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Adjustable Tuning Port for Bass-Reflex Loudspeaker Systems

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ADJUSTABLE TUNING PORT
FOR
BASS-REFLEX LOUDSPEAKER SYSTEMS

Prepared For:

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Abstract

This project report describes the design and testing of an adjustable tuning port that is adjustable in length and opening. The device is placed into the loudspeaker enclosure and mounted on the same side as the loudspeakers. The volume and compliance of the enclosure is affected by the length and opening of the tuning port. This allows tuning the air impedance of the enclosure to match the impedance of the loudspeaker. The result is a loudspeaker system capable of reproducing low frequencies that are not suppressed or overstressed in tonal qualities.

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