

Product Group: SG2 Programmable Relay
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Title: Counter Instructions

Summary: A Counter Instruction will be used to monitor an input and activate an output coil after a certain number of events.

We will be using the SG2 Client V3.4 software and Windows 7. Examples will be shown using the Ladder Logic program with the SG2-10HR-A model.

Procedure:

Using the SG2 Client software, duplicate the program as shown in Figure 1 below.



Figure 1

1. Double-click mouse with the pointer hovering over C01 for the Edit Contact/Coil screen to appear as seen in Figure 2.

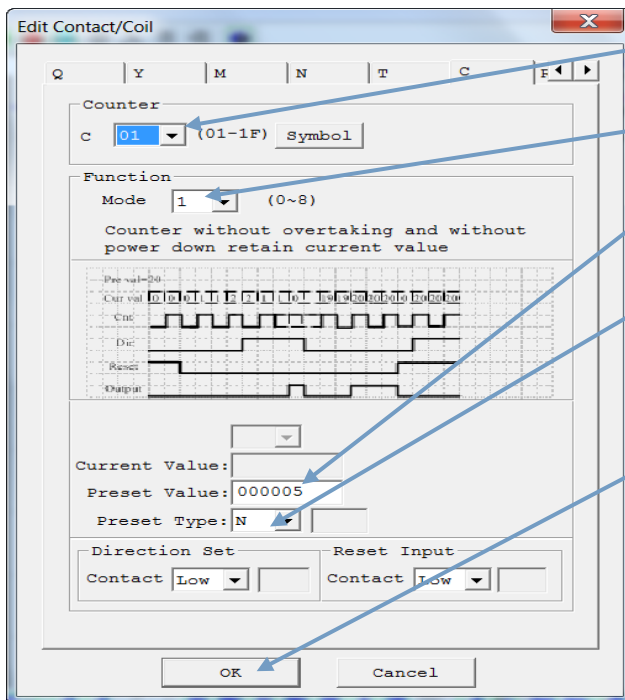


Figure 2

2. **Select Counter:** Set to C01
31 counter instructions available
3. **Select Mode:** Set to Mode 1
9 available
4. **Set Value Amount:** Set to 5 (shown as 000005) - Preset Value range 0~999999
5. **Select Preset Type:** Set to N (Numeric Constant) - Several options are available, including DR (Data Register), A (Analog Input), etc.
6. **Select:** OK

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Use the SG2 Client simulator to test the program. You should see the following:

Function Sequence:

1. When $\uparrow\uparrow$ I01 (N.O.) activates, a signal is sent to \bigcirc C01
2. \bigcirc C01 will increment the counter value with each cycle of $\uparrow\uparrow$ I01
3. Once \bigcirc C01 reaches the preset value (5), $\uparrow\uparrow$ C01 (N.O.) closes
4. \bigcirc Q01 is activated (signaling user set action)



Figure 3

NOTE

For further details pertaining to individual counter modes, please refer to the SG2 User Manual.

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