

Performing an XOR operation on 16-bit data

WXOR(P) [using two operands]

FX5S FX5UJ FX5U FX5UC

These instructions exclusive OR each bit of 16-bit binary data from the device specified by (d) and each bit of 16-bit binary data from device specified by (s), and store the results in the device specified by (d).

| Ladder diagram | Structured text |
|----------------|--|
| | Not supported ☞ Page 295 WXOR(P) [using three operands] |

| FBD/LD |
|---|
| Not supported. ☞ Page 295 WXOR(P) [using three operands] |

Setting data

■ Descriptions, ranges, and data types

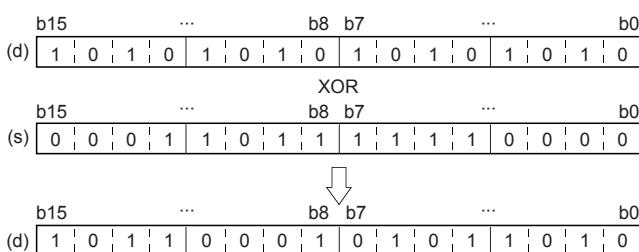
| Operand | Description | Range | Data type | Data type (label) |
|---------|---|------------------|----------------------|-------------------|
| (s) | Data for exclusive OR or head device where data is stored | -32768 to +32767 | 16-bit signed binary | ANY16 |
| (d) | Head device for storing exclusive OR results | -32768 to +32767 | 16-bit signed binary | ANY16 |

■ Applicable devices

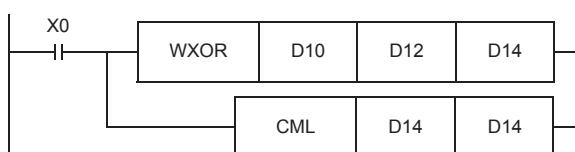
| Operand | Bit | Word | | | Double word | | Indirect specification | Constant | | | Others |
|---------|-----|--------------------------------|------------------------------|-------|-------------|----|------------------------|----------|---|----|--------|
| | | X, Y, M, L, SM, F, B, SB, S | T, ST, C, D, W, SD, SW, R | U□\G□ | Z | LC | | K, H | E | \$ | |
| (s) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d) | ○ | ○ | ○ | ○ | — | — | ○ | — | — | — | — |

Processing details

- These instructions exclusive OR each bit of 16-bit binary data from the device specified by (d) and each bit of 16-bit binary data from device specified by (s), and store the results in the device specified by (d).



- Bit devices subsequent to number of points by digit specification are calculated as 0.
- By combining WXOR and CML instructions, the exclusive logical sum not (XORNOT) operation can be executed as well as the WXNR instruction.



Operation error

There is no operation error.

WXOR(P) [using three operands]

FX5S FX5UJ FX5U FX5UC

These instructions exclusive OR each bit of 16-bit binary data from the device specified by (s1) and each bit of 16-bit binary data from device specified by (s2), and store the results in the device specified by (d).

| Ladder diagram | Structured text |
|----------------|--|
| | EN:=WXOR(EN,s1,s2,d); ENO:=WXORP(EN,s1,s2,d); |
| FBD/LD | |
| | |

Setting data

■ Descriptions, ranges, and data types

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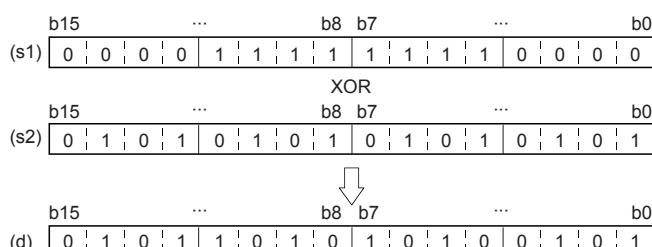
| Operand | Description | Range | Data type | Data type (label) |
|---------|---|------------------|----------------------|-------------------|
| (s1) | Data for exclusive OR or head device where data is stored | -32768 to +32767 | 16-bit signed binary | ANY16 |
| (s2) | Data for exclusive OR or head device where data is stored | -32768 to +32767 | 16-bit signed binary | ANY16 |
| (d) | Head device for storing exclusive OR results | — | 16-bit signed binary | ANY16 |
| EN | Execution condition | — | Bit | BOOL |
| ENO | Execution result | — | Bit | BOOL |

■ Applicable devices

| Operand | Bit | Word | | | Double word | | Indirect specification | Constant | | | Others |
|---------|-----|-----------------------------|---------------------------|-------|-------------|----|------------------------|----------|---|----|--------|
| | | X, Y, M, L, SM, F, B, SB, S | T, ST, C, D, W, SD, SW, R | U□\G□ | Z | LC | | K, H | E | \$ | |
| (s1) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (s2) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d) | ○ | ○ | ○ | ○ | — | — | ○ | — | — | — | — |

Processing details

- These instructions exclusive OR each bit of 16-bit binary data from the device specified by (s1) and each bit of 16-bit binary data from device specified by (s2), and store the results in the device specified by (d).



- Bit devices subsequent to number of points by digit specification are calculated as 0.

Operation error

There is no operation error.