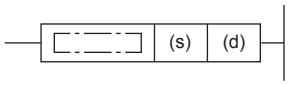
Converting BCD 8-digit data to binary data

DBIN(P)

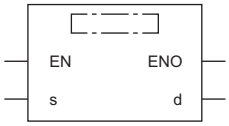
FX5S FX5UJ FX5U FX5UC

These instructions convert the binary-coded decimal data in the device specified by (s) to binary data, and store the converted data in the device specified by (d).

Use this instruction to convert a binary-coded decimal (BCD) value such as a value set by a digital switch into binary (BIN) data and to receive the converted binary data so that the data can be handled in operations in CPU module.

Ladder diagram	Structured text
	ENO:=DBIN(EN,s,d); ENO:=DBINP(EN,s,d);

FBD/LD



Setting data

■Descriptions, ranges, and data types

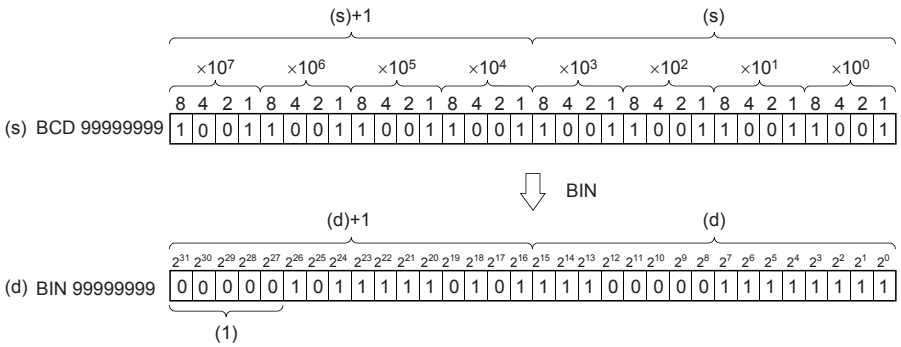
Operand	Description	Range	Data type	Data type (label)
(s)	Binary-coded decimal data or the head device where the binary-coded decimal data is stored	0 to 99999999	BCD 8-digit	ANY32
(d)	Head device for storing the binary data	—	32-bit signed binary	ANY32
EN	Execution condition	—	Bit	BOOL
ENO	Execution 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	LZ		K, H	E	$	
(s)	○	○	○	○	○	○	○	○	—	—	—
(d)	○	○	○	○	○	○	○	—	—	—	—

Processing details

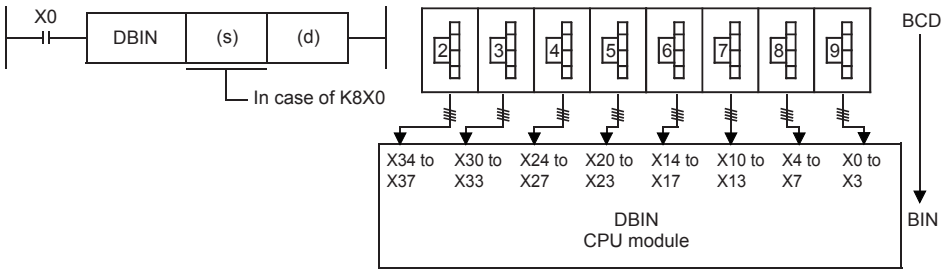
- These instructions convert the BCD 8-digit data (0 to 99999999) in the device specified by (s) to 32-bit binary data, and store the converted data in the device specified by (d).



(1): Filled with 0s.

- The data in the device specified by (s) can be converted if it is in the range from 0 to 99999999 (BCD).

• The table below shows digit specification for the data in the device specified by (s) and (d).



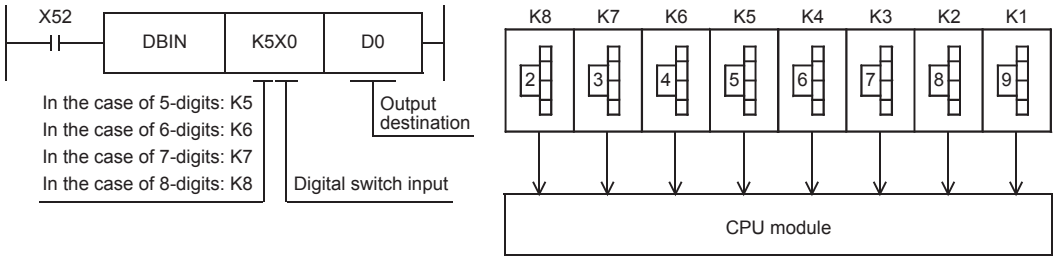
(s)+1, (s)	Number of digits	Data range
K1X0	1-digit	0 to 9
K2X0	2-digit	00 to 99
K3X0	3-digit	000 to 999
K4X0	4-digit	0000 to 9999
K5X0	5-digit	00000 to 99999
K6X0	6-digit	000000 to 999999
K7X0	7-digit	0000000 to 9999999
K8X0	8-digit	00000000 to 99999999

Precautions

• Binary data is used in all operations in CPU module including arithmetic operations (+-×÷), increment and decrement instructions. When receiving digital switch information in binary-coded decimal (BCD) format into a CPU module, use the BIN instruction (for converting BCD data into binary data). Furthermore, to output data to seven-segment display unit handling binary-coded decimal (BCD) data, use the BCD instruction (for converting binary data into BCD data).

Program example

• When the digital switch has 5 to 8-digits



Operation error

Error code (SD0/SD8067)	Description
3401H	The value of each digit of the device specified by (s) is other than 0 to 9. (The data is not binary-coded decimal data.)