



LP6-S-L Pendant Mount Satellite Speaker

LP6-S-L



BOSCH

en Installation Manual

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1 Safety



Warning!

Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Bosch strongly recommends all loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Bosch strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Bosch is the responsibility of others.

Suspension Cable Important Safety Instructions:

- Load* - Do not exceed the **WLL** (Working Load Limit) of the pendant suspension cable. The WLL of the pendant suspension cable is 10 kg (22 lb).
- No lifting* - Do not use for lifting, such as in a crane or pulley situation.
- No movement* - The pendent suspension cable is to be used to suspend static loads only. Do not use the cable to suspend moving objects or objects likely to be subject to movement.
- No joining* - Do not splice together the pendent suspension cable with another cable or other joining device. The pendent suspension cable as supplied is the maximum length available and should not be altered in any way.
- Not for re-use* - Do not re-use the pendent suspension cable; it is designed for permanent fixed installation use only.
- Lubricants* - Do not apply oil or any other lubricant to any part of the assembly.
- Round duct/pipes* - When wrapping around duct or other round pipes, do not exceed an angle of 60 degrees between the top of the pipe and the pendent suspension cable.
- I-Beams* - Minimum radius on I-Beams to be no less than 1/8-inch.
- Corners/edges* - Cables in contact with corners, edges, protrusions, or abrasive surfaces shall be protected with a material of sufficient strength, thickness, and construction to prevent damage.



Old electrical and electronic appliances

Electrical or electronic devices that are no longer serviceable must be collected separately and sent for environmentally compatible recycling (in accordance with the European Waste Electrical and Electronic Equipment Directive).

To dispose of old electrical or electronic devices, you should use the return and collection systems put in place in the country concerned.

2 Introduction

The LP6-S-L Pendant Mount Satellite Speaker is a companion speaker option to the Compact Sound Speaker System offering from Bosch . It provides a convenient way to equip open ceiling spaces with sound where conventional surface or ceiling mount speakers cannot be used. The 2-inch (50 mm) transducer provides matched performance to the other Compact Sound Satellite speaker models. The unit comes complete with a UL rated mounting cable and can be used in any combination with the Compact Sound ceiling or surface mount subwoofers and satellite speaker models. It's ideal for use in a wide variety of environments and spaces to provide high quality background or foreground music.

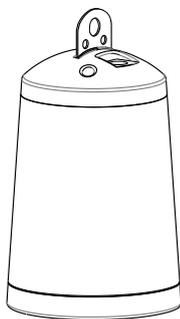
Read through this manual to familiarize yourself with the safety information, features, and applications before you use these products.

3 System overview

3.1 Packing list

The major components included in one (1) box for the LP6-S-L pendant speaker system.

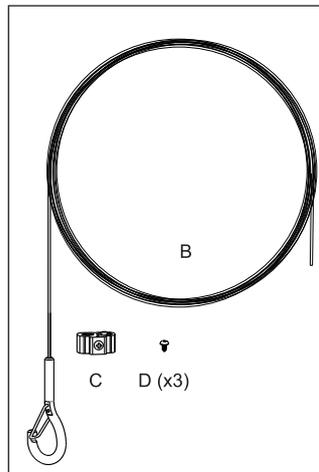
| Item | Quantity | Description |
|------|----------|---------------------------|
| A | 2 | Pendant speakers |
| B | 2 | Pendant suspension cables |
| C | 2 | Couplers |
| D | 6 | Wire cap screws |
| E | 1 | Installation manual |



A (x2)

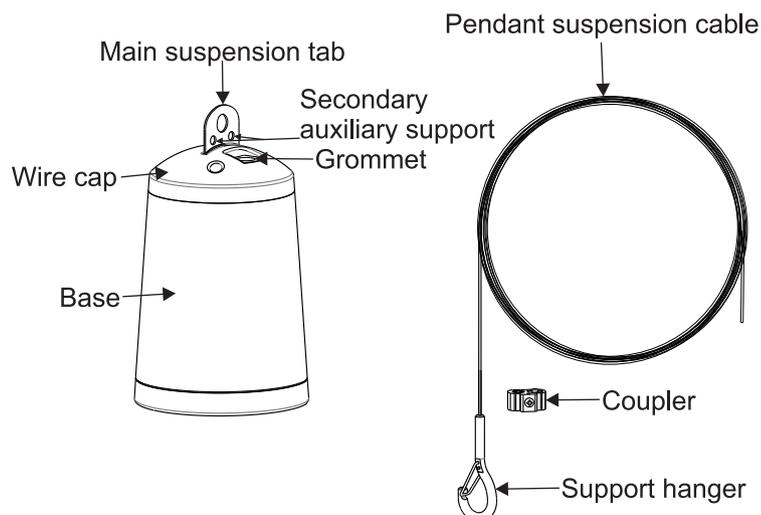


E

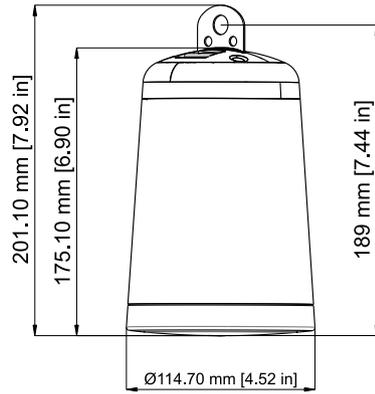


(x2)

3.2 Product information



3.3 Dimensions



3.4 Pendant suspension cable

The pendant suspension cable is supplied with the LP6-S-L kit. The material is strong steel wire rope. It is designed with a locking spring mechanism which secures the wire rope and allows for easy adjustment of the installation height, up to 15 ft (4.57 m).

Working Load Limit

The pendant suspension cable's WLL is based on the suspension being hung vertically. If the cable is suspended at an angle, a second suspension cable is required.



Caution!

Do not hang the pendant suspension cable at an angle in excess of 60° from vertical.

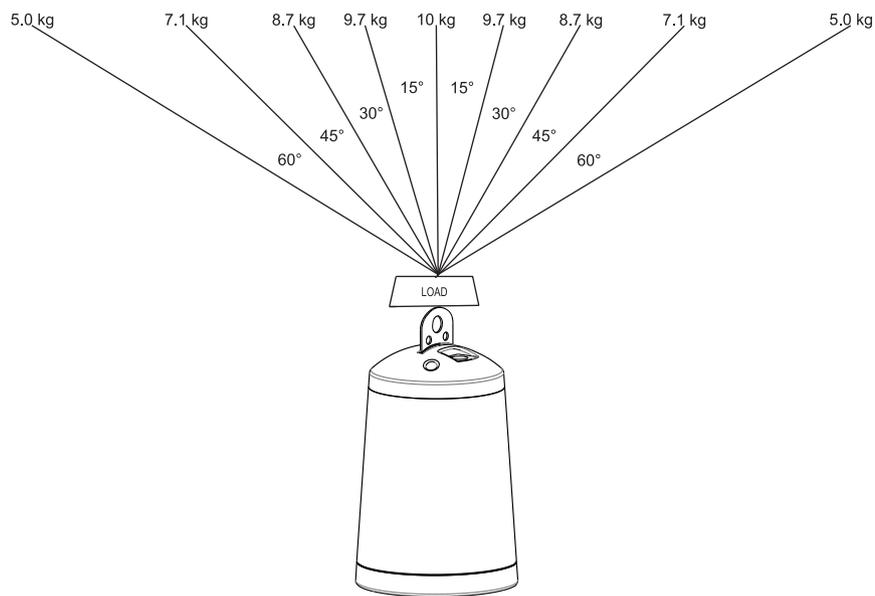


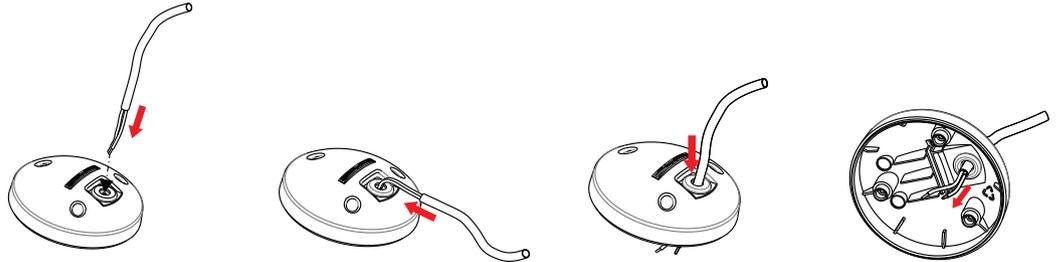
Figure 3.1: Pendant suspension cable working load limit

4 Wiring

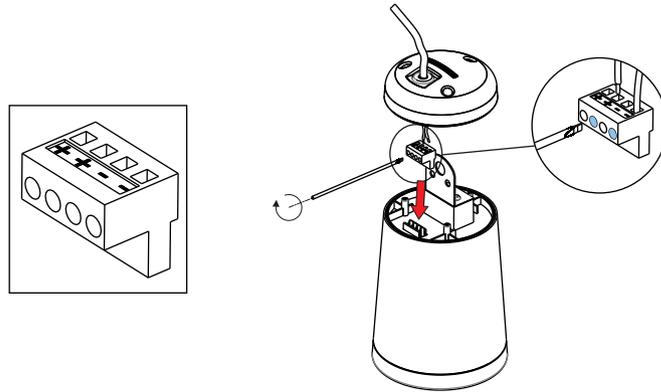
Wiring the pendant speaker is recommended before installation. Carefully observe the wire markings or tracers on your speaker wires. Verify the amplifier (+) terminal is connected to the red speaker terminals and the amplifier (-) terminal is connected to the black speaker terminals.

To **wire the pendant speaker**, do the following:

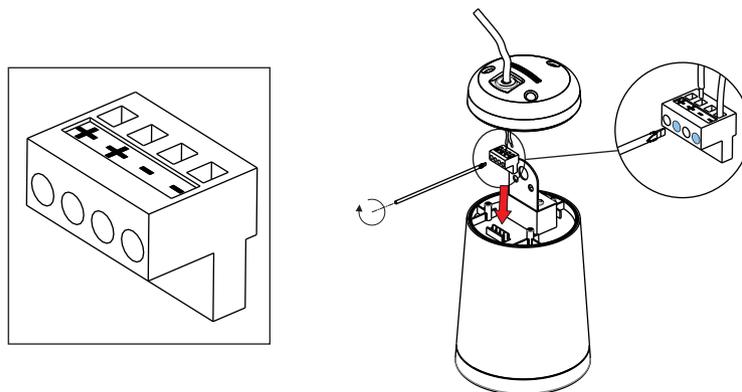
1. Install the **wire** through the grommet in the wire cap.



2. On the phoenix connector, insert **one (1) wire** into the positive (+) port.



3. On the phoenix connector, insert **one (1) wire** into the negative (-) port.
4. Using a screw driver, tighten the **two (2) screws to secure the wires**.
5. Insert the **phoenix connector** into the connector socket in the speaker base.
6. Place the **wire cap** onto the speaker base.
Ensure the main suspension tab is aligned.



7. Tighten the **three (3) screws** on the wire cap.

5 Installation

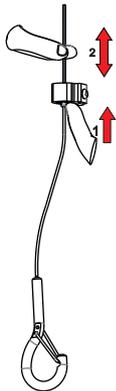
Wiring the pendant is recommended before installation. For more information, see *Wiring*, page 9.

To **install the pendant speaker**, do the following:

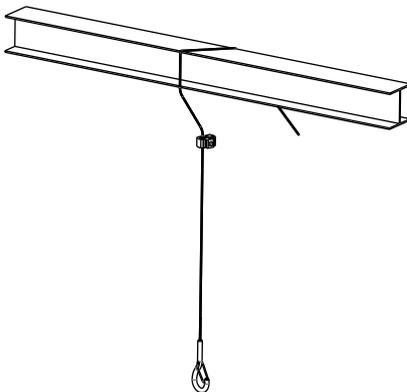
1. Thread the **cab**le into the coupler.



2. Adjust the **pendant suspension cable** length.

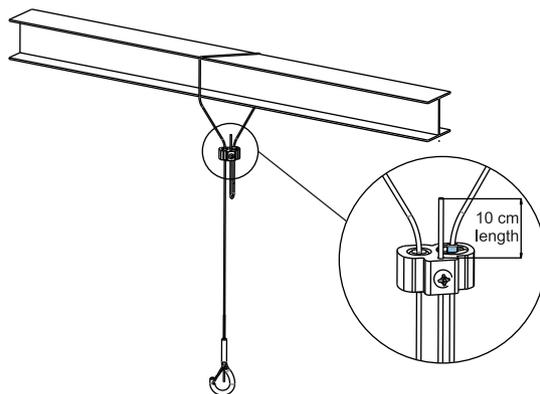


3. Place the **pendant suspension cable** over the ceiling support.

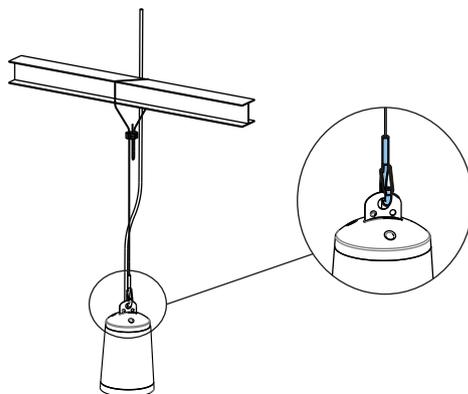


4. Thread the **cab**le into the opposite side of the coupler.

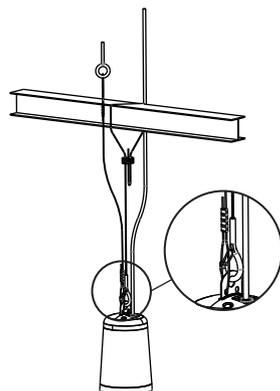
5. Once the proper height adjustment has been made, put the **cable tail** through the through hole of the coupler, and leave at least 10 cm (4 in) of length.



6. Tighten the **screw** to secure the cable.
7. Support the **speaker** , snap the support hanger onto the main suspension tab (center) located on the top of the speaker.



8. Attach a **secondary auxiliary support cable** onto one (1) of the secondary auxiliary support holes.



9. Secure the **secondary auxiliary support cable** to a different ceiling support point of the building structure.

6 Troubleshooting

| Problem | Possible Causes | Action |
|--|--|---|
| No Sound | Amplifier | Connect a known working test speaker to the amplifier outputs. If there is no sound, check all electronics are on, the signal routing is correct, the source is active; the volume is turned up, and so on. Correct/Repair/Replace as necessary. If there is sound, the problem is in the wiring. |
| | Wiring | Verify you have connected the correct wire pairs to the amplifier. Play something at low level through the amplifier (for example, from a CD player or tuner). Connect the test speaker in parallel with the malfunctioning line. If the sound has gone or is very weak, the line has a short in it (possibly a severe scrape, pinch, or staple puncture). If the sound level is normal the wire is open (possibly a cut wire or missed connection). Using the test speaker, move down the line and test each connection/junction until you find the problem and correct it. Observe proper polarity. |
| | | Verify you have the inputs and outputs connected to the correct wires. If the subwoofer input panel is not correctly wired, there will be little or no sound. Observe proper polarity. |
| Poor Low-Frequency Response | Speakers Wired Out-of-Polarity | When two (2) speakers are connected out of polarity (out of phase), the low frequencies will cancel each other acoustically. Carefully observe the wire markings or tracers on your speaker wires. Verify the amplifier (+) terminal is connected to the red speaker terminals and the amplifier (-) terminal is connected to the black speaker terminals. |
| | Improperly Wired Subwoofer Panel | Using a test speaker as described above, verify all amplifier and speaker wires are connected to their proper terminals with the correct polarity. Reversing just one (1) set of amplifier wires can cut out all bass output from the subwoofer. |
| Intermittent Output such as, Crackling or Distortion | Faulty Connection | Check all connections at amplifier and speakers to ensure they are clean and tight. If the problem persists, it may be in the amplifier or wiring. See other actions above. |
| Constant Noise such as Buzzing, Hissing, Humming | Defective Amplifier or other Electronic Device | If the noise is present but no program material is playing, the likely cause is the signal chain in the electronics. Evaluate each component as necessary to isolate the problem. |
| | Poor System Grounding or Ground Loop | Check and correct the system grounding, as required. |

If these suggestions do not solve your problem, contact your nearest dealer or distributor.

7 Technical data

| | LP6-S-L |
|--|-------------------------------------|
| Freq. Response (-10 dB): | 150 Hz - 20 kHz ¹ |
| Power Handling: | 30 W ² |
| Sensitivity: | 84 dB ¹ |
| Impedance: | 16 Ohms |
| Maximum SPL: | 102 dB ¹ |
| Voice Coverage (H x V): | 150° x 150° ³ |
| Music Program Coverage (H x V): | 100° x 100° ⁴ |
| Transducer: | 50 mm (1.97 in) |
| Connectors: | Phoenix (4-pin) |
| Enclosure: | ABS (fire rated) |
| Dimensions (H x Dia): | 201 mm x 113 mm (7.92 in x 4.45 in) |
| Net Weight: (1 pendant and 1 suspension cable) | 0.73 kg (1.6 lb) |
| Shipping Weight: (2 pendants and 2 suspension cables) | 2.04 kg (4.5 lb) |
| Support Hardware: | (2) Pendant suspension cables |
| Approvals: | UL1480, CE |

¹Full space

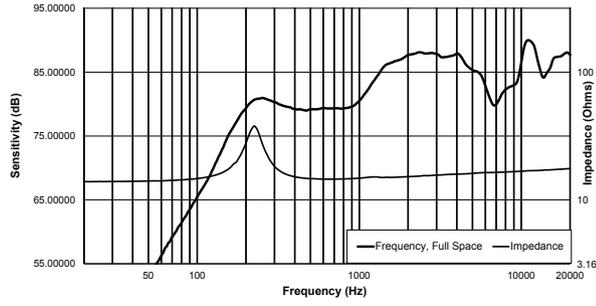
²Long Term Program Rating, 3 dB greater than continuous notes pink noise rating

³Average 1 kHz – 4 kHz

⁴Average 1 kHz – 8 kHz

| | Pendant Suspension Cable |
|---------------------|---------------------------------|
| Material: | Steel wire rope |
| Working Load Limit: | 10 kg (22 lb) |
| Length: | 4.57 m (15 ft) |
| Approvals: | UL2442 |

7.1 Frequency response and impedance



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