

# **PM Series**

## ***Pendant Mount Loudspeakers***

### **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:**

This professional loudspeaker systems is 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.

- 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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#### **Installation Via Mounting Cables (Included)**

##### **General considerations and hardware recommendations**

**CAUTION:** PM series models weigh as much as 21 pounds (7.9kg) – model PM8CX. 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 of the PM speaker. The mounting surface the PM speaker is being attached to should be able to handle five or more times the weight of the PM speaker

The hardware employed must be safely and securely attached both to the loudspeaker and the structure in question, using only the mounting holes. A general rule for soft surface installations (wood beams) is to multiply the corresponding working load limit by 75%: the result will be approximate working load strength. Use thread locking compound for all installations.

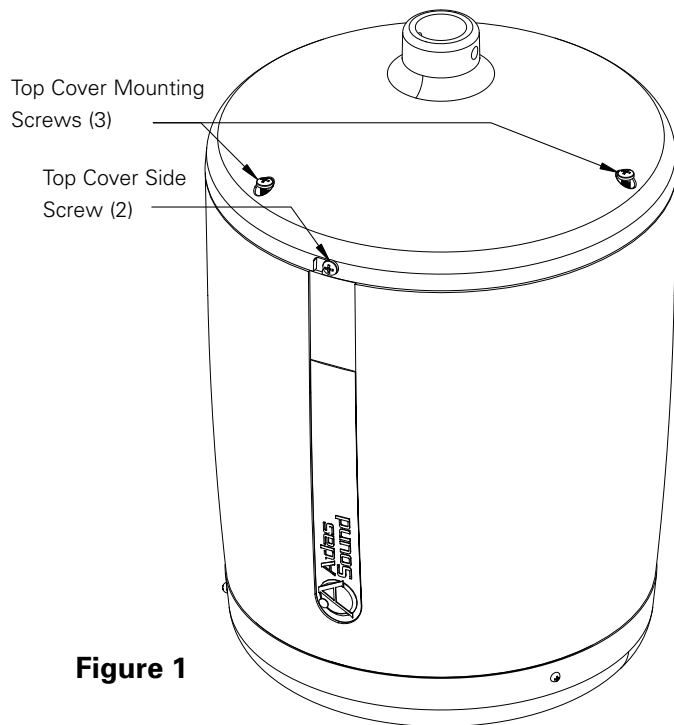
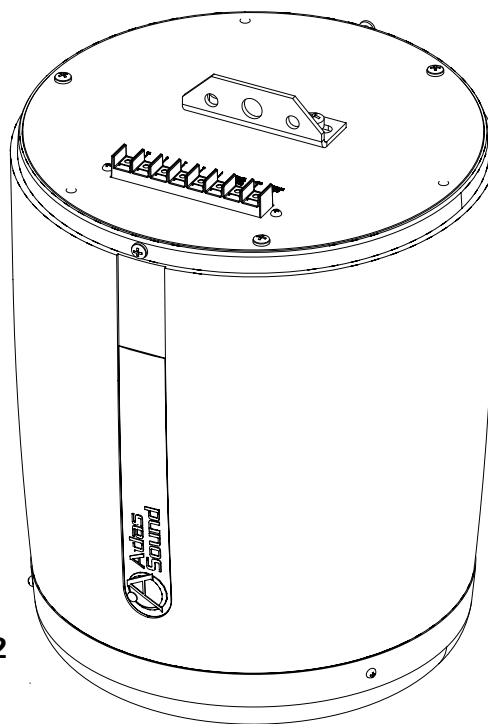
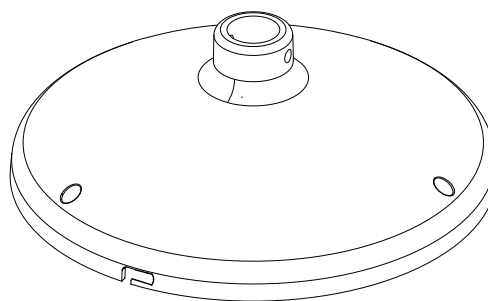
**CAUTION:** Mounting the PM loudspeaker may require two people.

**When in doubt contact a qualified structural/mechanical engineer for approval of the mounting materials and methods.**

1. Remove the 3 top cover mounting screws, loosen the 2 side top cover screws rotate the top cover counterclockwise, and pull up to remove the top cover. (Fig 1 and 2)
2. Locate suitable support structure in the area the speaker is to be installed.
3. Route the bare end of the main support cable through the included clamp, then around the mounting structure, and back through the clamp. (Fig 3 and 4)
4. Adjust the cable length in the clamp so that the eyelet end of the cable is at the final height above the floor. (Fig 5)
5. (For PM8) Route the eyelet end of the main support cable through the top cover of the PM speaker, attach the included carabiner clip to the eyelet and the large mounting hole on the back of the PM speaker. (Fig 6a) (For PM4) Route the eyelet end of the main support cable through the top cover of the PM speaker, attach the eyelet to the large mounting hole on the back of the PM speaker using included mounting screw. (Fig 6b)
6. Repeat steps 1-4 for the safety cable and attach it to one of the smaller mounting holes on the support plate of the PM speaker with the included mounting screw. (Fig 6)
7. Route the speaker cable through the top cover and connect to the appropriate terminals.
8. Position the top cover over the side cover screws and rotate the cover clockwise to align the top cover mounting screw holes. Reinstall the 3 mounting screws, tighten and tighten the side cover screws.
9. Slide the top hole plug over the main support cable, safety cable, and speaker cable using the opening on the side of the plug. Then slide the plug down the cable and into the top cover hole. (Fig 7 and 8)

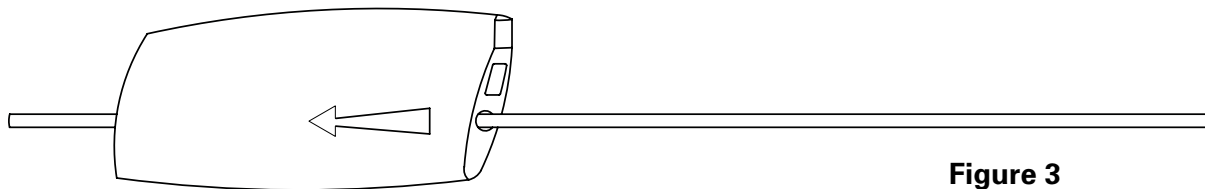
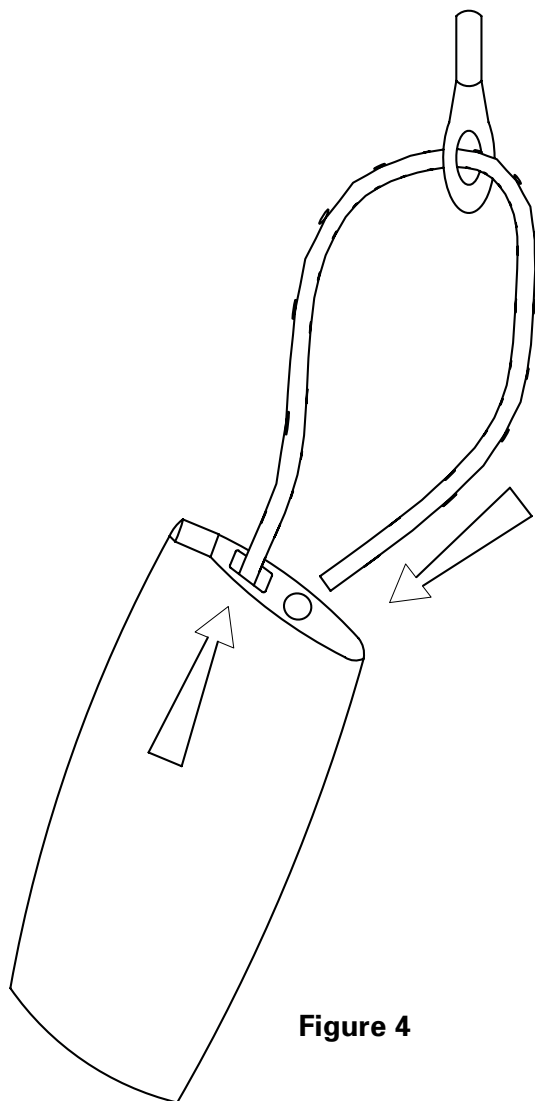
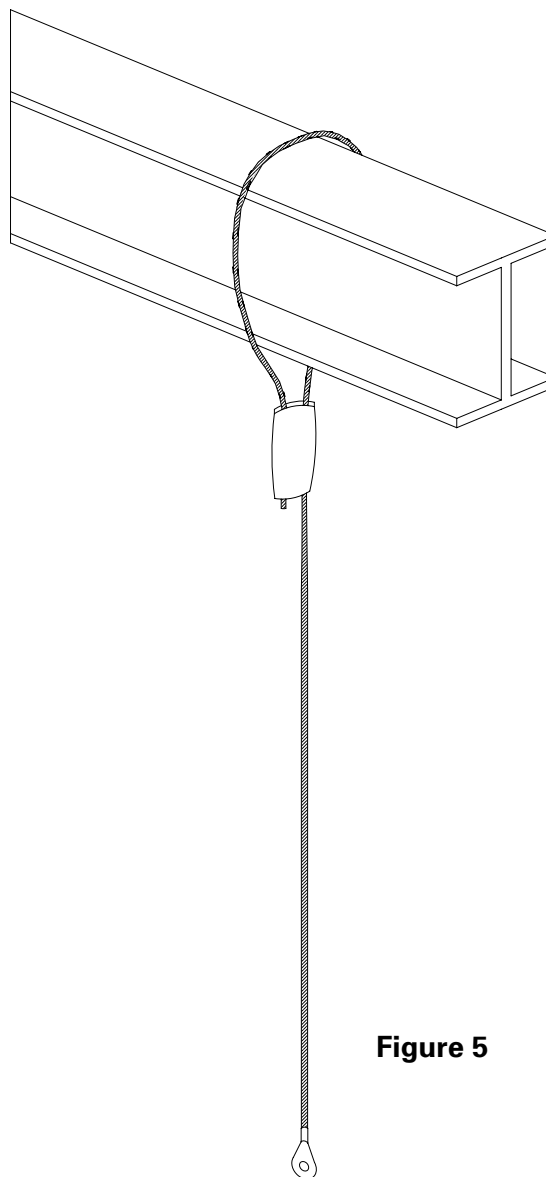
*Note: If the speaker is being installed outdoors, seal plug with RTV silicone to prevent moisture from entering speaker.*

# **PM Series** *Pendant Mount Loudspeakers*


**Figure 1**

**Figure 2**

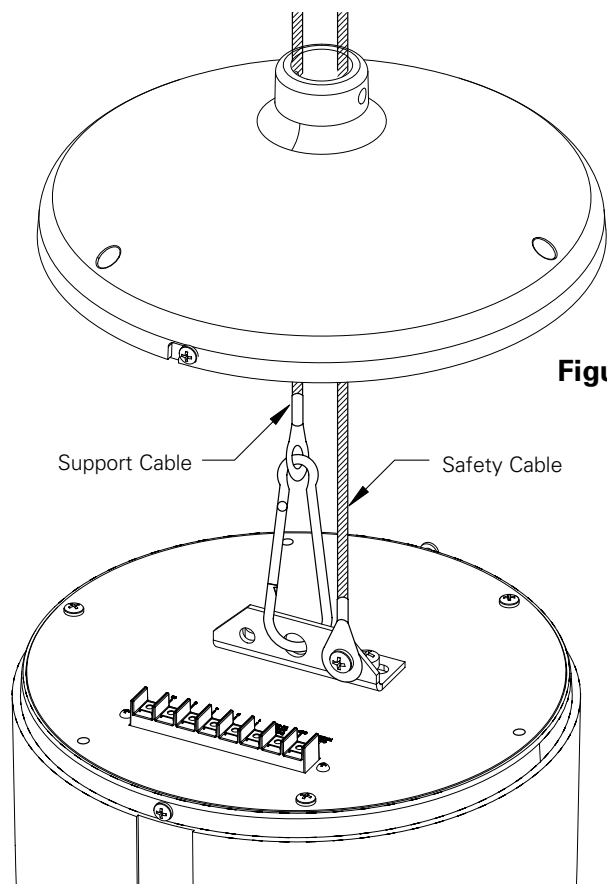
## PM Series

### Pendant Mount Loudspeakers

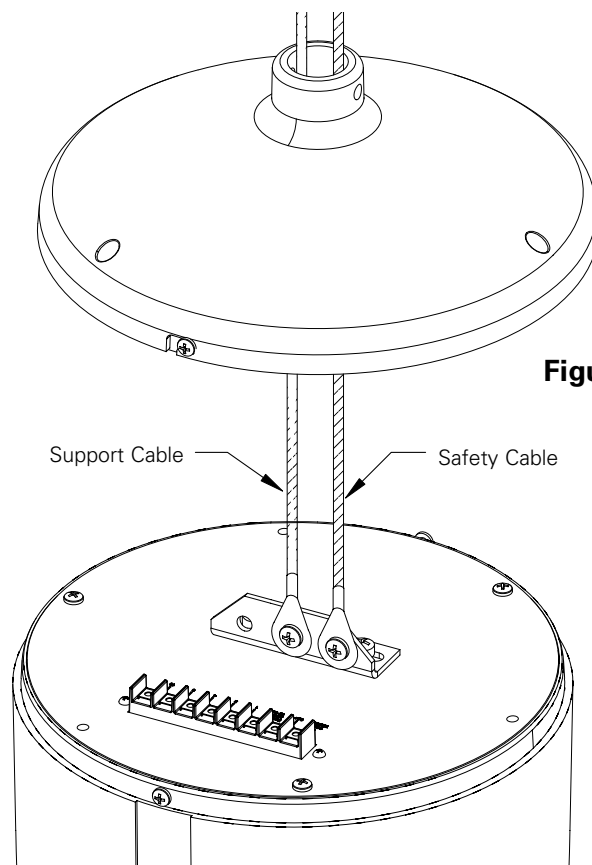

**Figure 3**

**Figure 4**

**Figure 5**

## PM Series

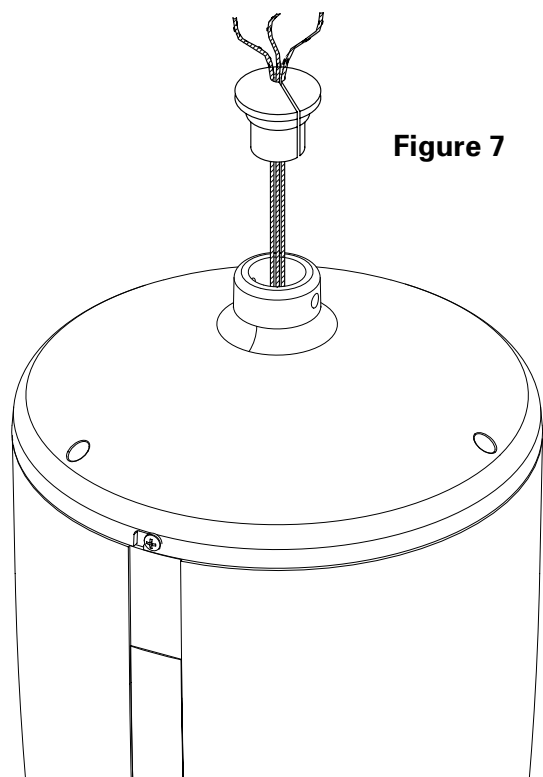
### Pendant Mount Loudspeakers



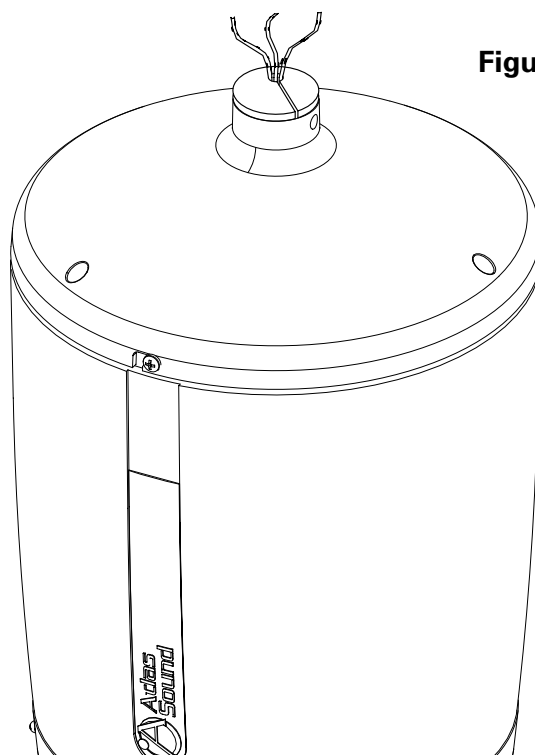
**Figure 6a**



**Figure 6b**



**Figure 7**



**Figure 8**

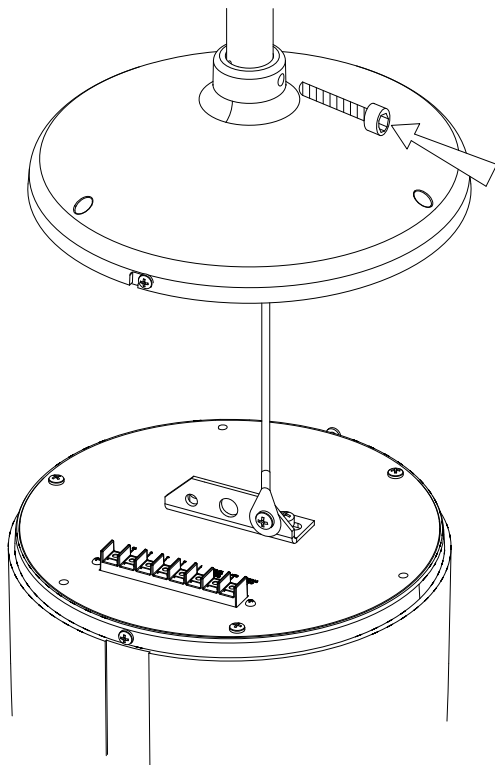
## PM Series

### Pendant Mount Loudspeakers

#### Suspended Installation Via Down Pipe (Not-Included) Using 3/4" Diameter Ceiling Fan Hardware

Atlas Sound's PM series speaker may also be installed using industry standard ceiling fan hardware. This hardware is available at most local hardware stores. Using this type of installation allows speaker cable and safety cable to be concealed with the down pipe providing a very clean installation.

1. Remove the 3 top cover mounting screws, loosen the 2 side top cover screws rotate the top cover counterclockwise, and pull up to remove the top cover. (Figure 1 and 2)
2. Locate suitable support structure in the area the speaker is to be installed.
3. Mount the ceiling mount canopy and down pipe per manufacturer instructions.
4. Screw the PM speaker top cover onto the bottom of the down pipe, install the safety screw through the side of the top cover and through the end of the down pipe. (Figure 9)
5. Route the bare end of the safety cable through the included clamp, then around a suitable support structure, and back through the clamp. (Figure 3 and 4)
6. Route the eyelet end of the safety cable through down pipe and the cover of the PM speaker, attach the eyelet to one of the smaller mounting holes on the support plate of the PM speaker with the included mounting screw. (Figure 9)
7. Route the speaker cable through the down pipe and connect to the appropriate terminals.
8. Position the speaker under the top cover, align the side cover screws and rotate the speaker clockwise to align the top cover mounting screw holes. Reinstall the 3 mounting screws, tighten and tighten the side cover screws. (Figure 9)



**Figure 9**

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### Troubleshooting

| PROBLEM                        | POSSIBLE CAUSE                                                          | REMEDY                                                                                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| There is no sound              | Power off. Equipment setting is wrong.<br>Volume set too low.           | Assure that power is applied to all equipment in system.<br>Check that routing (input/output) controls are set correctly.<br>Check that volume level is above minimum. |
| There is no sound              | Loose connection.                                                       | Check system from start to finish for crossed wires, loose connection, etc. On the PM location check for correct connection.                                           |
| Low sound level                | Setting/volume control is set too low.<br>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.                                                 |

