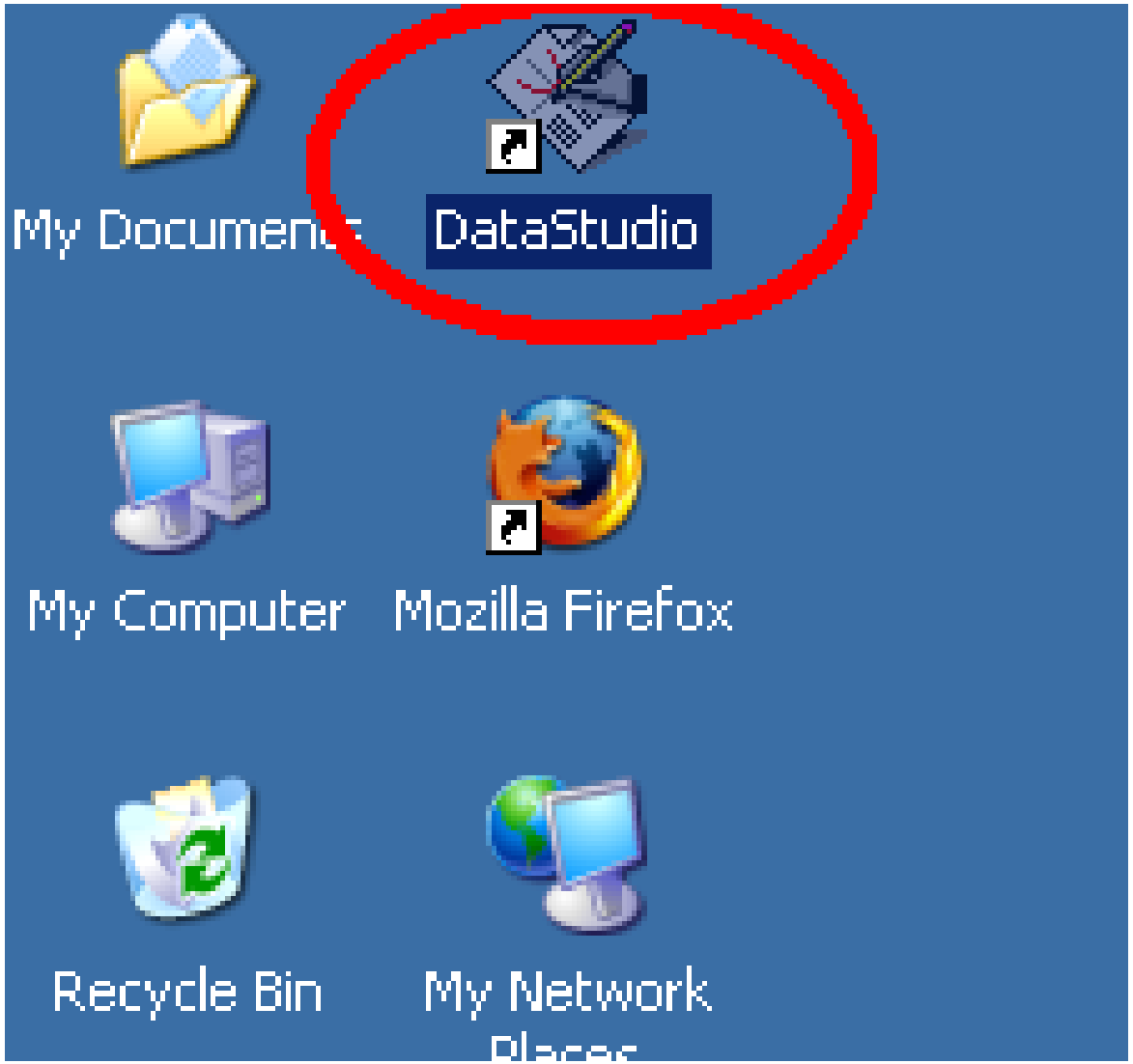
DataStudio for Generator

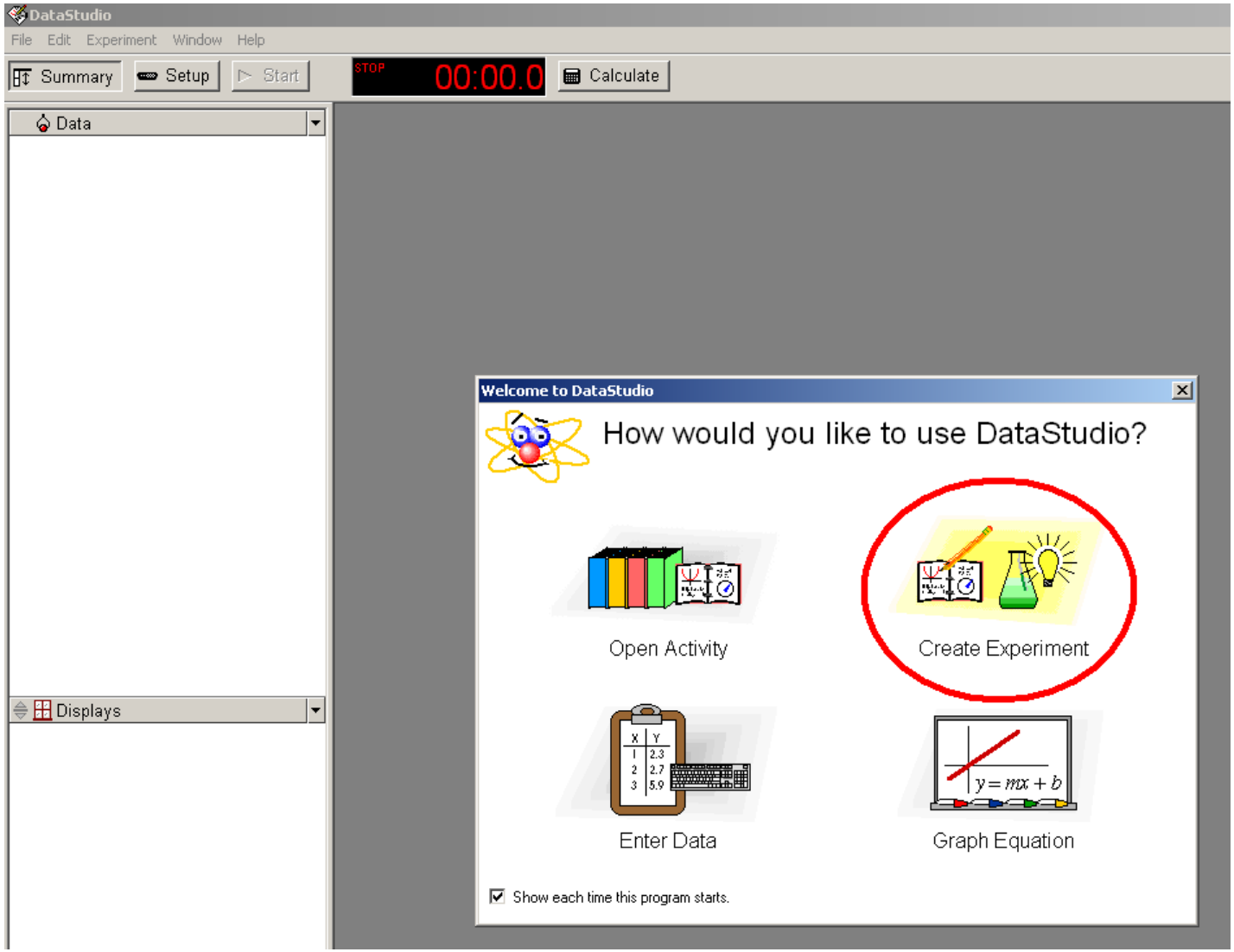
Physics 24 Lab O5

Missouri University of Science and Technology

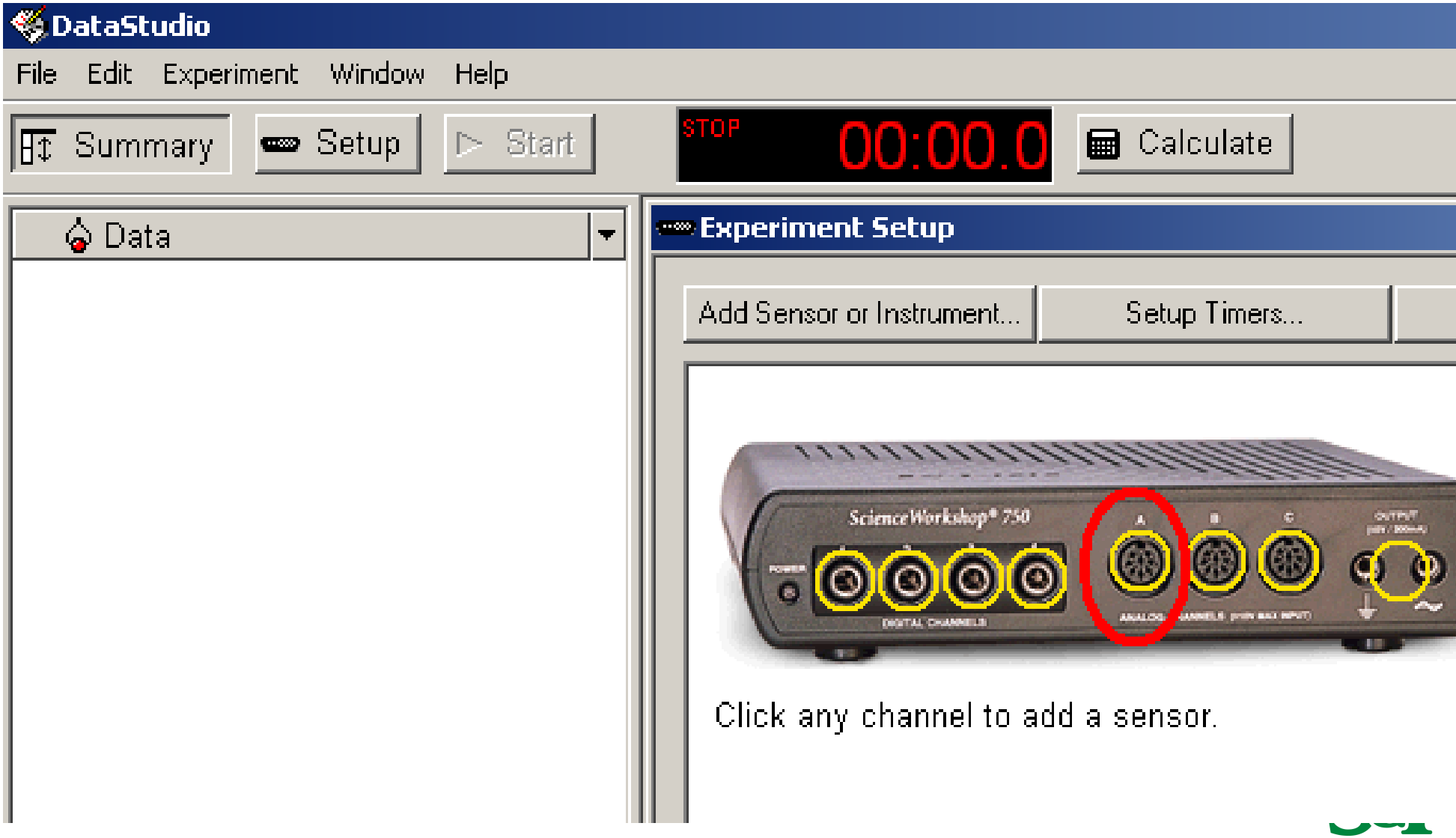
DataStudio icon on desktop



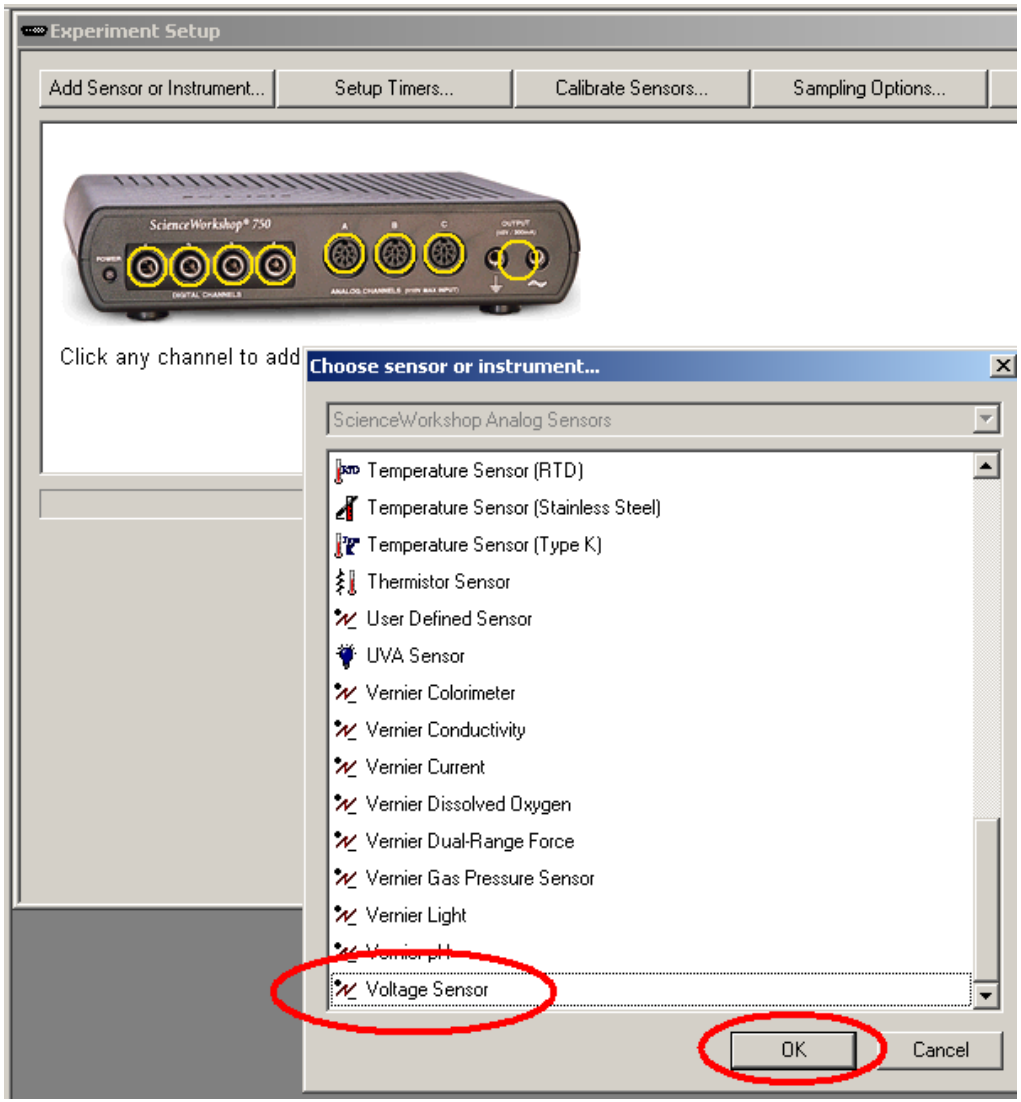
Create Experiment



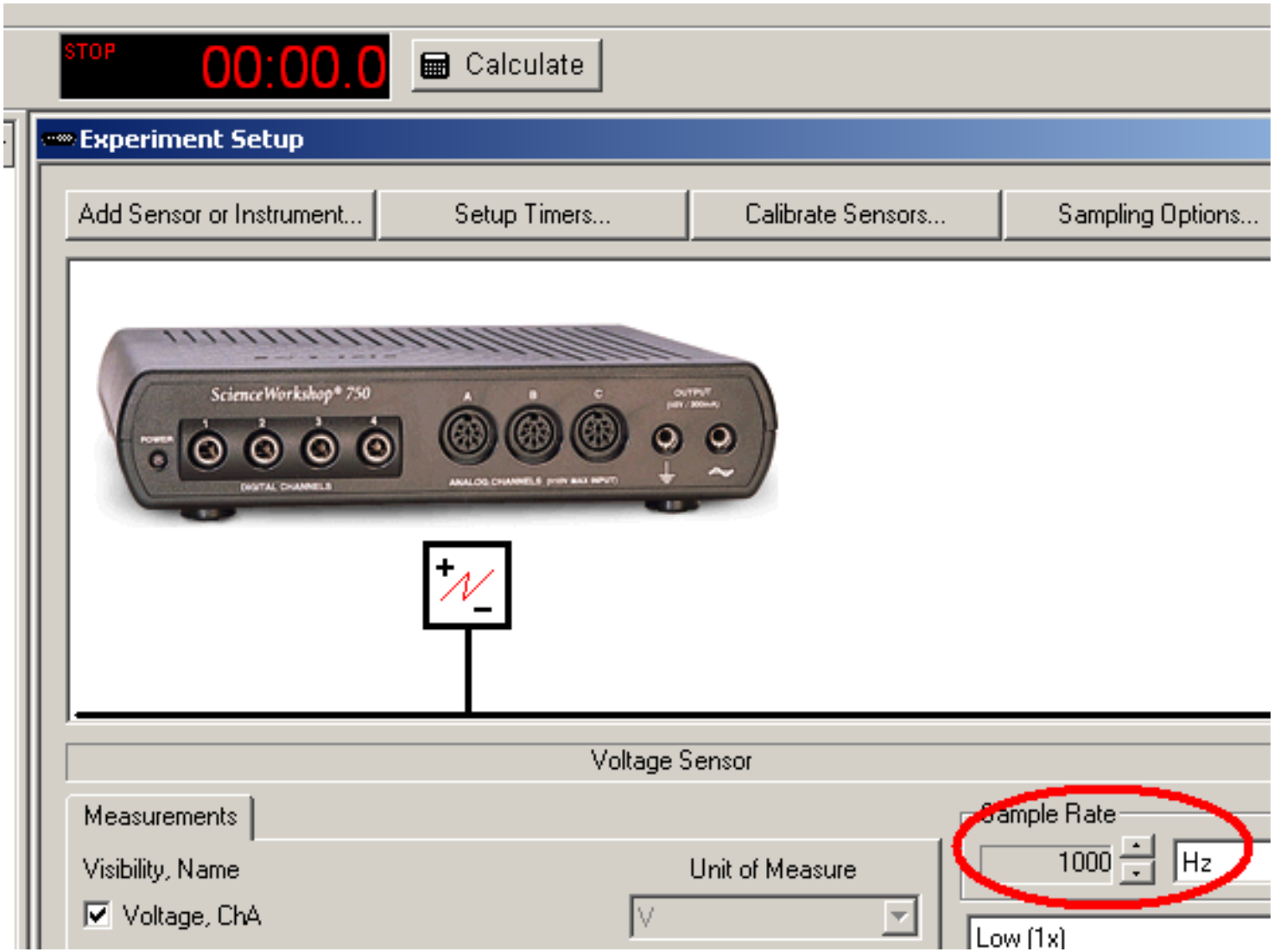
Left click input which has red and black wires plugged in



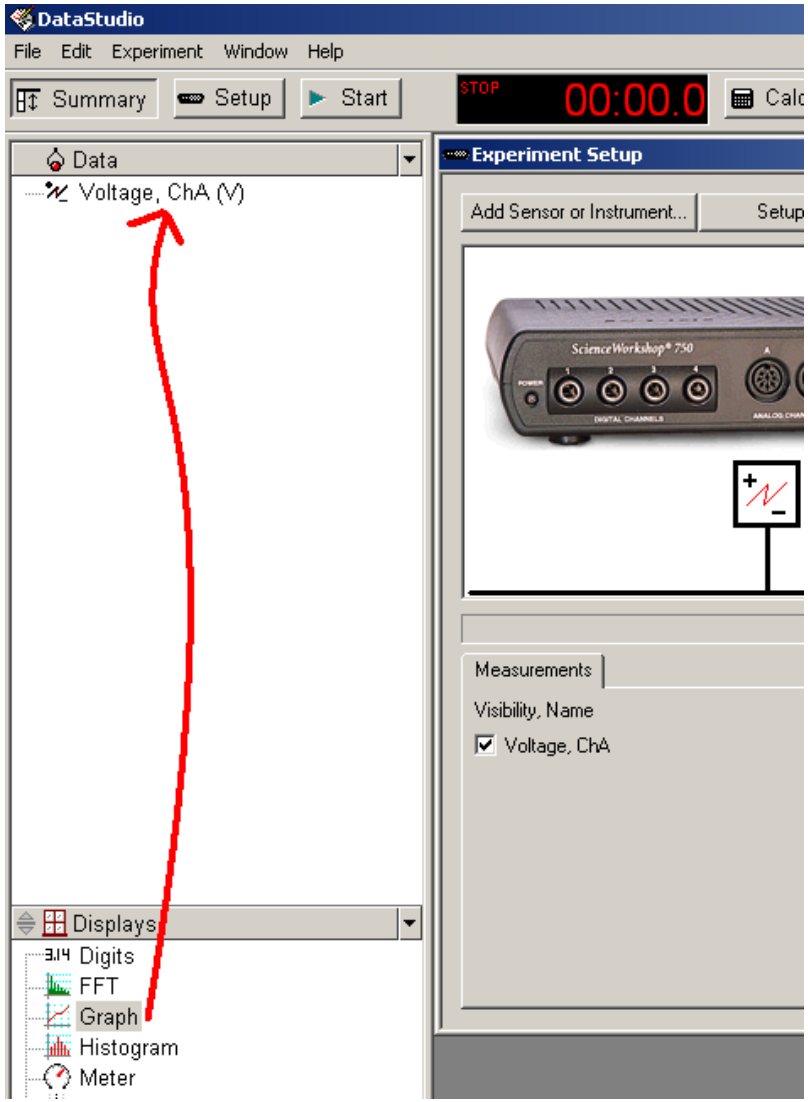
Select "Voltage Sensor"



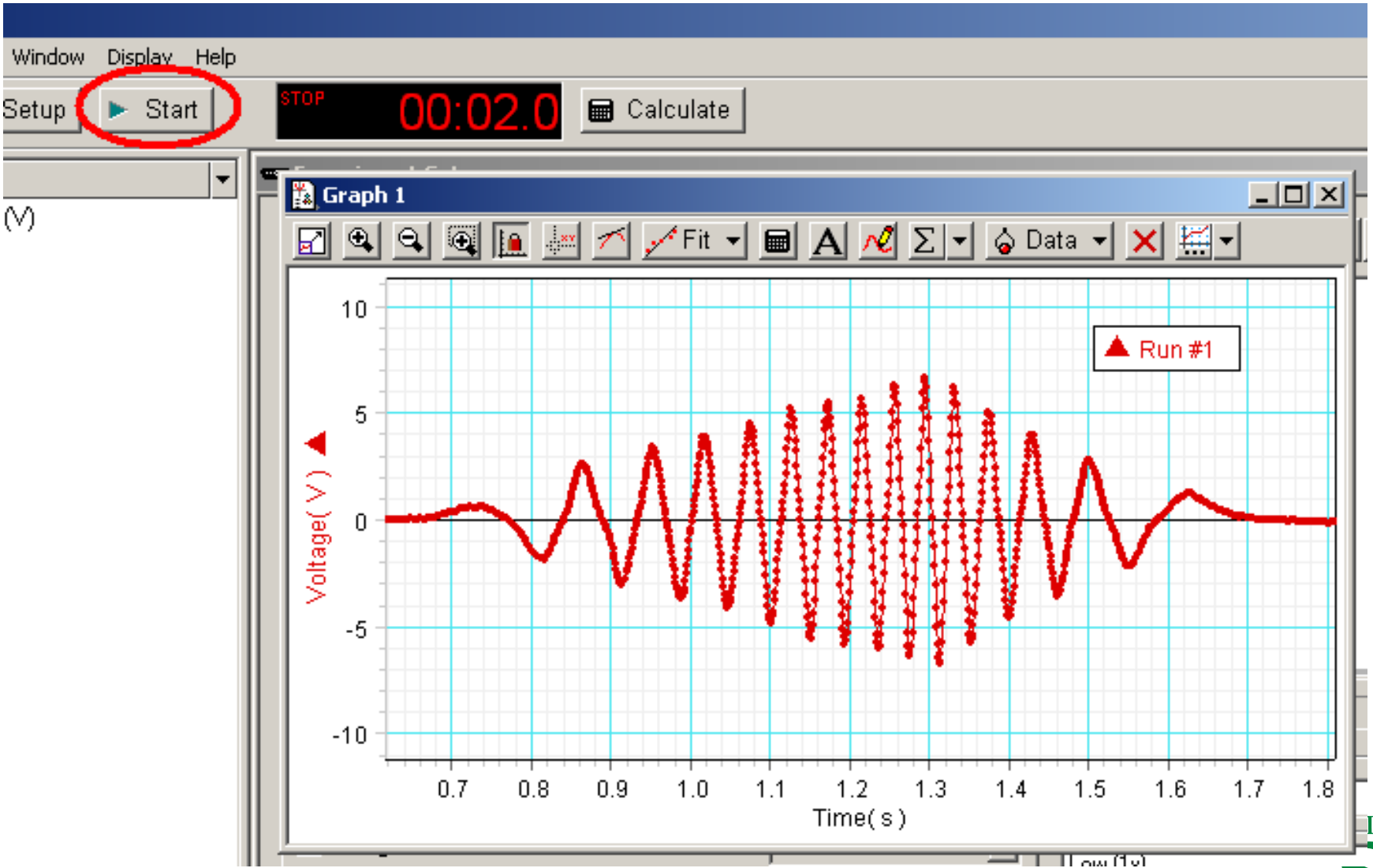
Increase "Sample Rate" to 1000 Hz



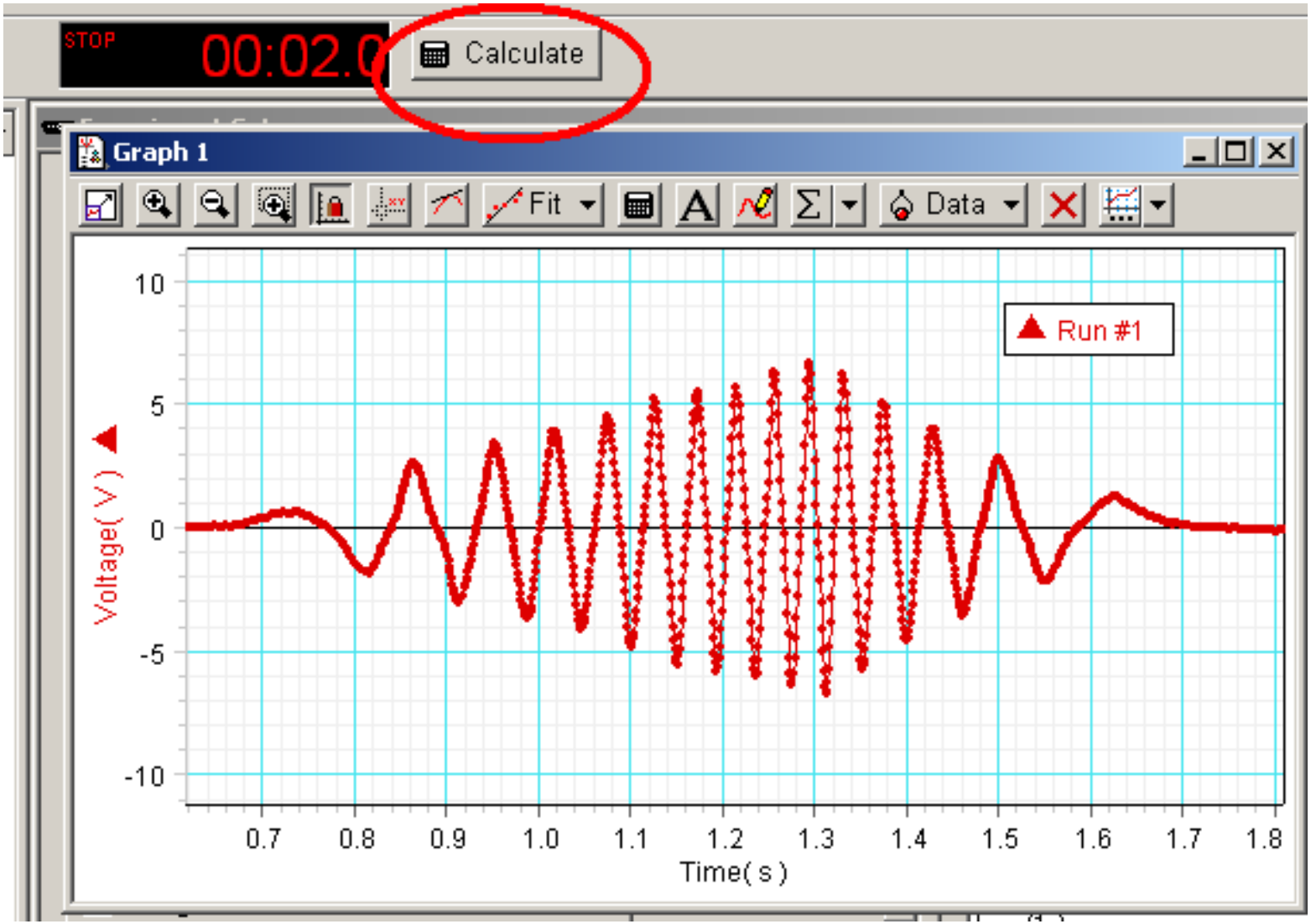
Drag Graph to Voltage



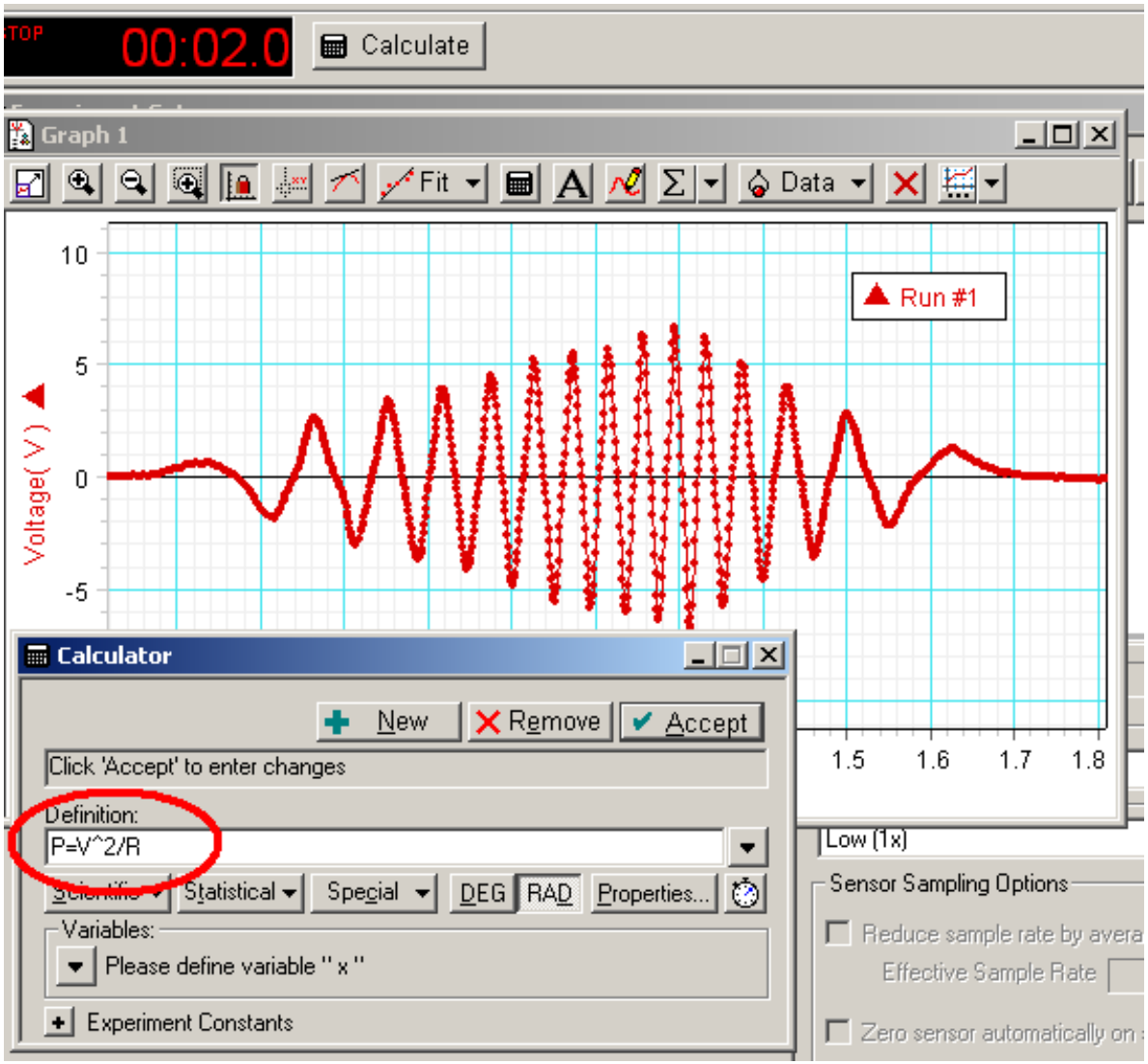
Gather data by clicking Start



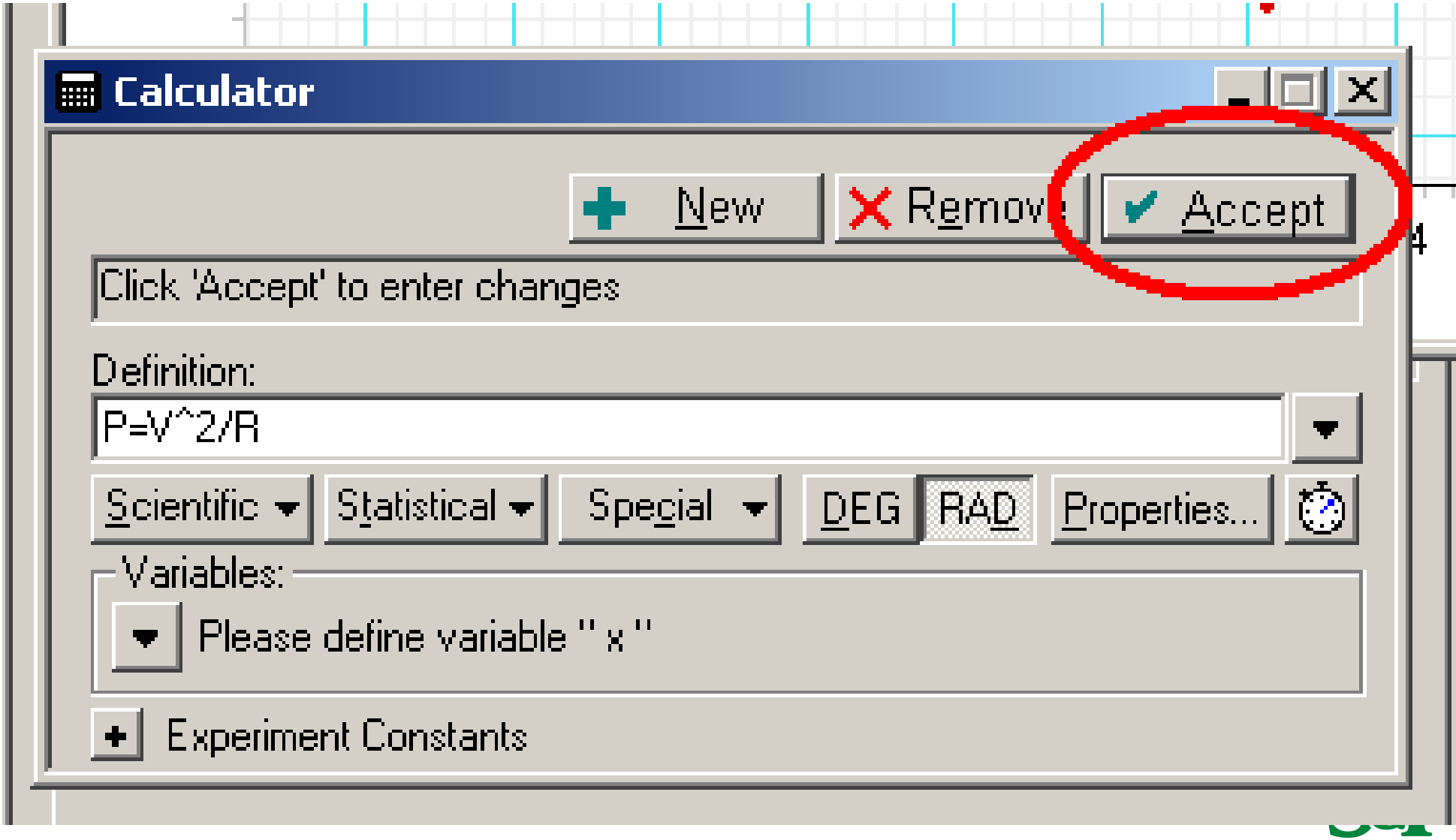
Left click Calculate to add a dependent function



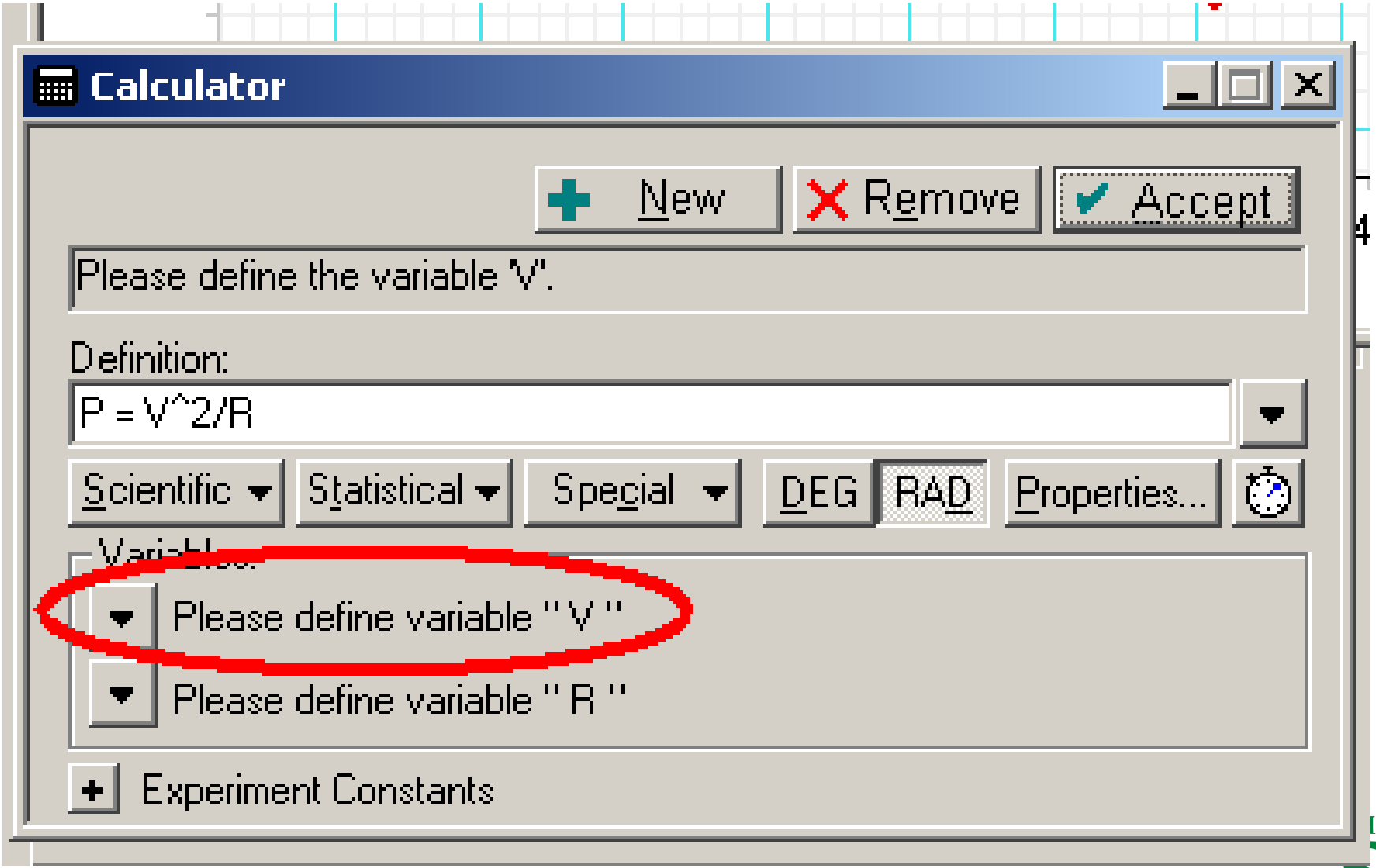
Define equation $P = V \wedge 2/R$



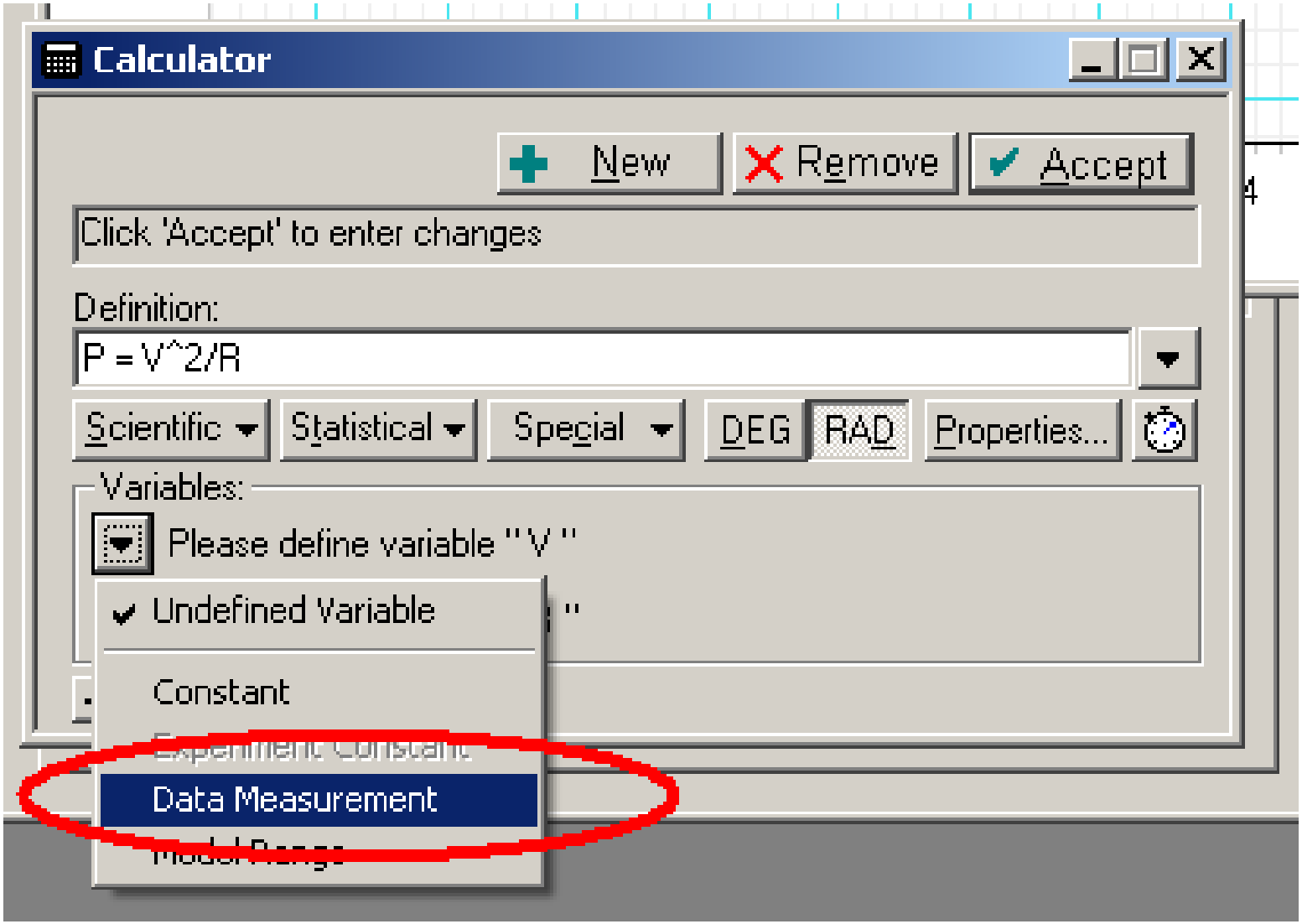
Accept (this resets Variables)



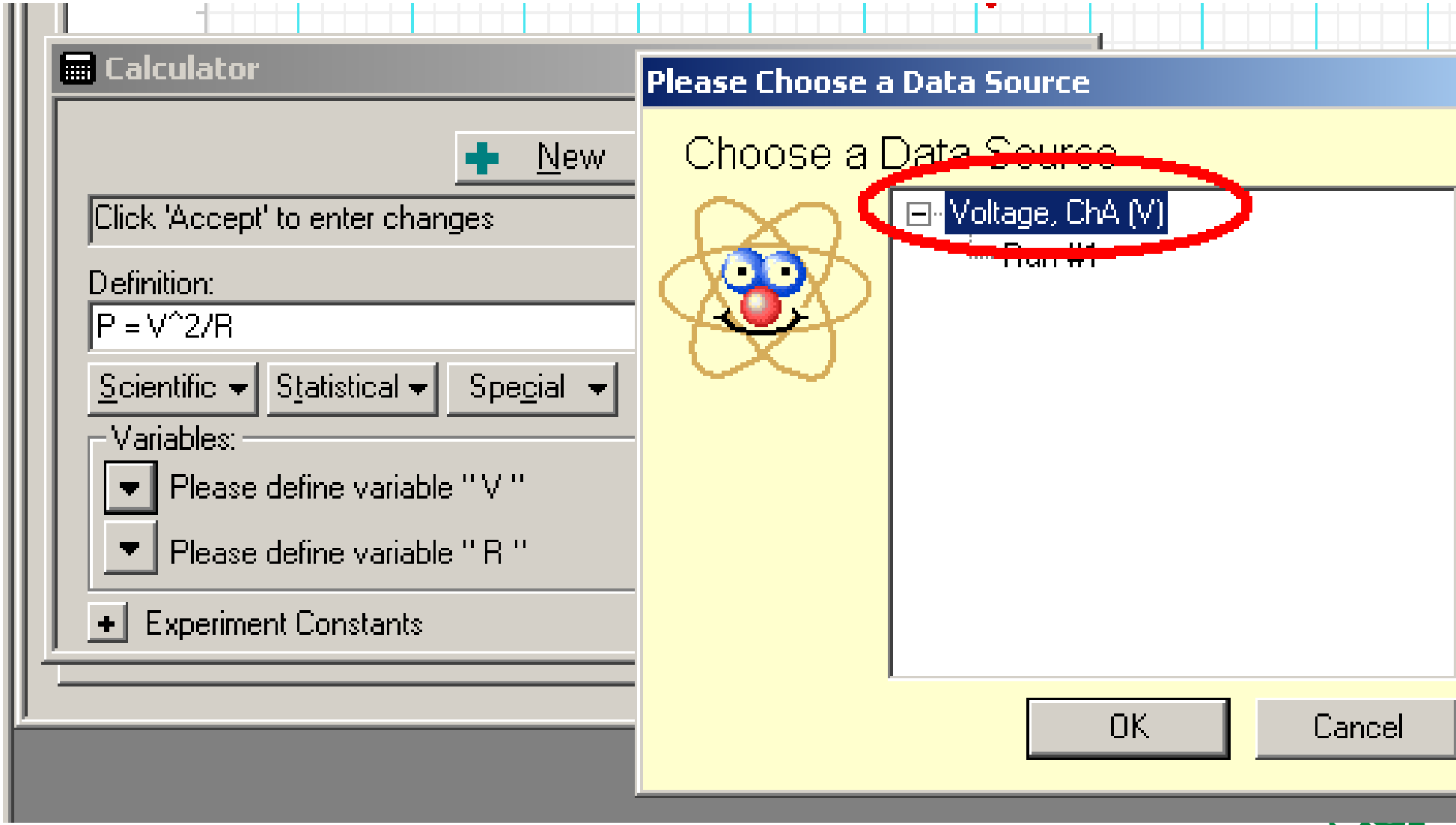
Define "V" dropdown box



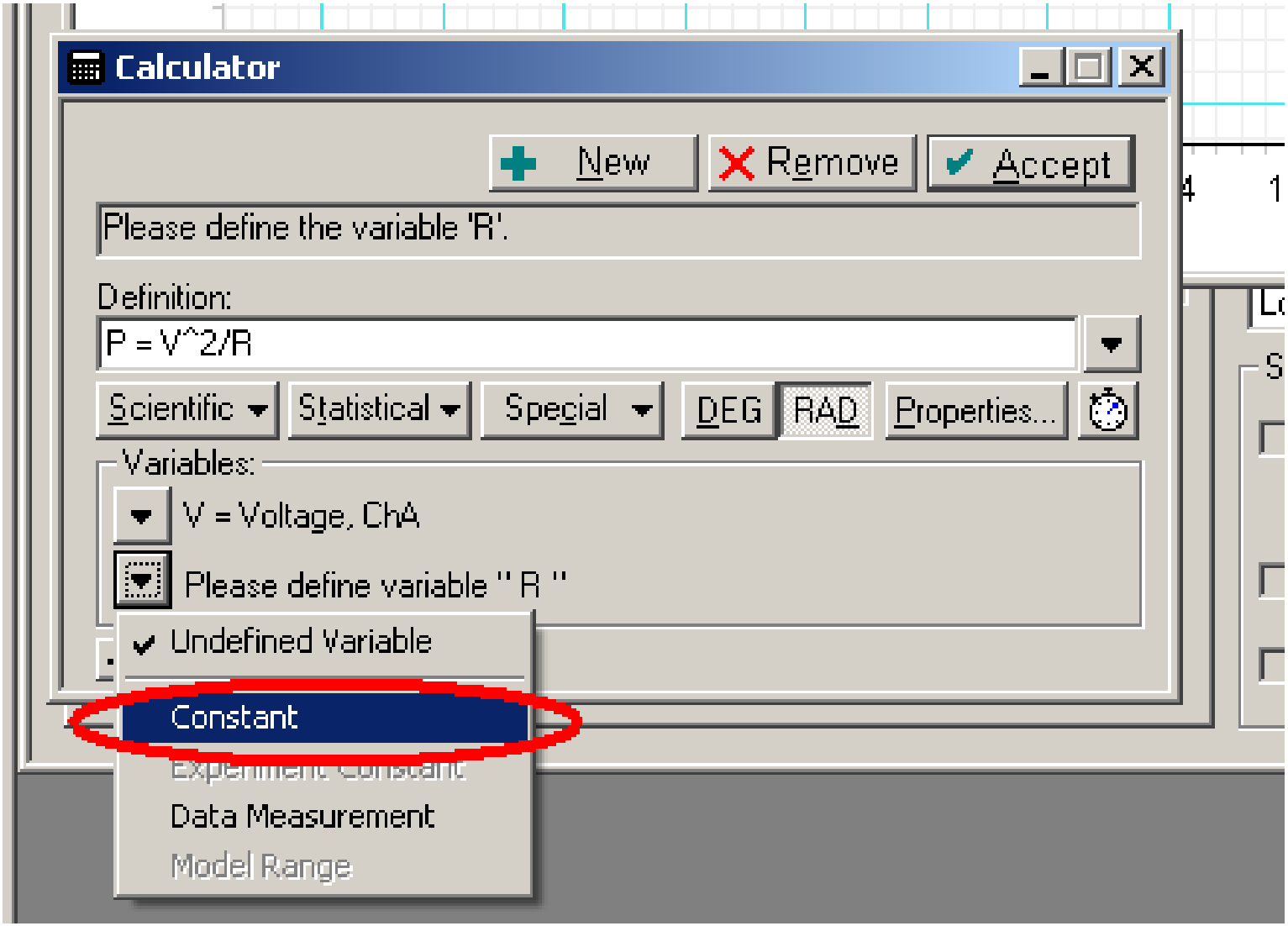
V is from the data measurment you collected



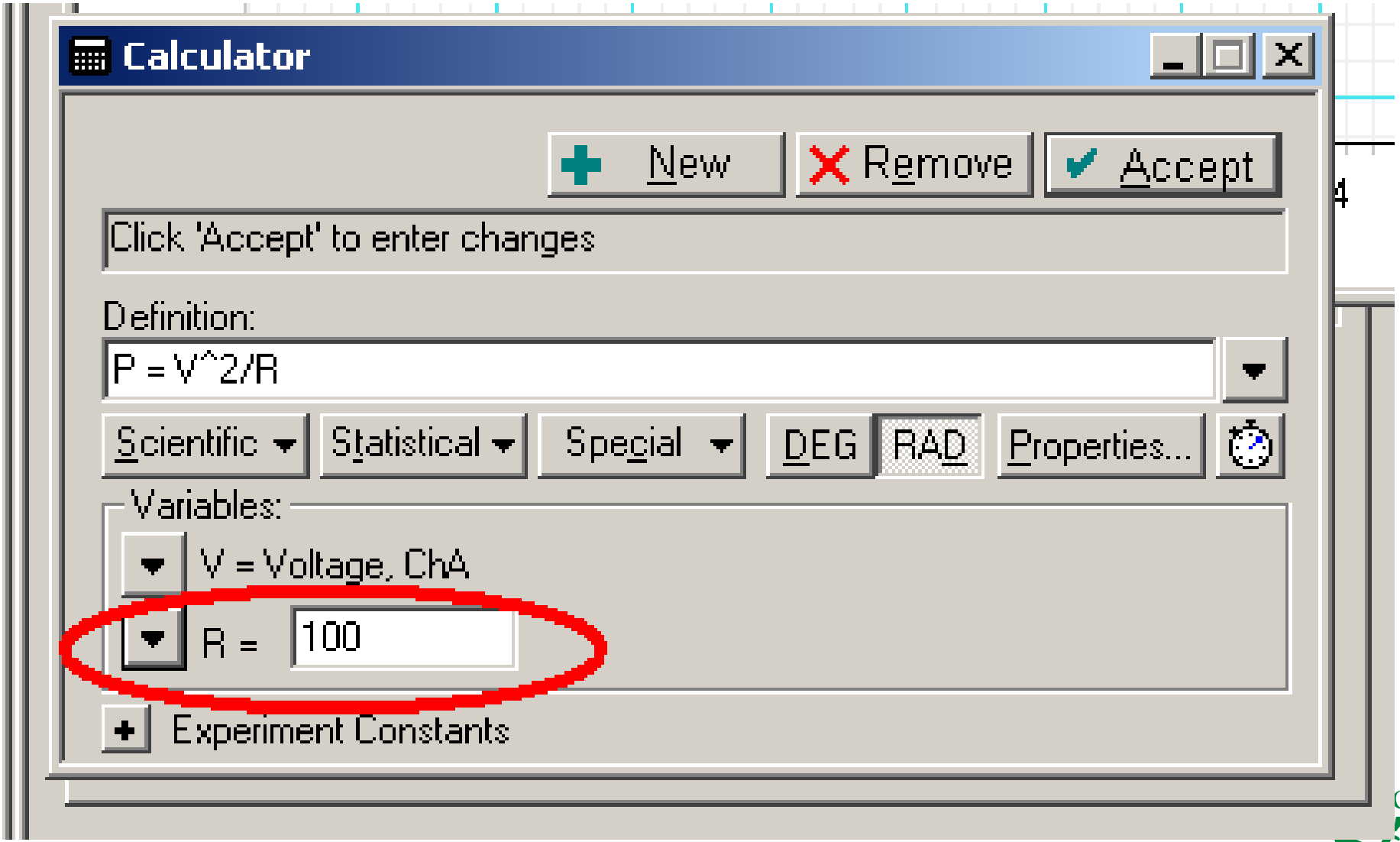
Select generic Voltage rather than a specific run



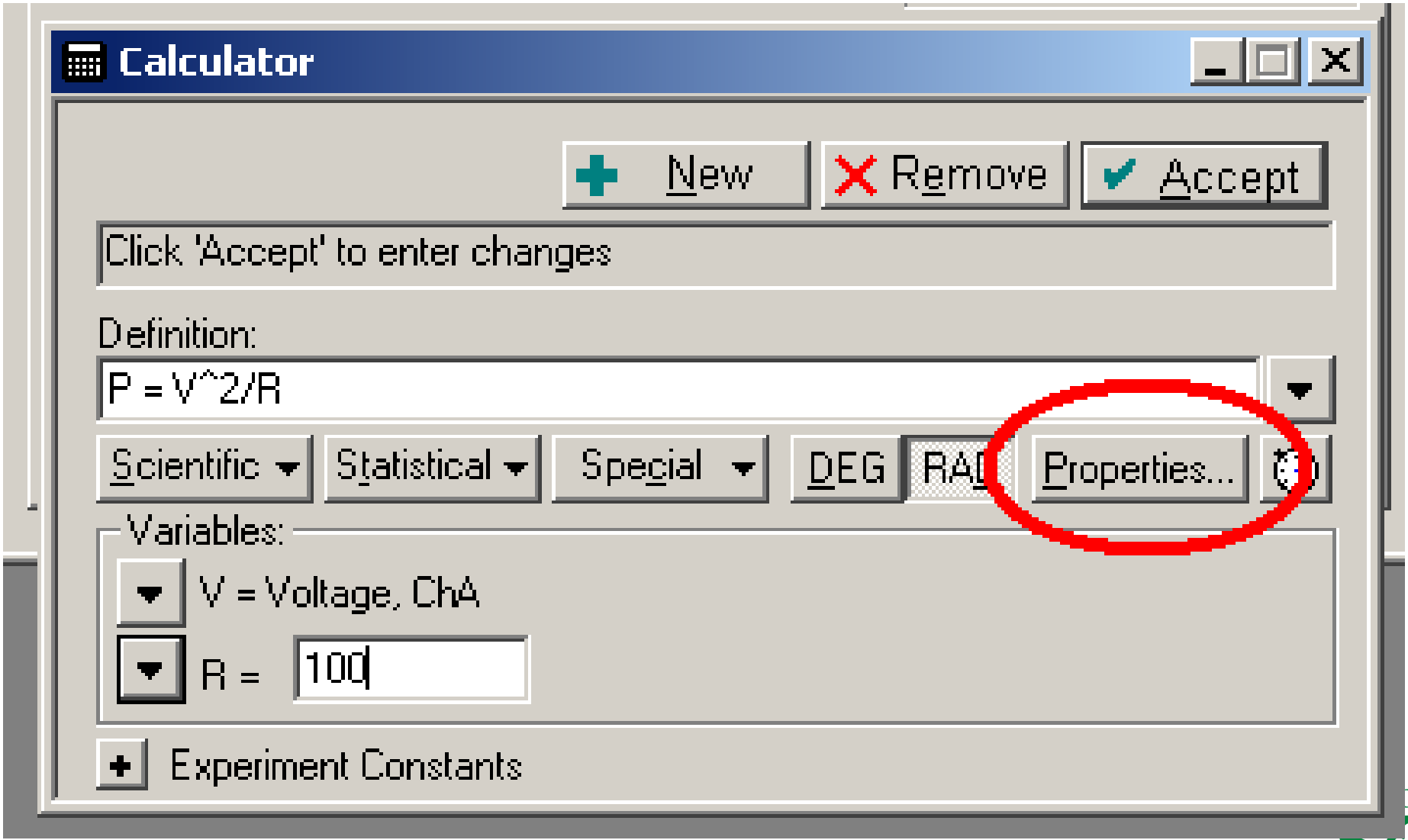
The Resistance R is constant 100 Ω



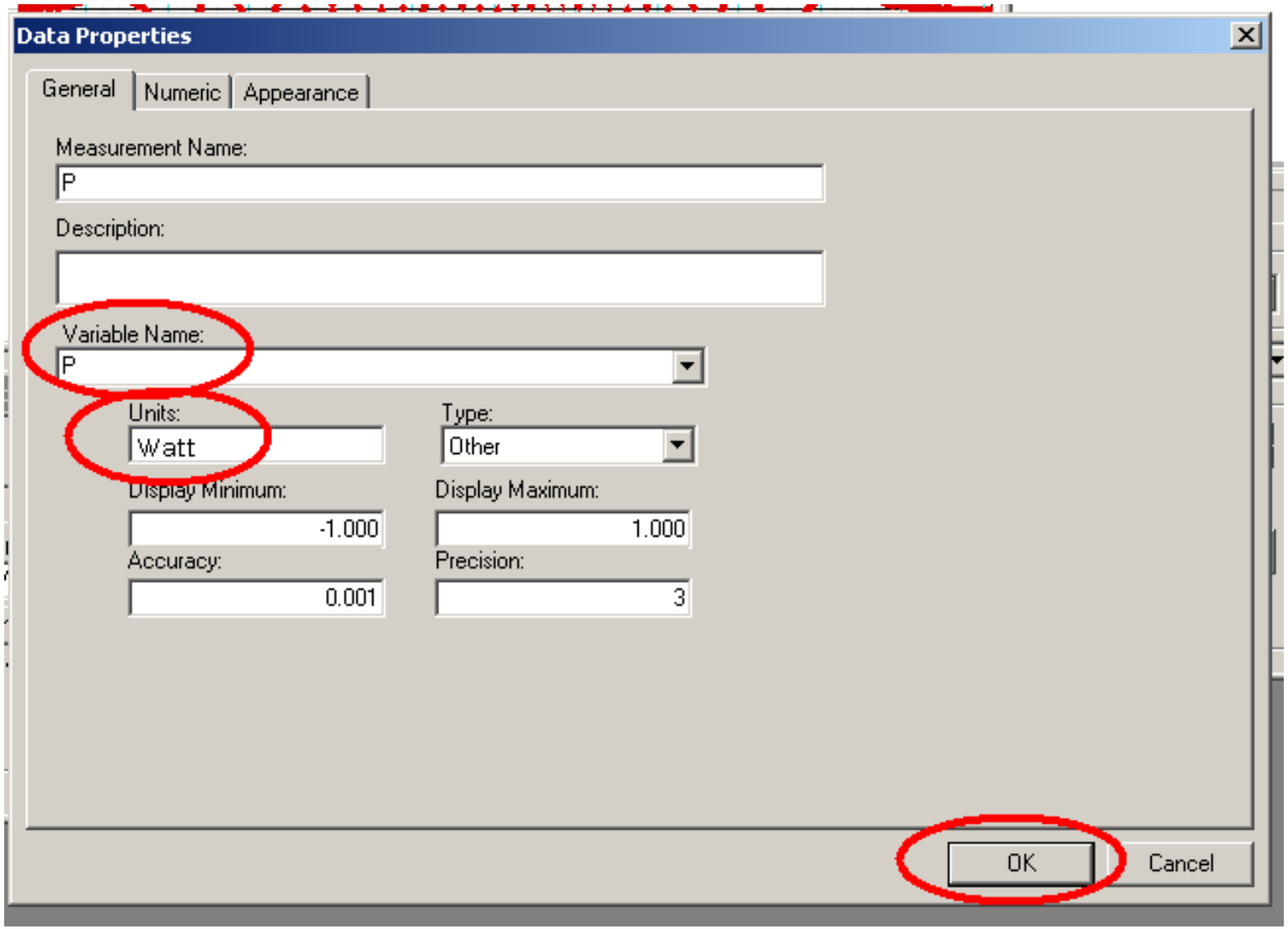
Input 100 for resistor value



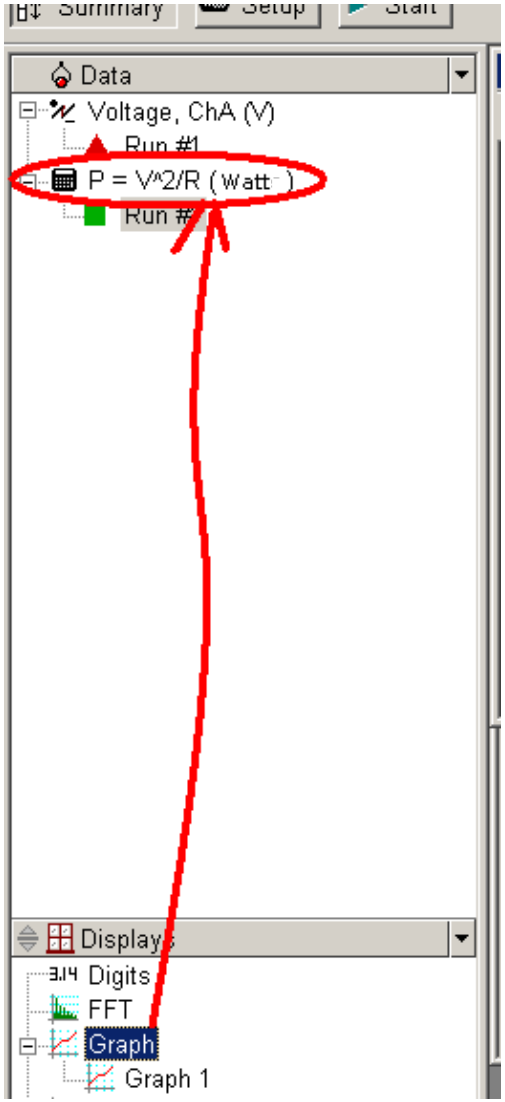
Properties refers to plot labels



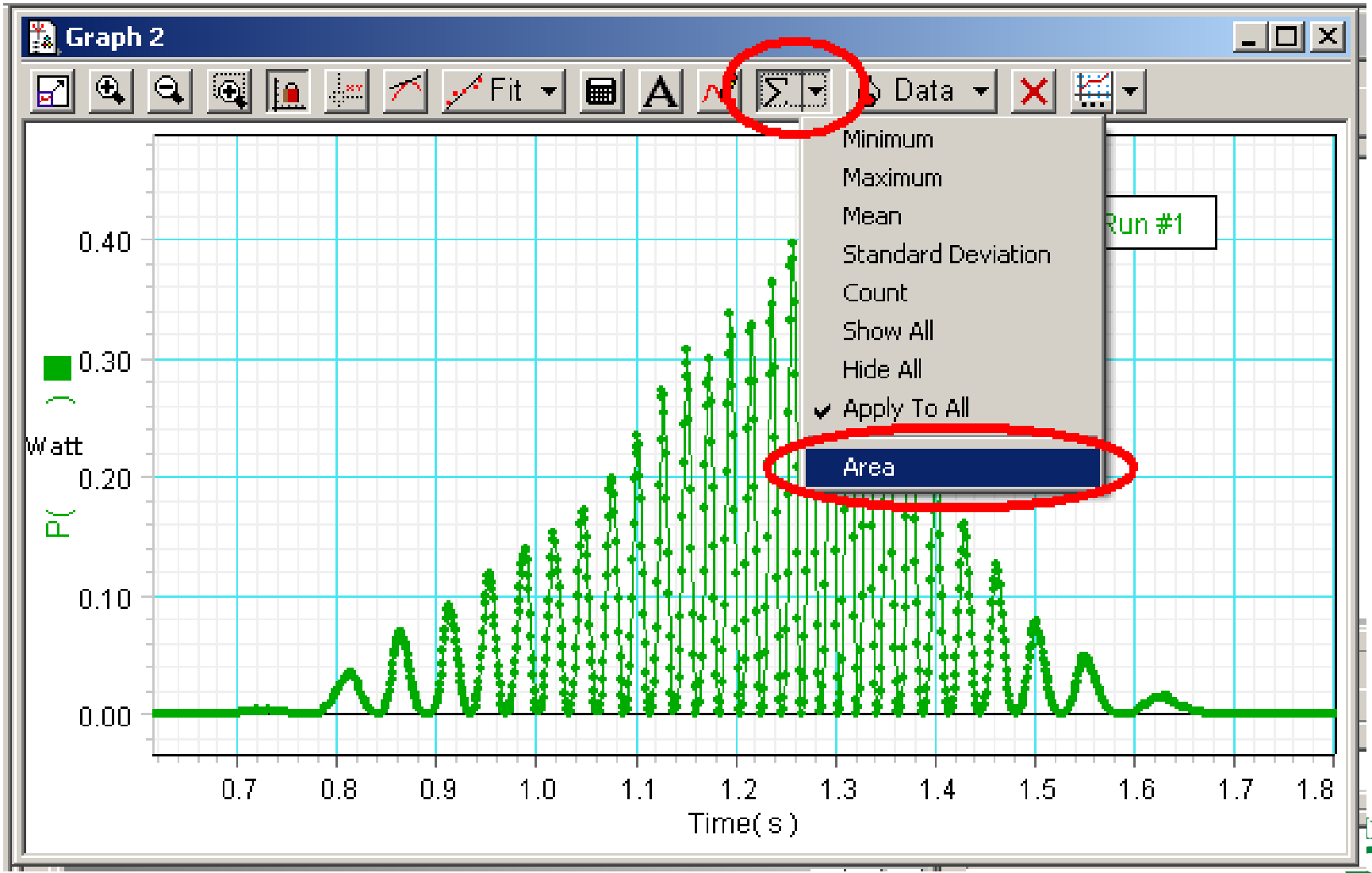
The vertical axis has label P and units



Add new graph to equation



To calculate area under curve



Power versus time with area displayed