



Polk Audio 90-RT 3-Way In-Ceiling Speaker – The Vanishing Series-Complete Features/Instruction Guide

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Polk Audio 90-RT 3-Way In-Ceiling Speaker – The Vanishing Series



Specifications

- **Product Dimensions**
15.5 x 13.3 x 11.3 inches
- **Item Weight**
9.5 pounds
- **Connectivity Technology**
Wired
- **Speaker Type**
In-Ceiling
- **Mounting Type**
Ceiling Mount
- **Brand**
Polk Audio

Introduction

A large speaker with huge sound that blends well with your room's decor. The 90-RT is ideal for use as stealth mains, rears, and side surrounds in a high-end home theatre, as well as for delivering dynamic sound to different zones from your main stereo listening room. Our revolutionary wafer-thin Sheer-Grille, a magnetically fastened grille that protrudes only 7mm from its surroundings, is featured on Vanishing Series built-in speakers. Sheer-Grilles are acoustically inert and have practically transparent, ultra-small perfs for dynamic, unhindered sound and more uniform coverage, even in bigger rooms. These speakers are timbre-matched to Polk RTi speakers to ensure a completely smooth blend of traditional and built-in speakers in systems with both.

What's In the Box?

- In-ceiling speaker
- White metal grille
- Mounting template

- Owner's Manual
- Sheer-Grille Painting instructions
- Online Registration Card
- Polk Audio product brochure

IMPORTANT SAFETY INSTRUCTIONS READ BEFORE OPERATING EQUIPMENT

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
10. **WARNING**

To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

Product Disposal

Certain international, national, and/or local laws and/or regulations may apply regarding the disposal of this product. For further detailed information, please contact the retailer where you purchased this product or the Polk Audio Importer/ Distributor in your country. A listing of Polk Audio Importer/Distributors can be found on the Polk Audio website www.polkaudio.com or by contacting Polk Audio at 5601 Metro Drive, Baltimore, Maryland 21215, USA—Phone: +1 410 358-3600.

WARNING

Listen Carefully Polk Audio loudspeakers and subwoofers are capable of playing at extremely high volume levels, which could cause serious or permanent hearing damage. Polk Audio, Inc. accepts no liability for hearing loss, bodily injury or property damage resulting from the misuse of its products. Keep these guidelines in mind and always use your own good judgment when controlling volume:

- You should limit prolonged exposure to volumes that exceed 85 decibels(dB).

For more about safe volume levels, go to the Occupational Health and Safety Administration (OSHA) guidelines at http://www.osha.gov/dts/osta/otm/noise/standards_more.html

TAKE INVENTORY

Inside each speaker container, you should find the following:

1. One In-Ceiling Loudspeaker
2. One Sheer-Grille™

3. Mounting Template
4. Owner's Manual
5. Registration Card

Important Note

If anything is missing or damaged, or if your speaker fails to operate, notify Polk Audio Customer Support Services immediately at 800-377-7655.

INSTALLATION RECOMMENDATION FOR OPTIMUM PERFORMANCE**Important Note**

Vanishing Series Loudspeakers are not magnetically shielded and should not be placed closer than 1' (30cm) from a CRT (tube) television or video monitor.

You should have a thorough understanding of and adhere to all local building and fire codes. Also, you should be familiar with the area behind the wall or ceiling into which you plan to install your speakers. Always use wire that meets appropriate building and fire codes. Wiring is best performed by an experienced professional. When installing your loudspeakers, be aware of the weight of your particular model and the sturdiness of the material into which you are installing the speakers. Be aware of any concealed studs, electrical wiring, or plumbing in the wall or ceiling into which you are installing the speakers. or a professional installer.

WIRE RECOMMENDATIONS

(minimum recommended)

Runs/Gauge

- Lengths up to 25': 18 or 16
- Lengths greater than 25': 16 or 14
but less than 50'
- Lengths greater than 50': 14 or 12
but less than 75'
- Lengths greater than 75': 12

IMPORTANT INFORMATION BEFORE YOU INSTALL YOUR LOUDSPEAKERS**Wall Or Ceiling Surface Preparation**

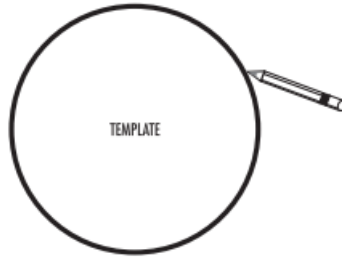
If you're installing your Vanishing Series speaker into a heavily textured wall or ceiling (e.g. stucco or popcorn finish), you must prepare the wall surface immediately around the speaker cutout. Sanding and smoothing the wall or ceiling surface will ensure the speaker and grille both seat properly and are flat on the surface.

LOUDSPEAKER INSTALLATION

You will need

- Pencil for marking the location of installation.
- Keyhole saw, utility knife, or material- appropriate tool for cutting drywall or other wall material.
- Screwdriver, preferably powered, with Phillips Head bit.
- Power drill with an appropriate bit (optional, for starting wall cut).

Trace around the template

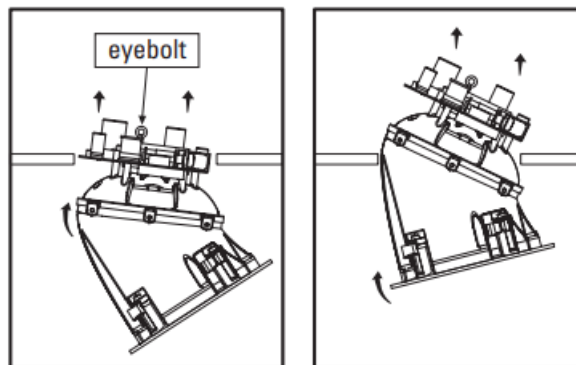


Cut the hole with the appropriate tool



CROSSOVER WARNING

Exercise extreme caution when installing this loudspeaker so you do not damage the crossover.



SECURITY EYEBOLT

Your Vanishing Series in-ceiling loudspeaker has an eyebolt on the back of the speaker that can be used for an extra measure of installation security. Follow standard building code installation procedures in your area.

IMPORTANT INFORMATION SHOULD YOU CHOOSE TO PAINT YOUR GRILLES

Because of its ultra-thin profile, the Vanishing Series Sheer-Grille™ requires a specific painting procedure to ensure smooth, even coverage.

Important Note

Do not remove the grille scrim before painting.

Paint Recommendation

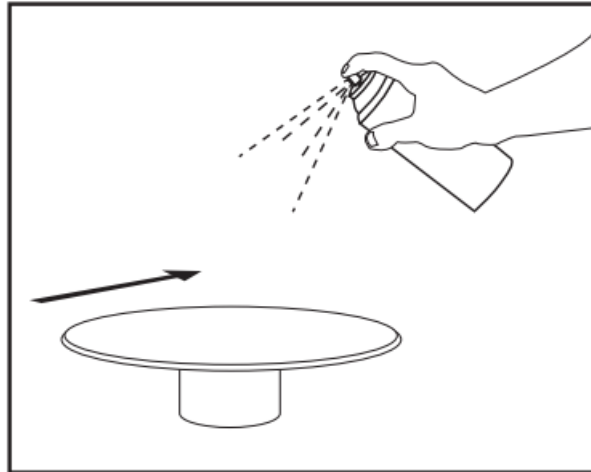
We highly recommend you use a can of spray paint matched to the ceiling color you want the Sheer-Grilles to blend with.

Important Note

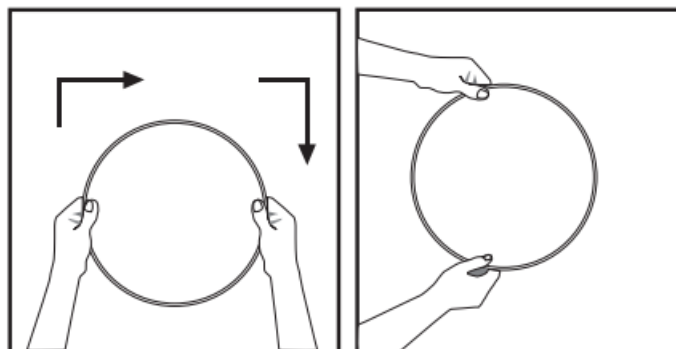
Never use a brush or roller to paint the grilles, as this will clog the perforated holes.

To paint the Sheer-Grille

1. Elevate the Sheer-Grille off of a flat surface. This will ensure even coverage of the grille frame and make it easier to pick up. Mounting Idea: A single spray can cap will raise the grille high enough.
2. Hold the spray paint about 12" from the grille and at a 45° angle.

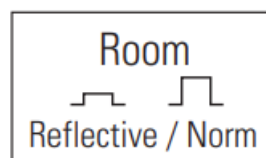


3. Apply one light, thin coat, moving evenly side to side over the grille, then work your way around the perimeter of the grille to ensure you cover the grille frame.
4. After each application of paint, wait approximately 1 minute, rotate the grille 90°, and apply the next thin coat. Important Note: You must rotate the grille 90°. Use your hands to define the next 90° rotation and always rotate the grille in the same direction of travel.



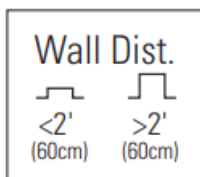
5. Three light, even applications should cover the grille and frame adequately. Remember to work your way around the grille frame to cover it evenly and completely.

ROOM ENVIRONMENT CONTROLS



Room Switch

If your listening room is very reflective, with smooth sheetrock walls, hardwood floors and non-cushioned furniture, the sound will be overly “bright” and unnatural. Engaging the Room Switch (Reflective) compensates for the effect of reflectivity in a “hard room” by attenuating only the portion of the tweeter response that can cause harshness resulting in listener fatigue. This flattens room response without hindering higher frequency response, for warmer, more realistic sound and more accurate imaging. If your listening room is not highly reflective, that is it has curtains, carpeting, and cushioned furniture, leave the Room Switch in its Normal setting (Norm).



Wall Distance Switch (LS models only)

In-ceiling loudspeakers excel when placed more than 2' (60cm) from side walls. If position limitations demand that in-ceiling loudspeakers be installed closer than 2' (60cm) from side walls, the proximity of the surface can result in a response “bump” between 50Hz and 200Hz. This can cause in-ceiling speakers to sound “boomy.” The “Wall Distance” switch flattens response and eliminates “boominess” without sacrificing deep bass response, for a more lifelike sound.

Frequently Asked Questions

- **Do you have more than 1 available? I would like to buy 2 of these. Thanks.**

Sorry, but we’ve only got one open box (customer return) unit and are no longer carrying Polk Audio.

- **Best Polk speaker for center in-ceiling set up? I have a projector so this needs to be an in-ceiling install?**

Our Polk Audio 90-RT in-ceiling speaker will make an excellent center channel speaker with its three-way design. Other models to consider are the 900-LS with its Ring radiator tweeter and the V80 with its swivel tweeter.

- **Do these fit under 7 in floor joists? I am looking for something comparable to the 70RT which is too tall?**

The 90RT and 70RT are essentially the same speakers, with the 90RT being larger to accommodate bigger woofers. If the 70RT won’t fit in the space, the 90RT most certainly won’t either.

- **What is the frequency range?**

Total Frequency Response is 30 Hz → 27,000 Hz.

- **Can this handle 12 gauge wire?**

Yes. The connectors on the speakers are the spring-loaded compression type. 12g no problem.

- **Which model year is this speaker? If purchased from a licensed seller (Amazon), does the lifetime warranty still stand?**

Polk is odd with their speakers...my front-3 are the same as they were almost 9 years ago. As far as the lifetime warranty, as long as it’s a licensed dealer you’re set.

- **What is the best/most practical Polk speaker combination for in-ceiling 7.1?**

That is a subjective topic and dependent on room conditions, size, seating location, etc. Typically, one should match the types of speakers to ensure tonal balance, i.e., pick speakers from the same manufacturer line of products. The sides and rear speakers are for effect so they are less critical (less expensive) but the fronts and center are where fidelity and clarity are mandatory. Also, the sub-woofer should mate well with the main

speakers but does not have to be from the same manufacturer. I used the Polk Audio 90RTs in ceilings in rooms where I wanted rich full-range music but my main system is a 5.1 system with higher-end bookshelf speakers (L, R&C), a sub, and in-ceiling rears. The 90 RTs are excellent speakers and would make a nice HT system. My personal preference is bookshelf speakers for my main speakers and in-walls/in-ceiling for room-filling sound.

- **I Have 80RFX(rear) , bass 10 ” and 255RT(center) Looking for a front speaker ceiling(to listen to music) Suggestions?Polk90RT or PolkRC80i?**

I have the Polk90RT in our kitchen that we use for music and they sound fantastic.

- **Will these work in a drop ceiling?**

The Polk Audio 90-RT speakers will work in a drop ceiling in most cases. Please consult a professional installer as some drop ceilings may require extra support.

- **Which is the best amplifier to match these speakers? Cause I bought 4 of them, and now choosing the amplifier.?**

Mine is paired with the ART SLA-4 amplifiers (professional quality) and I could not ask for a better sound out of this combination.

- **Would this work for rear speakers in a 7.1 system?**

I have them as the surround peaked in my 7.1 set up and they work perfectly. They will eventually be my height speakers when my current receiver dies. If you are placing them in the ceiling, they are perfect for the job.

<https://m.media-amazon.com/images/I/A1QRgivitDL.pdf>