

**Gain:**

The Gain can be set with the Potentiometer in series with R1.

$$R_2 := 27000 \quad \text{Ohm} \quad R_1 := 470 + 0 \quad \text{Ohm} \quad 0\% \text{ Potentiometer}$$

$$V_U := 1 + \frac{R_2}{R_1} = 58.447 \quad V_{UdB} := 20 \cdot \log(V_U) = 35.335 \text{ dB}$$

$$R_2 := 27000 \quad \text{Ohm} \quad R_1 := 470 + 10000 \quad \text{Ohm} \quad 100\% \text{ Potentiometer}$$

$$V_U := 1 + \frac{R_2}{R_1} = 3.579 \quad V_{UdB} := 20 \cdot \log(V_U) = 11.075 \text{ dB}$$

**Active Filters:**

Can be found in Excel Calculations!

Lower Cut Off Frequency is around 300Hz.

Upper Cut Off Frequency is around 3kHz.