



# OPERATOR INTERFACE PRODUCTS APPLICATION NOTE

Subject: Indirect Max and Min on Bar Graphs

AN# 1104

Date: Sept 19, 2001

Name: Michael McLaren

Page: 1 of 2

Description: This is a simple application to show how to set a g-tag to scale the input values for display based on minimum and maximum value registers.

---

## **Affected Products:**

- All GP and GLC Series
- Pro PB all versions

## **Problem:**

How do I configure my bar graph to display 0 to 100% based on runtime settable minimum and maximum values?

## **Solution:**

The Bar Graph Part only allows direct setting of the minimum and maximum values for a bar graph.

Using the g-tag (not the G-tag) it can be configured to accept minimum and maximum range values from registers at run-time. See the steps below:

1. In the Pro/PB Win editor, with the drawing board open, click on the "g" icon to bring up the dialog for the g-tag.
2. Click on the "Data Format" tab
3. Click on the "Relative" radio button at the top of that tab. Note how the input range settings appear at the bottom of the dialog.
4. Set a word address for your bar graph to monitor and display. For the sample application 0700 is used.



## OPERATOR INTERFACE PRODUCTS APPLICATION NOTE

5. Now click on the "Designated Input: Indirect" radio button. Again note how the input range fields change. Now they show register addresses rather than actual values.
6. Note the registers for the minimum and maximum values and then click place to locate your g-tag on the screen.
7. The g-tag requires an upper-left lower-right rectangle definition. Click on the drawing board for each of these.
8. You may draw a surrounding rectangle for this graph if you wish.
9. This completes the actual bar graph. If you wish you may make pop-up keypads, or increment decrement word buttons to change the scale values. Load the example application BarGraphs.prw and look at how the rest of the screen is put together.
10. Download the example application, and try changing the scale of the bar graph by pressing on the numeric displays to the right of the g-tag.
11. Link to example application:  
[ftp://ftp.xycom.com/pub/oif\\_mmi/app\\_note/bargraphs.prw](ftp://ftp.xycom.com/pub/oif_mmi/app_note/bargraphs.prw)