

In other words an individual cabinet not exceeding 175 lbs can be suspended using one **ASK** kit horizontally.

If multiple cabinets are to be suspended, two **ASK** kits are needed, per cabinet. The steel tubes run top to bottom. The eyebolts must be connected using a suitably rated connectors such as shackles, threaded chain connectors or aircraft cable. The

load is calculated by adding the combined weight of all suspended equipment. Altec Lansing recommends that no more than three cabinets are strung together using **ASK** kits, even if the designated weight limit is not exceeded. These are working limits and should not be exceeded under any circumstances. Include horns, drivers and any additional equipment when calculating the load.

The **ASK** kits have been independently tested and certified at these load limits when used with the "AB series " range of cabinets and installed in the following manner.

## MOUNTING PROCEDURE

1. A template is provided with each cabinet to show the different hole locations. Decide on the appropriate hanging method depending on number of cabinets and weight. Mark hole positions on cabinet.
  2. Use 1-3/4 inch Hole Saw to cut holes in cabinet at the designated positions.
  3. Screw threaded tube firmly into hanging bracket.
  4. Pass tube through cabinet.
  5. Screw remaining hanging bracket onto exposed thread of tube. Screw down firmly using nut head and socket spanner.
  6. When tight use #8 drill to drill 6 holes into the cabinet through the holes in the bracket.
  7. Screw in six wood screws.
  8. Test cabinet does not leak from hanging bracket by applying sine wave to cabinet.
- Please refer to the individual products Specification Sheet to see if any special procedures should be followed.

## CONTRACTOR REQUIRED EQUIPMENT

3/4 in socket wrench  
1 3/4 in hole saw

#8 wood drill  
#10 Phillips head screwdriver

## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The suspension system shall be certified by an independent Structural Engineer and be fully integrated with the enclosure design. It shall consist of threaded, structural, thick wall steel tubing and specially cast Zinc brackets with precision machined threads. The structural steel

tube shall pass through the enclosure. The Zinc brackets shall be threaded onto the steel tubing and screwed into the enclosure using no less than six high tensile corrosion resistant screws. Individual enclosures can be suspended using one system per

enclosure. The suspension of multiple enclosures shall require the use of two systems per enclosure. The system shall include 3/8-16 forged eye-bolts. When used in shear it shall be capable of suspending 175 lbs with a safety factor exceeding 5:1. When used in tension and in pairs it shall be capable of suspending 750 lbs with a safety factor exceeding 5:1. The system shall allow the enclosure to be aimed with an infinite number of angular variations. The system shall be the Altec Lansing **ASK** system.

### WARNING

Altec Lansing does not take any responsibility for the misuse of this product and is not liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion

or limitation of incidental or consequential damages so this limitation may not be applicable. If this product is used outside the United States of America local and/or national regulations may apply.

PATENT PENDING



a MARK IV company

P.O. BOX 26105 ● OKLAHOMA CITY, OK 73126-0105 ● U.S.A. ● (405) 324-5311 or FAX: (405) 324-8981  
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