## Monitoring the Program with a Data View

Creating a Data View

With the program loaded in the PLC, you can now open a **Data View** window to monitor and manipulate the status and data for the various elements of the program. If you have programmed in other languages before, you may know this type of window as a Watch Window. You can access this window by selecting **Debug**, then **Data View**, and **New**.

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The Data View window is useful when observed with your ladder logic screen while in the Status ON Mode. To set this up, click on **Window**, then **Tile**. If you are using a DL305 PLC, turn to Page 47 after opening the Data View Window shown below. All other PLC users should continue to the next page.

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Below the column labeled **Element**, type in **C0** as the first element to be monitored. The software will substitute the assigned nickname, **Start Switch**.

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## Adding Dynamic ON/OFF Edit Buttons

Now you can setup the Data View window to easily change the status of the observed elements. Notice in the tool bar at the top of the Data View window there is **C1?** and **C1=1 (with an hour glass)**. The C1? is active by default, however by selecting the other button ,C1=1, the ON/OFF **edit buttons** will appear beside the element.

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Now you can add the elements C1 (Output1), C2 (Output2), CTA0 (the counter current value), and TA0 (the timer current value) to the Data View window. Notice there are no ON/OFF edit buttons for the counter and timer values. This is because you are observing V-memory data for these elements as compared to observing an ON/OFF status.

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## Entering the Run Mode

You are now ready to test the program. First, place the PLC in the **RUN** mode. Select the "traffic light icon" of the on-line tool bar. Then, click on the **Run** mode and **OK**. Alternately, you could have chosen **PLC Modes** from **PLC** of the main menu bar, and then selected **Run** mode from the pop-up dialog box.

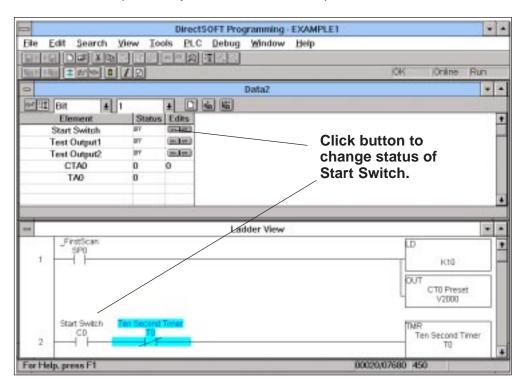
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Observing the<br/>Status of ElementsTo monitor the status of each element, you will need to place the software in the All<br/>Status ON Mode. Select Debug, then All Status ON.

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## Using the Edit Buttons to Change Status

You can start the program by first clicking the edit button labeled **ON** for the **Start Switch (C0)**. This by itself does nothing. You will need to write a new status to the PLC. The next step shows you how this is accomplished.



Writing Edits to the PLC

To write the new status to the PLC, select the icon of the Data View (one arrow pointing inward to the PLC).

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A confirmation dialog will appear. It will ask if you want to write the edit (or edits) to the PLC. Answer **yes**. The active elements will change color when they are in the ON state. You will see the counter start. Now the program can be observed as it runs.

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