

Shown: PBK in a 7.1 setup with primary listening position marked

# Paradigm Perfect Bass Kit™

*"Audibly better bass through science."*  
– Chris Martens, AVGuide

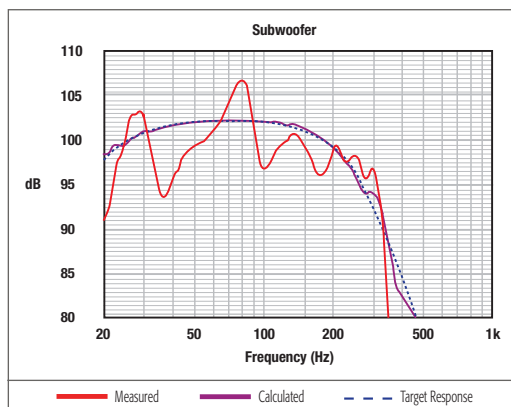


## Paradigm® Perfect Bass Kit (PBK™)

Even when your Paradigm subwoofer is ideally placed, the room can still have a dramatic impact on bass performance. Room dimensions, dead spots, archways, and even furniture placement can turn a room into an additional instrument, playing alongside musicians or movie scores with unwanted contributions of coloration and resonance. Bass can sound bloated or boomy, with poor definition. Paradigm's Perfect Bass Kit is the answer ...

- PBK is unlike anything previously available:**  
 With the Paradigm Perfect Bass Kit, the negative effects of room boundaries on sound quality are a thing of the past. This state-of-the-art "bass perfecting" system analyzes the subwoofer's response in your room, then sets the correct equalization parameters to attain optimal sound.  
  
 The frequency response of each PBK microphone is measured precisely and the data is used to create the microphone's calibration file included on the PBK software disk.
- PBK applies Super-Efficient Infinite Impulse Response (IIR) Filters in addition to Custom Filter Topology:**  
 This minimizes delay and reduces processing gain noise. The combined approach of limiting the width of IIR filters and applying custom topology means that any artifacts that might have resulted from the filtering process are so small as to be completely inaudible.

- PBK allows for Multiple Microphone Measurements:**  
 Most room equalization methods work from a single point source, taking one measurement at the primary listening position. PBK however, provides for multiple user-selected measurement points (we suggest a minimum of five, but up to ten positions can be measured).
- Unlike many "Room EQ" systems, PBK applies Correction to Peaks (modes) and Dips (anti-modes):**  
 Tackling both allows us to achieve a far more accurate and natural room response. And to limit the demands on the amplifier as well as maximize signal-to-noise ratio, PBK applies appropriate limits to this correction.
- PBK is Ultra-Accurate:**  
 The connected PC's 64-bit floating-point processor does the hard work of calculating the correction curves, which greatly minimizes the rounding errors of a less sophisticated "calculator".
- It's Easy-to-Use (at least your part is!):**  
 Three years of intensive research and development on our part have made it a snap to attain "Perfect Bass" performance in any room! All that's required is a PC running Windows XP or Vista, two USB ports and the Paradigm Perfect Bass Kit. Paradigm even includes the two USB cables you'll need: one for the PBK microphone and one for the subwoofer.



Paradigm's Perfect Bass Kit (PBK) is a derivative of the critically acclaimed Anthem® Room Correction (ARC) system, based on research conducted by the National Research Council (NRC). The NRC's goal was to identify the correct "in-room" target response for a loudspeaker (in this case, the subwoofer) and then develop a way to achieve that same response in any listening room. Using proprietary processing, PBK measures your subwoofer's frequency response and then computes the target response to yield optimal bass performance in your room. Each PBK can be used with up to four Paradigm Reference subwoofers.

### How Does PBK Do What it Does?

The process begins when your computer signals the subwoofer to play the test signal, which is then picked up by the individually calibrated microphone. The system puts the subwoofer through a frequency sweep to highlight problem areas and determine necessary adjustments. It asks you to position the microphone in at least five different locations. Configurations are then saved on the connected PC. The optimized solutions are calculated, then uploaded to the subwoofer and the calculated room corrections are put in place. An audiophile solution to the problem of "the room"!