Subject: Beta 12LT in PiAlign'ed cabinet
Posted by Wayne Parham on Tue, 04 Sep 2001 23:56:57 GMT
View Forum Message <> Reply to Message

You asked what Pi Alignments recommend for the Eminence Beta 12LT speaker. Eminence publishes the following specifications:Vas = 4.81 cubic feetFts = 45HzQts = 0.51And these correspond to PiAlign values of:Vad = 4.81 cubic feetFrd = 45HzQd = 2.0 (1/Qts)PiAlign recommends a bass reflex cabinet of 2.4 cubic feet tuned to 33.75Hz and having Q of 1.5. It recommends doing this using a 2.5" diameter port that's 2.75" long, which is very close to a perfect match - corresponding to Frd of 34.0Hz and Q of 1.56. Without any volume displacements, it is suggesting the cabinet be 24" x 16" x 11", but after consideration of the volume displaced by the speaker driver and the wood thickness, I'd expect your cabinet's outside dimensions to be closer to 26" x 18" x 14". And while these cabinet dimensions can be off a half inch or so, be sure the port dimensions are "right on the money." You must have inside dimensions of 2.5" diameter and 2.75" long for the design to be optimal.