

Equalizer Project

- Combine (from scratch) a second-order low-pass filter (LPF), a second-order high-pass filter (HPF), and a second-order bandpass filter (BPF) to create an equalizer (equalizers are hardware filters that adjust the amplitude of specific frequencies). This equalizer is used to modify an input music signal.
- Grade received: **A**

Agilent (Keysight)
Function Generator

Keithley Power input

Second-order
High Pass
filter

Second-order
Low Pass filter

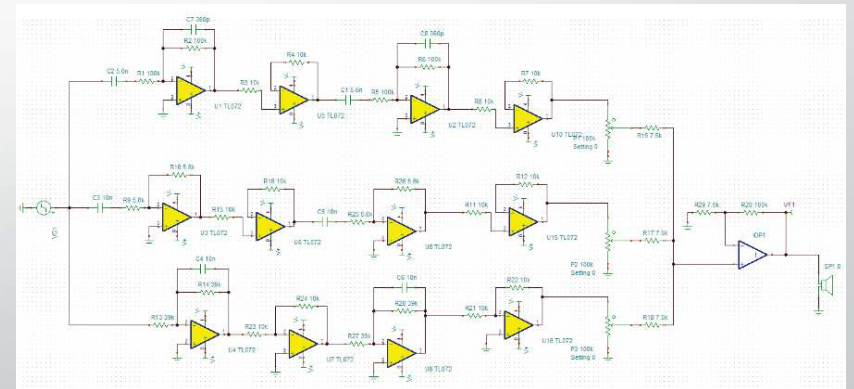
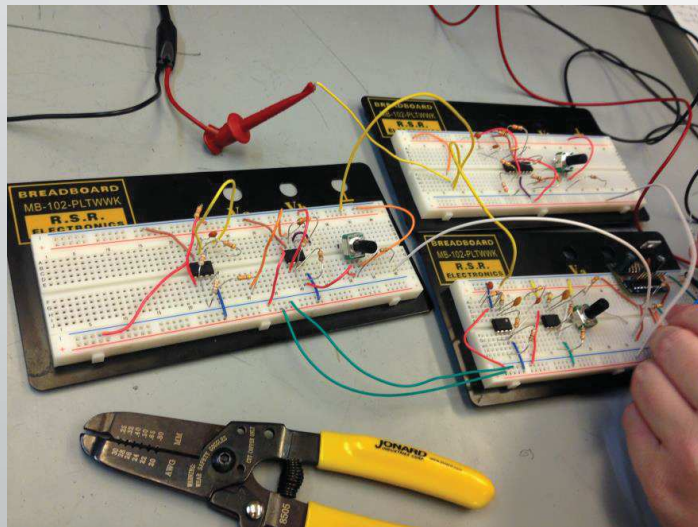
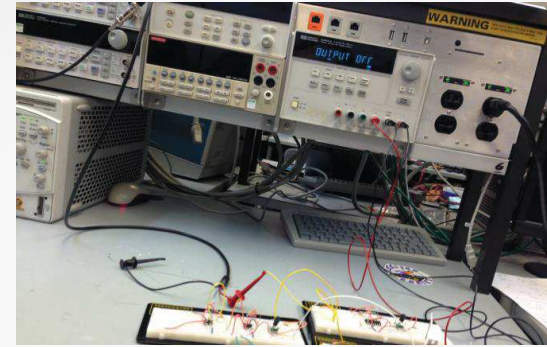


Figure 1: The Equalizer
structure.

Second-order
Band Pass filter

Figure 2: Simulation for the
Equalizer in TINA-TI.

Video Representation

- Please click on the below YouTube link to see how the Equalizer works.

https://youtu.be/J_s1tbV-znA