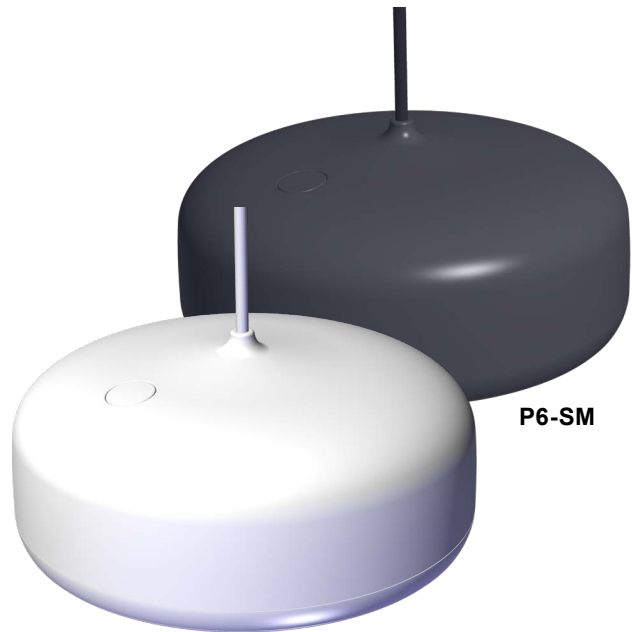


# Desono P6 / P6-SM

## Installation & Operation Guide



### PRODUCT DESCRIPTION

Desono™ P6 and P6-SM are two-way passive coaxial loudspeakers intended for full range music reproduction in distributed audio applications. They deliver high intelligibility coupled with a wide coverage area, allowing system designers to use fewer speakers while maintaining acceptable levels of speech intelligibility.

There are two different styles (models) of Desono pendants. They are designed to be used both indoors and outdoors in damp conditions. Designed with the installer in mind, the pendants come pre-terminated with Magic Cable, a composite cable comprised of two aircraft cables, two conductors jacketed separately, and integrated ripcords that allow the installer to easily slice through the cable jackets.

### FEATURES

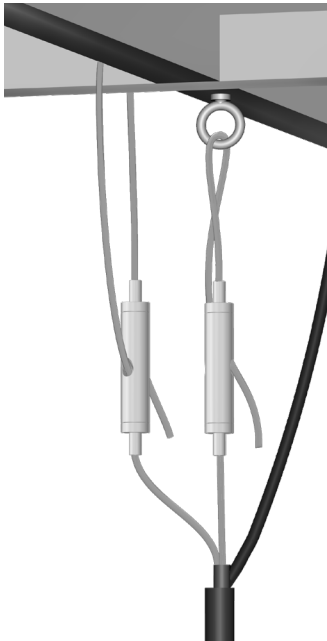
- Two stylish designs
- 90° conical coverage
- Magic Cable is pre-terminated inside the pendant to ensure no exposed connections
- 6-position tap for 70V/100V systems (60W, 30W, 15W, 7.5W, 3.75W, 1.875W) with low impedance bypass
- ETL listed to comply with UL 1480A, CE marked, and RoHS compliant
- Covered by Biamp's seven-year warranty



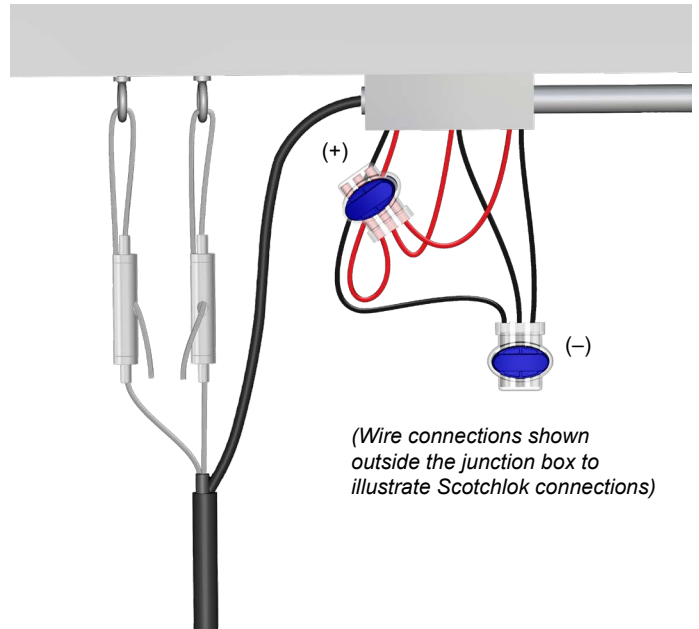
## STANDARD INSTALLATION

The Desono pendants have integral 15' (4.6m) cables and can be suspended up to 14' (4.3m) if the safety supports and wiring junction boxes are within a short distance from the drop. Pre-installation of any cable drops will require use of bulk "Magic Cable" and a splice kit to install the loudspeaker.

There are several methods of installation. All involve attaching the support cables to, or around, structural elements. Some of the methods are shown below. Please use the appropriate method for your application.



**Figure 1a.** Support cables can loop around structural members or through anchored hardware



**Figure 1b.** A typical installation with wiring connections in a nearby junction box

## RIGGING AND ELECTRICAL SAFETY



**IMPORTANT:** The loudspeakers described in this manual are designed and intended to be mounted to differing building surfaces using a variety of rigging hardware, means and methods. Installation of loudspeakers should only be performed by trained and qualified personnel. All electrical connections must conform to applicable city, county, state, and national (NEC) electrical codes.



**DANGER:** The Magic Cable is rated with a Working Load Limit (WLL) of 80 lbs (36.3 kg), and the Griplocks have a WLL of 50 lbs (22.7 kg); both with a 5:1 safety margin. No single rigging fitting using the Griplock locking device should ever be subjected to a load that is greater than 50 lbs (22.7 kg). Failure to heed this warning could result in injury or death!



**DANGER:** It is possible to experience severe electrical shock from a power amplifier. Always make sure that all power amplifiers are in the "OFF" position and unplugged from an AC Mains supply before performing electrical work.



**IMPORTANT:** The Magic Cable's connection to the pendant loudspeaker is UL listed for the purpose of suspending that loudspeaker only. No additional objects should be attached to, or suspended from, that cable.



**IMPORTANT:** Refer to the sections on installation and connections later in this manual for additional information on rigging and electrical safety.



**IMPORTANT:** Please review the safety guide accompanying this product and these installation instructions prior to installing this loudspeaker.



**CAUTION:** Installation of Biamp loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting. Severe injury and/or loss of life may occur if this product is improperly installed.



**DANGER:** It is essential that the secondary cable be secured to a suitable load-bearing point separate from the primary loudspeaker mounting point, with as little slack as possible so as not to develop undue kinetic force if the primary mount were to fail.



**IMPORTANT:** When installing loudspeakers outdoors, use a support system with enough wind-load strength to comply with applicable codes and standards.



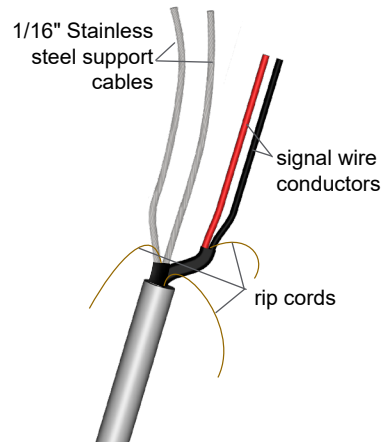
**IMPORTANT:** Magic Cable's strength members are hardened stainless steel. Cutting the cables with tools not rated for such use will damage those tools. You should use a tool rated for cutting ACSR (Aluminum Conductor Steel Reinforced) cables such as the Klein J2000-59.



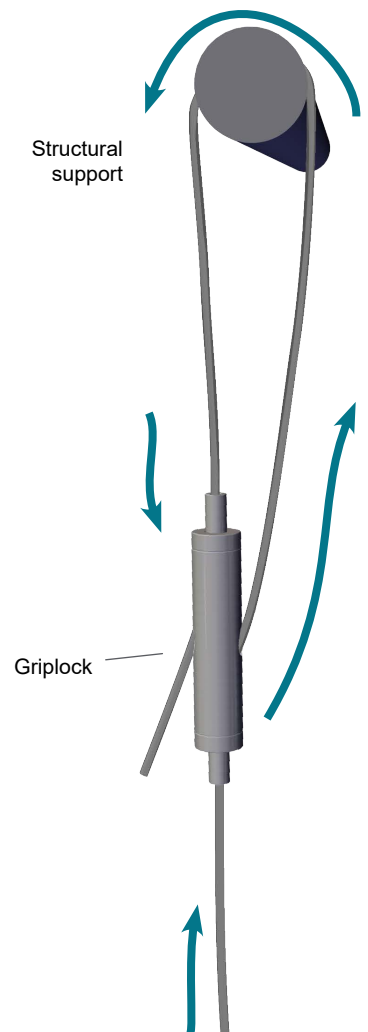
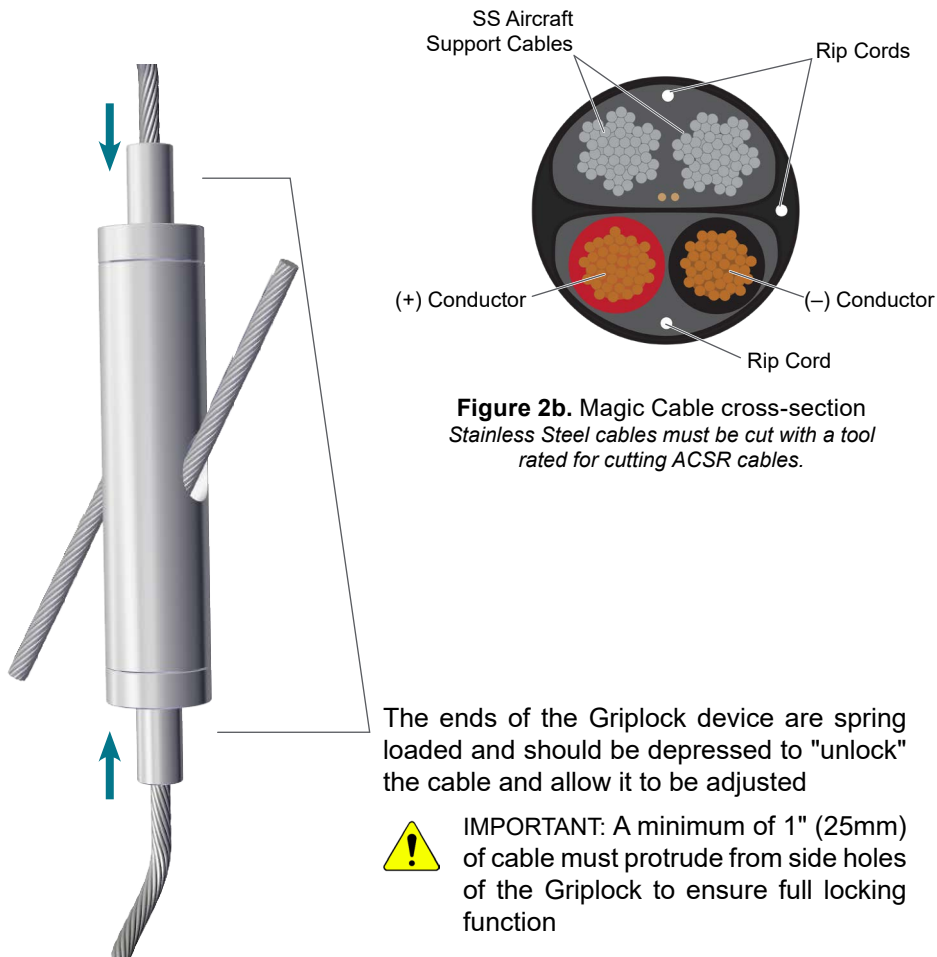
**CAUTION:** The ends of the stainless steel support elements are sharp and may cause injury. Please handle with care.

## Support Cable Installation

1. The outside insulation has been slit to provide access to the interior support and audio cable elements. Strip back that outer cover. There are rip cords in the main cable and each of the interior elements for easy removal of the insulation.
2. Pull the rip cords down as far as needed and cut off any extra cable insulation (Figures 2a , 2b).
3. Insert one support cable into the bottom end of a Griplock and push it up until the end of the wire protrudes from the side hole (Figure 3).
4. Pull the end of the cable through the Griplock enough to either form a loop over the structure or through structurally anchored hardware and insert back through the Griplock and out the remaining side hole. The wire must extend at least 1" (25 mm) through the side hole to ensure full gripping function.
5. Do the same to install the secondary support cable, giving it some slack to keep it from bearing weight. The secondary mount should be close to the primary one to avoid any kinetic force if the primary mount should fail. See Figure 1b for reference.



**Figure 2a.** Cable stripped with rip cords showing



**Figure 3.** Path of the cable, looping back through the Griplock

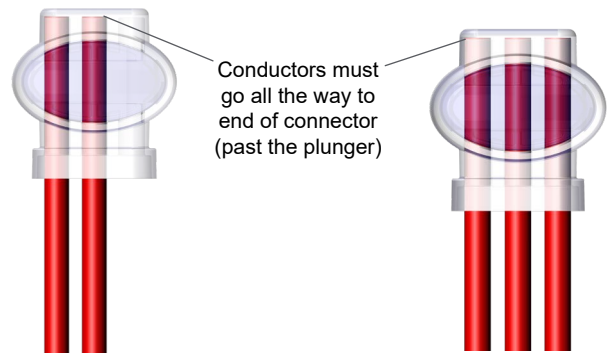
## Wiring



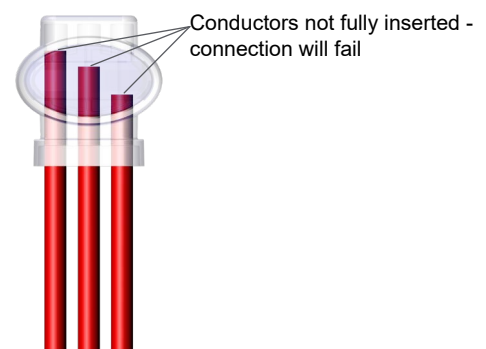
Scotchlok™ connectors are provided for easy wire connections (2 per pendant). Each connector can secure an input, output and "pass through" wire.

1. Strip the insulation from the outside jacket around the conductors using the rip cord.
2. Pull rip cord down and cut off extra insulation. There is no need to strip the insulation from the individual conductors to expose the wire if using the provided Scotchlok connectors.
3. Fully insert positive (red) conductors into one Scotchlok connector. See Figures 4a and 4b for correct and incorrect insertion. Using pliers, firmly press the oval "plunger" to secure the wires (Figures 5a, 5b). These are single use connectors; once the plunger has been depressed the connector must be replaced if there is a problem with the connection.
4. Repeat for negative (black) conductors. (Figure 6)

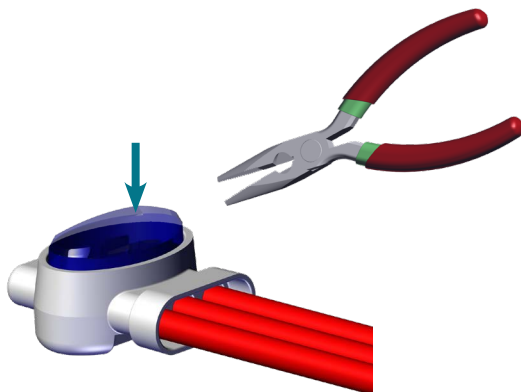
**Note:** The connections should be housed in a junction box, but may not be subject to any force pulling on the wire or stressing the connectors.



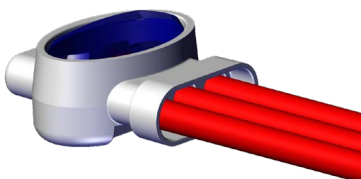
**Figure 4a. CORRECT** wire insertion in Scotchlok connector



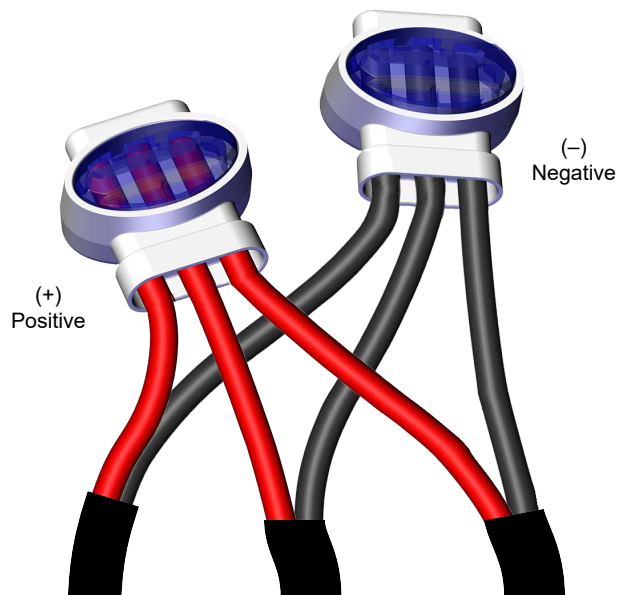
**Figure 4b. INCORRECT** wire insertion in Scotchlok connector



**Figure 5a.** Depress the scotchlok plunger to fully secure the conductors



**Figure 5b.** Plunger depressed; conductors secured



**Figure 6.** Typical connection including a pass through pair of conductors.

Setting the Tap Switch

The Desono pendants can be utilized in both low impedance and 70/100V systems. The default setting is low impedance, and will need to be changed for 70/100V systems. See setting values in the table below. Each pendant's tap switch locations and access is also described below. To keep installation simple, make any changes to the settings before the pendant is installed. The knob can be rotated with a Phillips head screwdriver or by hand.

P6

The tap switch is located under the dust cap. The pendant is shipped with the dust cap ajar - it will be much easier to access the switch before the cap is pressed into place. **Do Not** make any changes to the tap setting while the loudspeaker is connected to any equipment powered ON.

- 1. Carefully move the dust cap up the Magic Cable to expose the switch (Figure 7).
- 2. Rotate the knob to the appropriate setting and align with the arrows (Figure 8).
- 3. Pull the dust cap back down the cable and press into the pendent housing until flush with the top.

Tap Settings for both pendant models

6 Ω	low impedance (default setting)					
70V	60W	30W	15W	7.5W	3.75W	1.875W
100V	n/a	60W	30W	15W	7.5W	3.75W

P6-SM

The tap switch is located under a removable rubber cap. **Do Not** make any changes to the tap setting while the loudspeaker is connected to any equipment powered ON.

- 1. A small screwdriver or fingernail will pry the cap loose. If possible, make any changes before hanging the pendant.
- 2. With the cap moved up and out of the way, rotate knob to the appropriate setting and align with the arrows (Figures 9a, 9b).
- 3. Replace the rubber cap in the pendant. It should be flush with the pendant housing.



Figure 9a. Lift cap up and move out of the way to access tap.

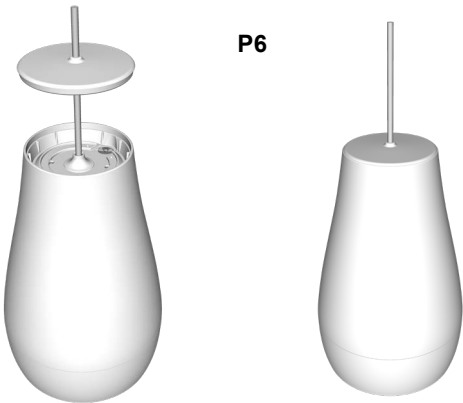


Figure 7. Move dust cap up the cable to access the tap switch, and back down and press into place when finished

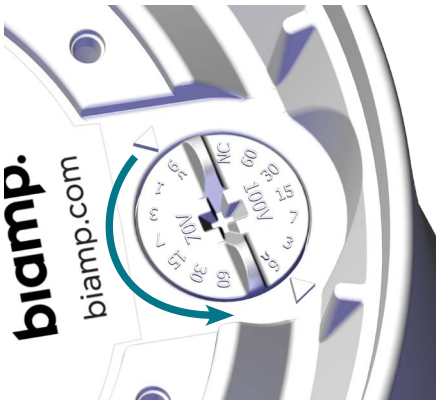


Figure 8. Rotate knob to select tap setting - align desired value with arrows

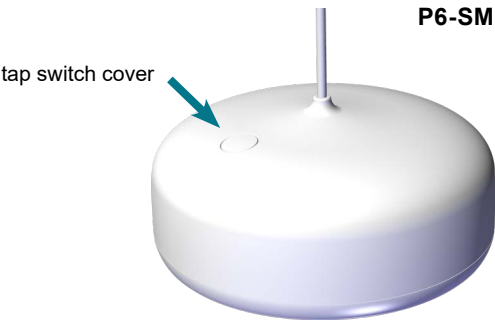
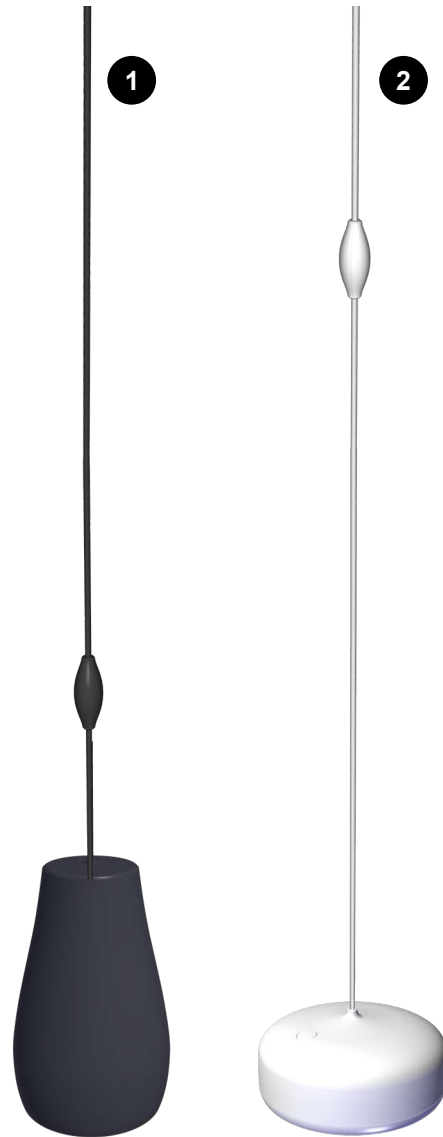


Figure 9b. Rotate knob to select tap setting - align desired value with arrows

## Typical Splice Case Applications

1. Venue has Magic Cable installed as prewired drops
2. Suspension height is longer than 14 ft (4.2m)



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## CONTACT US

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**Note:** Every effort has been made to insure that the information contained in this manual was complete and accurate when printed. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this manual. The latest version is available at [support.biamp.com](http://support.biamp.com).

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