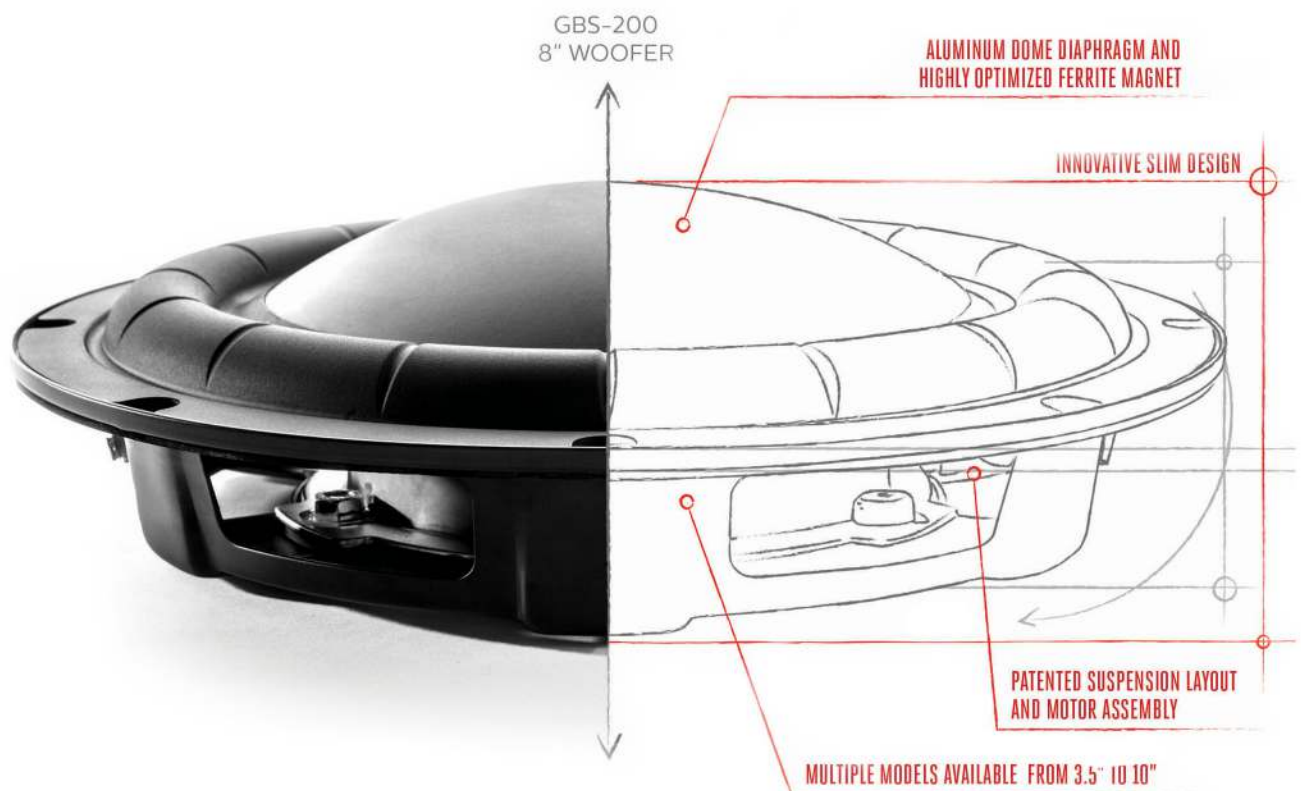




Peerless

by TYMPHANY

GBS LOW-PROFILE WOOFERS



*Setting a new standard in
space-saving design*

OVERVIEW

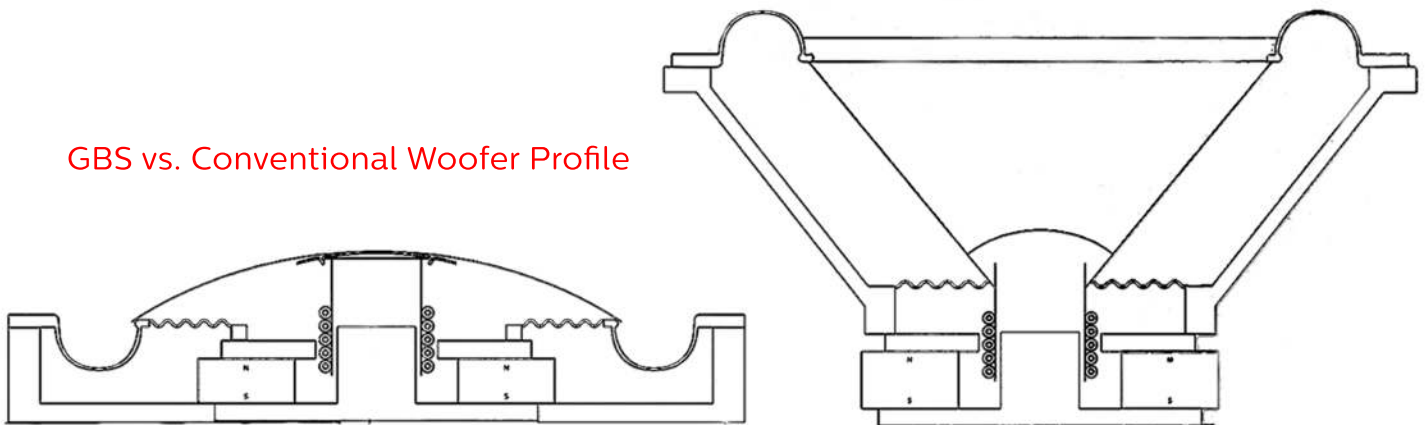
GBS SERIES OF WOOFERS AND SUBWOOFERS

were designed to reduce the overall height of the woofer without compromising the sound quality. It features an innovative shallow design well-suited for applications where mounting depth is scarce, yet low-frequency performance cannot be sacrificed. The GBS design allows for versatile installation options using conventional materials that maintain efficient cost savings.



HEIGHT-SAVINGS COMPARISON

GBS vs. Conventional Woofer Profile



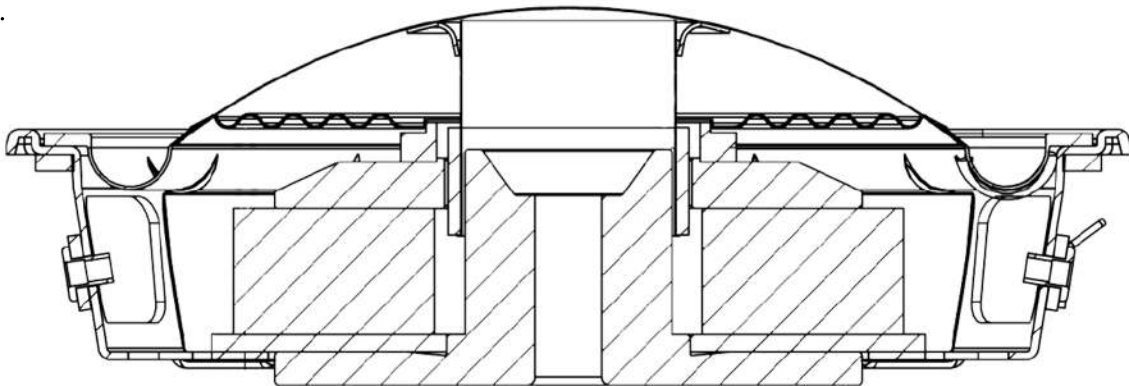
WITH THE GBS WOOFER, OUR GOAL WAS TO DECREASE THE HEIGHT of the woofer, while still allowing for large excursions of the diaphragm. There are two key features that make this possible: the dome shape and a secondary suspension.

DOMESHAPE

THE GEOMETRY OF THE DIAPHRAGM IS DOME-SHAPED, RATHER than cone-shaped. This unique design allows the motor to be inverted, taking advantage of the space underneath the dome and reducing the total height significantly.

SECONDARY SUSPENSION

RAISING OF THE MOTOR NORMALLY WOULD NOT BE POSSIBLE due to placement of the spider. The solution is to invert the spider fixation arrangement, which allows for a secondary suspension that doesn't interfere with the new motor location.



VOICE COIL CENTERING:

WITH THE USE OF FEA, WE DESIGNED LATERAL STABILITY INTO THE suspension system which helps to control the rocking modes and allows a reduction of distance between both suspensions. The dome geometry of the diaphragm assists with mass centralization – as a result, the rocking mode center of the driver is placed in a similar plane as the voice coil and magnetic gap, giving the driver a much higher tolerance to rocking modes than a conventional driver.

EXCURSION CLEARANCE

BOTH THE BASKET AND SUSPENSION COMPONENTS WERE CAREFULLY designed to allow full excursion, without risk of rocking or hard 'bottoming'. All mechanical excursion clearances were precisely balanced to ensure that the driver is of the minimum height for a given excursion capability.

NOW AVAILABLE

GBS-85N25PR03-04

Motor - Neodymium
Size - 3.5 inches
Diaphragm - Paper
Impedance - 4 Ω

GBS-135F25AL02-04

Motor - Neodymium
Size - 5.25 inches
Diaphragm - Aluminum
Impedance - 4 Ω

GBS -250F38CP01-04

Motor - Ferrite
Size - 10 inches
Diaphragm - Paper
Impedance - 4 Ω

COMING SOON

GBS-115N25AL01-04

Motor - Neodymium
Size - 4.5 inches
Diaphragm - Aluminum
Impedance - 4 Ω

GBS-200F35CP02-04

Motor - Ferrite
Size - 8 inches
Diaphragm - Paper
Impedance - 4 Ω

