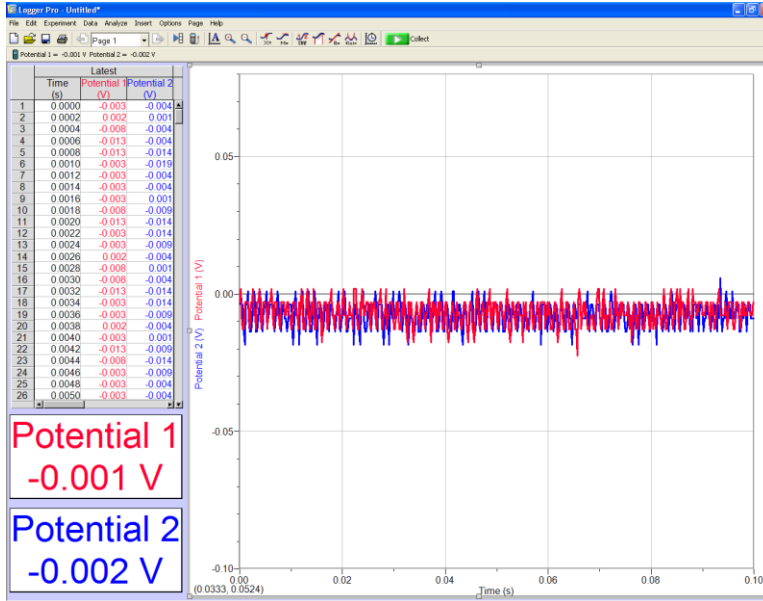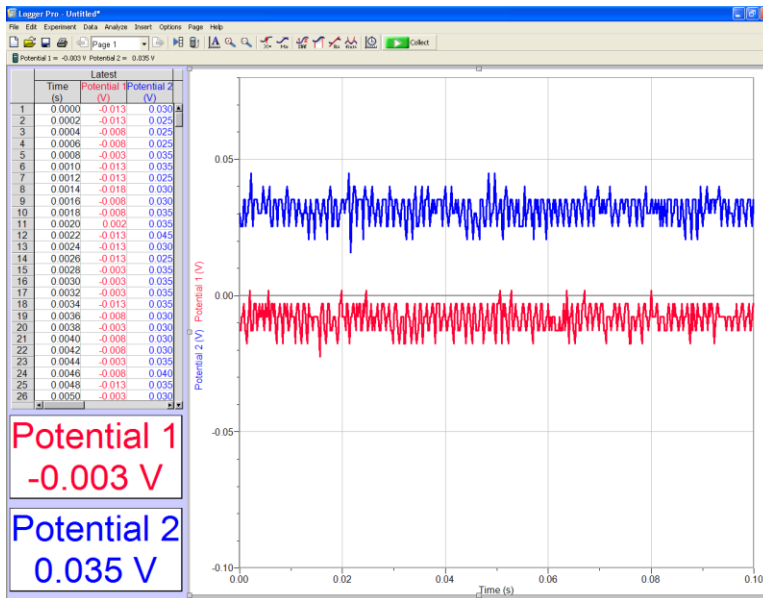# Sample Graphs for Op Amp Activity

All of the Graphs below were reading for 0.1 s at a sampling rate of 5000 per second. The red graph is for the input, the blue is for the output.
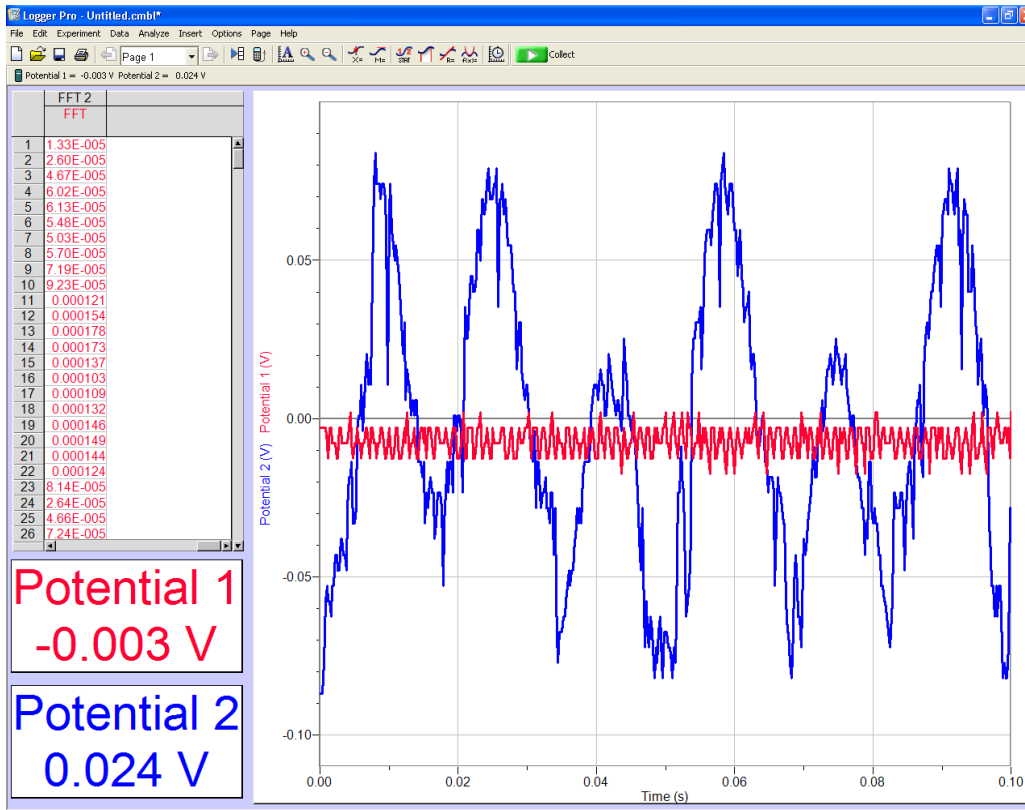

Var resistor turned all the way down. Audio plug not connected to anything. The sensors have been zeroed previously, the slight negative offset is being caused by the circuit.


Audio plug not connected to anything, but variable resistor turned up all the way.
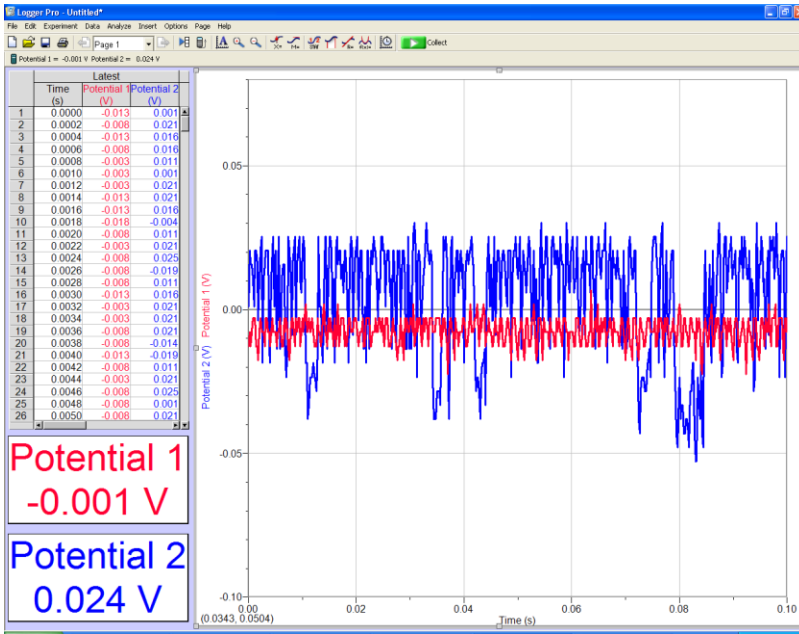
Variable resistor turned up all the way, audio plug now connected to the computer. No mp3 files being played.

60 hz white noise file. Vertical scale is now almost 2 times as large in previous graphs. Student methods to estimate signal and noise will vary. However, all should realize that the amplification of the noise is not as great as the amplification of the signal (a feature of the chip). The circuit also inverts the signal, which may be discernible to students if prompted to zoom into the input signal. Even though it has an overall negative offset, it shifts up and down opposite of the output signal.
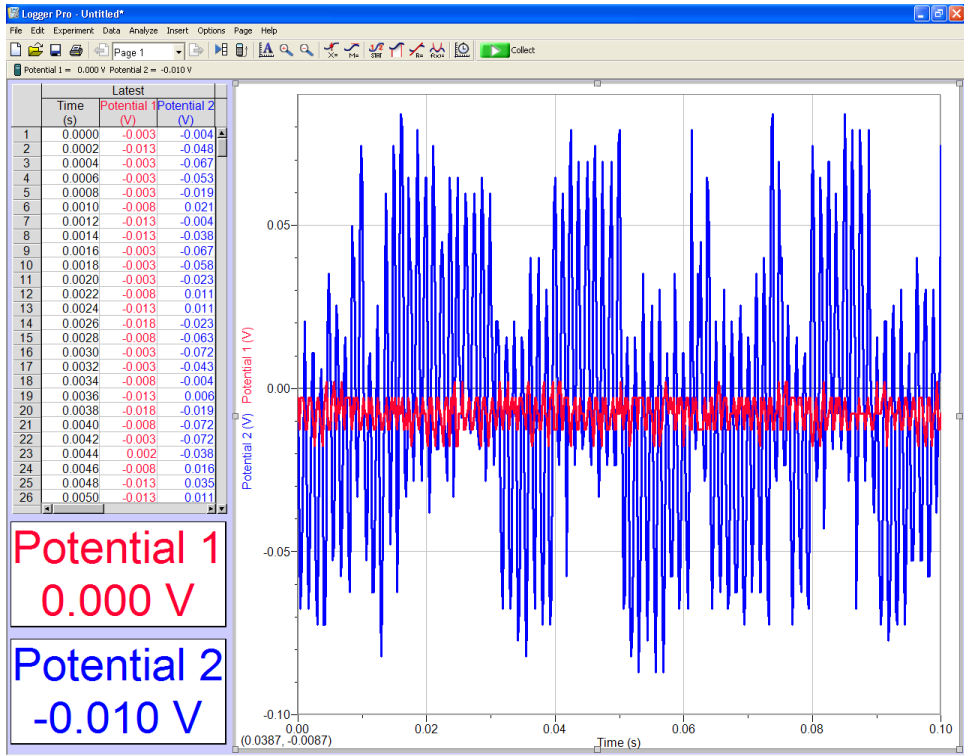
800 hz white noise file. Below if the FFT graphs for the input and out put zoomed to the same scale—both clearly indicating an 800 hz signal.