

USB BARCODE READER

Supported version TOP Design Studio V1.4.4.0 or higher



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We want to thank our customers who use the Touch Operation Panel.

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Describes the devices required for connection, the setting of each device, cables, and configurable systems.
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Select a TOP model and an external device.
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Refer to this section to check the addresses which can communicate with an external device.

1. System configuration

The system configuration of TOP and "USB BARCODE READER" is as follows:

Series	Communication method	System setting	Cable
USB BARCODE READER -	USB	3.1 Settings example 1 (Page 4)	

■ Connection configuration

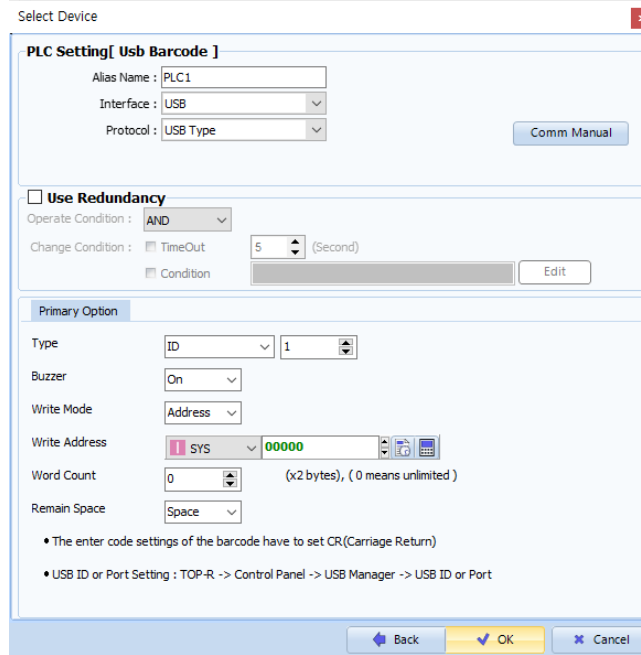
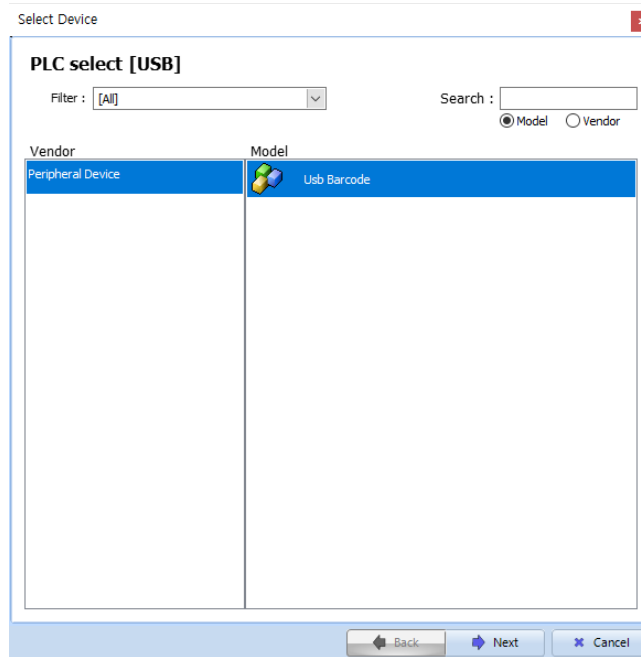
- 1:1 (one TOP and one external device) connection – configuration which is possible in USB communication.



*Unable to use 1:N

2. External device selection

- Select a TOP model and a port, and then select an external device.



Settings		Contents					
TOP	Model	Check the TOP display and process to select the touch model.					
External device	Vendor	Select the vendor of the external device to be connected to TOP. Select "USB BARCODE READER".					
	PLC	Select an external device to connect to TOP. <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>Model</th> <th>Interface</th> <th>Protocol</th> </tr> </thead> <tbody> <tr> <td>USB BARCODE READER</td> <td>SERIAL</td> <td>SERIAL TYPE</td> </tr> </tbody> </table> <p>Please check the system configuration in Chapter 1 to see if the external device you want to connect is a model whose system can be configured.</p>	Model	Interface	Protocol	USB BARCODE READER	SERIAL
Model	Interface	Protocol					
USB BARCODE READER	SERIAL	SERIAL TYPE					

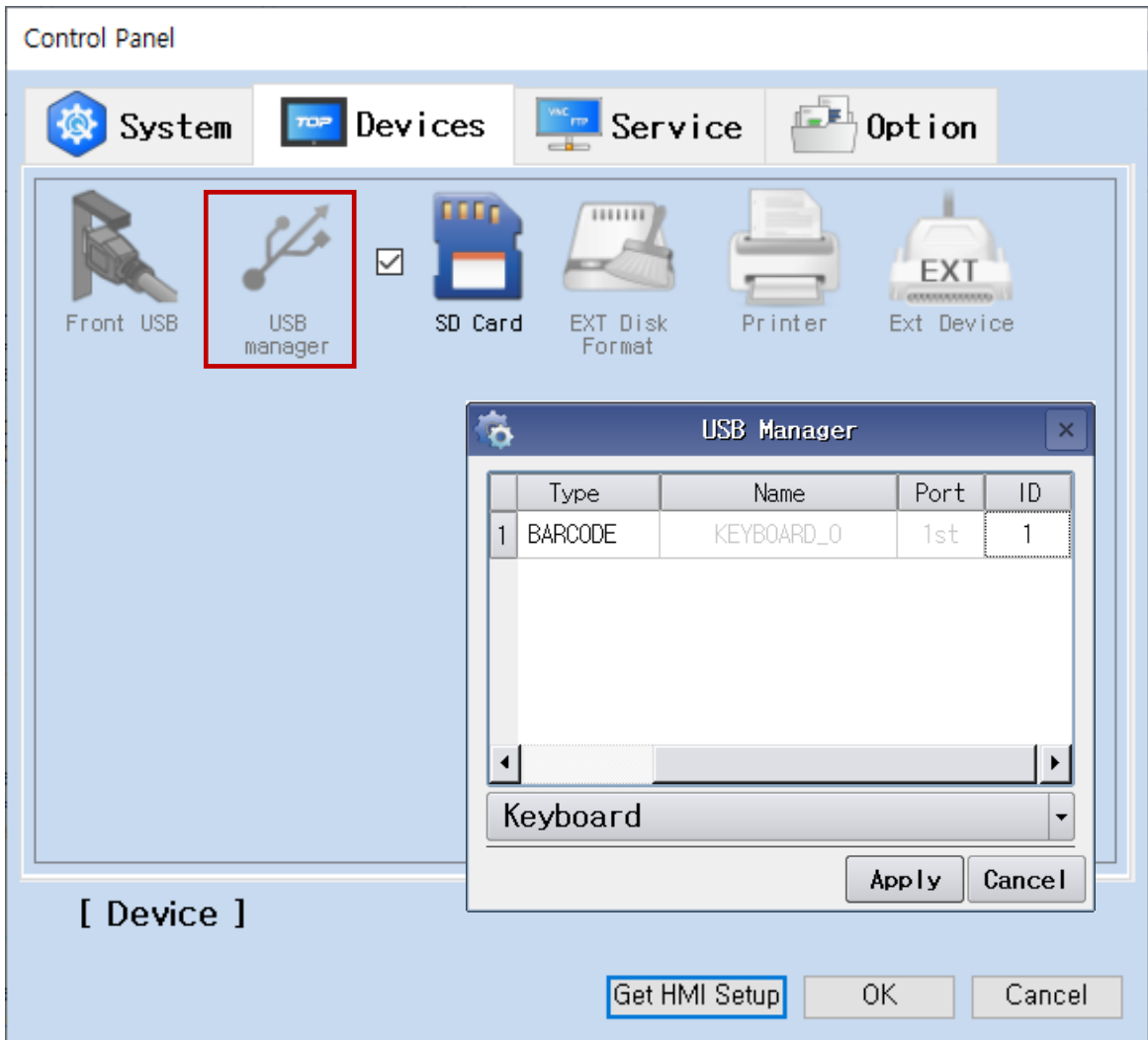
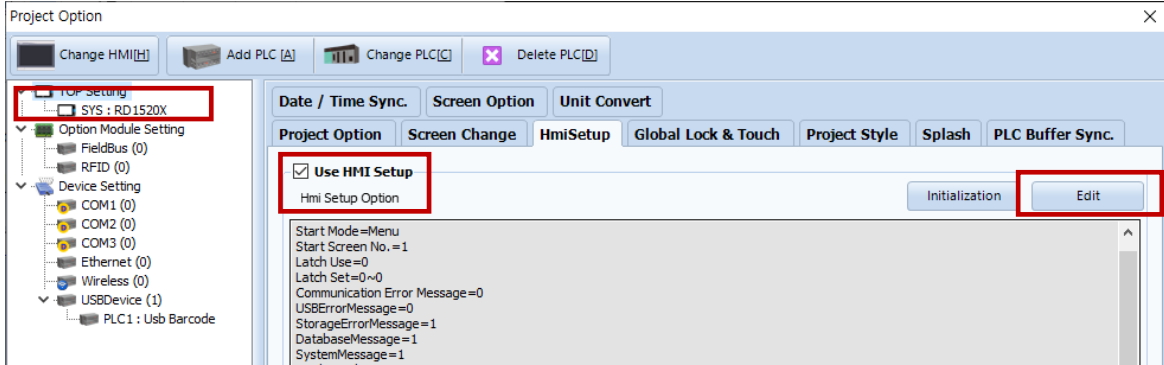
3. TOP communication setting

The communication can be set in TOP Design Studio or TOP main menu. The communication should be set in the same way as that of the external device.

3.1 Communication setting in TOP Design Studio

(1) Communication interface setting

- [Project > Project Property > TOP Setting] → [Project Option > "Use HMI Setup" Check > Edit > Serial]
- Set the TOP communication interface in TOP Design Studio.

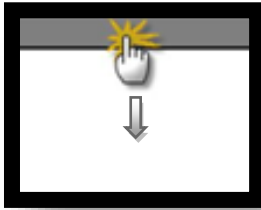


A list appears upon successful connection of the BARCODE.

3.2. Communication setting in TOP

* This is a setting method when "Use HMI Setup" in the setting items in "3.1 TOP Design Studio" is not checked.

- Touch the top of the TOP screen and drag it down. Touch "EXIT" in the pop-up window to go to the main screen.



(1) Communication interface setting

(2) Communication option setting

- [Main Screen > Control Panel > PLC]

Primary Option

Type: ID [v] 1 [▲▼]

Buzzer: On [v]

Write Mode: Address [v]

Write Address: [I] SYS [v] 00000 [▲▼] [G] [C]

Word Count: 0 [▲▼] (x2 bytes), (0 means unlimited)

Remain Space: Space [v]

- The enter code settings of the barcode have to set CR(Carriage Return)
- USB ID or Port Setting : TOP-R -> Control Panel -> USB Manager -> USB ID or Port

Items	Settings	Remarks
USB ID	Configure the USB ID. (if owned)	
Write Address	Configure the address to store data read by BARCODE	
Character Count	Configure the display word count. Setting it to 0 displays raw value.	
Buzzer	Enable or disable buzzer upon read	

3.3 Communication diagnostics

- Check the interface setting status between the TOP and external device.
 - Touch the top of the TOP screen and drag it down. Touch "EXIT" in the pop-up window to go to the main screen.
 - Check if the COM port settings you want to use in [Control Panel > Serial] are the same as those of the external device.

- Diagnosis of whether the port communication is normal or not
 - Touch "Communication diagnostics" in [Control Panel > PLC].
 - The Diagnostics dialog box pops up on the screen and determines the diagnostic status.

OK	Communication setting normal
Time Out Error	Communication setting abnormal - Check the cable, TOP, and external device setting status. (Reference: Communication diagnostics sheet)

- Communication diagnostics sheet
 - If there is a problem with the communication connection with an external terminal, please check the settings in the sheet below.

Items	Contents	Check		Remarks	
System configuration	How to connect the system	OK	NG	1. System configuration	
	Connection cable name	OK	NG		
TOP	Version information	OK	NG	2. External device selection 3. Communication setting	
	Port in use	OK	NG		
	Driver name	OK	NG		
	Other detailed settings	OK	NG		
	Relative prefix	Project setting	OK		NG
		Communication diagnostics	OK		NG
	Serial Parameter	Transmission Speed	OK		NG
		Data Bit	OK		NG
Stop Bit		OK	NG		
Parity Bit		OK	NG		
External device	CPU name	OK	NG	4. Supported addresses (For details, please refer to the PLC vendor's manual.)	
	Communication port name (module name)	OK	NG		
	Protocol (mode)	OK	NG		
	Setup Prefix	OK	NG		
	Other detailed settings	OK	NG		
	Serial Parameter	Transmission Speed	OK		NG
		Data Bit	OK		NG
		Stop Bit	OK		NG
Parity Bit		OK	NG		
Check address range	OK	NG			

4. Supported addresses

The devices available in TOP are as follows:

The device range (address) may differ depending on the CPU module series/type. The TOP series supports the maximum address range used by the external device series. Please refer to each CPU module user manual and be take caution to not deviate from the address range supported by the device you want to use.

*Barcode settings example)

1. Set All Defaults



Set All Defaults

2. Interface Barcode



IBM PC/AT & IBM PC Compatibles¹

3. Enter Value Setting



Scan Options



<DATA> <SUFFIX>



Enter