BIXOLON

Software Manual

Virtual COM for USB Driver Configuration Tool

Ver. 2.12

http://www.bixolon.com

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1. Manual Information

This manual provides information on the usage of the “Virtual COM for USB Driver” and “Configuration Tool” software associated with USB interface use on BIXOLON printers.

This software can be used to set and use the USB interface via the serial communication mode.

The latest file version is available for download from the BIXOLON website. (www.bixolon.com)

2. Usage Environment

2-1 Operating System Environment

Microsoft Windows 7 (32bit, 64bit)
Microsoft Windows 8 (32bit, 64bit)
Microsoft Windows 8.1 (32bit, 64bit)
Microsoft Windows 10 (32bit, 64bit)

Microsoft Windows Server 2008 (32bit, 64bit)
Microsoft Windows Server 2008 R2 (64bit)
Microsoft Windows Server 2012 (64bit)
Microsoft Windows Server 2012 R2(64bit)
Microsoft Windows Server 2016 (64bit)
Microsoft Windows Server 2019 (64bit)

2-2 Supported Printer Models

• The “Virtual COM for USB Driver” software can be used only with USB-supported printers.

1) POSPrinter

SRP-270 / SRP-275 / SRP-275II / SRP-275III / SRP-280
STP-103II / STP-103III / SRP-370 / SRP-372 / SRP-500
SRP-350 / SRP-350plus / SRP-352plus
SRP-350II / SRP-350IIK / SRP-350plusII / SRP-352plusII
SRP-330 / SRP-330II / SRP-332II
SRP-340 / SRP-340II / SRP-342II
SRP-350III / SRP-352III / SRP-350plusIII / SRP-352plusIII
SRP-F310 / SRP-F312 / SRP-F310II / SRP-F312II / SRP-F313II
SRP-S300 / SRP-S320
SRP-380 / SRP-382 / SRP-383
SRP-Q300 / SRP-Q302 / SRP-QE300 / SRP-QE302 / SRP-Q200
SRP-E300 / SRP-E302 / SRP-B300
SRP-S3000 / SRP-S200

2) LabelPrinter

SLP-T400 / SLP-T403 / SLP-D420 / SLP-D423 / SLP-D220 / SLP-D223
SLP-TX400(RFID) / SLP-TX403(RFID)
SLP-TX420 / SLP-TX423 / SLP-TX220 / SLP-TX223
SLP-DX420 / SLP-DX423 / SLP-DX220 / SLP-DX223 / SLP-DL410 / SLP-DL413
SRP-770II / SRP-770III / SRP-E770III
XT5-40(RFID) / XT5-43(RFID) / XT5-46(RFID)
SRP-S3000_LABEL

XD3-40d / XD3-40t
XD5-40d / XD5-43d
XD5-40t(RFID) / XD5-43t(RFID)
XL5-40CT / XL5-43CT

SPP-L3000
SPP-L310 / SPP-L410
XM7-40 / XM7-20

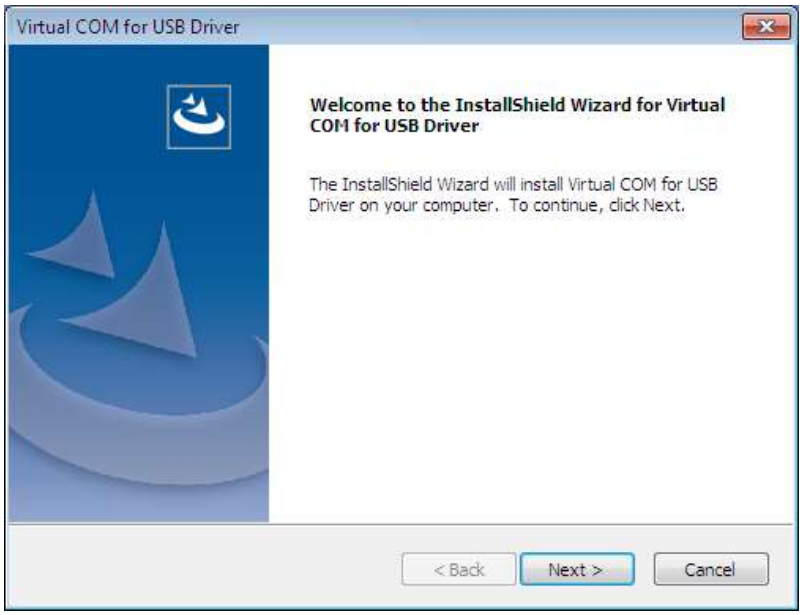
3. Software Installation & Uninstallation

Installation and uninstallation process in this document is written based on Windows 7

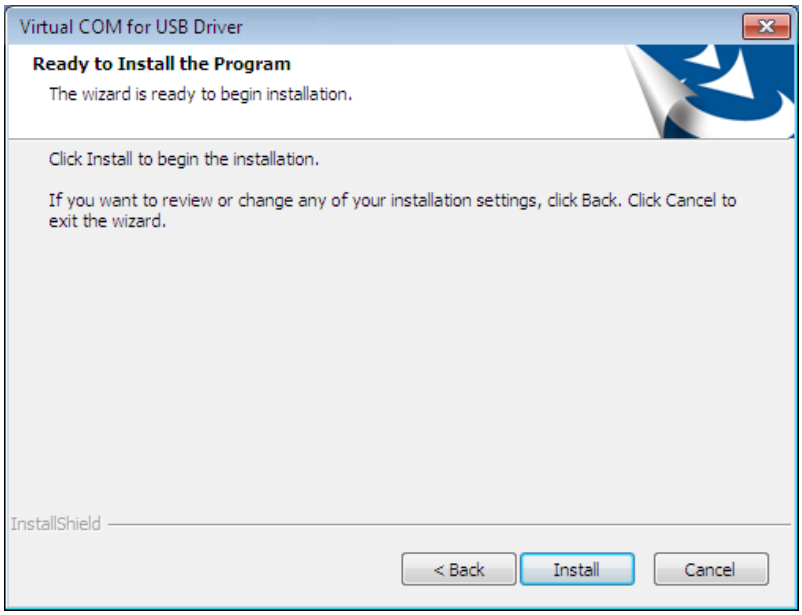
3-1 Installation

1) Execute the installation file.

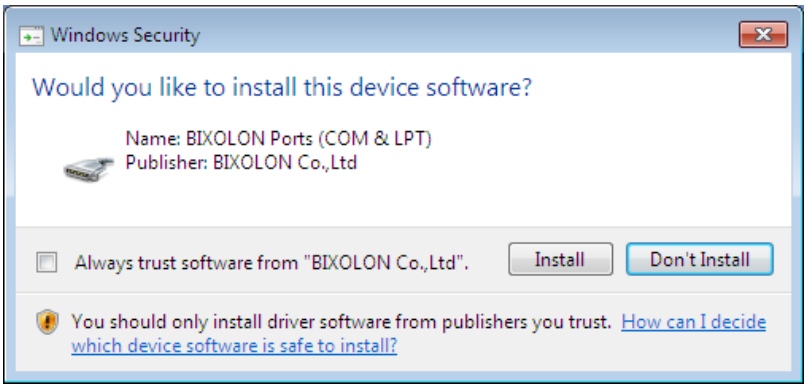
2) Click the “Next” button.



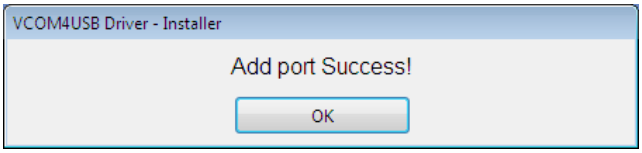
3) Clicking the “Install” button begins the installation process.



4) When the following message appears, click the “Install” button.



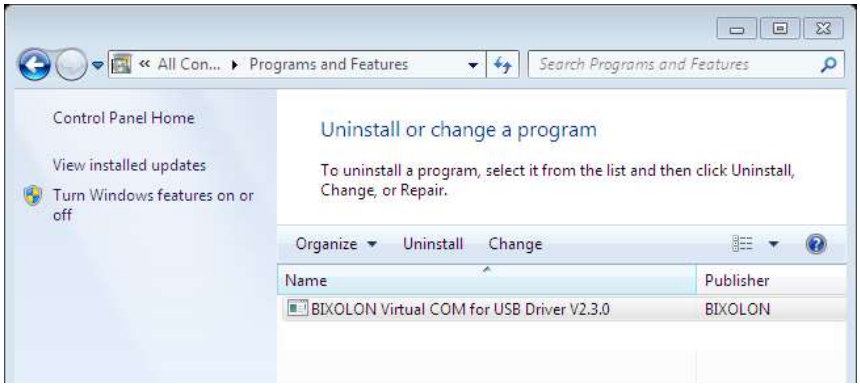
5) The following message appears upon the successful completion of installation.



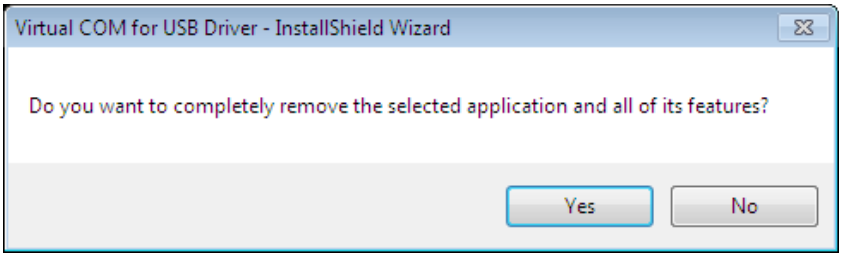
3-2 Uninstallation

1) Click and activate the “Uninstall a program” or “Programs and Features” icon in the Control Panel.

2) Select “Virtual COM for USB Driver” and click the “Uninstall“ button.



3) Click the “Yes” button to completely remove the application.



4. Configuration Tool Usage

The “Configuration Tool” program can be used to create a serial port, and set and/or delete printer devices.

4-1 Configuration Tool Functions

• Select from “Start ▶ All Programs ▶ BIXOLON ▶ Virtual COM for USB Driver” and open “Configuration Tool”.

The “Configuration Tool” functions are described as follows.

① Printer Device Sequence Number
- This function displays the connection sequence of printer devices.

② Printer Device Name
- This function displays the printer device models that are turned on and connected via the USB interface.

③ Assigned Port
- This function displays the currently set virtual serial port number. If one is not set, the status is shown as “Not Assigned”

④ Assign
- This function is used to establish a connection between a printer selected in the list box and a registered virtual serial port.

⑤ Detach
- This function is used to disconnect a connection between a printer selected in the list box and a virtual serial port.

⑥ Refresh
- This function is used to update the USB printer device list shown in the list box and set port information.

⑦ Test Print
- This function is used to perform a print test on the printer selected in the list box. The serial port must be set in order to perform a print test.

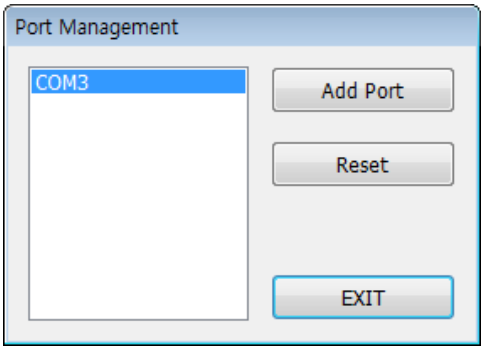
⑧ Port Management
- This function is used to add/remove virtual serial ports.

⑨ Exit
- This function is used to exit the “Configuration Tool” program.

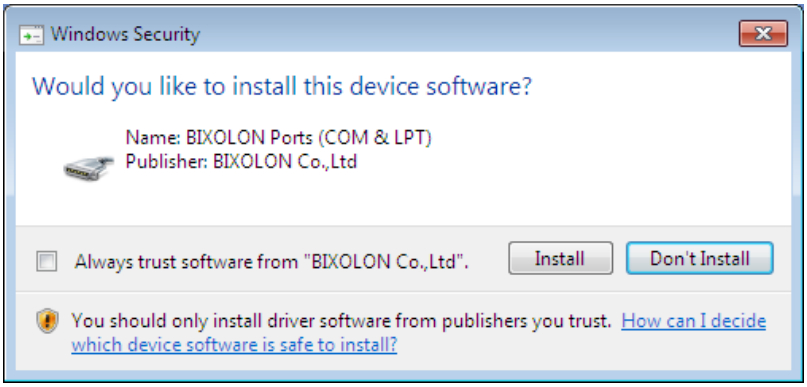
4-2 Virtual COM Port Addition

• The “Configuration Tool” program is used to add a virtual COM port. To create a port, click the “Port Management’ button in the “Configuration Tool”.

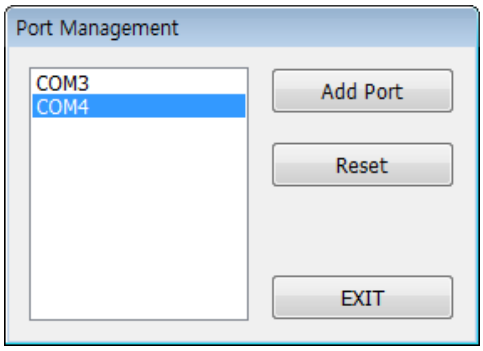
1) Clicking the “Port Management” button of the “Configuration Tool” brings up the following dialog box.



2) Click the “Add Port” button to add a port.
Click “Install” when “Windows Security” screen below appears.



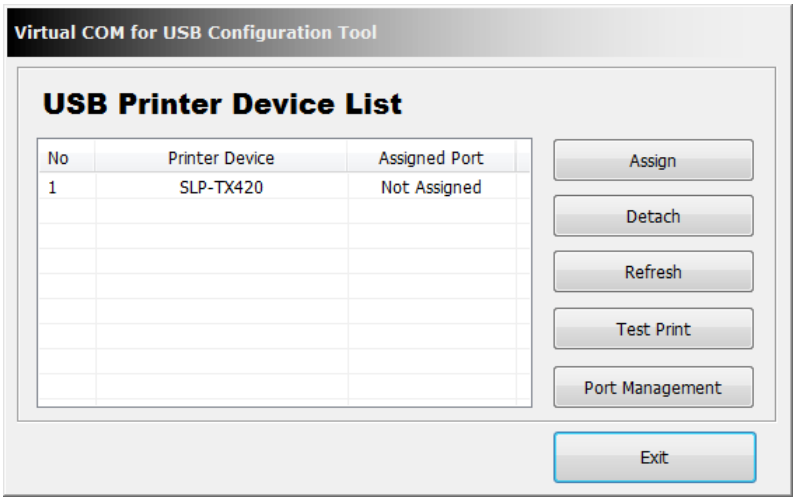
3) If the port has been added successfully, the virtual serial port added will appear as follows.



⚠Note	- A port number is determined by operating system. - Refer to section 5 (Virtual Serial Port Management) of this manual for information on modifying the virtual serial port number.

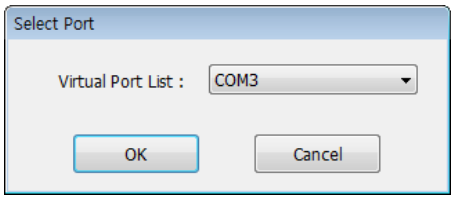
4-3 Printer Port Connection

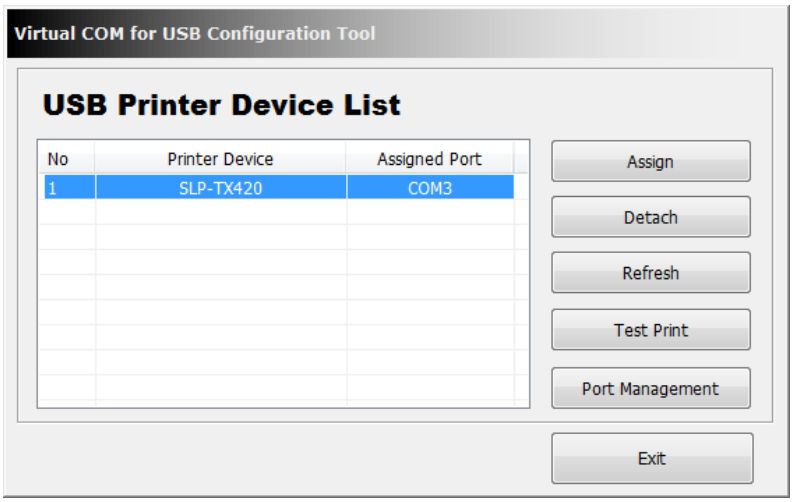
• To use the added serial port and printer, click the “Assign” button and set the connection.



1) Select the printer to be connected from the list, and click the “Assign” button to bring up a dialog box.

2) Select the port number to be used among the virtual serial ports added via “Port Management” and click the “OK” button to automatically update the “Assigned Port” section of the main screen.

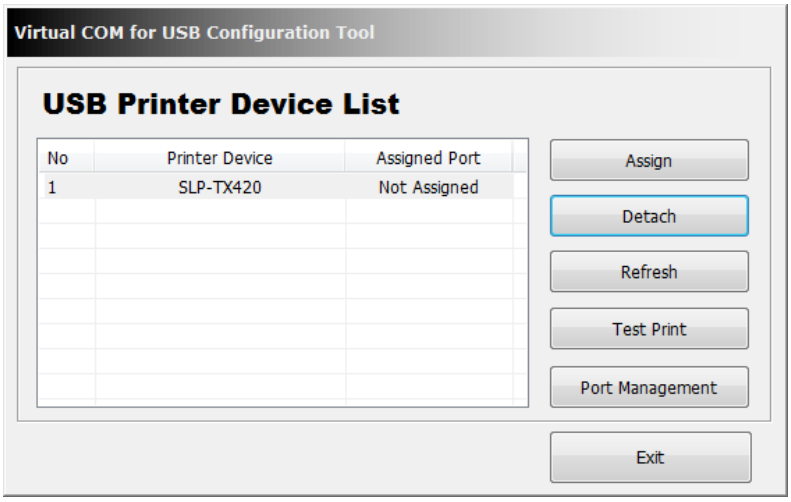




⚠Note	When connecting a virtual serial port, if another printer is connected to the corresponding port, that existing connection is automatically disconnected, and the connection is established with the selected printer.

4-4 Printer Port Disconnection

• Select the printer to be disconnected from the list of printers connected via virtual serial ports. Click the “Detach” button to disconnect the previously connected virtual serial port. This will result in reversion of the “Assigned Port” status of the printer to “Not Assigned”.



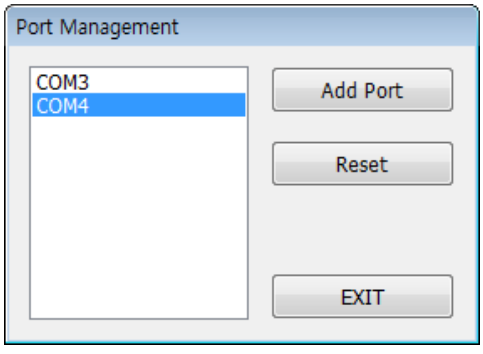
⚠Note	- Although the port setting of the printer has been disconnected, the virtual serial port is not deleted. - The “Port Management” function can be used to delete all ports, or the Device Manager can be used to manually delete select ports.

4-5 Print Test

• The “Test Print” button can be used to check the communication status between the printer and the virtual serial port.

4-6 Virtual Serial Port Deletion

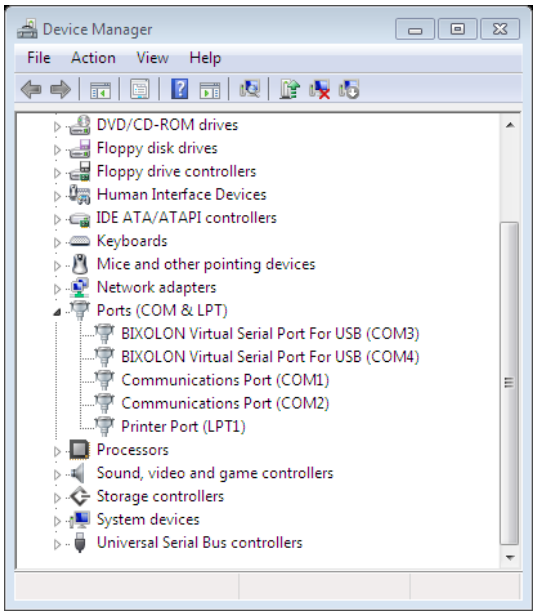
• Click the “Port Management” button to delete the connection settings of virtual serial ports. The “Reset” button can be used to delete all virtual serial ports and connected printer information.



5. Virtual Serial Port Management

1) Port number modification, port deletion, and serial communication setting are done via the Device Manager.

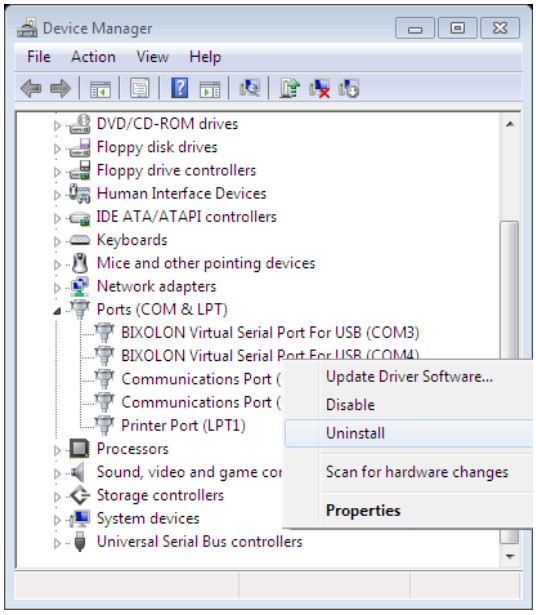
2) Control Panel ▶ System ▶ Device Manager: Upon examination of the "Ports (COM & LPT)" section, the port(s) added previously via the "Configuration Tool" program can be seen.



5-1 Port Deletion Via the Device Manager

1) Select the virtual serial port to be deleted and click the right mouse button. On the popup menu, select "Uninstall" to delete the port.

2) Following deletion, the "Configuration Tool" program must be executed, and the changes must be updated.

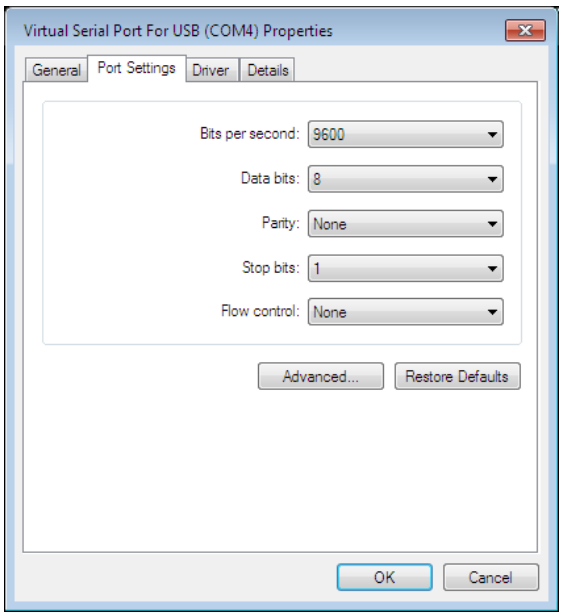


5-2 Port Setting/Number Modification Via the Device Manager

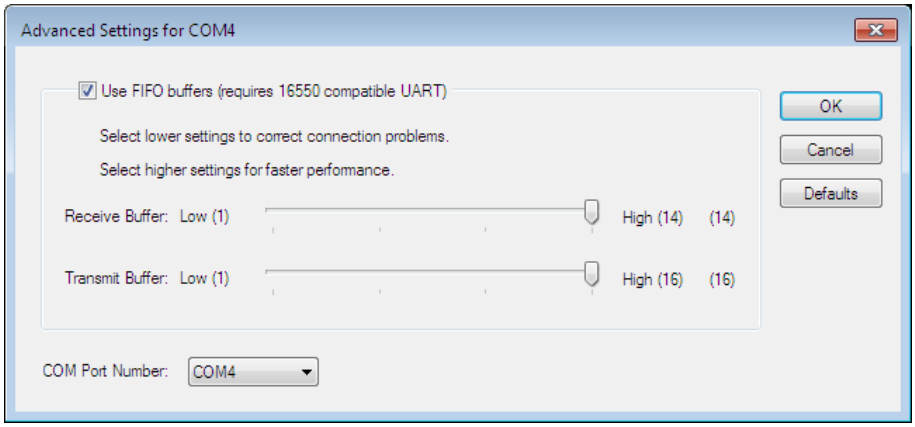
1) Select the desired virtual serial port and click the right mouse button. On the popup menu, select “Properties”.

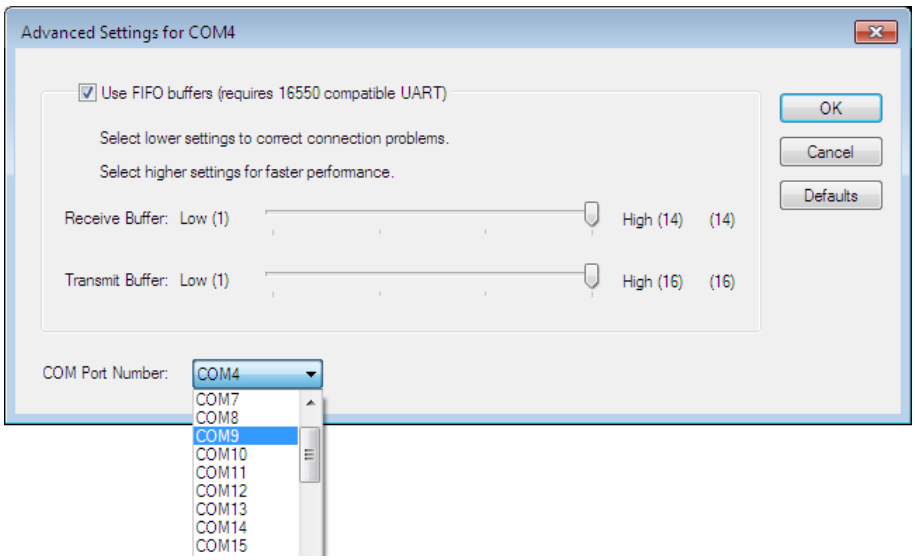
2) In the “Properties” window, click the “Port Settings” tab.

3) The “Port Settings” tab can be used to set the baud rate, data bits, parity, stop bits, and flow control of a port.



4) Click the “Advanced” button to modify the port number and/or designate buffer settings. Modification of buffer settings is not recommended.
The COM port number is changed by selecting a number in the combo box.





Following port modifications, the settings utility must be run to update changes.
If a printer was connected previously, the connection setting must be disconnected.

⚠**Caution**	- A port not in use must be selected. - Following port modification, clicking the “Yes” button can result in the appearance of a warning message. Click the “Yes” button to finalize and set the modified information and settings. Port modification on certain operating systems will require the repeat opening of the Device Manager to confirm changes.
⚠**Warning**	**After deleting a virtual serial port, the “Configuration Tool” program must be executed to update the Virtual COM for USB Driver, and directly deleted connection information must be removed.**

6. Command line

Use the Configuration Tool functions as a command line without using the Configuration Tool. Using command lines, the UI will not be displayed.
If a command fails, an error log file is created.

6-1 Command Description

Open a command window and navigate to the folder where VCOM4USB is installed.
CMD > cd “C:\ BIXOLON\Virtual COM for USB”

⚠Note	Default installation path C:\BIXOLON\Virtual COM for USB

e.g. CMD> VCOM4USB_Configuration /u /i 1 /pid 0086 /rs

Action Description : After deleting all Virtual COM ports, all the COM1 port and assign a printer with USB PID “0086” of the currently connected printer to the Virtual COM1 port. Reboot the system.

6-2 Command Option

⚠Note	- Values marked as '[]' in the command below are negligible. - If /i and /u are used at the same time, /u will run first.

VCOM4USB_Configuration.exe [/i [PORT_NUMBER]] [/m [MESSAGE OPTION]]
[/pid [USB PID]] [/sn USB SN] [/u]
[/rs REBOOT_OPTION]

1) /u : Delete all installed Virtual COM ports.

2) /i [PORT_NUMBER] : Add Virtual COM Port.
   - PORT_NUMBER : Specifies the Virtual COM port number to add.

⚠Warning	If you assign the port number currently being used by the system, the system may not operate normally.

3) /m [MESSAGE_OPTION] : View the execution results of the installation (/i) command in the message window. If not using the /m command, the message window will not be displayed.
   - MESSAGE_OPTION : If the value is 1 then display message window
   - when installation is successful
     If the value is 2 then display message window
     when installation is successful or unsuccessful

4) /pid [USB_PID] : Set the same USB_PID printer as the COMport among the currently connected printers. Only one Virtual COM port should exist in the system.. Only one printer with matching USB_PID should be connected.
   - USB_PID : 4 digits of printer's usb pid, If you don't enter USB_PID, only one connection must be made, and the Virtual COM port is assigned to the connected printer.

5) /sn USB_S/N: Set the same printer as the Virtual COM port on which the USB_S/N is currently connected. Only one Virtual COM port should exist in the system.
   - USB_S/N : If you use '/sn', make sure input the usb serial number.

⚠Note	If using the /pid command with the /sn command, Can set it up without the printer being connected.

6) /rs [REBOOT_OPTION] : reboot system.
   - REBOOT_OPTION : If the value is 0 or does not contain a value, reboot without notification.
     If the value is 1, show the notification window and reboot

⚠Warning	If you don't reboot the system, the Virtual COM port may not operate properly.

7. Win32 API

The “Virtual COM for USB Driver” program can be used in serial communication programming. Refer to Microsoft MSDN regarding the Win32 API for serial communication.

7-1 File I/O API

API Name	Supported
CreateFile	O
WriteFile	O
ReadFile	O
CloseHandle	O

O : Supported, X : Unsupported

7-2 Communication API

API Name	Supported
BuildCommDCB	O
BuildCommDCBAndTimeouts	O
CommConfigDialog	O
DeviceIoControl	O
GetCommModemStatus	O
GetCommState	O
GetCommTimeouts	O
PurgeComm	O
SetCommState	O
SetCommTimeouts	O

O : Supported, X : Unsupported

7-3 Precautions for Serial Communication Programming

• When calling CreateFile function, you must prefix the port name with “\\\\.\\” depending on the range of COM port numbers. For details, refer to the ‘port name format’ below.

* Port name format
  - COM1 ~ COM9 : “COM1” ~ “COM9”
  - **COM10 ~ COM256** : “\\\\.\\COM10” ~ “\\\\.\\COM256”

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quality of all our products.
In the following, product specifications and/or user manual content may be changed without prior notice.

Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer “OFF”, before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer “OFF”.

Revision history

Rev.	Date	Page	Description
2.00	04.12.17	-	New
2.01	09.03.18	3,4,8,9, 10,15,16	Add SRP-E770III, MX4000 , Supplementation of contents
2.02	16.05.18	4	Change model name of XT5
2.03	05.09.18	4	add SRP-383
2.04	10.01.19	4	add SPP-L310/L410
2.05	06.03.19	4	add SRP-Q200, XD3-40d
2.06	24.06.19	4 16,17	add XD3-40t, XD5-40d/43d, XL5-40/43 Add command Line Description
2.07	01.11.19	4	Change model name XL5-40CT / XL5-43CT
2.08	16.12.19	4	add XD5-40t / XD5-43t, XM7-40
2.09	28.02.20	4	add XM7-20
2.10	11.09.20	4 5	Modify supported OS list add XT5-40NR, XD5-40tR, SRP-B300, SRP-S320
2.11	06.11.20	4	add SRP-S3000, SRP-S3000_LABEL
2.12	24.02.21	-	Change the font in the manual
		4	Add SRP-S200