Initializing the Module
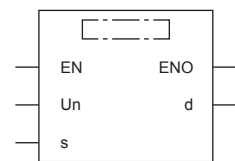
GP.PINIT

| FX5S | FX5UJ | FX5U | FX5UC |

This instruction resets the module parameter and module extension parameter (the positioning data and block start data) in the buffer memory, and the module extension parameter file setting values to the factory default settings (initial values).

Ladder diagram	Structured text
	ENO:=GP_PINIT(EN,Un,s,d);

FBD/LD

("GP_PINIT" enters □.)

Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(U)[*1]	Position number of the module connected	■FX5UJ CPU module 1H to 8H ■FX5U/FX5UC CPU module 1H to 10H	16-bit unsigned binary	ANY16
(s)	Own station head device where control data is stored	☞ Page 1194 Control dataRefer to	Device name	ANY16_ARRAY[*2] (Number of elements: 2)
(d)	Own station device to be turned on for one scan when the instruction completes. When the instruction completes with an error, (d)+1 also turns on.	—	Bit	ANYBIT_ARRAY (Number of elements: 2)
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

*1 In the case of the ST language and the FBD/LD language, U displays as Un.
*2 When specifying setting data by using a label, define an array to secure enough operation area and specify an element of the array label.
Digit specified bit type label cannot be used.

■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	LZ		K, H	E	$	(U)
(U)	—	○	—	—	—	—	○	○	—	—	○
(s)	—	○	—	—	—	—	○	—	—	—	—
(d)	○[*1]	○[*2]	—	—	—	—	—	—	—	—	—

*1 S cannot be used.
*2 T, ST, and C cannot be used.

■Control data

Device	Item	Description	Setting range	Set by
(s)+0	System area	—	—	—
(s)+1	Completion status	The instruction completion status is stored. • 0: Normal • Other than 0: Error (error code)	—	System

Processing details

- These instructions reset the module parameters and module extension parameters in the buffer memory of the positioning module, and the settings in the module extension parameter file to the factory default settings (initial values).
- The setting data initialized include the parameters, positioning data (No. 1 to 600), and block start data (No. 7000 to 7004).
- Whether the GP.PINIT instruction has been completed normally or with an error can be checked with the completion device (d) or completion status indication device (d)+1.

Device	Description
Completion device (d)	This device turns on during the END processing of the scan where the GP.PINIT instruction completed, and turns off during the next END processing.
Completion status indication device (d)+1	This device turns on or off depending on the completion status of the GP.PINIT instruction. When completed normally: Unchanged from off. When completed with an error: Turns on during the END processing of the scan where the GP.PINIT instruction completed, and turns off during the next END processing.

- The following figure shows the operation at completion of the GP.PINIT instruction.
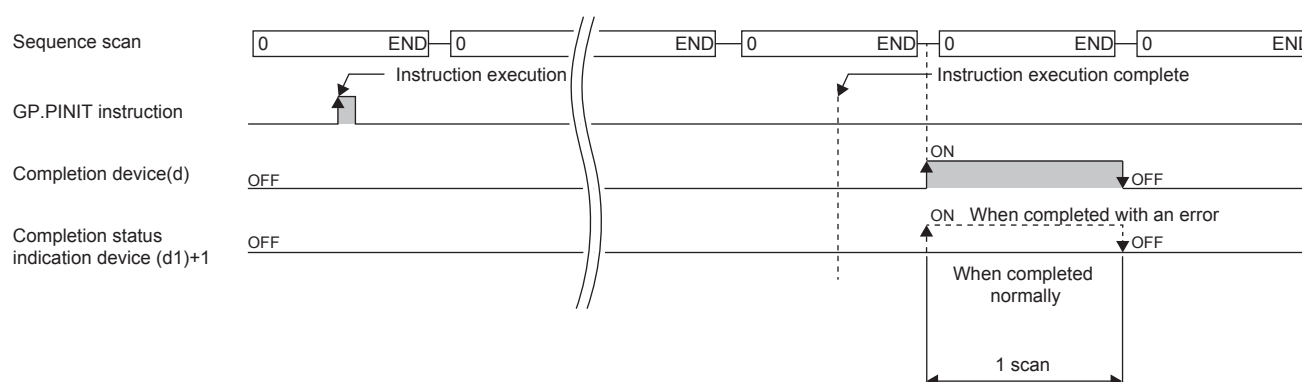
- For details of the function, refer to ▢MELSEC iQ-F FX5 Positioning Module User's Manual.

Precautions

- The GP.PINIT instruction can be executed when the READY signal ([Md.140] module status: b0) is OFF. While the READY signal ([Md.140] module status: b0) is ON, if the GP.PINIT instruction is executed, "Writing during PLC READY ON (Warning code: 0905H) warning occurs in the positioning module and the initializing the module cannot be executed. Turn the "[Cd.190] PLC READY signal" OFF, and turn the READY signal ([Md.140] module status: b0) OFF before executing the GP.PINIT instruction.
- Data write to the flash ROM of the positioning module can be repeated a maximum of one hundred thousand times. Any attempt to write data to the flash memory beyond this count results in failure, and the flash ROM write error (error code: 1931H) occurs.
- After the power is turned on or the CPU module is reset once, module backup (including the number of times initialization is executed) can be repeated a maximum of 25 times if the program is used. Any attempt to write data to the flash ROM memory beyond 25 times results in a flash ROM write count error at error code 1080H. If this error occurs, reset the positioning module error with "[Cd.5] axis error reset", by turning the power OFF to ON, or by resetting the CPU module.
- If this instruction is executed in an interrupt program with the priority 1, operation error (3580H) occurs. This instruction operates in an interrupt program with the priority 2 or 3.

Operation error

Error code ((s)+1)	Description
1080H	Flash ROM write count error
1931H	Flash ROM write error