



Printer Driver Manual

Table of Contents

Before You Start	4
1. Installing the Printer Driver	5
1.1 Preparing the Printer Driver.....	7
1.2 Checking the Printer Interface.....	8
1.3 Connecting the Printer to the Computer.....	14
1.4 Running the Installation.....	15
1.4.1 Installing the Printer Driver When Connected via USB or IEEE1284.....	15
1.4.2 Installing the Printer Driver When Connected via LAN or Wireless LAN.....	21
1.4.3 Installing the Printer Driver When Connected via Bluetooth.....	28
1.4.4 Installing the Printer Driver When Connected via RS-232C.....	38
1.4.5 Installing the Printer Driver When No Printer is Connected.....	43
1.4.6 Installing the Printer Driver for Second and Later Printers.....	51
1.4.7 What to Do If the Printer Driver Is Added under [Unspecified].....	52
2. Setting Up the Printer Driver	57
2.1 [Printing Defaults] (For All Users) and [Printing Preferences] (For Individual Users).....	57
2.2 How to Get Administrator Privileges.....	61
3. Settings on the [Driver Settings] Tab	62
3.1 Stocks.....	62
3.1.1 Page Setup.....	63
3.1.2 Print Options.....	64
3.2 Fonts.....	65
3.2.1 Barcode Font Settings and Usage Example.....	66
3.2.2 Command Font Settings and Usage Example.....	71
3.2.3 Substitution Font Settings and Usage Example.....	77
3.2.4 Download Font Settings (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/ PW4NX/S84NX/S86NX only).....	81
3.3 Setup.....	84
3.4 Maintenance (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/ FX3-LX/PW208NX/PW208mNX/S84NX/S86NX only).....	86

3.5	Settings.....	87
3.6	Configure Printer	88
3.7	RFID Settings (CL4NX/CL4NX Plus/CL6NX Plus only)	89
3.8	Support.....	91
3.9	Help and About.....	92
4.	Settings on the [Printer Settings] Tab.....	93
4.1	Page Setup.....	95
4.2	Print Options.....	97
4.3	Print Mode	100
4.4	Barcode Verifier (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/S84NX/ S86NX only)	101
4.5	Graphic Options.....	103
4.6	Custom Commands.....	104
4.7	Maintenance	107
4.8	Units	108
4.9	Help and About.....	109
4.10	Test Page.....	110
5.	Sharing the Printer.....	111
5.1	Installing the Printer Driver on the Print Server and Client Computers.....	113
5.2	Configuring Sharing Settings on the Print Server Printer	118
5.3	Configuring Sharing Settings on the Client Printer	120
6.	Updating the Printer Driver	123
7.	Uninstalling the Printer Driver	127
8.	Removing the Printer Driver Data File	129

Before You Start

A printer driver is a software that sends data created on a computer (documents and illustrations) to the printer and print it on a label. The Printer Driver Manual (hereinafter, "this manual") describes how to obtain and install the printer driver for the printers manufactured by SATO. It also describes how to configure various settings after installing the printer driver, and how to uninstall and update the printer driver.

Printer Driver Screenshots Used in This Manual

This manual mainly uses the printer driver screenshots when CL4NX Plus is connected to a Windows 10 computer. The screen layout may differ depending on your OS and printer.

Printer Driver Version Used in This Manual

This manual uses printer driver version 8.4.3.23190. Note that the screen layout may differ depending on the version of the printer driver.

Limitation of Liability

SATO Corporation and its subsidiaries in Japan, the U.S. and other countries make no representations or warranties of any kind regarding this material, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. SATO Corporation shall not be held responsible for errors contained herein or any omissions from this material or for any damages, whether direct, indirect, incidental or consequential, in connection with the furnishing, distribution, performance or use of this material. Specifications and contents in this document are subject to change without notice.

Trademarks

- The following is a registered trademark of SATO Holdings Corporation and its subsidiaries in Japan, the U.S. and other countries.
 - SATO
- Windows is a registered trademark of Microsoft Corporation, U.S.A.
- Bluetooth is a trademark of Bluetooth SIG, Inc., U.S.A.
- All other trademarks are the property of their respective owners.

Copyrights/Other Matters

Any unauthorized reproduction of the contents of this document, in part or whole, is strictly prohibited.

© 2023 SATO Corporation. All rights reserved.

1. Installing the Printer Driver

By installing a printer driver on a computer, data created with the computer can be printed by the printer. You must first connect the printer to a computer and then install the printer driver. The installation method varies depending on how the computer and printer are connected.

Printer Driver Operating Environment

- A computer screen resolution of at least 1024 x 768 pixels is recommended. If it is lower than that, part of the screen will not be shown.

- The printer driver supports the following OSs:

Windows 8.1

Windows 10

Windows 11

Windows Server 2012

Windows Server 2012 R2

Windows Server 2016

Windows Server 2019

Windows Server 2022

* Windows for ARM is not supported.

Process to Install the Printer Driver

The process to install printer driver is as follows:

1. Prepare the printer driver installer on a computer.

An installer is used to install the printer driver.

For details, refer to "1.1 Preparing the Printer Driver".

2. Connect the printer to the computer using one of the interface connections.

For details, refer to "1.3 Connecting the Printer to the Computer".

3. Install the printer driver on the computer.

- When the printer is connected via USB or IEEE1284, refer to "1.4.1 Installing the Printer Driver When Connected via USB or IEEE1284".

- When the printer is connected via LAN or wireless LAN, refer to "1.4.2 Installing the Printer Driver When Connected via LAN or Wireless LAN".

- When the printer is connected via Bluetooth, refer to "1.4.3 Installing the Printer Driver When Connected via Bluetooth".

- When the printer is connected via RS-232C, refer to "1.4.4 Installing the Printer Driver When Connected via RS-232C".

4. Set up the installed printer driver as necessary.

For details, refer to the following sections:

- "2. Setting Up the Printer Driver"
- "3. Settings on the [Driver Settings] Tab"
- "4. Settings on the [Printer Settings] Tab"

Precautions When Installing the Printer Driver

- Before starting the installation, close all applications.
- When you do the printer driver setup, the properties settings, or the print settings, log in with Administrator Privilege.
- When you use the printer driver, enable bi-directional communication.
In Windows 10, open [Printer properties] under [Devices and Printers], and make sure that [Enable bidirectional support] is checked on the [Ports] tab.
- If the remote desktop service is being started with Windows Server 2012, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019 or Windows Server 2022, change the remote desktop service to install mode. However, it is not guaranteed that the printer driver can be used in the remote desktop service environment.
- When using multiple printers, it is necessary to install as many printer drivers as printers, to identify each printer.
- If using a CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/S84NX/S86NX printer, the resolution differs depending on the model. Select the model which is compatible with the resolution of your printer and install it. The resolution can be checked on the printer screen.

1.1 Preparing the Printer Driver

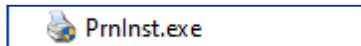
Download the printer driver from <https://www.sato-global.com/drivers/redirect.html> onto the computer. A compressed file will be downloaded. Extract it to anywhere on the computer.

Downloading the Printer Driver

1. Start the computer and open your web browser.
2. Go to <https://www.sato-global.com/drivers/redirect.html>.
3. Download the printer driver for your printer from your local SATO website.
A compressed file will be downloaded.

Extracting the Compressed Files

1. Extract the compressed files.
"PrnInst.exe" is the installer.



The file "PrnInst.exe" is used not only to install the printer driver but also to update or uninstall the printer driver.

1.2 Checking the Printer Interface

How to connect to your computer differs depending on the printer you are using. Connect the printer to the computer in one of the following ways and install the printer driver.

For printer interfaces not mentioned in this manual, refer to the Operator Manual of each printer.

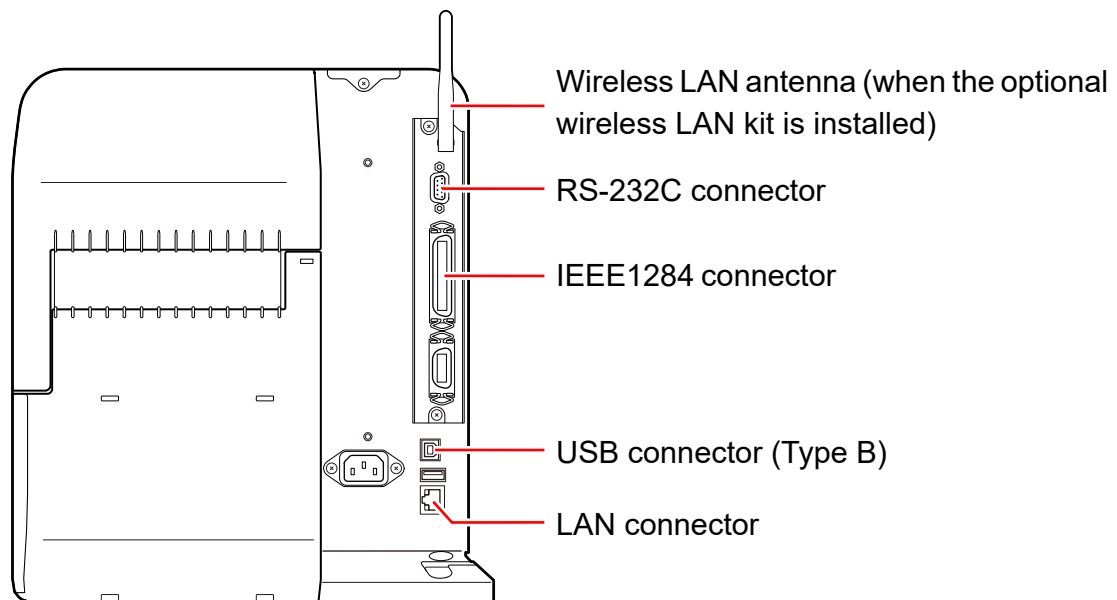
Caution

Bluetooth connection may be unstable depending on compatibility with host devices. When using Bluetooth connection, please test the operation beforehand in your usage environment (host device, print data, print quantity, print frequency, etc.).

CL4NX/CL6NX/CL4NX Plus/CL6NX Plus

The printer driver can be installed by the following connection methods:

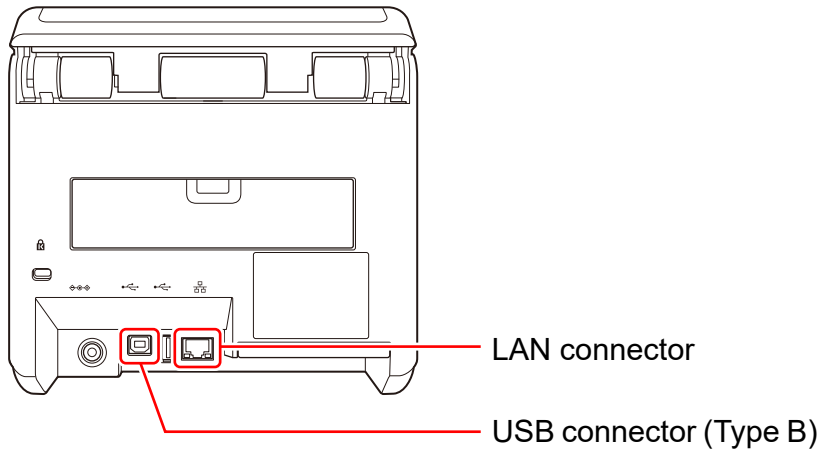
- USB (Type B)
- LAN
- Wireless LAN (when the optional wireless LAN kit is installed)
- RS-232C
- IEEE1284
- Bluetooth



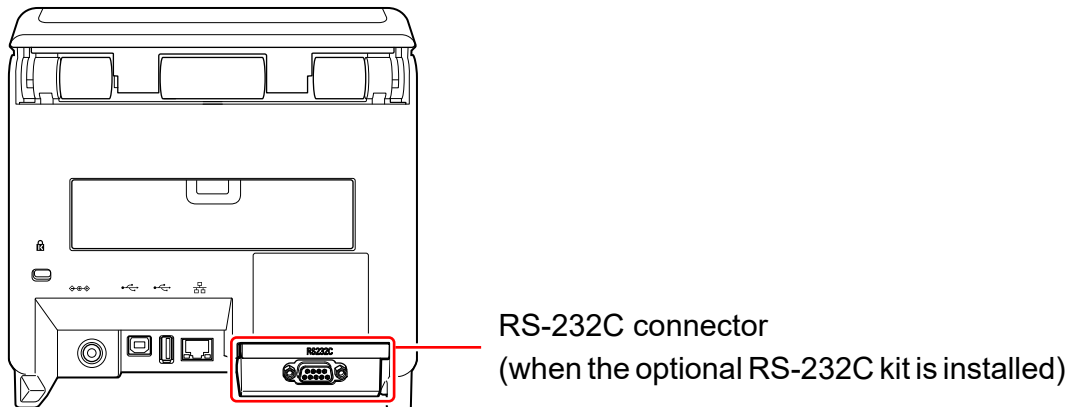
CT4-LX

The printer driver can be installed by the following connection methods:

- USB (Type B)
- LAN



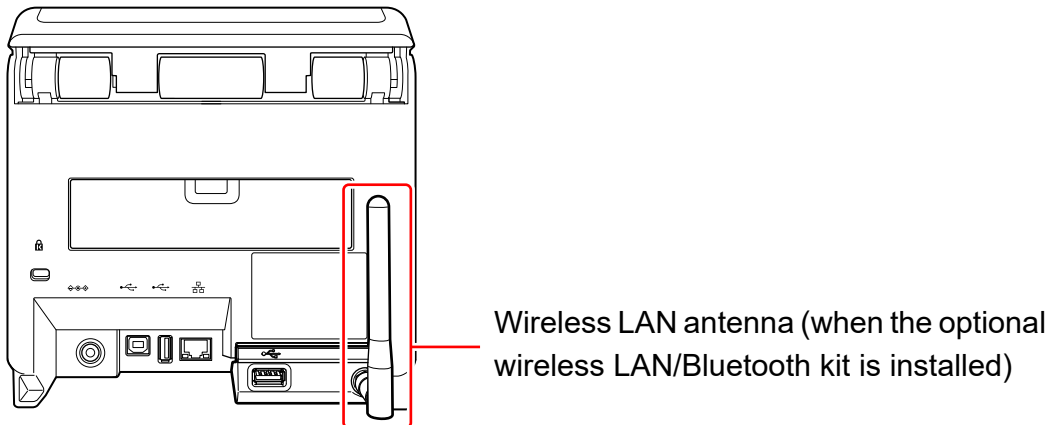
- RS-232C (when the optional RS-232C kit is installed)



The RS-232C kit needs to be installed by the customer engineer. Contact your SATO reseller or technical support center.

- Wireless LAN (when the optional wireless LAN/Bluetooth kit is installed)
- Bluetooth (when the optional wireless LAN/Bluetooth kit is installed)

Check whether the wireless LAN/Bluetooth kit is installed to the printer.

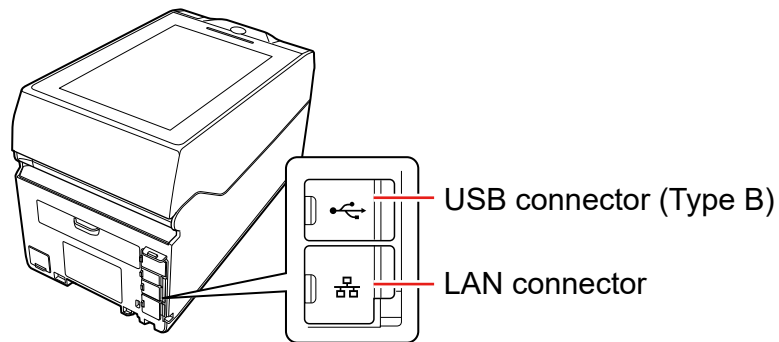


The Wireless LAN/Bluetooth kit needs to be installed by the customer engineer.
Contact your SATO reseller or technical support center.

FX3-LX

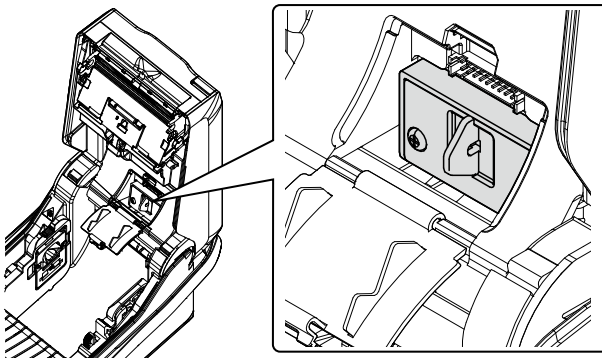
The printer driver can be installed by the following connection methods:

- USB (Type B)
- LAN



- Wireless LAN (when the optional wireless LAN/Bluetooth kit is installed)
- Bluetooth (when the optional wireless LAN/Bluetooth kit is installed)

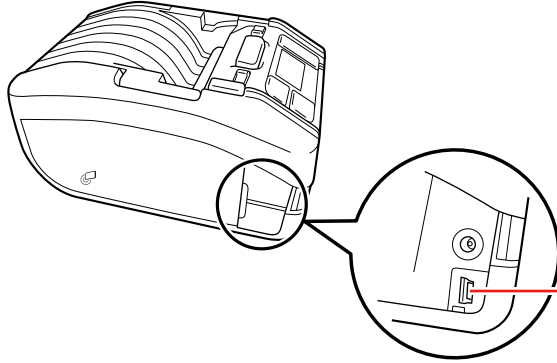
Check whether the wireless LAN/Bluetooth kit is installed to the printer.



PW208NX/PW208mNX

The printer driver can be installed by the following connection methods:

- USB (Mini-B)
- Wireless LAN
- Bluetooth



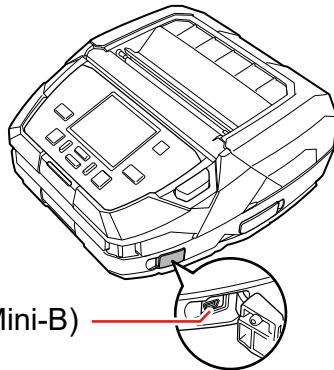
USB connector (Mini-B)

The connector is located inside the interface cover.

PW4NX

The printer driver can be installed by the following connection methods:

- USB (Mini-B)
- Wireless LAN
- Bluetooth

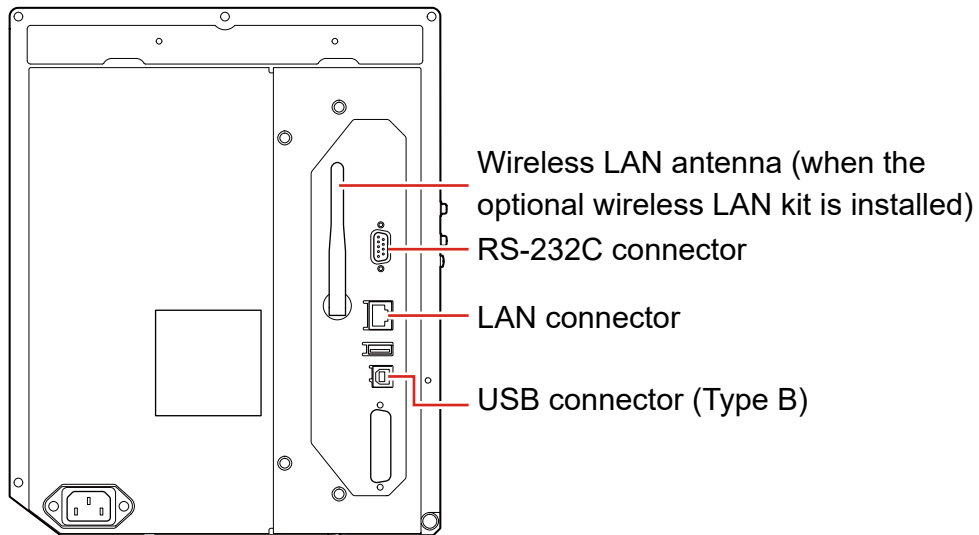


USB connector (Mini-B)

S84NX/S86NX

The printer driver can be installed by the following connection methods:

- USB (Type B)
- LAN
- RS-232C
- Wireless LAN (when the optional wireless LAN kit is installed)



1.3 Connecting the Printer to the Computer

Before installing the printer driver, connect the printer to the computer.

Caution

Power off the printer and connect the printer to the computer.

Connecting via USB Cable

The recommended USB cable for connecting the printer is the one within 5 meters (16.4 feet) long.

1. Power off the printer.
2. Connect the USB cable to the printer.
3. Connect the USB cable to the computer.

Connecting via LAN Cable

1. Power off the printer.
2. Connect the LAN cable to the printer.
3. Connect the LAN cable according to your network environment.
4. Power on the printer and configure the network settings.

For details of the network settings, refer to the Operator Manual of your printer.

Connecting via a Wireless LAN

Configure the network settings of the printer.

For details of the network settings, refer to the Operator Manual of your printer.

Connecting via RS-232C Cable

1. Power off the printer.
2. Connect the RS-232C cable to the printer.
3. Connect the RS-232C cable to the computer.

Connecting via IEEE1284 Cable

1. Power off the printer.
2. Connect the IEEE1284 cable to the printer.
3. Connect the IEEE1284 cable to the computer.

1.4 Running the Installation

The printer driver installation procedure differs depending on how the computer and printer are connected.

Check how the printer is connected before running the installation.

1.4.1 Installing the Printer Driver When Connected via USB or IEEE1284

This section describes how the printer driver is installed automatically with the Plug and Play feature.

Note:

- Automatic printer detection is supported only on a USB port and IEEE1284 port.
- Before starting the installation, close all applications.
- When you perform the printer driver setup, the properties settings, or the print settings, log in with Administrator Privileges.
- When you use the printer driver, enable bi-directional communication.
- When using multiple printers, it is necessary to install as many printer drivers as printers, to identify each printer.
- After installing the printer driver for the first printer, the printer driver for the second and additional printers will be automatically installed when the printers are connected to the computer and powered on. However, the names of the printer drivers will be "printer driver name (1)," "printer driver name (2)" etc. To change the printer driver name, right-click the printer driver in [Devices and Printers], select [Printer properties], and change the name at the top of the [General] tab.

-
1. Power on the printer.
 2. Connect the printer to a computer, using a USB cable or IEEE1284 cable.
The printer driver is located online and downloaded to the computer. Automatic installation starts immediately.

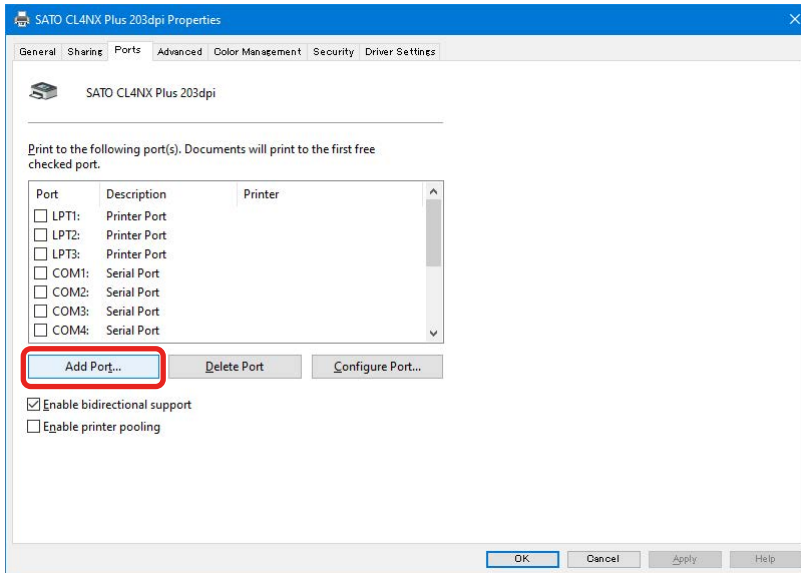
Note:

For IEEE1284 connection, change the port of the printer installed with the Plug and Play feature to Advanced Port.

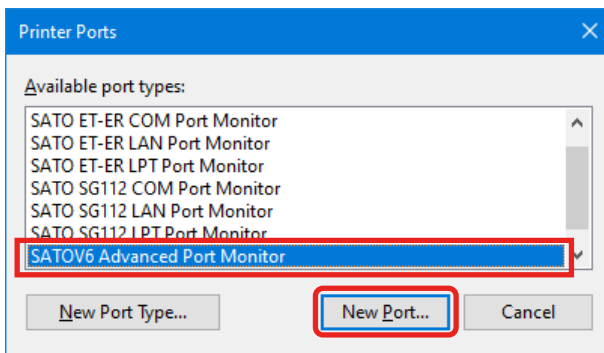
This operation requires Administrator Privileges.

Refer to "2.2 How to Get Administrator Privileges" on how to get Administrator Privileges.

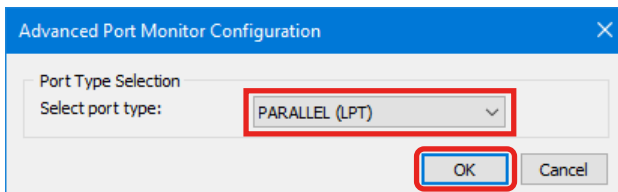
- a. Open [Devices and Printers], right-click the printer to be configured and select [Printer properties].
- b. Click [Add Port] on the [Ports] tab.



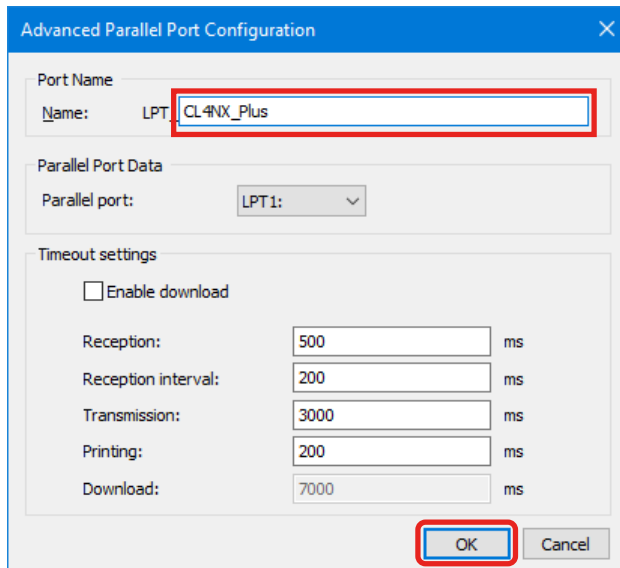
- c. Select [SATO V6 Advanced Port Monitor] and then click [New Port].



- d. Select [PARALLEL (LPT)] from the [Select port type] drop down list and click [OK].

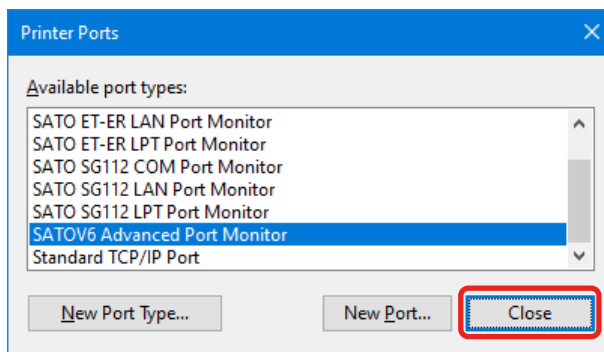


- e. Enter the [Port Name] and click [OK] to close the Port Configuration dialog box.

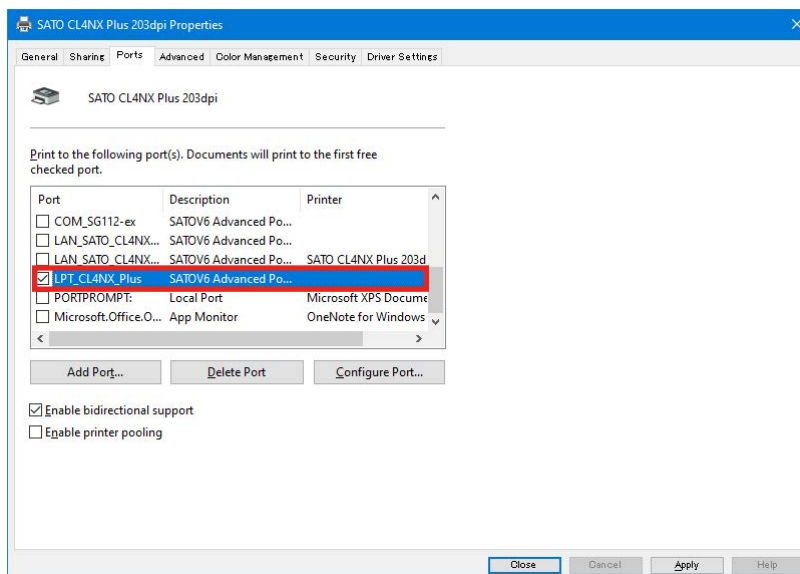


If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.

- f. Click [Close].



- g. Confirm that the added port is selected on the [Ports] tab.



If the Printer Driver Is Available at the Windows Update Site (Automatic Installation)

On the latest operating systems (Windows 8 and later), a system notification message is shown. If you click the notification message, the new [Driver Software Installation] dialog box opens. Monitor the installation status using this dialog box. Closing the dialog box finishes the installation.

If the Printer Driver Is Unavailable at the Windows Update Site (Manual Installation)

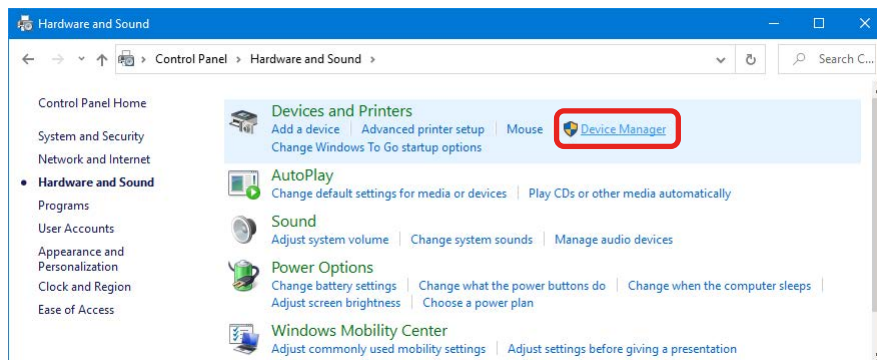
If the printer driver is unavailable at the Windows Update site, the connected printer will be recognized as "Other devices". Download the printer driver to the local disk.

Download the printer driver from <https://www.sato-global.com/drivers/redirect.html>.

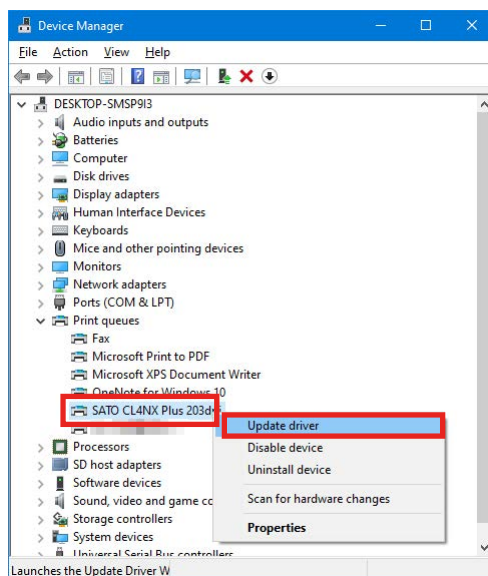
For details on how to obtain the printer driver, refer to "1.1 Preparing the Printer Driver".

Follow these steps to install the printer driver using the [Update driver] procedure.

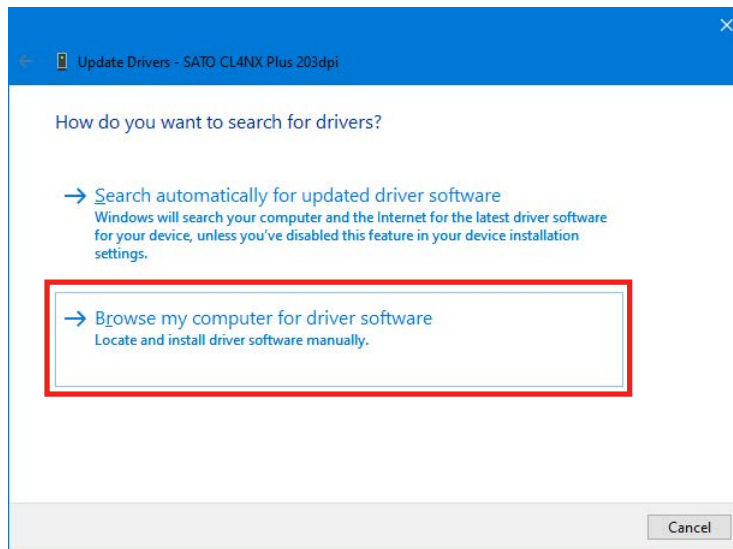
1. Open [Control Panel] and click [Hardware and Sound] > [Devices and Printers] > [Device Manager].



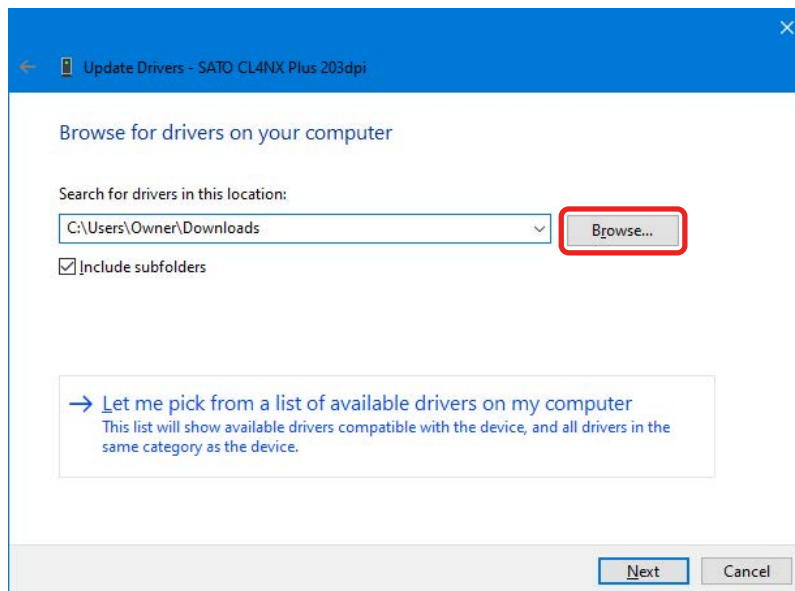
2. Expand the node [Other devices] to show the installed printer driver, then right-click the printer driver and select [Update driver].



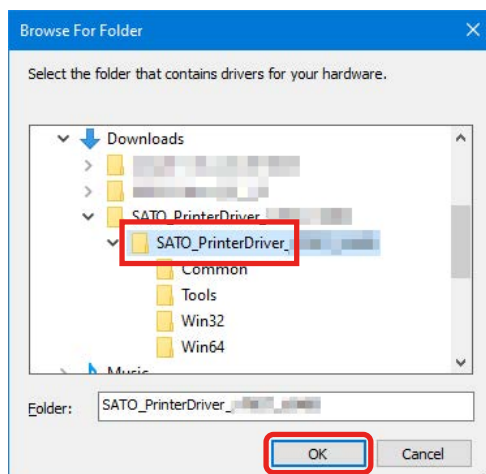
3. At the message [How do you want to search for drivers?], select [Browse my computer for driver software].



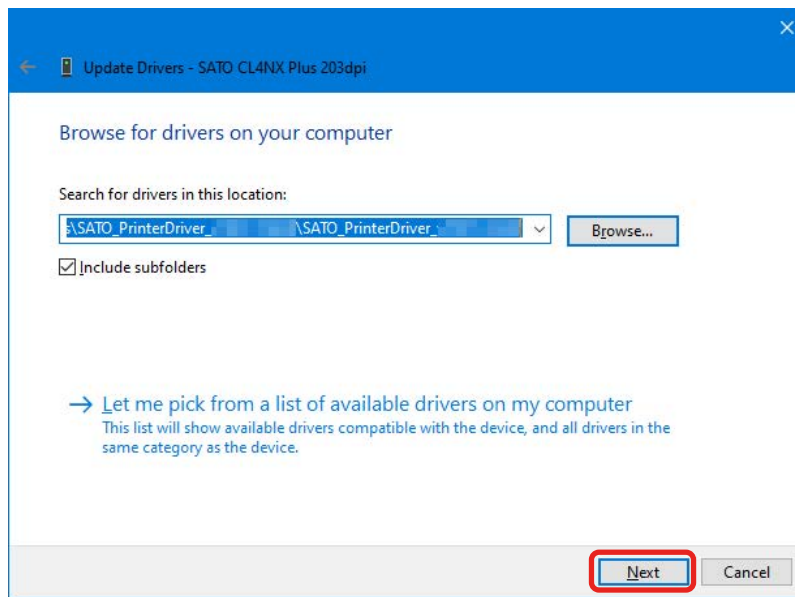
4. Click [Browse] and search for the printer driver folder that you have downloaded.



5. Once located, expand the node and select the [SATO] folder then click [OK].

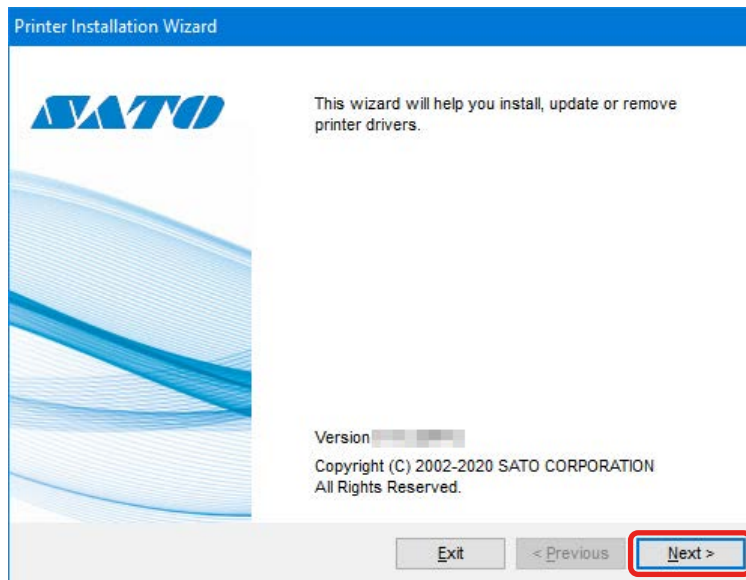


6. Click [Next]. Wait for the printer driver to be updated or installed accordingly.

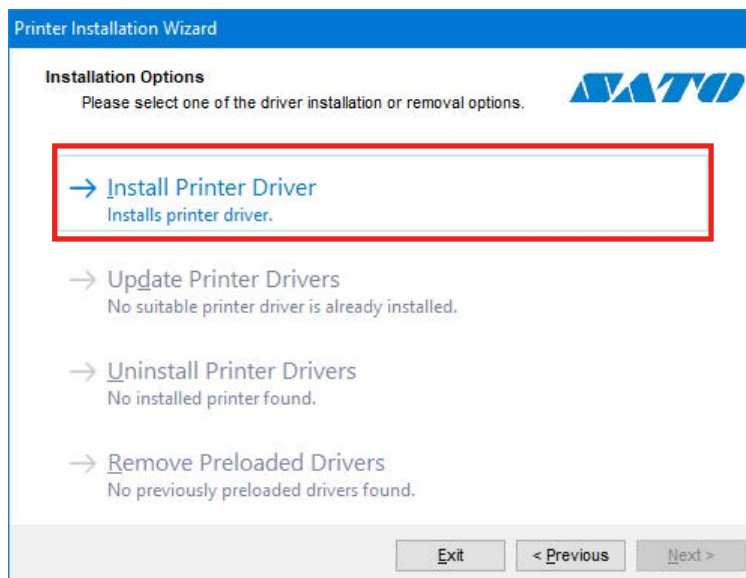


1.4.2 Installing the Printer Driver When Connected via LAN or Wireless LAN

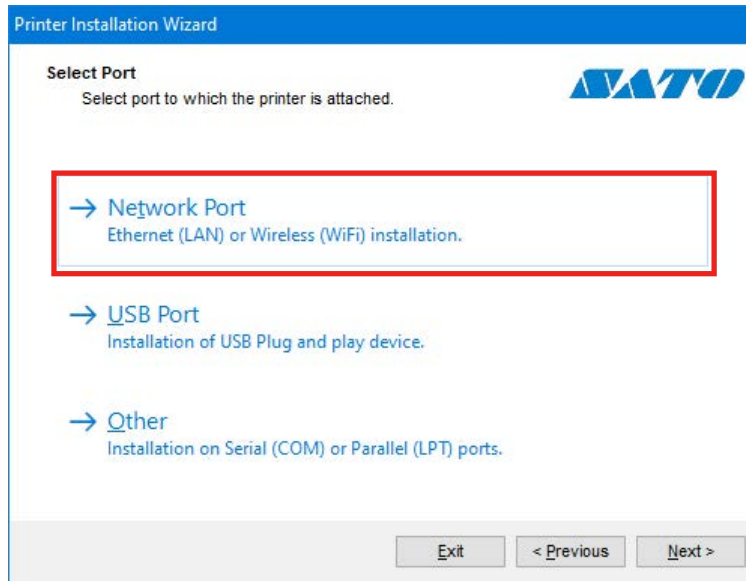
1. Power on the printer and confirm that the printer is connected to the network.
2. Double-click PrnInst.exe.
The printer installation wizard starts.
3. Click [Next].



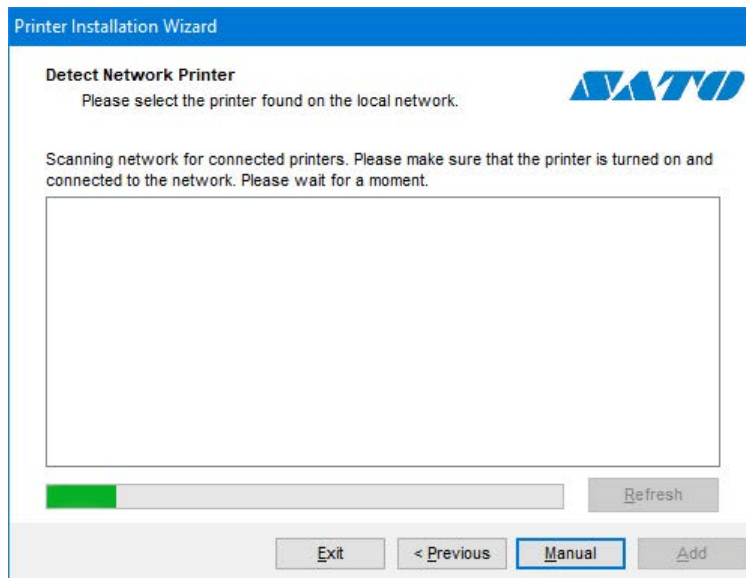
4. Click [Install Printer Driver].



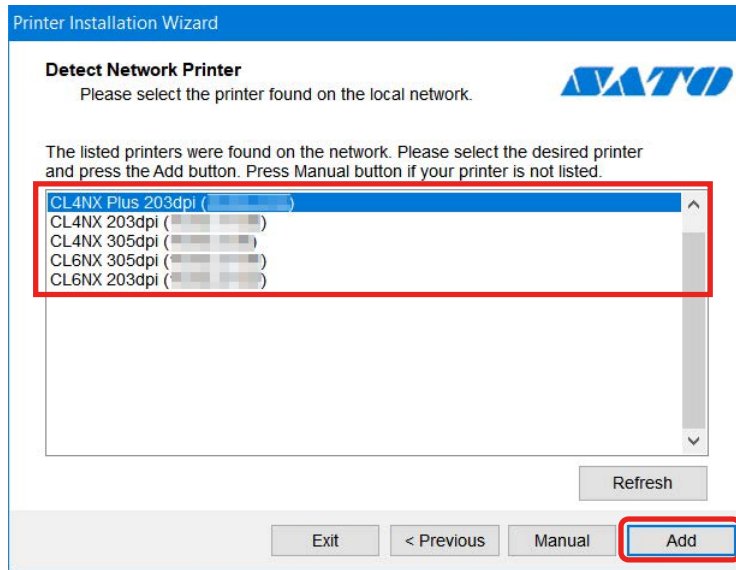
5. Click [Network Port].



The printers which can be connected on the network are detected.

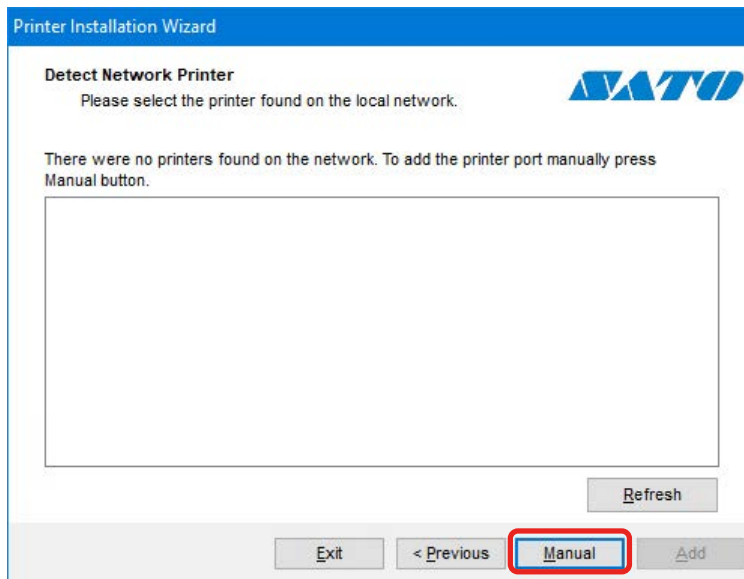


6. Select your printer and click [Add].



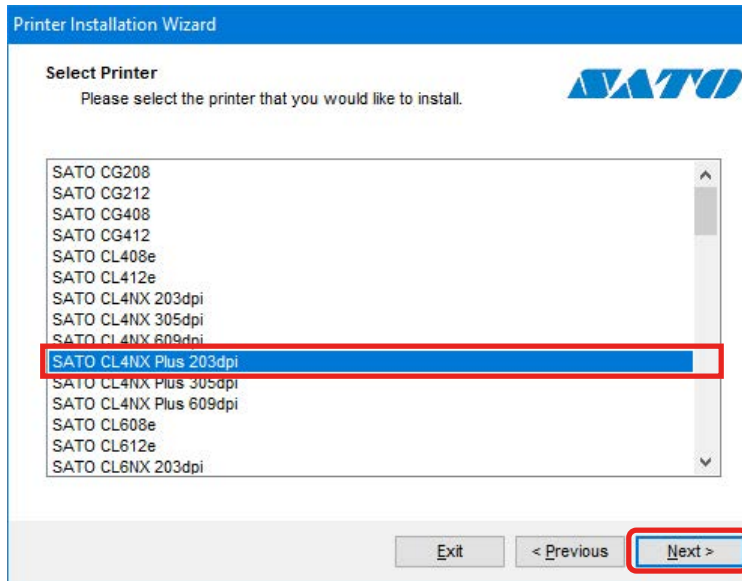
If your printer is not listed, check that the printer is powered on and connected to the network, and click [Refresh]. If your printer is still not shown on the list, add the printer by performing the following procedures.

a. Click [Manual].



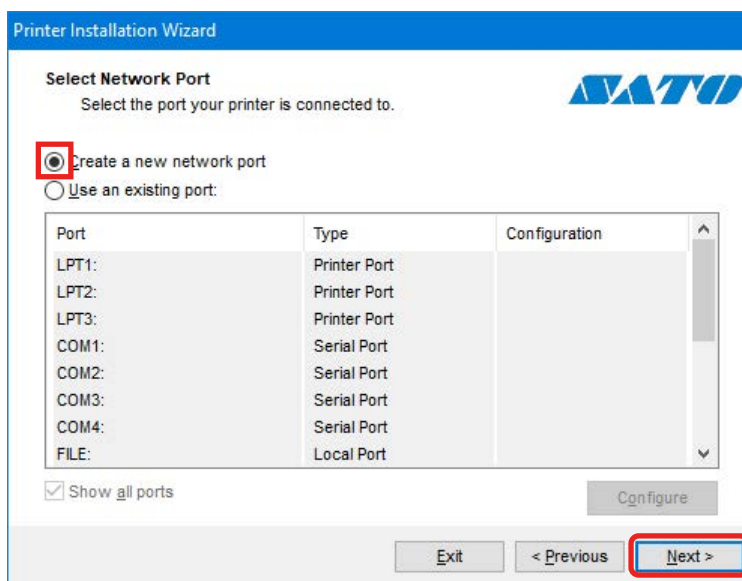
- b. Select the model of the printer and click [Next].

The following illustration shows SATO CL4NX Plus 203dpi is selected as an example.



- c. Select [Create a new network port] and click [Next].

When a network port already exists, select [Use an existing port] to use the port. Select the port from the list, click [Next], and proceed to step 7.



d. Enter the IP address of the printer into [Printer Name or IP Address] and click [Next].

If the same port name exists, change [Port name] and then click [Next].

Printer Installation Wizard

Add Network Port
Enter port configuration for the desired printer.

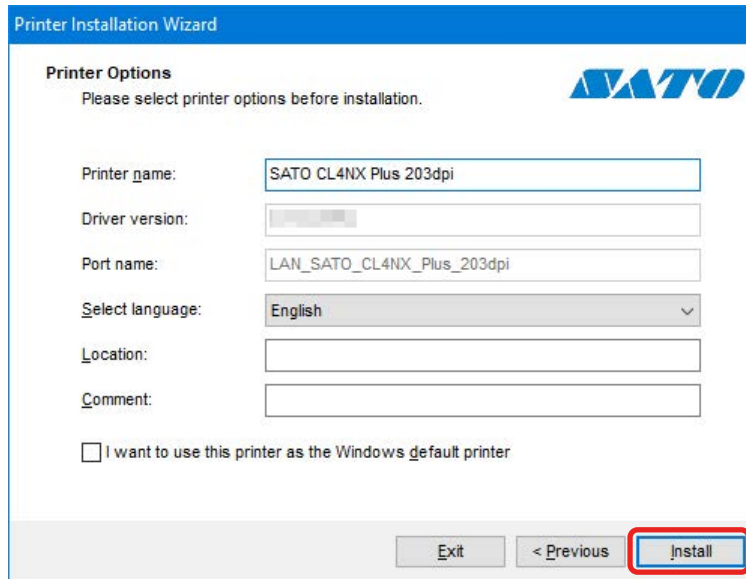
Port name: LAN_SATO_CL4NX_Plus_203dpi

Printer Name or IP Address:

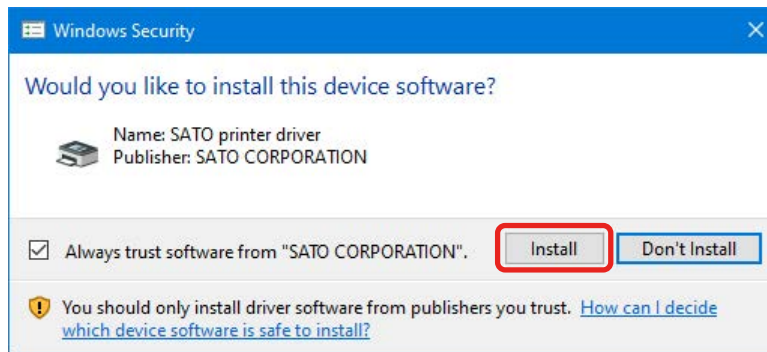
Port number: 9100

Exit < Previous **Next >**

7. Click [Install].



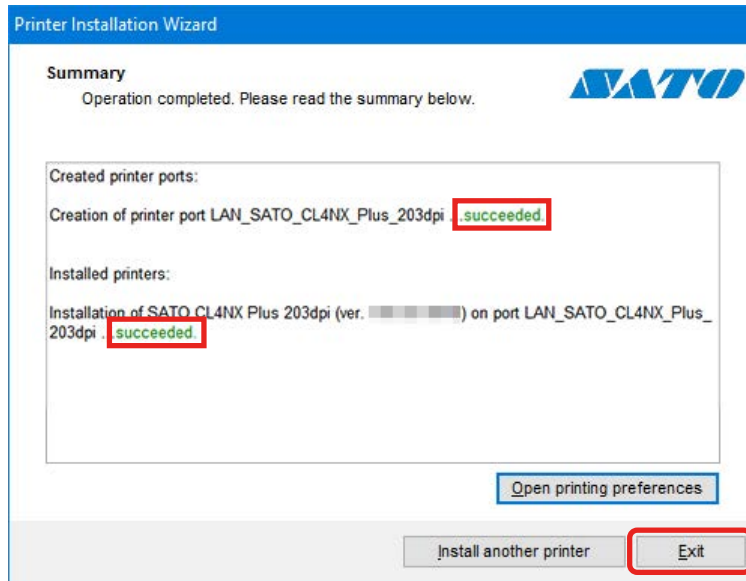
When the [Windows Security] screen appears, click [Install].



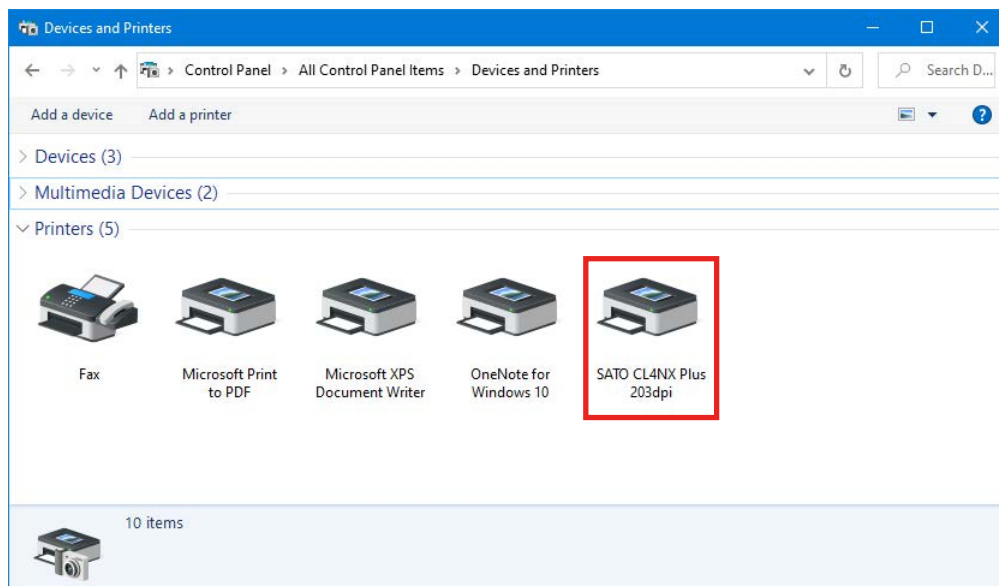
Note:

The warning screen above may not appear, depending on the computer environment. If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

8. Confirm that [succeeded] is shown for the installed printer driver and click [Exit].



9. Open [Devices and Printers] and confirm that the printer has been added to the list of [Printers].



1.4.3 Installing the Printer Driver When Connected via Bluetooth

Add the printer to the computer as a Bluetooth device (this is called pairing) and install the printer driver on the computer. The procedure for pairing a Bluetooth device varies depending on your computer environment.

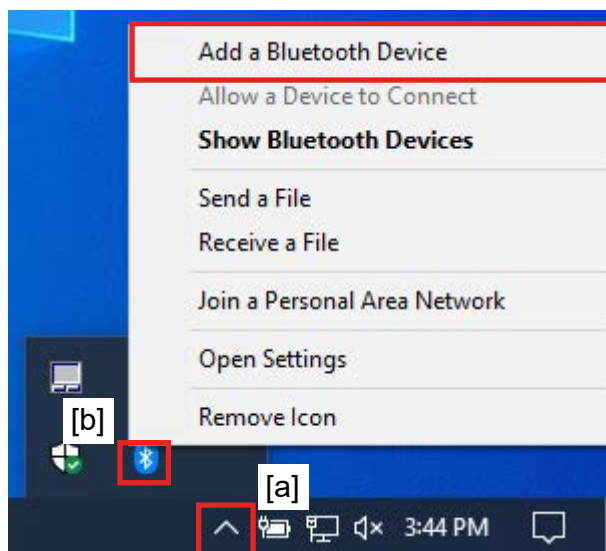
For details, refer to the user manual of your computer.

Caution

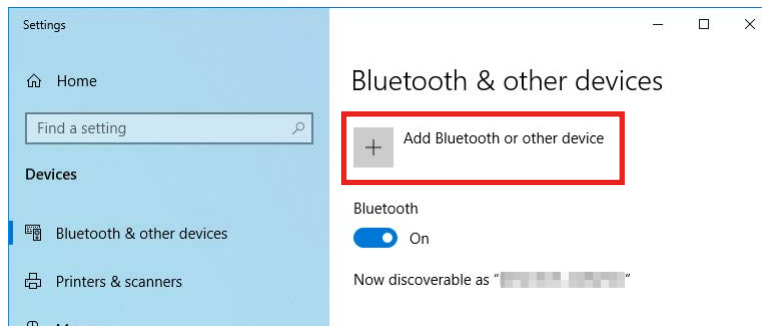
Bluetooth connection may be unstable depending on compatibility with host devices. When using Bluetooth connection, please test the operation beforehand in your usage environment (host device, print data, print quantity, print frequency, etc.).

Pairing the Printer with the Computer

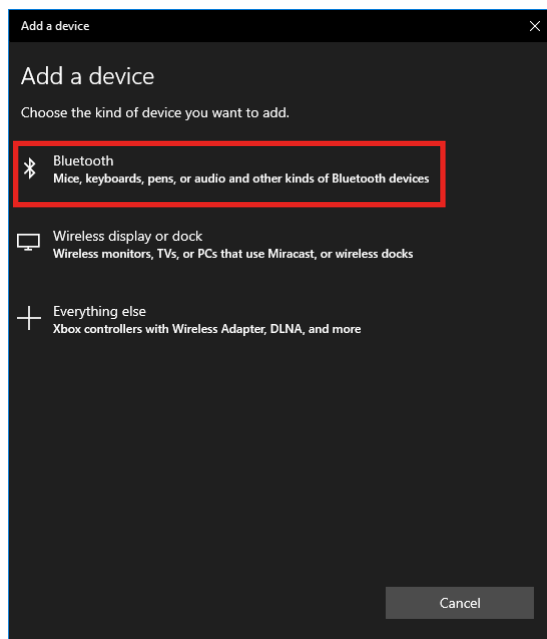
1. Start the computer.
2. Power on the printer.
3. Confirm that Bluetooth is enabled on the printer and note the device name.
For details on the printer screen and operations, refer to the Operator Manual of your printer.
4. Click the arrow ([Show hidden icons]) ([a]) on the bottom-right of the computer desktop, right-click the Bluetooth icon ([b]), and select [Add a Bluetooth Device].



5. Click [Add Bluetooth or other device].

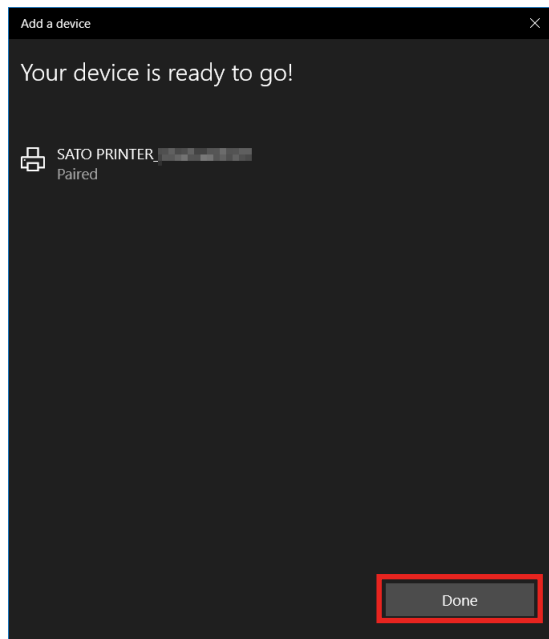


6. Click [Bluetooth].



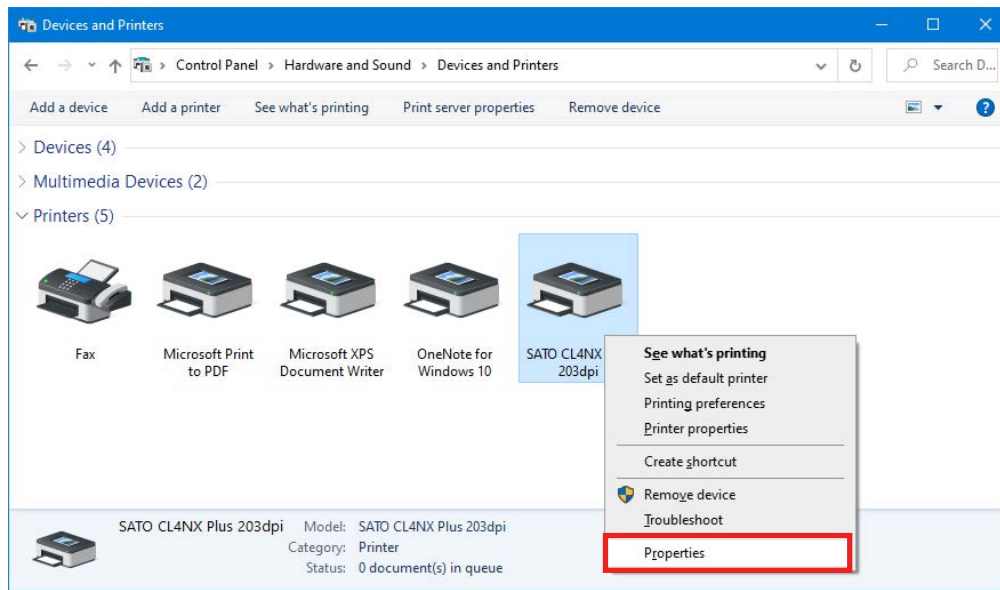
7. On the list of discovered devices, select the name of the device that you confirmed in step 3.
8. Follow the instructions on the computer and printer screens.

9. Click [Done].

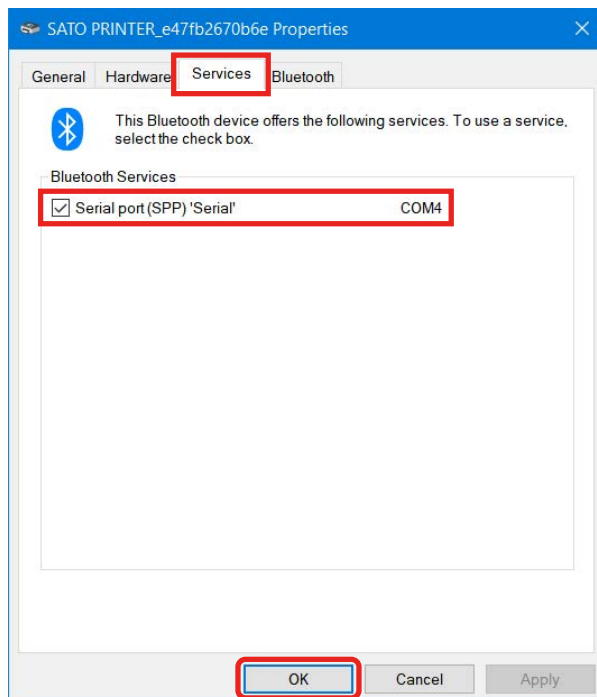


Installing the Printer Driver

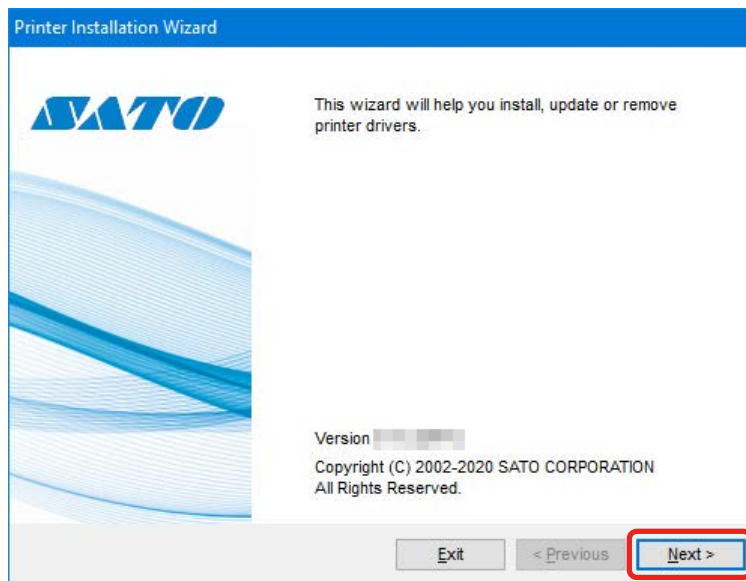
1. Open [Devices and Printers], right-click the added printer, and select [Properties].



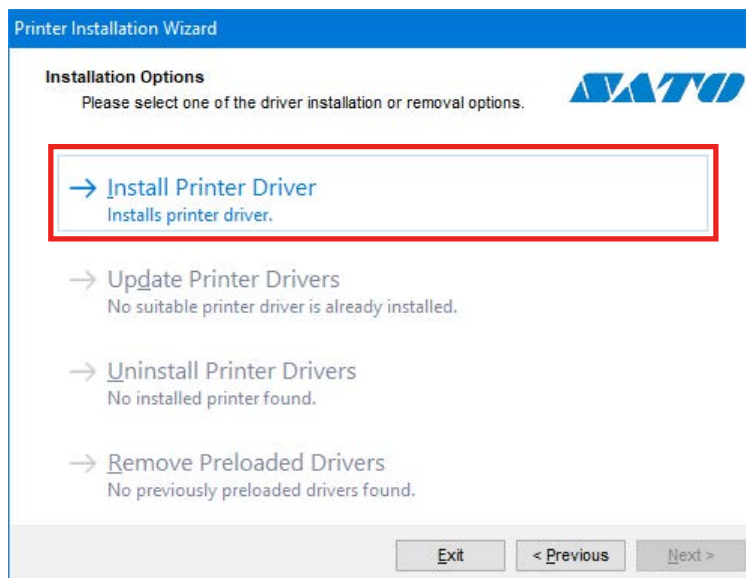
2. Confirm the port assigned to [Serial port (SPP)] on the [Services] tab and click [OK]. This information is necessary when installing the printer driver so make sure to write it down.



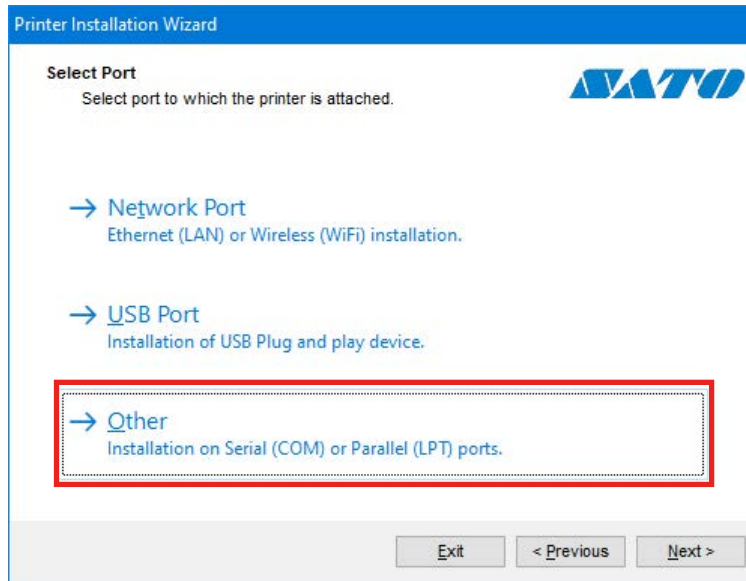
3. Double-click PrnInst.exe.
The printer installation wizard starts.
4. Click [Next].



5. Click [Install Printer Driver].

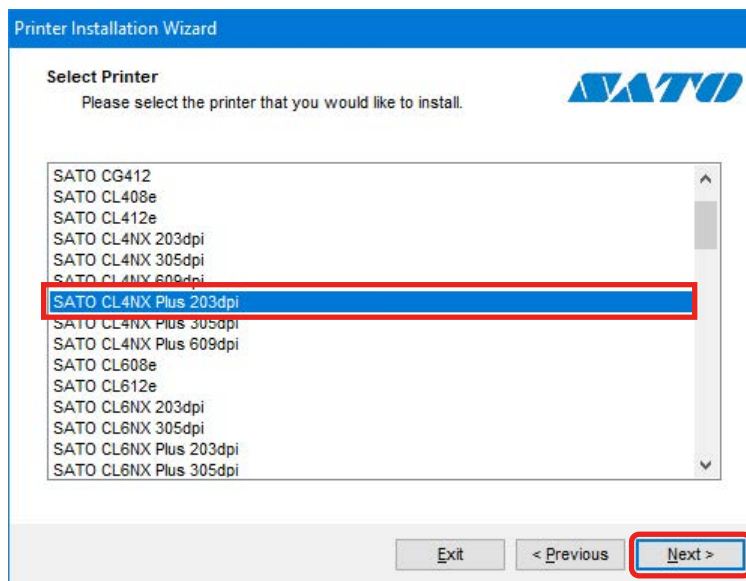


6. Click [Other].

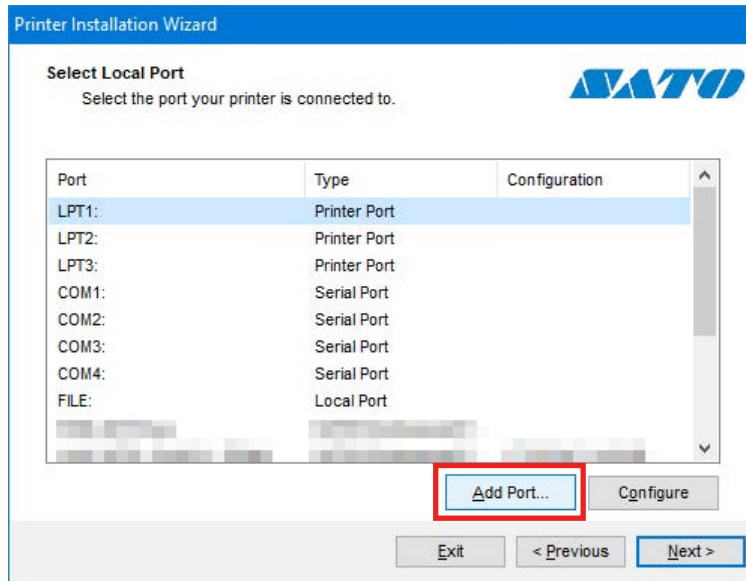


7. Select the model of the printer and click [Next].

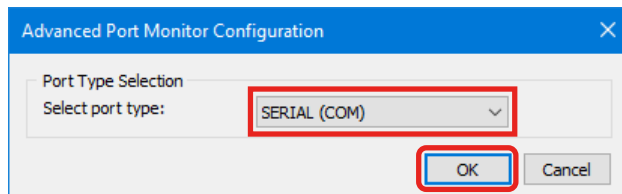
The following illustration shows SATO CL4NX Plus 203dpi is selected as an example.



8. Click [Add Port].



9. Select [SERIAL (COM)] from the [Select port type] drop down list and click [OK].



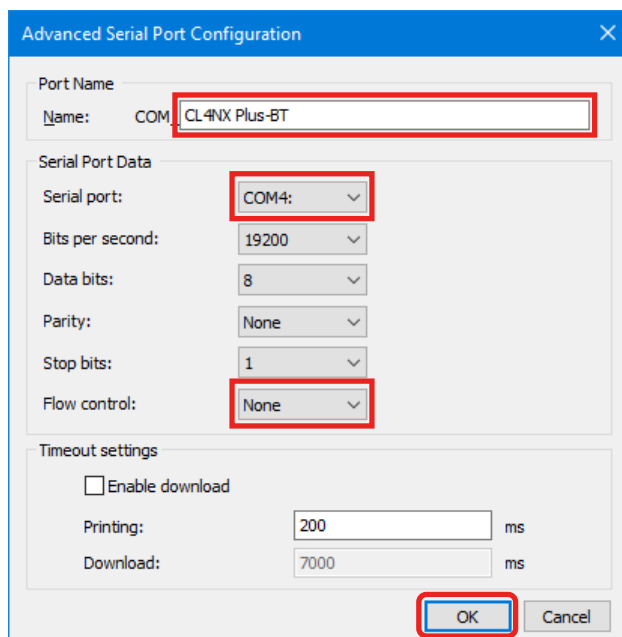
10. Configure the port settings and click [OK].

Configure the following settings:

[Port Name]: Enter a name (E.g., CL4NX Plus-BT)

[Serial port]: Select the port you checked in step 2.

[Flow control]: Select [None].

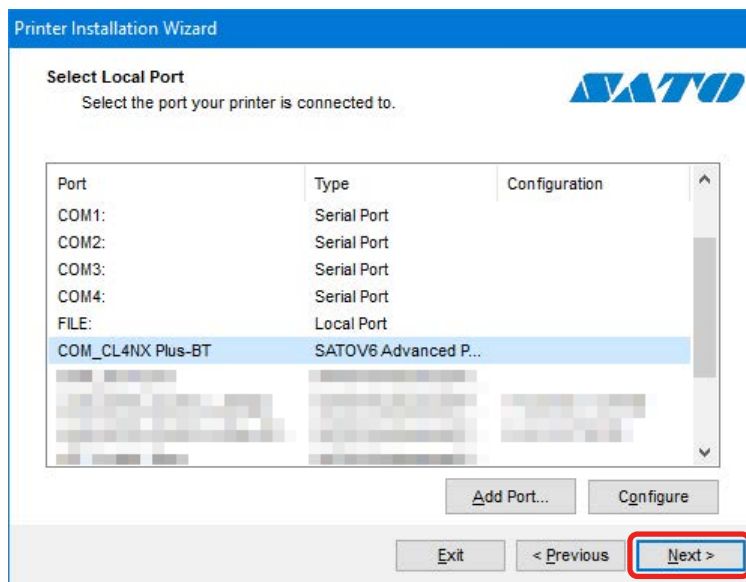


- The [Advanced Serial Port Configuration] dialog box can be shown even after installing the printer driver with the following procedure:
 - a. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
 - b. Click the [Ports] tab.
 - c. Click [Configure Port].

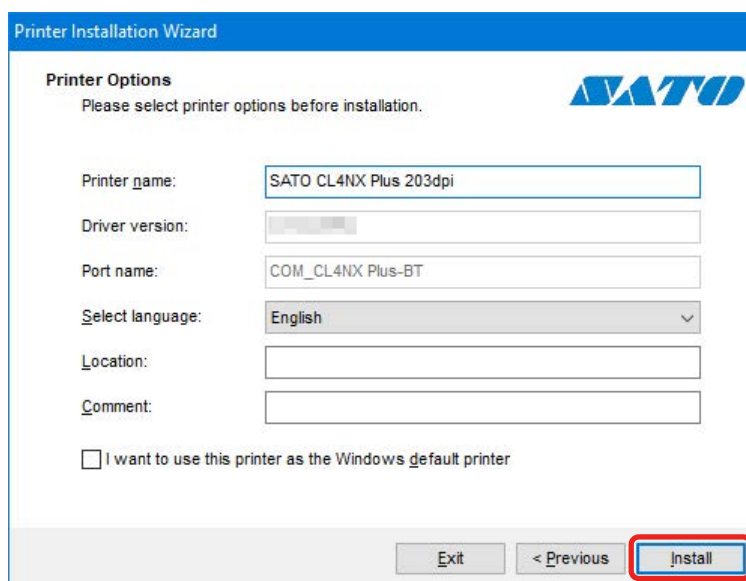
Note:

If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.

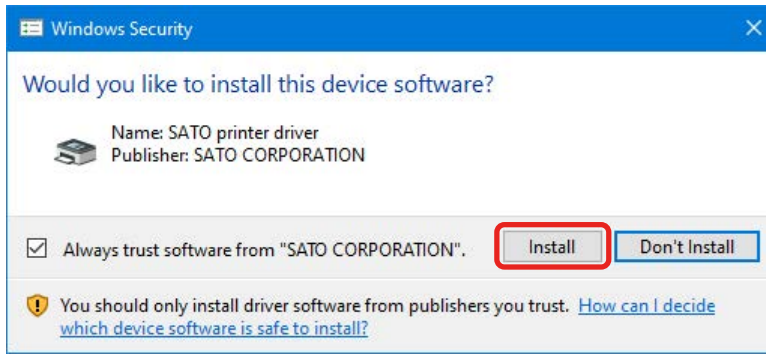
11. Click [Next].



12. Click [Install].



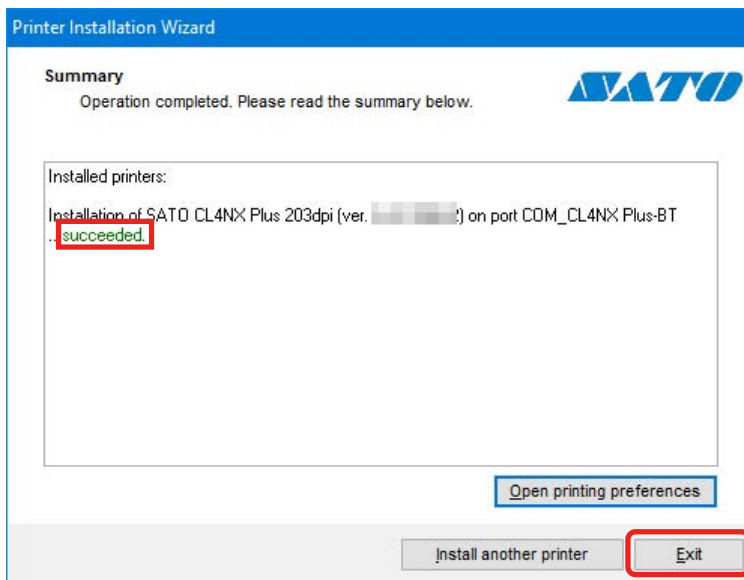
When the [Windows Security] screen appears, click [Install].



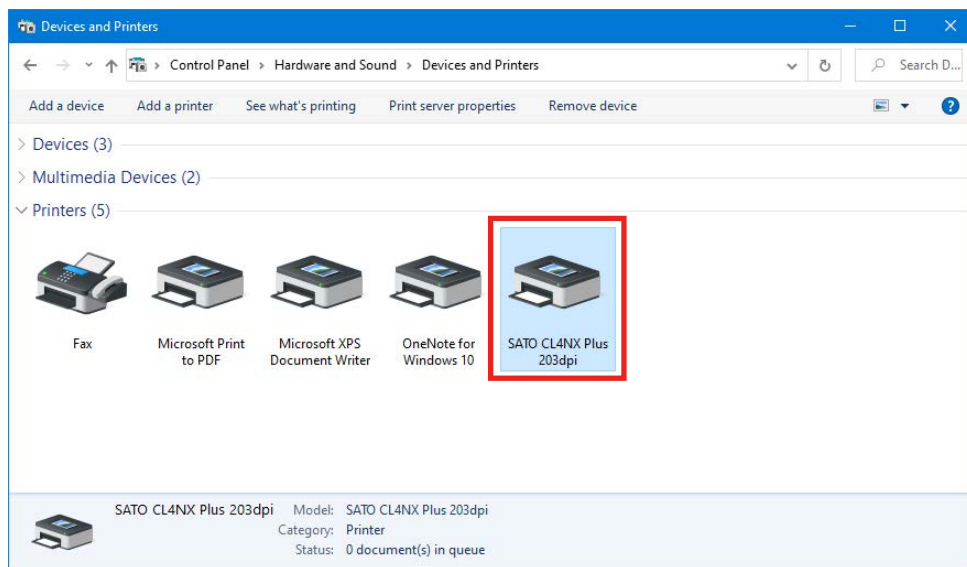
Note:

The warning screen above may not appear, depending on the computer environment. If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

13. Confirm that [succeeded] is shown for the installed printer driver and click [Exit].



14. Open [Devices and Printers] and confirm that the printer has been added to the list of [Printers].



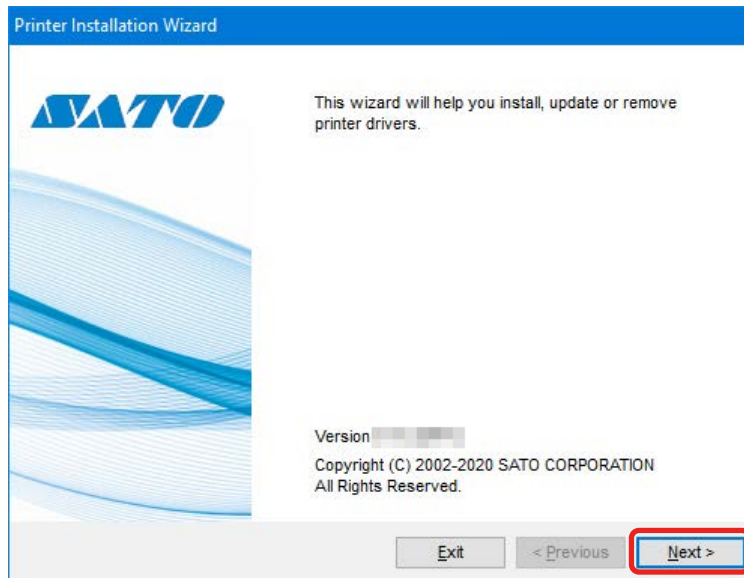
The printer driver can be used with the Bluetooth interface connection. When printing, use the name of the printer added when the printer driver was installed, not the name of the printer added as the Bluetooth device.

1.4.4 Installing the Printer Driver When Connected via RS-232C

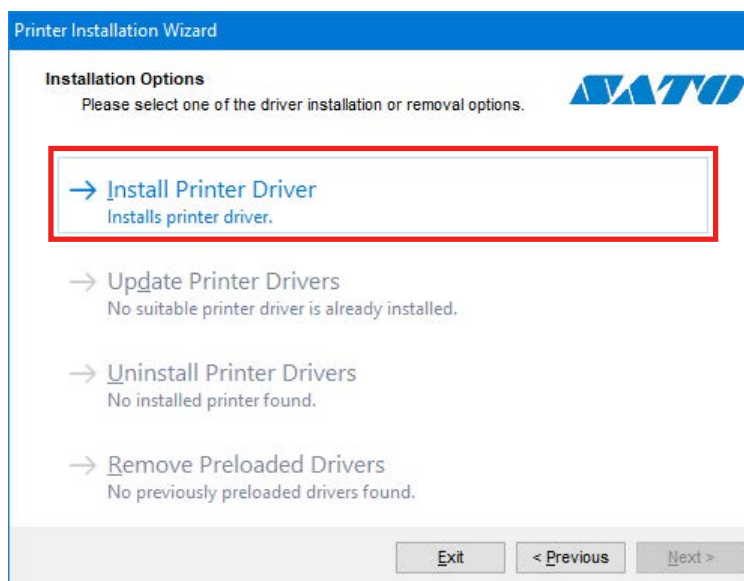
1. Connect the printer and computer with the RS-232C cable, and power on the printer.
2. Double-click PmInst.exe.

The printer installation wizard starts.

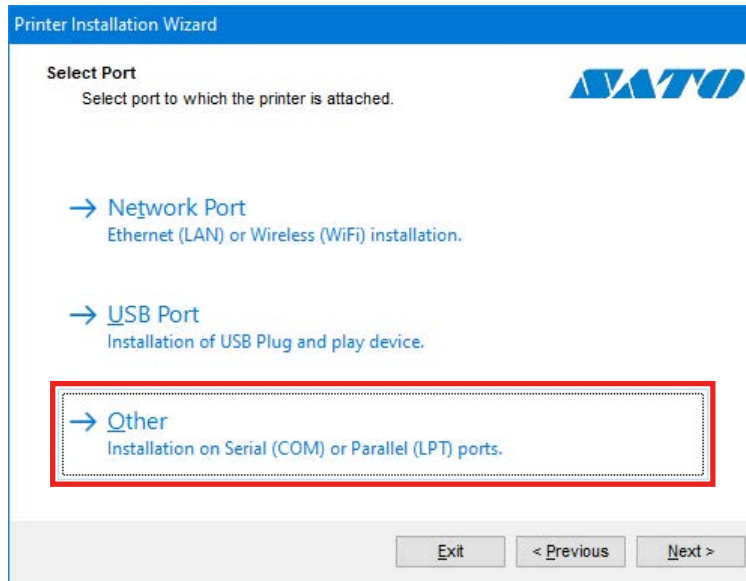
3. Click [Next].



4. Click [Install Printer Driver].

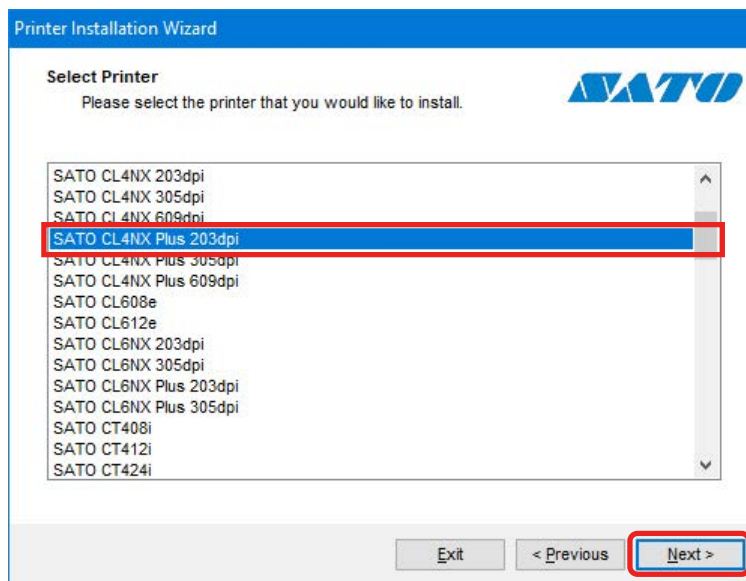


5. Click [Other].

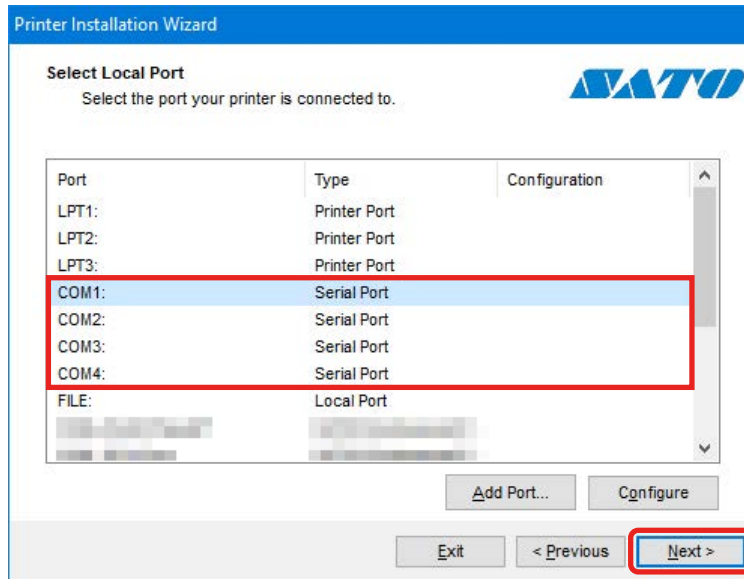


6. Select the model of the printer and click [Next].

The following illustration shows SATO CL4NX Plus 203dpi is selected as an example.



7. Select a printer port (COM) and click [Next].



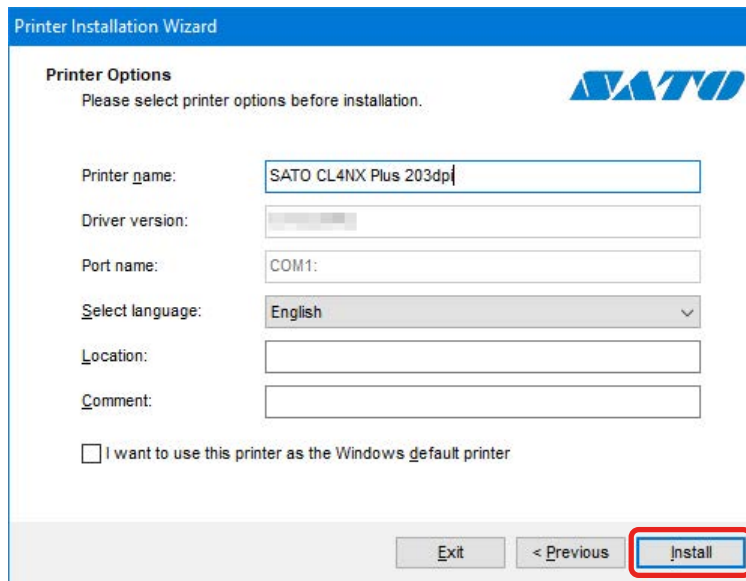
- If you want to download graphics and fonts to the printer's internal memory from the computer, or if you want to check the printer status via bi-directional communication, you must install the SATO Advanced Port Monitor. Add it by performing the following procedure.
 - a. Click [Add Port].
 - b. Select the port type that matches the printer connection method from the [Select port type] drop down list and click [OK].
 - c. Configure the port settings and click [OK].
- The [Advanced TCP/ IP Port Configuration] dialog box can be shown even after installing the printer driver with the following procedure:
 - a. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
 - b. Click the [Ports] tab.
 - c. Click [Configure Port].

Note:

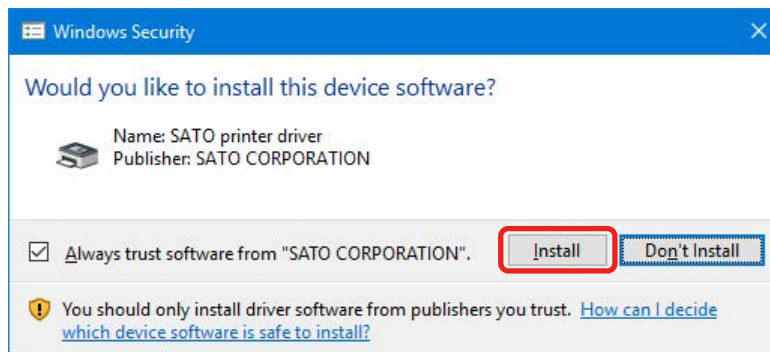
If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.

8. Click [Install].

If you selected [COM1]



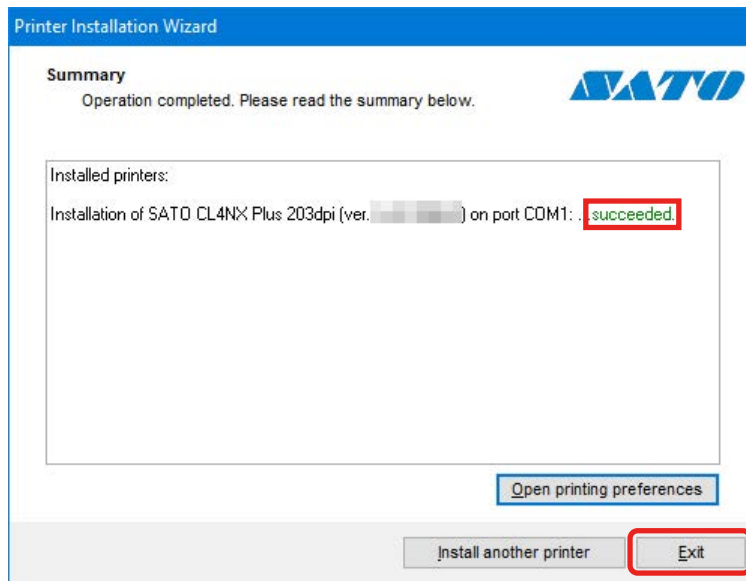
When the [Windows Security] screen appears, click [Install].



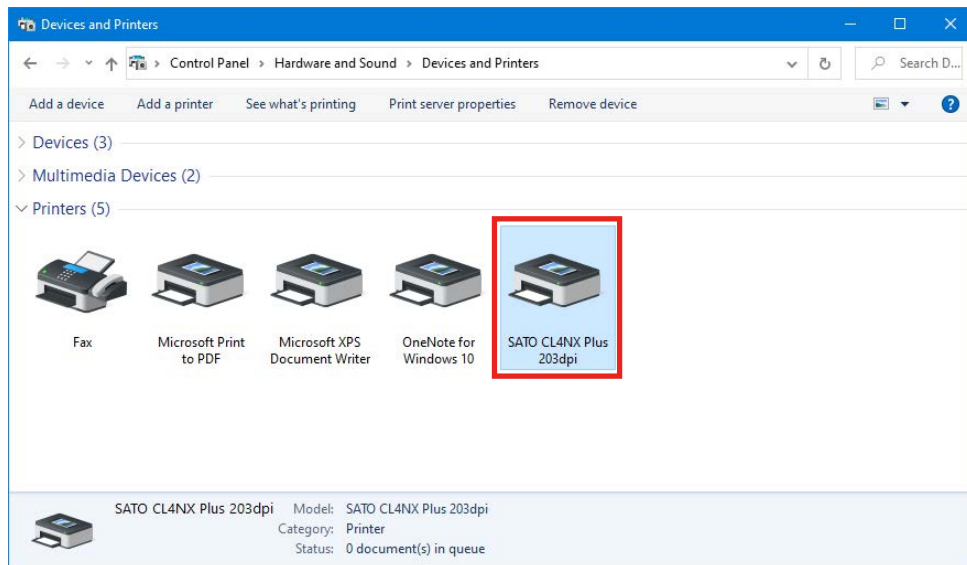
Note:

The warning screen above may not appear, depending on the computer environment. If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

9. Confirm that [succeeded] is shown for the installed printer driver and click [Exit].
If you selected [COM1]



10. Open [Devices and Printers] and confirm that the printer has been added to the list of [Printers].

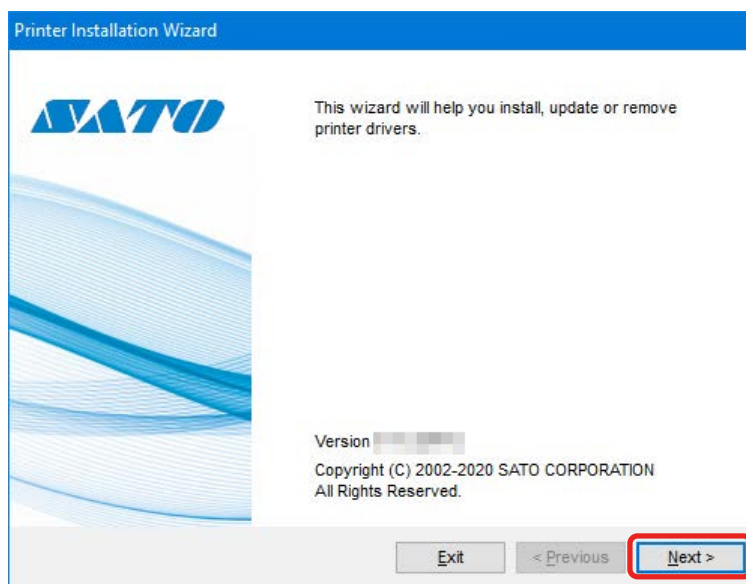


1.4.5 Installing the Printer Driver When No Printer is Connected

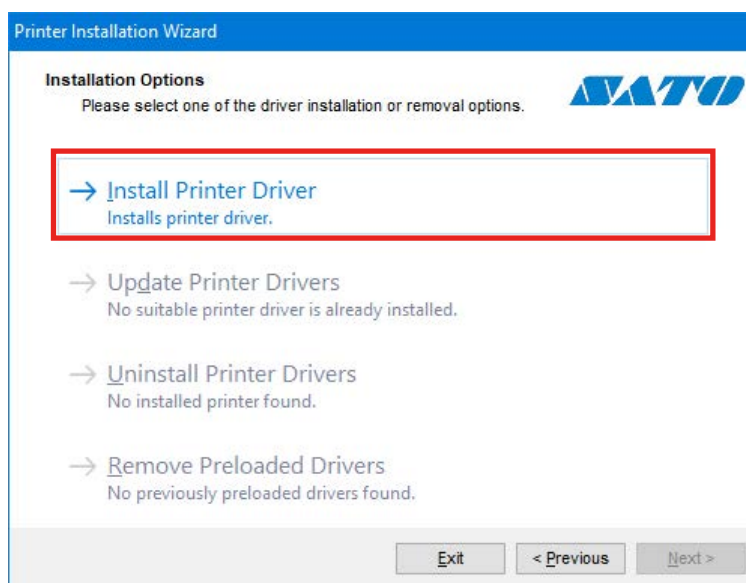
If no printer is connected to your computer, manually configure and install the printer driver. The following connection methods are applicable:

- LAN
- Wireless LAN
- RS-232C
- IEEE1284

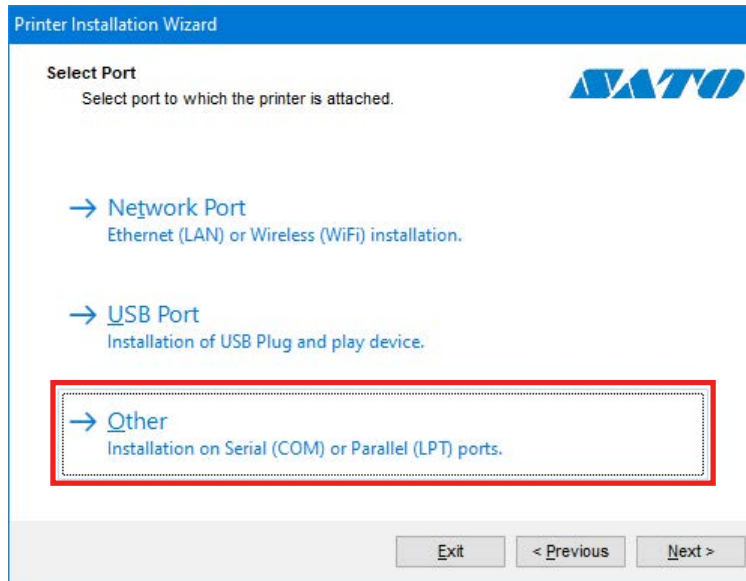
1. Double-click PrnInst.exe.
The printer installation wizard starts.
2. Click [Next].



3. Click [Install Printer Driver].

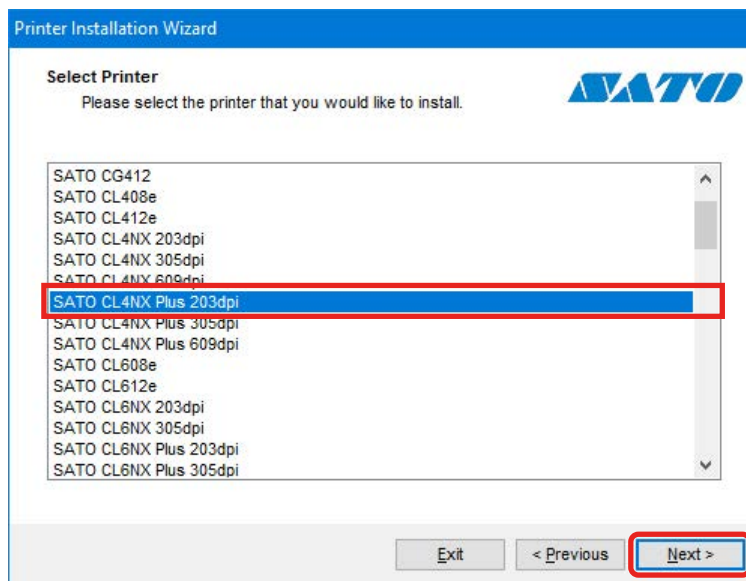


4. Click [Other].

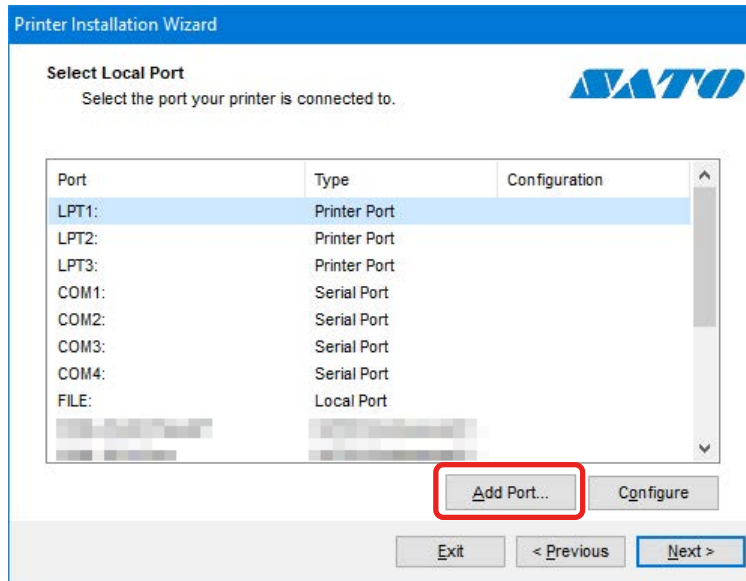


5. Select the model of the printer and click [Next].

The following illustration shows SATO CL4NX Plus 203dpi is selected as an example.



6. Click [Add Port].

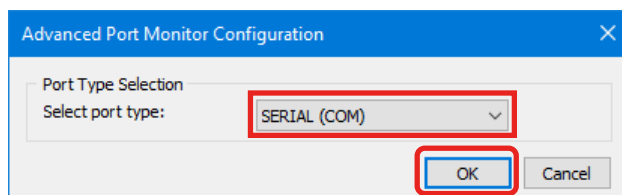


7. Select the port type that matches the printer connection method from the [Select port type] drop down list and click [OK].

For a LAN or wireless LAN connection: [TCP/IP (LAN)]

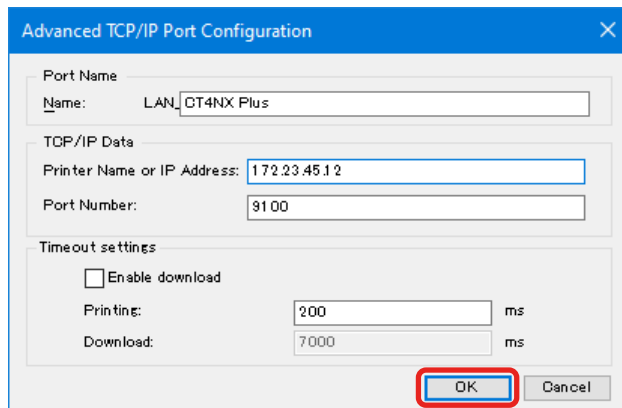
For a Bluetooth or RS-232C connection: [SERIAL (COM)]

For IEEE1284 connection: [PARALLEL (LPT)]



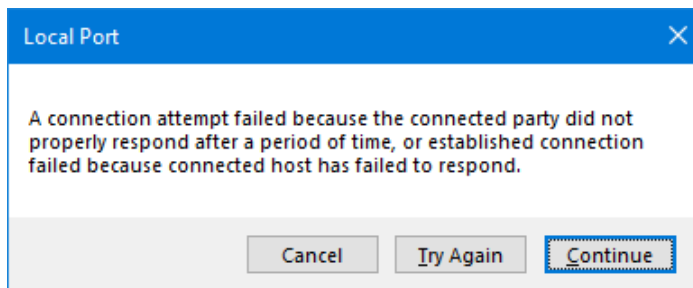
8. Configure the port settings and click [OK].

If you selected [TCP/IP (LAN)]



Note:

- You cannot set the same name as an existing port name.
- The computer cannot communicate with the destination printer if the [Printer Name or IP Address] and [Port Number] settings do not match those of the printer.
- Click [OK] to check communications using the configured settings. If communications failed, the following screen appears.



[Cancel]

Returns to the previous screen. Click this button to change [Printer Name or IP Address] or any other settings.

[Try Again]

Checks communications again.

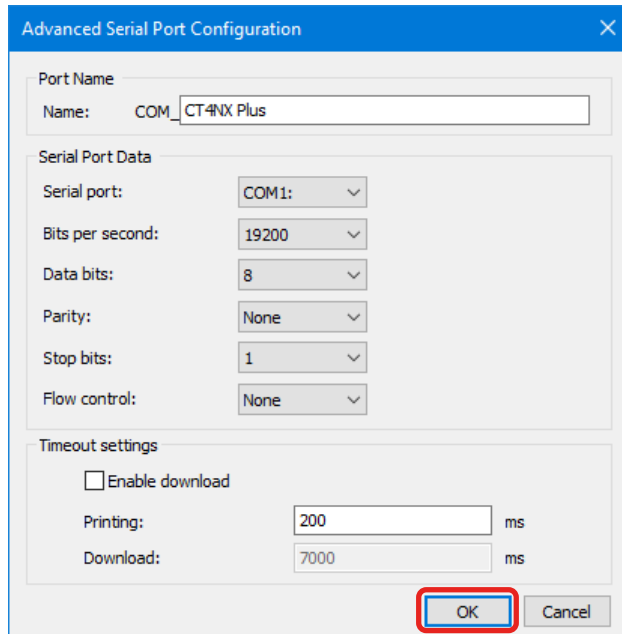
[Continue]

Does not check communications and proceeds to the next step. Click this button when you want to continue with the port setup without checking communications with the printer.

- Normally, you do not need to change [Port Number] (the default value on the printer is also 9100).
- Normally, you do not need to change the timeout settings.
- The [Advanced TCP/ IP Port Configuration] dialog box can be shown even after installing the printer driver with the following procedure:
 - a. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
 - b. Click the [Ports] tab.

- c. Click [Configure Port].
 - If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.
-

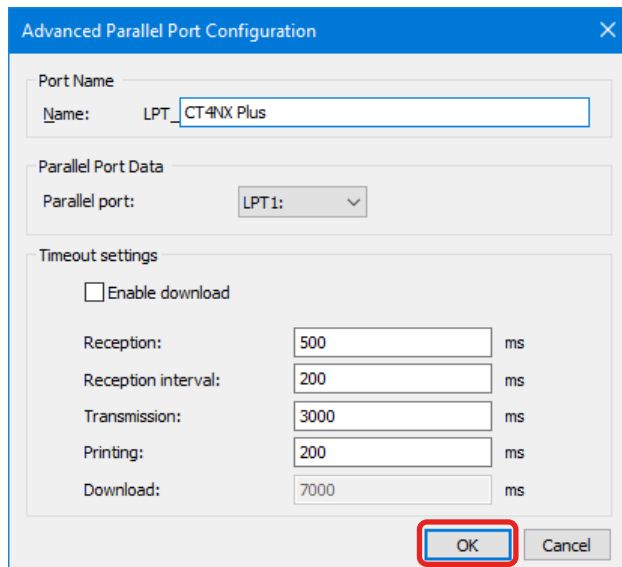
If you selected [SERIAL (COM)]



Note:

- You cannot set the same name as an existing port name.
 - Select the same port as the connected printer for [Serial port].
 - For [Flow control], select [None].
 - The [Advanced TCP/ IP Port Configuration] dialog box can be shown even after installing the printer driver with the following procedure:
 - a. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
 - b. Click the [Ports] tab.
 - c. Click [Configure Port].
 - If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.
-

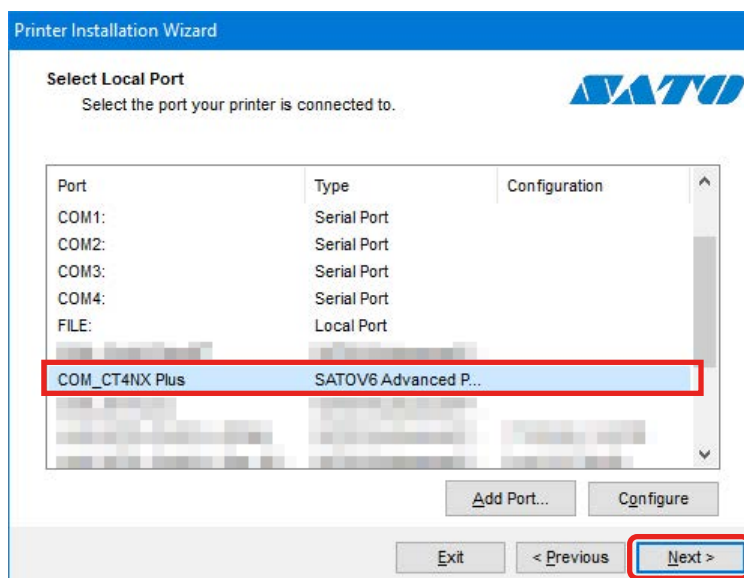
If you selected [PARALLEL (LPT)]



Note:

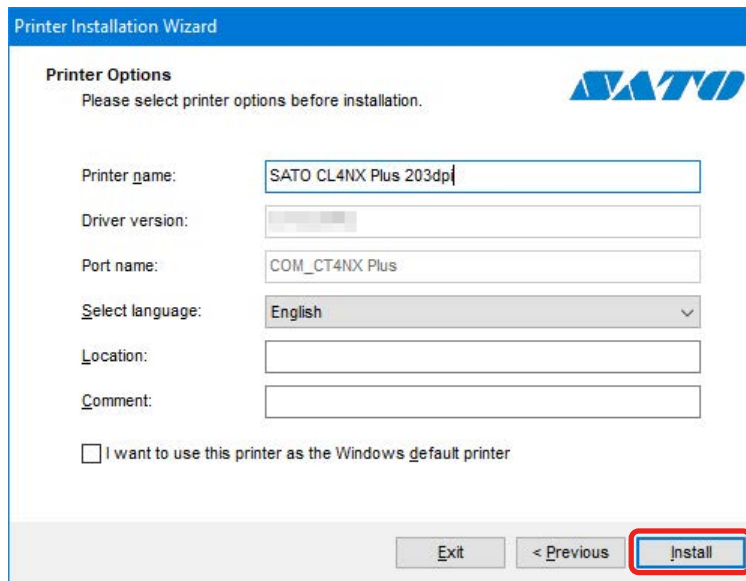
- You cannot set the same name as an existing port name.
 - Select the same port as the connected printer for [Parallel port].
 - The [Advanced TCP/ IP Port Configuration] dialog box can be shown even after installing the printer driver with the following procedure:
 - a. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
 - b. Click the [Ports] tab.
 - c. Click [Configure Port].
 - If you want to download fonts and graphics from the computer, check [Enable download] and uncheck it when you are finished downloading. If left checked, the printer performance will be poor.
-

9. Confirm that the added port is selected and click [Next].

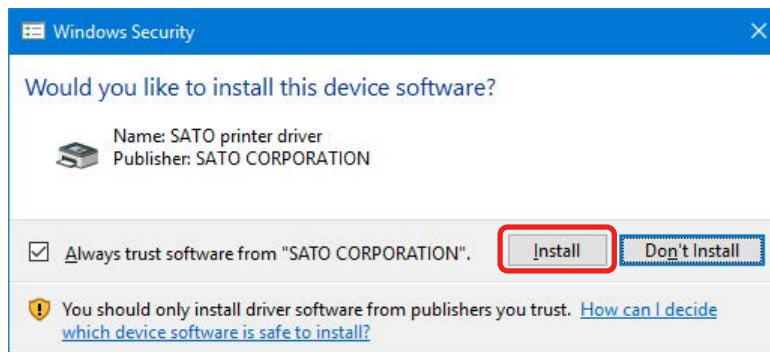


10. Click [Install].

If the same printer name exists, change [Printer name] and then click [Install].



When the [Windows Security] screen appears, click [Install].

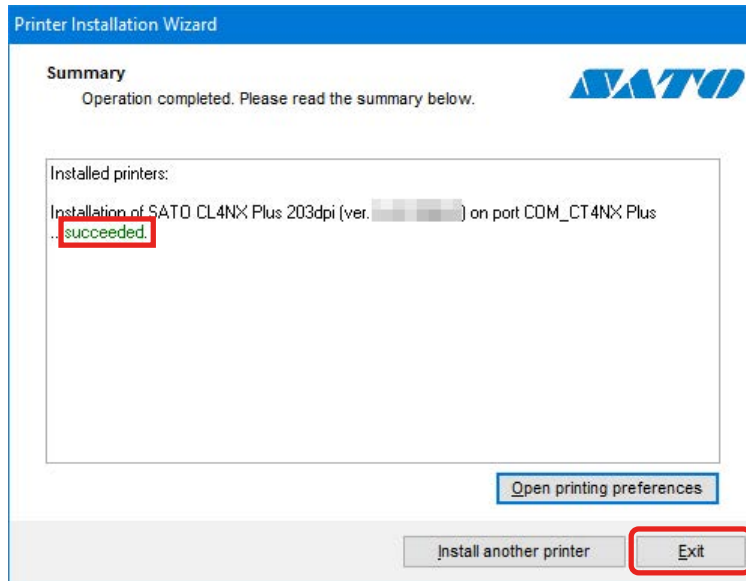


Note:

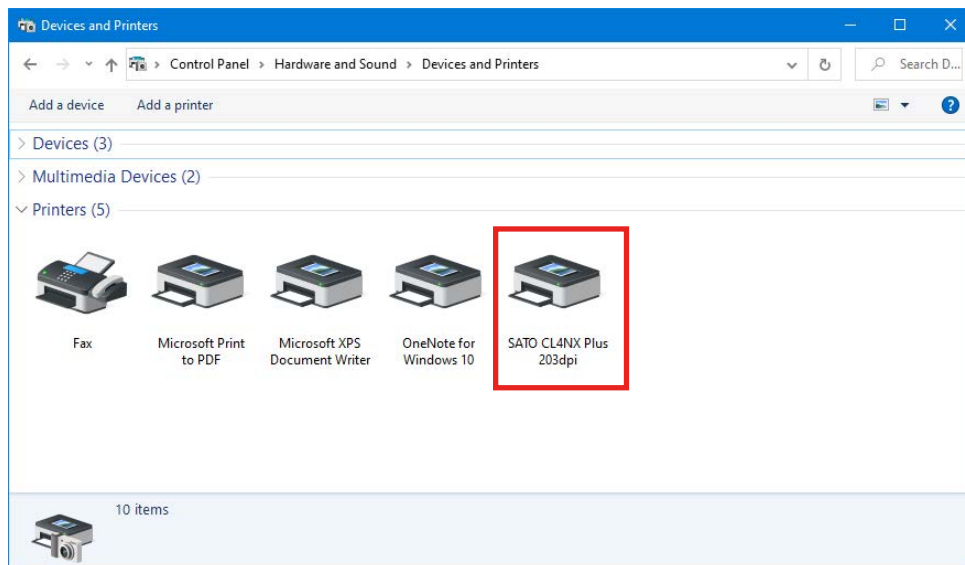
The warning screen above may not appear, depending on the computer environment.

If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

11. Confirm that [succeeded] is shown for the installed printer driver and click [Exit].



12. Open [Devices and Printers] and confirm that the printer has been added to the list of [Printers].



1.4.6 Installing the Printer Driver for Second and Later Printers

When using multiple printers, you need to install printer drivers for each printer.

When Connected via USB or IEEE1284

1. Power off the printer and connect the printer to the computer.
2. Power on the printer.

The Plug and Play feature runs and the printer driver is automatically installed.

When Connected via LAN, Wireless LAN or RS-232C

Use the same procedure as the first printer to install the printer driver.

1. Double-click PrnInst.exe.
 2. To finish installing the driver, follow the same procedure as the first printer.
-

Note:

You cannot install the printer driver using port and printer names that have already been created. Change the name(s).

When Connected via Bluetooth

Use the same procedure as the first printer to install the printer driver.

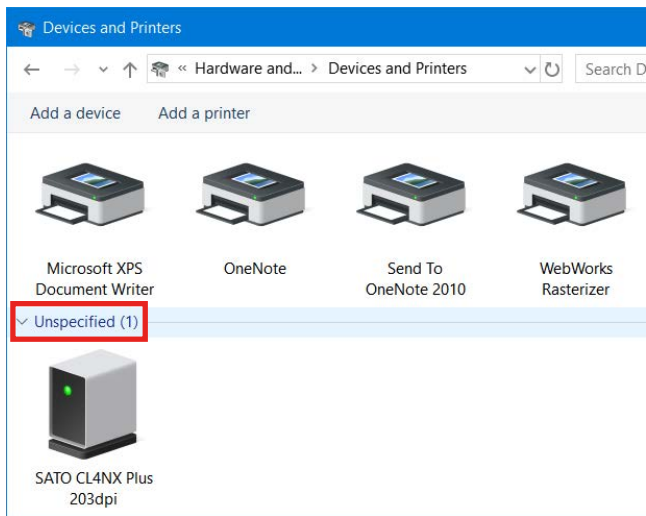
1. Pair the printer with the computer.
 2. Double-click PrnInst.exe.
 3. To finish installing the driver, follow the same procedure as the first printer.
-

Note:

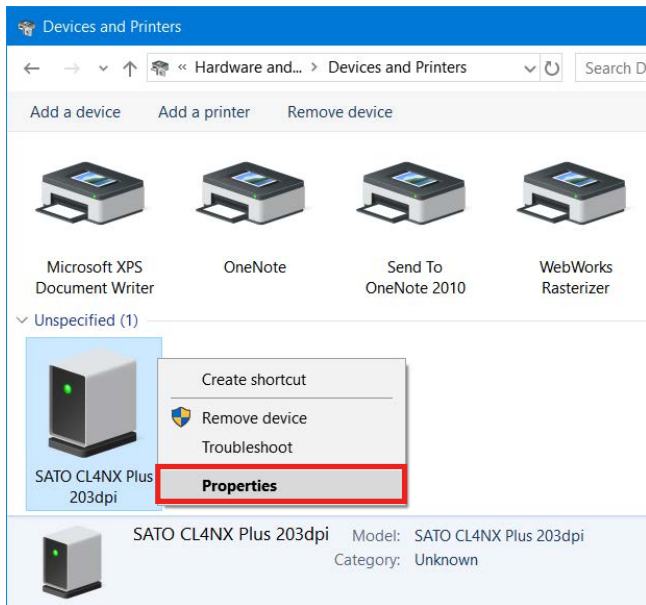
You cannot install the printer driver using port and printer names that have already been created. Change the name(s).

1.4.7 What to Do If the Printer Driver Is Added under [Unspecified]

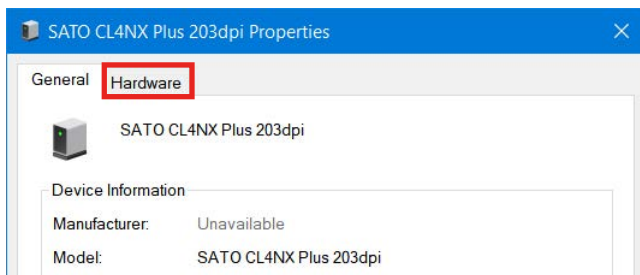
If the printer driver is added under [Unspecified] in [Devices and Printers], it will not be recognized as a printer. Follow the procedure below to recognize it as a printer.



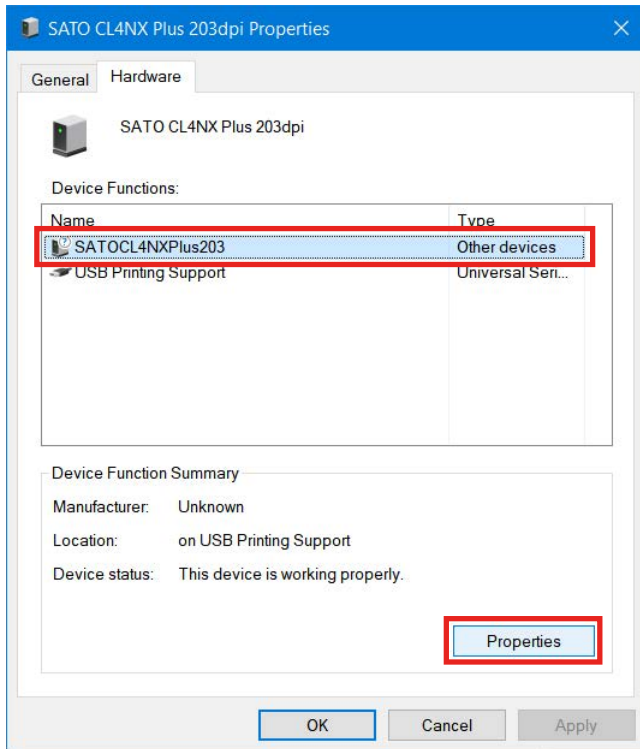
1. Open [Devices and Printers], right-click the printer driver added under [Unspecified], and select [Properties].



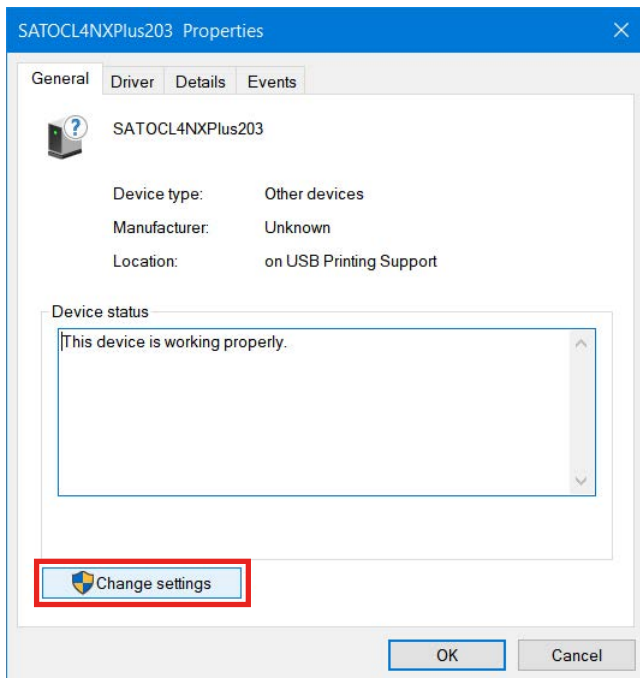
2. Select the [Hardware] tab.



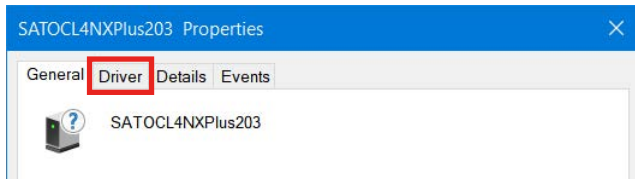
3. Select the name of the printer and click [Properties].



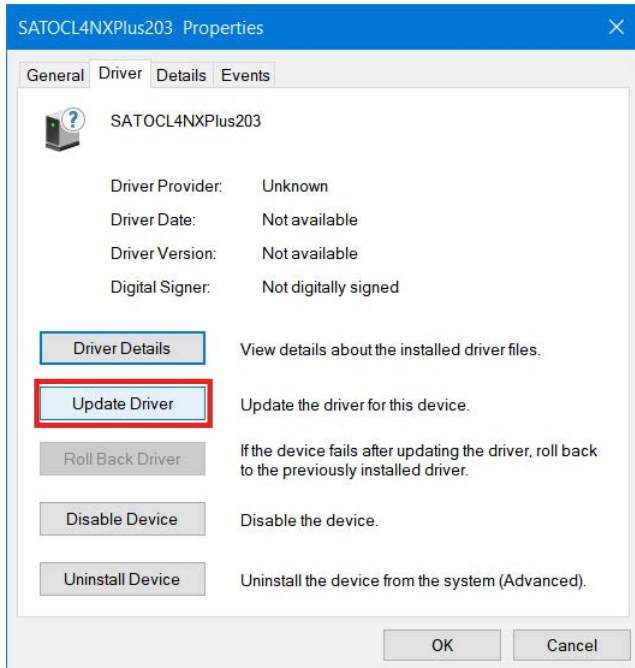
4. Click [Change settings].



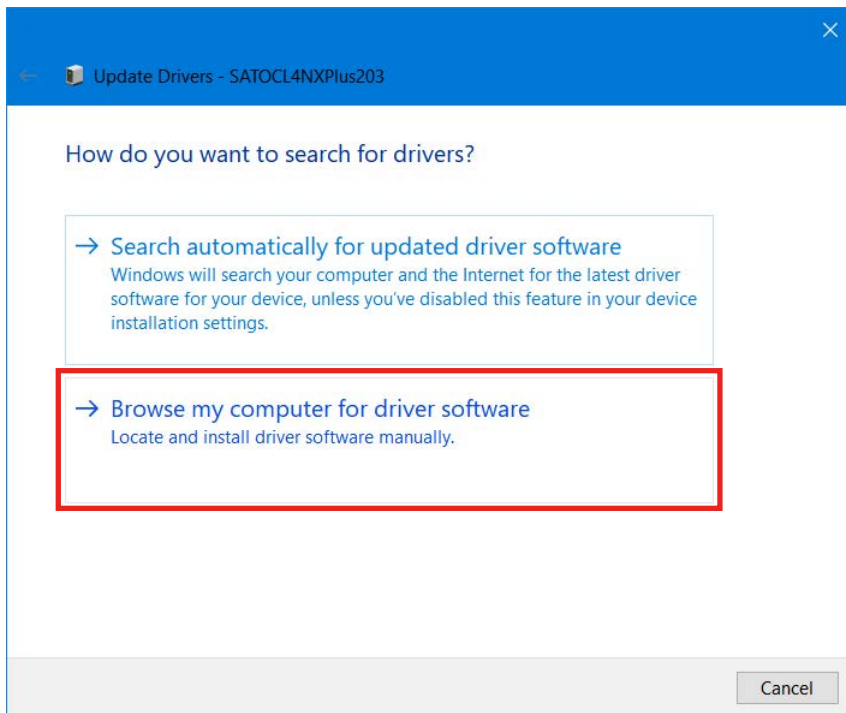
5. Select the [Driver] tab.



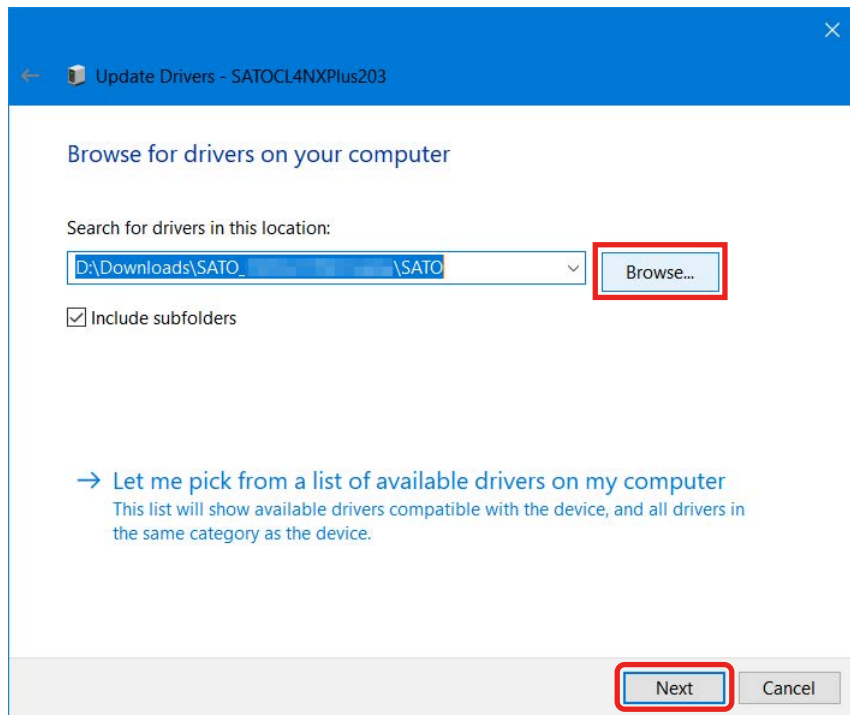
6. Click [Update Driver].



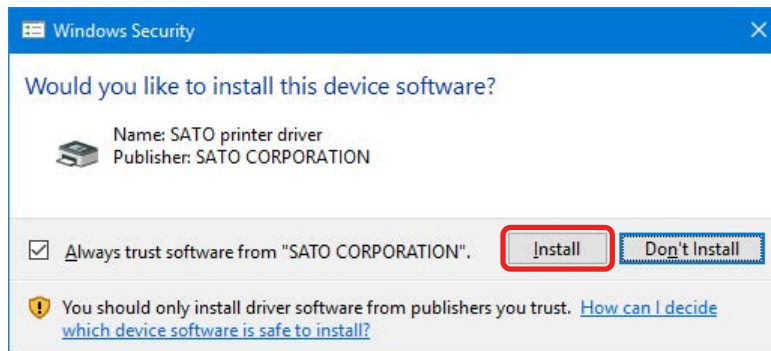
7. Click [Browse my computer for driver software].



- Click [Browse], specify the folder where the printer driver was extracted to, and click [Next].



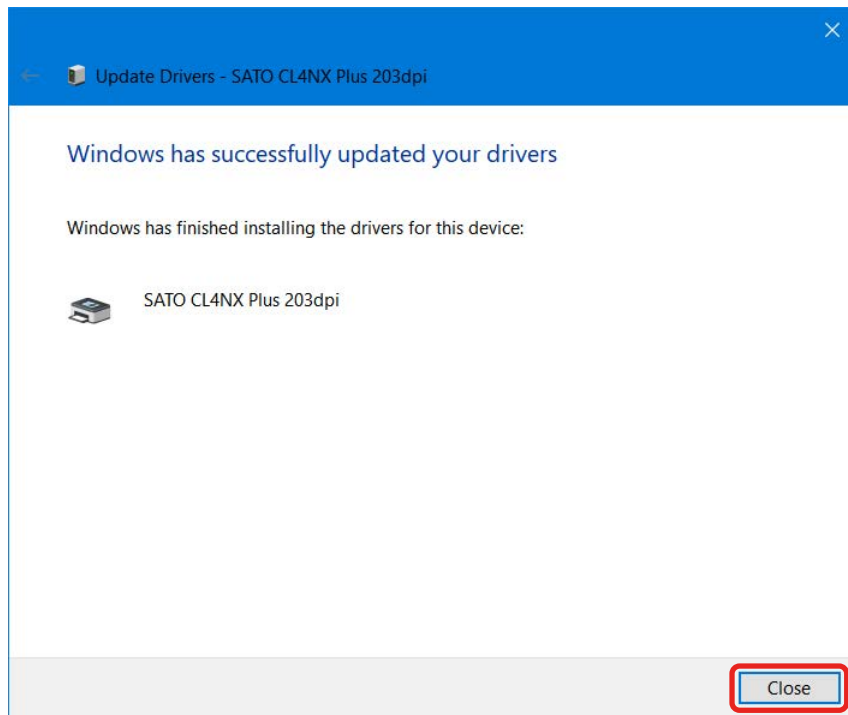
When the [Windows Security] screen appears, click [Install].



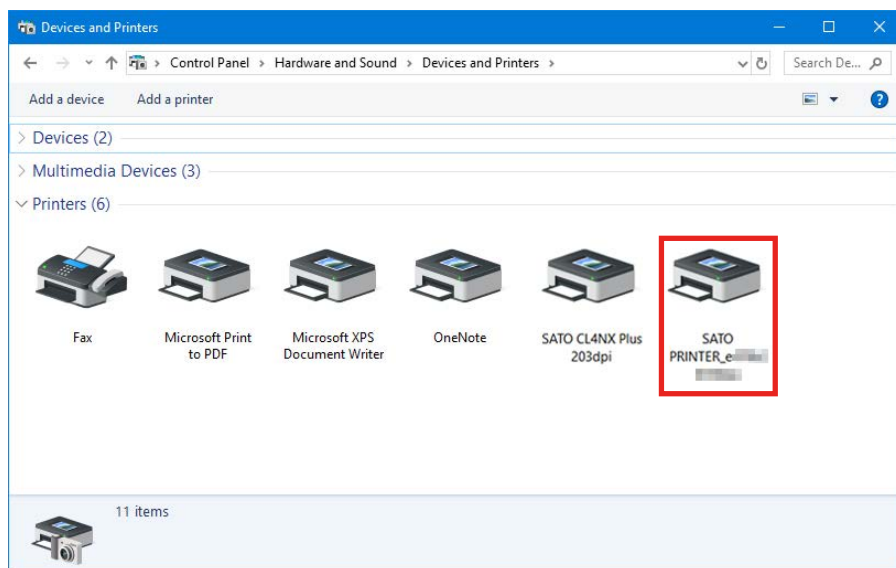
Note:

The warning screen above may not appear, depending on the computer environment. If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

9. Click [Close].



10. Confirm that the printer is shown under [Printers] in [Devices and Printers].



2. Setting Up the Printer Driver

After installing the printer driver, set up the printer driver as necessary.

2.1 [Printing Defaults] (For All Users) and [Printing Preferences] (For Individual Users)

There are two printer driver settings: [Printing Defaults], which is applied to all users, and [Printing Preferences], which is applied to users individually. While the settings and interface for [Printing Defaults] and [Printing Preferences] are the same, the behavior differs.

[Printing Defaults]

This setting is used for an administrator to manage default values and settings of other users.

Settings changed in [Printing Defaults] are applied to [Printing Preferences] for other users.

The default values for [Printing Preferences] of newly added users are the settings for [Printing Defaults] at the time the user was added.

[Printing Preferences]

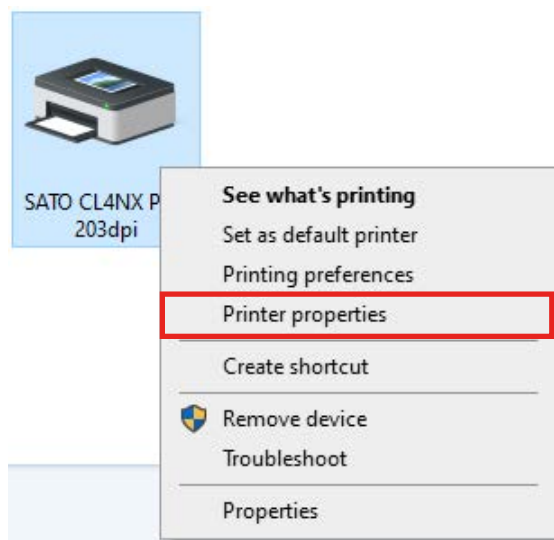
This setting is used to change settings for individual user.

Settings changed in [Printing Preferences] do not affect the settings of other users.

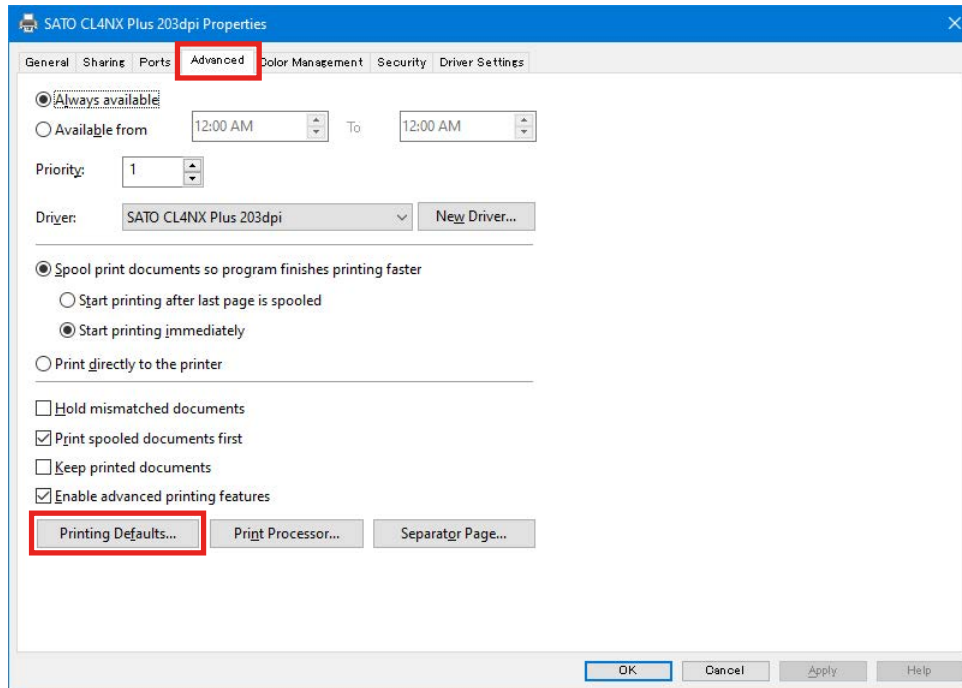
Settings changed in [Printing Preferences] take priority over settings in [Printing Defaults].

Opening [Printing Defaults]

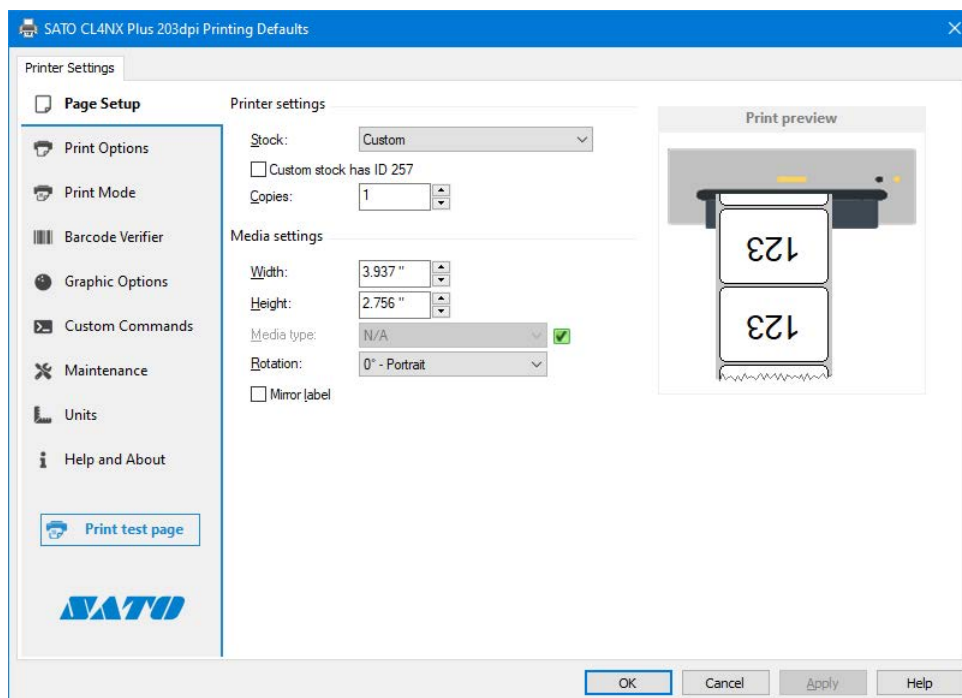
1. Open [Devices and Printers], right-click the installed printer driver, and select [Printer properties].



2. Click the [Advanced] tab and then [Printing Defaults].

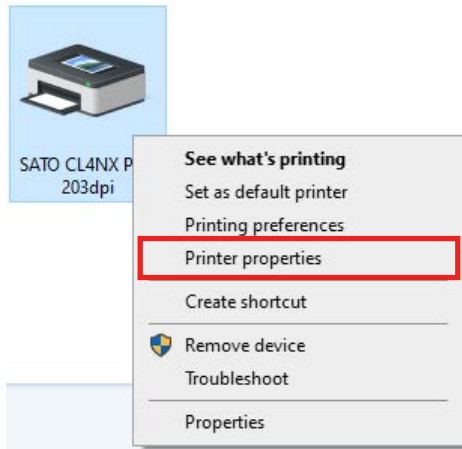


The [Printing Defaults] screen appears.

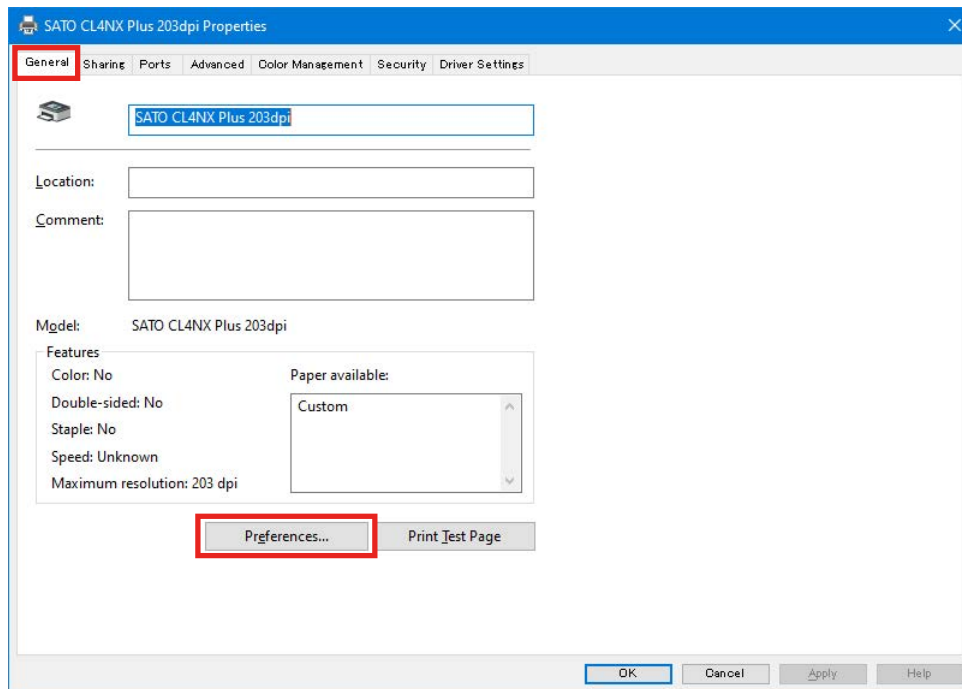


Opening [Printing Preferences]

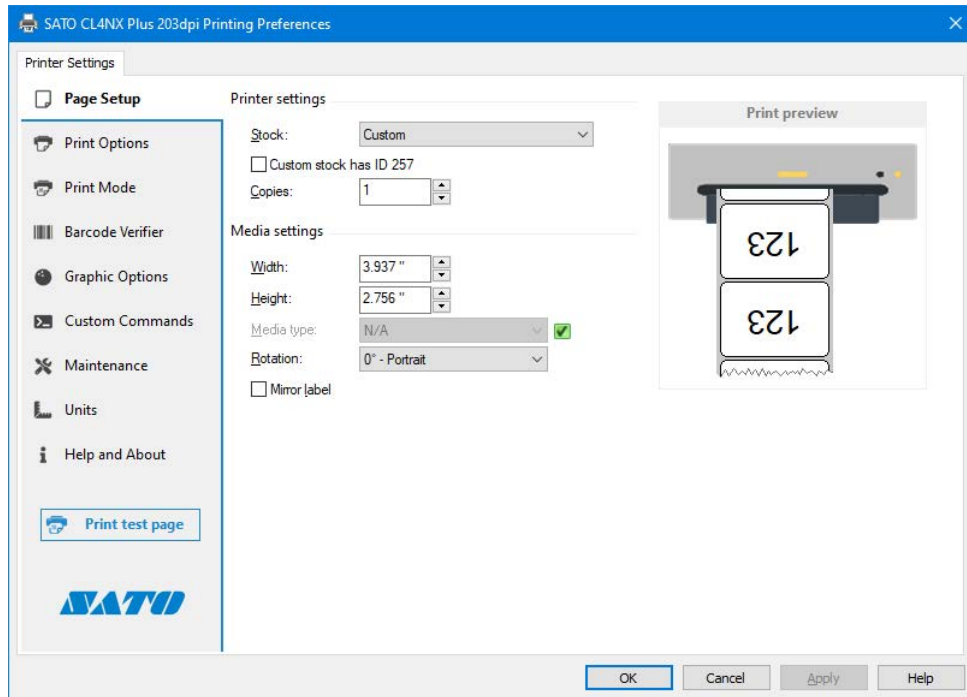
1. Open [Devices and Printers], right-click the installed printer driver, and select [Printer properties].



2. Click the [General] tab and then [Preferences].



The [Printing Preferences] screen appears.



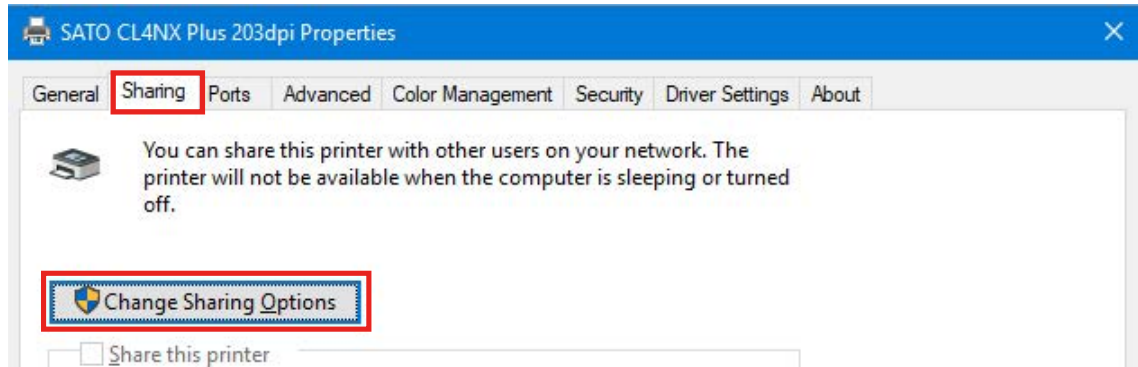
Note:

When you right-click the printer driver in [Devices and Printers] and select [Printing preferences], the same setting screen for the [Printing Preferences] appears.

2.2 How to Get Administrator Privileges

To change settings, add and change ports, administrator privileges are required.

1. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
2. Click the [Sharing] tab and then [Change Sharing Options].



The [Printer Properties] screen will appear with administrator privileges.

What to do if [Change Sharing Options] is not shown

Perform the procedure below to show the button. This procedure is performed in Windows 10 as an example. Depending on the settings of the Windows version that you are using, the menu layout may be different. You may also not be able to change settings.

- a. Open Start icon > [All apps] > [Windows System Tools] > [Control Panel] > [Choose homegroup and sharing options] or [HomeGroup] > [Change advanced sharing settings].
- b. Under [File and printer sharing] in [Home or Work (or Public or Domain) (current profile)], select [Turn off file and printer sharing], and then click [Save changes].

3. Settings on the [Driver Settings] Tab

You can configure various settings for the printer on the [Driver Settings] tab on the [Printer Properties] dialog box.

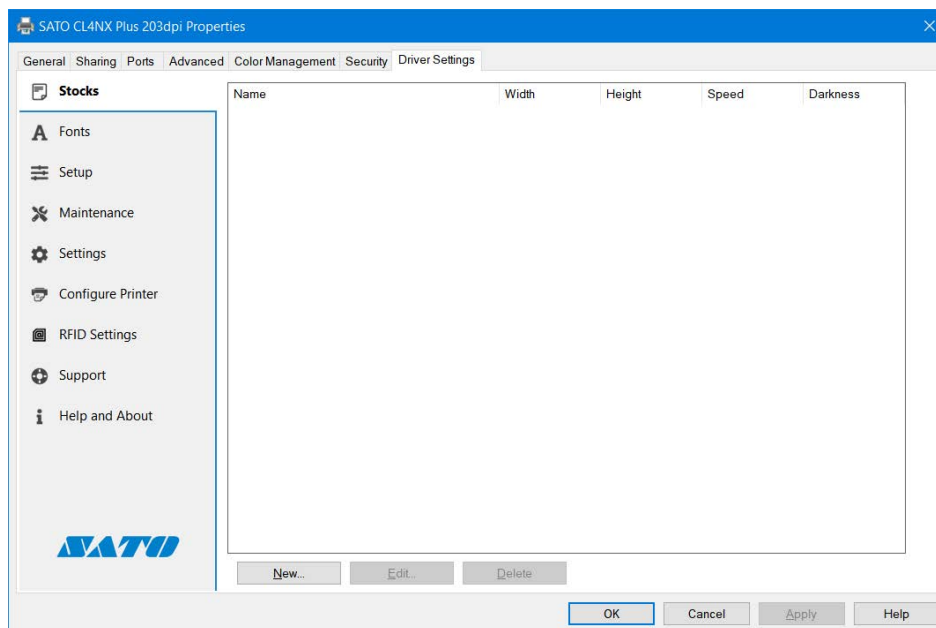
The settings on the [Driver Settings] tab are shared with all users who use the computer that the printer driver is installed on.

Showing the [Driver Settings] Tab

1. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
2. Click the [Driver Settings] tab.

3.1 Stocks

You can register the media size, print speed, and other settings in a lump. By registering the settings in advance, you can easily configure settings in accordance with the media.



[New]

Newly register stock.

[Edit]

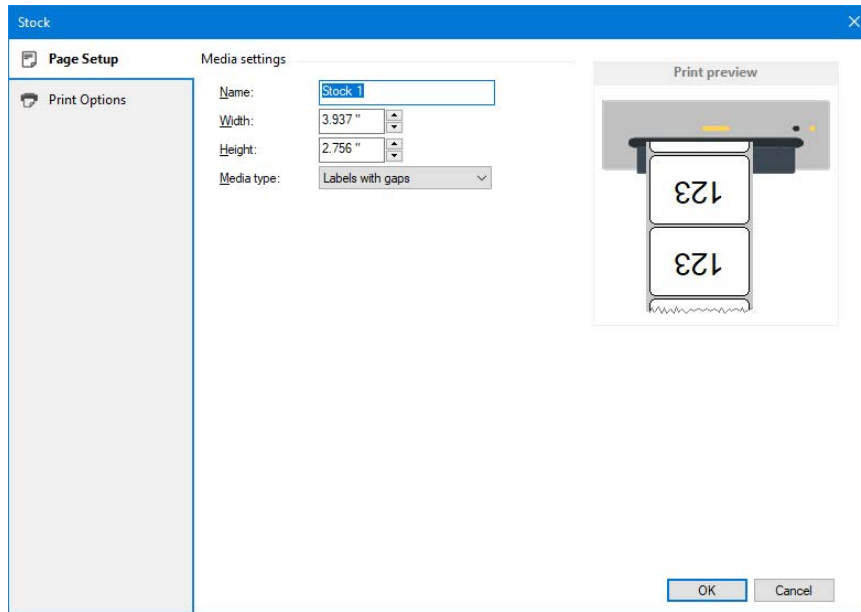
Edit the details of registered stock.

[Delete]

Delete registered stock.

3.1.1 Page Setup

This screen is shown when you click [New] or [Edit] on the [Stocks] screen.



[Name]

Set or edit the name of the media.

[Width]

Set the media width that includes the liner.

[Height]

Set the media height that includes the liner.

[Media type]

You can set the media type.

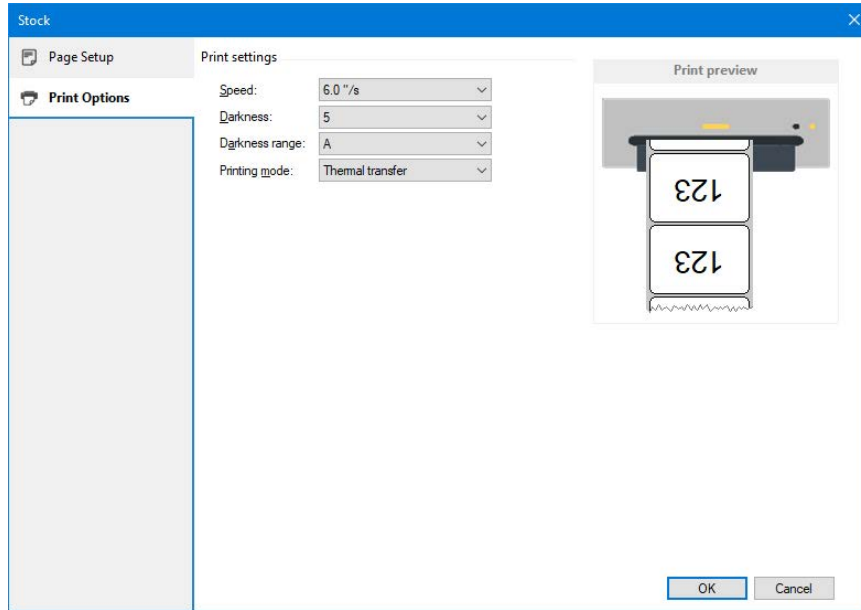
[Media form] (CT4-LX only)

Select the media form from [Roll] and [Fan-fold].

[Black mark position] (FX3-LX only)

This setting can only be configured when [Media type] is set to [Labels with black marks]. Select from [Bottom black mark] and [Top black mark].

3.1.2 Print Options



[Speed]

This shows the print speed for the media that you set on the [Page Setup] screen.

[Darkness]

This shows the print darkness for the media that you set on the [Page Setup] screen. You can set 10 levels, from [1] to [10]. The bigger the number, the darker the print result.

[Darkness range] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/S84NX/S86NX only)

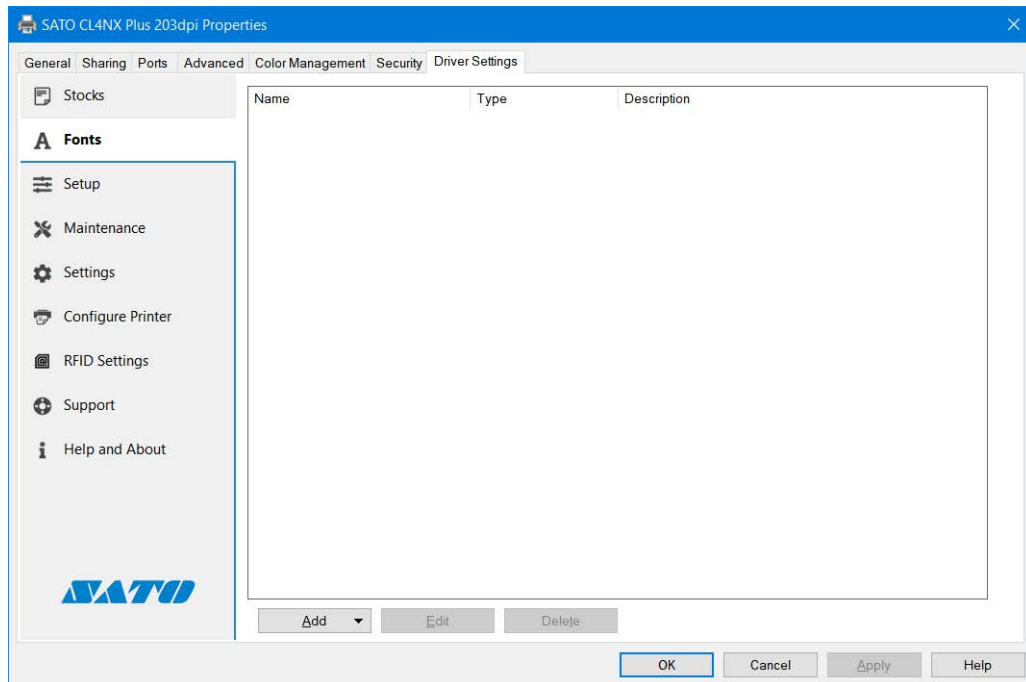
This shows the darkness range for the media that you set on the [Page Setup] screen. For details, refer to the Operator Manual of your printer.

[Printing mode] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/S84NX/S86NX only)

This shows the printing mode for the media that you set on the [Page Setup] screen. You can set [Thermal transfer] or [Direct thermal].

3.2 Fonts

You can manage barcode fonts, command fonts, and substitution fonts on this screen.



[Add]

Select the fonts to add from [Barcode], [Command], [Substitution], and [Download].

[Edit]

Edit the settings of registered fonts.

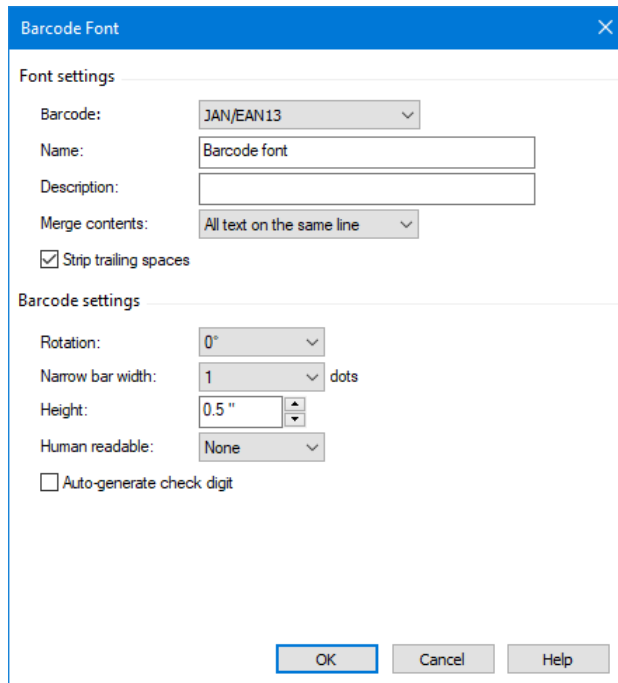
[Delete]

Delete registered fonts.

3.2.1 Barcode Font Settings and Usage Example

“Barcode font” is a feature that converts the numbers and strings into a barcode format for printing.

The converted string is not shown as a barcode on the edit or preview screen in application.



[Barcode]

Select a type of barcode or 2D code that you want to register.

[Name]

Set the name of the barcode font that you want to register. The name that you set here is shown on the font list in the application.

[Description]

Enter the description of the barcode font that you want to register.

[Merge contents]

This setting is used to apply commands only the appropriate number of times to objects divided multiple times in lines or on the page.

[No merge]:

Any special processing is not performed.

[All text on the same line]:

Apply to text that have the same Y coordinates only once using the same font.

The result is that, even if one line of text is divided into multiple characters, it is applied only once.

[All text on the page]:

Apply to all text on the same label only once using the same font.

This setting is used to apply commands to serial data like initialization and end processing only once.

Depending on the [Barcode] type, the following settings vary.

[Rotation]

Select [0°], [90°], [180°], or [270°] as the angle to print barcodes and 2D codes.

[Narrow bar width]

Specify the bar width for narrow bars.

This setting may not appear depending on the barcode type.

[Height]

Specify the height of the barcode.

[Human readable]

Specify how to append human readable text (comments).

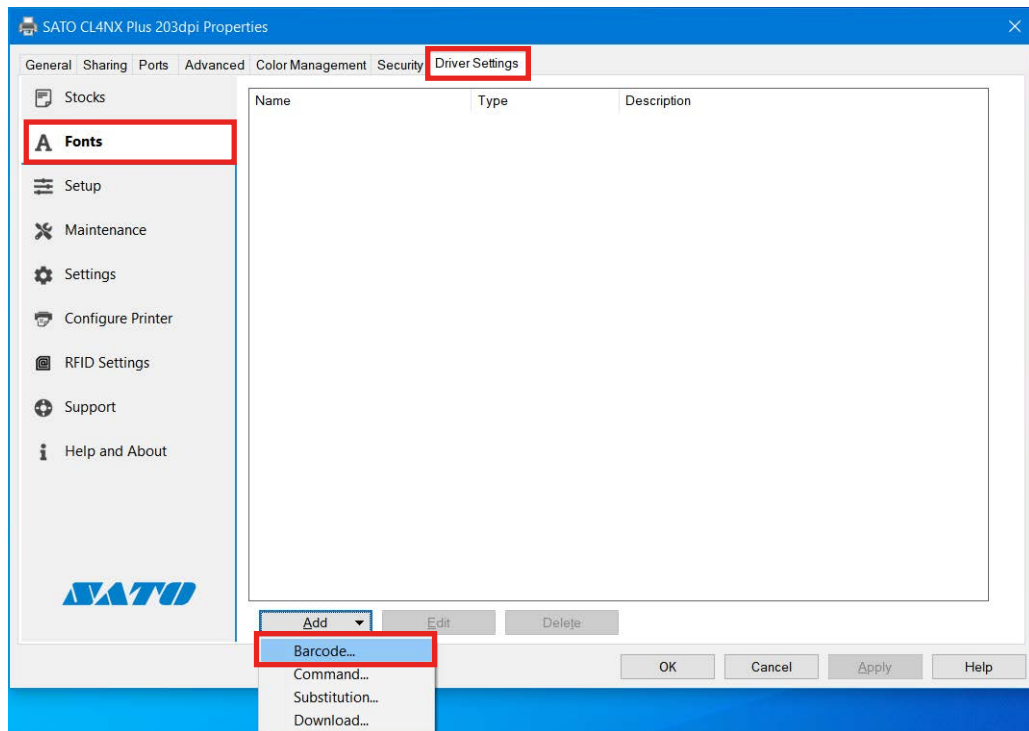
[Auto-generate check digit]

Selecting this check box enables a check digit to be automatically generated.

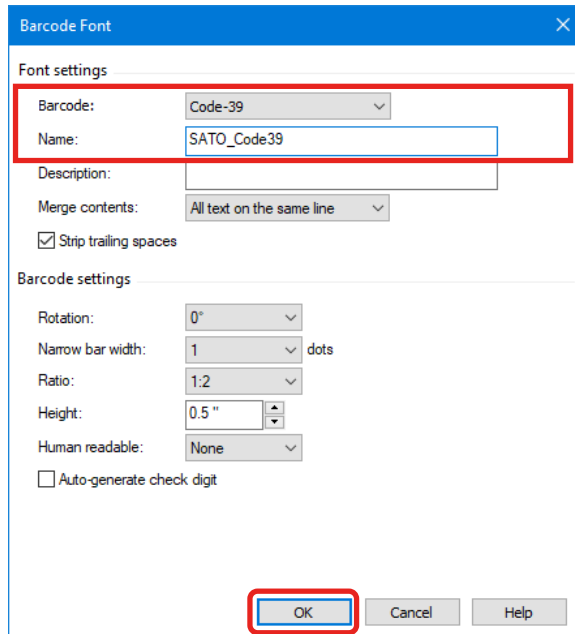
Barcode font use example

This example shows how to add the "Code-39" barcode font and use it in an application.

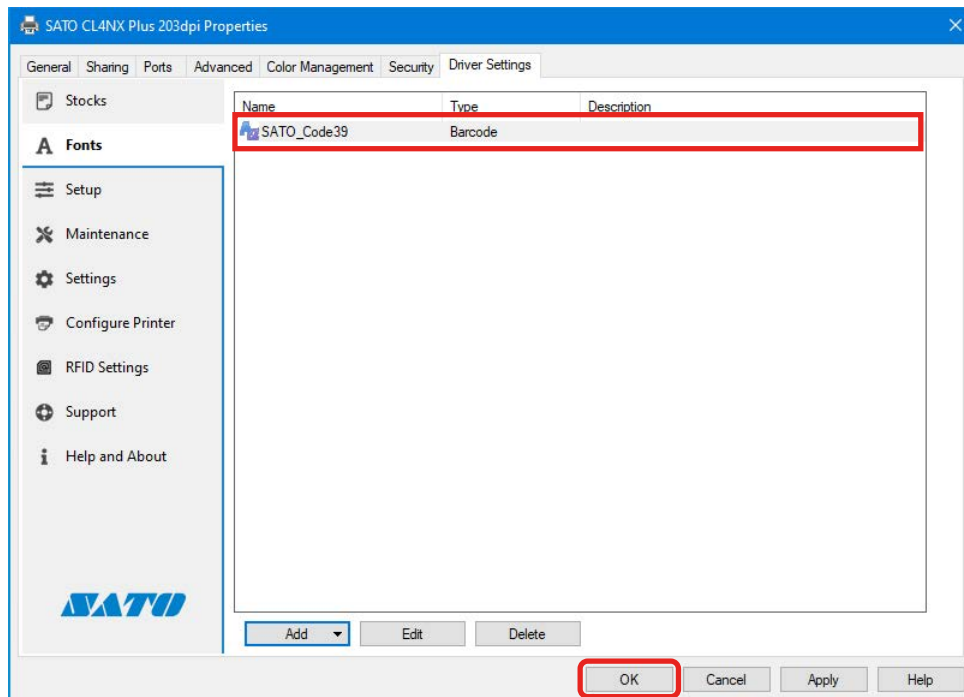
1. Open [Devices and Printers], right-click the printer, and select [Printer properties].
2. Select [Fonts] on the [Driver Settings] tab and then select [Add] > [Barcode].



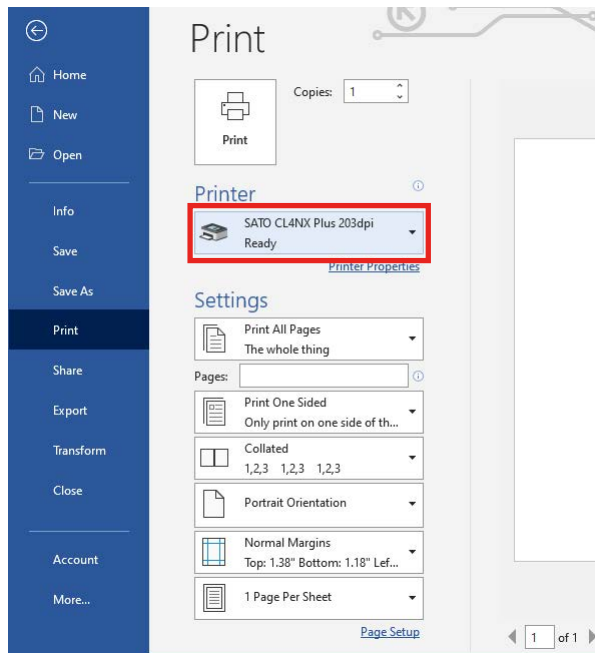
3. Configure the following settings and click [OK]:
[Barcode]: [Code-39]
[Name]: E.g., "SATO_Code39"



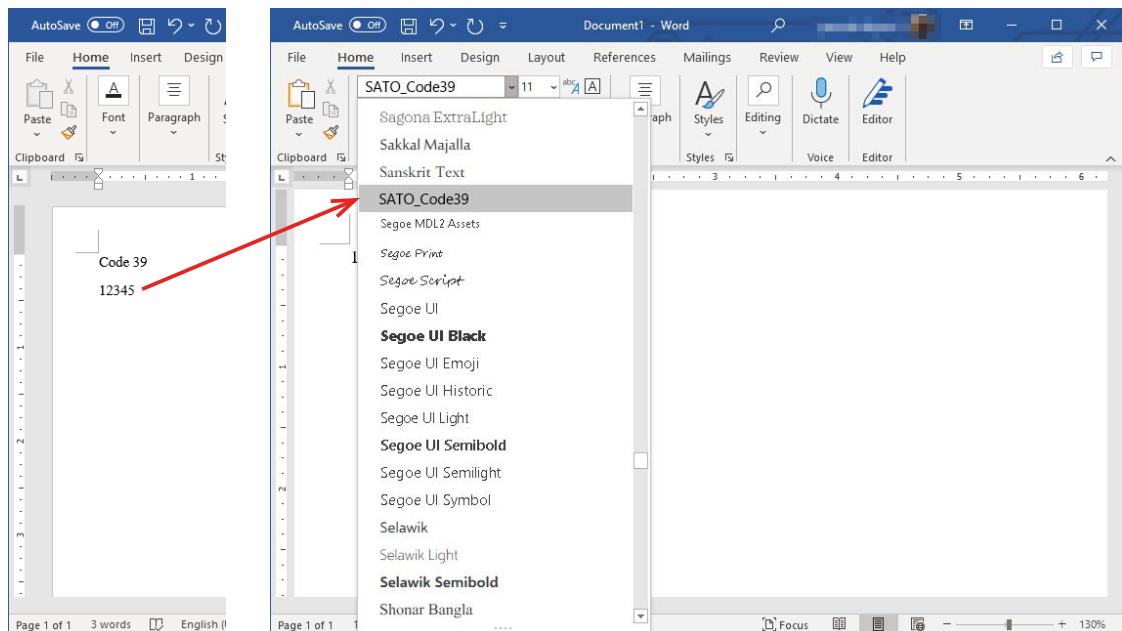
4. Confirm that the name you set for the barcode font is registered and click [OK].



5. Start the application and specify the printer that you set the barcode font for as the printer to be used.



6. Enter the text that you want to convert into a barcode in the application and specify [SATO_Code39] as the text font.



In this example, "12345" will be converted to a barcode. On the application, a line feed will be appended to the end of "12345". Set the barcode font to "12345" excluding the line feed.

7. Print the barcode.

The print result is shown below. The numbers "12345" specified as the CODE39 barcode font are printed as a CODE39 barcode.

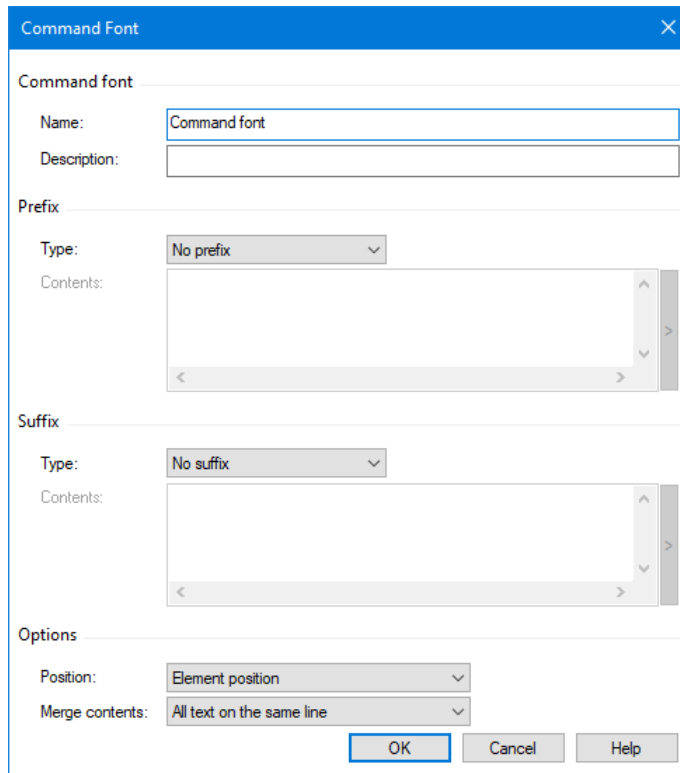


Note:

- Some characters cannot be used and there are text length restrictions depending on the barcode type set as the barcode font. Moreover, if the settings are not configured correctly, the text may not be printed as a barcode. For the data specifications that correspond to the barcode type, refer to the Programming Reference of your printer.
 - The text is not shown as a barcode on the edit or preview screen in application.
 - If you cannot select registered barcode font in the application, make sure that the barcode font is registered in the printer driver to be used for printing.
 - The font size is independent of the barcode size. Adjust the data so that it fits on the layout of the application.
 - If the converted barcode does not fit onto the page, it will not be printed. Adjust the position of the data on the application or adjust the barcode font settings so that the barcode fits onto the media.
-

3.2.2 Command Font Settings and Usage Example

Command font is a virtual font for directly sending commands to the printer. You can use features that are not directly supported by the printer driver. Knowledge of SATO Barcode Printer Language (SBPL) command is necessary to use command font. For details on SBPL commands, refer to the Programming Reference of your printer.



[Name]

Set the name of the command font that you want to register.

This name is shown on the font list in the application.

[Description]

You can enter a description of the command font to be registered.

[Prefix] [Suffix]

Specify how the text is to be supplied. The specified text can be appended to the front or the end of a command.

[No prefix]: A prefix is not used.

[No suffix]: A suffix is not used.

[File]:

Prefixes and suffixes are loaded from an external file and appended to the data.

[Parsed file]:

Prefixes and suffixes are loaded from an external file and appended to the data.

Reserved variables can be included and are converted to data during printing.

[Text]: Prefixes and suffixes are appended directly as text.

[Parsed text]:

Prefixes and suffixes are appended directly as text. Reserved variables can be included and are converted to data during printing.

[Position]

You can control the position that the command font is inserted into the print data.

[Before page]: The command is inserted before the page starts.

[Before elements]:

The command is inserted after the page starts and in front of all objects.

[Element position]: The command is inserted at the position of the object.

[After elements]:

The command is inserted after all the objects and before the page ends.

[After page]: The command is inserted after the page ends.

[Merge contents]

This setting is used to apply commands only the appropriate number of times to objects divided multiple times in lines or on the page.

[No merge]: Any special processing is not performed.

[All text on the same line]:

Apply to text that have the same Y coordinates only once using the same font.

This setting is applied even if one line of text is divided into multiple characters.

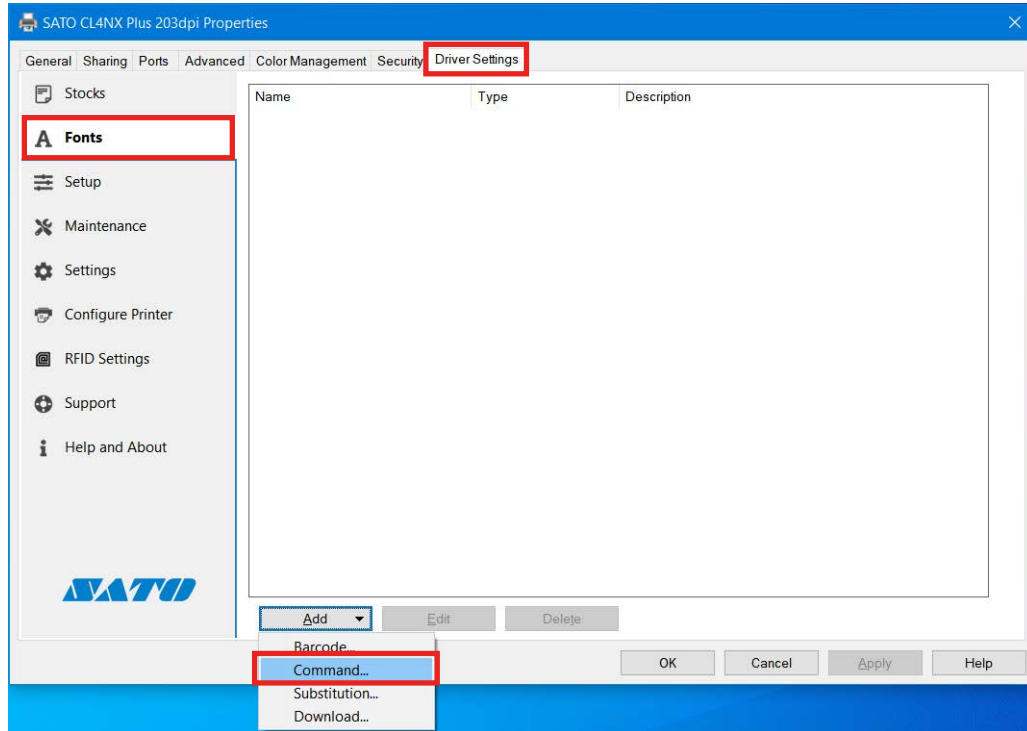
[All text on the page]:

Apply to all text on the same label only once using the same font. This setting is used to apply text to serial data like initialization and end processing.

Command Font Usage Example

This example shows how to add X21 printer device font as the font name "SATO Command Font" and use it in an application.

1. Open [Devices and Printers], right-click the printer, and select [Printer properties].
2. Select [Fonts] on the [Driver Settings] tab and then select [Add] > [Command].



3. Configure the following settings and click [OK]:

Command font

[Name]: E.g., "SATO_Command font"

Prefix

[Type]: [Parsed text]

[Contents]: E.g., "<ESC>V<Y><ESC>H<X><ESC>X21,"

<ESC> is 1B in hexadecimal.

<ESC>, <Y>, and <X> can be entered with the keyboard. You can also select them from a list by clicking [>] on the right of [Contents].

Suffix

[Type]: [Text]

[Contents]: E.g., "678"

Command Font

Command font

Name: SATO_Command font

Description:

Prefix

Type: Parsed text

Contents: <ESC>V<Y><ESC>H<X><ESC>X21

Suffix

Type: Text

Contents: 678

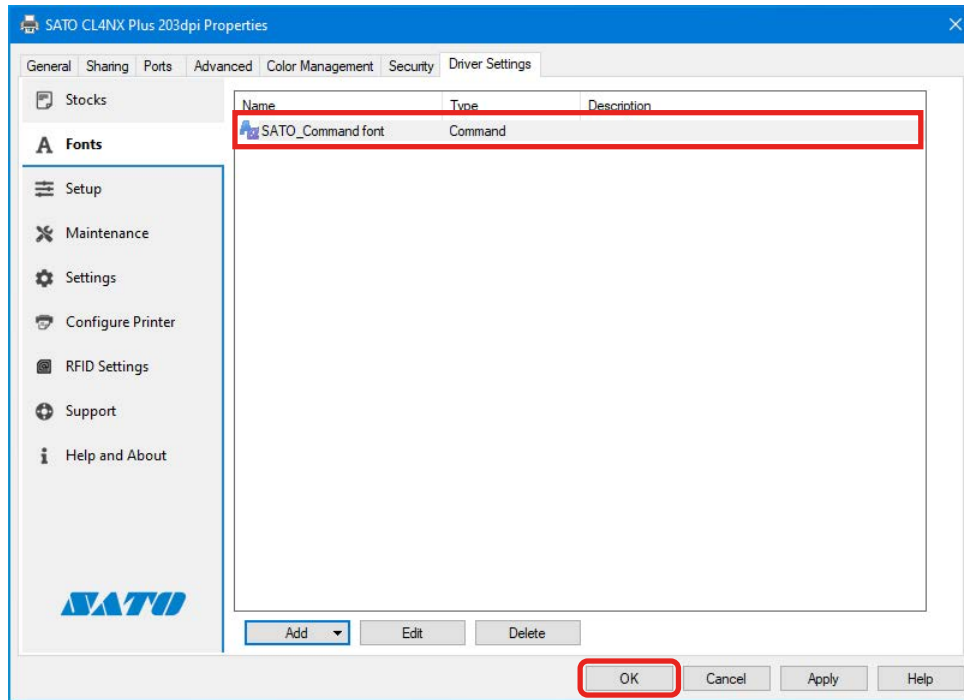
Options

Position: Element position

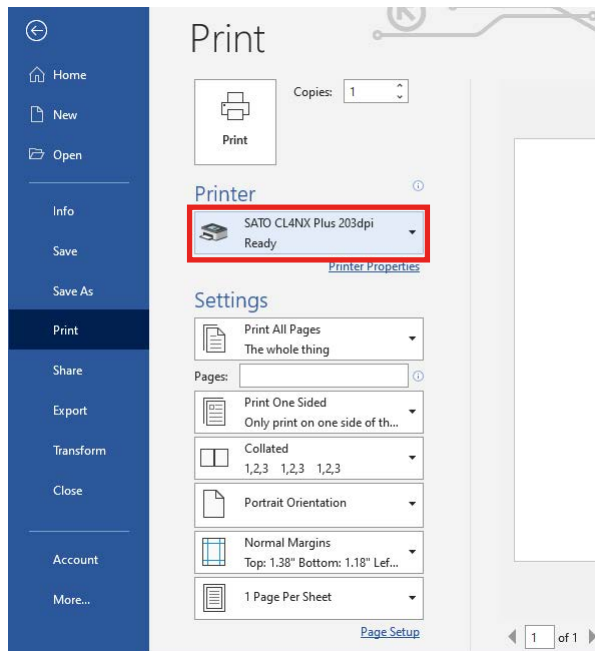
Merge contents: All text on the same line

OK Cancel Help

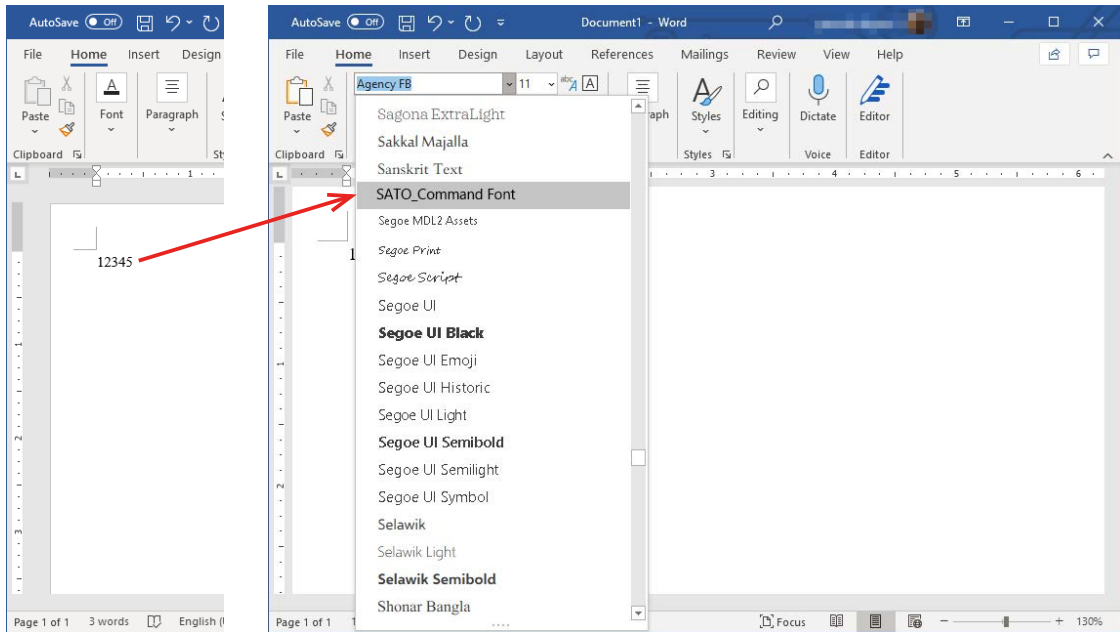
4. Confirm that the command font is registered and click [OK].



5. Start the application and specify the printer that you set the command font for as the printer to be used.



6. Enter the text in the application and specify [SATO Command Font] as the font.



7. Print the text.

The numbers "12345678" are printed in X21 font.



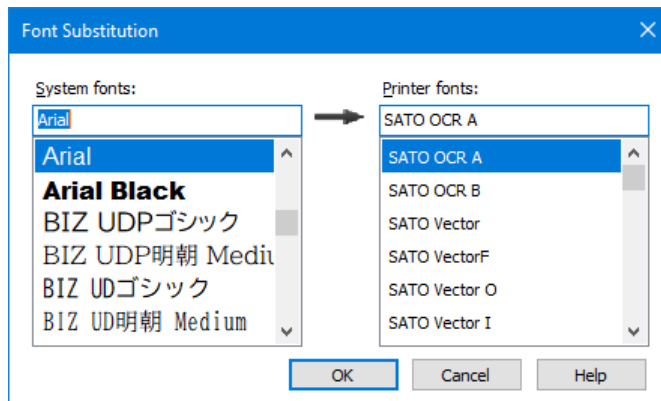
The content output as a command is as follows:

`<ESC>V<Y coordinate in the application><ESC>H<X coordinate in the application><ESC>X21, 12345 678`
 Prefix Suffix
↑
 Data entered into the application

Prefixes and suffixes are not shown on the edit or preview screen in application.

3.2.3 Substitution Font Settings and Usage Example

You can print by replacing the Windows system fonts with the printer's device fonts when defining substitution fonts.



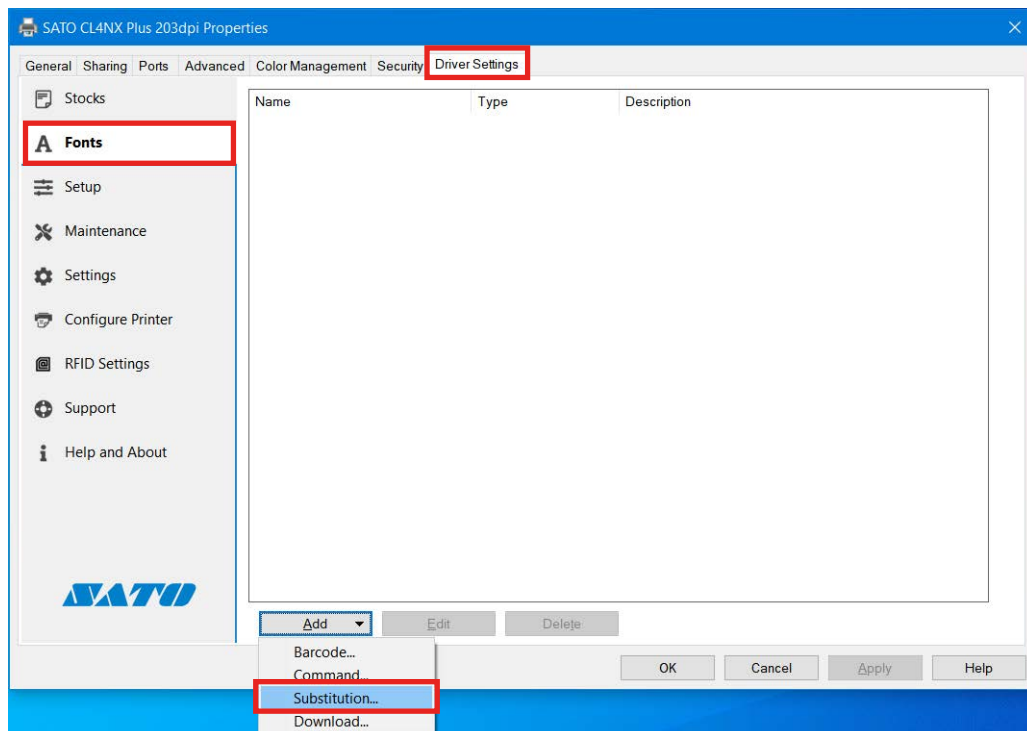
Use these fonts when you cannot select device fonts (they are not shown) from the application font list.

You can also replace them with the barcode and command fonts that you added.

Substitution Font Usage Example

This section describes an example using substitution fonts.

1. Open [Devices and Printers], right-click the printer, and select [Printer properties].
2. Select [Fonts] on the [Driver Settings] tab and then select [Add] > [Substitution].

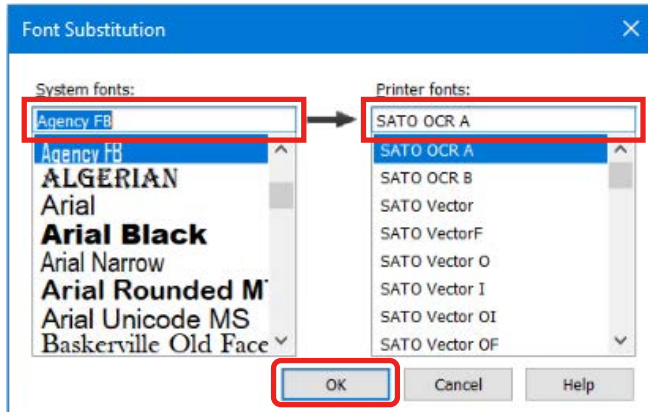


3. Configure the following settings and click [OK]:

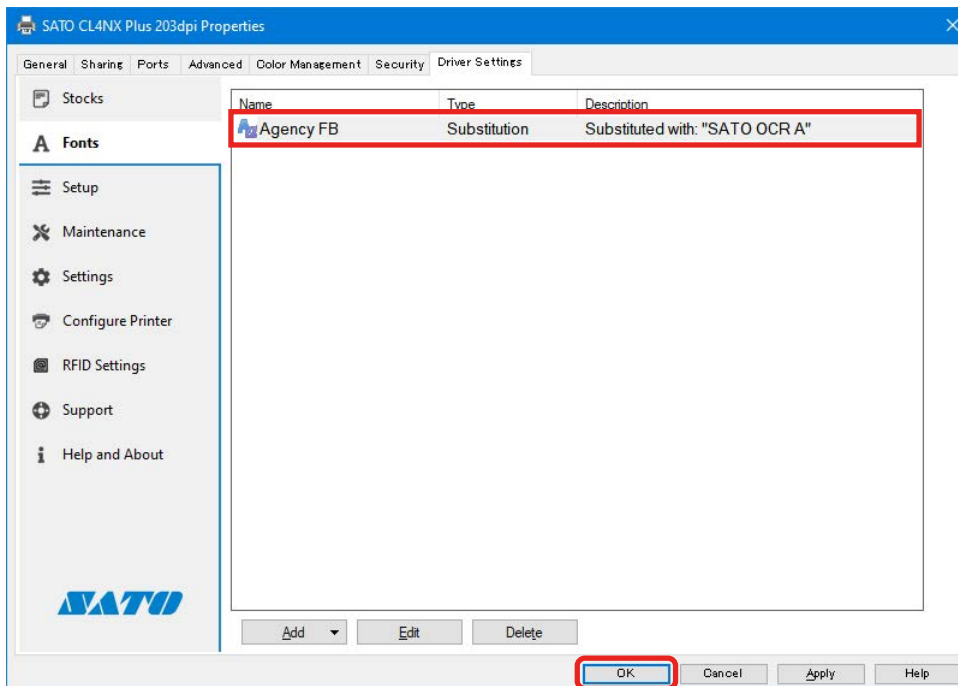
Windows system fonts are shown in the [System fonts] field and printer device fonts are shown in the [Printer fonts] field.

[System fonts]: [Agency FB]

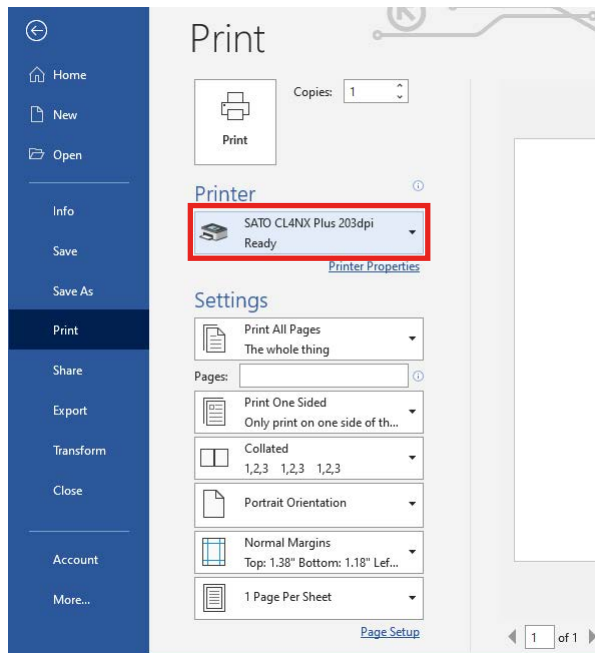
[Printer fonts]: [SATO OCR A]



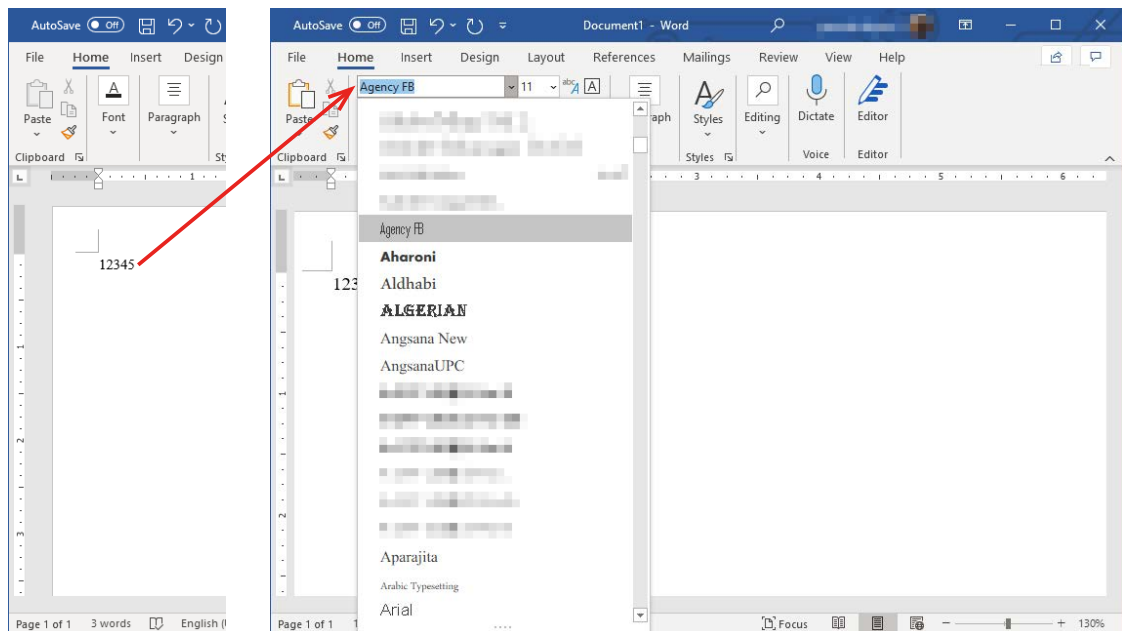
4. Confirm that the name you set for the substitution font is registered and click [OK].



5. Start the application and specify the printer that you set the substitution font for as the printer to be used.

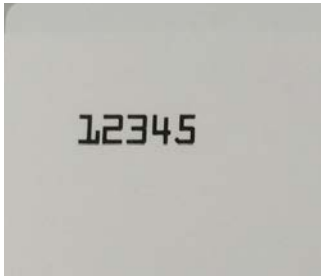


6. Enter text into the application and change the text font to the Windows system font that you set as the substitution font, "Agency FB".



7. Print the text.

The font for "12345" is replaced by the substitution font that you set for the device font, "SATO OCR A," and printed.



Note:

The text is not shown as the replaced device font on the edit or preview screen in application.

3.2.4 Download Font Settings (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/PW4NX/S84NX/S86NX only)

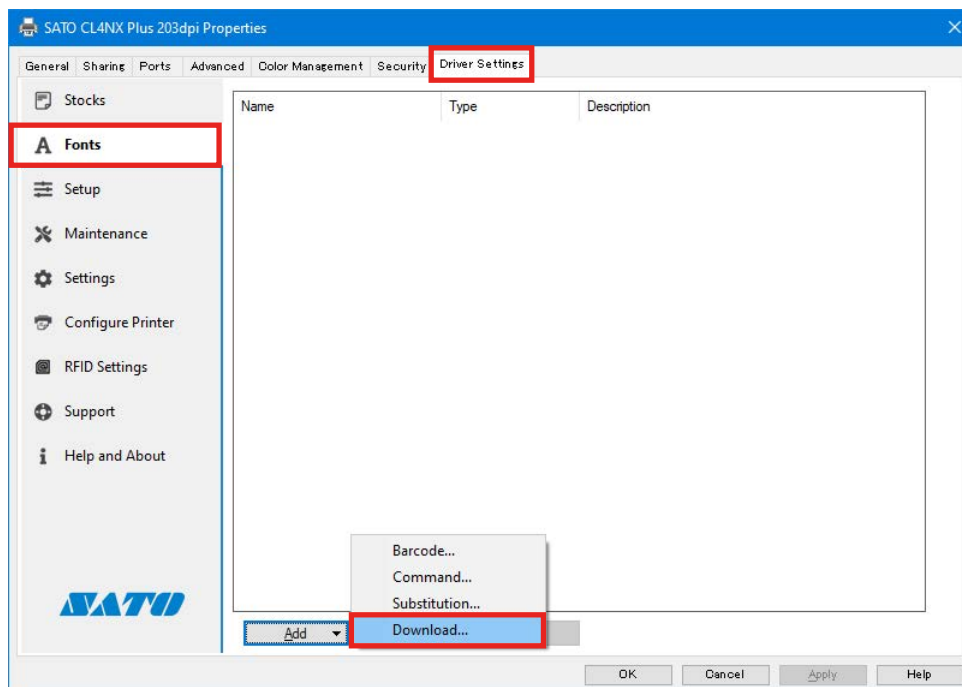
You can download the fonts installed on Windows to your printer.

Normally, when sending a layout using Windows fonts via the driver, the specified font is sent to the printer as graphic data.

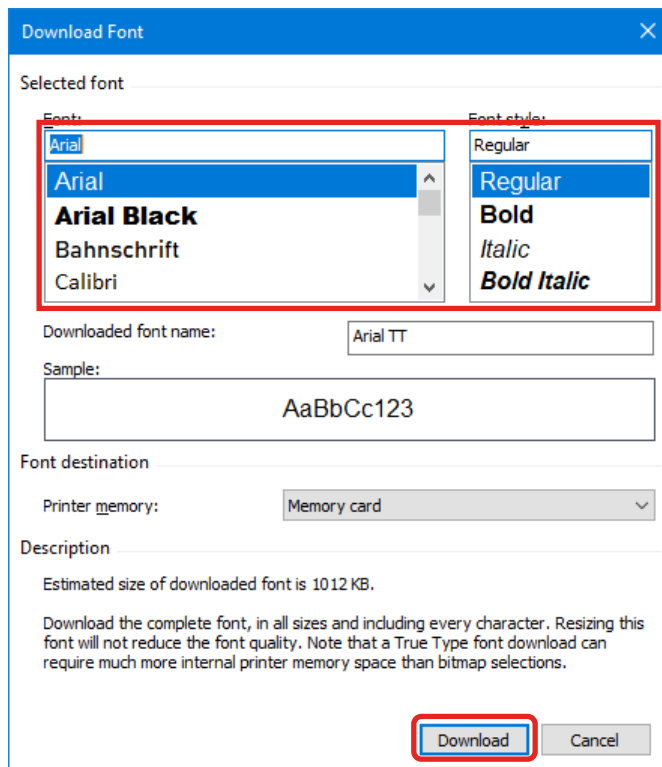
If you use a download font for your layout, it will send the character code instead of the graphic data when printing. On the printer, the font corresponding to the transmitted character code is called and printed.

This reduces the size of the transmitted data, which can be expected to improve throughput.

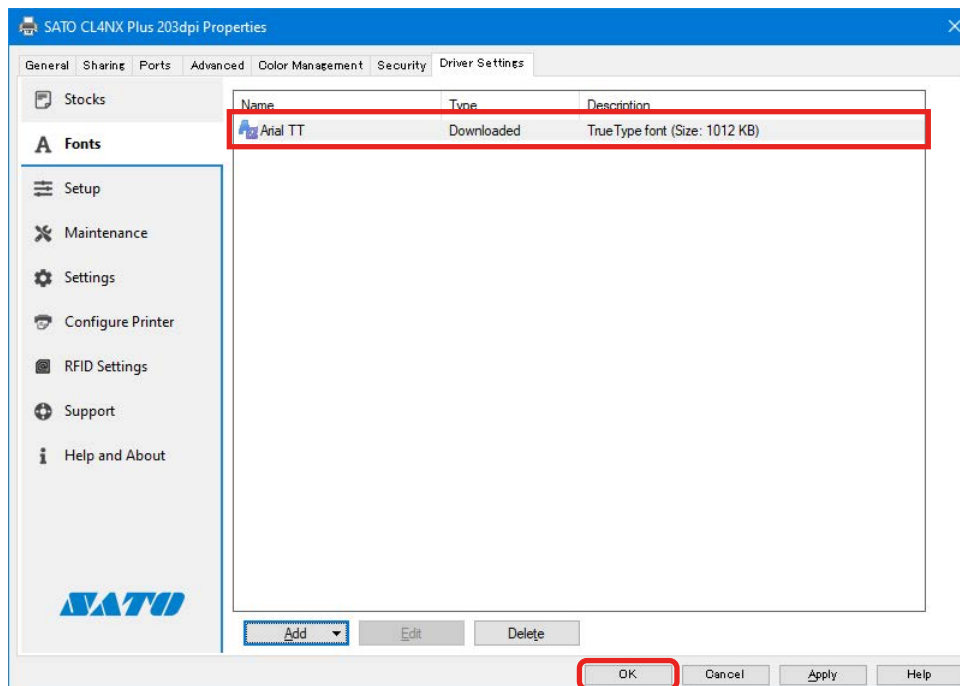
1. Open [Devices and Printers], right-click the printer, and select [Printer properties].
2. Select [Fonts] on the [Driver Settings] tab and then select [Add] > [Download].



3. Select the fonts you want to download to the printer and click [Download].



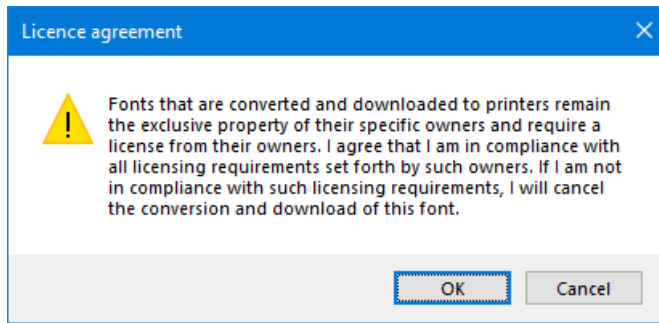
4. Confirm that the download font is registered and click [OK].



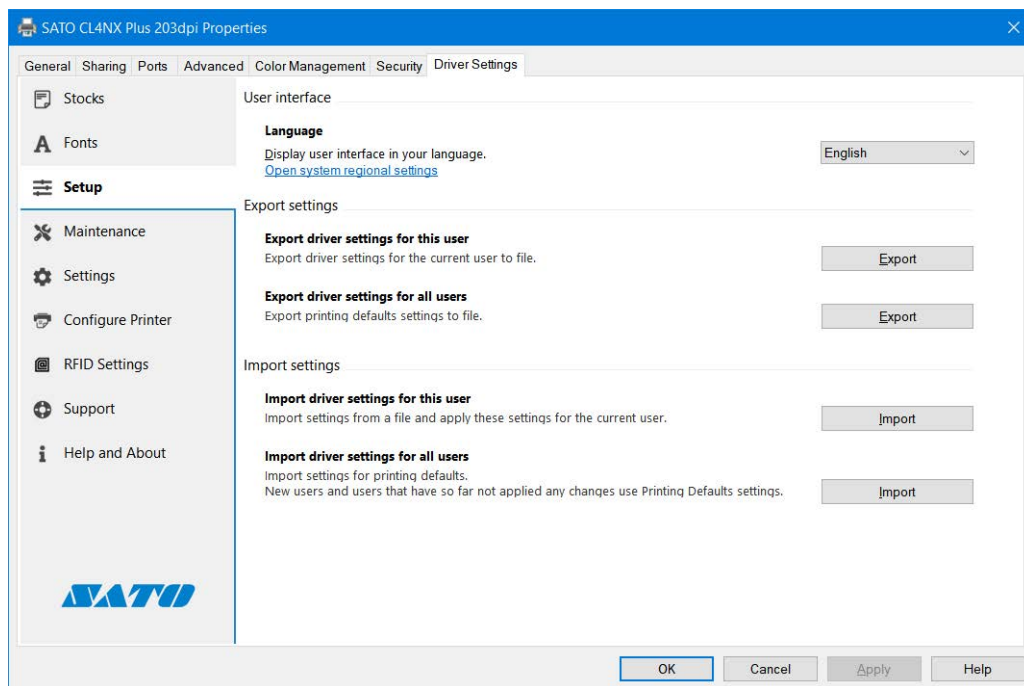
When layouts using download fonts are sent via the driver, it will improve throughput and reduce printing time.

Note:

Some Windows fonts have license terms (such as paid third-party fonts). You must comply with the license terms for those fonts.



3.3 Setup



User interface

[Language]

You can switch the display language for the [Printing Defaults], [Printing Preferences], and [Driver Settings] tabs.

Export settings

[Export driver settings for this user]

The settings on the [Printing Preferences] and [Driver Settings] tabs will be saved to a file.

[Export driver settings for all users]

The settings on the [Printing Defaults] and [Driver Settings] tabs will be saved to a file.

Import settings

[Import driver settings for this user]

You can import the files created by "Export".

If you have administrator privileges

The content of the imported file will be applied to the [Printing Preferences] and [Driver Settings] tabs.

If you do not have administrator privileges

The content of the imported file will be applied to the [Printing Preferences] tab.

[Import driver settings for all users]

You can import the files created by "Export".

If you have administrator privileges

The content of the imported file will be applied to the [Printing Defaults] and [Driver Settings] tabs.

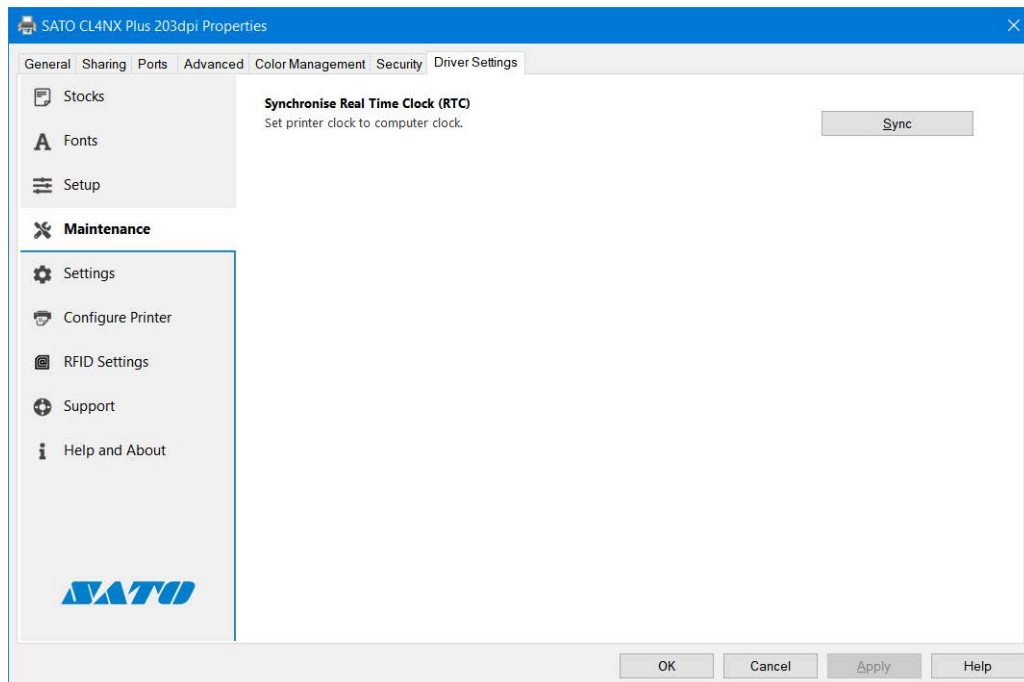
If you do not have administrator privileges

This feature is not available.

Note:

- For details on [Printing Preferences] and [Printing Defaults], refer to "2.1 [Printing Defaults] (For All Users) and [Printing Preferences] (For Individual Users)".
 - The settings in [Configure Printer] on the [Driver Settings] tab cannot be imported or exported.
 - The extension of the exported file is "drx".
-

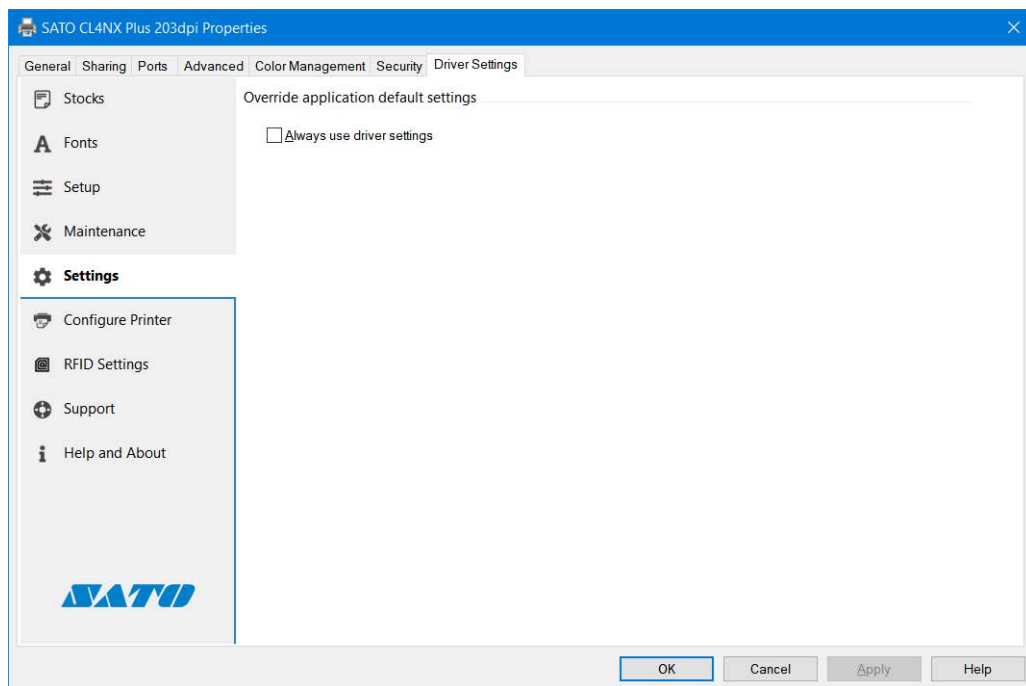
3.4 Maintenance (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/FX3-LX/PW208NX/PW208mNX/S84NX/S86NX only)



Synchronise Real Time Clock (RTC)

Synchronize the calendar information of the printer with the computer by sending and setting the computer information (year, month, day, hour and minute) to the printer equipped with the optional RTC (Real Time Clock) calendar kit.

3.5 Settings



Override application default settings

[Always use driver settings]

Enable this setting to discard all printer settings specified in the application and always use the settings on the printer driver.

Note:

Note that this setting cannot be used with some applications. In that case, set the printer driver in the application.

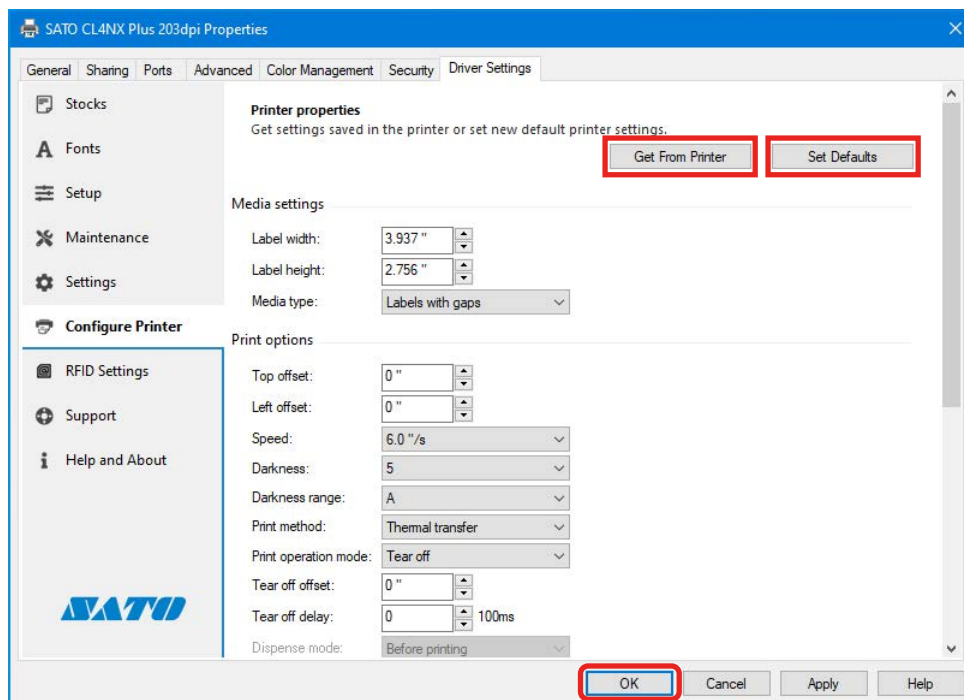
3.6 Configure Printer

You can acquire and change the settings of the printer connected to the computer. To use this feature, the printer needs to be available for printing from the computer using the printer driver.

Note that the [Configure Printer] settings are not related to the printer driver settings.

1. Open [Devices and Printers], right-click the desired printer, and select [Printer properties].
2. Click [Get From Printer].

If you successfully acquire the settings from the printer, the settings change to match those of the printer settings.



3. Change the settings as necessary.

4. Click [Set Defaults].

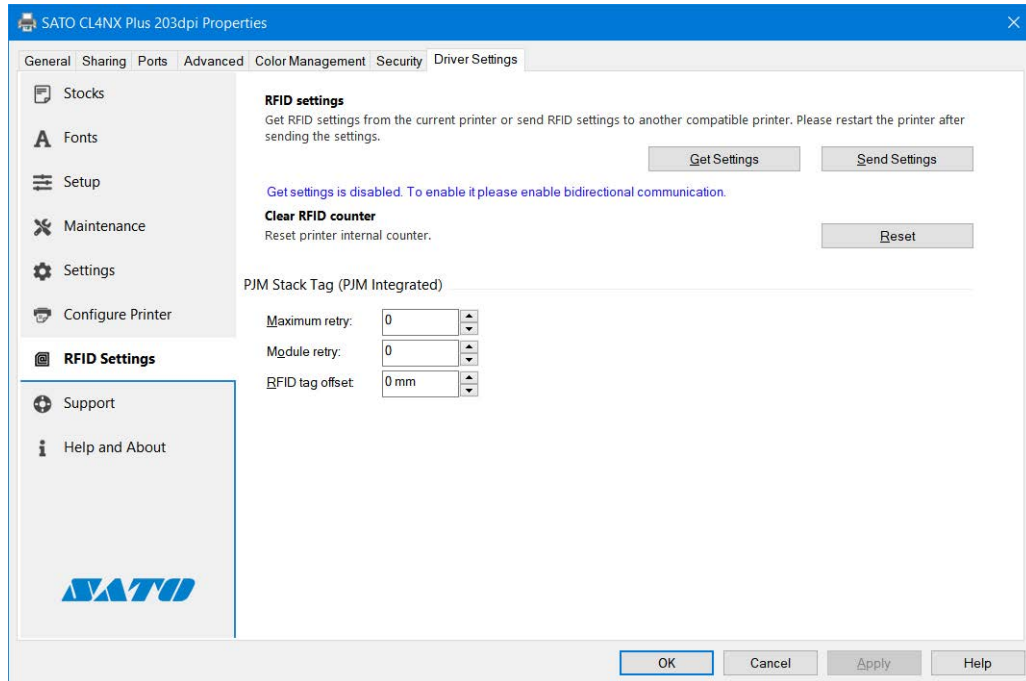
The settings are sent to the printer. You can click [Get From Printer] again to confirm that the settings have been applied to the printer.

5. Click [OK].

The screen closes.

3.7 RFID Settings (CL4NX/CL4NX Plus/CL6NX Plus only)

For RFID (PJM) specification models, you can manage the RFID function. To use this function, check that the printer is available for printing from the computer using the printer driver. This operation requires Administrator Privileges.



RFID Settings

[Get Settings]

Click to get the RFID settings of the printer.

[Send Settings]

Click to send the RFID settings to the printer.

Clear RFID counter

[Reset]

Click to reset the printer's internal counter.

Note:

You need to restart the printer after sending settings.

PJM Stack Tag (PJM Integrated)

This group of settings lets you determine the PJM (Phase Jitter Modulation) RFID tag properties.

[Maximum retry]

Sets the maximum number of retry prints when an error occurs.

The setting range is from 0 to 9. If you set to 0, the RFID error screen appears and printing continues.

[Module retry]

Sets the maximum number of retries when a write error occurs in the RFID module.

The setting range is from 0 to 9. If you set to 0, the RFID error screen appears and printing continues.

[RFID tag offset]

Enter the distance from the label edge to the RFID module.

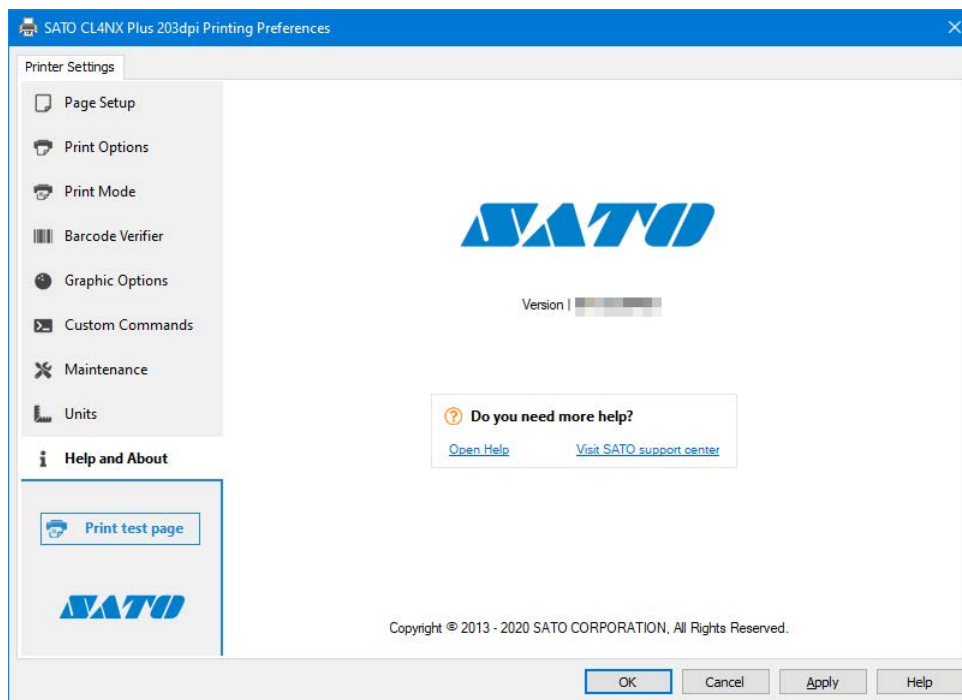
The setting range is from 0 to 240 mm.

This setting will be used when labels are not compatible with the RFID antenna positions of your printer. For more information about compatible antenna positions, refer to the Operator Manual of your printer.

3.8 Support

The functions on this screen are used by SATO technical support. Do not use this option unless instructed by technical support.

3.9 Help and About



[Open Help]

Click to show the printer driver help file.

[Visit SATO support center]

Click the link to be redirected to the SATO contact us page.

Make sure your computer has Internet access.

Checking the Version Information

[Version]

The version of the currently installed printer driver is shown under the SATO logo.

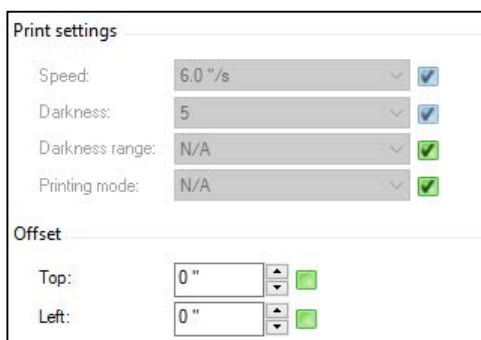
4. Settings on the [Printer Settings] Tab

Printer settings can be configured on [Printing Defaults] and [Printing Preferences]. As the settings that can be configured are the same on both screens, this section will use [Printing Preferences] (Print settings) to describe the settings.

[Help] is available on all screens. Click it to show a description of that screen.

Check Box Behavior

When a green or blue check box is to the right of a setting, they behave in the manner described below.



Green Check Box

Checked: [Let the printer control this option]

"N/A" will be shown for the value of the setting. This setting value is not sent to the printer and the printer setting value is used. "N/A" will also be shown for other settings that must be used in combination with this setting.

Cleared: [Send this parameter to printer]

The setting values are sent to the printer.

Blue Check Box

If you select stock other than [Custom] for [Stock] on the [Page Setup] tab, a blue check box will be shown on the right of the following items.

Media settings

[Width]

[Height]

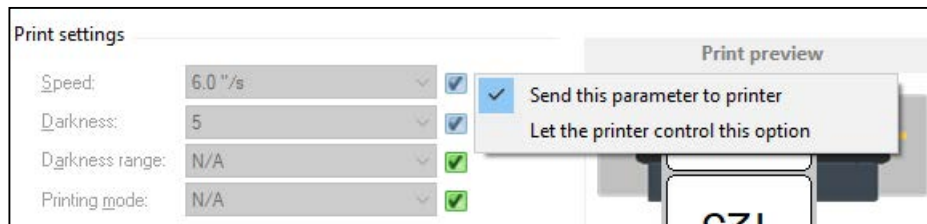
Print settings

[Speed]

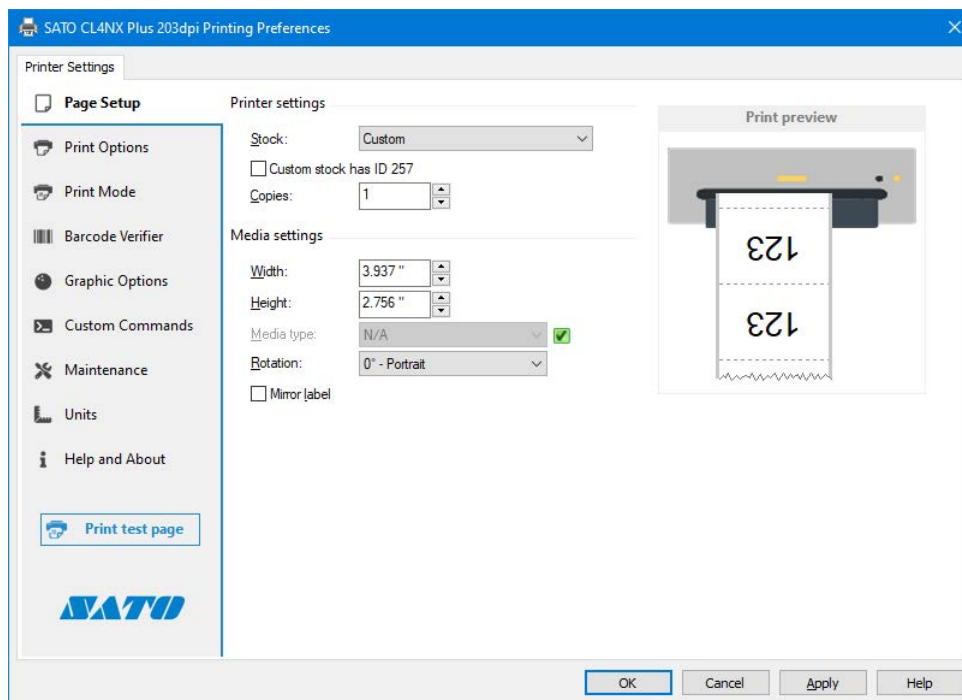
[Darkness]

If you select the stock to be used in [Stock] on [Page Setup], you can change the above setting values all at once. For details, refer to "4.1 Page Setup".

Blue check boxes are always on and cannot be cleared. However, if you select [Let the printer control this option], the green check box is selected for using the setting values on the printer.



4.1 Page Setup



Printer Settings

[Stock]

Select the default stock from the registered stock. If you select [Custom], you can set [Width], [Height] and [Sensors] on this screen.

[Custom stock has ID 257]

This check box enables compatibility with older SATO printer drivers that require a custom stock ID of greater than 256.

[Copies]

Specify the number of labels to be issued.

Media settings

[Width]

This setting shows the width set for the media that you selected. If you select [Custom] for [Stock], you can change the settings on this screen.

[Height]

This setting shows the height set for the media that you selected. If you select [Custom] for [Stock], you can change the settings on this screen.

[Media type]

You can set the media type.

[Black mark position] (FX3-LX only)

This setting can only be configured when [Media type] is set to [Labels with black marks]. Select from [Bottom black mark] and [Top black mark].

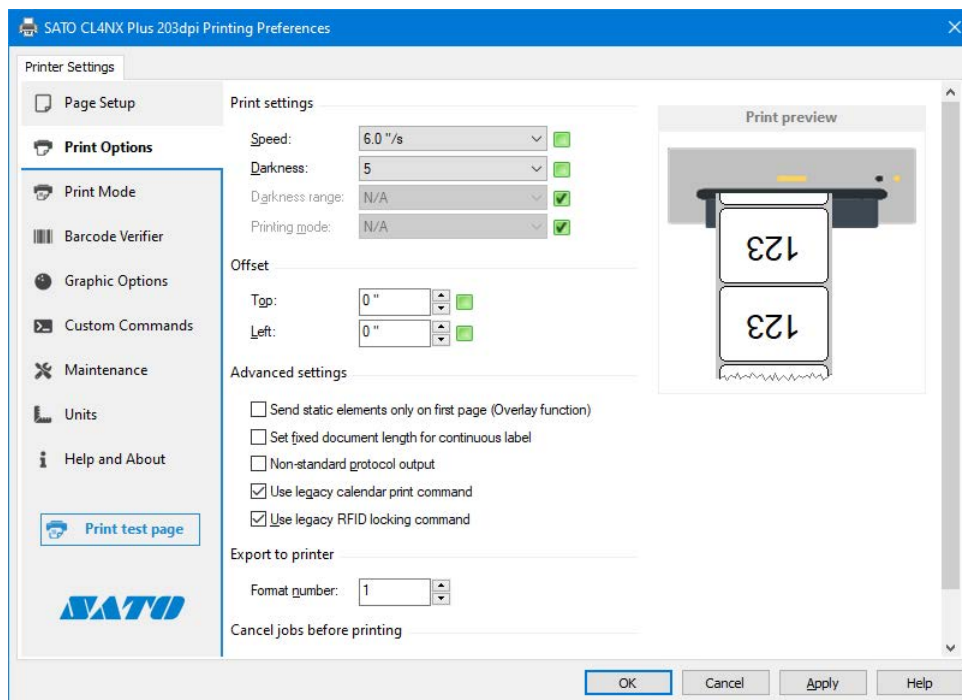
[Rotation]

You can set the print rotation angle as [0° - Portrait], [90° - Landscape], [180° - Portrait] or [270° - Landscape].

[Mirror label]

You can specify printing to be a mirror image.

4.2 Print Options



Print settings

[Speed]

This shows the print speed for the stock that you set on the [Page Setup] screen. If you select [Custom] for [Stock] on [Page Setup], you can change the settings on this screen.

[Darkness]

This shows the print darkness for the stock that you set on the [Page Setup] screen. If you select [Custom] for [Stock] on [Page Setup], you can change the settings on this screen.

You can set 10 levels, from [1] to [10]. The bigger the number, the darker the ink.

[Darkness range] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/PW208NX/PW208mNX/PW4NX/S84NX/S86NX only)

This shows the darkness range for the stock that you set on the [Page Setup] screen. If you select [Custom] for [Stock] on [Page Setup], you can change the settings on this screen.

[Printing mode] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/S84NX/S86NX only)

This shows the printing mode for the media that you set on the [Page Setup] screen. If you select [Custom] for [Stock] on [Page Setup], you can change the settings on this screen.

You can set [Thermal transfer] or [Direct thermal].

[Barcode darkness] (PW208NX/PW208mNX only)

Currently not supported.

[Barcode darkness range] (PW208NX/PW208mNX only)

Currently not supported.

Offset

[Top]

You can adjust the print base reference point in vertical direction (the height direction of the media).

[Left]

You can adjust the print base reference point in horizontal direction (the width direction of the media).

**Advanced Settings (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/FX3-LX/
PW4NX/S84NX/S86NX only)**

[Send static elements only on first page (Overlay function)]

All static elements will be sent to only the first page of the print job. Only variable elements will be sent for subsequent pages. Static elements are called from printer memory.

[Set fixed document length for continuous label]

Send the entire label to an appropriate position after the printer finishes printing. For a continuous label, the one label is the feed amount because the feed amount cannot be determined by the sensor.

[Non-standard protocol output]

Substitute and output part of the control code as ASCII readable characters. This feature is for host environments that cannot use binary data.

**[Use legacy calendar print command] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/
CT4-LX/FX3-LX only)**

This works when linked with "Nice Label" of the application. If checked, [ESC+WA] is used as the calendar print command, and if unchecked, [ESC+WU] is used.

**[Use legacy RFID locking command] (CL4NX/CL4NX Plus/CL6NX Plus/CT4-LX/
S84NX/S86NX only)**

Select the format of the RFID locking command. If checked, the legacy "lck" format RFID locking command is used, and if unchecked, the "lc2" format RFID locking command is used.

[Export to printer] (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/FX3-LX/PW4NX/S84NX/S86NX only)

[Format number]

This setting is used when the XML-Enabled feature is used. For details, refer to "XML-Enabled Reference". For "XML-Enabled Reference", contact your SATO sales representative.

[Cancel job before printing]

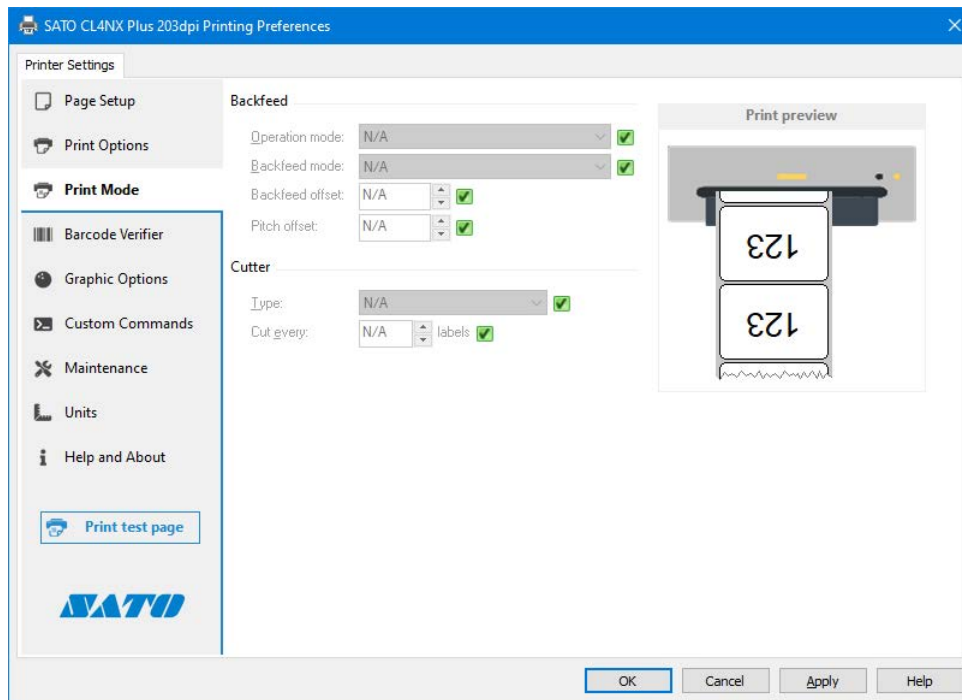
[Cancel all current and queued printing documents]

Delete all jobs from the printer buffer. Use this setting when you want to cancel the preceding jobs and print a new job immediately.

Caution

You cannot cancel this command. Take care when using it.

4.3 Print Mode



Backfeed

[Operation mode]

Set the print mode. The available settings vary depending on the printer model and installed options.

[Backfeed mode]

Specify the backfeed operation for the [Operation mode] setting. You can configure this setting when [Operation mode] is set to [Cutter] or [Dispenser]. Select [No backfeed], [Before printing] or [After printing].

[Backfeed offset]

You can finely adjust the media stop position during backfeed operation.

[Pitch offset]

You can finely adjust the media stop position during forward feed operation.

Cutter (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/CT4-LX/FX3-LX only)

[Type]

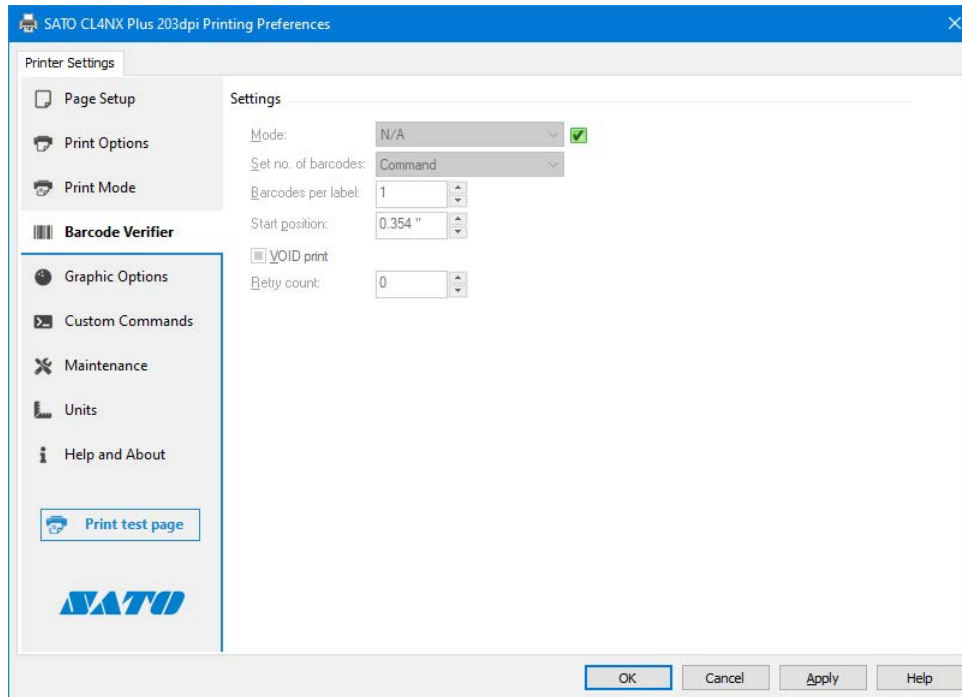
Specify how the cutter operates when [Operation mode] is set to [Cutter]. Select [Off], [Batch], or [Designated number of pages]. If you select [Batch], the page is cut at the end of the print job.

[Cut every]

Specify the number of pages to cut at when [Type] is set to [Designated number of pages].

4.4 Barcode Verifier (CL4NX/CL6NX/CL4NX Plus/CL6NX Plus/S84NX/S86NX only)

When the optional barcode checker is installed to the printer, the barcode checker scans the barcodes immediately after printing and checks the accuracy of printed 1D barcode and 2D code.



Settings

[Mode]

Set the Barcode Verifier mode of operation.

Select [Disable] to disable the Barcode Verifier. Select [Readable] to check for readability of barcodes. And select [Comparison] to check if the scanned results of the printed barcodes match the barcode print data.

[Set no. of barcodes]

Specify how to set the maximum number of verified barcodes.

Select [Command] to set the maximum number using direct command to the barcode checker. Select [Setting] to set the maximum number using printer driver interface.

[Barcode per label]

Set the maximum number of verified barcodes per single printed label. You can set up to 10 barcodes.

[Start Position]

Adjust the position at which the barcode checker starts to scan. It starts reading each media after the specified length passes from the printing start position. This setting can be used to exclude first barcode(s) from the check target when multiple barcodes are printed on each media.

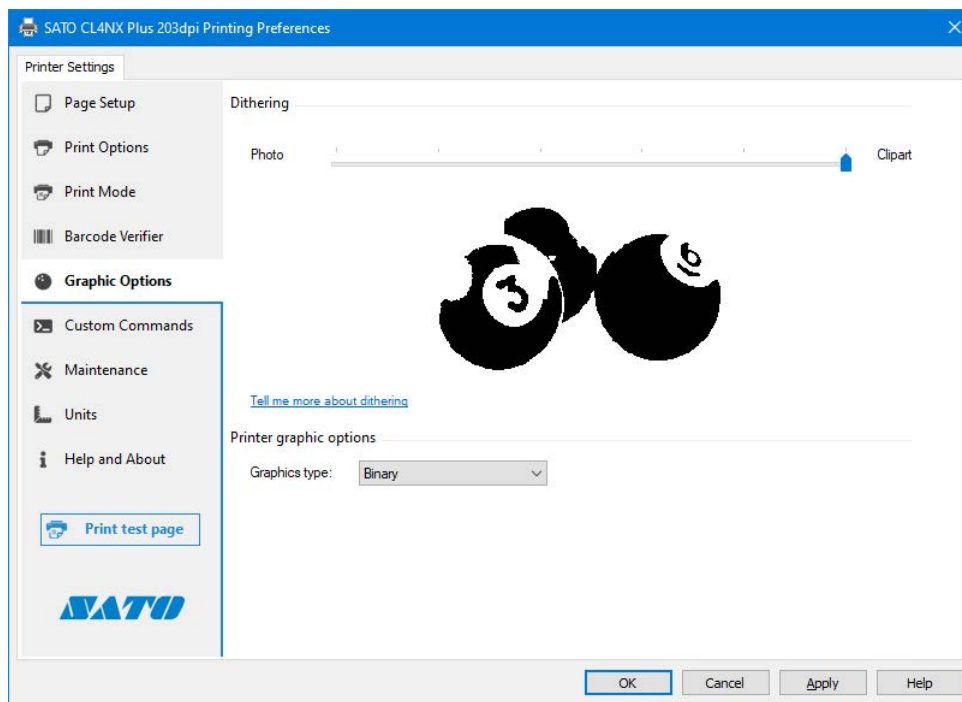
[VOID print]

This check box enables printing of error marks on the media if a barcode reading error or barcode comparison error occurs.

[Retry count]

Set how many times the printer will try to print and check the same barcode after VOID printing when a barcode reading error or barcode comparison error occurs.

4.5 Graphic Options



Dithering

Set the dithering algorithm. Move the slider to preview the result of applying the algorithm.

The amount of data sent to the printer will vary depending on the settings. The closer it is to [Photo], the larger the capacity, and the closer it is to [Clipart], the smaller the capacity.

Note:

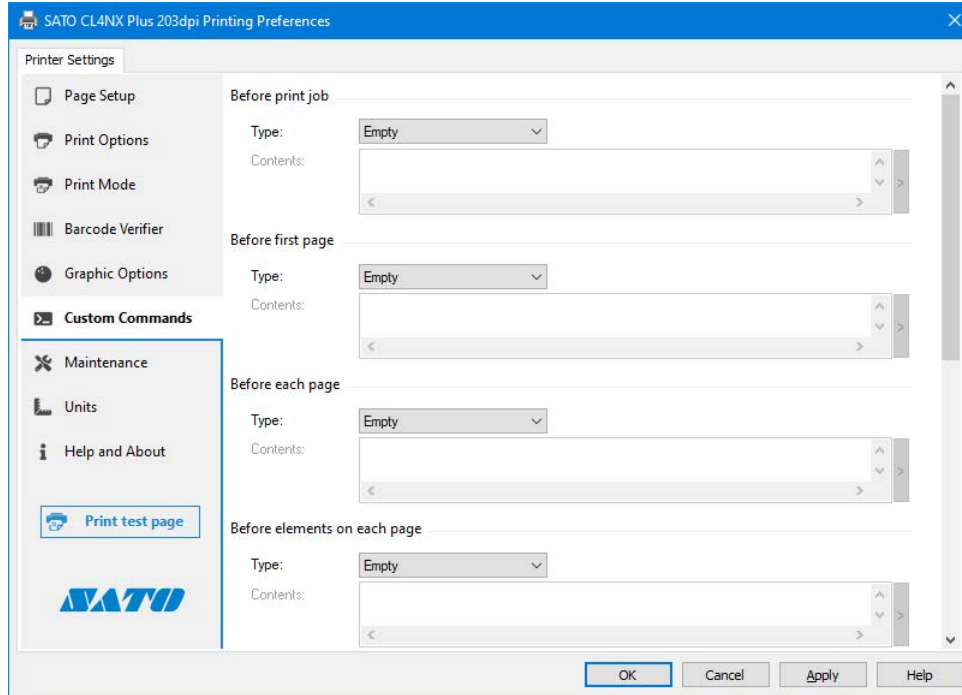
Dithering is a technique to change a dot pattern according to a specific algorithm. Even a printer that can only express two colors, white and black, can express color and grayscale images as if they were expressed in gradation.

Printer graphic options

Specify the data format to send the graphics data to the printer. Normally, specify [Binary].

4.6 Custom Commands

You can directly control the printer by using custom commands. You can use features that are not directly supported by the printer driver. Knowledge of SATO Barcode Printer Language (SBPL) is necessary to use custom commands. For details on SBPL commands, refer to the Programming Reference of your printer.



Custom Command Insert Position

Before print job

Insert a command before a new print job. This setting affects the entered print job.

Before first page

Insert a command at the top of the first page in one file of data.

Before each page

Insert a command at the beginning of each page in one file of data.

Before elements on each page

Insert a command at the beginning of an element on each page in one file of data.

After elements on each page

Insert a command after elements on each page in one file of data.

After each page

Insert a command at the end of each page in one file of data.

After last page

Insert a command at the end of the last page in one file of data.

After print job

Insert a command after the print job finishes.

Type

[Empty]

Do not use custom commands.

[File]

Load a custom command from the specified file.

[Text]

Enter the custom command directly into the [Contents] field.

[Parsed text]

Enter the custom command directly into the [Contents] field. You can enter control text as a substitute entry.

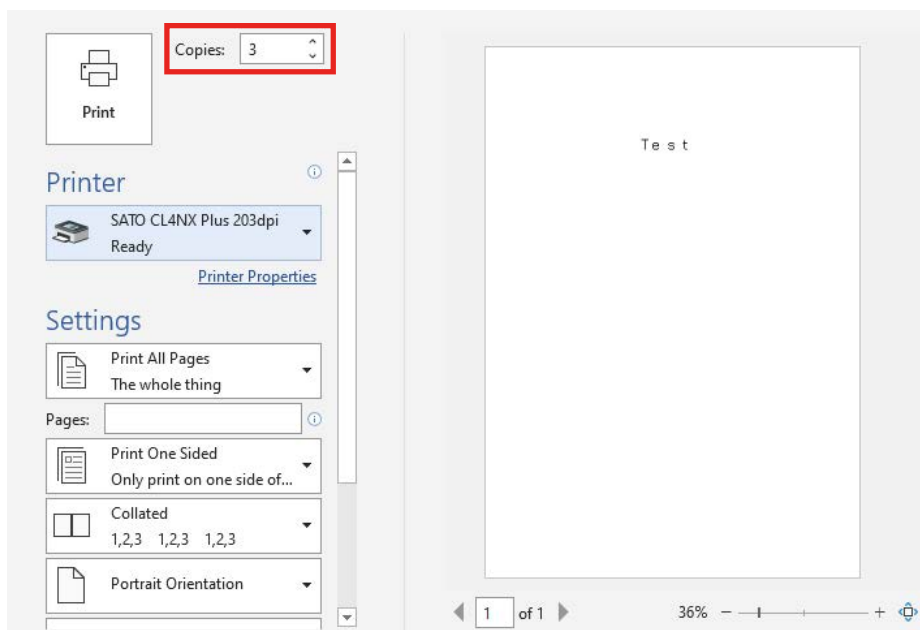
[Parsed file]

Load a custom command from the specified file. You can enter control text into the file as a substitute entry.

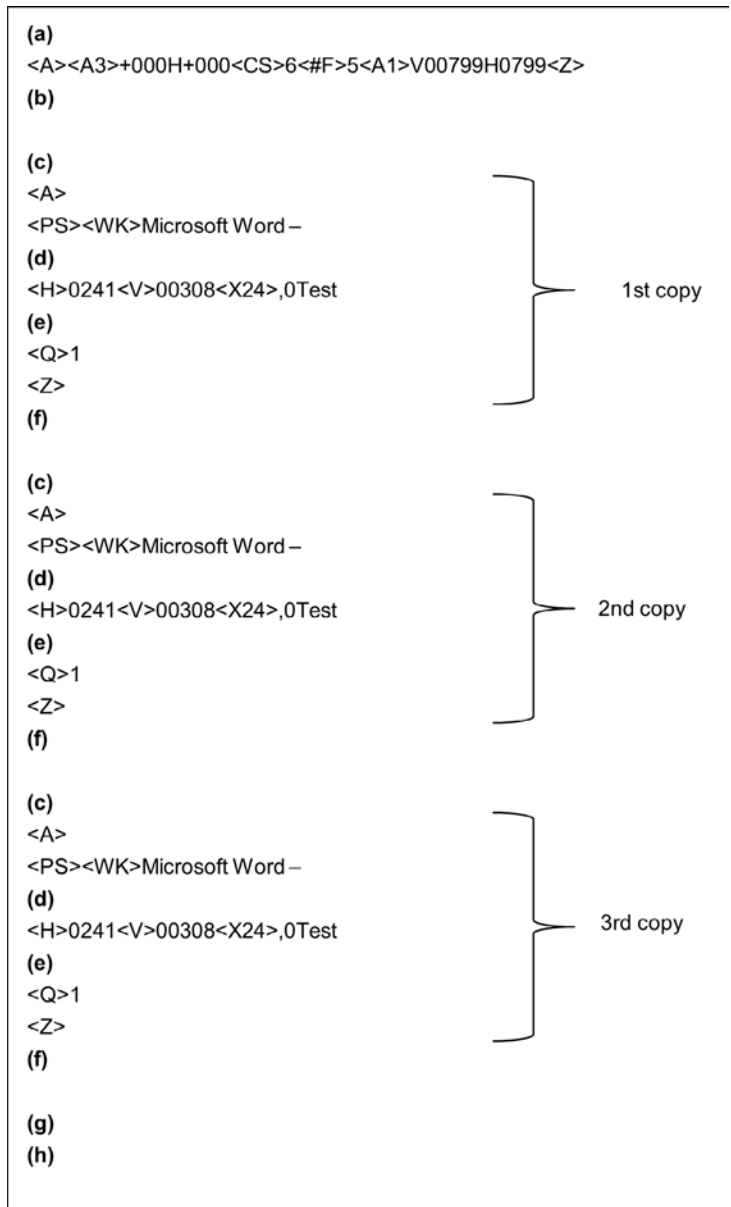
Note:

When printing a print layout created in an application (when outputting as an SBPL command), the custom command is inserted into each position according to the custom command insertion position setting in the printer driver.

The figures below show an image of the custom command insertion position when the print layout and print settings are used in an application.



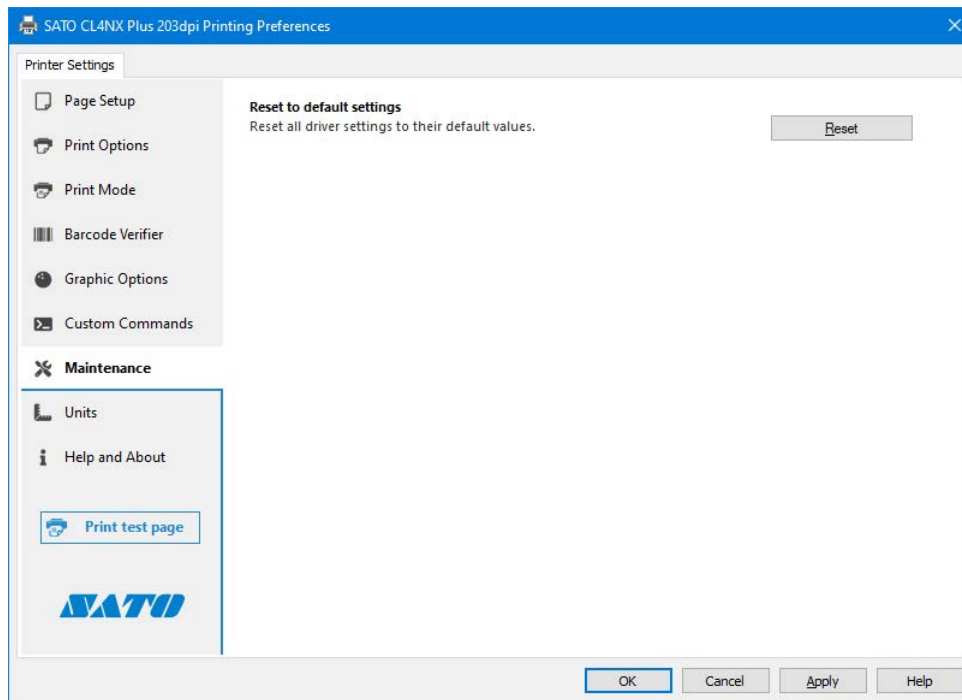
- "Test" in the print layout is set to "SATO X24" device font (the SBPL command is <X24>).
- The number of copies is set to [3].



Symbols (a) through (h) in the figure correspond to the following custom command insertion position:

- (a) Before print job
- (b) Before first page
- (c) Before each page
- (d) Before elements on each page
- (e) After elements on each page
- (f) After each page
- (g) After last page
- (h) After print job

4.7 Maintenance



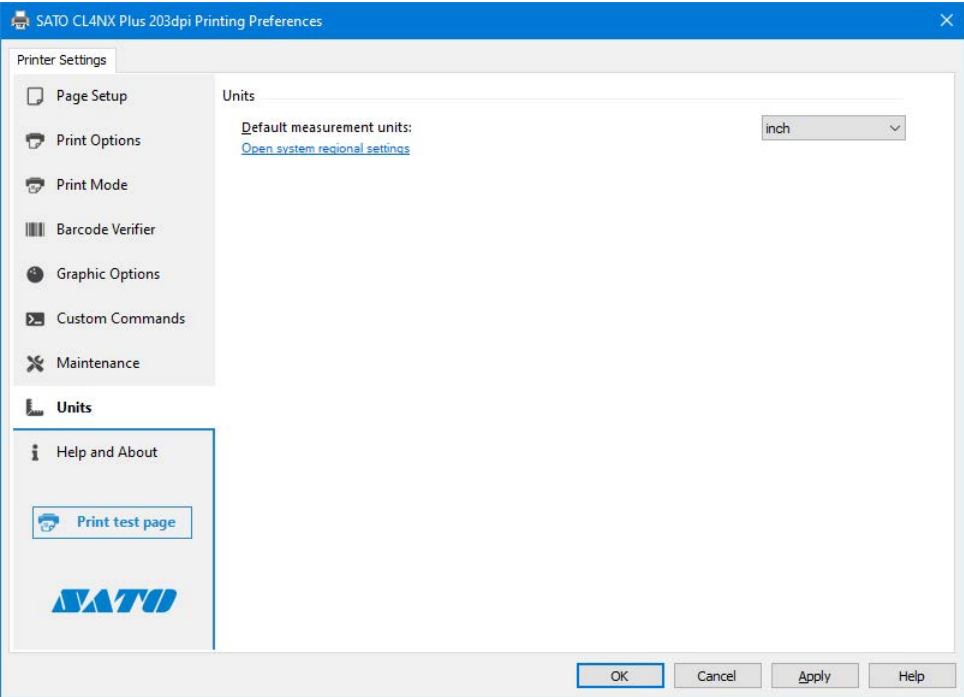
[Reset to default settings]

Click [Reset] to reset the "Printing Preferences" (print settings) to the default values.

Note:

For CL4NX/CL4NX Plus/CL6NX Plus, the settings of "Driver Settings" - "RFID Settings" also return to their default values.

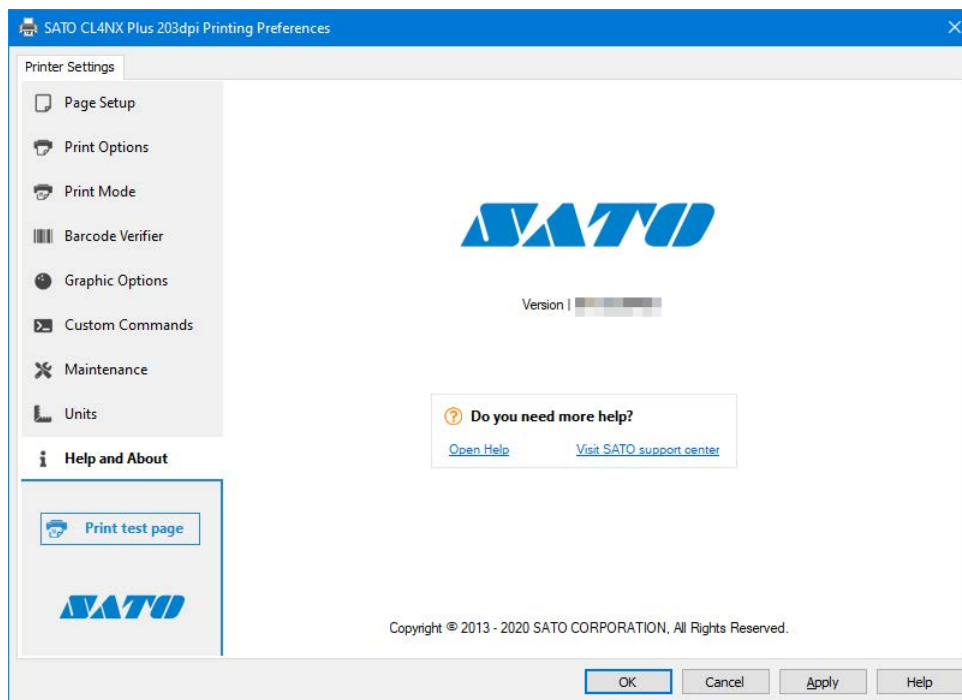
4.8 Units



[Default measurement units]

Select the units to be used for the printer driver settings.

4.9 Help and About



[Open Help]

Click to show the printer driver help file.

[Visit SATO support center]

Click the link to be redirected to the SATO contact us page.

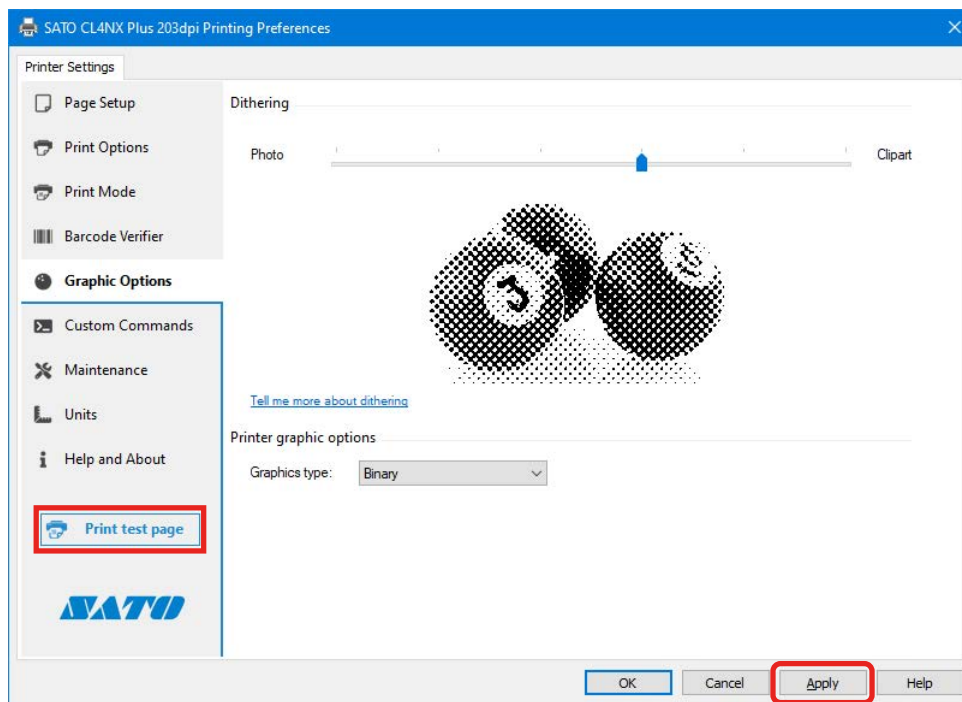
Make sure your computer has Internet access.

Checking the Version Information

[Version]

The version of the currently installed printer driver is shown under the SATO logo.

4.10 Test Page



[Print Test Page]

Click to execute a test print that reflects all of the settings in "Printing Preferences" (print settings).

The content of the test print is the image shown in the "Graphics Options" surrounded by the border of the media size specified in "Page Setup". The image is scaled according to the size of the media.

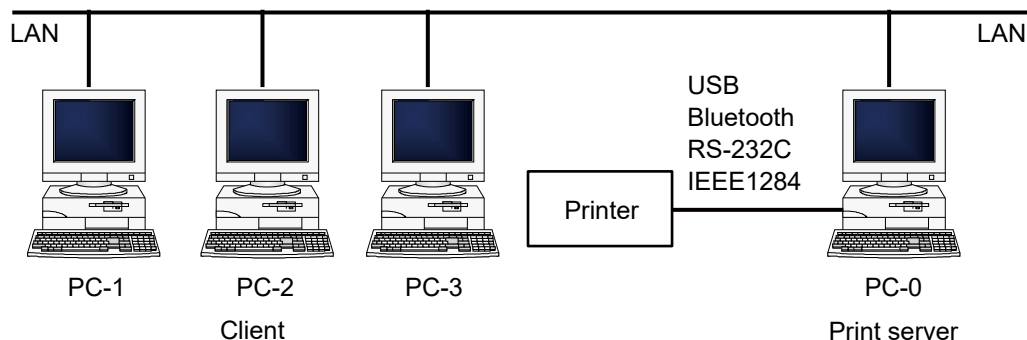
If you have changed the settings in "Printing Preferences" (print settings), click [Apply] and then click [Print Test Page].

5. Sharing the Printer

You can share a printer connected directly to a computer on the network with other computers.

Connecting When Using the Printer Driver with Sharing Settings

The figure below shows how to connect when using the printer driver with sharing settings.



Set one computer (PC-0) as the print server and set other computers (PC-1, PC-2, PC-3, etc.) as clients. All computers should be connected using LAN connection and the print server and printer should be connected via USB, Bluetooth, RS-232C or IEEE1284.

Procedure to Configure Printer Driver Sharing Settings

To use the printer driver with sharing settings, follow the steps below:

1. Install the printer driver on the print server and client computers.
Refer to "5.1 Installing the Printer Driver on the Print Server and Client Computers".
2. Confirm that a label was printed correctly from the printer connected to the print server.
3. Configure the sharing settings on the printer connected to the print server.
Refer to "5.2 Configuring Sharing Settings on the Print Server Printer".
4. Specify the printer connected to the print server setup for sharing as the output destination port for the client printer and disable bi-directional communication on the client printer.
Refer to "5.3 Configuring Sharing Settings on the Client Printer".

Restrictions

When you use the printer driver with sharing settings, the following restrictions occur because bi-directional communication is disabled on the client:

- Errors that occur in the printer, such as "Paper End" and "Ribbon End", will not be recognized.
- You cannot use [Get From Printer] and [Send To Printer] under [Configure Printer] on the [Printer Properties] > [Driver Settings] tab in the printer driver.
- The settings changed on the [Printing Preferences]> [Configure Printer] tab in the printer driver cannot be sent to the printer (when the green check box is not selected).

5.1 Installing the Printer Driver on the Print Server and Client Computers

Download the printer driver from <https://www.sato-global.com/drivers/redirect.html> and install it on the print server and client computers. Install the printer driver on each computer.

Downloading the Printer Driver

Download the printer driver from <https://www.sato-global.com/drivers/redirect.html>.

For details, refer to "1.1 Preparing the Printer Driver".

Installing the Printer Driver on the Print Server

Connect the printer to the computer and install the printer driver.

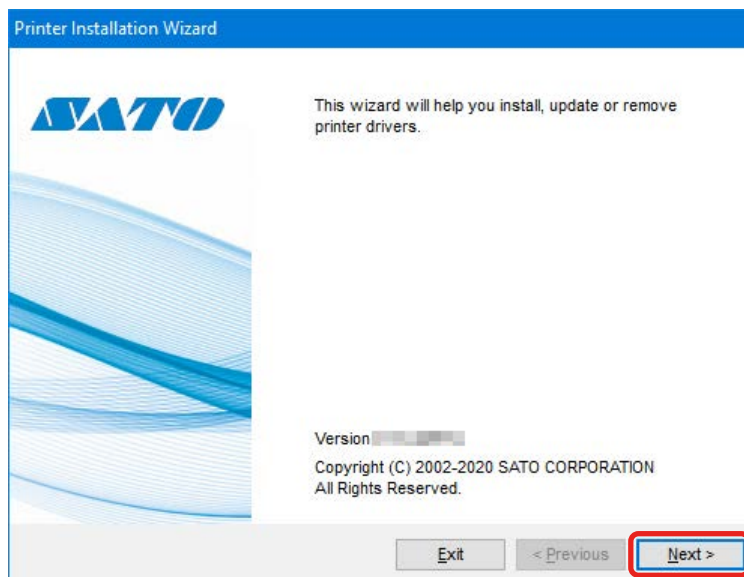
For details on how to connect the printer, refer to "1.3 Connecting the Printer to the Computer".

Printer driver installation varies depending on how the printer is connected. For details, refer to "1.4 Running the Installation".

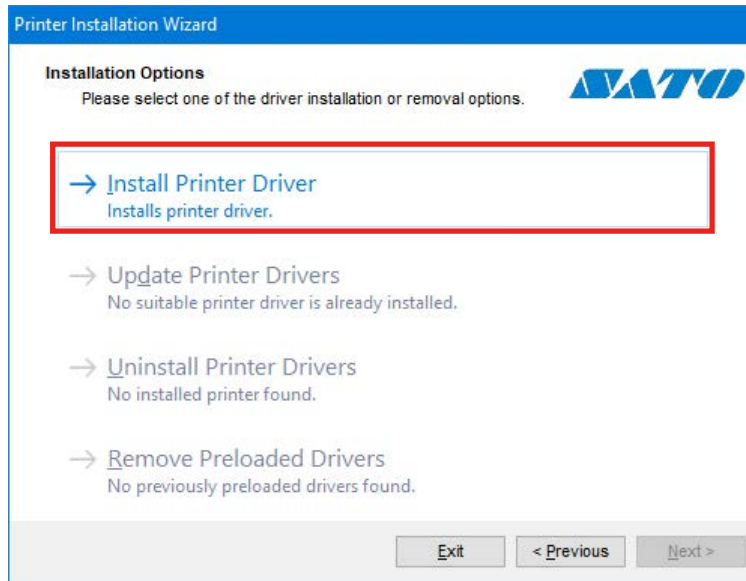
Installing the Printer Driver on the Client Computers

Prepare the printer driver in the same manner as the print server and follow the procedure below to install the printer driver.

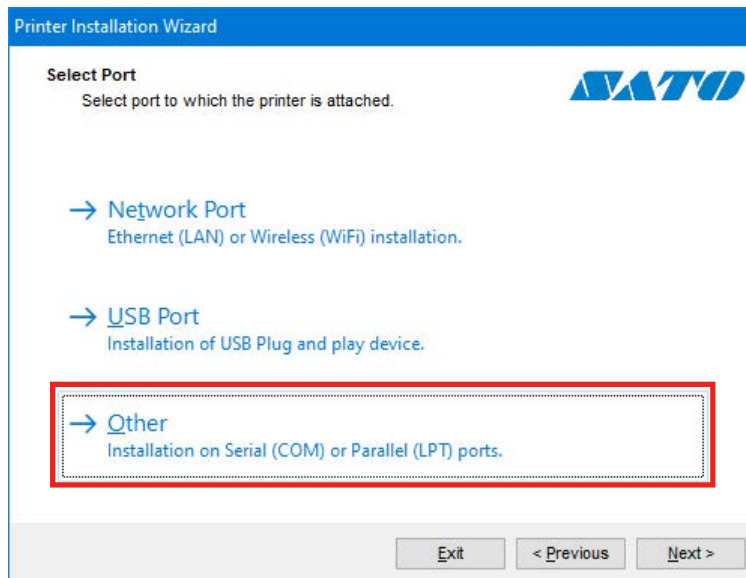
1. Double-click PrnInst.exe.
The printer installation wizard starts.
2. Click [Next].



3. Click [Install Printer Driver].

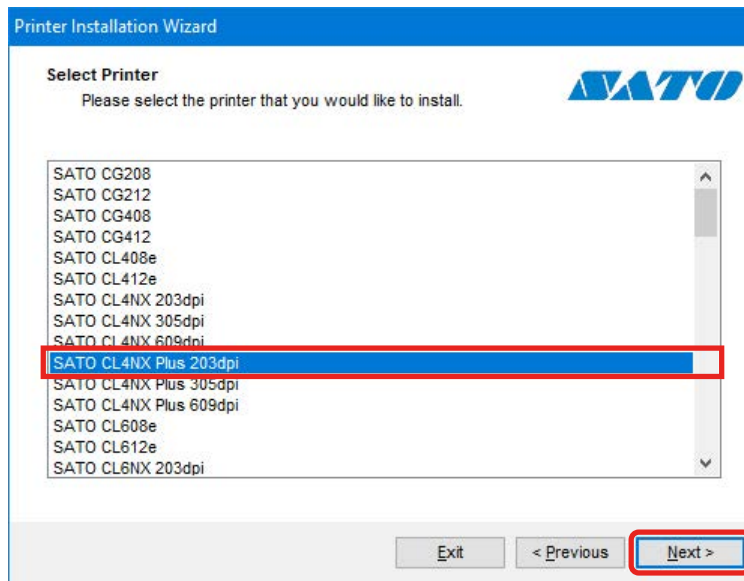


4. Click [Other].



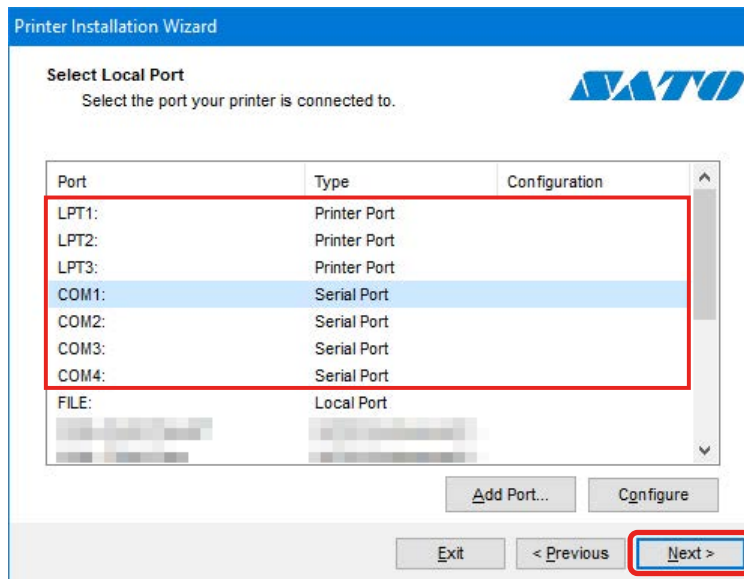
5. Select the model of the printer and click [Next].

The following illustration shows SATO CL4NX Plus 203dpi is selected as an example.

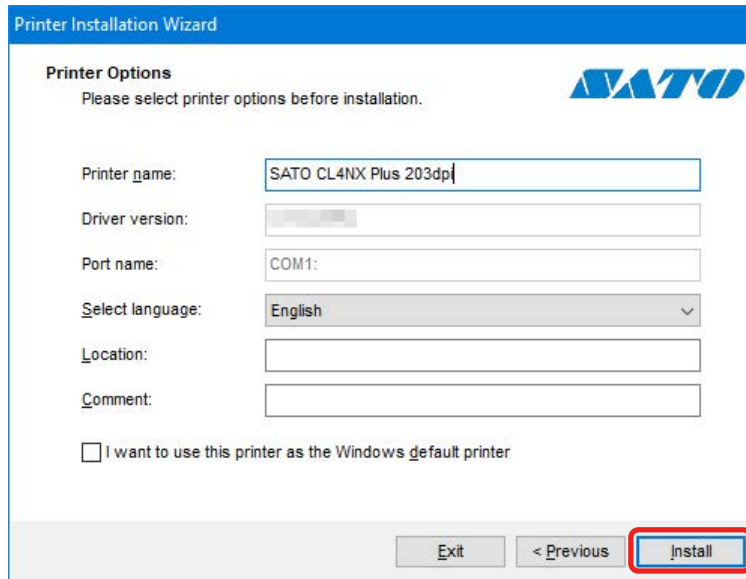


6. Select an LPT or COM port and click [Next].

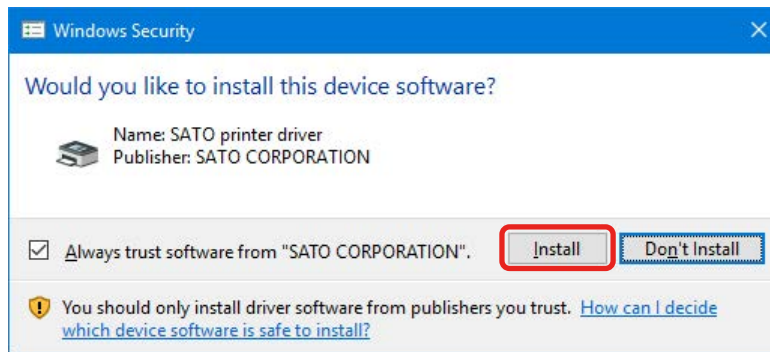
The following illustration shows COM1 was selected as an example.



7. Click [Install].



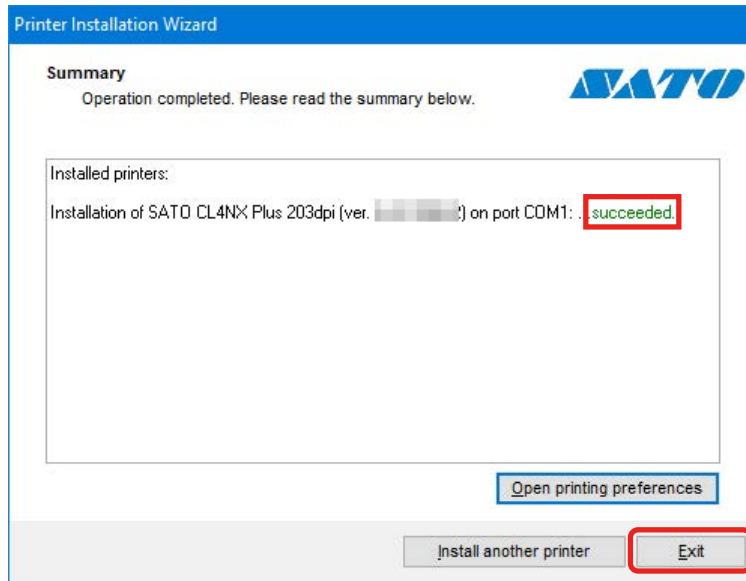
When the [Windows Security] screen appears, click [Install].



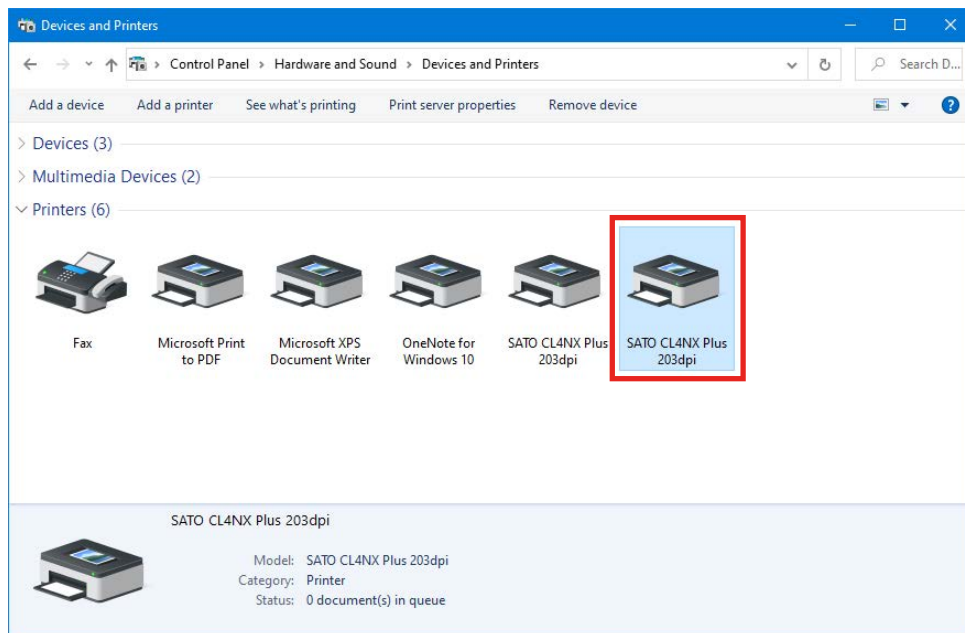
Note:

The warning screen above may not appear, depending on the computer environment. If a security warning screen indicating that another process is blocking access appears, follow the on-screen instructions.

8. Confirm that [succeeded] is shown for the installed printer driver and click [Exit].



9. Open [Devices and Printers] and confirm that the printer driver has been added to the list of [Printers].

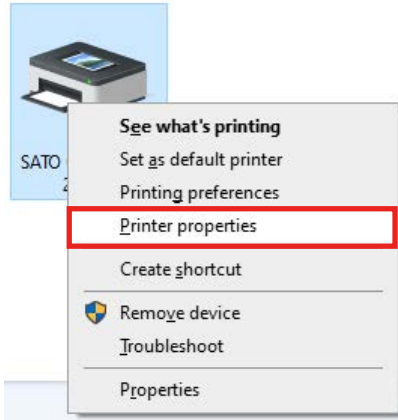


Install the printer driver on all client computers using the above procedure.

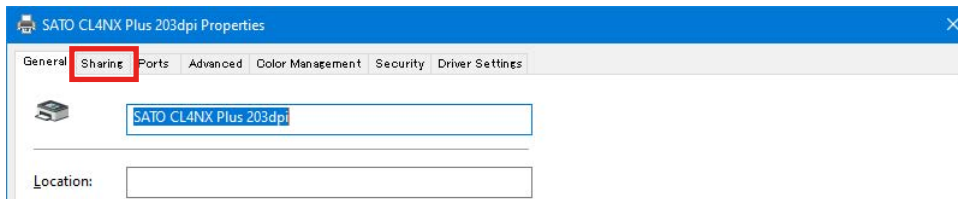
5.2 Configuring Sharing Settings on the Print Server Printer

Set the printer driver installed on the print server to enable it to be shared with other computers.

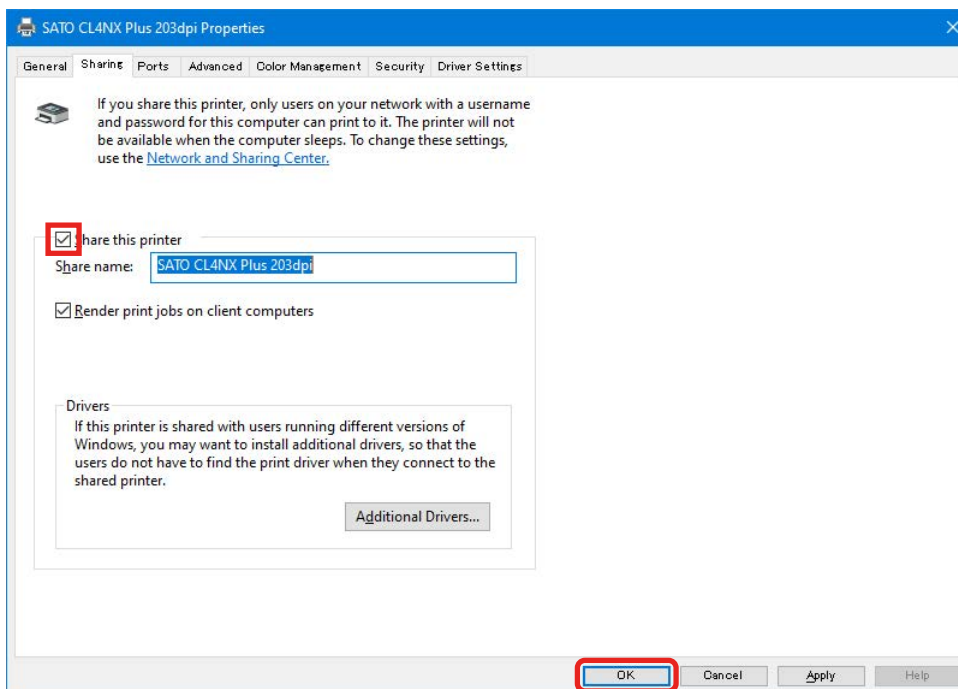
1. Open [Devices and Printers], right-click the installed printer driver, and select [Printer properties].



2. Select the [Sharing] tab.



3. Select the [Share this printer] check box and click [OK].
If necessary, change [Share name].



4. Open [Devices and Printers] and confirm that the printer sharing settings have been set.

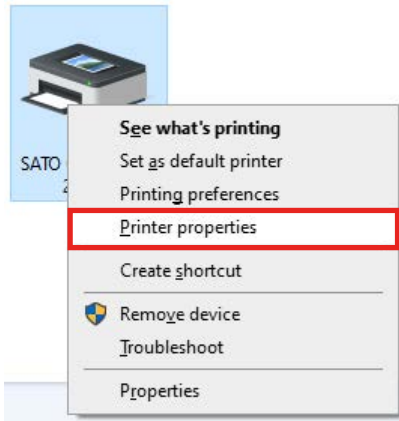


5.3 Configuring Sharing Settings on the Client Printer

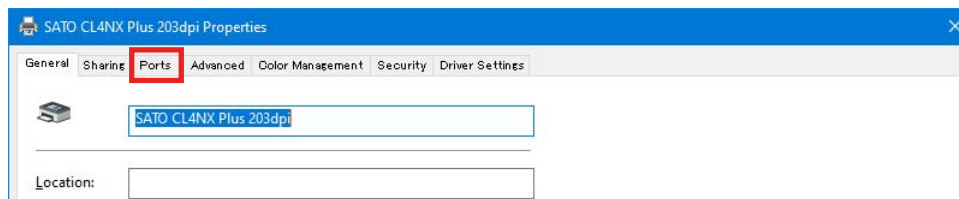
Configure the sharing settings on the printer driver installed on the client.

This operation requires Administrator Privileges. Refer to "2.2 How to Get Administrator Privileges" on how to get Administrator Privileges.

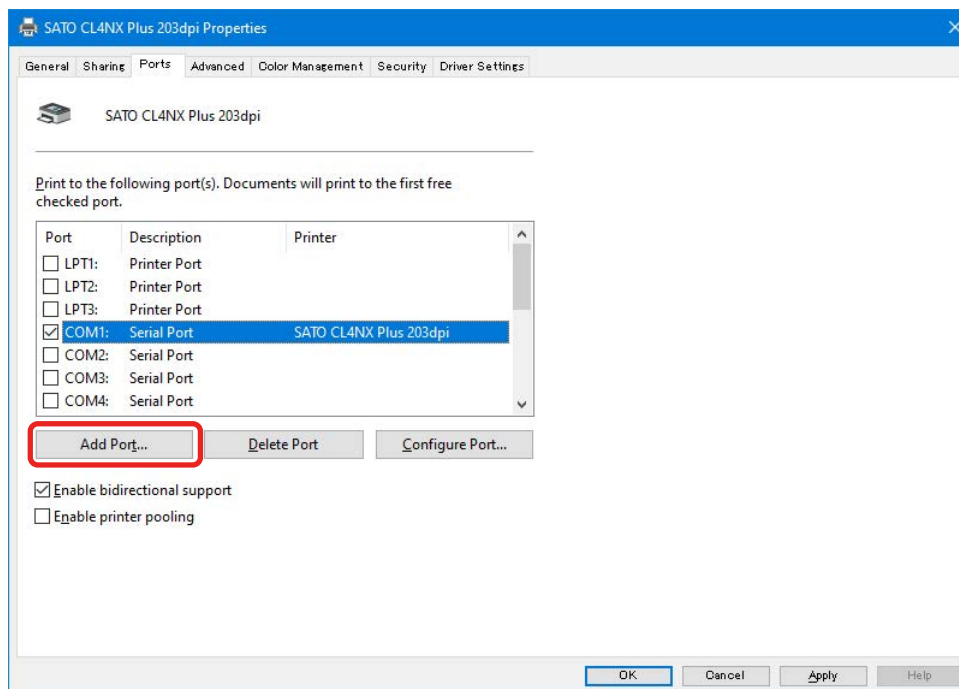
1. Open [Devices and Printers], right-click the installed printer driver, and select [Printer properties].



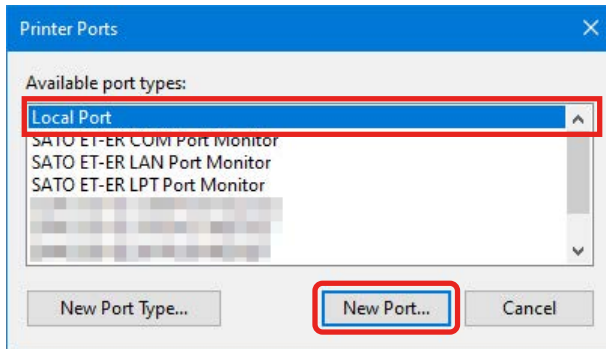
2. Select the [Ports] tab.



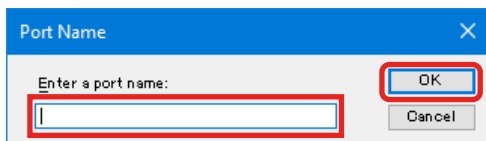
3. Click [Add Port].



4. Select [Local Port] and then click [New Port].



5. Enter "\\<Print_Server_Computer_Name>\<Printer_Sharing_Name>" in the port name field and then click [OK].



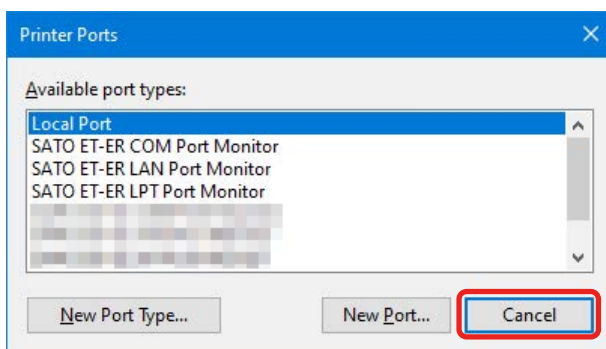
For example, if the print server computer name is "PC-0" and the printer sharing name is "SATO CL4NX Plus 203dpi," enter the following:

\\PC-0\SATO CL4NX Plus 203dpi

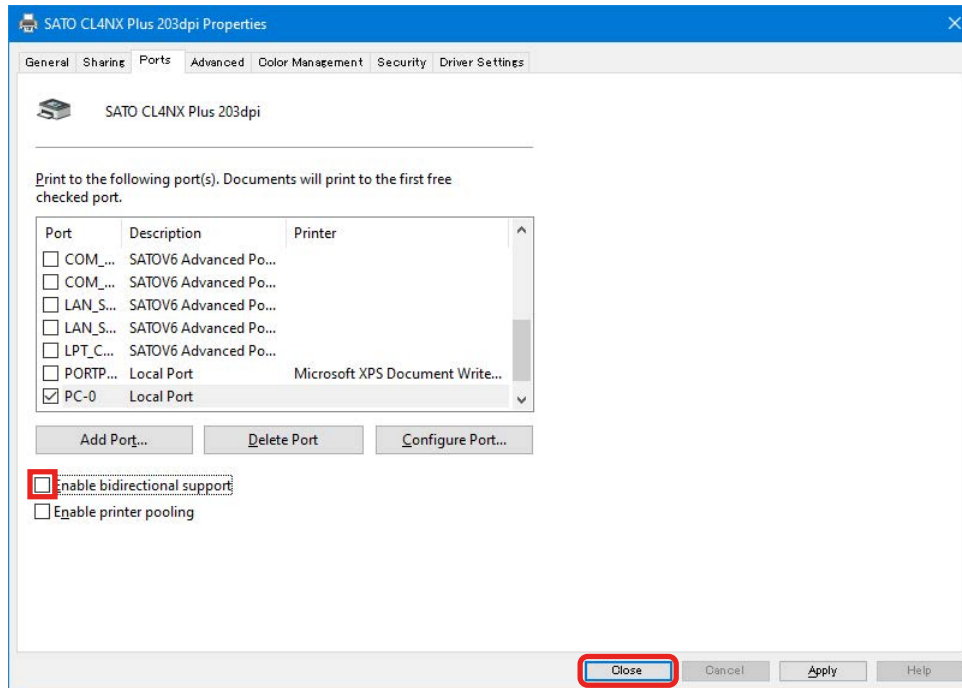
Note:

On Windows 10, you can check the computer name by clicking [Control Panel] > [All Control Panel Items] or [System and Security] > [System] > [Computer name].

6. Click [Cancel].



7. Uncheck the [Enable bidirectional support] check box and click [Close].

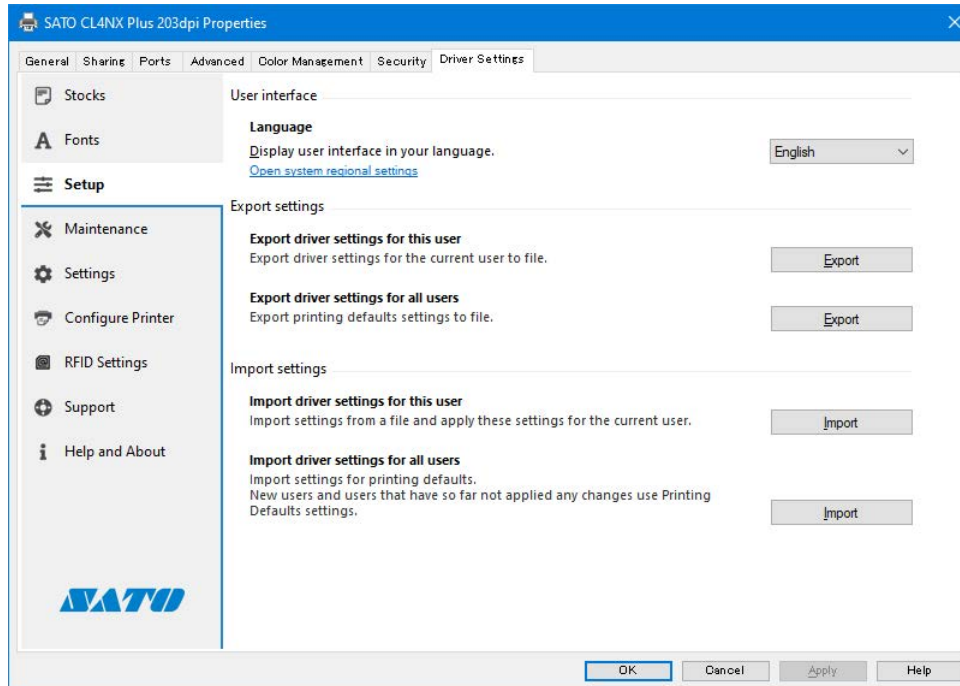


6. Updating the Printer Driver

Update the installed printer driver to the latest version.

Be sure to save the printer driver data before updating.

Save the printer driver data using [Setup] on the [Driver Settings] tab.



Saving the Current Printer Driver Data

1. Open [Devices and Printers], right-click the printer driver for which you want to update, and select [Printer properties].
2. Click the [Driver Settings] tab.
3. On [Setup], export the current printer driver settings.

For details of how to export the settings, refer to "3.3 Setup".

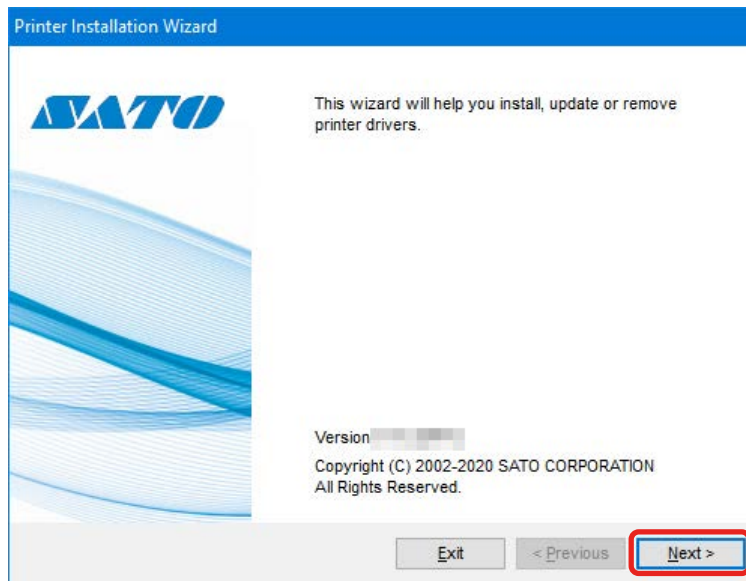
Obtaining the Printer Driver

Download the printer driver from <https://www.sato-global.com/drivers/redirect.html>.

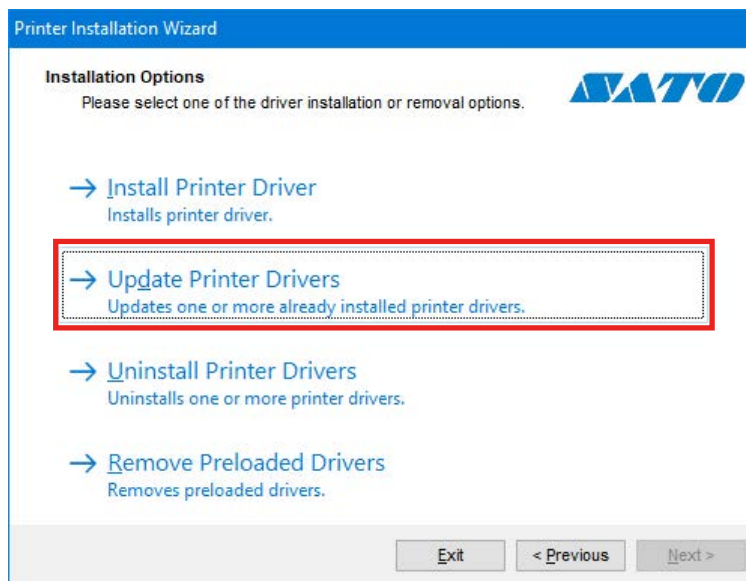
For details on how to obtain the printer driver, refer to "1.1 Preparing the Printer Driver".

Updating the Printer Driver

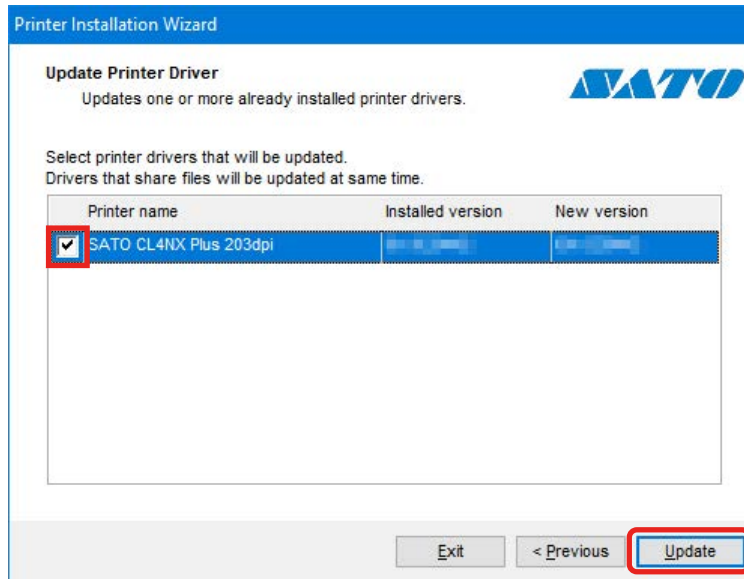
1. Double-click PrnInst.exe for the update version.
The printer installation wizard starts.
2. Click [Next].



3. Click [Update Printer Drivers].



4. Select the check box of the printer driver and click [Update].

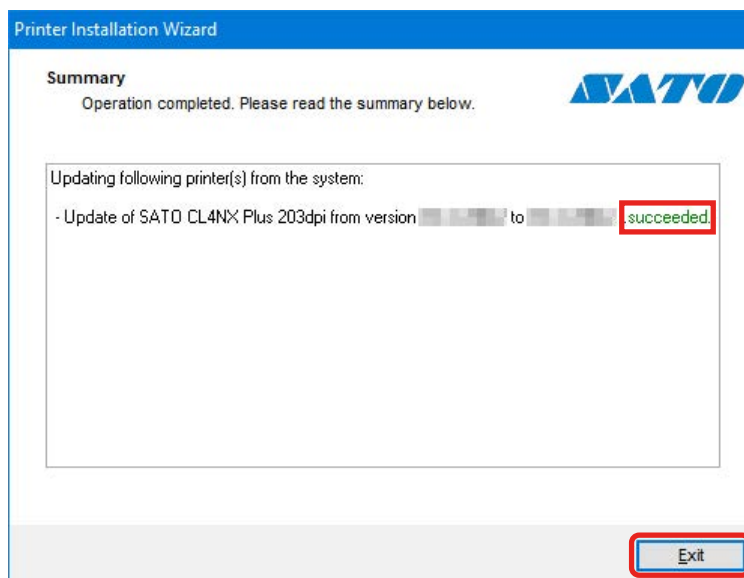


The printer drivers will start updating.

Note:

If you have multiple printer drivers installed on your computer, a check box appears for each printer, but you cannot check them separately. All installed printer drivers are updated at the same time.

5. Confirm that [succeeded] is shown for the updated printer driver and click [Exit].



Importing an Exported File

1. Open [Devices and Printers], right-click the updated printer driver for which you have exported the printer driver data, and select [Printer properties].
2. Select the [Driver Settings] tab.
3. On [Setup], import the driver settings that you saved before updating the driver.
For details on how to import settings, refer to "3.3 Setup".

7. Uninstalling the Printer Driver

The installer (PrnInst.exe) is also used to uninstall the printer driver.

Caution

Do not use [Remove device] in [Devices and Printers]. The printer driver may not be uninstalled correctly if you do so.

Pre-checks

Check the following items before uninstalling the printer driver.

Is the installer (PrnInst.exe) on the computer?

If PrnInst.exe is not on the computer, obtain it from <https://www.sato-global.com/drivers/redirect.html>.

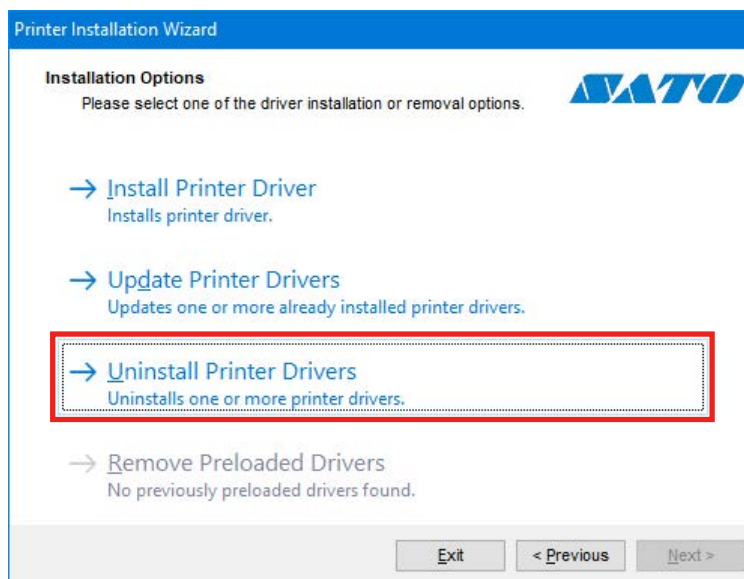
For details, refer to "1.1 Preparing the Printer Driver".

Is the cable disconnected from the computer?

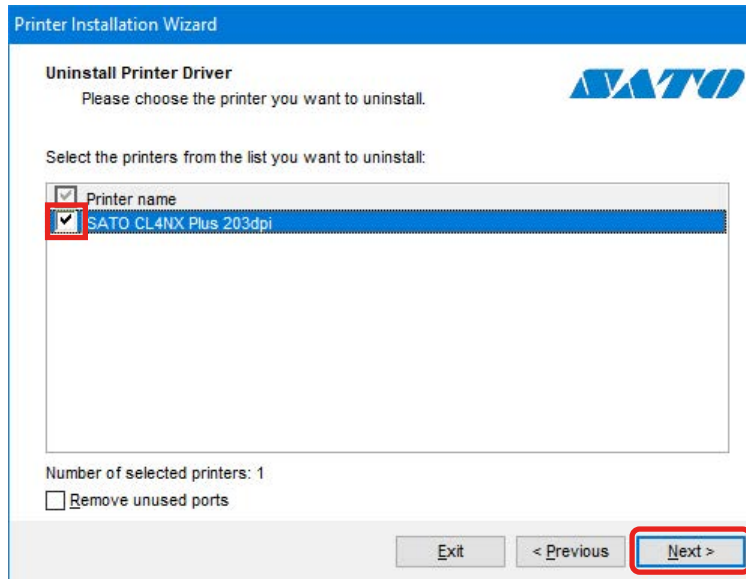
When uninstalling the printer driver of a printer connected to a computer via USB or IEEE1284, power off the printer and disconnect the cable connecting the printer from the computer.

Uninstalling the Printer Driver

1. Double-click PrnInst.exe.
2. Click [Next].
3. Click [Uninstall Printer Drivers].

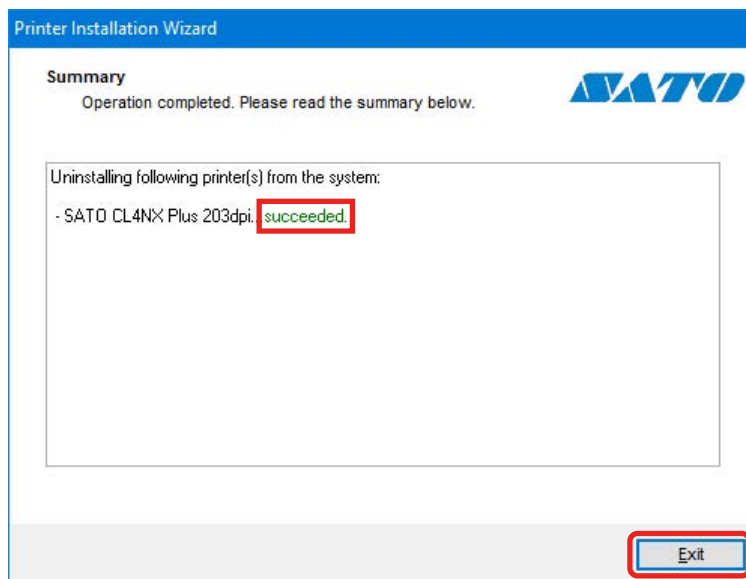


4. Select the check box of the printer driver that you want to uninstall and click [Next].



The uninstallation procedure starts.

5. Confirm that [succeeded] is shown for the uninstalled printer driver and click [Exit].



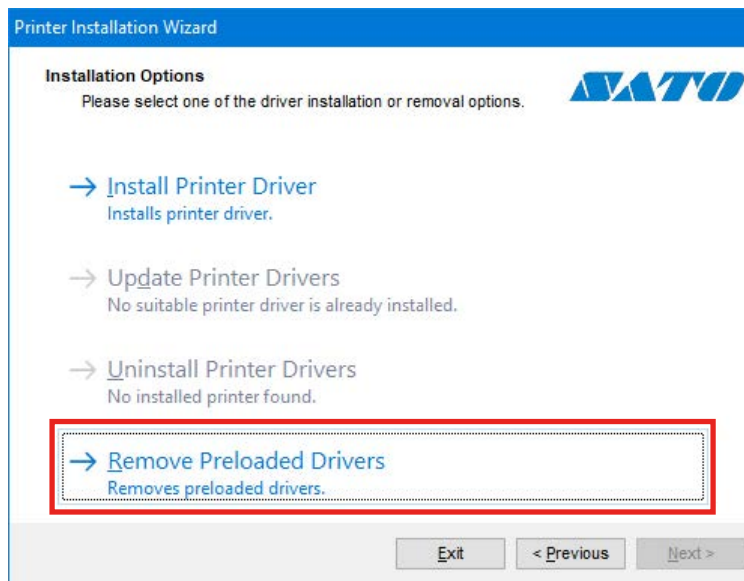
8. Removing the Printer Driver Data File

When the printer driver is installed, the printer driver data file is also installed. Even if you uninstall the printer driver, the printer driver data file remains on the computer.

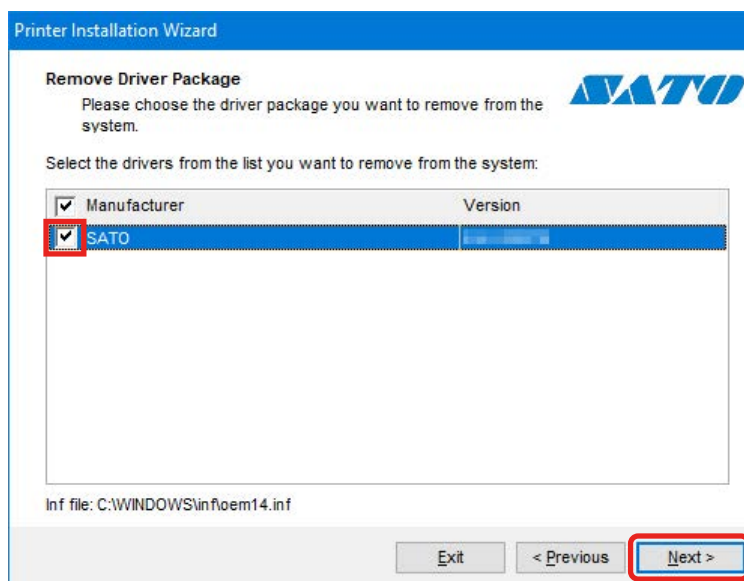
This printer driver data file is used to install the printer driver with Plug and Play.

Once you have uninstalled all the printer drivers and you do not intend to install the printer driver with Plug and Play in the future, the printer driver data file can be removed.

1. Double-click PrnInst.exe.
2. Click [Next].
3. Click [Remove Preloaded Drivers].



4. Select the check box for the printer driver data that you want to delete and click [Next].



The removal procedure starts.

5. Confirm that [succeeded] is shown for the deleted printer driver and click [Exit].

