Instructions for using National Instrument Measurement & Automation Explorer with the SR245 Computer Interface

These instructions are for the default GPIB address of 25.

If using a National Instruments GPIB-USB-HS then you need to connect a standard GPIB cable (at least 1.5 meters in length) in between the National instruments connector and the SR245.

1. Setup the SR245 for GPIB communication (see manual page 41).
2. Start up Measurement & Automation Explorer
3. Select the + box next to “Devices and Interfaces”
4. Select “GPIB0 (GPIB-USB-HS)” or (PCI-GPIB)
5. On the upper menu click on “Scan for Instruments”
6. Double click on the instrument with address 25 (Bottom of the page section labeled “Connected Instruments”)
8. Select “Communicate with Instrument” on the top menu

9. Power up/down the mainframe (*idn? is an invalid command that locks up the SR245 for the first command)
10. Select “Configure EOS”

11. Type 10 in the EOS Byte box and hit “OK”.

(ALL COMMANDS SENT TO THE SR245 MUST END WITH A “\r”)  

12. In the “Send String” dialog box type: i2\r and then click on the “Write” button (This sets the first two ports as inputs and the remaining ports as outputs). The ACTIVITY light on the SR245 should blink the ERROR light should not.

13. Type: s4=3.3\r then the Write button (This sets the output voltage on port 4 to 3.3V). You might want to check it with a meter.

14. Type: ?4\r then the Query button (This queries the port)  

15. The “String Received” box should return the value of port 4.