

# SP66 IN-WALL SPEAKER OWNERS MANUAL



Congratulations and thank you for choosing Knöll inwall speakers! To assure correct installation and to realize the full potential of these new speakers, please read and follow these instructions carefully. If you have questions or comments, please don't hesitate to call or write your authorized Knöll dealer. Your dealer has the experience needed to pinpoint any problems that may exist and has easy access to technical information from the Knöll factory.

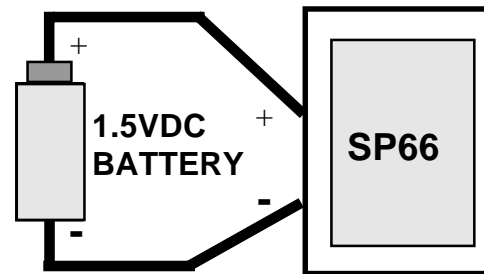
## Speaker Placement

Knöll SP66 speakers are designed to work within almost any interior decorating scheme where inwall or flush mounting is possible. Ideally SP66 speakers are ceiling mounted 2-3 meters (6'-10') apart, away from corners directly over the listening area. This ideal placement gives the best stereo imaging. Position SP66 speakers as symmetrically as possible. SP66 speakers can be ceiling or wall mounted.

## Installation Tips

1. Follow all electrical and building code requirements in your area.
2. A minimum mounting depth of 3-1/4" (8.25cm) measured from the face of the wall or ceiling is needed in order to fit properly. SP66 speakers can be placed right next to studs or other wall interior items but avoid near proximity to pipes, machinery and high amperage wiring.
3. The mount brackets provided with SP66 speakers can accommodate sheet rock or wall board thicknesses of 1/2" to 1-3/8". Spacers or longer screws can be used on thinner and thicker surfaces.
4. Avoid mounting speakers closer than 0.5m (20") from a video monitor or TV screen. If any video or TV screen distortion is detected, the video monitor or TV should be moved farther away from the speaker.
5. It is not necessary to install SP66 speakers in a special box unless required to do so by local electrical or fire regulations.
6. Adding insulation such as 10cm (4") rock wool behind the SP66 generally improves sound quality.

**Fig 1: SPEAKER POLARITY VERIFICATION**



7. Speaker wire should be minimum 16 gauge (ideally fire code rated, low oxygen wire. Runs longer than 10m (30') should be 14 or 12 gauge.

8. Parallel or series wiring is generally acceptable for SP66 speakers to obtain

correct amplifier loading. Avoid series wiring SP66 speakers with any other speaker type.

9. Always take care to connect the speaker wire runs in phase. An easy method verify polarity follows. Connect a 1.5V battery across the speaker wire at the amplifier location (see fig 1) Have someone observe if the SP65 cone moves in or out. If the cone goes out (toward the observer) the + wire is now connected to the + terminal of the battery and that wire should be connected to the + terminal of the amplifier. Other speaker(s) should be tested and connected in a similar manner.

## Installation: Existing Construction

1. Use a stud locator device or other means to determine suitable sized cavity in the wall or ceiling for the SP66.
2. When ceiling mounting try to make the locations as symmetrical as possible. When wall mounting carefully measure the distance from the floor to the speaker center so both speakers are **exactly** the same distance from the floor. Draw a rectangular hole 7-1/2"x11" at the correct location. Cut the hole out using a sheet rock saw, keyhole saw or other suitable device. Place the SP66 mount bracket in the hole to verify correct flush mount fit.
3. Run speaker wires from the amplifier to the room volume control location (optional) then to the left and right speakers. Allow an extra 1m (3') of wire at the speaker cutout location to make installation easier. Strip and twist about 1/2" of insulation off wires. The wire runs should be hidden as well as possible (ask your dealer for tips to conceal wires).
4. Remove the speaker grills.

5. Connect the speaker wire to the SP66 speaker carefully observing correct speaker terminal polarity.
6. Slip the bottom of the speaker down into the opening cut in the wall or ceiling, slide the whole speaker into the wall cavity and center the speaker in the hole. Tighten all six screws (just snug, don't over tighten). This should allow the speaker to line up and clamp the wall board with the speaker frame.
7. Turn the amplifier on, room volume controls up and test the speakers.
8. Snap the white (paintable) grill into the SP66 speaker bracket.

## Installation: New Construction

1. Run two wires from the amplifier location to the room volume control (optional) then to the intended speaker location. Loop an extra 1m (3') of wire out from the ceiling or wall. ID tag the wires.
2. After wall board or sheet rock is installed, make sure the 7-3/4" x 11" speaker hole is cut out correctly then follow steps 4-8 in "Existing Construction".

## Amplifier or Receiver Operation

The amplifier or receiver should provide more power than will be needed. Always reduce sound levels immediately if sound distortion is present. Any amplifier, especially low powered amplifiers can damage speakers when distorted sound (usually you will hear a harsh or unclear sound) is being reproduced. Speaker damage caused by sound distortion or gross overpowering is easily evident and is not covered by the warranty.

## Trim Ring Painting

The SP66 speaker baffle and grill can be painted to match any interior decorating scheme. Ideally paints with nitrocellulose lacquer are used. Most cold paint types are suitable as well. Primer can be used when darker colors are required. We do not suggest painting the inner black cavity or drivers.

## SP66 Limited Warranty

Knöll Systems warrants SP66 speakers to be free from defects in materials and workmanship. This warranty extends for one full year from the date of purchase by the consumer. Any products returned freight prepaid to Knöll Systems and found to be defective by Knöll systems within the warranty period will be repaired or replaced at Knöll Systems option, at no charge. Knöll Systems will not be responsible for the actual cost of installation or removal of the product, nor for any consequential or incidental damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may have additional rights which vary from state to state.

## Specifications

Speaker Type: 2-way  
Woofer: 6-1/2" filled mica  
Tweeter: 1" (25mm) Soft dome  
Peak Power RMS: 80 watts  
Power Rating RMS: 60 watts  
Amplifier Power : 5-100 watts/channel  
Nominal Impedance: 8 ohms  
Sensitivity: 90 dB/W/m  
Frequency Range: 50Hz-21kHz  
Mount Depth Required: 3-1/4" (90mm)  
Dimensions: 12-1/8 x 8-3/4"  
Cut Out Dimensions: 11 x 7-1/2"  
Color: Paintable white



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