Gain expression for the mic-condenser output

$$\left|\frac{Vo}{V}\right| = \left|\frac{1}{1 - \dfrac{1 + j\,\omega R_1 (C_m + C_d)}{R_2^2 (\omega^2 R_1 C_d C_m - j\,\omega C_d)}}\right|$$

R_1 = Mic-condenser bias resistance

R_2 = Potentiometer resistance (10k pot)

C_m = Mic-condenser capacitance (~ 1-10 pF)

C_d = DC blocking capacitance (10 uF)

V = DC voltage (5 V)

V_o = Input voltahe to amplifier

Derivation of Gain