

**NII Printer_D 2.0 Printer Driver
User ' s Manual
(Windows 2000)
(Windows XP)
(Windows Vista (32/64 Bit Version))**

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1. Introduction

This printer driver is designed for Nippon Primex Printers in Windows 2000/XP/Vista (32/64 bit versions). By using this driver, you are able to print from Nippon Primex Printers through the applications of Windows 2000/XP/Vista (32/64 bit versions).

This manual introduces the necessary things to use this driver. Please read carefully before using this to fulfill the function and use correctly. And when you use this driver, please also read each printer's manual.

2. Operation Environment

2.1. Operating System

Support the following operating system.

- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Windows Vista(32/64 Bit Version)

2.2. Computer

Support the following computers which are based in the above operating system.

- PC/AT Compatible machine

2.3. Printer

It is applied for Nippon Primex Printers.

Please install the appropriate printer driver according to models and resolution.

The specifications which this driver supports are following.

- Paper width
Print valid area is 2/3/4 inch, 48/54/56/71/72/76/104 mm width roll paper, and the size (set width and length) which is made in the server property are available for print.
*Note) Please select the "paper size" as print valid width in the printer property.
(Example) In case of NP-215: Select 54 mm paper roll.
*Note) Please ask or confirm about each printer setting.
- Paper length
It is possible up to 208 cm. The length of printable paper might be restricted less than 208 cm according to applications. In case of that, please make the new paper in the server property.
- Resolution of graphic print
203 DPI (Please refer to the hardware specs of the printer)
- Fonts
Use printer built-in full size and half size fonts, and Windows fonts.

3. Install

3.1. Confirmation before installing

Please prepare the following before installing.

- Check of the printer connection

Please confirm that Nippon Primex Printer connect correctly.

- Prepare for the set up disk.
- Prepare for the printer driver set up disk.

3.2. Install procedure

3.2.1. In case of Windows XP (USB driver)

3.2.1.1. Before installing

Please start-up the system before installing and connect the printer.

1. Turn on the PC.
2. Turn on the printer after starting up the system.
3. Please connect with the PC after starting up printer.

* If dialog box of “Found new hardware wizard” popped up for other device, please connect the printer after the installation of the other device.

3.2.1.2. Install Procedure

- 1 . Connect the printer with PC.
- 2 . [Found new hardware wizard] dialog will be popped up, select[Install from a list or specific location] and click[Next].

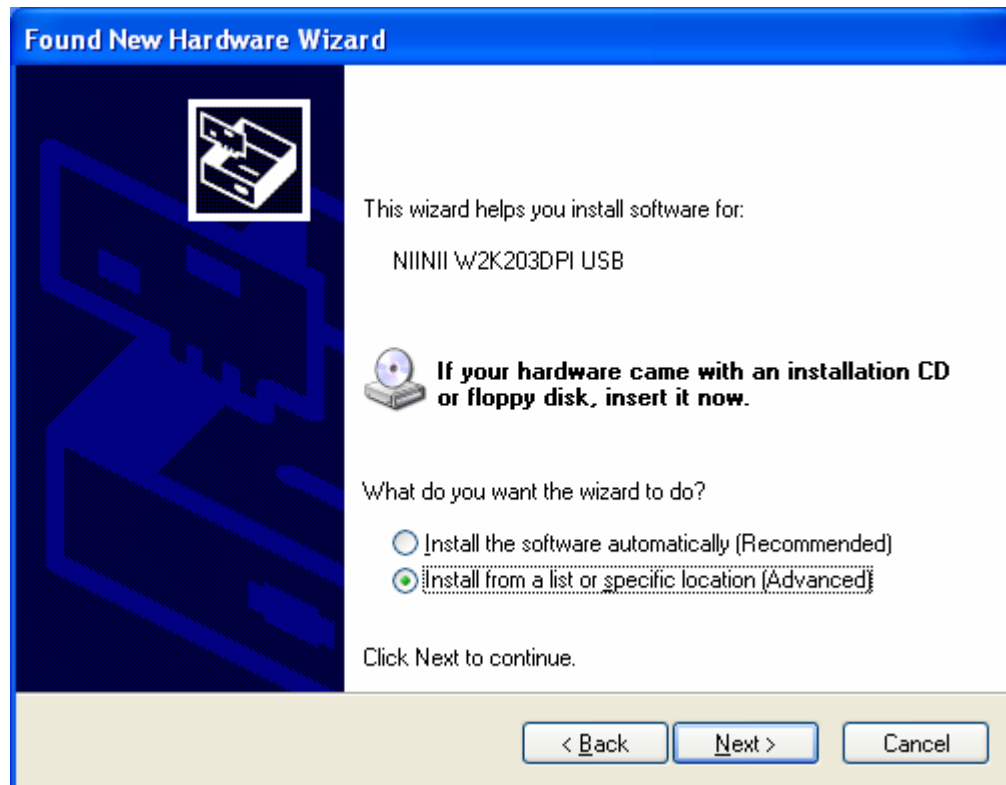


Fig.1 : [Found new hardware wizard] window

- 3 . Insert the Primex printer driver set-up disk and check [Search removable media {floppy, CD-ROM}], and select the drive, then click [Next] .

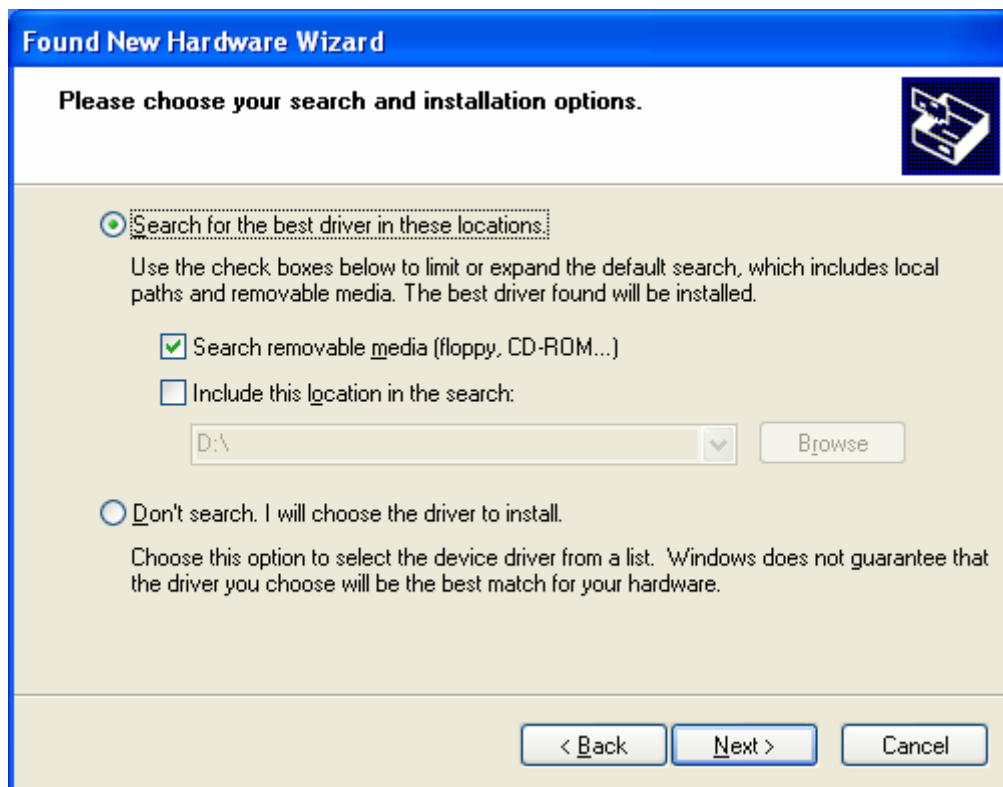


Fig.2 : Choose your search and installation options Wizard

- 4 . During installation, the following window popped up, click [Continue Anyway] and continue installation.

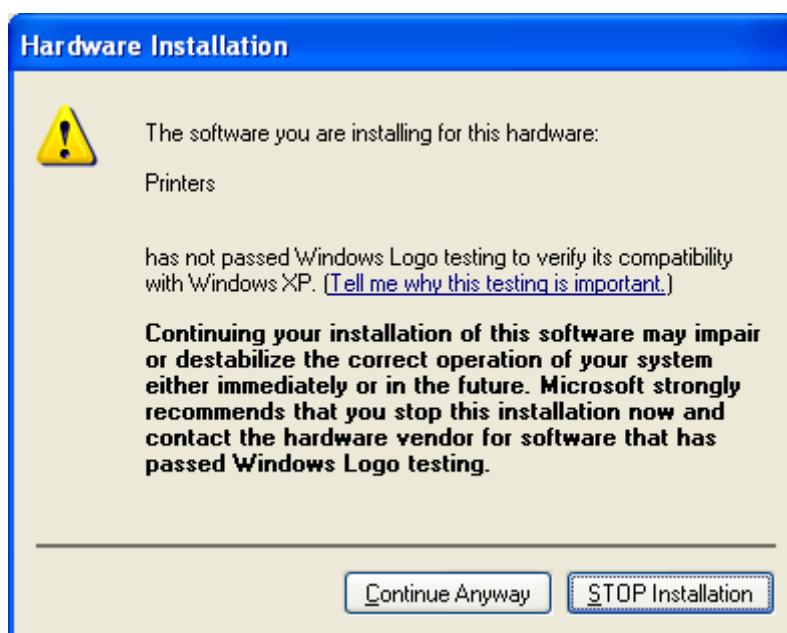


Fig.3 : Digital signature window

5 . Click [Finish].



Fig.4 : Finished [Found new hardware wizard]

6 . When installation is completed, the icon of the printer driver installed in the Printers and Faxes window is displayed.

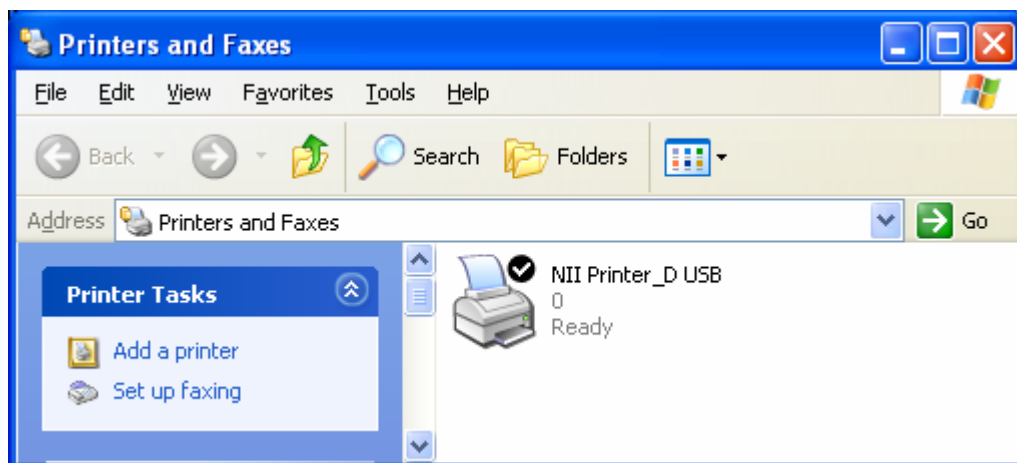


Fig.5 : Printers and Faxes window display after addition of driver

3.2.2. In case of Windows XP (Serial/ Parallel driver)

3.2.2.1. Confirmation of before installing

The illustration of Windows XP is written as category transcription (default setting). In case of choosing classic transcription, please select the category directly.

3.2.2.2. Install procedure

- 1 . Click the [Start] and run the [Control Panel(C)].
Click [Printer and other hardware] and select [Printer and FAX].
- 2 . Click [Add Printer] from the left side menu.

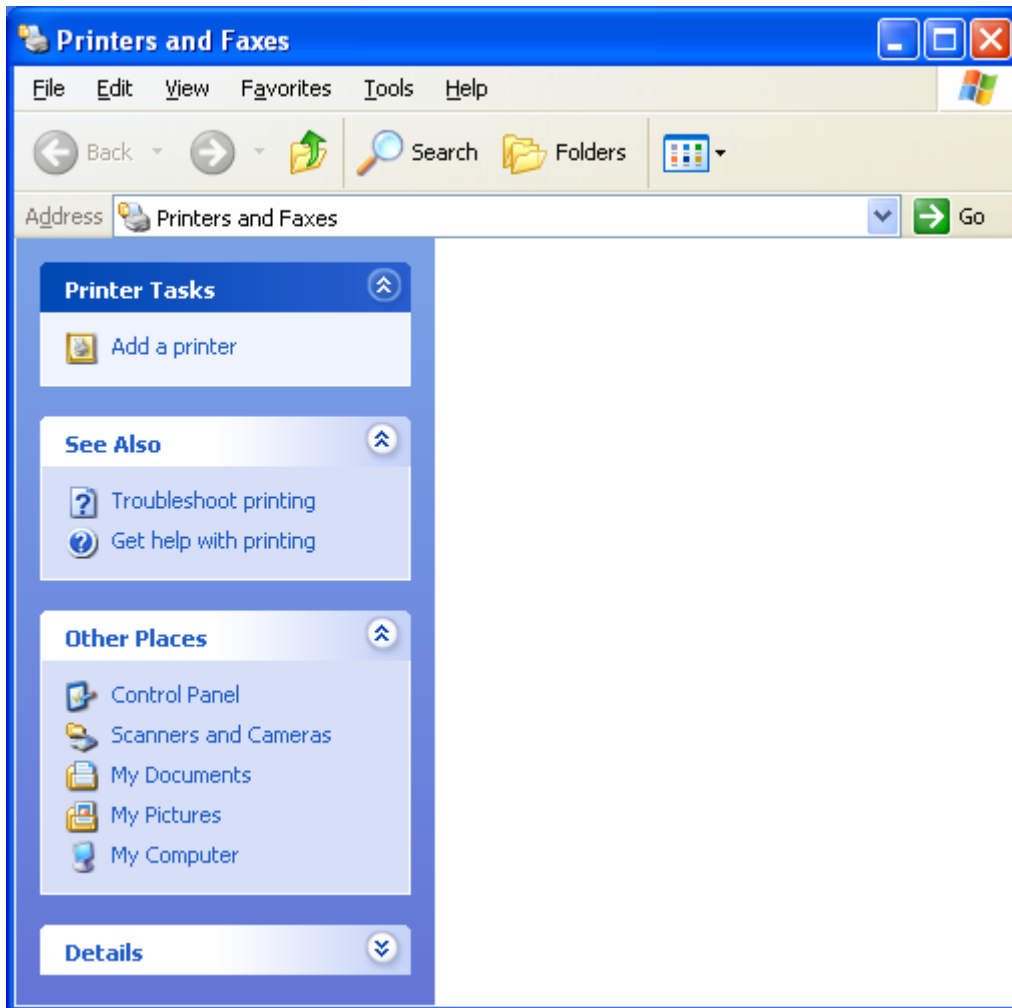


Fig.6 : [Printer and Fax] window

3 . Click [Next (N) >] button.

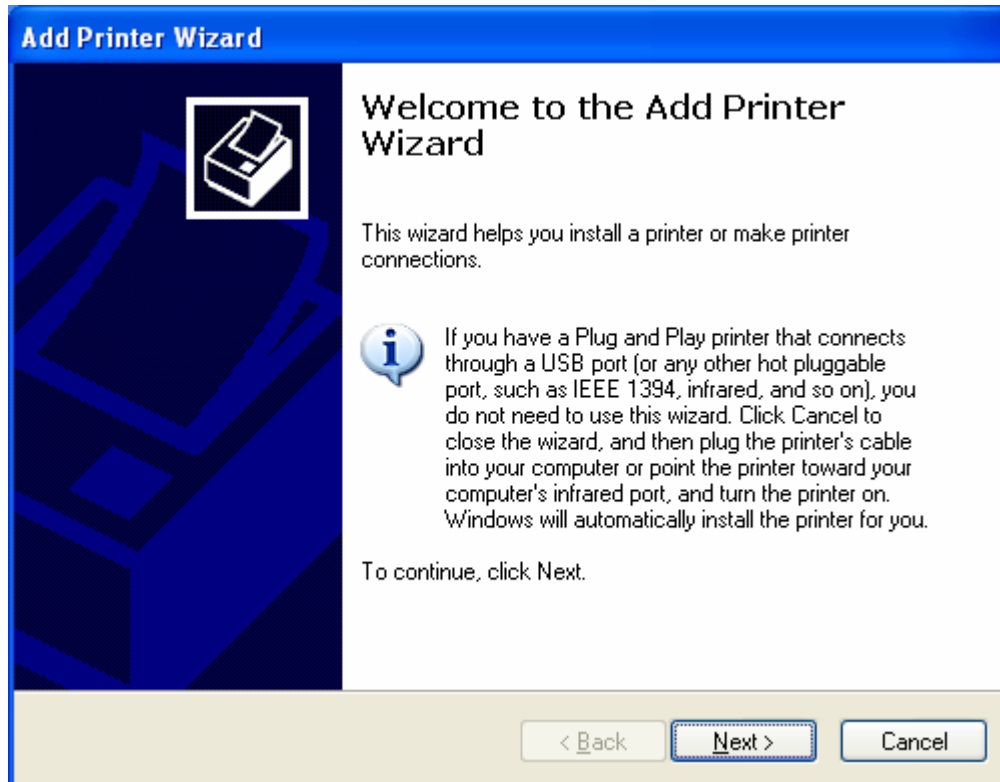


Fig.7 : Start of [Add Printer Wizard]

4 . Select [Local printer (L)] and click [Next (N) >] button. The [Automatically detected and install plug and play printer] cannot be used.

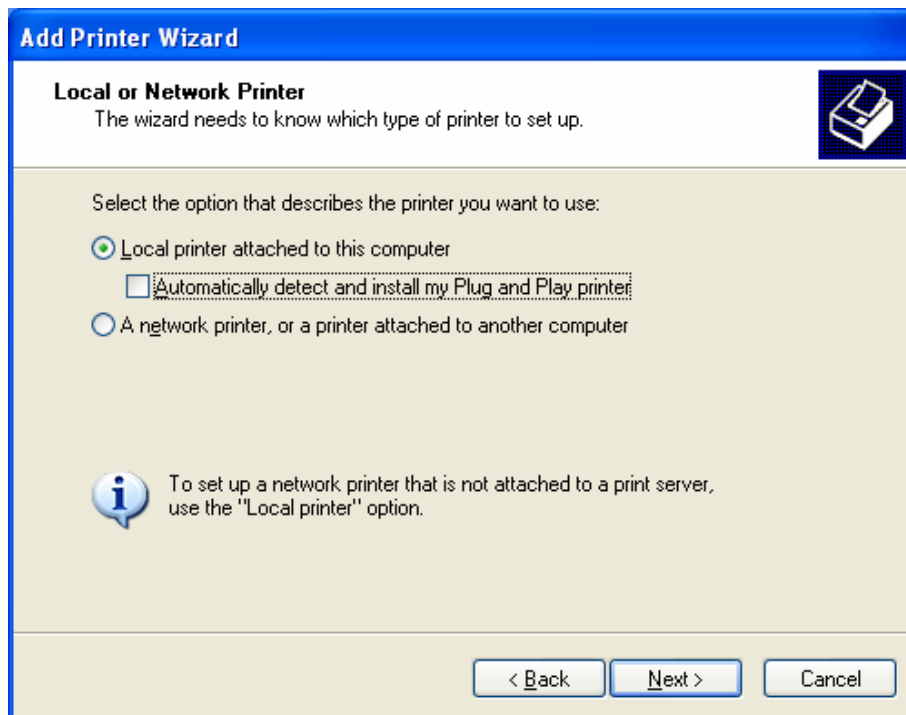


Fig.8 : Select the connection printer

5 . Select the port which connecting printer, and click [Next (N) >] button.

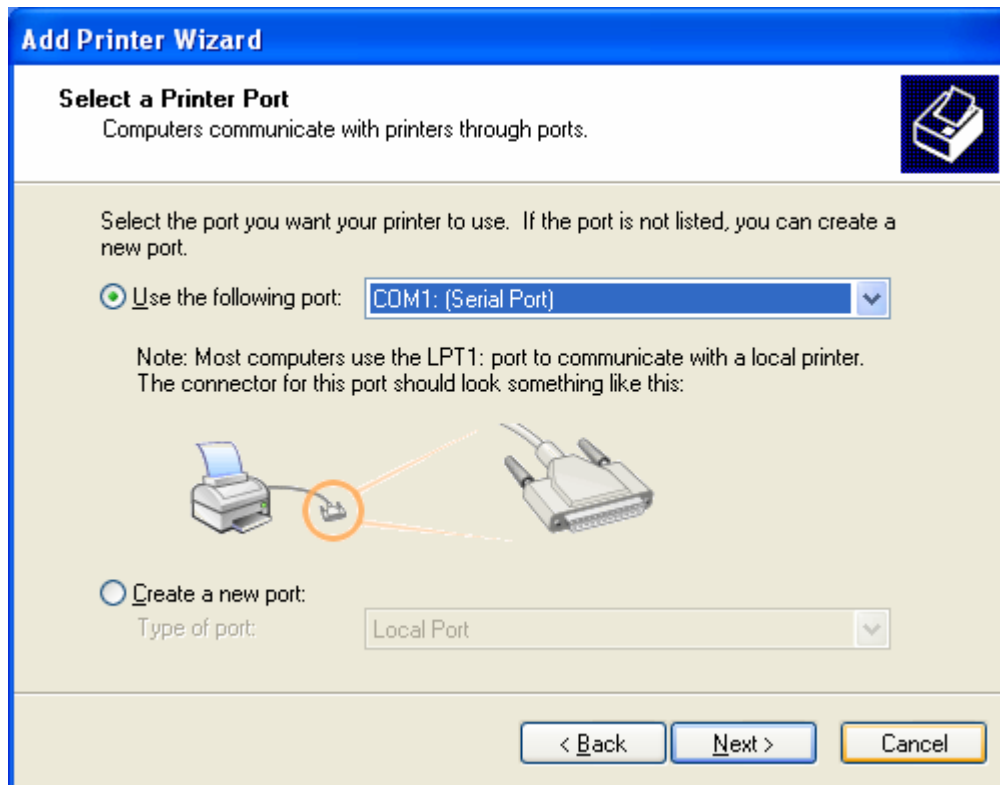


Fig.9 : Select connection port

6 . Click [Have Disk] button.

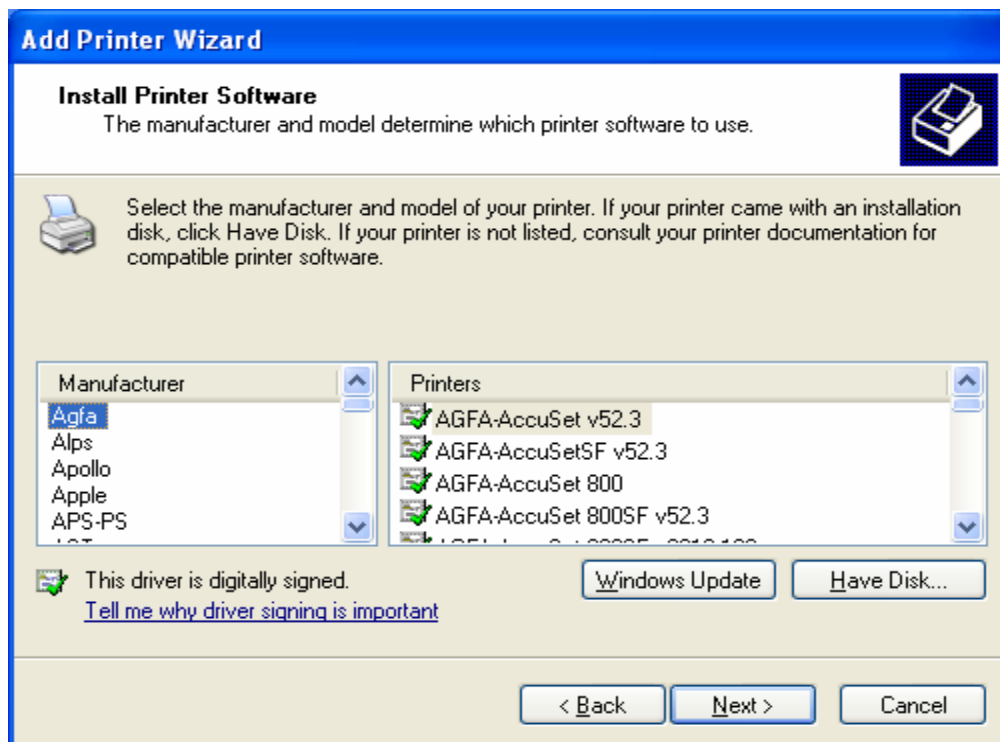


Fig.10 : Select printer model

- 7 . Insert the Primex printer driver set-up disk and enter the pass. In case of floppy disk drive A:, enter [A:¥], then click [OK] button.

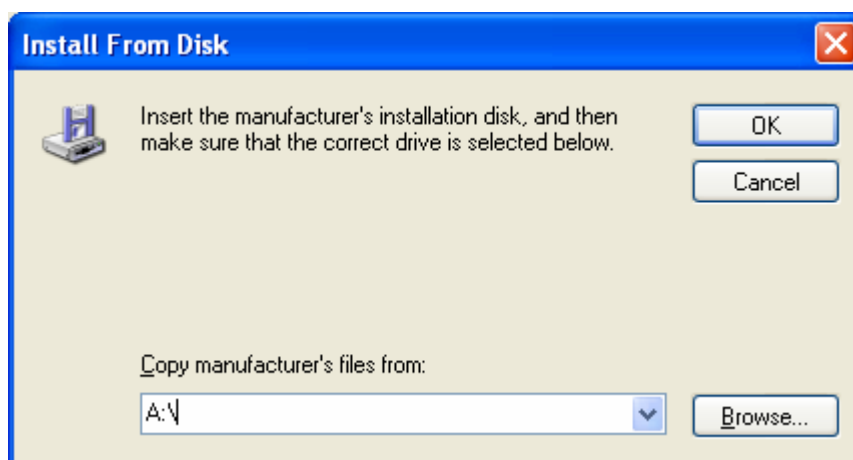


Fig.11 : Select drive

- 8 . Select the printer driver, and click [Next (N) >] button.

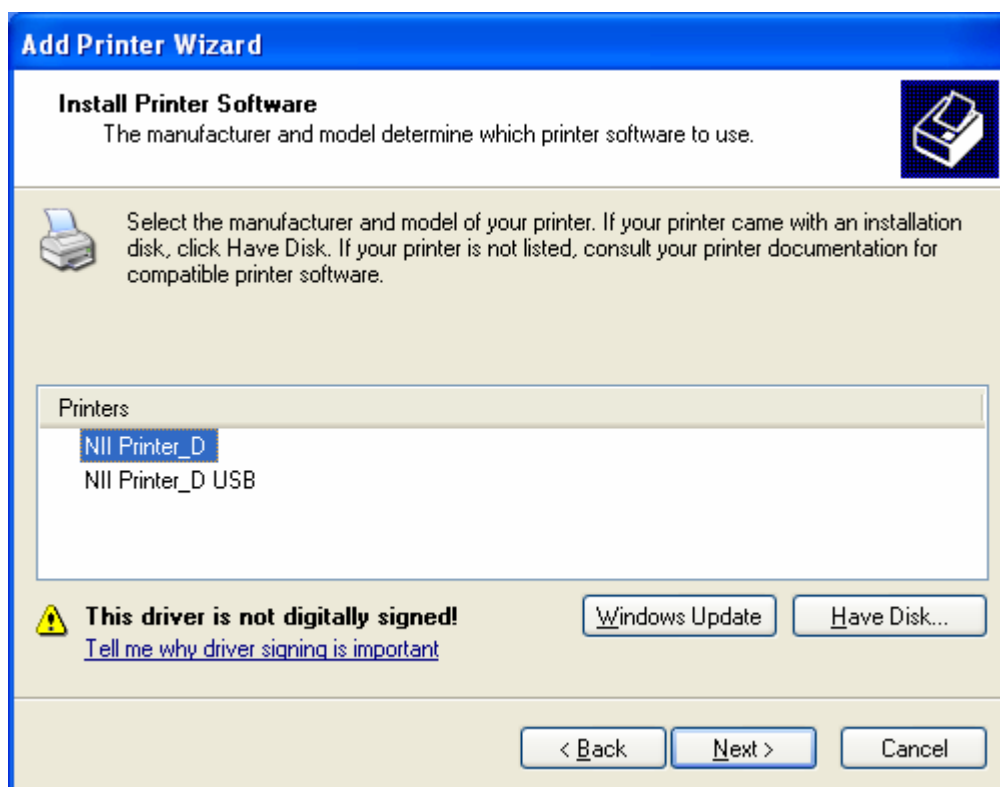
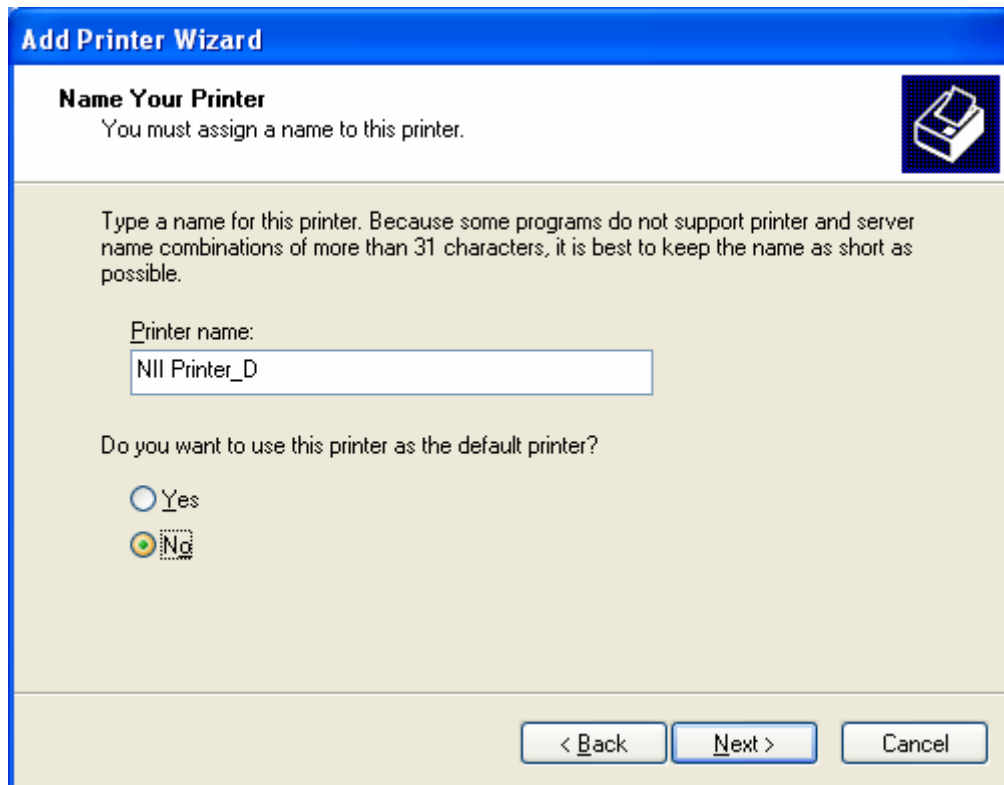


Fig.12 : Select the printer software

*Printer model is different according to your using printer. Please refer to the table 1 of section 4 for more detail.

9 . If necessary, enter the printer name, and press [Next (N) >] button.



The image shows a Windows-style dialog box titled "Add Printer Wizard". The main heading is "Name Your Printer", followed by the instruction "You must assign a name to this printer." and a printer icon. Below this, a text box is labeled "Printer name:" and contains the text "NII Printer_D". A paragraph of text explains that names should be kept short due to 31-character limits. Below the text box, a question asks "Do you want to use this printer as the default printer?" with two radio button options: "Yes" (unselected) and "No" (selected). At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

Add Printer Wizard

Name Your Printer
You must assign a name to this printer.

Type a name for this printer. Because some programs do not support printer and server name combinations of more than 31 characters, it is best to keep the name as short as possible.

Printer name:
NII Printer_D

Do you want to use this printer as the default printer?

☐ Yes
☒ No

< Back Next > Cancel

Fig.13 : Set the printer name

1 0 . Select whether you print test page or not, and press [Next (N) >] button.

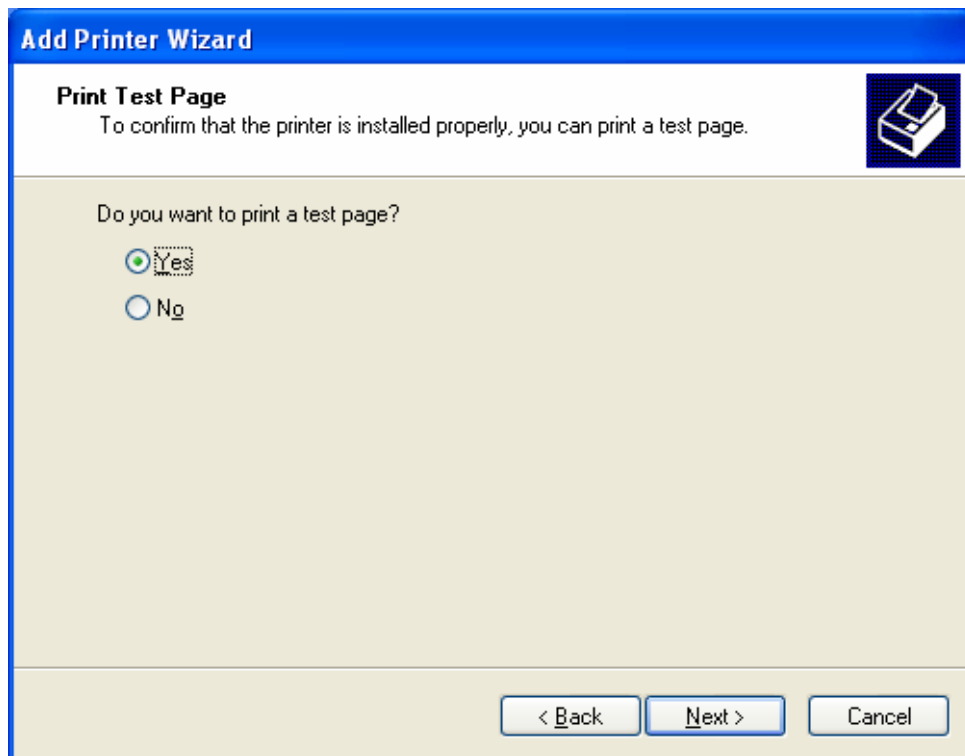


Fig.14 : Select the test page print

1 1 . Please confirm the setting, and if it is correct, please press [Finish] button. If you change the setting, press [Back (B)] button.

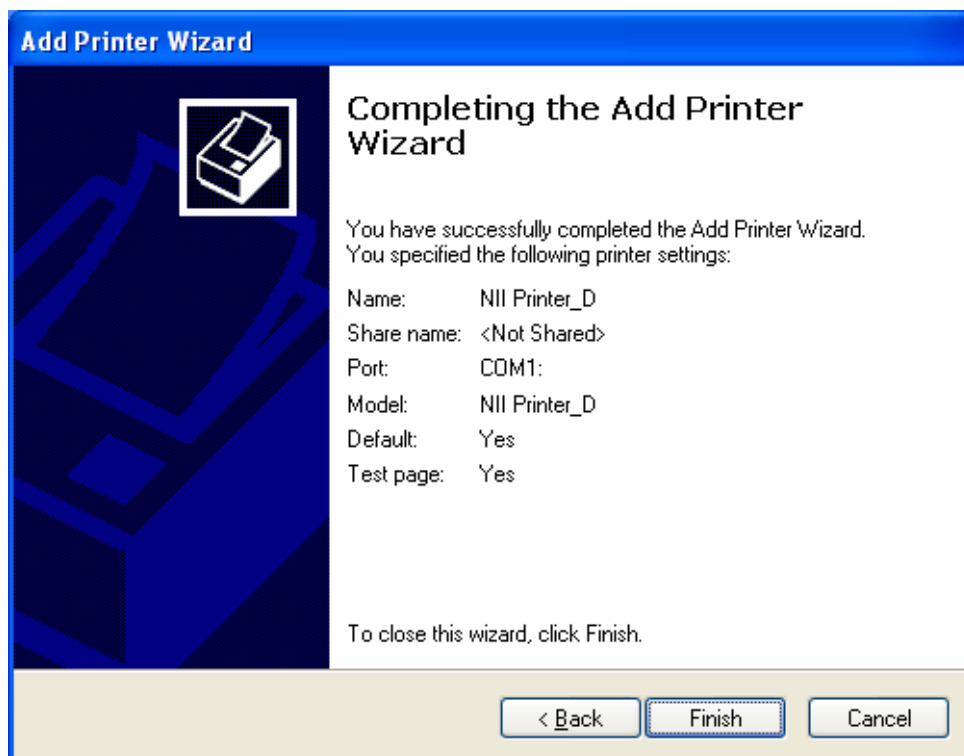


Fig.15 : Finish [Add Printer Wizard]

- 1 2 . During installation, the following window popped up, click [Continue Anyway] and continue installation.



Fig.16 : Digital Signiture Window

- 1 3 . When installation is completed, the icon of the printer driver installed in the Printers and Faxes window is displayed.

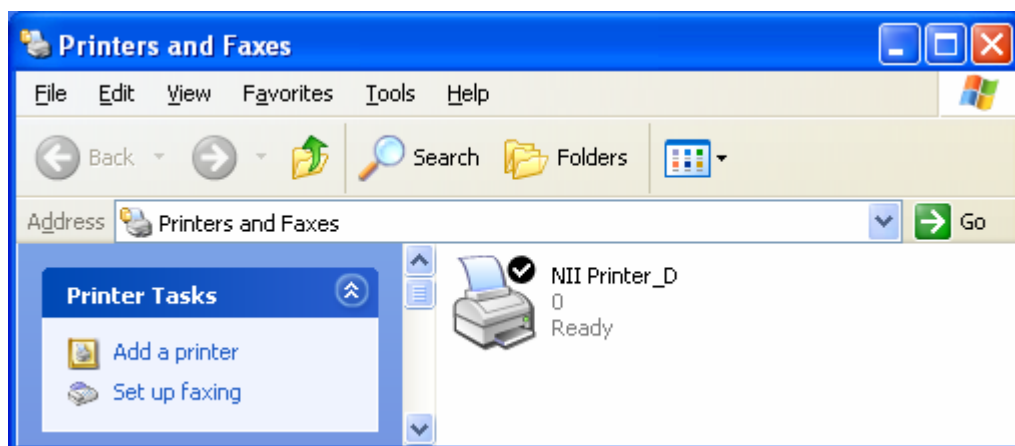


Fig.17 : Printers and Faxes window display after addition of driver

4. Types of driver

This driver varies according to interfaces.

The printer model number, displayed in the driver 's selection screen, is specified as follows.




Nii	Printer_D	
Nii	Printer_D	USB
		
NII	Printer model	USB
(Common)	(Common)	

Table. 1

Each part explains as follows:

- NII Printer_D
It illustrates as this driver, and common name for all models.
- USB
It is for USB connection.

Please use the correct driver for appropriate printing.

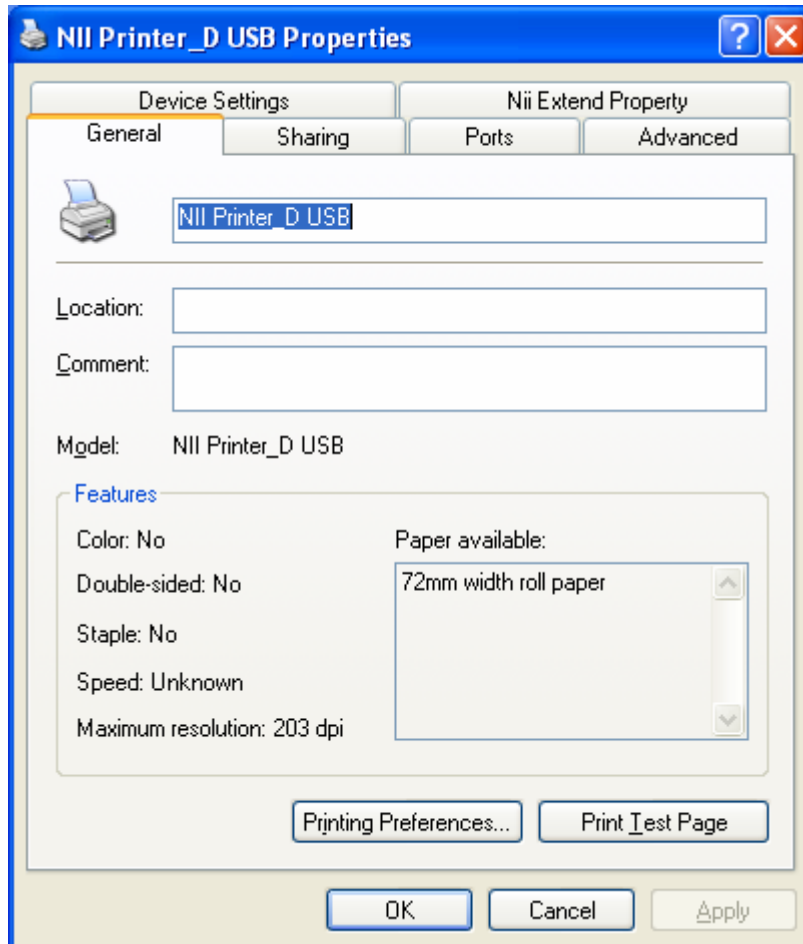
* Note: Please use API in NiiPrinterLib for sending command.

5. Printer setting

5.1. In case of WindowsXP (USB driver)

5.1.1. WindowsXP printer setting screen

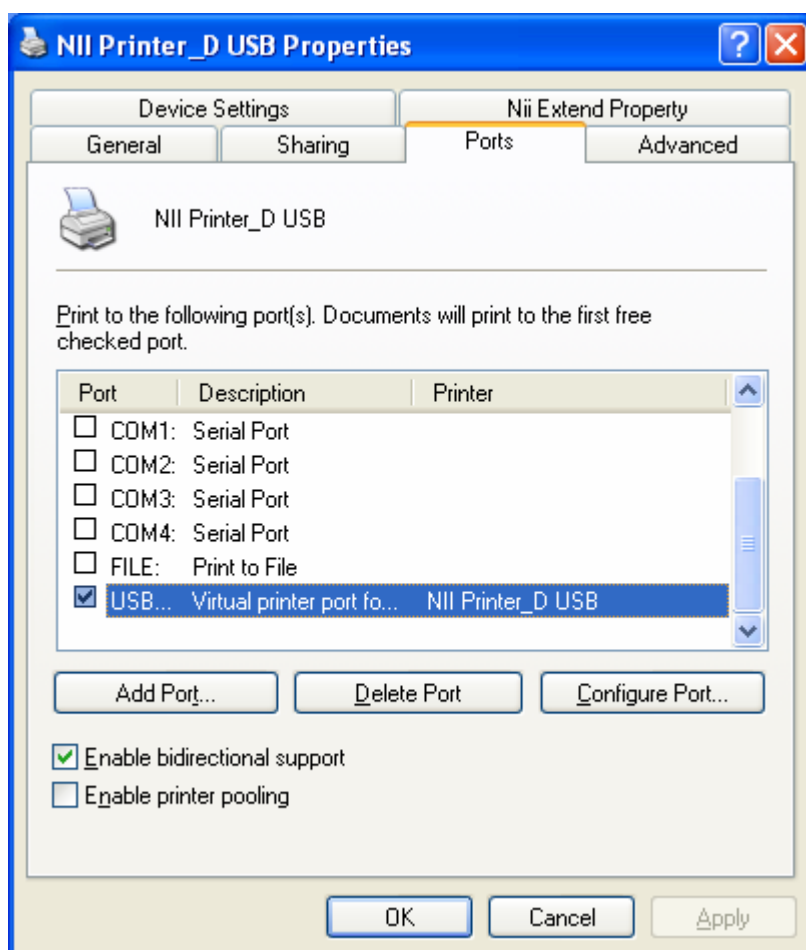
Select the icon of printer driver from the printer window and click [Properties] in [File] menu to display the dialogue below.



The setting method and the range of the influence are as follows.

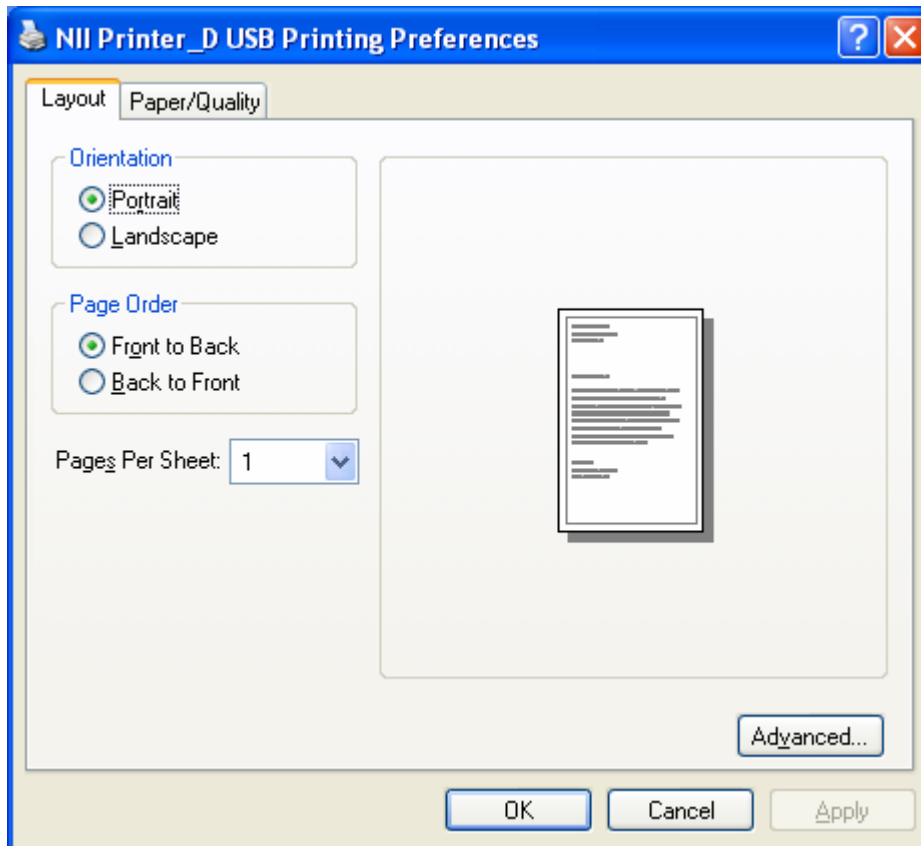
Setting	Range
[Printing Preferences...] in General tag	Change individual property
[Printing Defaults...] in Advanced tag	Change all user 's default property
Device settings	Change device setting
From application	Temporary change only in print from the application

It can be changed the parts of setting, which are set in installing, in [Sharing] and [Port] tag. However, check [Enable bidirectional support]. The printer may not work correctly if this check is removed occasionally.

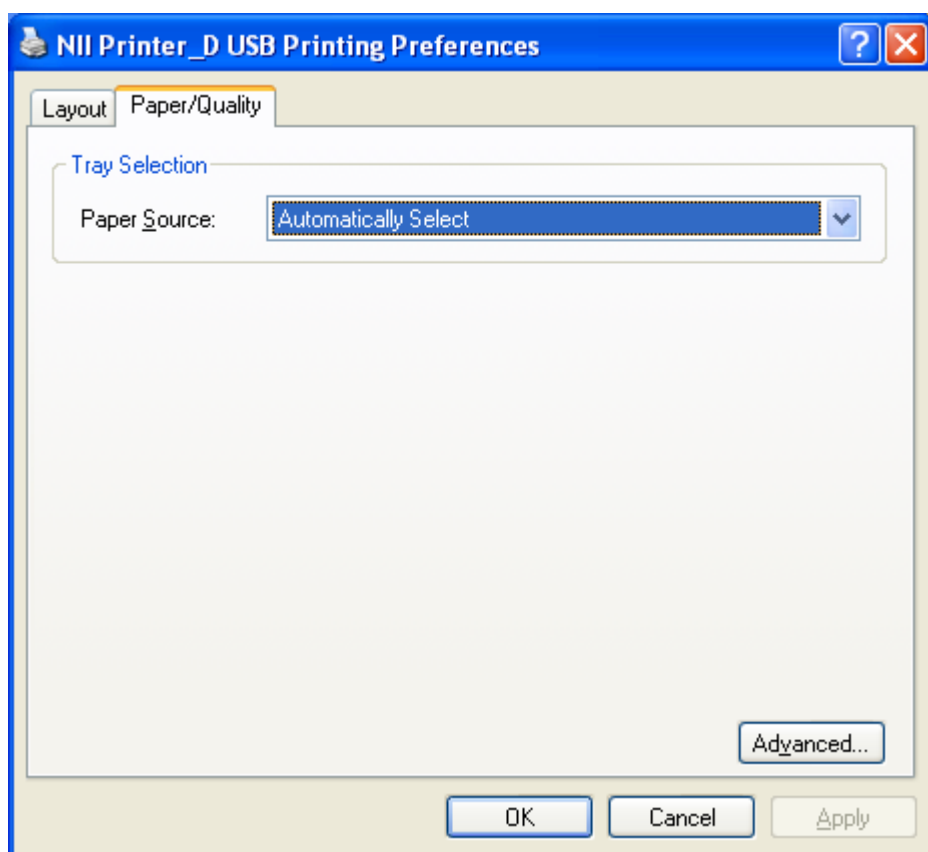


5.1.2. Printing Preferences

The following items can be set from [Printing Preferences...] in General tag and [Printing Defaults...] in Advanced tag.



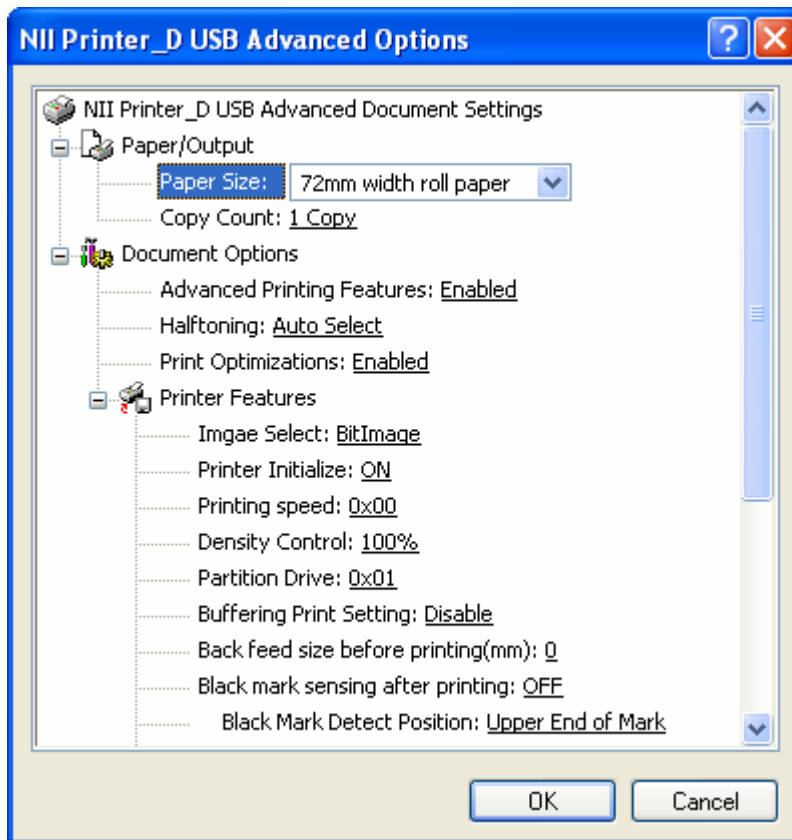
Item	Value
Orientation	Portrait (Print the form on the vertical direction)
	Landscape (Print the form on the horizontal direction) Note: A text font and a special font cannot be used. Use only the windows font.
Page Order	Front to Back (The first page is printed first.)
	Back to Front (The first page is printed at the end.)
Page per Sheet	1 (Select this usually)
	2,4,6,9,16 (Not supported)



Item	Value
Paper Source	Automatically select (Select this usually)
	Roll Paper Holder (Print from the roll paper holder)

5.1.3. Advanced Options

The following items can be set from [Advanced...] button.



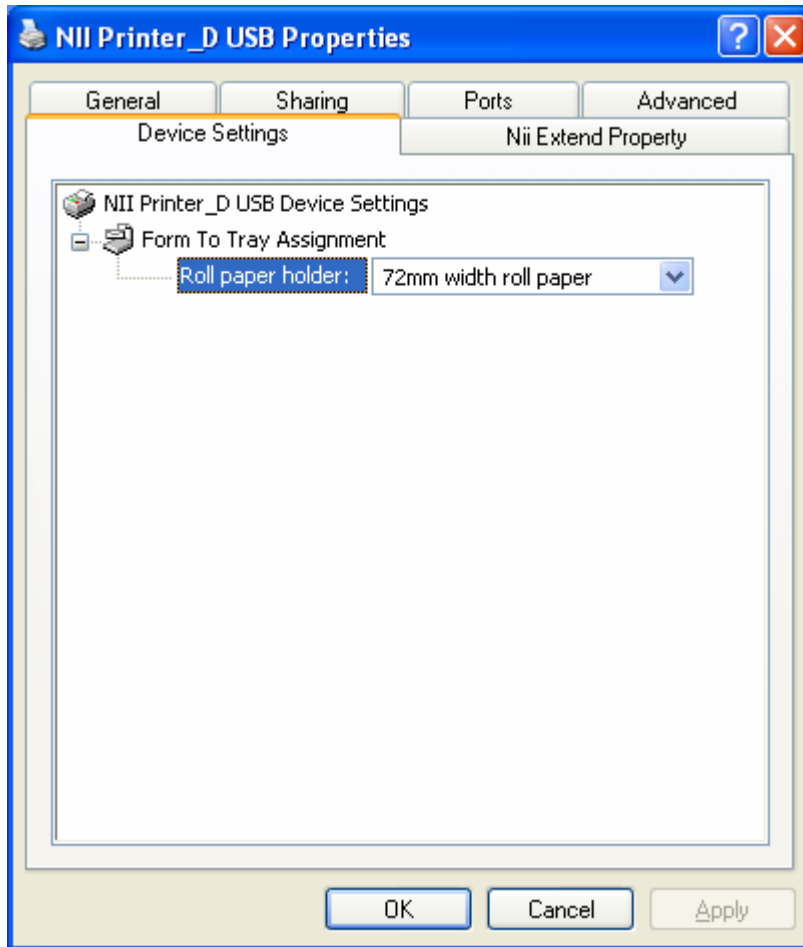
Item	Value
Paper Size	Size of form being set by printer
Copy Count	Set it when copying it.
Advanced Printing Features	Enabled (Select this usually)
	Disabled (Printing Preferences is reset)
Half toning	Auto Select (Select this usually)
	Super cell (UNIDRV processes the halftone.)
	Dither 6x6 (UNIDRV processes the halftone.)
	Dither 8x8 (UNIDRV processes the halftone.)
Print Optimization	Enabled (Select this usually)
	Disabled (Device)
Image Select	BitImage (Bit Image Output)
	RasterImage(LINE) (Raster line output)
	RasterImage(BLOCK) (Raster Block output)
Printer Initialize	ON (Select this usually)
	OFF (Not Send Printer Initialize Command)
Print Speed	Print Speed Setting (0x00h ~ 0x10h) *) Refer to the specifications for setting value
Density Control	Print Density Setting <ul style="list-style-type: none"> • 65% ~ 150% 《by 5%》 • 150% ~ 200% 《by 10%》 *) Refer to the specifications for setting value

Partition Drive	Partition Drive Setting (0x01h ~ 0x10h) *) Refer to the specifications for setting value
Buffering Print Setting	Disabled (No sending command)
	Disabled (with Print Completion Notice) (Print Start Command 《GS G 11h》 +JOB ID)
	Enabled (without Print Completion Notice)(Print Start Command 《GS G 21h》)
	Enabled (with Print Completion Notice)(Print Start Command 《GS G 31h》 +JOB ID)
Back Feed Size before Printing	Back feed length before printing document(mm)
Black Mark Sensing after Printing	OFF (No sensing)
	ON (Black mark sensing)
	ON (Sensor switching system) (Existing black mark sensing)
Black Mark Detect Position	Upper End of Mark (Detect Upper End of Black Mark)
	Lower End of Mark (Detect Lower End of Black Mark)
Correct Position after Sensing	Correct the sensing variance between models by dots. * In case of switching black mark sensing printer, • Necessary need to move in the size of black mark. • Do not correct the negative (-) value.
Cue Operation of Paper Setting	Unused
	Used
Que Operation after Auto Loading	OFF
	ON
Que Operation after Head Cover Open/Close	OFF
	ON
Que Operation after Paper Feed	OFF
	ON
Back Feed Size after printing	Back feed length after printing document(mm)
Paper Feed Size after Printing	Paper Feed Length after printing document(mm)
Presenter Ejection	None
	Cramp Ejection
	Whole Ejection
Cutter Operation after Printing	No Cut
	Full Cut
	Partial Cut
Barcode Output	OFF
	ON * When NiiPrinterLib, NiiPrinter SDK or using based on these, please use as OFF.

* Please note there are properties that printer does not support.

5.1.4. Device Setting

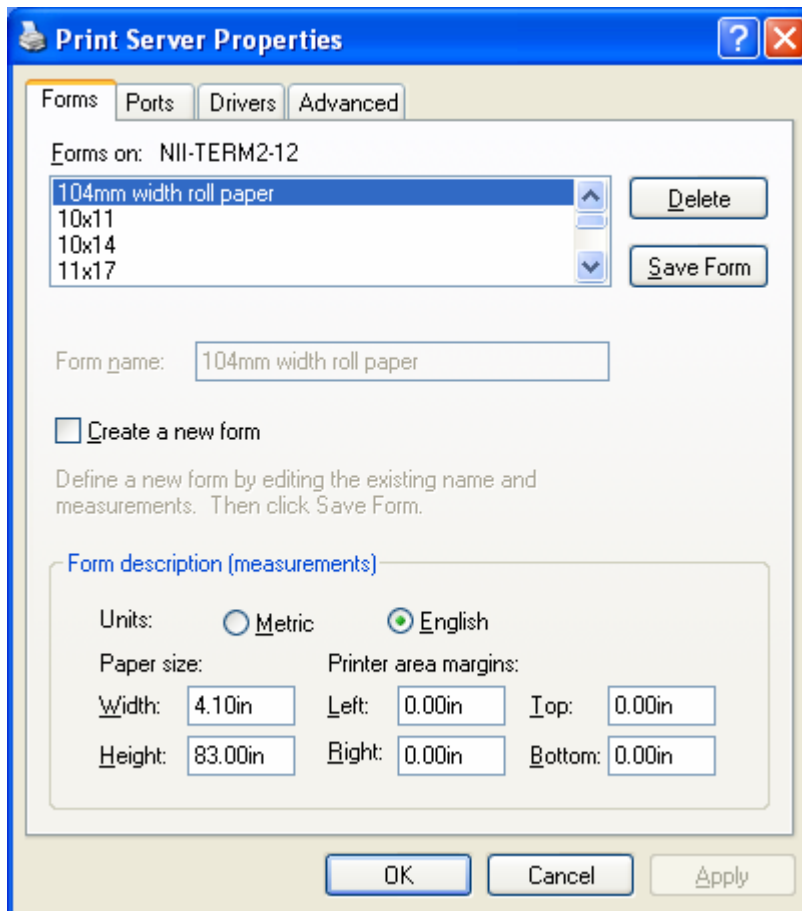
The following items can be set from Device Settings tag.



Item	Value
Form to Tray Assignment	Relate Tray Form and Paper. When it is selected particular paper in the application, the paper is feed by designated tray. However, there is no meaning to set in this driver.

5.1.5. Server Properties

When the command of [Server Properties] of [File] menu is executed from the printer window, the following dialogue is displayed.

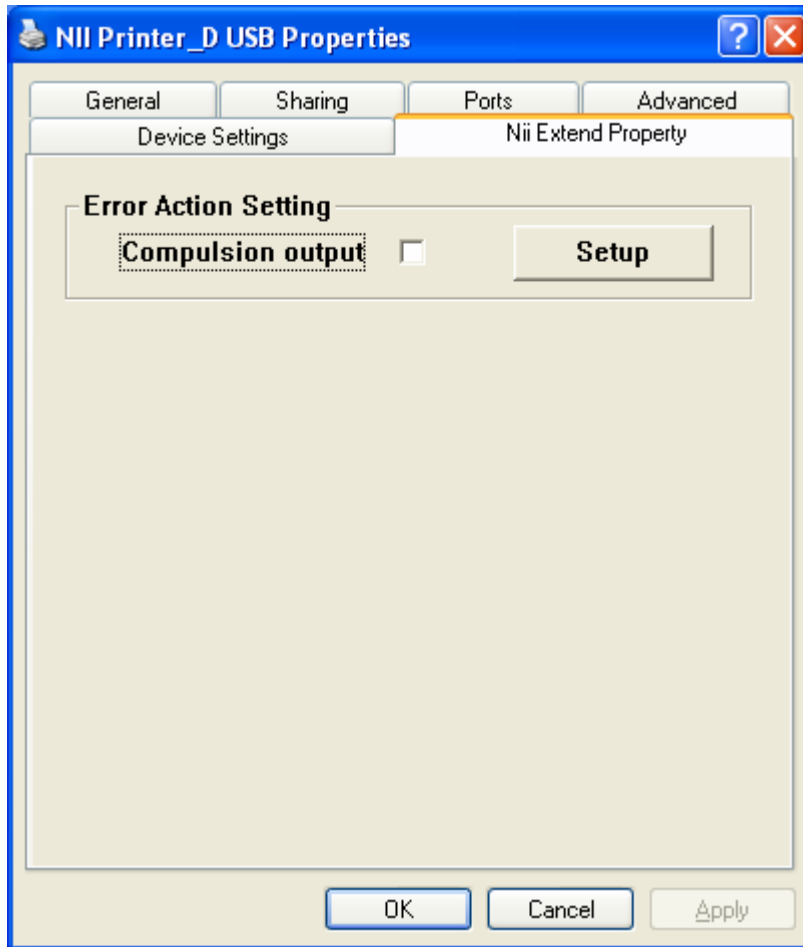


The image shows a Windows-style dialog box titled "Print Server Properties". It has four tabs: "Forms", "Ports", "Drivers", and "Advanced". The "Forms" tab is selected. Inside the dialog, it says "Forms on: NII-TERM2-12". Below this is a list box containing "104mm width roll paper", "10x11", "10x14", and "11x17". The "104mm width roll paper" item is selected. To the right of the list box are "Delete" and "Save Form" buttons. Below the list box is a text field labeled "Form name:" containing the text "104mm width roll paper". Below that is a checkbox labeled "Create a new form". Underneath the checkbox is a paragraph of text: "Define a new form by editing the existing name and measurements. Then click Save Form." Below this text is a section titled "Form description (measurements)". Inside this section, there are two radio buttons for "Units": "Metric" and "English", with "English" selected. Below the units are two groups of input fields. The "Paper size" group has "Width:" and "Height:" labels with input fields containing "4.10in" and "83.00in" respectively. The "Printer area margins" group has "Left:", "Right:", "Top:", and "Bottom:" labels, each with an input field containing "0.00in". At the bottom of the dialog are three buttons: "OK", "Cancel", and "Apply".

Set width and height according to the form which you use.

5.1.6. Error Handling Properties

Nii Extend Property is able to set the error handling.

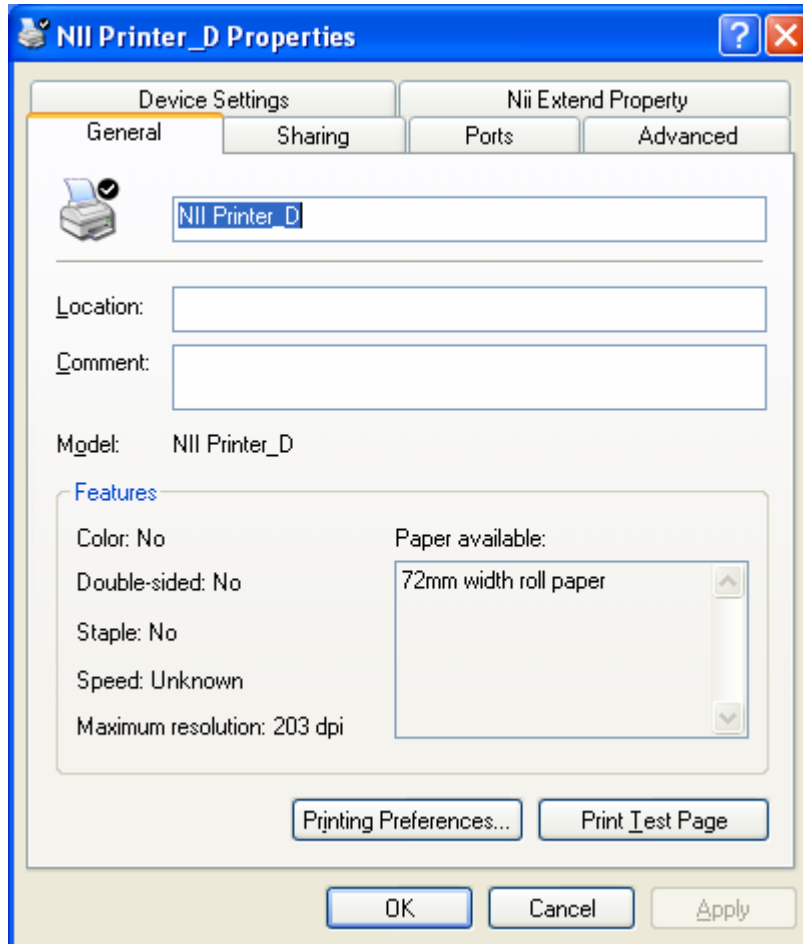


- * Tick the "Compulsion output" and press "Setup" when it become invalid the control of spooling stop during printer errors by this property.
- * Before setting this property, please delete all of print jobs.
Please reboot the computer to enable the new setting.
- * When setting NiiExtend Property on Windows Vista, you have to be an administrator user before opening the window.

5.2. In case of WindowsXP (Serial/ Parallel Driver)

5.2.1. WindowsXP Printer Setting Screen

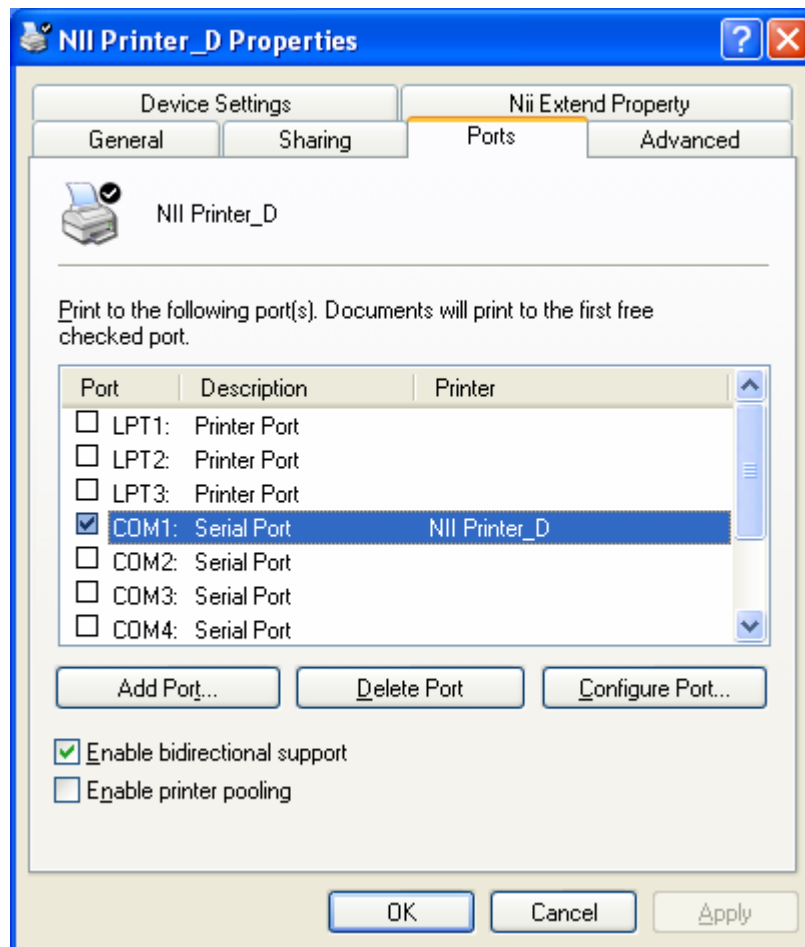
Select the icon of printer driver from the printer window and click [Properties] in [File] menu to display the dialogue below.



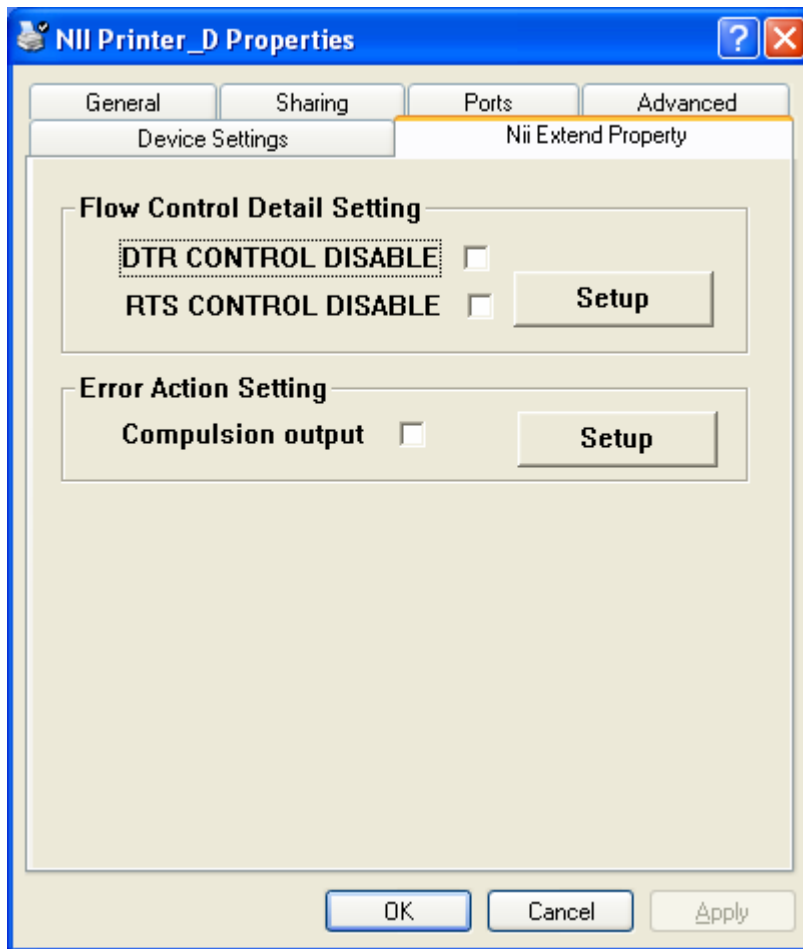
The setting method and the range of the influence are as follows.

Setting	Range
[Printing Preferences...] in General tag	Change individual property
[Printing Defaults...] in Advanced tag	Change all user 's default property
Device Settings	Change device setting
From Application	Temporary change only in print from the application
Set up for Nii Extend Property	Change all user 's property

It can be changed the parts of setting, which are set in installing, in [Sharing] and [Port] tag. However, check [Enable bidirectional support]. The printer may not work correctly if this check is removed occasionally.



In the Flow Control Detail Setting of Nii Extend Property, you can set the detail of serial communication about port monitoring.



- * When you become disable the DTR/RTS control by this property, please set by each flow control and press "Setup" .
- * When you set this property, the setting process should be done after deleting all of print jobs. Please restart for enabling the property setting with accuracy.
- * **When setting NiiExtend Property on Windows Vista, you have to be an administrator user before opening the window.**

5.2.2. Printing Preferences

* Refer to 【5.1.2.】 .

5.2.3. Advanced Options

* Refer to 【5.1.3.】 .

5.2.4. Device Setting

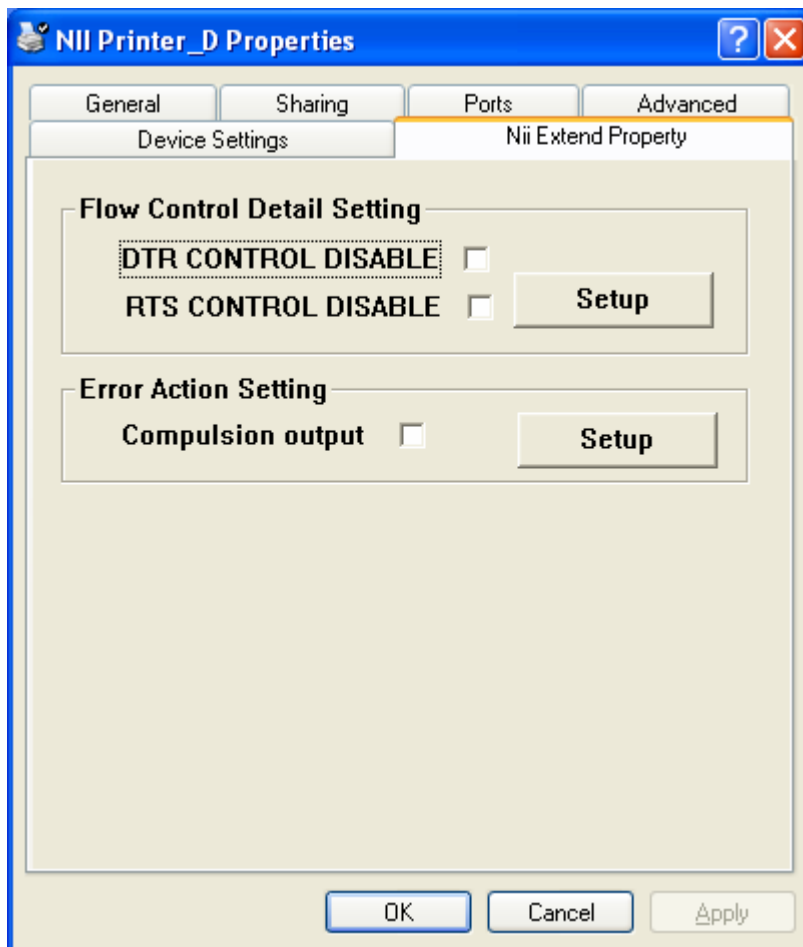
* Refer to 【5.1.4.】 .

5.2.5. Server Properties

* Refer to 【5.1.5.】 .

5.2.6. Error Handling Properties

Error Action Setting of Nii Extend Property is able to set the error handling.



* Tick the “Compulsion output” and press “Setup” when it become invalid the control of spooling stop during printer errors by this property.

* Before setting this property, please delete all of print jobs.

Please reboot the computer to enable the new setting.

6. Device Font

6.1. About Device Font

The driver has incorporated font (device fonts) for output of text.

6.2. Text Fonts

They are the fonts to improve the printing throughput by using the fonts incorporated in the printer and by outputting the character codes only for printing. The text font can be specified from the application such as Microsoft Word and the programming language such as VB.

The font and the size which can be used are as follows:

Font Name	6 Point	8.5 Point	12 Point	17 Point
ANK A	×	Normal	×	Double Height
ANK A Wide	×	Double Width	×	4 倍角
ANK B	Normal	×	Double Height	×
ANK B Wide	Double Width	×	Double Height and Width	×
Kanji	×	Normal	×	Double Height
Kanji Wide	×	Double Width	×	Double Height and Width
NII UPC-A	×	NII UPC-A	×	×
NII UPC-A-HRI	×	NII UPC-A-HRI	×	×
NII UPC-A Small	×	NII UPC-A Small	×	×
NII UPC-A Small-HRI	×	NII UPC-A Small-HRI	×	×
NII UPC-E	×	NII UPC-E	×	×
NII UPC-E-HRI	×	NII UPC-E-HRI	×	×
NII UPC-E Small	×	NII UPC-E Small	×	×
NII UPC-E Small-HRI	×	NII UPC-E Small-HRI	×	×
NII JAN-13	×	NII JAN-13	×	×
NII JAN-13-HRI	×	NII JAN-13-HRI	×	×
NII JAN-13 Small	×	NII JAN-13 Small	×	×
NII JAN-13 Small-HRI	×	NII JAN-13 Small-HRI	×	×
NII JAN-8	×	NII JAN-8	×	×
NII JAN-8-HRI	×	NII JAN-8-HRI	×	×
NII JAN-8 Small	×	NII JAN-8 Small	×	×
NII JAN-8 Small-HRI	×	NII JAN-8 Small-HRI	×	×
NII CODE39	×	NII CODE39	×	×
NII CODE39-HRI	×	NII CODE39-HRI	×	×
NII CODE39 Small	×	NII CODE39 Small	×	×
NII CODE39 Small-HRI	×	NII CODE39 Small-HRI	×	×

NII ITF	x	NII ITF	x	x
NII ITF-HRI	x	NII ITF-HRI	x	x
NII ITF Small	x	NII ITF Small	x	x
NII ITF Small-HRI	x	NII ITF Small-HRI	x	x
NII NW-7	x	NII NW-7	x	x
NII NW-7-HRI	x	NII NW-7-HRI	x	x
NII NW-7 Small	x	NII NW-7 Small	x	x
NII NW-7 Small-HRI	x	NII NW-7 Small-HRI	x	x
NII RIGHT POSITION	x	NII RIGHT POSITION	x	x
NII CENTER POSITION	x	NII CENTER POSITION	x	x
NII LEFT POSITION	x	NII LEFT POSITION	x	x
NII BARCODE END	x	NII BARCODE END	x	x

*) Barcode fonts do not show as images in the preview or editing screen.

*) Device font is enabled only portrait orientation.

7. How to get the printer status

*Refer to the “Esc v” command in your using printer specification.

7.1. Outline

This driver provide the procedure, by which the status code sent by the printer, to read from the application software. As a result of that, it becomes possible to acquire the status about the cutter and the presenter, etc., which are not supported by OS.

This function is provided by API DLL being bundled with the driver. Please refer to the Function guide for the details.

7.2. About the status and extended information notification

This function has been achieved according to the following structures and procedures.

LM (Language Monitor) which is a part of the printer driver has paired with the printer driver. And it provides the DLL to support the communication between the each process and the LM. It communicates as follows between LM and DLL.

7.3. Status notification from LM to DLL

LM prepares shared memory to pass status information acquired from the printer.

Each application observes the status change by periodically reading this shared memory via DLL.

7.4. Exclusive operation about running API function

Because this function does not compete with other processes, the function offered with this API does not do the exclusive operation.

7.5. Reservation name of resources

To achieve this function, this driver has reserved the following names.

Shared memory : Global¥SHMEM / <printer name> / monitor / status /

Specified printer name enters the part of "< printer name >".

7.6. Status acquisition at the time of the same port assignment

When two or more printers are assigned to the same port, any statuses other than the printer (printer which printed at the last) which is effective now cannot be acquired.