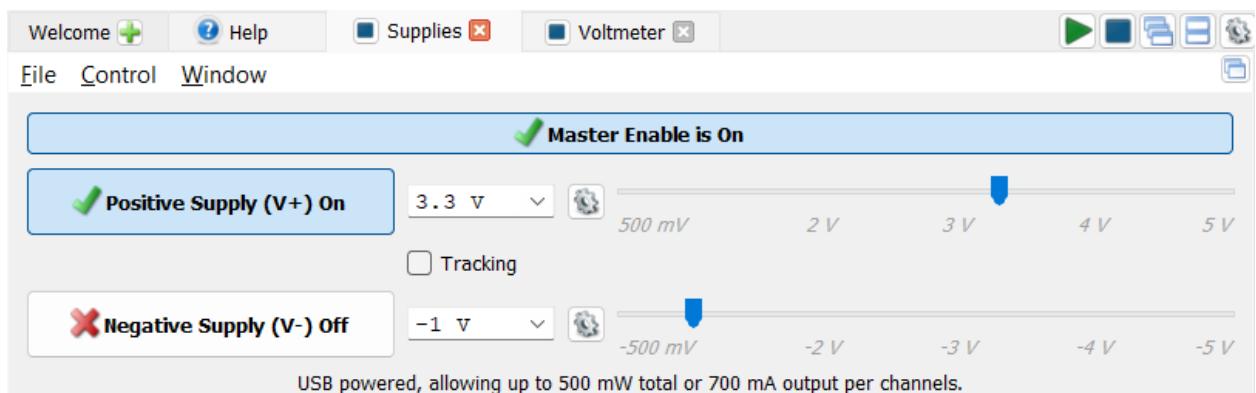


Hayden Fuller

Generate and measure directly:

DC:

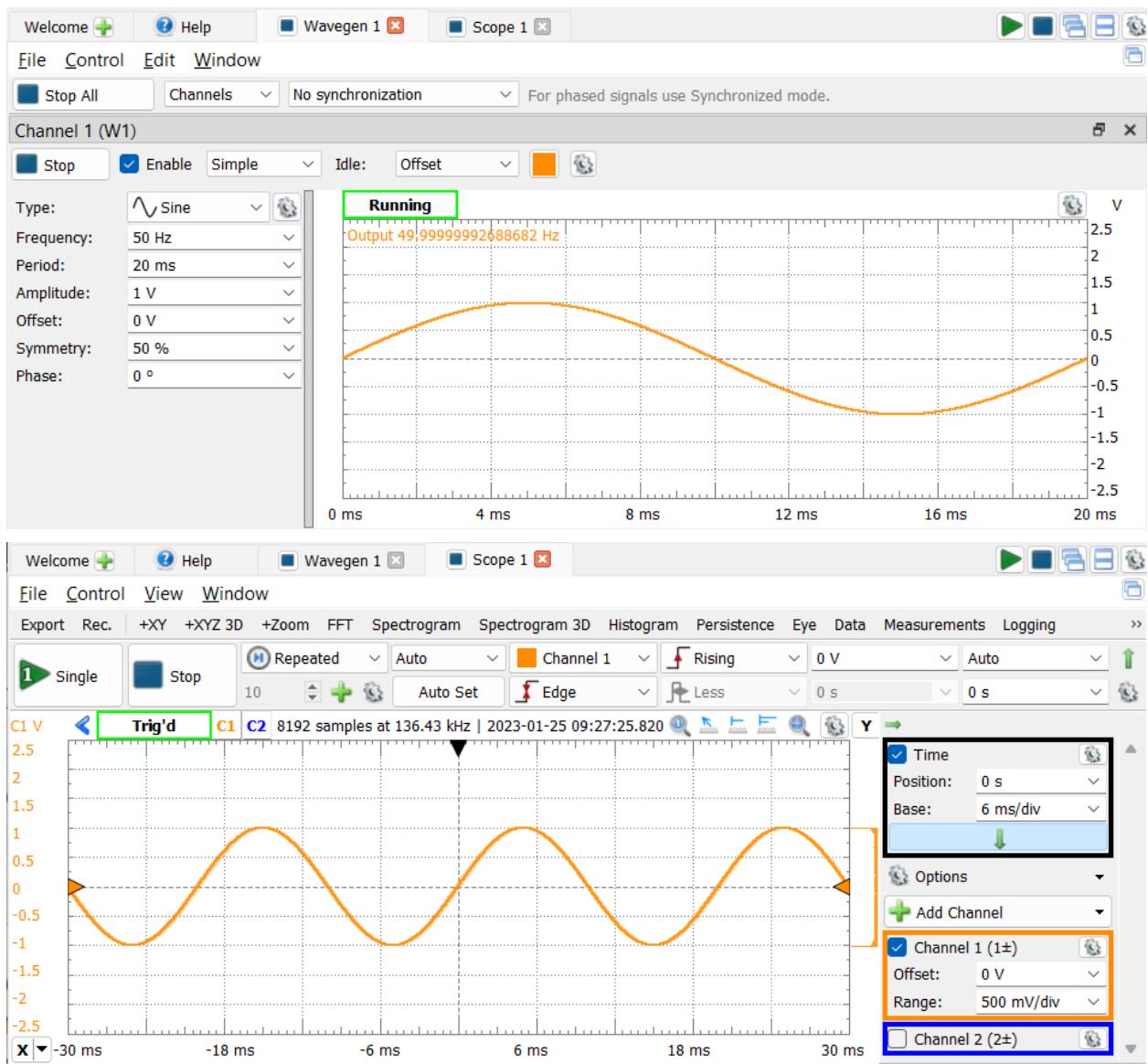


Screenshot of the DMM software interface showing measurement results. The table displays the following data:

	Channel 1	Channel 2
DC	3.314 V	0 V
True RMS	3.314 \tilde{V}	2 m \tilde{V}
AC RMS	2 m \tilde{V}	2 m \tilde{V}

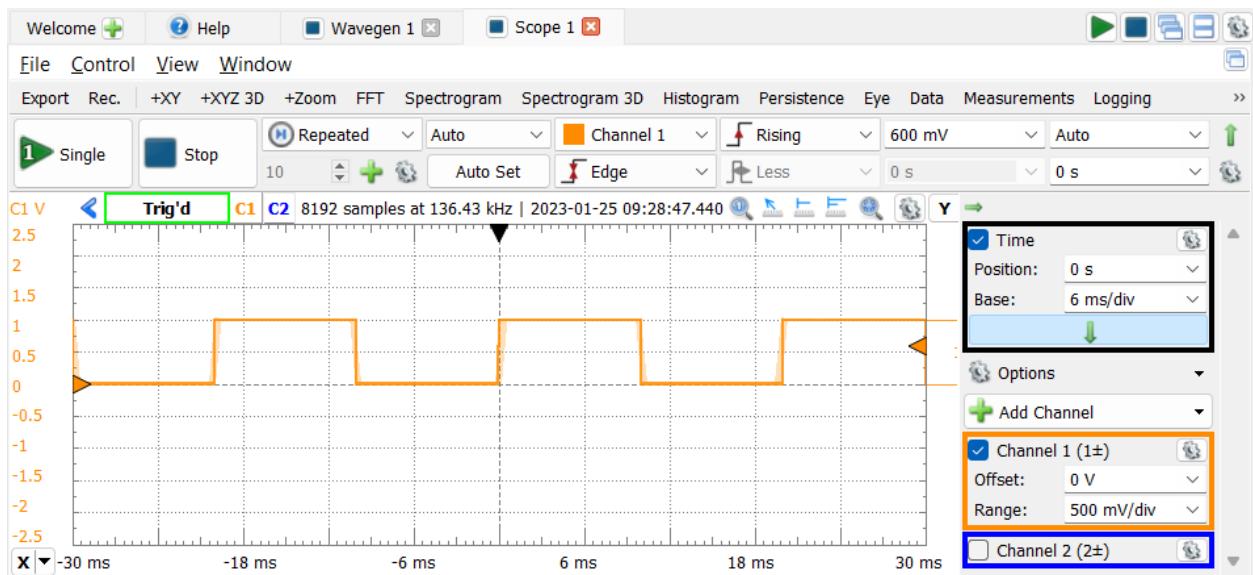
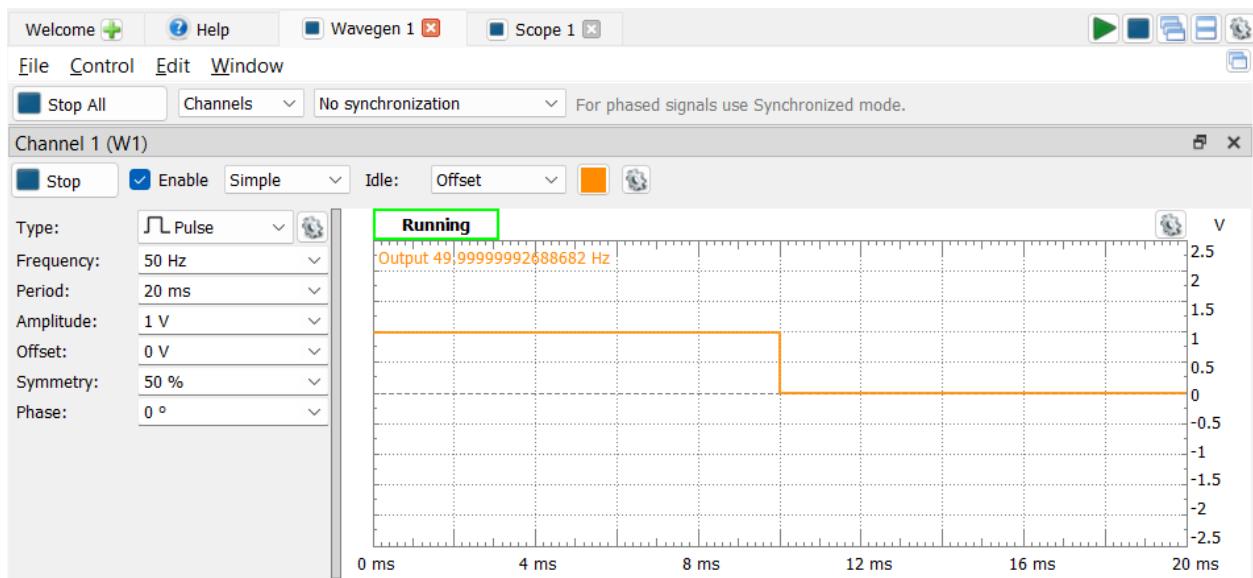
Sinusoid:

W1 ————— **1 +**

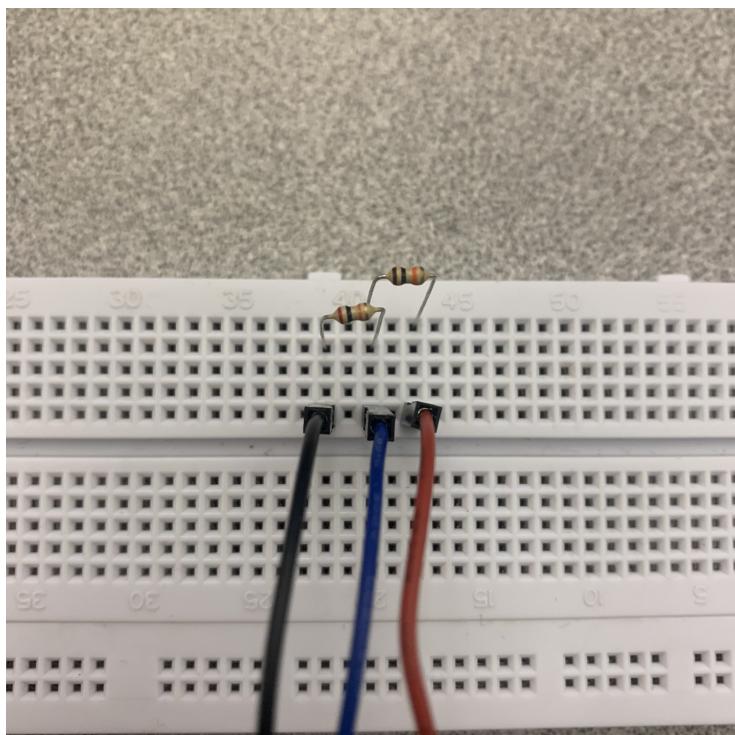
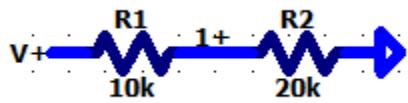


Pulsed signal:

W1 ————— **1 +**



Measure DC across one resistor: Simple 10k and 20k in series (20k on gnd side which will be measured across for the remaining objectives)

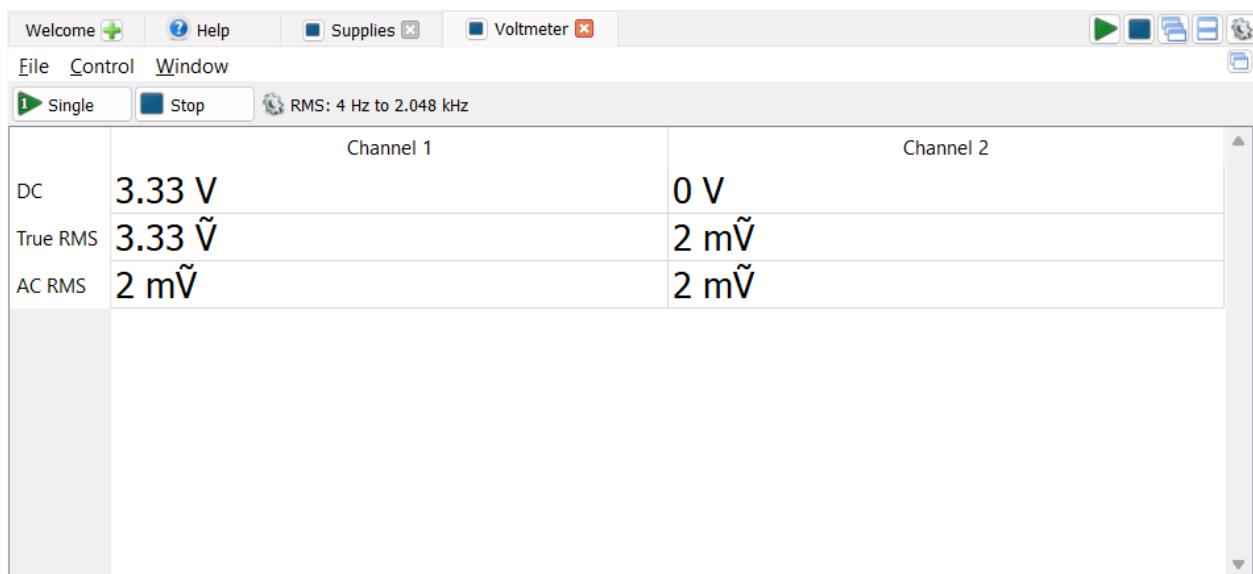
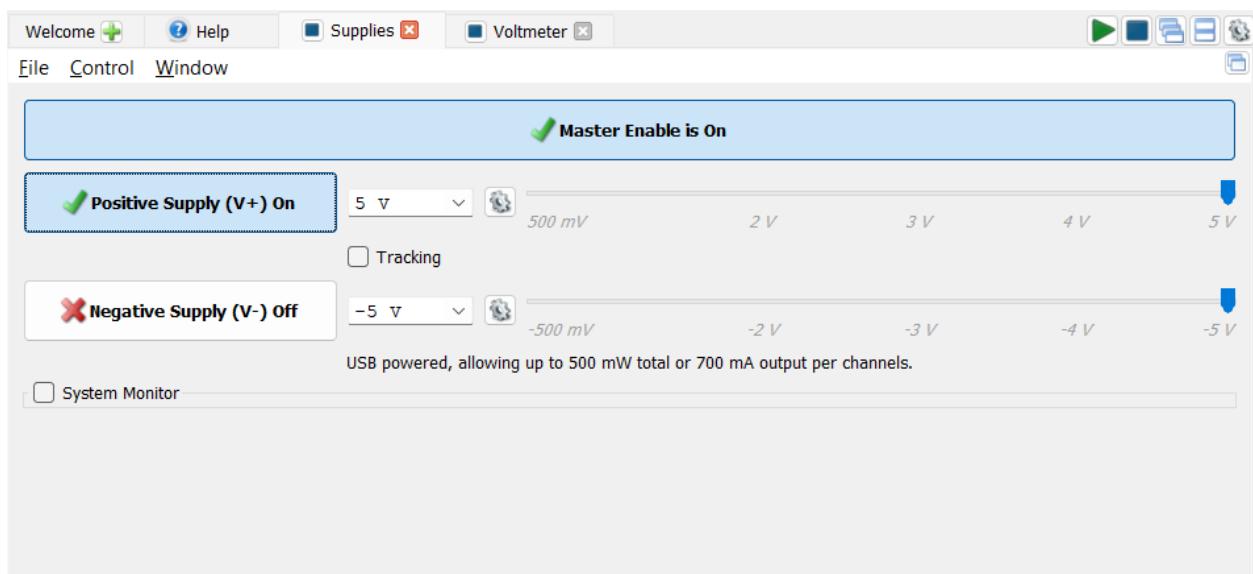
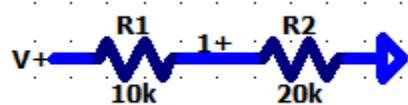


5v:

Red: V+, 5V

Black: Gnd

Blue: 1+, Channel 1

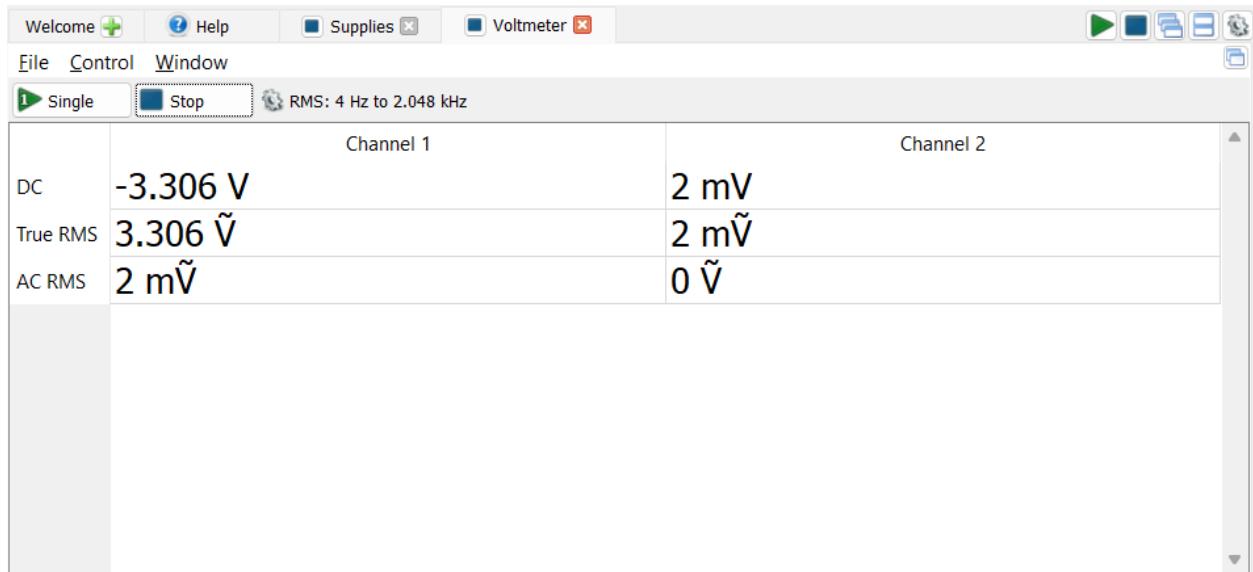
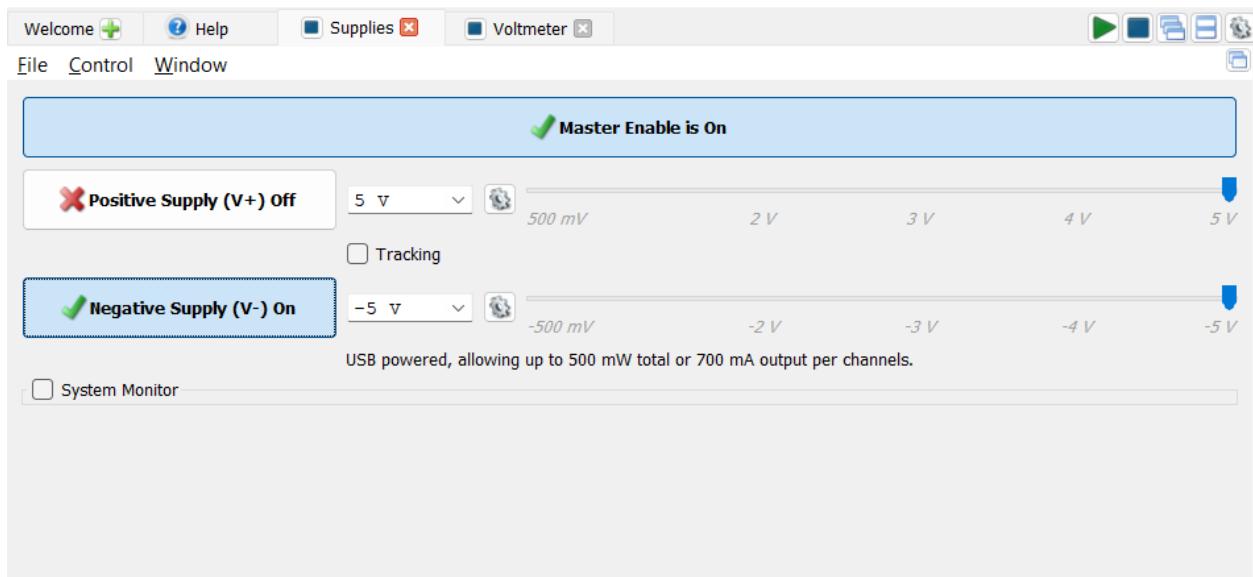
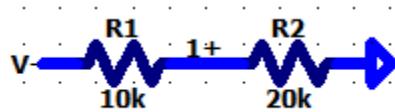


-5V:

Red: V-, -5V

Black: Gnd

Blue: 1+, Channel 1

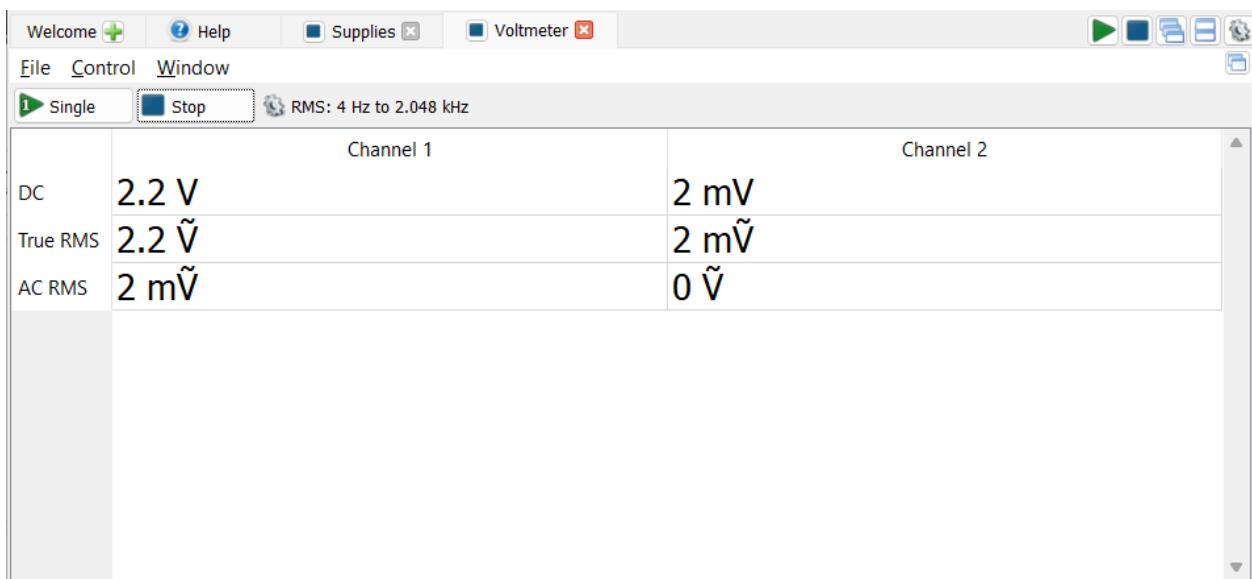
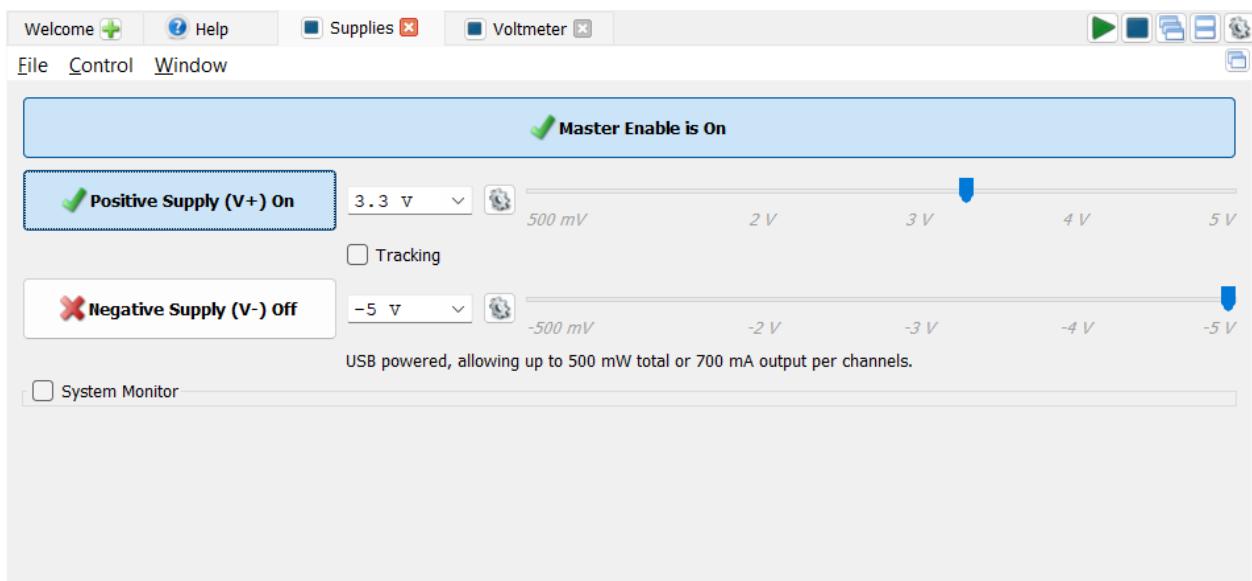
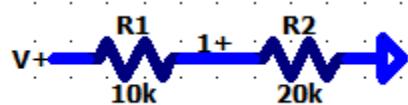


3.3V:

Red: V+, 3.3V

Black: Gnd

Blue: 1+, Channel 1

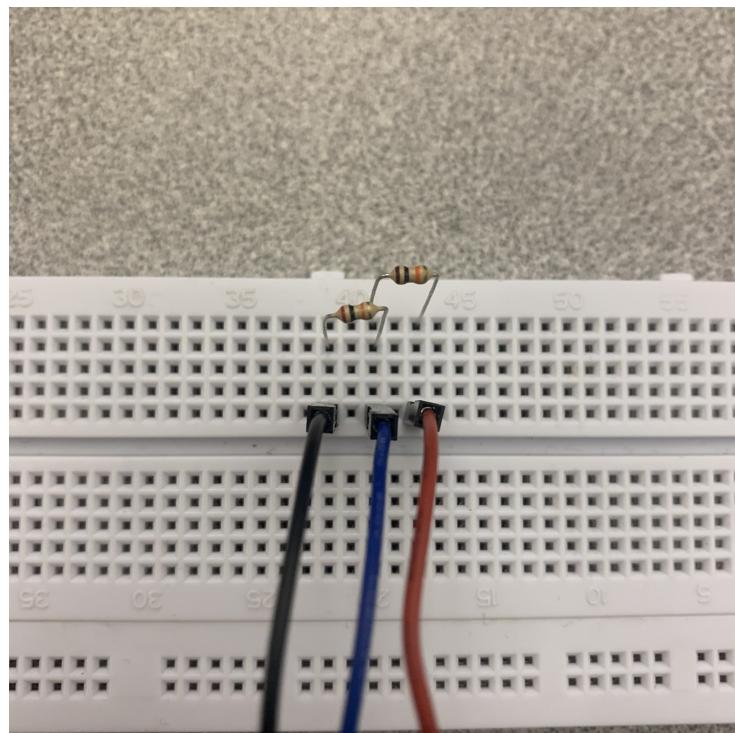
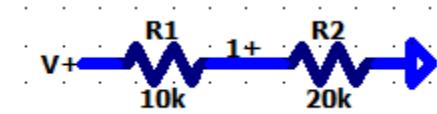


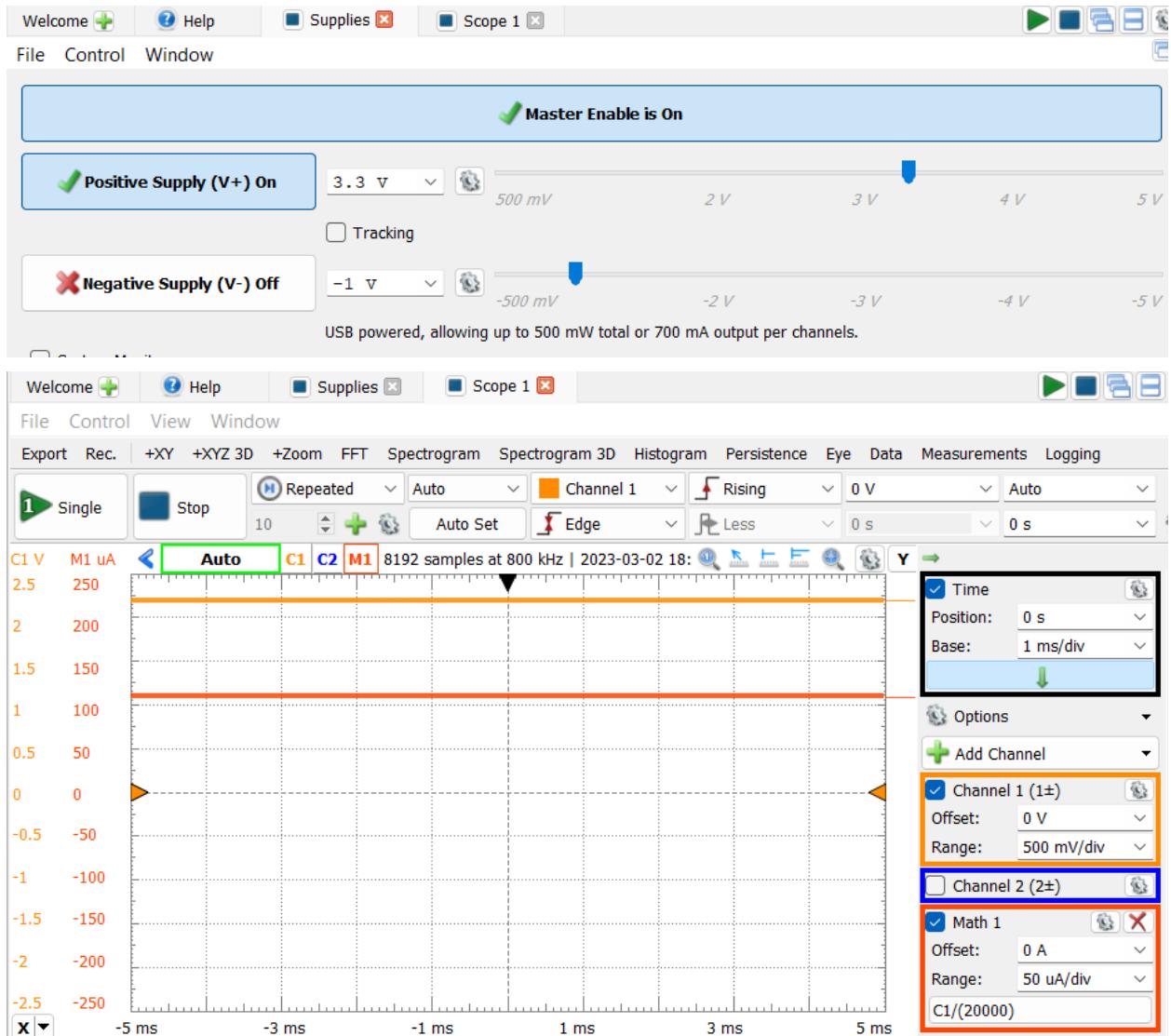
Measure DC current through a resistor: can't be done directly with AD2, used $I=V/R$ with a math channel to calculate it in real time

Red: V+, 3.3V

Black: Gnd

Blue: 1+, Channel 1





I had points taken off for the background not being white. Assuming my vision is correct, that is white.

I also had points taken off for not increasing the line width, but it's also already at the maximum setting.

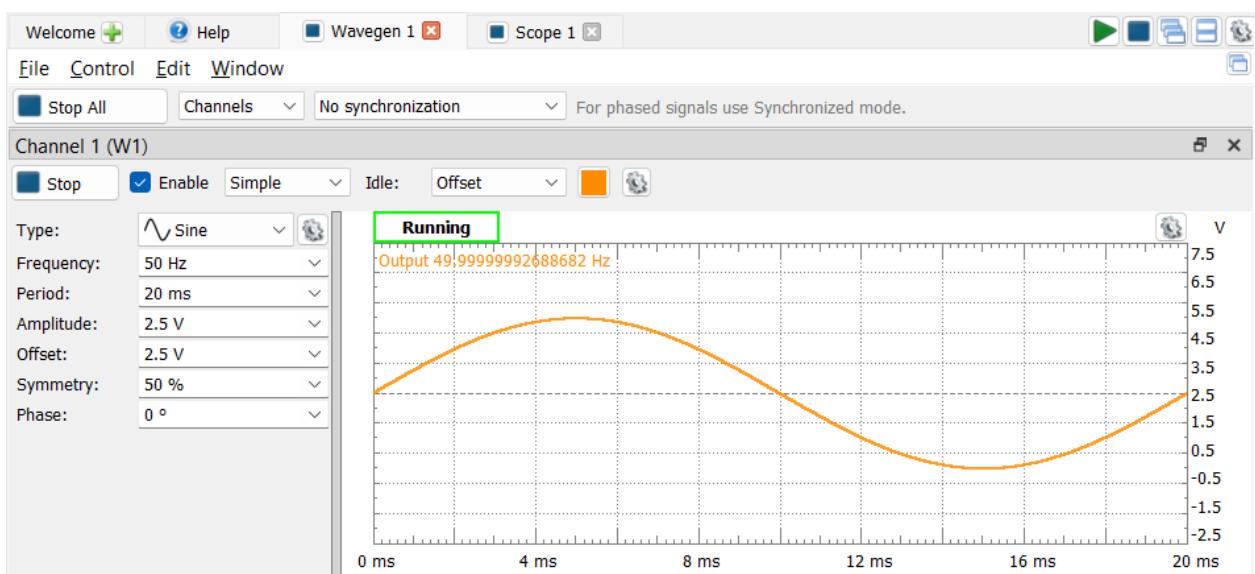
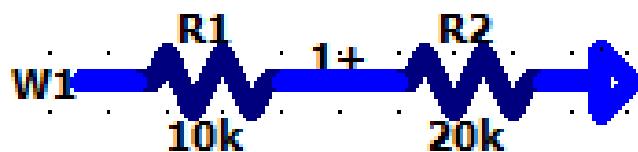
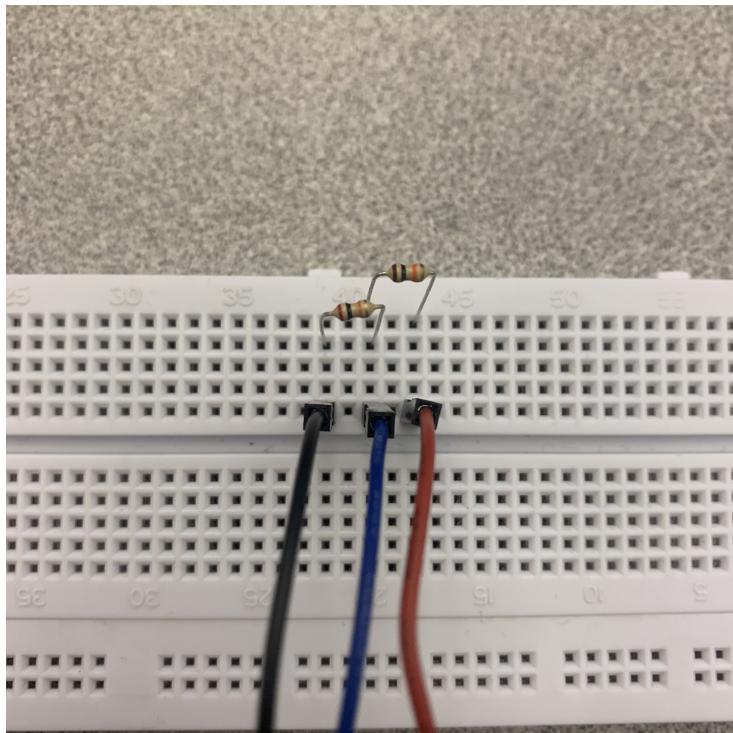
Measure voltage across one resistor with a sinusoid source:

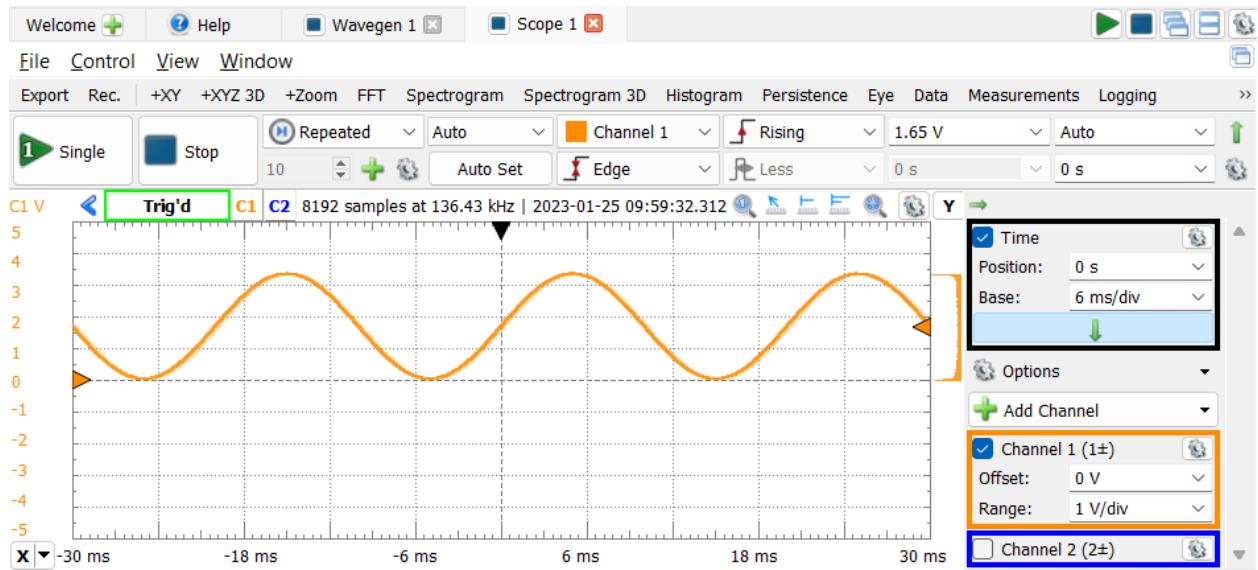
5 to 0:

Red: W1

Black: Gnd

Blue: 1+, Channel 1



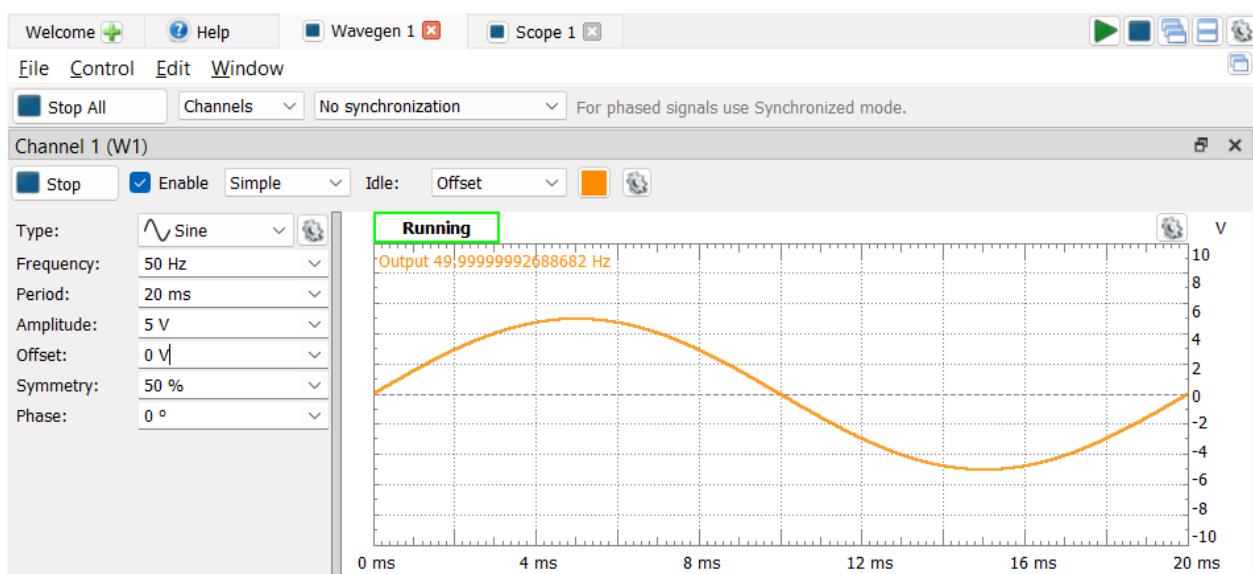
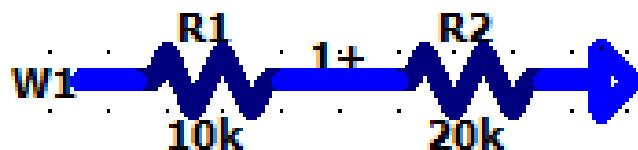
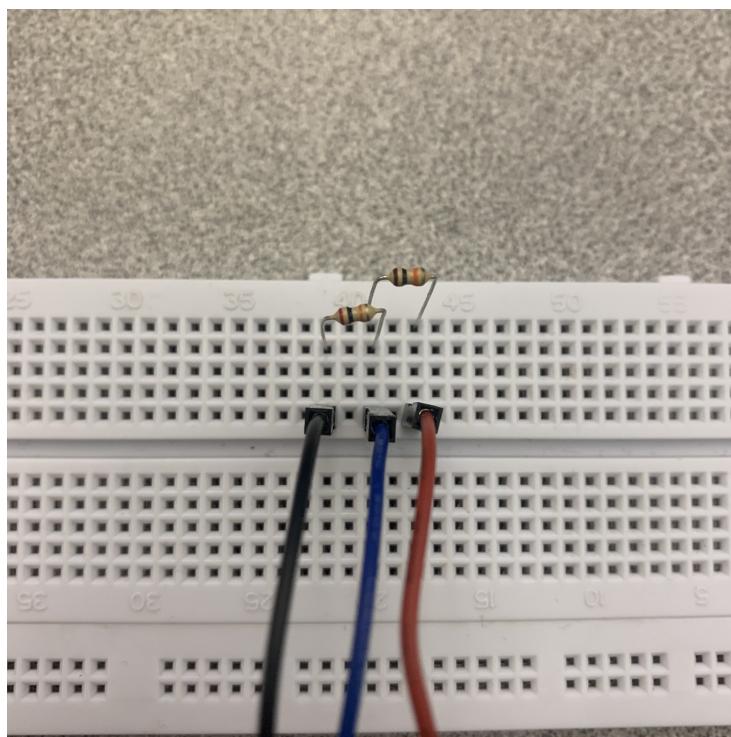


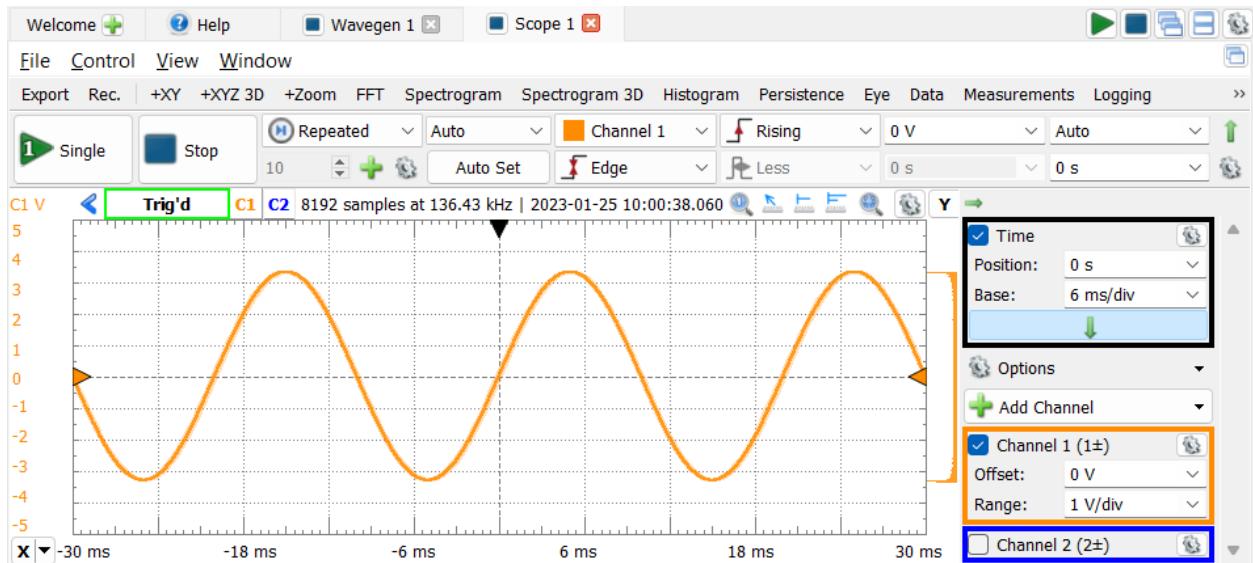
5 to -5:

Red: W1

Black: Gnd

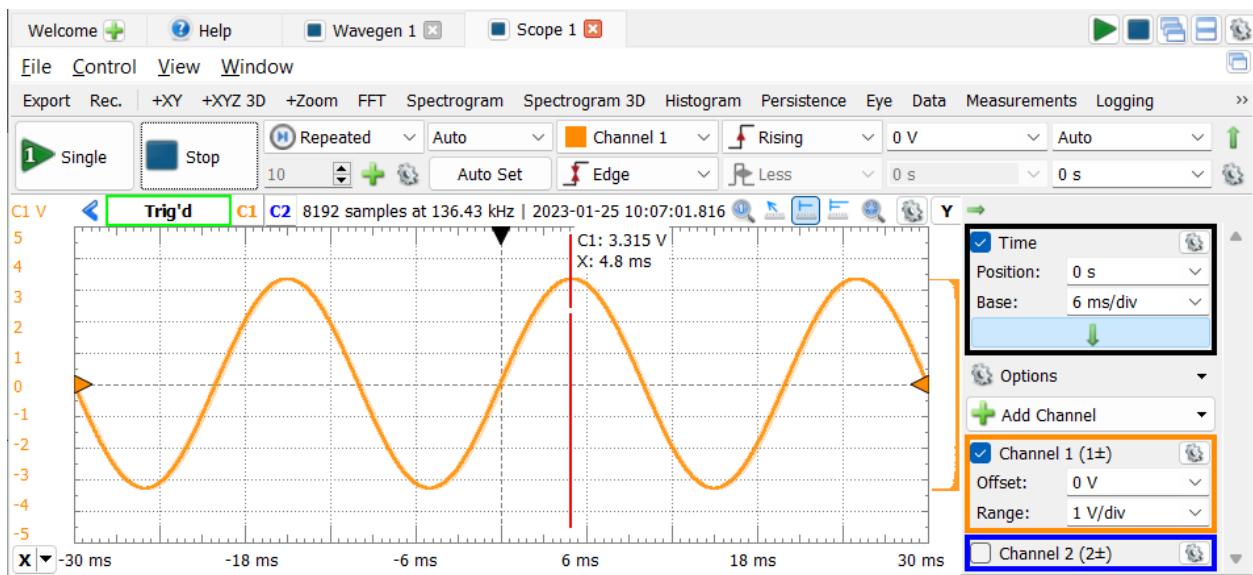
Blue: 1+, Channel 1



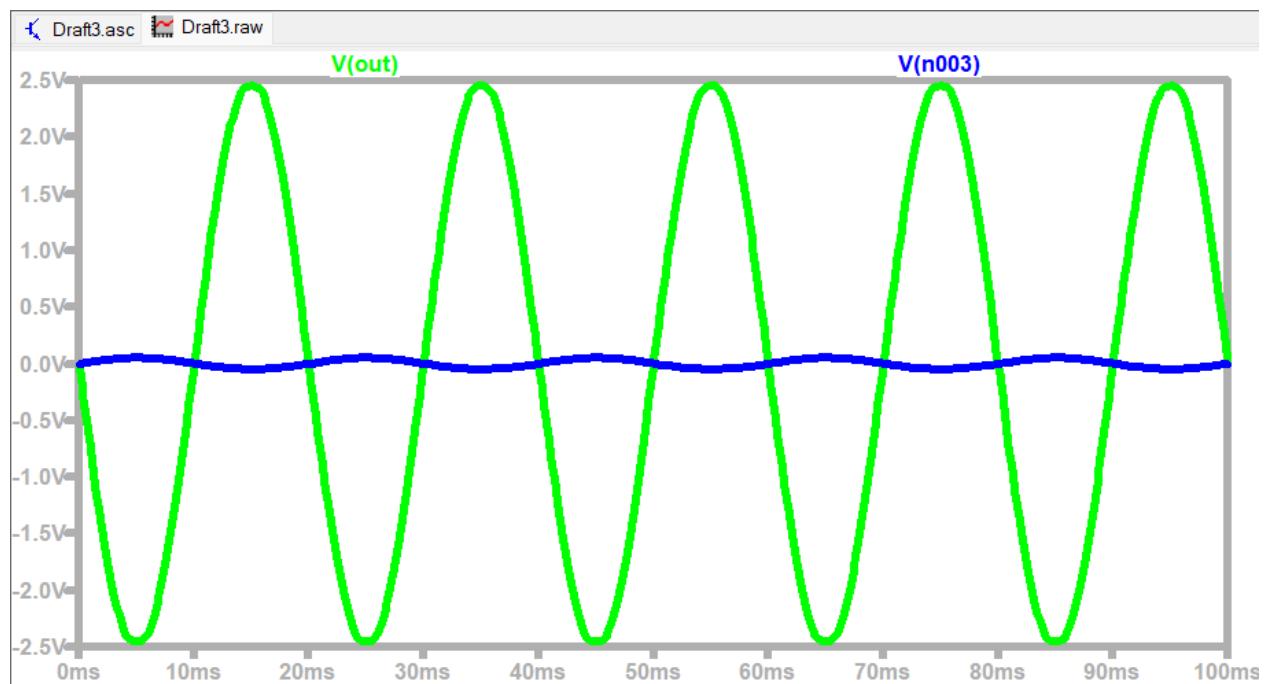
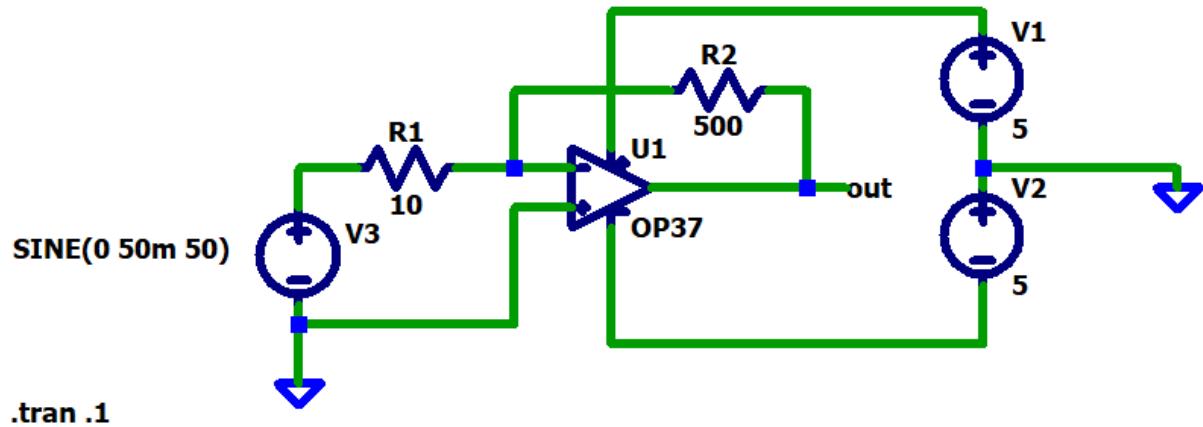


The analog discovery 2 can do both.

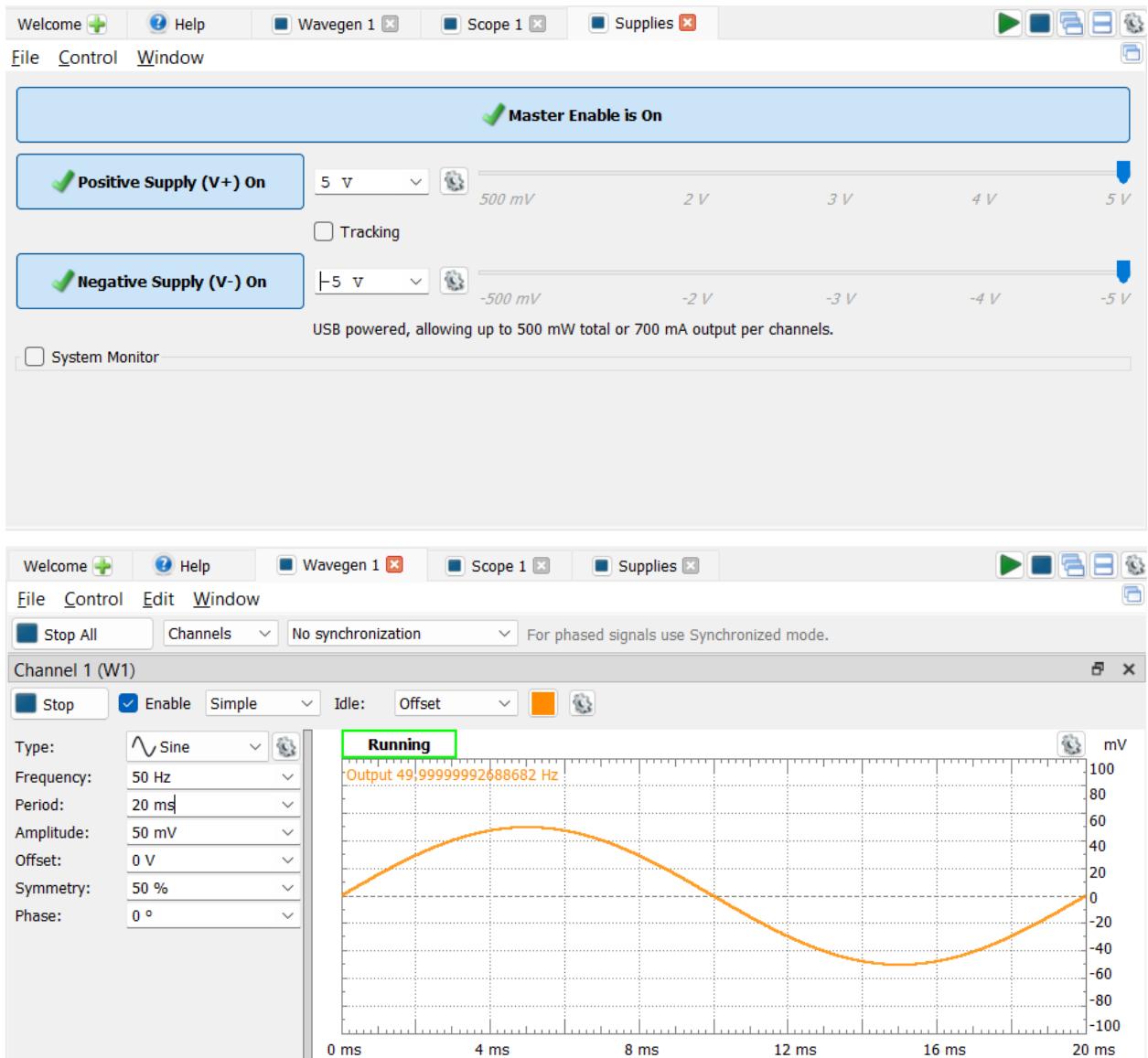
Use cursor function:



Op amp: Inverting amplifier with a gain of 50
LT spice circuit and simulation



Waveforms setup



output

