



OPERATOR INTERFACE PRODUCTS APPLICATION NOTE

Subject: SoftScreen Word/Bit

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Description: SoftScreen Word/Bit Interrogation Optimization

With the SoftScreen Development System there are two methods to interrogate the bit status of a word. One technique will cause for a great deal of communications with the PLC. The other provides for PLC communications optimization.

Example 1.

[PLC0 : N7 : 3 1] = =1 This collects N file 7 Word 3 Bit 1 and tests for true or on.

[PLC0 : N7 : 3 2] = =2 This collects N file 7 Word 3 Bit 2 and tests for true or on.

Both examples are packaged in a communications request block to the PLC and consume two of the total 300 (version 3.5) locations available per screen (including Psuedo Keys and Alarm points).

Example 2.

[PLC0 : N7 : 3] &1 This collects N file 7 Word 3 and tests the value of the Word Bit 1 for true.

[PLC0 : N7 : 3] &2 This collects N file 7 Word 3 and tests the value of the Word Bit 2 for true.

This example is more efficient in the PLC communications. Only one Word is collected in the communications. With the Bit Wise AND (&) operation the developer may interrogate each Bit in the Word and provide better communications optimization.

Conclusion:

Example 1 will restrict the developer to only 300 Word Bit analysis.

Example 2 will increase the number of Word Bit analysis to up to 4800 (300*16)