

WECON

Programming



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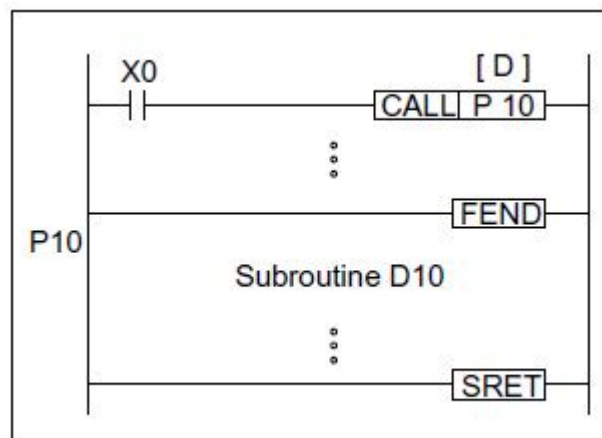
Phone: 86-591-87868869

CALL Instructions

1. Instruction Description

| Name | Function | Bits(bits) | Pulse type | Instruction format | Step |
|-------|-----------------|------------|------------|----------------------|------|
| CALL | Subroutine call | 16 | No | CALL subroutine name | 3 |
| CALLP | | 16 | Yes | | 3 |

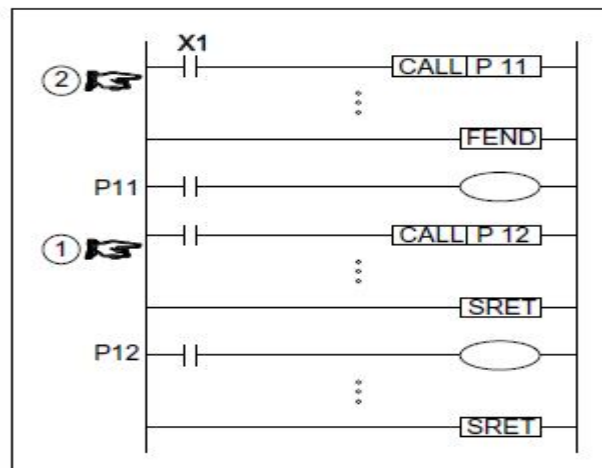
2.Operation:



Operation:

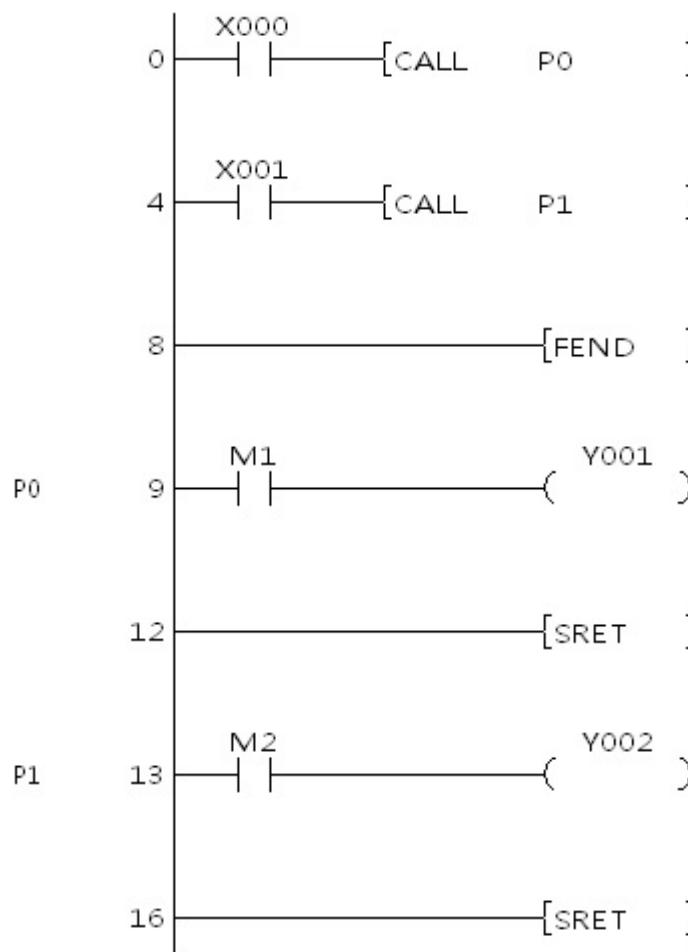
When the CALL instruction is active it forces the program to run the subroutine associated with the called pointer (area identified as subroutine P10). A CALL instruction must be used in conjunction with FEND and SRET instructions. The program jumps to the subroutine pointer (located after an FEND instruction) and processes the contents until an SRET instruction is encountered. This forces the program flow back to the line of ladder logic immediately following the original CALL instruction.

Points to note:



- a) Many CALL statements can reference a single subroutine.
- b) Each subroutine must have a unique pointer number. Subroutine pointers can be selected from the range P0 to P127(LX3V). Subroutine pointers and the pointers used for CJ instructions are NOT allowed to coincide.
- c) Subroutines are not normally processed as they occur after an FEND instruction. When they are called, care should be taken not to overrun the watchdog timer setting..
- d) Subroutines can be nested for 5 levels including the initial CALL instruction. As an example the program shown opposite shows a 2 level nest.

When X1 is activated the program calls subroutine P11. Within this subroutine is a CALL to a second subroutine P12. When both subroutines P11 and P12 are active simultaneously, they are said to be nested. Once subroutine P12 reaches its SRET instruction it returns the program control to the program step immediately following its original CALL (see ①). P11 then completes its operation, and once its SRET instruction is processed the program returns once again to the step following the CALL P11 statement (see ②).



4. PLC monitor

