

ECE 110 Lab: Oscilloscope Capture for Lab 7

1 Using BenchVue

In Lab 7: Question 4 the student is asked to use software to collect waveforms from their benchtop oscilloscope. We can easily do this using BenchVue.

1. Turn on your oscilloscope.
2. Search for BenchVue from the Start Menu and open the program. When initially opened you will see an interface similar to the one shown in Figure 1. The oscilloscope should be recognized immediately by BenchVue.
3. Double click the oscilloscope in the lower bar of the program. This will cause the program to interface with the oscilloscope and display the scope data in a sub-window, as shown in Figure 2.
4. Maximize the oscilloscope windows to display extra options, as shown in Figure 3.
5. Click the "Screen Image" option, and check off the Screen Image Options to invert colors and convert to black and white. Then click "Get Current Screen," which produces a result like the one shown in Figure 4
6. Click the save icon on the bottom of the oscilloscope window save the current screen. Make sure to set your export path to a location in your U: drive, as shown in Figure 5.

The exported figure will appear similar to the example provided in Figure 6. Since the capture depicts exactly what is shown on the oscilloscope screen, you can also display measurement data on the scope, like signal frequency and peak-to-peak amplitude and have it included in the capture, as shown in Figure 7.

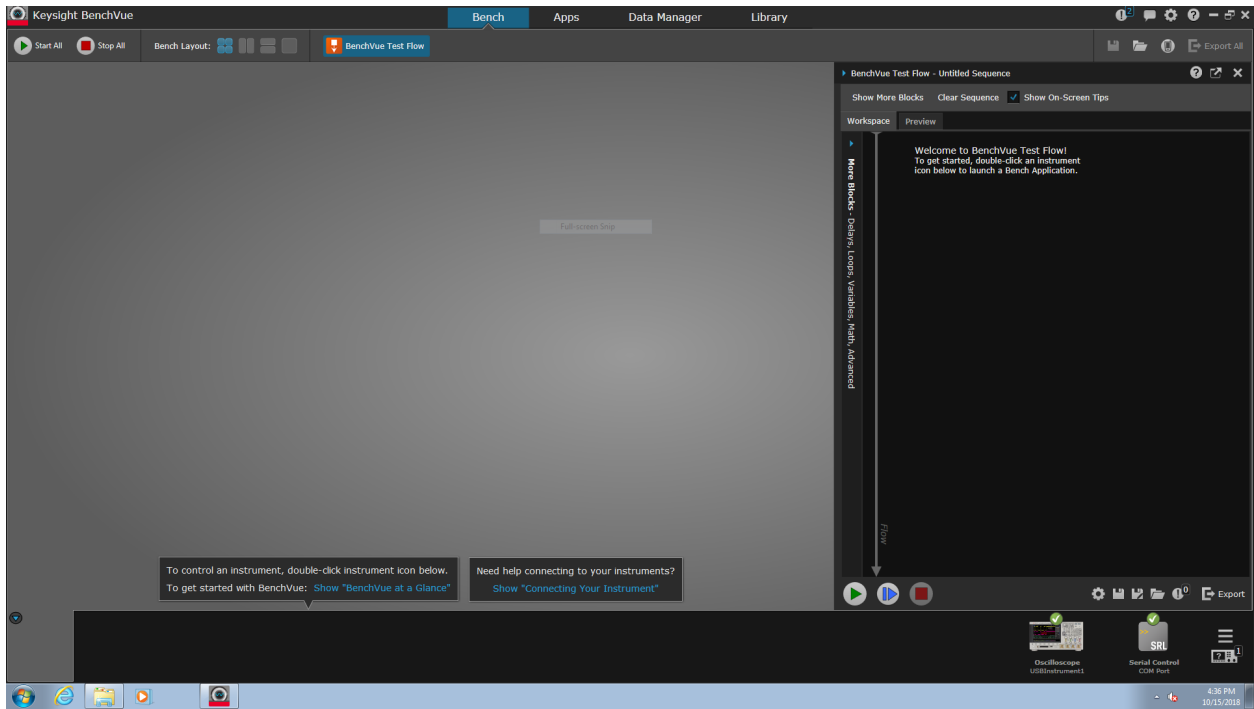


Figure 1: BenchVue when first opened with the oscilloscope shown on the bottom device bar.



Figure 2: Oscilloscope display shown in BenchVue.



Figure 3: Maximized scope window displaying additional options.

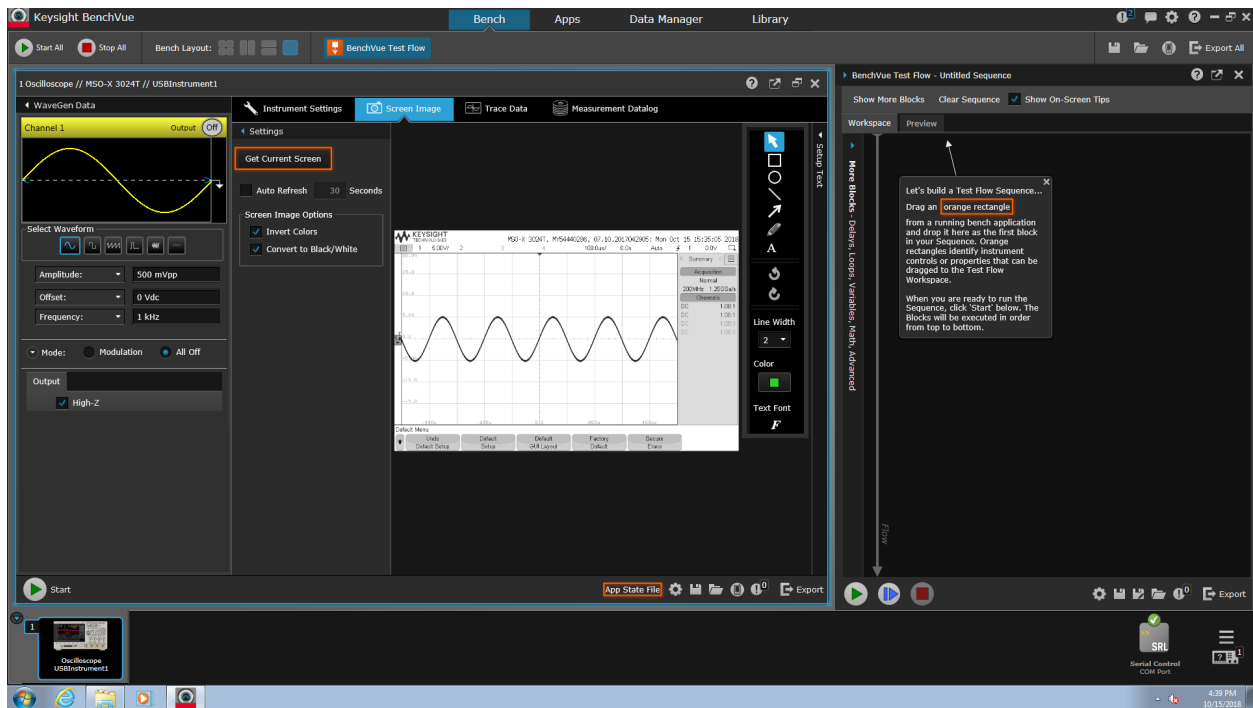


Figure 4: The Screen Image tab with additional options selected, and the current scope screen capture.

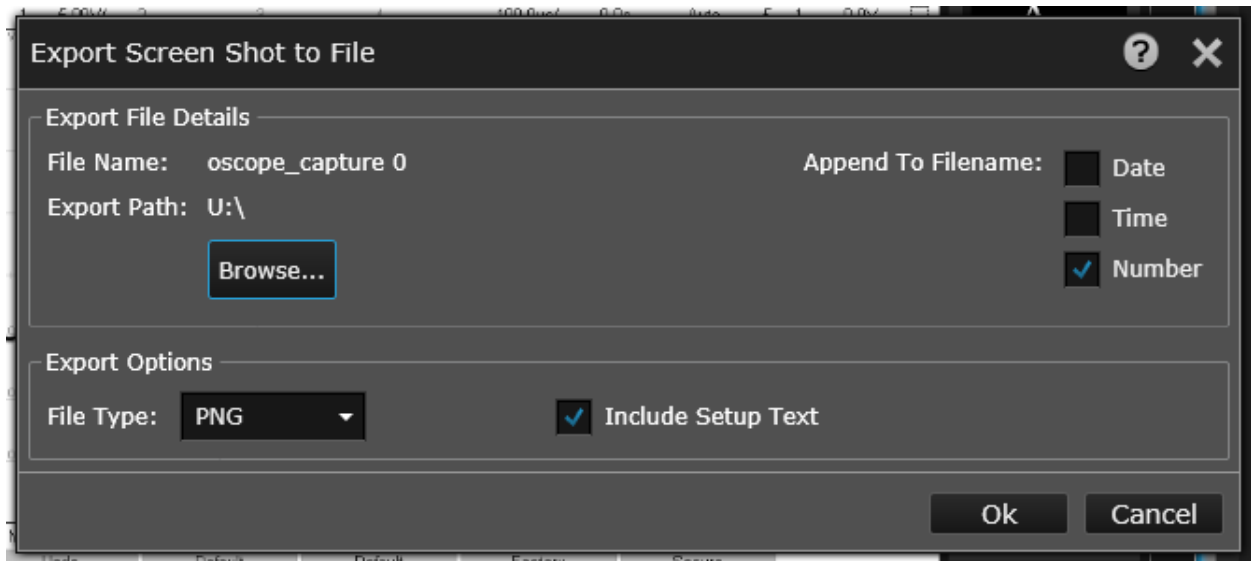


Figure 5: The file saving dialog with the Export Path set to the U: drive.

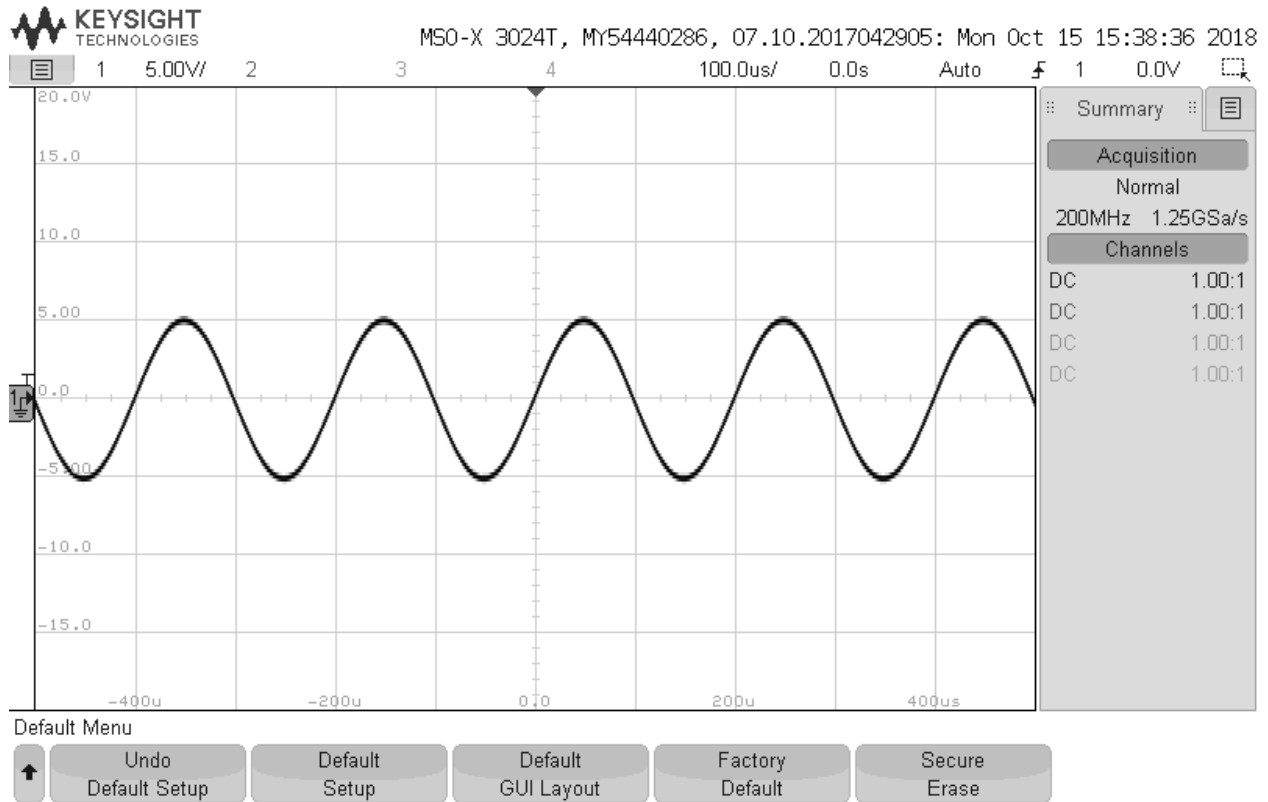


Figure 6: Example capture of a sinusoid from the benchtop waveform generator.

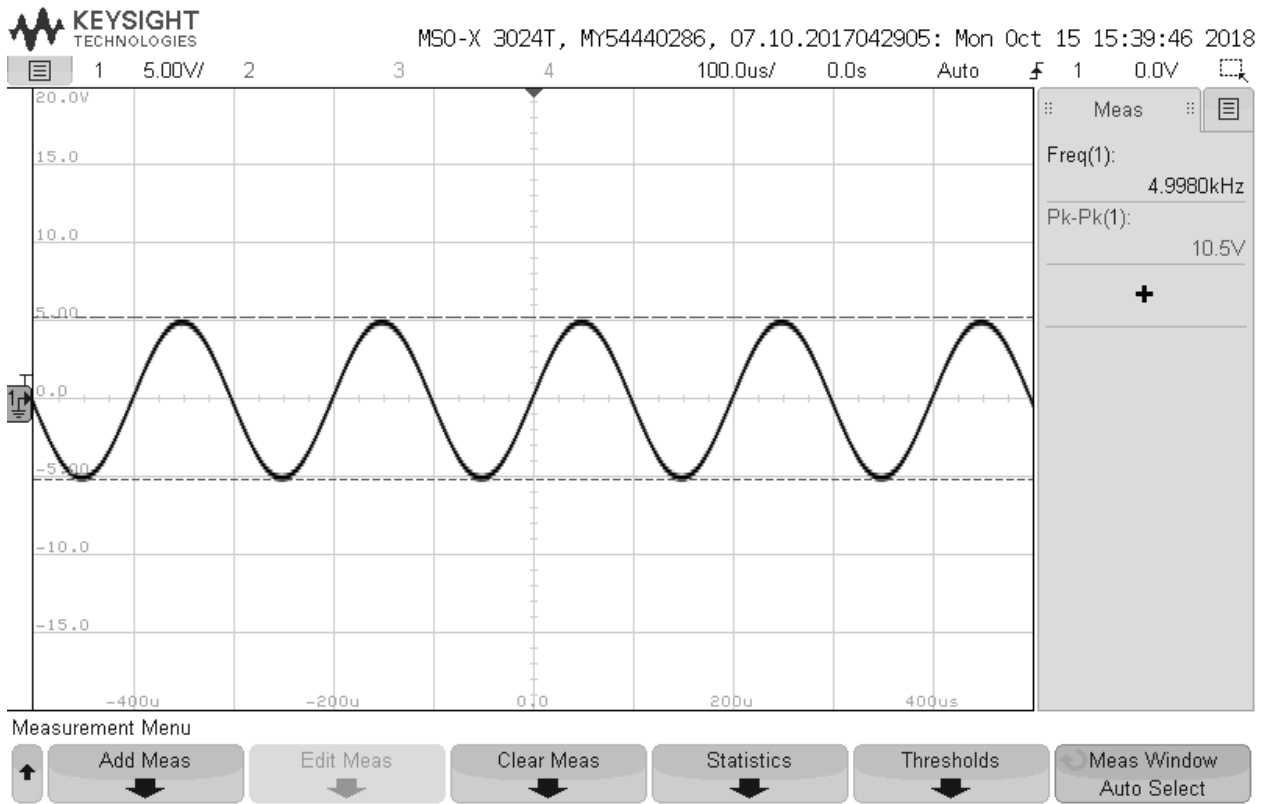


Figure 7: Capture with additional measurement data displayed (5 kHz frequency, 10 Vpp amplitude).