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Device/PLC Connection Manuals



About the Device/PLC Connection Manuals

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

A

Toyoda Machine Works

A.1

Maximum Number of Consecutive Device Address

The following lists the maximum number of consecutive addresses that can be read by each PLC. Refer to these tables to utilize *Block Transfer*.



Note: When the device is setup using the methods below, the Data Communication Speed declines by the number of times the device is read.

- When consecutive addresses exceed the maximum data number range
- When an address is designated for *division*
- When device types are different

To speed up data communication, plan the tag layout in screen units, as consecutive devices. (Includes the Alarm and Trend screens.)

■ PLC

<TOYOPUC-PC2 Series>

Device	Max. No. of Consecutive Address	Device	Max. No. of Consecutive Address
Input Relay X	128 Words	Timer (contact) T	128 Words
Output Relay Y		Counter (contact) C	
Internal Relay I		Data Register D	
Keep Relay K		Link Register R	
Link Relay L		File Register B	
Edge Detect P		Current Value Register N	

<TOYOPUC-PC3J Series>

Device	Max. No. of Consecutive Address	Device	Max. No. of Consecutive Address
Input Relay X	128 Words	Exp. Output Relay EY	128 Words
Output Relay Y		Exp. Internal Relay EM	
Internal Relay R		Exp. Keep Relay EK	
Keep Relay K		Exp. Link Relay EL	
Link Relay L		Exp. Special Relay EV	
Special Relay V		Exp. Edge Relay EP	
Edge Detect P		Exp. Timer ET	
Timer (contact) T		Exp. Counter EC	
Counter (contact) C		Exp. Special Register ES	
Data Register D		Exp. Current Value Register EN	
Link Register R		Exp. Setting Value Register H	
Special Register S		Exp. Data Register U	
Current Value Register N		Exp. 2 Input Relay GX	
File Register B		Exp. 2 Output Relay GY	
Exp. Input Relay EX		Exp. 2 Internal Relay GM	

A.2 Device Codes and Address Codes

Device codes and address codes are used to specify indirect addresses for the E-tags or K-tags.

The word addresses of data to be displayed are coded and stored in the word address specified by the E-tags and K-tags. (Code storage is done either by the PLC, or with T-tag and K-tags)

■ PLC

<TOYOPUC-PC2 Series>

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input Relay	X0000~	8000	Word Address
	Output Relay	Y0000~	8800	Word Address
	Internal Relay	M0000~	9000	Word Address
	Keep Relay	K0000~	C000	Word Address
	Link Relay	L0000~	C800	Word Address
Word Device	Register (current value)	N0000~	6000	Word Address
	Data Register	D0000~	0000	Word Address
	Link Register	R0000~	4800	Word Address
	File Register	B0000~	7800	Word Address
	Special Register	S0000~	5000	Word Address
	LS area	LS0000~	4000	Word Address

<TOYOPUC-PC3J Series>

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input Relay	1X0000~	8000	Word Address
		2X0000~	8200	Word Address
		3X0000~	8400	Word Address
	Output Relay	1Y0000~	8800	Word Address
		2Y0000~	8A00	Word Address
		3Y0000~	8C00	Word Address
	Internal Relay	1M0000~	9000	Word Address
		2M0000~	9200	Word Address
		3M0000~	9400	Word Address
	Keep Relay	1K0000~	C000	Word Address
		2K0000~	C200	Word Address
		3K0000~	C400	Word Address
	Link Relay	1L0000~	C800	Word Address
		2L0000~	CA00	Word Address
		3L0000~	CC00	Word Address
	Special Relay	1V0000~	B000	Word Address
		2V0000~	B200	Word Address
		3V0000~	B400	Word Address
	Timer	1T0000~	E000	Word Address
		2T0000~	E200	Word Address
		3T0000~	E400	Word Address
	Counter	1C0000~	F000	Word Address
		2C0000~	F200	Word Address
		3C0000~	F400	Word Address
	Exp. Input	EX0000~	8600	Word Address
	Exp. Output	EY0000~	8E00	Word Address
	Exp. Internal Relay	EM0000~	9600	Word Address
Exp. Keep Relay	EK0000~	C600	Word Address	
Exp.n Link Relay	EL0000~	CE00	Word Address	
Exp. Special Relay	EV0000~	B600	Word Address	
Exp. Timer	ET0000~	E600	Word Address	
Exp. Counter	EC0000~	F600	Word Address	
Word Device	Data Register	1D0000~	0000	Word Address
		2D0000~	0200	Word Address
		3D0000~	0400	Word Address
	Link Register	1R0000~	4800	Word Address
		2R0000~	4A00	Word Address
		3R0000~	4C00	Word Address
	Special Register	1S0000~	5000	Word Address
		2S0000~	5200	Word Address
		3S0000~	5400	Word Address
	Register (current value)	1N0000~	6000	Word Address
		2N0000~	6200	Word Address
		3N0000~	6400	Word Address
	File Register	B0000~	7800	Word Address
	Exp. Special Register	ES0000~	5600	Word Address
	Exp. Current Value Register	EN0000~	6600	Word Address
	Exp. Setting Value Register	H0000~	7600	Word Address
	Exp. Data Register	U0000~	6000	Word Address
	Exp. 2 Input	GX0000~	A600	Word Address
	Exp. 2 Output	GY0000~	AE00	Word Address
Exp. 2 Internal Relay	GM0000~	BE00	Word Address	
LS area	LS0000~	4000	Word Address	