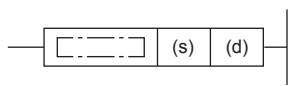# Converting Gray code to 16-bit binary data

GBIN(P)(_U)

FX5S **FX5UJ** **FX5U** **FX5UC**

These instructions convert the 16-bit binary gray code data in the device specified by (s) to 16-bit binary data, and store the converted data in the device specified by (d).

Ladder diagram	Structured text	
▭ (s) (d)	ENO:=GBIN(EN,s,d); ENO:=GBINP(EN,s,d);	ENO:=GBIN_U(EN,s,d); ENO:=GBINP_U(EN,s,d);

FBD/LD
EN   ENO s   d

Setting data

■Descriptions, ranges, and data types

Operand		Description	Range	Data type	Data type (label)
(s)	GBIN(P)	Gray code data or head device storing the gray code data	0 to 32767	16-bit signed binary	ANY16_S
	GBIN(P)_U		0 to 65535	16-bit unsigned binary	ANY16_U
(d)	GBIN(P)	Head device for storing the binary data after conversion	—	16-bit signed binary	ANY16_S
	GBIN(P)_U			16-bit unsigned binary	ANY16_U
EN		Execution condition	—	Bit	BOOL
ENO		Execution result	—	Bit	BOOL

■Applicable devices

Operand	Bit	Word		Z	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	$	
(s)	○	○	○	○	—	—	○	○	—	—	—
(d)	○	○	○	○	—	—	○	—	—	—	—

Processing details

- These instructions convert the 16-bit binary gray code data in the device specified by (s) to 16-bit binary data, and store the converted data in the device specified by (d).
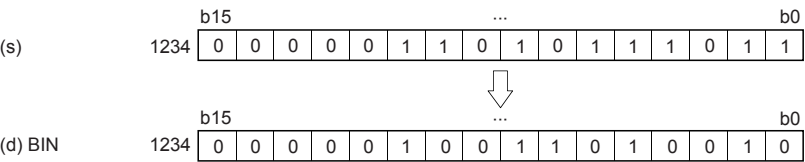
Precautions

When an input relay (X) is specified as (s), the response delay will be "Scan time of CPU module + Input filter constant".

Operation error

There is no operation error.