

Vent Modification and Effect Chart

	Modification	Effect on Low Frequencies (Below 750 Hz)	Effect on Frequencies Btw 750-1500 Hz	Effect on Frequencies Btw 1500-3000 Hz	Effect on High Frequencies (Above 3000 Hz)
Tubing Diameter (inside diameter)	Larger & Horn Tubing	Negligible	Moves peak to higher frequency	Increases peak height & moves to higher frequency	Increases
	Smaller Tubing	May reduce below 1K Hz	Moves peak to lower frequency	Reduces peak height & moves to lower frequency	Large reduction
Tubing Length	Longer Tubing	Increases	Moves peak to lower frequency	Moves peak to lower frequency	Negligible
	Shorter Tubing	Slightly decreases	Moves peak to higher frequency	Moves peak to higher frequency	Negligible
Length of Earmold Canal	Longer	Increases level of response curve			
	Shorter	Decreases level of response curve			
Bore Diameter	Larger through earmold	Negligible	Moves peak to higher frequency	Moves peak to higher frequency	Increases
	Smaller through earmold	Negligible	Moves peak to lower frequency	Moves peak to lower frequency	Decreases
Bore Length	Longer through earmold	Slightly increases	Moves peak to lower frequency	Moves peak to lower frequency	Decreases
	Shorter through earmold	Slightly decreases	Moves peak to higher frequency	Moves peak to higher frequency	Increases
Venting	Small (.031"/0.8 mm)	Negligible	Negligible	Negligible	Negligible
	Medium (.064"/1.6 mm)	Decreases	Increases peak height	Negligible	Negligible
	Large (.094"/2.4 mm)	Decreases	Increases peak height	Negligible	Negligible
Non-Occluding Mold	Non-Occluding Mold	Eliminates	Increases peak height & moves to higher frequency	Increases peak height	Negligible
Open Vent Mold	High frequency mold	Decreases	Reduces peak height	Negligible	Negligible
Filter Inserts	Insert at ear hook	Negligible	Reduces peak height	Reduces peak height	Negligible
	Insert at earmold tip	Slightly decreases	Large reduction	Large reduction	Decreases

*This chart is to be used as a guideline for average conditions.