15 September, 2005

Microwave Laboratory GB450
Supplemental Instructions

These instructions are for downloading the osilloscope traces to the Dell computers.

NOTE: The computers in GB450 are **NOT** connected to the internet.

The Agilent DSO3202A oscilloscopes are connected to the Dell computer via a USB port. There are two oscilloscopes connected to each computer.

There are eight stations in GB450 marked 'A' through 'H', these correspond to the Groups 'A' through 'H' designated on the computers. GB450Comp1 is GroupsA_B, GB450Comp2 is GroupsC_D, GB450Comp3 is GroupsE_F and GB450Comp4 is GroupsG_H.

1. Log on to a computer as GroupsA_B, GroupsC_D, GroupsE_F or GroupsG_H. There is a temporary password posted on the computer screen.
2. Click on the DSO3000 Icon.
3. A window will come up titled '3000 Series Scope Connect Software'.
4. Click on Tools on the top row Menu.
5. Click on Options.
6. Click on Communication Setting.
7. If you are in Groups A, C, E or G set USB device to 0.
8. Press OK.
9. Again Click on the DSO3000 Icon.
10. A second window will come up titled '3000 Series Scope Connect Software'.
11. In the second window, click on Tools on the top row Menu.
12. Click on Options.
13. Click on Communication Setting.
14. If you are in Groups B, D, F or H set USB device to 1.
15. Press OK.

At this point you should setup the waveforms on the oscilloscopes that you wish to save to the computer. When the waveforms are setup do the following;

1. In the appropriate '3000 Series Scope Connect Software' window (depending on the group you are in), click on Tools.
2. Click on 'Connect to Oscilloscope'.
3. This is done for each '3000 Series Scope Connect Software' window so that both scopes are connected to the computer.

At this point there should be a red 'RMT' in the top right hand corner of the oscilloscope.

Inside the '3000 Series Scope Connect Software' window there are three windows;

1. One shows a picture of the osilloscope CRT (Waveform 0),
2. The second shows the trace parameters (Measurement 0),
3. The third shows a spreadsheet window (Data 0).

 For this experiment the Measurement 0 window is not required. Remove the Measurement 0 window by clicking on 'X' in the top right hand corner of its window. To observe the current trace on the oscilloscope press 'Refresh' in the Waveform 0 window. To obtain the data in a spreadsheet format press 'Refresh' in the Data 0 window.

The window information can be downloaded to the computer by pressing 'Export' located in the top right-hand side of each window. The Waveform 0 window is saved as a .bmp file and the Data 0 window is saved as a .xls file.

Save each file to C:\Group(X) with X the group you are in.

In the bottom left hand side of the '3000 Series Scope Connect Software' window click on the 'Show Virtual Panel'. A window showing the front panel of the oscilloscope will appear. All oscilloscope functions can be controlled from this panel.

If you do not use the Virtual Panel you will have to disconnect the oscilloscope from the computer by pressing 'Tools' and then pressing 'Disconnect' each time you wish to adjust the oscilloscope.