TECHNICAL BRIEF



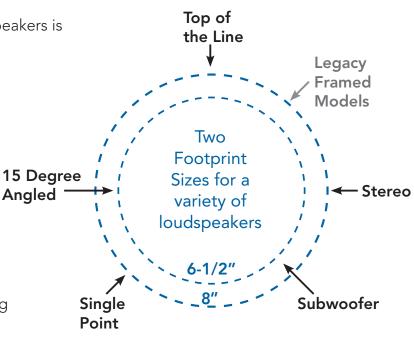
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UNIFIED DESIGN

The new family of Preference frameless speakers is built upon what we call "Unified Design".

Our primary round models share one of two footprints – for a given size they are interchangeable - one for the other. The Stereo, single point, 15

degree, and subwoofer models all use one of two cut-out sizes, giving the customer, salesman, and installer a greater number of options. Also, most of the older framed in-ceiling speaker models share the same footprints enabling consumers to easily upgrade to the new frameless design.





MASTERS OF THE GRILLE

They say to put your best foot forward. Well - the grille design for Preference speakers does just that. GRILLES are the most visible part of an installation that customers see every day. With Preference speakers, customer's are assured that the look and fit of their installation is perfect.

Preference speakers come with a micro-perforated, stainless steel, magnetic grille design that uses 16 and 24 neodymium magnets on the 6-1/2" and 8" speakers respectively. These rattle-free grilles really hold tight, and look and sound magnificent. Even the little button magnets were designed with great forethought. At just 10 mm x 2 mm, these small, powerful magnets hold the grilles in place securely and have the lowest possible profile. This enables the grille to sit as low and flat as possible on the baffle. Furthermore, these button magnets are slightly angled, so their surface meets the inside of the grille at just the right angle for full, secure attachment.

These grilles are also designed with a low-profile dome silhouette, exhibiting a nearly-imperceptible gently-domed shape. This fine detail enables these grilles to be resistant to sympathetic vibrations that can occur when the speakers are playing. Without this feature the grilles would rattle and generate sound of their own. Not with Preference!

We've even included an acoustically-transparent scrim cloth inside the grille to ensure a smooth, ceiling-bright appearance. With round or the optional square grille, Preference speakers are the finest way to go.

Grilles that
looks great, fit well,
hold tight and create
a superb-looking
installation.



Ultra-Thin Magnetic Stainless Steel Grille



(round)



(round)





MGS-6f (square)

MGS-8f (square)

CONSTANT COLOR BACKGROUND

It is surprising how much thought went into making Preference speakers look so unobtrusive from the front. We've created a stealthy design approach we call "constant color background" by avoiding flashy cones and glitzy tweeters & support structures. This produces a smooth consistent background that gives the grille a uniform look from the front. On our square grilles there are even pieces of damping material in the corners that match the coloring of the speaker and baffle underneath, and eliminating any chatter with the wall or ceiling surface.



constant color background

EASY PAINTING

The micro-perforated grilles are easy to paint with ordinary fast-dry spray paint and there is no need to remove the scrim cloth. For a custom finish, color and

sheen-matched spray paints are available through Preference Audio and My Perfect Color®.

4 X 4 SCREWS

Preference speakers utilize two kinds of screw heads on the front of the speakers. While 4 Allen-head screws hold the Preference woofers securely to the baffles, 4 common Phillips-head screws are used to drive the toggle clamps home no confusion. Just another small touch to make working with Preference speakers as easy and convenient as possible.

FRONT-MOUNTED DRIVERS

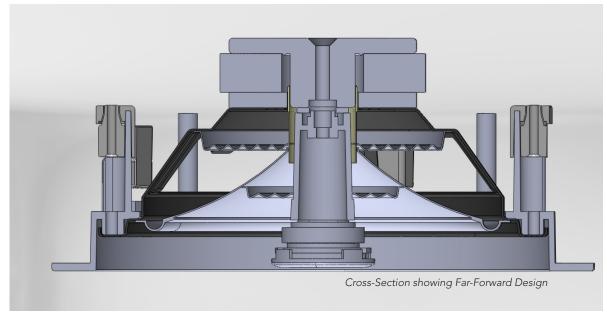
By mounting the Preference woofers from the <u>front</u> on ALL our round models, the overall diameter of the Preference footprint is reduced by more than 1 inch. Preference 6 1/2" and 8" speakers have one of the smallest footprints of any in the industry - thanks to this "front-mounted" design approach. Less real estate on the ceiling or wall means less obtrusive installations.

FAR-FORWARD DESIGN

Preference loudspeakers are designed to have the woofer & tweeter mounted as close to the grille as possible, achieving a "Far-Forward" position. The less the drivers are "swallowed up" by the baffle the more open and airy the resultant sound will be. High frequencies in particular benefit greatly from

this Far-Forward design philosophy.

The better the woofer & tweeter can "see" the listening area, the more detailed and open the sound quality will be.



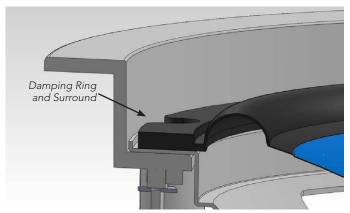
MAGNETIC DIFFRACTION RINGS

Special diffraction rings are held seamlessly in place by a clever embedded-magnet design. Preference speaker performance is noticeably smoother and more detailed while the look of the speaker is more ergonomically pleasing and sleek.

INTEGRATED DAMPING RING & ONE-PIECE SURROUND

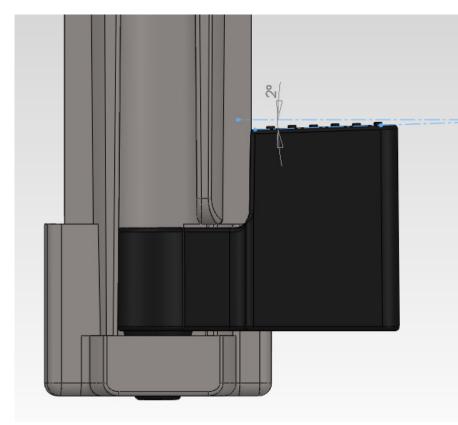
Preference 8" speakers are capable of significant output and low bass performance. Preference engineers created an integrated, one-piece surround that helps damp unwanted resonance in the mechanical substructure of the woofer, and it incorporates embedded magnet attraction points to hold the DIFFRACTION RING firmly in place—a very slick piece of system design ingenuity.





LOAD-BALANCED TOGGLES

Clever design went into the Preference speaker mounting system as well. Looking carefully at the foot of the toggles, you'll notice they aren't exactly perpendicular to the baffle's flange. There is a 2 degree forward slant to the mounting face of the toggle so when they're tightened to the sheetrock, the clamping force causes them to naturally flex in towards the cut-out, balancing the load across the entire face of the toggle. By anticipating this natural flex inward, and designing them with a 2 degree slanted face, they seat themselves flat up against the sheetrock. This provides a more secure, durable installation with less



stress on the sheetrock and a better installation of the speaker, thanks to this 2-degree design tweak.

Even the sharp tips of the screws are smoothed over, so no accidental snagging, scratching, or discomfort during installation.

ANTI-VIBRATION MOTOR BOOT

Preference speakers are capable of robust audio output, with a great deal of energy output in the lower frequency ranges. The custom-tooled motor boot on the woofer's magnet assembly helps damp extraneous energy and enables the Preference line to play loud, clean, and clear.

MULTI-ORDER CROSSOVER DESIGN

All Preference speakers are designed with multi-order crossover networks to seamlessly blend the drivers and optimize the off-axis performance - because that's how these speakers function in the home. People don't stand under the ceiling speaker listening to music. They are constantly moving around and they want the best sound possible wherever they are. Preference speakers are designed to deliver musically accurate reproduction - over the widest area of dispersion, creating great sound throughout the home.

POLYPROPYLENE CAPACITORS in the PREFERENCE CROSSOVERS

Preference speakers use polypropylene capacitors in all critical signal areas of the crossover for optimum musical performance, clarity and detail. Oversized Electrolytic capacitors are used for long life only where polypropylene is impractical.

GOLD-PLATED CONNECTORS with HIGH-FORCE SPRINGS

The hefty, gold-plated connectors on Preference speakers are equipped with high-force springs to ensure a solid, safe, durable connection for even the largest gauge wire. These are NOT 5-way binding posts. While often used for high-end home audio, 5-way binding posts are NOT good for custom installed speakers since the connections tend to loosen with movement, vibration, and time. The high-force spring tension connectors used by Preference speakers enable the wire to be under



constant pressure, and the single interface connection (no banana plugs—wire right to the metal of the speaker connector), ensures the best possible connection.

Another benefit of the high-tension spring connector is how they tighten up over time while the 5-way binding post does the opposite.

As the stripped copper wire sits in the insertion cavity of the spring connector, the spring's constant pressure continually squeezes the wire strands into a tighter, denser pack. The conductivity of the connection gets more effective and stays tight.

LARGE GAUGE WIRE

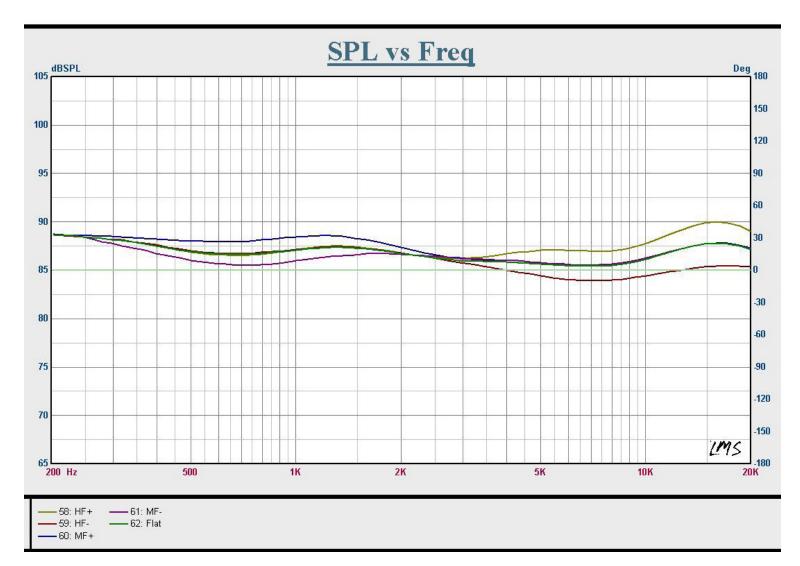
And speaking of wire, Preference speakers are built with beefy 14-gauge wire connections to reproduce as much musical detail as possible throughout the frequency range.

FR-4 FIBERGLASS PC BOARDS

Preference speakers are built with durable, high-quality FR-4 fiberglass PC boards for the crossover platform to solidly support the crossover components and input terminals.

HIGH-ACCURACY FREQUENCY CONTOUR SWITCHES

All Preference speakers (except Single-Point) come with tweeter and mid-range contour switches to fine tune the high and mid frequency contours. Installers can easily adapt each speaker to the surrounding conditions.



KEVLAR® and **TETORON™ DRIVER TECHNOLOGY**

All Preference speaker systems feature woofers with Kevlar cone construction and tweeters utilizing Tetoron dome material. Kevlar is a superior material for woofer design because it has excellent damping characteristics, is extremely durable, light-yet-strong, and generates a musical character that is warm, lush and powerful.

The Tetoron tweeter is known for its accuracy, performance and clarity. With structural materials like Kevlar and Tetoron, it's no wonder all Preference speakers come with a Limited Lifetime Warranty.



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