



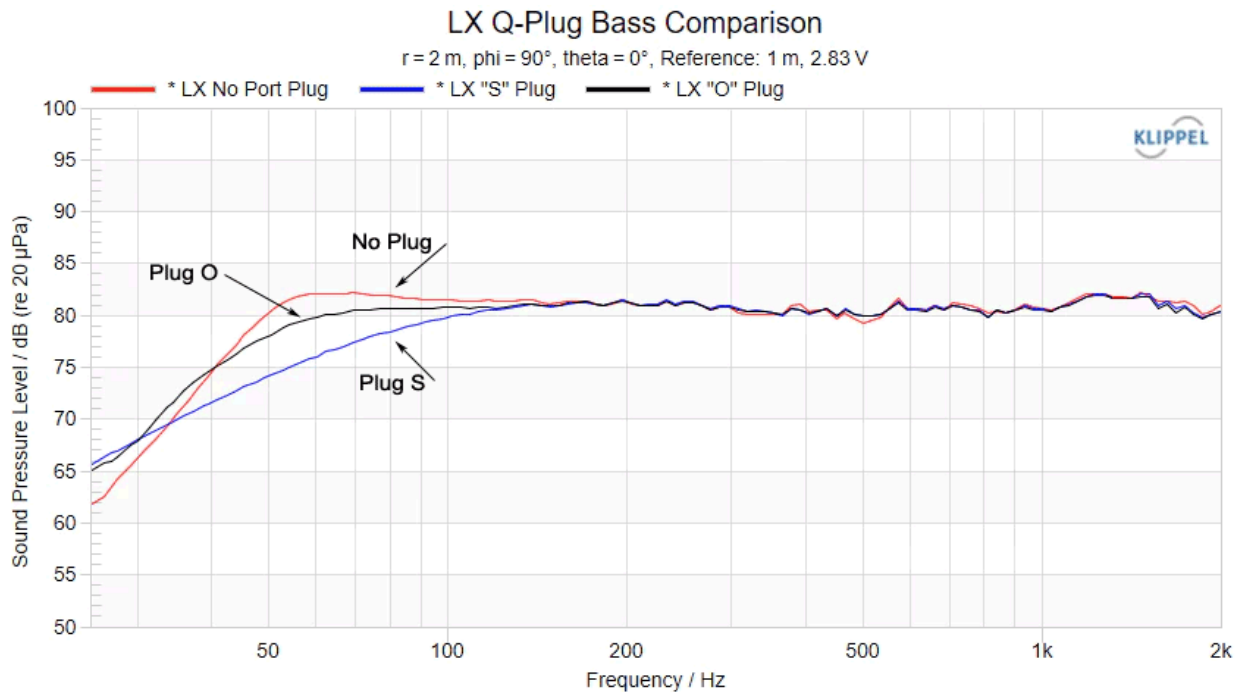
## Q-Plug Instruction Sheet

Q-Plugs are custom tooled port plugs designed to tune ported speakers bass response to improve overall in-room bass performance in problematic rooms or with poor speaker placement. They can also improve integration with subwoofers and allow for many more placement options.

Enclosed you will find 2 different plug styles. Q-Plug S is for fully sealing the port tube while Q-Plug O is an open design. Plug "S" seals the rear port and changes the low frequency roll off from 24dB/octave to 12dB/octave with a -3dB point of 70Hz. Plug "O" dampens resonance and port noise, reduces bass output in the 50-100Hz range while increasing bass output below 40Hz.

**Q-Plug S:** Recommended when the speaker will be positioned so that the rear port tube is very close to a wall, wall mounted, or when the speaker is placed in a small enclosure. Also recommended to improve integration with a subwoofer and it is the ideal choice if you want to use a subwoofer but do not have bass management for the speakers (speakers full range with a subwoofer.)

**Q-Plug O:** Recommended in smaller rooms where room modes might cause over emphasized bass. These plugs will provide a deeper more articulate bass response with less output in the 50-100Hz range, and more output below 40Hz. They also do an excellent job at damping port resonance and air-noise due to turbulence.



Q-Plugs should be experimented with. There is no technically right or wrong way to use them. Use whichever configuration sounds best to you.