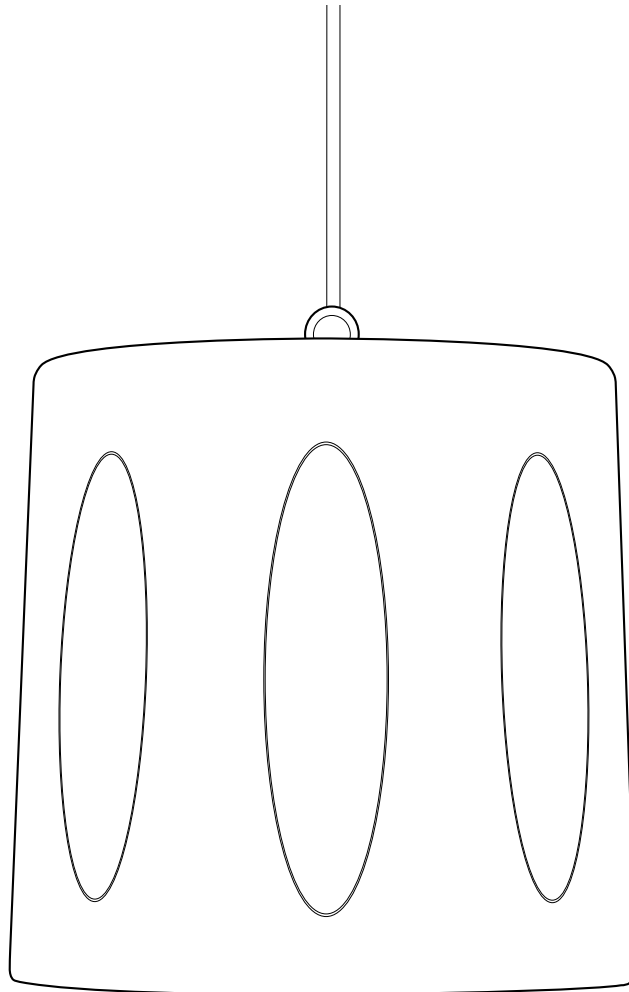




PENDANT83 SPEAKER INSTALL GUIDE



**Preparation:**

**Tools For Installation**

- Pencil
- Drill
- Tape Measure
- Wire Cutter
- Phillips Screwdriver
- Utility Knife
- Safety Eye Wear
- Gloves

**Speaker Wire Guide**

- 18AWG minimum - for distances up to ..... 10 ft
- 16AWG - from ..... 10 to 50 ft
- 14AWG - from ..... 50 to 100 ft

**Considerations**

- Where is the best place to install the speakers?
- Where do the speakers sound the best?
- Separate the speakers 6 - 10 feet apart.

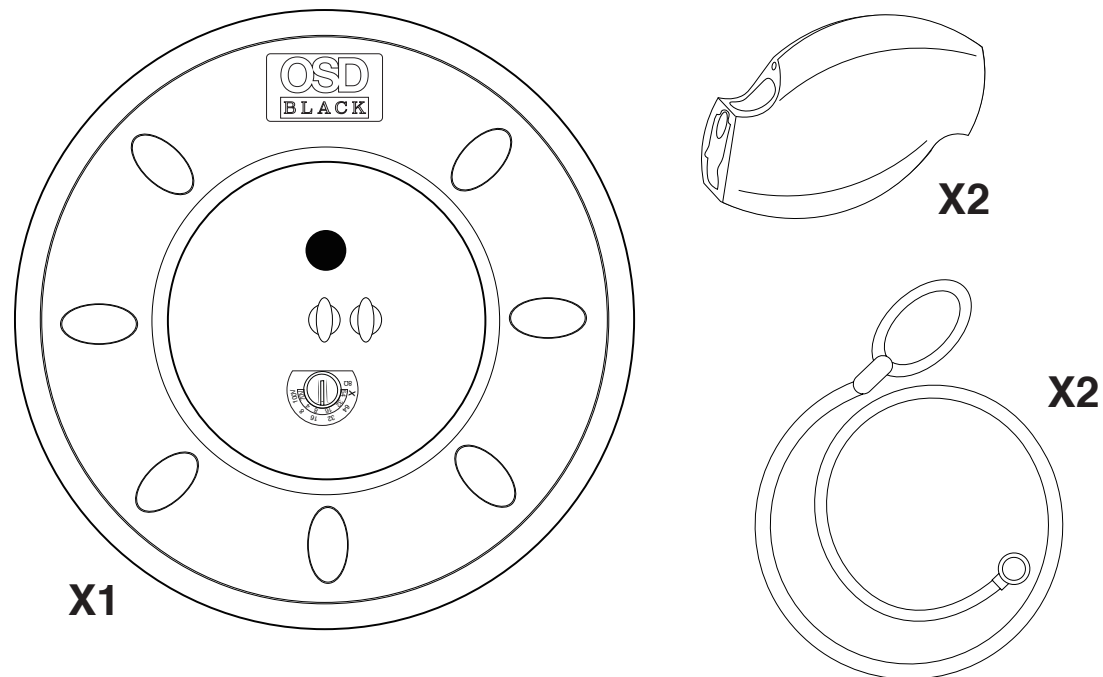
**Introduction**

The PENDANT83 was designed for high ceilings and open space environments. Featuring a 1-inch aluminum dome tweeter and an aluminum grille. The PENDANT83 also comes with a built in 70V/100V/8Ω selector.

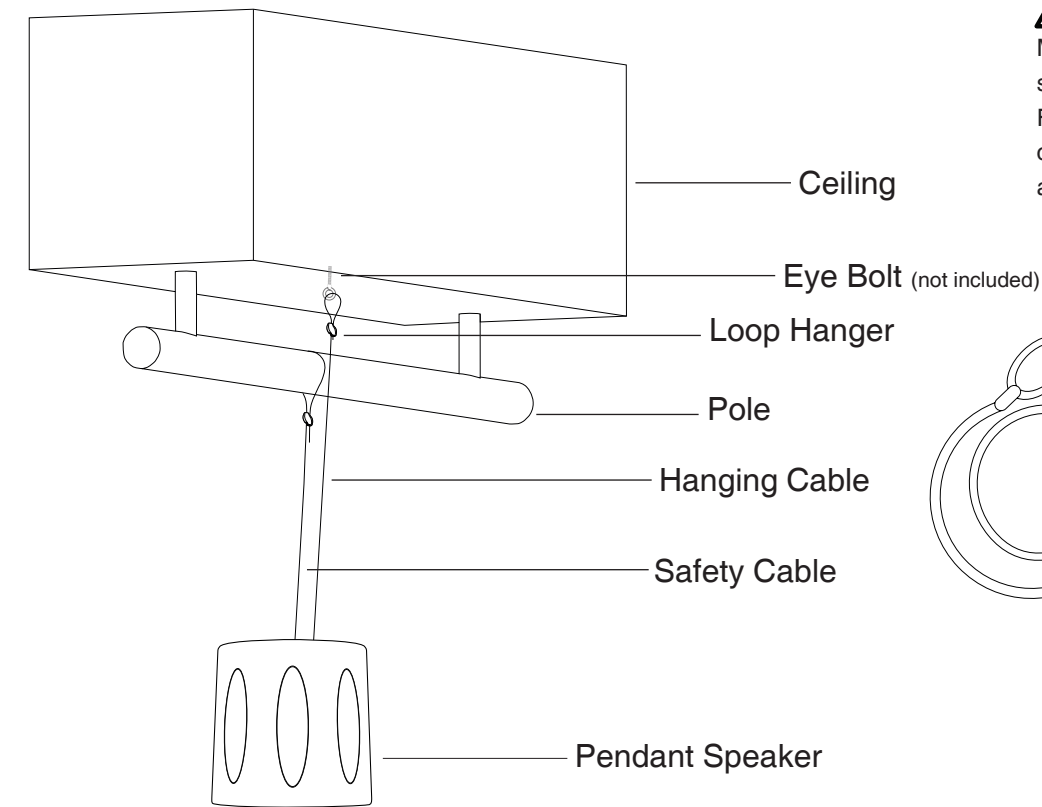
**Features**

- 8 inch PP Cone Woofer
- 1-Inch Aluminum Dome Tweeter
- 70V/100V/8Ω Selectable
- UV Resistant PP Enclosure
- Aluminum Grille
- Can be Painted to Match Decor
- Additional Safety Cable Included

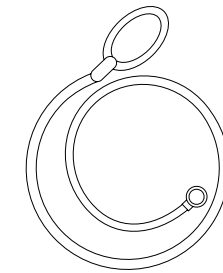
**Included**



**Hanging Options**



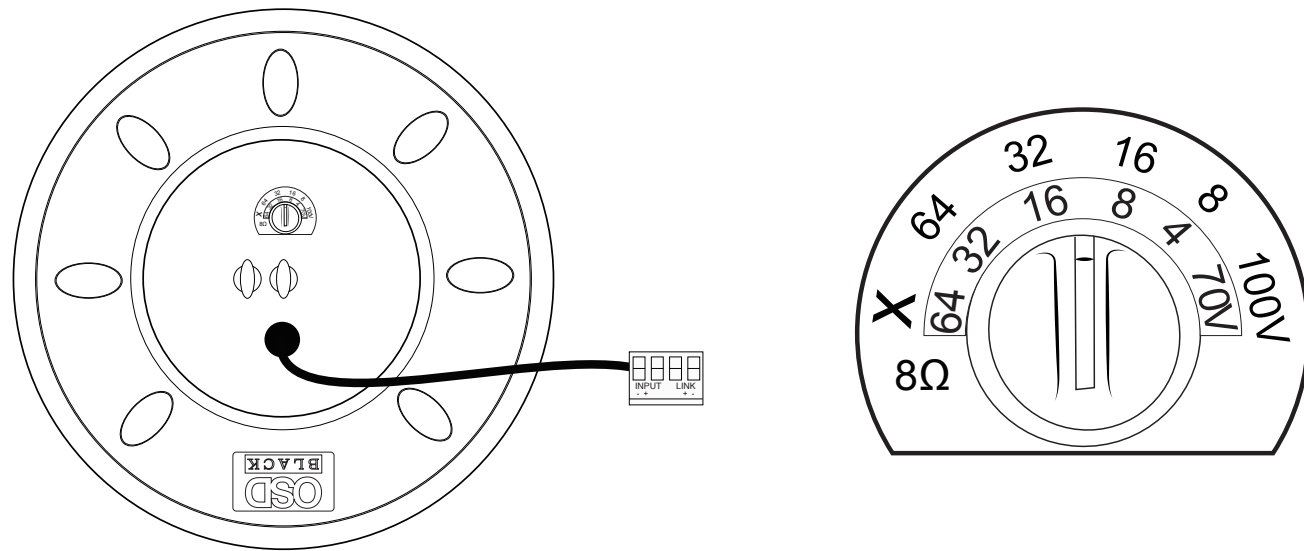
Make sure the speaker is properly secured to the ceiling/building structure. Failure to use the proper hardware may cause the speaker to become un-secure and resulting in damage or injury.



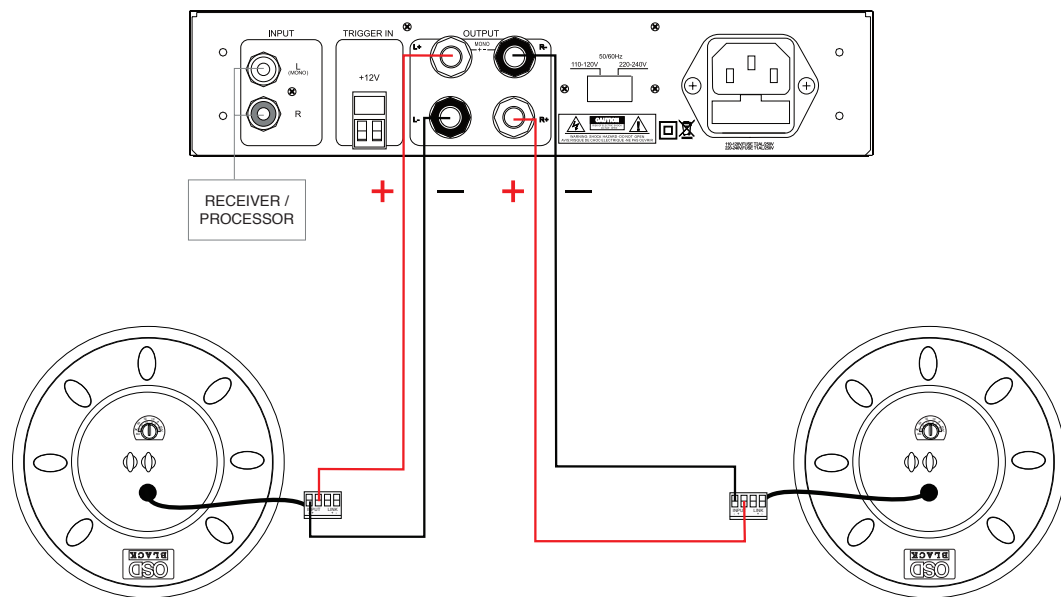
**Set Up & Operation**

The PENDANT83 is designed to hang from the ceiling. A safety cable should be used when installing the speakers to avoid personal injury and damage to the speaker.

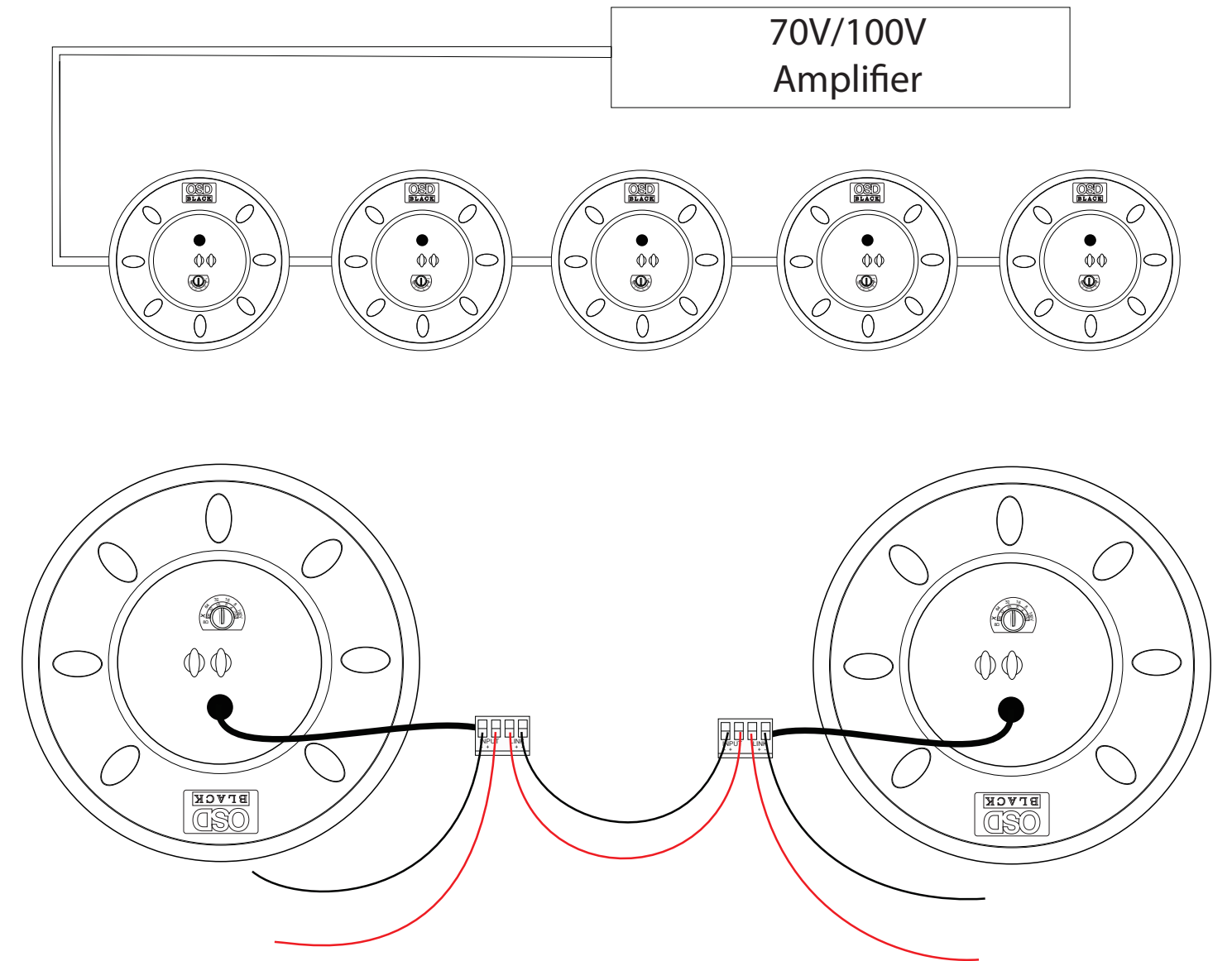
1. Set the proper speaker setting for your application ( 70V/100V/8Ω ).
2. At each speaker location, route the speaker cable(s) hanging from the ceiling area through the top cover, and dress the cables to the wire rope using plastic cable ties. Slide the speaker cables through the supplied back cover. Strip the ends back to 1/8" to 3/16".
3. Connect the wires from the amplifier to the supplied terminal block, Using the IN terminals: red to + and black to -. Please refer to the following pages for examples of various types of applications.
4. Attach the safety cable to the speaker.
5. If using the bracket to wall or ceiling mount, be sure to use the appropriate hardware to securely attach the speaker.



**Standard 8 Ohm Application**



**70V/100V Application**



**NOTE:** The above example shows 5 total speakers. Using the 10W selection, you will need an amplifier with at least  $(5) \times (10) = 50W$ . A good rule of thumb to remember is that the total number of speakers multiplied by the setting you select, cannot exceed the output power of the 70V/100V amplifiers. You should select an amplifier with 20% greater power; in this case, an amplifier that delivers about 60W.

**⚠** When installing multiple rows of speakers, we strongly recommend doing multiple wire runs, one run per row. We do not recommend doing a single wire run.

**Specifications**

Frequency Range (-3dB)	60~20 KHZ
Sensitivity (1W/1M)	89 dB
Power Handling	150W
Impedance	16Ω
Transformer Taps	70V 100V 8Ω
Finish	Black or White
Height	11 in (280 mm)
Diameter	11.2 in (285 mm)
Weight	12 lb (5.4 kg)

**Troubleshooting**

Problem	Possible Cause	Fix
There is no sound	Power Off Equipment setting is wrong	Assure power is applied to all equipment in system. Check that routing in/output controls are set correctly.
Low sound level	Setting/Volume is set too low. Connection is shorted or bad.	Check volume controls or amplifiers and equalizers. Check that connections aren't partially shortened.
Sound cuts in and out	System overload/oscillation intermittent connection	Check for overload condition or bad connection.
Distortion at increased level	Amplifier/Speaker over driven	Check that power to speaker isn't over limits, amplifier isn't over driven. Reduce power to amplifier slightly.
Speaker makes "buzzing" noise	Hardware loose or speaker damaged	Make sure speaker is tight. Check speakers for loose parts or speaker damage.

**Warranty**

All Optimal Speaker Design speaker products have Limited Lifetime Warranty against defects in materials and workmanship. Proof of purchase must accompany all claims. During the warranty period Optimal Speaker Design will replace any defective part and correct any defect in workmanship without charge for either parts or labor Optimal Speaker Design may replace returned speakers with a product of equal value and performance. In such cases, some modification to the mounting may be necessary and are not Optimal Speaker Designs responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by Optimal Speaker Design. The unit must be returned to Optimal Speaker Design at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damaged resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by Optimal Speaker Design

Optimal Speaker Design sells products only through authorized dealers and distributors to ensure that customers obtain proper support and service. Any Optimal Speaker Design product purchased from an unauthorized dealer or other source, including retailers, mail over dealers and on-line sellers will not be honored or serviced under existing Optimal Speaker Design warranty policy. Any sale of product by an unauthorized source or other manner not authorized by Optimal Speaker Design shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, you must email customer service at [RMA@audiogeargroup.com](mailto:RMA@audiogeargroup.com) for a Returned Merchandise Authorization (RMA) number# then the unit must be shipped to Optimal Speaker Design at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the speaker(s) in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

This Warranty Does Not Cover: Damage caused by abuse, accident, misuse, negligence, or improper operation (installation) • Any products that have been altered or modified • Any product whose identifying number of decal, serial #, etc. been altered, defaced or removed • Normal wear and maintenance.

