

The Model Five Floor Standing Loudspeaker Q&A with KLH's Chief Engineer Kerry Geist

The KLH Model Five floor standing loudspeaker was custom engineered from the ground up by KLH's Kerry Geist. Geist is a 1986 Louisiana Tech University graduate with a degree in Electrical Engineering Technology. Following his college graduation, Kerry joined Klipsch & Associates as an Acoustics Engineer, where he worked on commercial and consumer loudspeakers. Geist stayed with Klipsch for 32 years and worked in acoustics engineering, manufacturing, and product development for Klipsch's Heritage product line. In 2019 Kerry joined our team at KLH Audio as the Chief Engineer. We are fortunate to have Kerry hold multiple responsibilities within KLH that revolve around product design and management. Kerry Geist's most recent success story is the KLH Model Five. Below he will answer all your questions about the legendary Model Five floor standing loudspeaker.



Why does the KLH Model Five sound so good?

The Model Five loudspeaker is designed around two guiding principles that perfect its sound quality. The first principle is the acoustic suspension design. Unlike bass-reflex systems, the acoustic suspension design is not optimized to favor one frequency band at the expense of another. The volume of the air in the enclosure ensures that the 10-inch woofer will always be in control, and the low-frequency performance will remain clean even at the highest cone excursions. Secondly, the dedicated midrange driver is specifically designed to reproduce the important, middle part of the audio spectrum- the area where the ear is the most sensitive and where distortion is most easily heard. This guarantees the output is clean and detailed at all levels.

What makes the KLH Model Five floor standing speaker different from other speakers?

It all comes down to the Model Five's acoustic suspension design. Acoustic suspension speakers are much better suited to deal with low-frequency program material than any other loudspeaker design. This is particularly true when listening to contemporary music. Today's recording technology has become so advanced that artists are constantly finding new ways to use the frequency band below 40Hz. This was not the case 20 years ago. As technology has evolved, it is becoming apparent that traditional bass-reflex speakers have problems with detail and accuracy in this regard.

What makes the KLH Model Five loudspeaker such an incredible value?

One of my favorite things about the Model Five is its elegant simplicity. There are five major acoustic components in this floor standing speaker, and they were each developed with the intent of reaching the highest performance quality possible- without breaking the bank. We knew the level of performance we wanted to achieve from the start, so in the engineering realm, it was easy to map out the product design and quality that was necessary to reach those objectives. We did not spend money where it was not needed. Instead, we focused on the individual components and specifications required to build this groundbreaking loudspeaker.

Why is the KLH Model Five one of the best-selling loudspeakers in history?

Dating back to the 1950s, there has always been a desire for low-bass extension from a small enclosure. Back then, one of the best ways to achieve this output of sound was through the acoustic suspension design. This design principle turned KLH into a dominant solution in the loudspeaker industry for decades. The Model Five was then introduced in the mid-60s when high-fidelity was first becoming popular. The original Model Five was the perfect mix of size and performance and led to un-heard of success in the speaker industry which is rarely experienced today.

What makes this loudspeaker so stunningly beautiful?

The Model Five's "Old-World Linen" grille complements the rich finish of the genuine mahogany veneer giving this floor standing loudspeaker the mid-century modern look that has been sought-after for years. The integration of the slant riser base with the retro-looking body gives the Model Five an un-intrusive appeal that helps it blend in any listening room.

Why do we include the 14-gauge powder-coated steel riser base in the Model Five floor standing speaker?

The challenge with any small enclosure is optimizing the positioning of the loudspeaker, regardless of whether the listener is sitting or standing. The slant riser base raises the loudspeaker to the perfect height, and the 5-degree slant-angle positions the floor standing speaker at the proper angle to ensure the best vertical coverage for all listening positions.

What does that custom contour switch on the back do? Why is this different from what other speaker companies do?

Listening room acoustics are more varied than ever before considering today's vast volume of furnishing and architectural design possibilities. This can make the task of setting up a pair of floor standing speakers for music in a room quite difficult. It is not likely that a customer will be willing to spend money on expensive room treatment, so the next best thing is to provide the customer with additional help to initially set up their loudspeaker- hence the attenuator switch. The attenuator switch provides users the ability to slightly reduce the mid & high frequencies in rooms that contain a lot of hard-flat surfaces. The attenuation is not drastic, and you may not immediately notice it, but it does just enough to reduce the high-frequency energy in any room. Overall, the switch improves the balance between the low frequencies (those that are more influenced by the position of the speaker in the room) and the high frequencies (those that are sensitive to the liveness or deadness of the listening space).

Why has every single component of the KLH Model Five floor standing loudspeaker been custom engineered from the ground up by KLH's Kerry Geist?

An acoustic suspension design requires a different type of transducer than those used in traditional bass-reflex systems. The transducer must be more robust, and the excursion requires a much larger cone displacement which presents several challenges to a designer. But fortunately, transducer design and measurement have come a long way in the last 60 years. Modern laser-based measurement techniques are very well-suited for transducer development used in acoustic suspension designs. The magnet structure geometry, flat-wound voice coil, and flux stabilizing ring are all a result of testing using laser-based measurement techniques.

Is the KLH logo solid zinc? Is that indeed the original KLH logo from 1968?

Yes, the logo is cast from zinc. And yes, it is the original KLH logo from 1968. We wanted the logo to represent the quality of the materials used in the Model Five loudspeaker, and honor the fact that KLH uses more responsible, recyclable, and sustainable materials in its construction.

Why are the Model Five's grilles so beautiful? What makes them unique?

A loudspeaker's grille cloth is the most dominant part of its cosmetic appeal. We chose to depart from the traditional black cloth and look at fabrics of assorted colors and textures to enhance how the product will look in customers' listening rooms. Our goal was to get the product out of the traditional "man cave" and into living rooms for more people to enjoy.