

# Pound – Drever – Hall frequency locking method

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We use the Pound reflection locking method to tune the cavity. We input a phase-modulated RF signal to the cavity through a directional coupler. The RF signal reflected by the cavity is given to a lock in amplifier using a Zero bias Schottky detector. The output of the lock in amplifier gives a measure of how far the carrier is off the resonance. This output is fed to an integrator and the signal can be used as a feedback signal to tune the cavity using a servo control.

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