LS Industrial Systems Co., Ltd XGT(XGK-CPU), XGB(XBC-CPU/XBM-CPU) Series

CNET Driver

Support version OS

V4.0 and over



XDesignerPlus 4.0.0.0 and over

CONTENTS

Thank you for using TOP series of M2I corporation.

Please read this manual carefully to know connection methods and procedures of "TOP to External device".

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A section for showing connectable external devices, serial signal types, connection configurations. Refer this section to select the right system configuration.

2. Selection of TOP, External device Page4

A section for selecting a Top model and the external device.

3. Example of system setting Page 5

A section for explaining examples to connect communications of TOP to External Device.

Select the correct example in your case according to "1. System configuration"

4. Communication setting

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A section for Communication setting.

The setting should be the same with the external device.

5. Cable diagram

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A section for cable to connect to external device. Select a suitable cable diagram for your system.

6. Usable address

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A section for usable address to communicate with external device.



1. System configuration

System configuration of TOP and "LS Industrial Systems Co., Ltd - XGT(XGK), XGB(XBC/XBM) Series".

Series	CPU*1)	Link I/F	Comm. type	System setting	Cable
		XGL-C22A, CH1	RS232	<u>4.1 setting ex 1</u> (5 Page)	<u>5.1 cable diagram 1</u> <u>(30 Page)</u>
-	XGL-C22A, CH2	RS232	<u>4.2 setting ex 2</u> (7 Page)	5.1 cable diagram 1 (30 Page)	
			RS422	<u>4.3 setting ex 3</u> (<u>9 Page)</u>	5.2 cable diagram 2 (31 Page)
	XGK-CPUH	XGL-C42A, CH1	RS485	<u>4.4 setting ex 4</u> <u>(11 Page)</u>	<u>5.3</u> cable diagram 3 (32 Page)
XGK-CPUA XGK XGK-CPUS XGK-CPUE XGK-CPUU		RS422	<u>4.5 setting ex 5</u> <u>(13 Page)</u>	<u>5.2 cable diagram 2</u> <u>(31 Page)</u>	
	XGK-CPUU	XGL-C42A, CH2	RS485	<u>4.6 setting ex 6</u> <u>(15 Page)</u>	5.3 cable diagram 3 (32 Page)
		XGL-CH2A, CH1	RS232	<u>4.1 setting ex 1</u> (5 Page)	<u>5.1 cable diagram 1</u> <u>(30 Page)</u>
			RS422	<u>4.5 setting ex 5</u> (13 Page)	<u>5.2 cable diagram 2</u> <u>(31 Page)</u>
		XGL-CH2A, CH2	RS485	<u>4.6 setting ex 6</u> <u>(15 Page)</u>	<u>5.3 cable diagram 3</u> (32 Page)
		CPU on Cnet ^{*2)} , CH1	RS232	<u>4.7 setting ex 7</u> <u>(17 Page)</u>	5.4 cable diagram 4 (33 Page)
XGB	XBM-D□16S	CPU on Cnet ^{*2)} , CH2	RS485	<u>4.8 setting ex 8</u> <u>(19 Page)</u>	<u>5.5 cable diagram 5</u> <u>(34 Page)</u>
	XBM-D□32S XBC-D□32H	XBL-C21A, CH2	RS232	<u>4.9 setting ex 9</u> <u>(21 Page)</u>	<u>5.1</u> cable diagram 1 (30 Page)
	XBC-D⊡64H		RS422	<u>4.10 setting ex 10</u> (23 Page)	<u>5.2 cable diagram 2</u> <u>(31 Page)</u>
		XBL-C41A, CH2	RS485	<u>4.11 setting ex 11</u> (25 Page)	5.3 cable diagram 3 (32 Page)

*1) Confirm that version written CPU unit label is 1.1 and over.

*2) Cnet port on CPU unit of XGB Series

Type name	Image	Detail name
Cnet on CPU unit		5 pin terminal port of XBC/XBM/XEC CPU module (RS-232 1 port + RS-485 1 port)



Connection configuration

• 1 : 1(TOP 1 unit to External device 1 unit) connection – It is available with RS232C/422/485.



• 1 : N(TOP 1 unit to External device N unit) connection – It is available with RS422/485.





2. Selection of TOP, External device

Select a external device which is communicated to the TOP.

		HMI / PLC Uint	
Series XT	OP Series	Vendor	LS Industrial Systems
Model XT	OP15TX-SA/SD	PLC Model	XGT Series(XGK), XGB Series(XBC/XBM
	0.0	PLC	
Ven	dor		Model
W2I Corporation WITSUBISHI Electr DMRON Industrial S Industrial Syste WODBUS Organiza SIEMENS AG. Rockwell Automati 28 Fanuc Automati 29 NASONIC Electric YASKAWA Electric YOKOGAWA Electric YOKOGAWA Electric YOKOGAWA Electric YOKOGAWA Electric Schneider Electric KOT Systems RS Automation(SA HITACHI IES FATEK Automation DELTA Electronics I VIGOR Electric Co Comfile Technolog Dongbu(DASAROE ROBOSTAR Bosch Revroth AG	ic Corporation Automation ation ation ation ation an (AB) tion c Corporation C Corporation Industries MSUNG) ACOPPATION ACOPATION ACOPPATION ACOPPATION ACOPATION ACOPPATION ACOPPATION ACO	A-GM Series CNET A-GM Series CPU Direct A-GM Series FENET A-GM(CPUC Type) Series CN ER-K(10S/30S/60S/100S) Se ER-K(10S/30S/60S/100S) Se ER-K(10S1) Series Compute ER-K(10S1) Series Compute ER-K(10S1) Series COADER ER-K(200S/300S/1000S) Series ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series LO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series LO ER-K(500H/1000H) Series LO ER-K(500H/1000H) Series CO ER-K(500H/1000H) Series CO ER	IET aries Computer Link aries LOADER r Link ries FENET computer Link DADER DER 1000S) Series CNET 1000S) Series CPU Direct 1000S) Series CPU Direct 1306/1307 s(XEC) CNET s(XEC) CPU Direct s(XEC) FENET C/XBM) CPU Direct C/XBM) FENET

Setting Items		Description			
ТОР	Series	Select a TOP series which is communicated with external device. Install an OS file v3.1 as diagram below before download a project file you have made.			
		Series OS Version			
		XTOP / HTOP	V4.0		
	Name	Select a TOP model which is co	mmunicated with external device.		
External Device	Vendor	Select vendor of the external device which is communicated with TOP. Select "LS Industrial Systems Co., Ltd".			
	PLC	Select a model name of the external device which is communicated with TOP. Select "XGT(XGK), XGB(XBC/XBM) Series CNET". Check whether the external device you want to use is connectable or not in "1. System configuration".			



3. Example of system setting

Set Communication interface of TOP and " XGT(XGK-CPU),XGB(XBC-CPU/XBM-CPU)Series CNET Driver".

3.1 Example 1

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	oort/channel)	RS-232 (COM2)	RS-232 (CH 1)	User set
Station number (PLC Address)		_	0	User set
Serial Baud rate	[BPS]	1	User set	
Serial Data bit	[Bit]		User set	
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	Ν	User set	
Run Mode		XGT private server		User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.



-CPU Type : Select CPU type



Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.

5. double click slot of Cnet card in [Project Window], show dialog box of [Default settings].

Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				? 🛛
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	~	RS232C	~
통신속도:	115200	~	9600	~
데이터 비트:	8	~	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	*	널모뎀	*
모뎀 초기화:				
국변:	0		0	
시간 설정	1	-10		
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	[1		1	
동작 모드				
채널 1: XGT 서비	H	*	모드버스	설정
채널 2: XGT 서비	H	~	[모드버스	설정
		확인	^	1소

Item		Contents	Note
Connection	Comm. Type	RS232C	fixation
setting	Baud rate	115200	User set
CH 1	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	Fixed
	Station No.	0	User set

- 6. Transfer setting contents to CPU at [Online] > [Parameter Write].
- 7. Reset PLC at [Online] > [Reset] >][Reset PLC].



3.2 Example 2

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	oort/channel)	RS-232 (COM2)	RS-232 (CH 2)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT private server		User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				?×
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	*	RS232C	~
통신속도:	9600	~	115200	*
데이터 비트:	8	~	8	~
정지 비트:	[1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	*	널모뎀	*
모뎀 초기화:				
국번:	0		0	
시간 설정				
응답 대기 시간:	1		1	
(0-50)(*100ms) エロロールフト・				
(0-255)(*10ms)	0		0	
문자간 대기 시간:	1		1	
(0-255)(*10ms)		317	1.0.	
동작 모드				
채널 1: XGT 서비	ł	~	모드버스 (설정
채널 2: XGT 서비	ł	~	모드베스 (절정
		확인	_	소

Item		Contents	Note
Connection	Comm. Type	RS232C	fixation
setting	Baud rate	115200	User set
CH 2	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set

- **6.** Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.3 Example 3

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	oort/channel)	RS-422 (4 wire, COM2)	RS-422 (4wire, CH 1)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	11	User set	
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT private server		User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				? 🛛
접속 설정	채널 1		채널 2	
통신 형태:	RS422	*	RS422	×
통신속도:	115200	~	9600	~
데이터 비트:	8	~	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	~	널모뎀	
모뎀 초기화:				
국번:	0		0	
시간 설정		39		
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	1		1	
동작 모드				
채널 1: XGT 서비	H	¥	모드베스	설정
채널 2: XGT 서비	ł	*	모드버스	설정
		확인		티소

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].

ltem		Contents	Note
Connection	Comm. Type	RS-422	fixation
setting	Baud rate	115200	User set
CH 1	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set



3.4 Example 4

Set your system as below.

Item		TOP External device		Note
Serial Signal Level (p	port/channel)	RS-485 (2 wire, COM2)	RS-485 (2 wire, CH 1)	User set
Station number (PLC	C Address)	— 0		User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT pr	ivate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.

4. Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.

5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].

Set [Connection] and [Run Mode] as below and click [OK].

저수 성전				L.E.
UT 20	채널		채널 2	
통신 형태:	RS485	*	RS422	Y
통신속도:	115200	~	9600	*
데이터 비트:	8	*	8	~
정지 비트:	1	~	1	×
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	~	널모뎀	2
모뎀 초기화:	1			
국번:	0		0	
시간 설정	-	ЭŬ		
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	1		1	
동작 모드				
채널 1: XGT 서버	1	~	모드베스	설정
채널 2: XGT 서비	1	~	모드버스	설정
	_	*L01		1.4

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].

Item		Contents	Note
Connection	Comm. Type	RS-485	fixation
setting	Baud rate	115200	User set
CH 1	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set



3.5 Example 5

Set your system as below.

Item		TOP External device		Note
Serial Signal Level (p	oort/channel)	RS-422 (4 wire, COM2)	RS-422 (4wire, CH 2)	User set
Station number (PLC	C Address)	— 0		User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				? 🛛
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	~	RS422	~
통신속도:	9600	~	115200	~
데이터 비트:	8	~	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	~	널모뎀	*
모뎀 초기화:				
국번:	0		0	
시간 설정			1	
응답 대기 시간:	1		1	
(0-50)(*100ms) รเดมวะ				
(0-255)(*10ms)	10		0	
문자간 대기 시간:	[1		1	
(0-255)(*10ms)	-	10		
동작 모드				
채널 1: XGT 서비	1	*	모드버스	설정
채널 2: XGT 서비	1	~	모드베스	설정
		확인	_	소

Item		Contents	Note
Connection	Comm. Type	RS-422	fixation
setting	Baud rate	115200	User set
CH 2	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set

- **6.** Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.6 Example 6

Set your system as below.

Item		TOP External device		Note
Serial Signal Level (p	port/channel)	RS-485 (2 wire, COM2)	RS-485 (2 wire, CH 2)	User set
Station number (PLC	C Address)	— 0		User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				? 🗙
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	~	RS485	~
통신속도:	9600	~	115200	~
데이터 비트:	8	~	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	~	널모뎀	
모뎀 초기화:				
국번:	0		0	
시간 설정			5	
응답 대기 시간:	1		T:	
(0-50)(*100ms)			- <u>1.1</u>	
(0-255)(*10ms)	0		0	
문자간 대기 시간:	1		1	
(0-255)(*10ms)		18	1	
동작 모드				
채널 1: XGT 세I	Ħ	~	모드버스	설정
채널 2: XGT 세	H	*	[모드베스	설정
		확인		소

Contents Note Item Connection Comm. Type RS-485 fixation setting Baud rate 115200 User set CH 2 Data bit 8 User set Stop bit 1 User set Parity bit NONE User set Modem Type Null fixation Station No. 0 User set

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.7 Example 7

Set your system as below.

Item		TOP External device		Note
Serial Signal Level (port/channel)	RS-232 (COM2)	RS-232 (CH 1)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.



-CPU Type : Select CPU type



Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				? 🗙
접속 설정	채널 1		채널 2	
통신 형태:	BS232C	×	RS485	N.
통신속도:	115200	*	9600	~
데이터 비트:	8	~	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	*	NONE	~
모뎀 형식:	닐모뎀	~	널모뎀	
모뎀 초기화:				
국변:	0		0	
시간 설정	-	_		
응답 대기 시간:	1		Ĩ1:	P
(0-50)(*100ms)	L			
지연지간 (0-255)(*10ms)	0		0	
문자간 대기 시간:	[1]		1	_
(0-255)(*10ms)	1.3			
동작 모드				
채널 1: XGT 서바		¥	모드버스	설정
채널 2: ХӨТ 서바	ĥ	~	모드버스	설정
		확인		비소

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].

Item		Contents	Note
Connection	Comm. Type	RS-232C	fixation
setting	Baud rate	115200	User set
CH 1	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set



3.8 Example 8

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	port/channel)	RS-485 (2 wire, COM2)	RS-485 (2 wire, CH 2)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.



Davice Read Type : Select protocol t



Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.

4. Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.

5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].

Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				?
접속 설정	채널 1	ů.	채널 2	
통신 형태:	RS232C	~	FIS485	×
통신속도:	9600	*	115200	*
데이터 비트:	8	*	8	~
정지 비트:	1	~	1	~
패리티 비트:	NONE	~	NONE	~
모뎀 형식:	널모뎀	×	닐모뎀	1
모뎀 초기화:				
국번:	0		q	
시간 설정				
응답 대기 시간:	1		1	1
(0-50)(*100ms) 지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	[1		1	
동작 모드				
채널 1: XGT 서비	H	~	모드버스	설정
채널 2: XGT 서비	H	~	모드베스	설정
		확인	_	1소

Item		Contents	Note
Connection	Comm. Type	RS-485	fixation
setting	Baud rate	115200	User set
CH 2	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.9 Example 9

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (port/channel)	RS-232 (COM2)	RS-232 (CH 2)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]		1	User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.



-CPU Type : Select CPU type



Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

본 설정 - Cnet				?
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	×	RS232C	~
통신속도:	9600	\mathbb{Z}	115200	~
데이터 비트:	8	\sim	8	~
정지 비트:	T	\sim	1	~
패리티 비트:	NONE	Y	NONE	~
모뎀 형식:	닐모뎀	~	널모뎀	*
모뎀 초기화:				
국번:	0		0	
시간 설정				
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	1		1	
동작 모드				
채널 1: [XGT 세	H	1	[모드버스	설정
채널 2: XGT 세	н	~	모드버스	설정
		확인	- A	소

Item		Contents	Note
Connection	Comm. Type	RS-232C	fixation
setting	Baud rate	115200	User set
CH 2	Data bit	8	User set
	Stop bit	1	User set
	Parity bit	NONE	User set
	Modem Type	Null	fixation
	Station No.	0	User set

- **6.** Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.10 Example 10

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	port/channel)	RS-422 (4 wire, COM2)	RS-422 (4 wire, CH 2)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT priv	vate server	User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.



-CPU Type : Select CPU type



Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.
- 5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].
- Set [Connection] and [Run Mode] as below and click [OK].

기본 설정 - Cnet				?
접속 설정	채널 1		채널 2	
통신 형태:	RS232C	×	RS422	~
통신속도:	9600	\geq	115200	*
데이터 비트:	8	~	8	~
정지 비트:	T		1	~
패리티 비트:	NONE	1	NONE	~
모뎀 형식:	닐모뎀		널모뎀	1
모뎀 초기화:				
국번:	0		0	
시간 설정				
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	1		1	
동작 모드				
채널 1: XGT 서태	H		[모드버스	설정
채널 2: XGT 서비	Н	~	모드베스	설정
		확인	7	티소

	Item		Contents	Note
_	Connection	Comm. Type	RS-422	fixation
	setting	Baud rate	115200	User set
	CH 2	Data bit	8	User set
		Stop bit	1	User set
		Parity bit	NONE	User set
		Modem Type	Null	fixation
		Station No.	0	User set

- **6.** Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



3.11 Example 11

Set your system as below.

Item		ТОР	External device	Note
Serial Signal Level (p	oort/channel)	RS-485 (2 wire, COM2)	RS-485 (2 wire, CH 2)	User set
Station number (PLC	C Address)	—	0	User set
Serial Baud rate	[BPS]	115200		User set
Serial Data bit	[Bit]	8		User set
Serial Stop bit	[Bit]	1		User set
Serial Parity bit	[Bit]	NONE		User set
Run Mode		XGT private server		User set

(1) XDesignerPlus Setting

[Project >Project property] of XDesignerPlus as below and download it to TOP machine.





Run "XG-PD Editor" program for communication setting and set as below. If you want to change communication interface, modify refer to PLC manual.

- 1. Run File > New File". Select CPU Type and push OK button refer to "1. system configuration".
- **2.** Connect CPU LOADER port of XGT Series and serial port of PC by serial cross cable. (If there is USB port in CPU, connect USB.)
- 3. Run [Online] > [Connection settings] menu. Select [Connection settings->Type] and click [Connect] button.
- **4.** Run [Online] > [I/O Information] and read slot number. Run [Online] > [Read Parameter] and read parameter information of slot of communication card.

5. Double click slot of Cnet card in [Project Window], show dialog box of [Default settings].

Set [Connection] and [Run Mode] as below and click [OK].

	채널 1		채널 2	
통신 형태:	RS232C	\sim	RS485	Y
통신속도:	9600	\sim	115200	~
데이터 비트:	8	8	8	~
정지 비트:	Ĩ	\sim	1	~
패리티 비트:	NONE	Y	NONE	~
모뎀 형식:	닐모뎀		널모뎀	2
모뎀 초기화:				
국번:	0		0	
시간 설정				
응답 대기 시간: (0-50)(*100ms)	1		1	
지연 시간: (0-255)(*10ms)	0		0	
문자간 대기 시간: (0-255)(*10ms)	1		1	
동작 모드				
채널 1: 🛛 🛛 저	H	1	[모드버스	설정
채널 2: XGT 서	Ш	~	모드버스	설정

	Item		Contents	Note	
0	Connection	Comm. Type	RS-485	fixation	
	setting	Baud rate	115200	User set	
	CH 2	Data bit	8	User set	
		Stop bit	1	User set	
		Parity bit	NONE	User set	
		Modem Type	Null	fixation	
		Station No.	0	User set	
		l			

- 6. Transfer setting contents to CPU at [Online] > [Write].
- 7. Reset PLC at [Online] > [Reset PLC].



4. Communication setting

Communication setup can be set on XDesignerPlus or TOP Main Menu. The setting should be the same with the external device.

4.1 XDesignerPlus setup

Set [Project > Project property] of XDesignerPlus as below.

⊡ Project ⊡ TOP Setting … XTOP05MQ-ED(-E) ⊡ PLC Setting	■ [Project >Project Property > Project >TOP Setting > TOP Name] Set communication interface of TOP. -Right window : [HMI Setting > check HMI Setting using > Device manager]
□ COM2 (1) □ PLC1 : XGT(XGK,XGB) Lir □ COM1 (0) □ Ethernet (0) □ FieldBus (0) □ USB Device (0) □ CF/SD Card Setting	ik + COM 1 + COM 2 - Boud Rate : 115200 - Boud Rate : 115200 - Data Bit : 8 - Data Bit : 8 - Stop Bit : 1 - Stop Bit : 1 - Parity Bit : None - Parity Bit : None
····· CF/SD Card	- Signal Level : RS-232C -Right window : [HMI Setting > check HMI Setting using > PLC setting]
	HMI Setup Sepcial Buffer Sync
	Vse HMI Setup
	System Setup PLC Setup Device Manager Interface
	(PLC1) XGT Series(XGK), XGB Series(XBC/XBM) CNET
	PLC Station Number : 0
	Time Out : 1000 🗘 msec.
	Wait before send : 0
	N:1 Setup
	N : 1 Use NO N : 1 Station Number (0~31)
	External device setup Set the communication driver option <u>"XGT(XGK), XGB(XBC,XBM) Series CNET"</u> PLC Comm Info
	Station Number (PLC) 0 CPU Type XGB
	Device Read Type Continuous 👻
Setting communication Interface	
Item	Description
Serial Signal Level	Setup signal level(RS-232C/422/485) of PLC connected with COM2/1 port. (COM1 only RS-232C)
Serial Baud Rate	Setup [communications Baud rate] of PLC connected with COM2/1 port.
Serial Data Bit	Setup [Data Bit] of PLC connected with COM2/1 port.
Serial Stop Bit	Setup [Stop Bit] of PLC connected with COM2/1 port.
Serial Parity Bit	Setup [Parity Bit] of PLC connected with COM2/1 port.
Time Out [x100 mSec]	Setup [Time Out] of PLC connected with COM2/1 port. (Timeout:: waiting time for answer of PLC)
Send Wait [x10 mSec]	Setup [Send Wait] of PLC connected with COM2/1 port. (Send Wait: communicate after waiting setting time when touch screen requires communications.)



Station Num. in Diag.[0~31]



4.2 Set TOP Main Menu

- When a buzzer is on during the power reset, touch 1 spot at the upper LCD to move to "TOP Management Main" display.

- Set up driver interface at TOP according to below Step1 \rightarrow Step2 .	
(Press "TOP COM 2/1 setup" in Step 1 to change setup at Step 2.)	



Step 1. [PLC setup] - Setup driver interface.

PLC setup						
PLC Address : 00	PLC Address : 00 Communication					
Timeout : 1000 [mSec]		Interface Settings				
Delay time of transmission : 0 [mSec]	l					
TOP COM 2/1 : RS - 232C , 115200 , 8 , 1 , NONE						
Step 1-Reference.			_			
Details Contents						
PLC address [0~65535] Address of other device. Select between [0 - 65535].						
Timeout [x1 mSec] Set up TOP's response waiting time from external device at [0 – 5000] x 1 mSec.						

inneedt [Af meee]	
Delay time of transmission [Set up TOP's waiting time between response receiving – next command request transmission
x1 mSec]	from external device at [0 – 5000] x 1 mSec.
TOP COM 2/1	TOP's Interface setup to external device.

Step 2. [PLC setup] > [TOP COM2/COM1 Setting] – Setup relevant port's serial parameter.

Port Settings	
* Serial communication	COM 1 Port
+ COM-1 Port	Communication
- Baud rate : 115200 [BPS]	Interface Settings
- Data bit : 8 [BIT]	
- Stop bit : 1 [BIT]	
- Parity bit : NONE [BIT]	
- Signal level : RS – 232C	
+ COM-2 Port	COM-2 Port
- Baud rate : 115200 [BPS]	Communication
- Data bit : 8 [BIT]	Interface Settings
- Stop bit : 1 [BIT]	
- Parity bit : NONE [BIT]	
- Signal level : RS – 232C	

Step 2-Reference.

Details	Contents
Baud rate	External device – select serial communication speed between TOPs.
Data bit	External device – select serial communication data bit between TOPs.
Stop bit	External device – select serial communication stop bit between TOPs.
Parity bit	External device – select serial communication parity bit check method between TOPs.
Signal level	External device – select serial communication method between TOPs.



4.3 Communication Diagnosis

■ TOP - Confirming interface setting condition between external devices

- Move to Menu by clicking the top side of LCD screen as resetting the power of TOP.

- Confirms if Port [COM 2 or COM 1] setting that is willing to use in [Communication Settings] matches with the setting of external devices.

Port Communication Issue Diagnosis

- PLC Setting > TOP [COM 2 or COM 1] click "Communication Diagnosis" button.

- Diagnosis dialog box will pop up on the screen, you can judge by following information that is shown on box no. 3 section.

OK!	Communication setting normal
Time Out Error!	Abnormal Communication setting.
	- Error in the setting situation of Cable and TOP / External device (reference
	: Communication Diagnosis sheet)

■ Communication Diagnosis Sheet

- Please refer to the information below if you have a problem between external devices and communication connection.

Designer Versior		O.S Version				
Details	Contents				Con	firm
System	Name of CPU		OK	NG		
configuration	Name of confront port that is				ОК	NG
	System Connection Method	1:1	1:N	N:1	OK	NG
Connection	Name of Cable				OK	NG
Cable						NO
PLC setup	Setup address				OK	NG
	Serial baud rate		[BPS	5]	OK	NG
	Serial data bit		[BIT]		OK	NG
	Serial Stop bit		[BIT]		OK	NG
	Serial parity bit		[BIT]		ОК	NG
	Assigned Address Limit				ОК	NG
TOP setup	Setup port	COM 1	CC	DM 2	OK	NG
	Name of Driver				OK	NG
	Confront Address	Project Property Setu	р		OK	NG
		When Diagn	osing		OK	NG
		Communication			OK	NO
	Serial baud rate		[BPS	5]	OK	NG
	Serial data bit		[BIT]		OK	NG
	Serial Stop bit		[BIT		OK	NG
	Serial parity bit		[BIT]		OK	NG



5. Cable diagram

This Chapter introduces cable wiring guidance for communication between TOP and PLC concerned. (The cable diagrams in this section may differ from the recommendations of LS Industrial Systems Co., Ltd)

5.1 Cable Diagram Table 1

■ 1:1 Connection

(A) XTOP COM 2port(9pin)							
XTOP	COM2			PLC			
Pin Assignment *1	Signal	Pin No.		Pin No.	Signal	Pin Assignment *1	
	CD	1		1	CD		
		2		2			
	RD				RD		
1 5						1 5	
	SD	3		3	SD		
6 9	DTR	4		4	DTR	6 9	
D-SUB 9 Pin	SG	5		5	SG	D-SUB 9 Pin	
(male, convex)	DSR	6		6	DSR	(male, convex)	
	RTS	7		7	RTS		
	CTS	8		8	CTS		
		9		9			

*1) Pin assignment of the cable connector is seen on the face of Front View.

(B) XTOP COM 2 port(15pin)

XTOP COM2			Cable Mining	PLC			
Pin Assignment *1	Signal	Pin No.	Cable wiring	Pin No.	Signal	Pin Assignment *1	
	CD	1		1	CD		
	RD	2		2	RD		
						1 5	
	SD	3		3	SD		
9 15 Front View of	DTR	4		4	DTR	6 9 Front View of	
D-SUB 15 Pin	SG	5		5	SG	D-SUB 9 Pin	
(male, convex)	DSR	6		6	DSR	(male, convex)	
	RTS	7		7	RTS		
	CTS	8		8	CTS		
		9		9			

*1) Pin assignment of the cable connector is seen on the face of Front View.

(C) XTOP/ATOP COM 1 port (6pin)

XTOP/ATOP COM 1 port			Cable Mining	PLC			
Pin Assignment *1	Signal	Pin No.	Cable Winng	Pin No.	Signal	Pin Assignment *1	

				7		한민국대표 터치패널 uch Operation Panel
		1		1	CD	
6 4 2	RD	2] —¶ •	2	RD	
í.°°,	SG	3] —• •	3	SD	1 5
		4	•	4	DTR	
5 0 1		5	-	5	SG	6 9
Front View of	SD	6		6	DSR	D-SUB 9 Pin
D-SUB 6 Pin				7	RTS	(male, convex)
(male, convex)				8	CTS	
				9		



5.2 Cable Diagram Table 2

■ 1:1 connection

(A) XTOP COM 2 port(9pin)



*1) Pin assignment of the cable connector is seen on the face of Front View.

(B) XTOP COM 2 port(15pin) **XTOP COM2** PLC **Cable Wiring** Pin Assignment *1 Pin Assignment Pin No. Signal Signal _ 1 TX+ TX-(skip) RX+ Ob CH1 800 6 тх-0 тх q 15 RX-10 RX-Front View of _ RX D-SUB 15 Pin RDA 11 SG (male, convex) RDB 12 SDA 13 SDB 14 SG 15

*1) Pin assignment of the cable connector is seen on the face of Front View.

(C) ATOP COM 2 port (Terminal block 5 pin)

ATOP COM2		Cable Mining	PLC		
Pin Assignment *1	Signal	Cable Winnig	Signal	Pin Assignment	



*1) Pin assignment of the cable connector is seen on the face of Front View.1

■ 1 : N connection – Connect as below refer to 1:1 connection.

TOP	Direction of	PLC	Direction of	PLC
Signal	cable connection and signal	Signal	cable connection and signal	Signal
RDA				
		TV		TV
		IX+		IX+
RDB		TX–		TX–
SDA		RX+		RX+
SDB		RX–		RX–
SG		SG		SG



■ 1:1 connection



11 1 Pin assignment of the cable connector is seen on the face of Front View.RDARDA

(C) ATOP COM 2 port (Terminal block 5 pin)

ATOP COM2		Cable Wiring	PLC		
Pin Assignment *1	Signal	Cable Wiring	Signal	Pin Assignment	
			TX+		
	RDB		TX–	<u></u>	
RS-422 RDA RDB SDA SDB SG FG	SDA		RX+	TX+	
	SDB		RX–		
$\otimes \otimes \otimes \otimes \otimes \otimes \otimes$	SG		SG		
Front View of					
Terminal block 5 Pin					
	1				

*1) Pin assignment of the cable connector is seen on the face of Front View.

■ 1 : N / N : 1 connection – Connect as below refer to 1:1 connection.

TOP

PLC

Direction of



cable connection and signal

Signal
TX+
TX–
RX+
RX–
SG

cable connection and signal

•

Signal	
TX+	
TX–	
RX+	
RX–	
SG	

Signal	
RDB	
SDA	
SDB	
SG	



5.4 Cable Diagram Table 4

■ 1:1 connection

(A) XTOP COM 2 port(9pin)

XTOP COM2			Cable Miniae	PLC		
Pin Assignment *1	Signal	Pin No.	Cable Wiring	Signal	Pin Assignment	
	CD	1		+		
		2		-		
1 5	RD				RS-485	
	SD	3		SG		
6 9 Eropt View of	DTR	4		TX	SG SG	
D-SUB 9 Pin	SG	5		RX		
(male, convex)	DSR	6				
	RTS	7			N3-2320	
	CTS	8				
		9				

*1) Pin assignment of the cable connector is seen on the face of Front View.

(B) XTOP COM 2 port(15pin)

XTOP COM2			Coble Wirring	PLC		
Pin Assignment *1	Signal	Pin No.	Cable Winng	Signal	Pin Assignment	
	CD	1		+		
	RD	2		-		
1 8 0 0 9 15 Front View of D-SUB 15 Pin (male, convex)	SD DTR SG DSR RTS CTS	3 4 5 6 7 8		SG TX RX	RS-485 + - 56 TX RX RS-232C	
		8 9				





SD	6

■ 1 : 1 connection

(A) XTOP COM 2 port(9pin)						
XTOP COM2				PLC		
Pin Assignment *1	Signal	Pin No.	Cable Wiring	Signal	Pin Assignment	
	RDA			+		
$ \begin{array}{ccc} 1 & 5 \\ \stackrel{\bigcirc}{\circ} & \stackrel{\bigcirc}{\circ} \\ \stackrel{\bigcirc}{\circ} & \stackrel{\bigcirc}{\circ} \end{array} $		2		-	RS-485	
		3		SG		
	RDB	4	•	TX		
6 9	SG	5		RX	SG 🔟	
Front View of D-SUB 9 Pin (male, convex)	SDA	6			TX	
		7				
		8			RS-232C	
	SDB	9				

*1) Pin assignment of the cable connector is seen on the face of Front View.

(B) XTOP COM 2 port(15pin)

XTOP COM2			Coble Wiving	PLC		
Pin Assignment *1	Signal	Pin No.	Cable Wiring	Signal	Pin Assignment	
	_		•	+		
	(sk	ip)	•	-	RS-485	
				SG		
	_	10		TX		
9 15	RDA	11		RX	SG 🔟	
Pront View of	RDB	12				
(male, convex)	SDA	13				
	SDB	14			RS-232C	
	SG	15				

*1) Pin assignment of the cable connector is seen on the face of Front View.

(C) ATOP COM 2 port (Terminal block 5 pin)

ATOP COM2		Cable Wiring	PLC		
Pin Assignment *1	Signal	Cable Wiring	Signal	Pin Assignment	
RS-422 RDA RDB SDA SDB SG FG RDA RDB SDA SDB SG FG FG RDA RDB SDA SDB SG FG FG RDA RDB SDA SDB SG FG FG FG FG FG FG FG FG FG FG	RDA RDB SDA SDB SG		+ SG TX RX	RS-485	



■ 1 : N / N : 1 connection – Connect as below refer to 1:1 connection.





6. Available Address

The available address of device are as below.

Device(address) range might be different according to series/type of CPU. TOP Series are capable of supporting maximum address range which is available in external Device.

Be careful get out of address range.

Device	Bit Address	Word Address	32 Bit	Property
Input / Output Relay	P00000 - P2047F	P0000 – P2047		R/W
Auxiliary Relay	M00000 – M2047F	M0000 – M2047		R/W
Keep Relay	K00000 – K2047F	K0000 – K2047		R/W
Link Relay	L000000 - L11263F	L00000 - L11263		R/W
Special Relay	F00000 - F2047F	F0000 - F2047		R
Timer (Contact)	T0000 – T2047			R/W
Counter (Contact)	C0000 – C2047		L/H ^{*1)}	R/W
Timer (Current Value)		T0000 – T2047		R/W
Counter (Current Value)		C0000 – C2047		R/W
Data Register	D00000.00 - D65535.15	D00000 - 65535		R/W
Communication Data Register	N00000.00 - D65535.15	N00000 - N21503		R/W
File Register	R00000.00 - R32767.15	R00000 – R32767		R/W
File Register	ZR00000.00 - ZR65535.15	ZR00000 – ZR65535		R/W

R:read / W:write

*1) Low 16BIT of 32BIT data is saved address input by touch program, high 16Bit of 32BIT data is saved next address input by touch program.

(Ex) If you input [12345678] of hex 32bit data at address [D00100], it will save in 16bit device as below.

Item	32BIT	16BIT		
address	D00100	D00100	D00101	
Input data(Hex)	12345678	5678	1234	