

Os 1 User Manual

The **Os 1** is an easy to use VI for obtaining life-time data from a digital oscilloscope. While the **Os 1** program is running, it provides continuously updated data and allows for saving to a file for analysis at any point(s) of time during acquisition. To run this program, simply follow these steps:

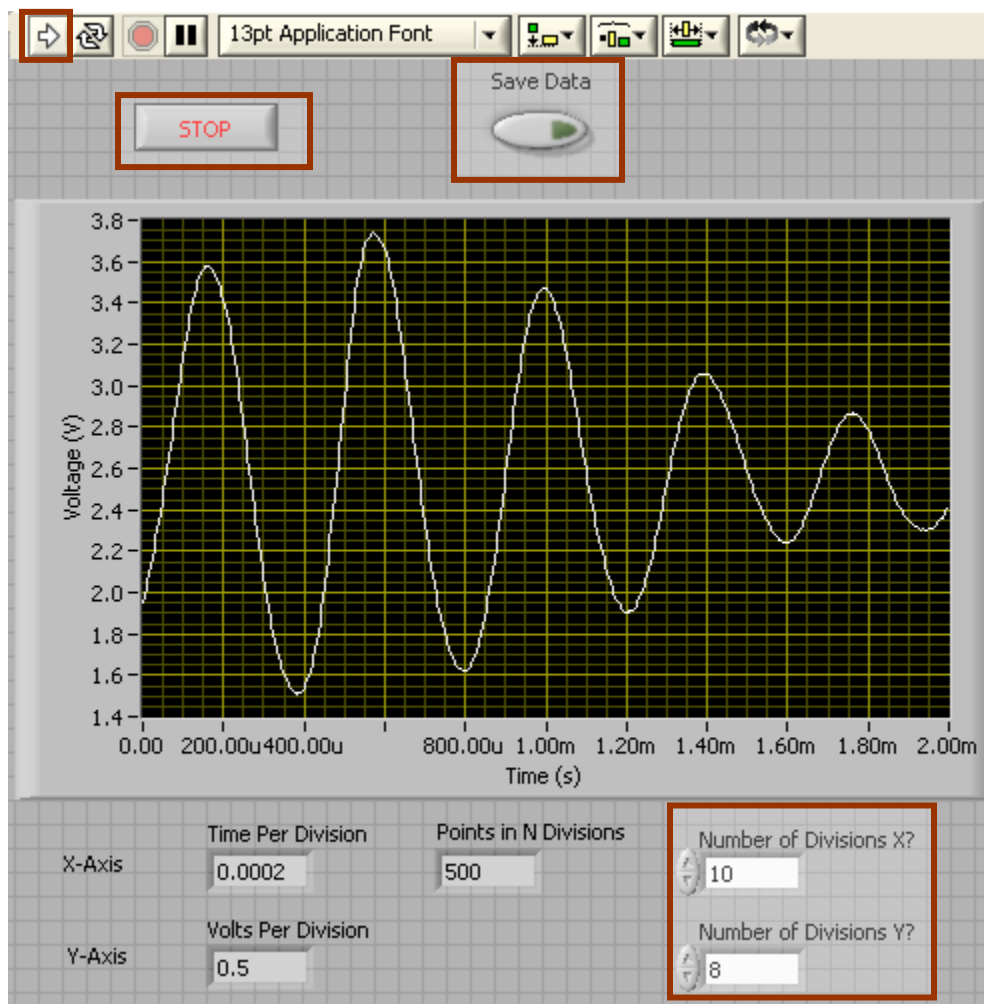
Step 1: Open **Os 1**, the program can be found in “Shared Documents”

Step 2: Input values for “Number of Divisions X” and “Number of Divisions Y” into the front panel (see below). Typically these values will be 10 and 8 respectively*.

Step 3: Run the program! Simply click the ‘run’ button at the top left corner of the front panel. The XY-graph will display the image from the oscilloscope.

Step 4: Save the data (if desired). Simply click the “Save Data” button at any time, *even after stopping the program*, to save the data on the screen at that time.

Step 5: Stop the program by clicking on the “STOP” button.



Os 1 Front Panel: Highlighted red boxes correspond to the steps in the procedure

Troubleshooting

- I can't find **Os 1** to open it.
The program is in the "Shared Documents" in "My Computer"
- I don't know what value to enter for "Number of Divisions."
Most commonly these values are 10 and 8 for X and Y respectively. However some setting for the oscilloscope change these values. To determine the correct number of divisions, simply count the number of boxes across each axis *as seen on the digital oscilloscope*.
- Can I run this program continuously?
This is not recommended. Although the program will function properly and data may still be saved while running continuously, the "Stop" button will not terminate the program, only the abort button at the top of the front panel will.
- Where is the data I saved?
The data file is most likely saved under the default location of "LabVIEW Data," however when the save file prompt appears, you may specify any name, location, or file type you wish.
- The stop button won't work!
Os 1 may be running continuously. Use the red abort button at the top of the front panel.
- The program is running, but there is only a single vertical line.
The values for "Number of Divisions" are likely incorrect. Double-check that you entered the proper numbers or try adjusting them.
- The program won't run! The Instrument Assistant flashes brown when I hit "run."
Make sure the oscilloscope is on and the Instrument Assistant is reading it.
- The vertical scale is jumping very fast...
It is set to autoscale. You can turn autoscale off while the program is running, but you can't set values for the scale unless you stop the program. Note that if you disable autoscale and some of the waveform is cut-off, the values of the unseen segments will still appear in any file you save.
- This troubleshooting didn't cover my problem!!!
Ask or Email the programmer for help: dudleyja@muohio.edu

Note: Additional information regarding **Os 1** can be found in Jon Dudley's lab journal on pages 14-16 from dates 2-27-05 to 3-3-05. The pages include user instructions as well as an overview of essentially how the program works.