DNP

DIGITAL PHOTO PRINTER

DS-RX1 HS
DS-RX1

Printer Driver Instruction Manual

For Windows XP

Dai Nippon Printing Co., Ltd.

December 25, 2015 Ver.1.10_1

●Safety precautions

Please read the User's Manual for the printer carefully before use, and follow the instructions. Note that the contents of directions for use and safety precautions correspond to the safety standards as of the time the User's Manual has been created.

●Remodeling

For product safety, do not remodel the DS-RX1 printers or the contents of the DS-RX1 printer drivers and the CD.

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Chapter 1 Install

1.1 Printer and Host computer Connection

Power ON the DS-RX1 and connect the DS-RX1 printer and the host by USB cable.
* Please refer to the manual for the DS-RX1 printer for connection if needed.

After that, if [Found New Hardware Wizard] is initiated, please install using the procedure in [1.2 Found New Hardware Wizard].If [Found New Hardware Wizard] is not initiated, please install in accordance with [1.3 Install from Add Printer Wizard].

1.2 Found New Hardware Wizard

After confirming [Install from a list or specific location [Advanced]] is selected, click [Next].

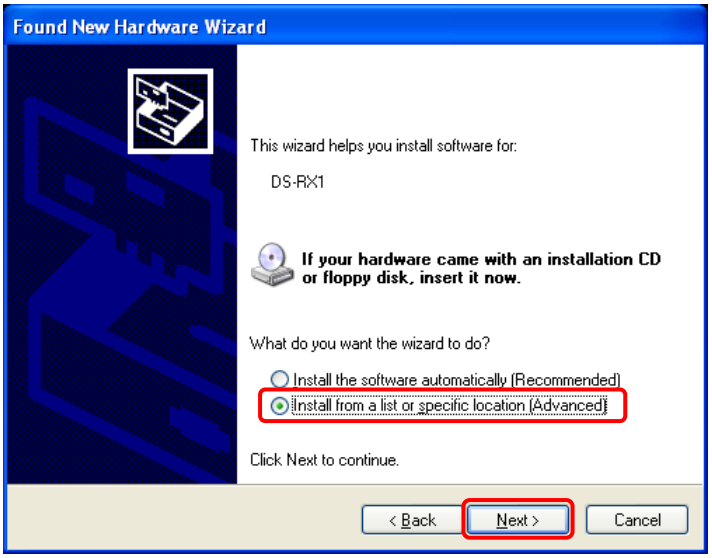
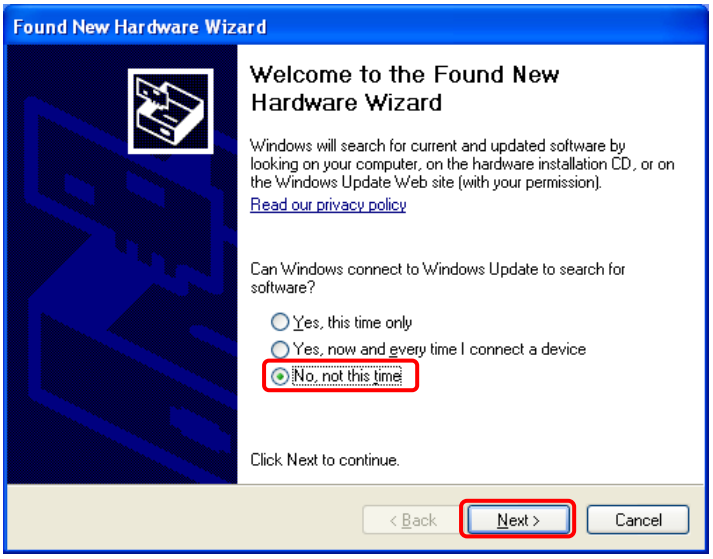


Fig 1.1 Found New Hardware Wizard

Note) When using Windows XP SP2 or later, if the following screen appears in “Found New Hardware Wizerd”, select “No, not this time”, and click the “Next” button.



Select [Search for the best driver in these locations], and confirm that [Include this location in the search] is selected.
Specify the location of the installation disk using the [Browse] button, and click [Next].
* The location is different by the OS.

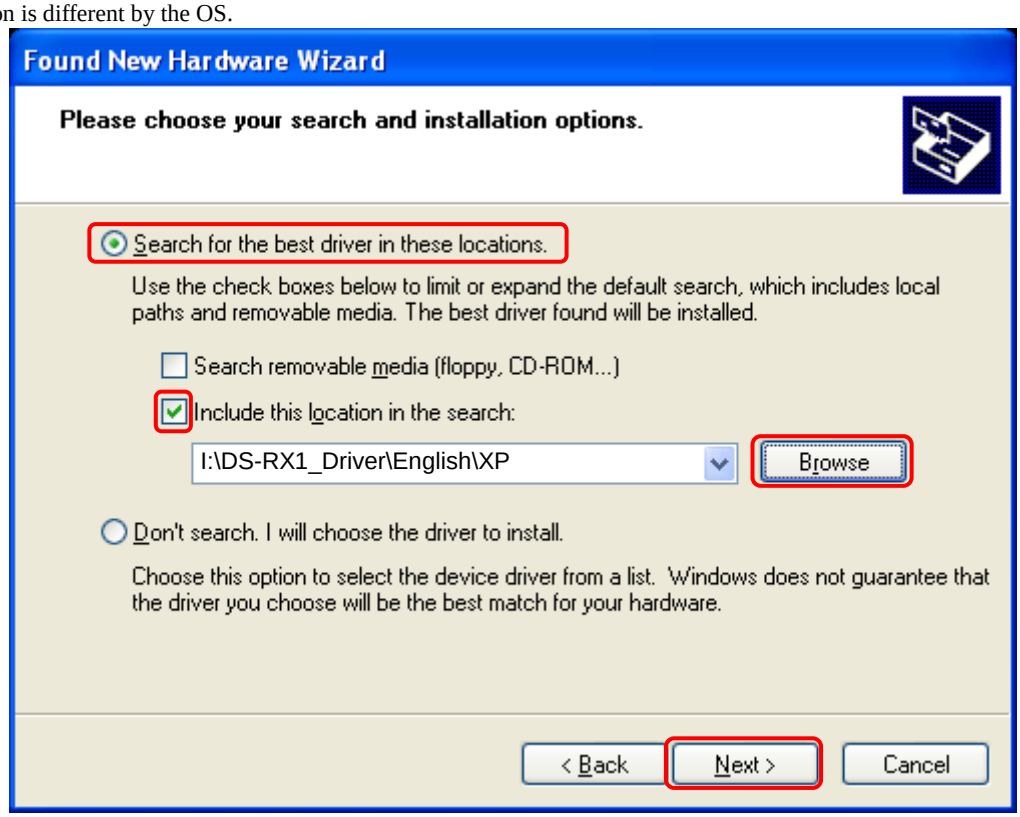


Fig 1.2 Search and Install Option

After searching the driver file, software installation is initiated. It takes some time for the software installation.

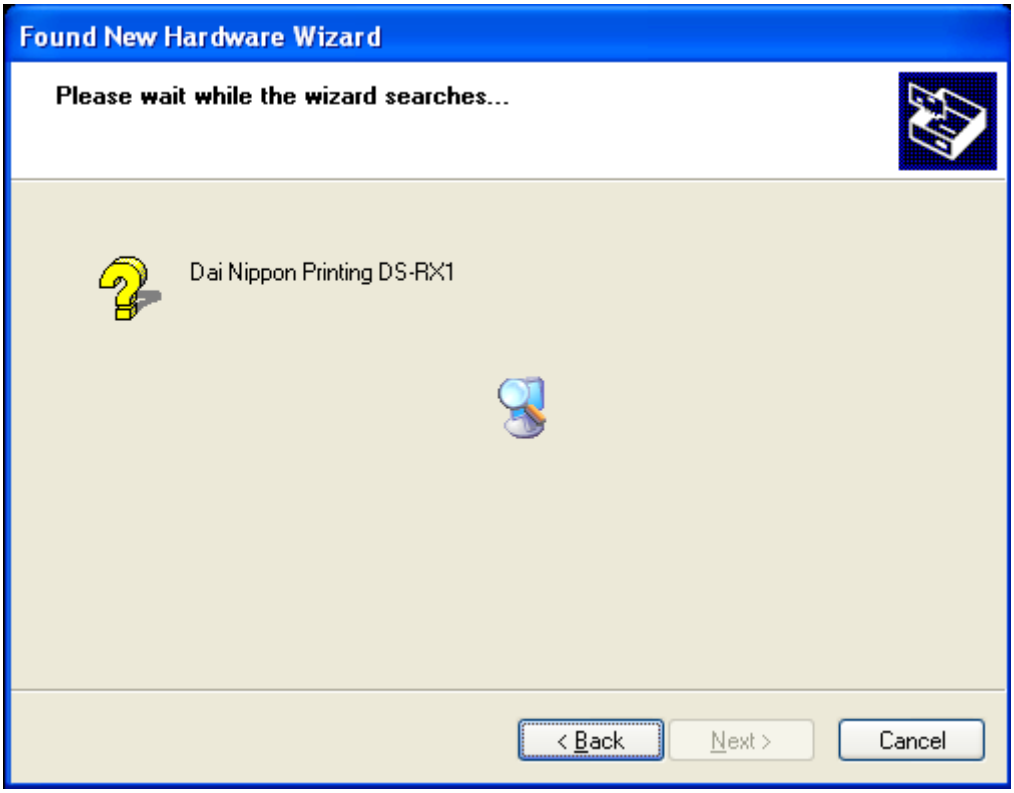


Fig 1.3 Software Installation

If the following window appears during upgrade installation, check the “Version” section, select the newest version, and click the “Next” button.

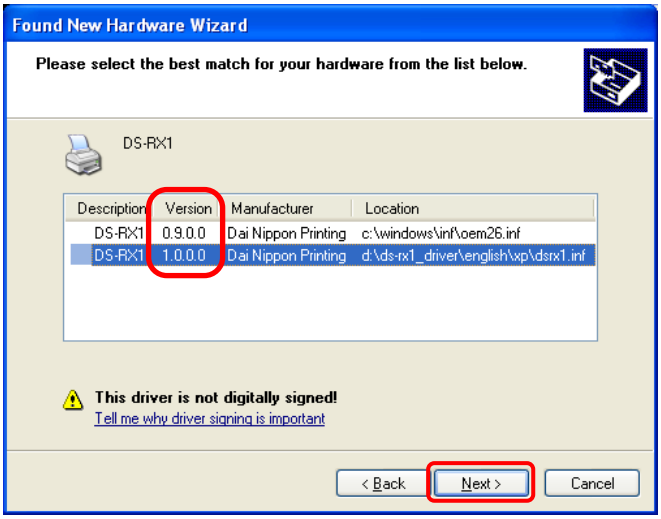


Fig 1.4 Select Software

During software installation, the following message will be displayed. Please click [Continue Anyway] to continue.

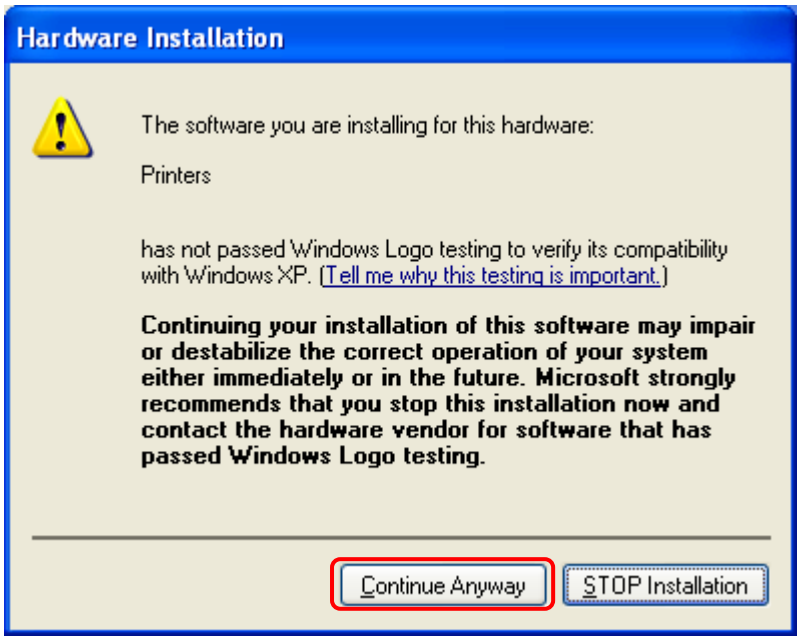


Fig 1.5 Hardware Installation

If [Search removable media (floppy,CD-ROM)] has been selected in Figure 1.2, the following message will be displayed. CD-ROM is inserted, and click [OK].

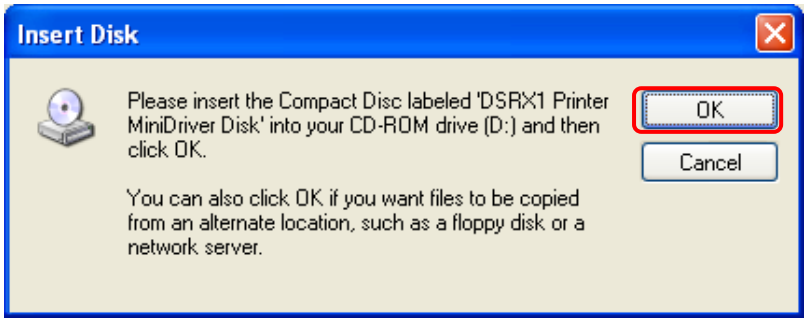


Fig 1.6 Insert Disk

If the following window appears when clicked [OK] in Figure 1.6.
Specify the location of the installation disk using the [Browse] button, and click [OK].

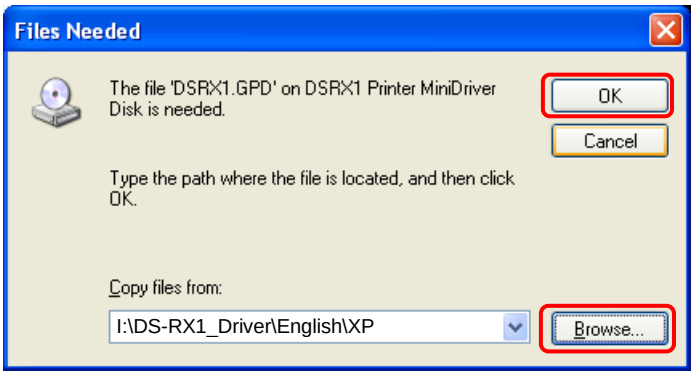


Fig 1.7 Files Needed

Click [Finish] to finish the wizard.

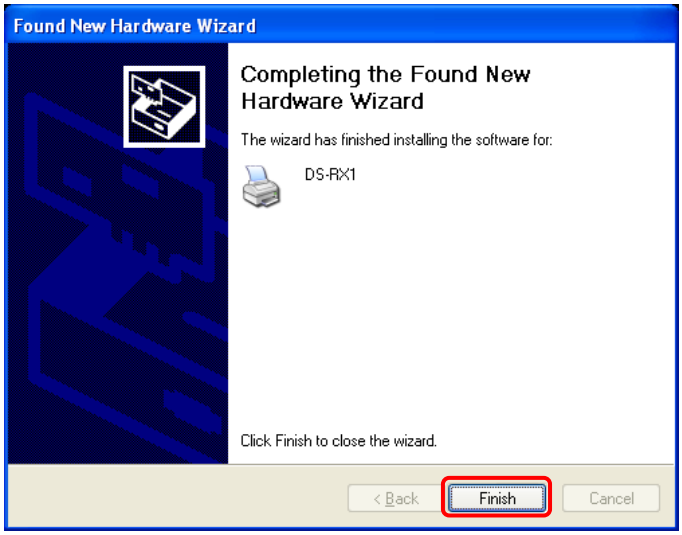


Fig 1.8 Quit from Found New Hardware Wizard

Click [start] – [Printer and Faxes] and confirm that [DS-RX1] is shown.

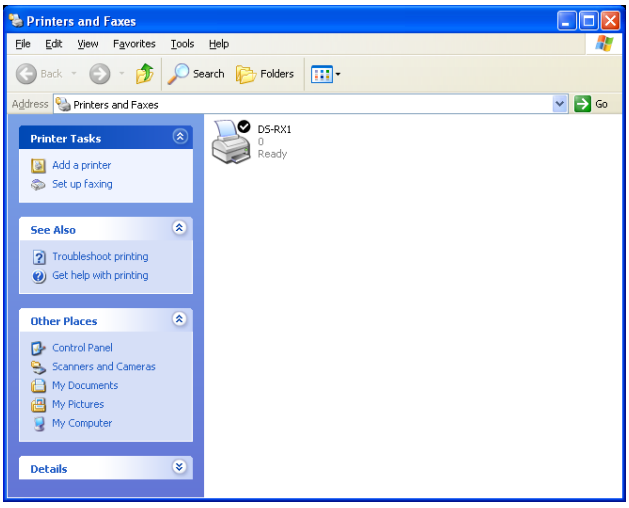


Fig 1.9 Printers and Faxes

After installation of the printer-driver is complete, be sure to reboot the computer.

1.3 Install from Add Printer Wizard

Click [start] – [Printers and Faxes].
(Depending on the host computer, [Printers and Faxes] may not be indicated. In that case, click [start] – [Control Panel] – [Printer and Other Hardware] – [Printers and Faxes])

Click [Add a printer].

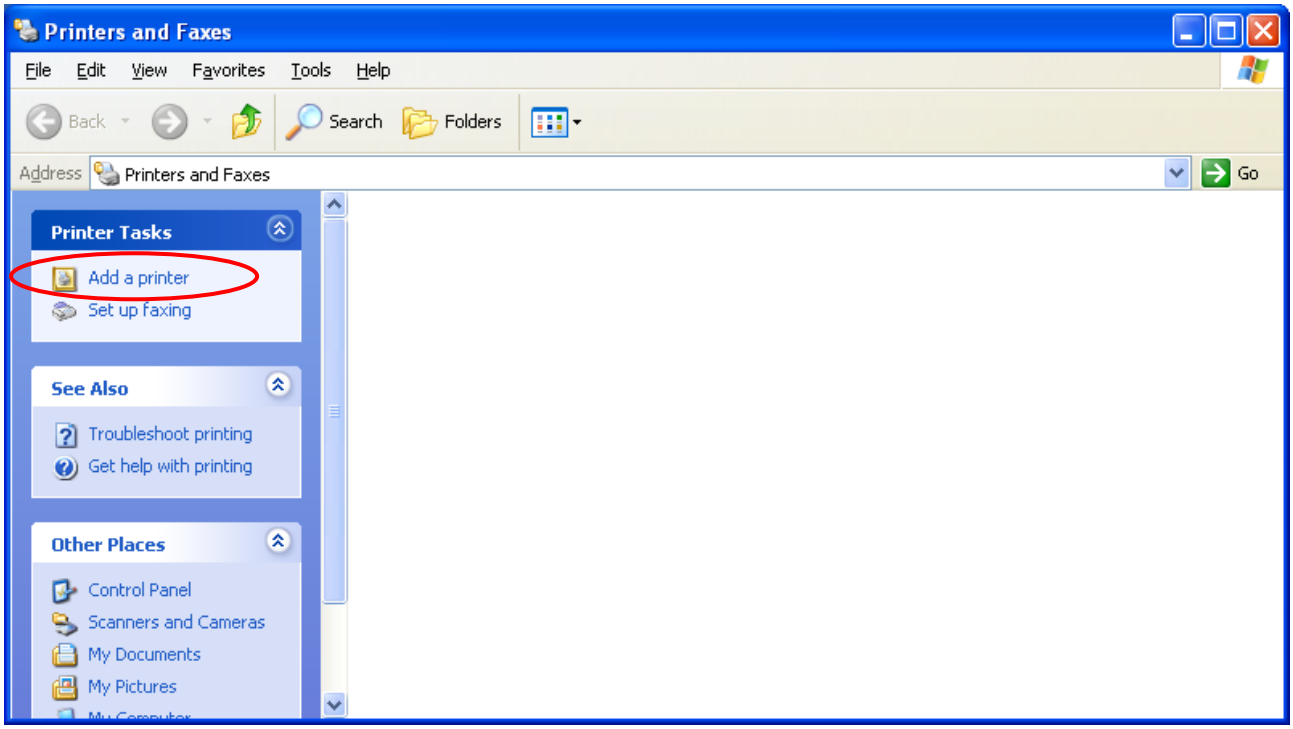


Fig 1.10 Printers and Faxes

After [Add Printer Wizard] window is shown, click [Next].

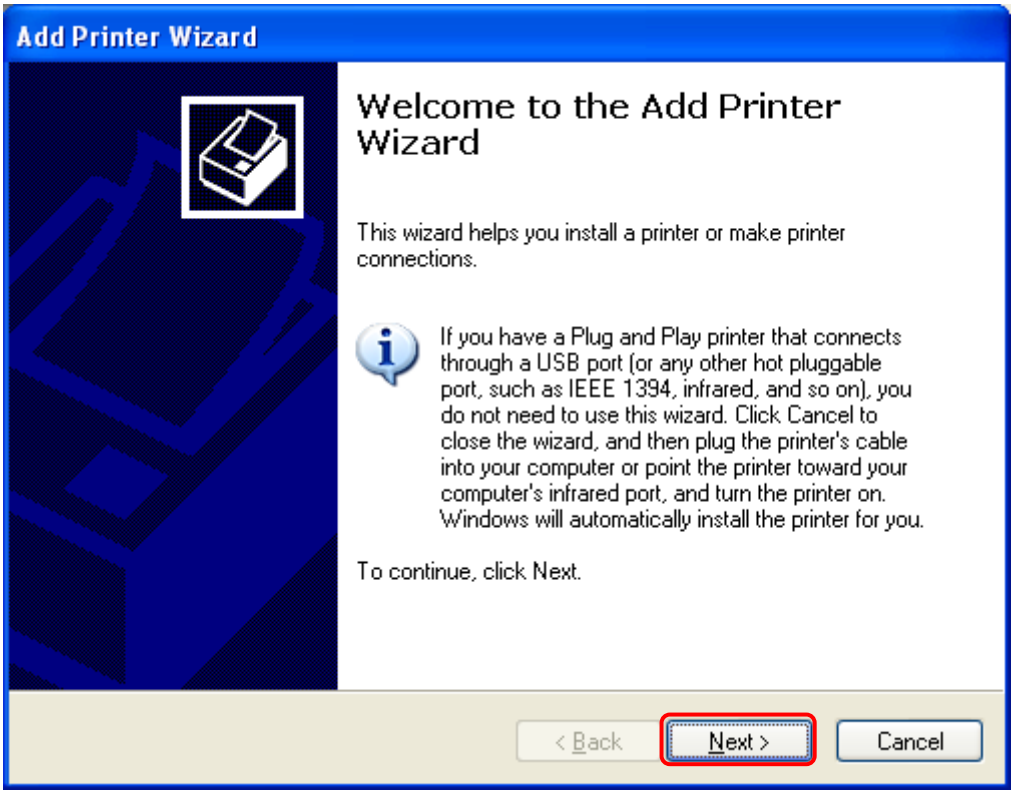


Fig 1.11 Start of Add Printer Wizard

In the [Local or Network Printer] window, select [Local printer], and deselect [Automatically detect and install my Plug and Play printer], then click [Next].

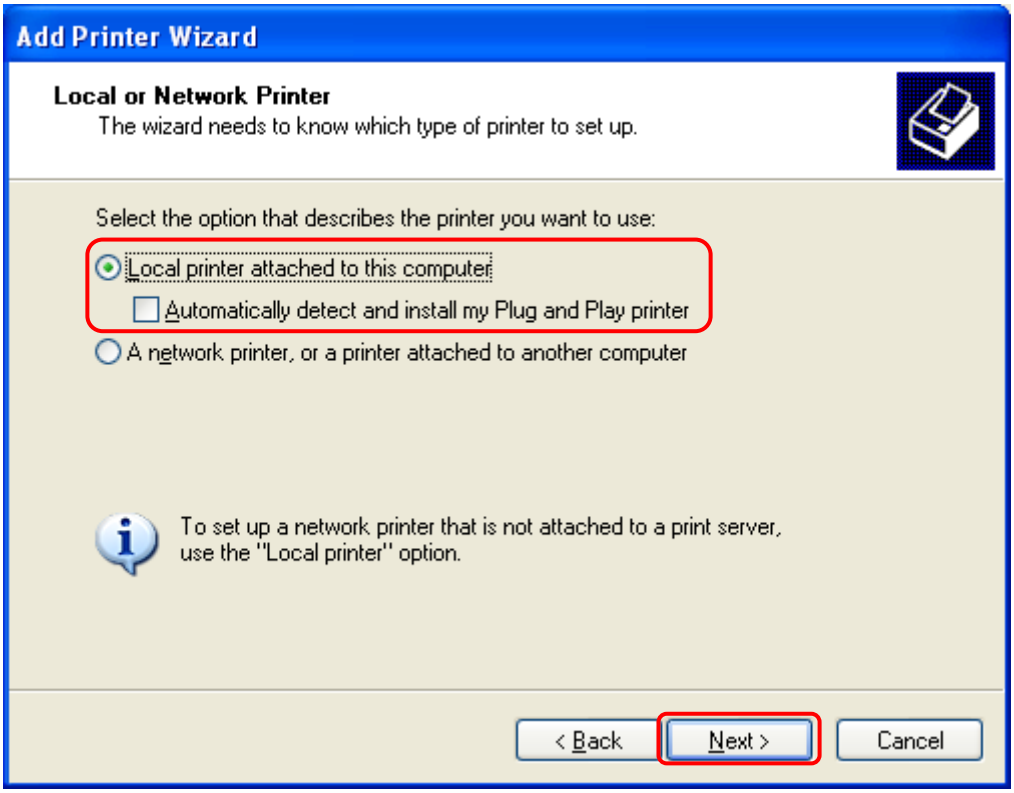


Fig 1.12 Local or Network Printer

In the [Select a Printer Port] window, select [Use the following port] and assign USB port ([USB001] so on) from the dropdown list, then click [Next].

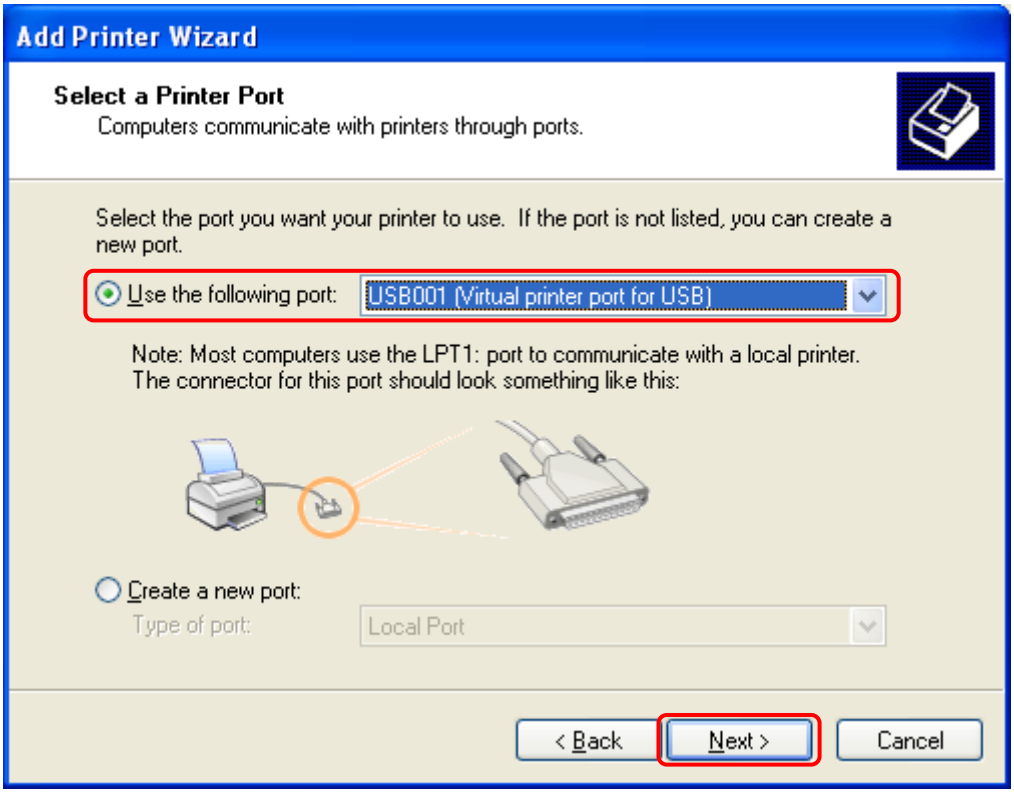


Fig 1.13 Printer port assign

After [Install Printer Software] is shown, click [Have Disk].

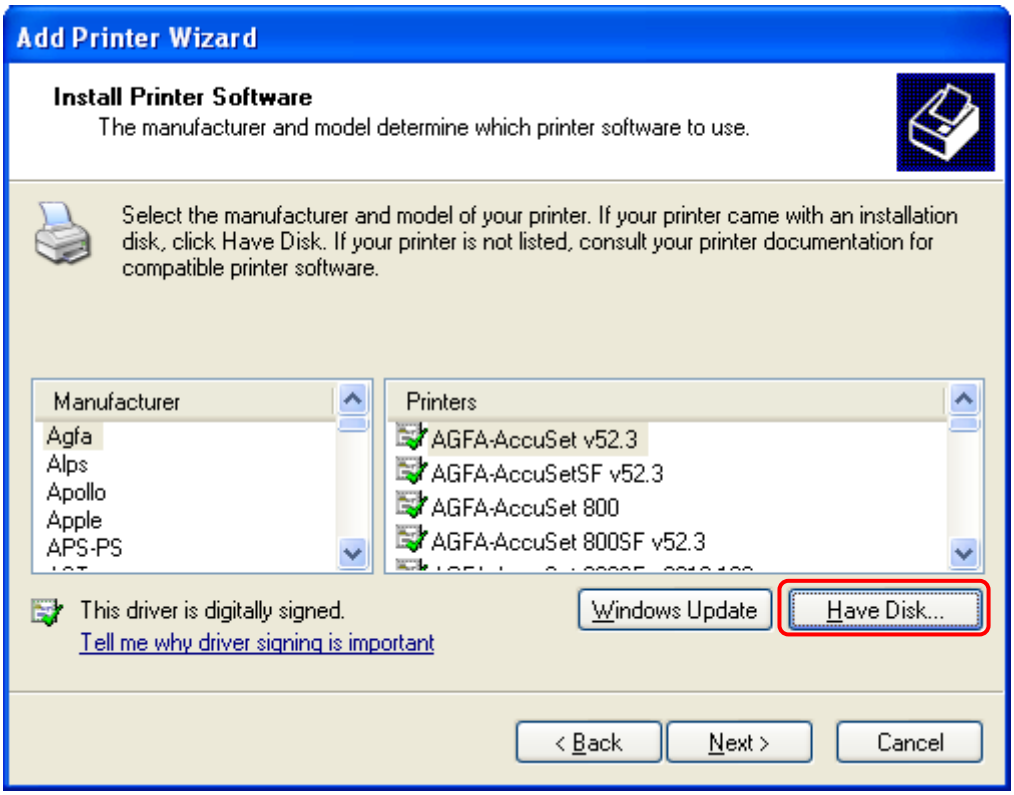


Fig 1.14 Printer software installation

In the [Install From Disk] window, select the location of the installation disk using [Browse].
* The location is different by the OS.

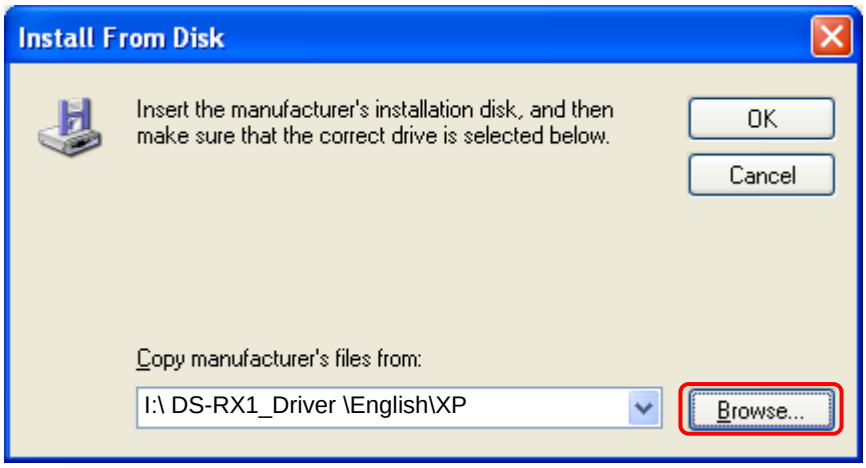


Fig 1.15 Install from disk

After confirming that [DS-RX1] is shown, click [Next].

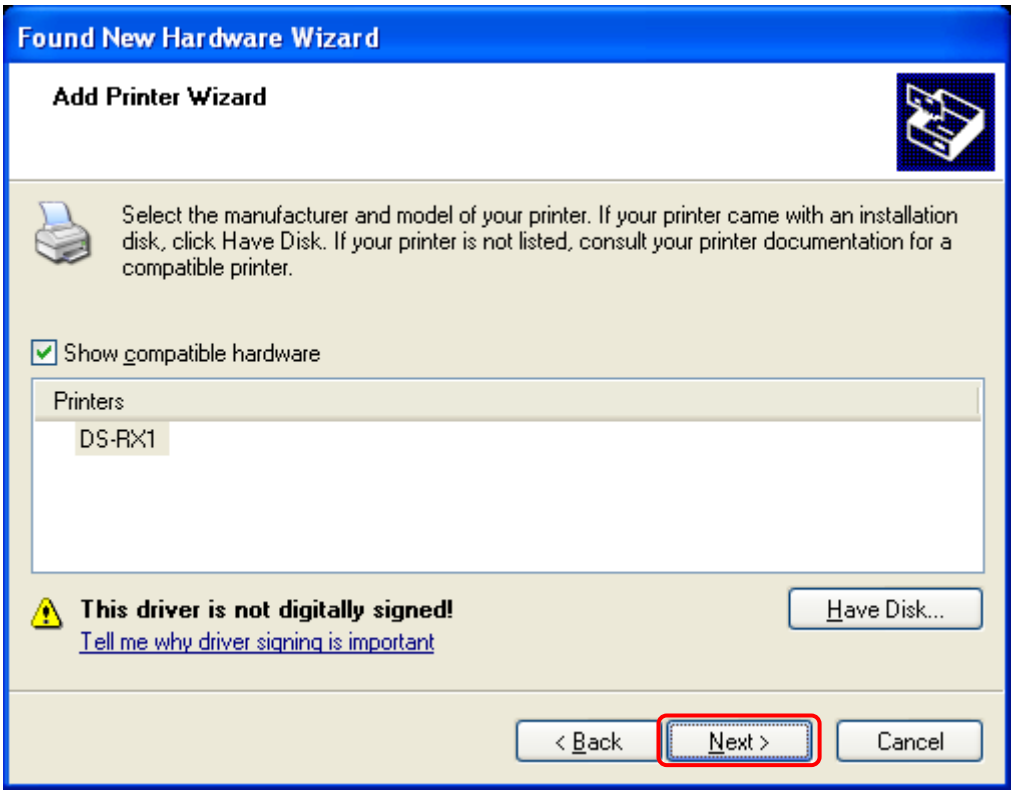


Fig 1.16 Printer software installation

In the [Name Your Printer] window, assign a name to the printer and click [Next].

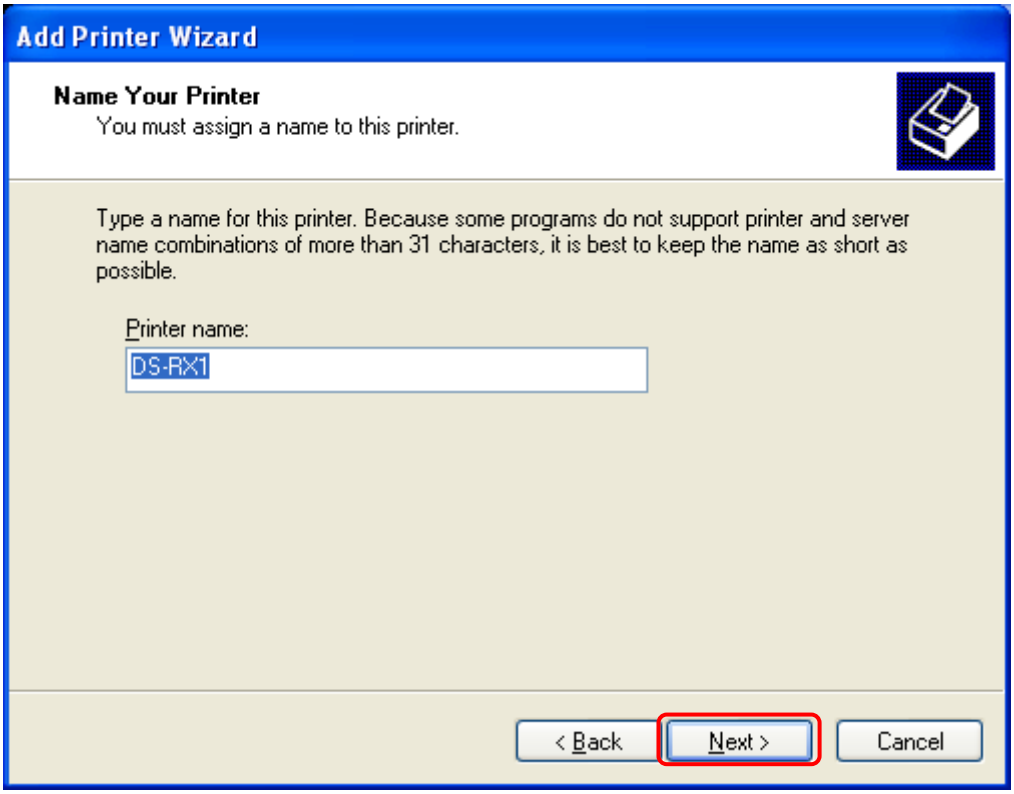


Fig 1.17 Assigning a name to the printer

In the [Print Test Page] window, select [No] and click [Next].

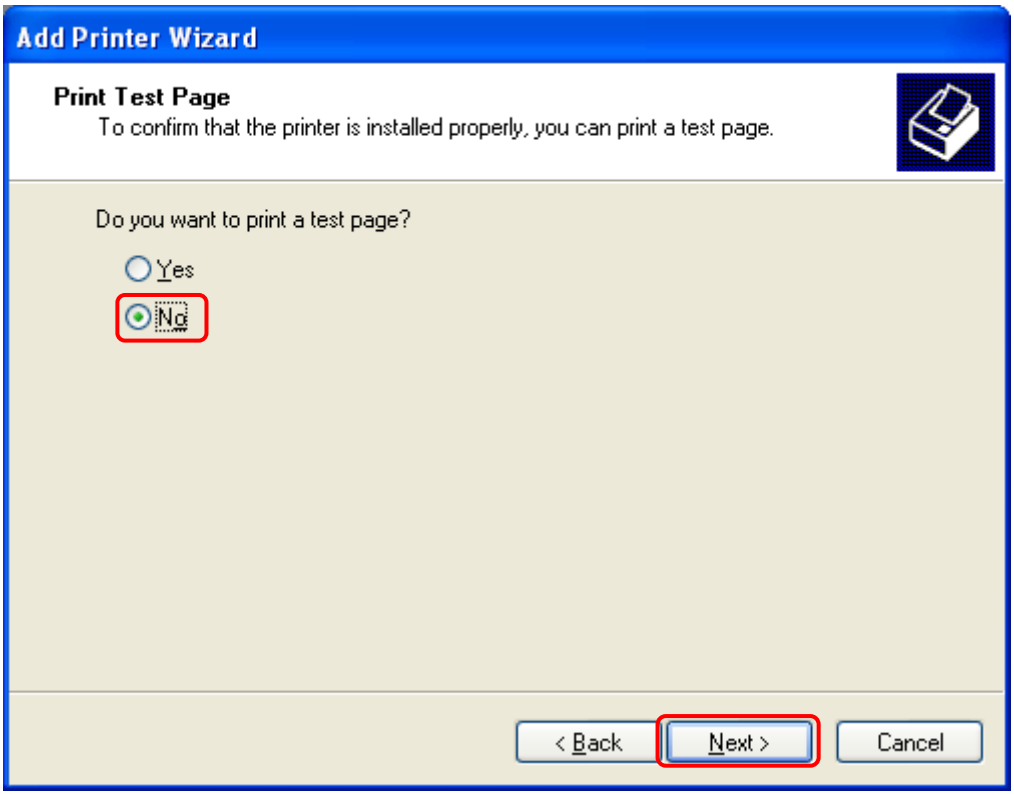


Fig 1.18 Print test page

In the [Completing the Add Printer Wizard] window, click [Finish].

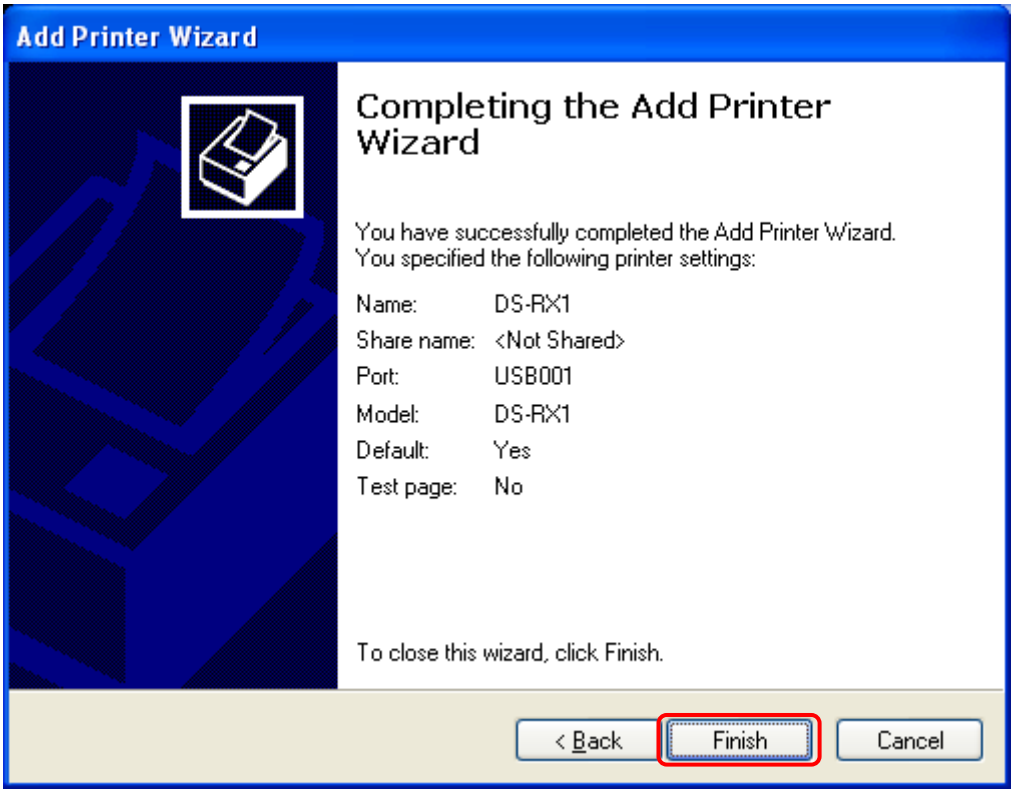


Fig 1.19 Completing the Add Printer Wizard

When installing the software, the following message may be displayed.
Click [Continue Anyway] to continue.

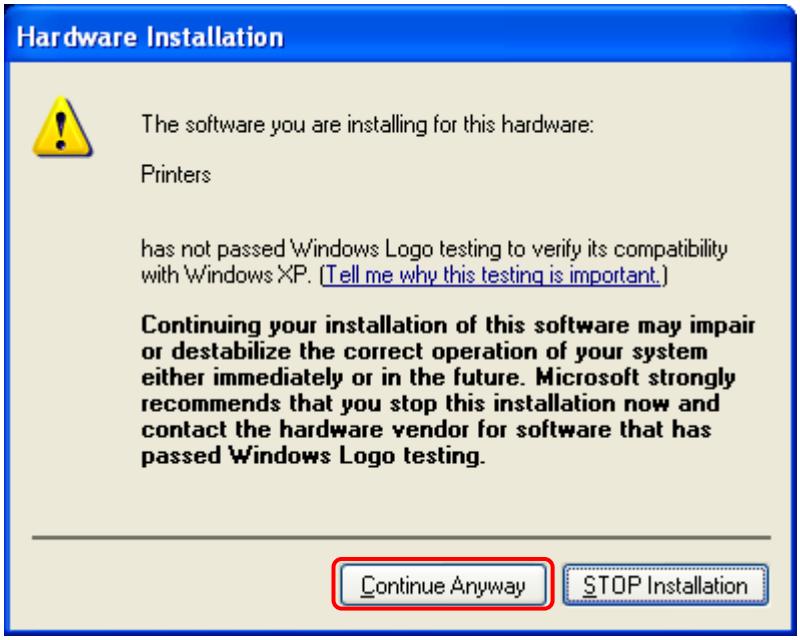


Fig 1.20 Hardware installation

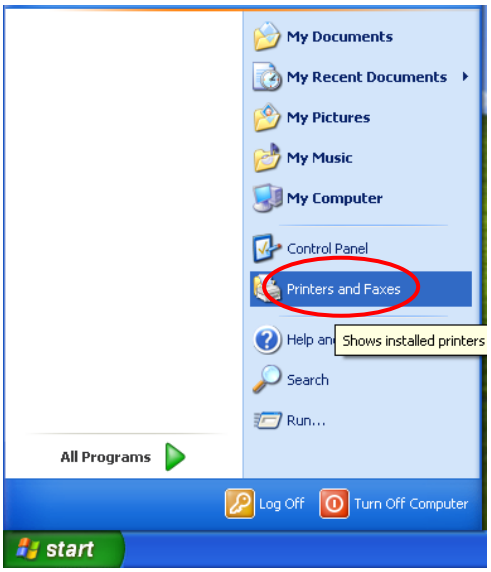
After installation of the printer-driver is complete, be sure to reboot the computer.

Chapter 2 Properties

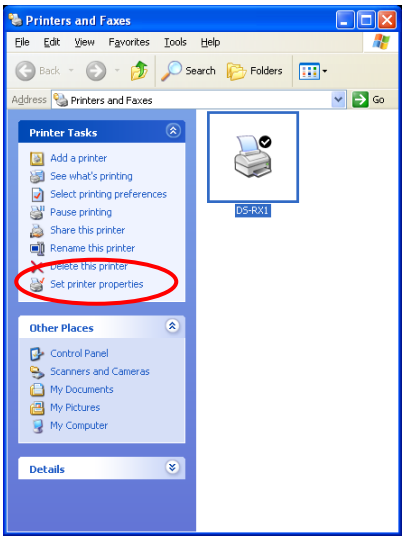
Various printer settings can be made using the DS-RX1 Driver properties. Before operation, be sure to have a good understanding of the contents. Depending on application of the use, operation from print setting of the application is necessary.

2.1 Opening Printer Properties

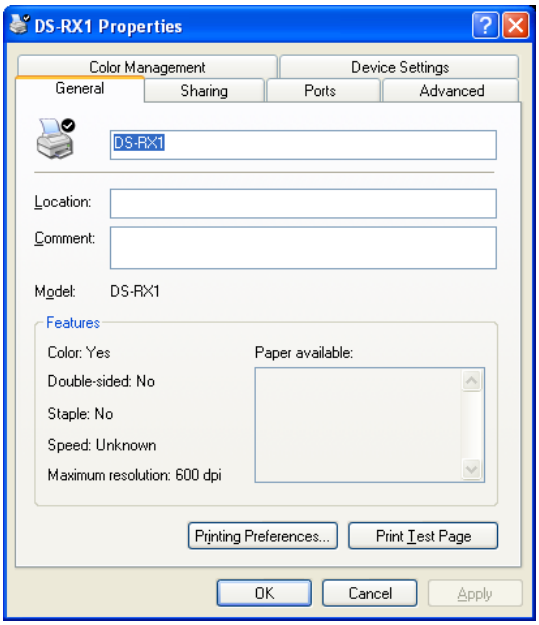
1. Start in order using START → All Programs → Printers and Faxes



2. Select the DS-RX1 printer → Open Set printer properties



3. The DS-RX1 Properties window will appear.



2.2 Explanation of Print Setting Functions

2.1 From the Properties window, by selecting Printing Preferences you can make various print settings.

2.2.1 Layout

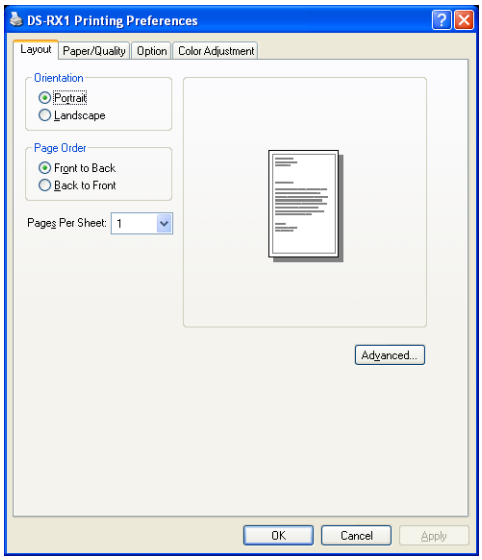
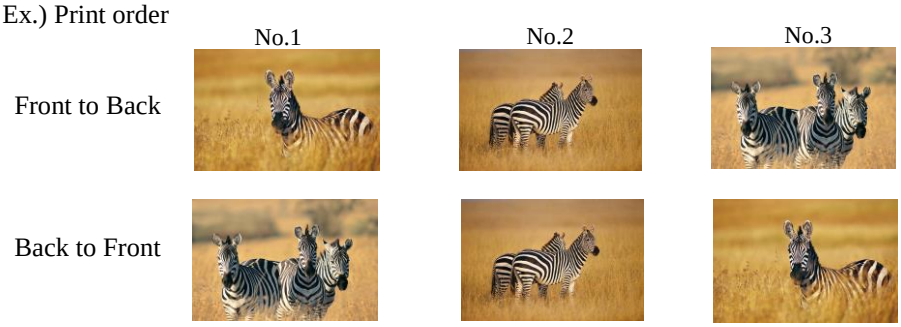


Fig 2.2.1 Layout tab

Orientation
Assign print orientation as Landscape or Portrait.
Refer to 2.6 Print direction.

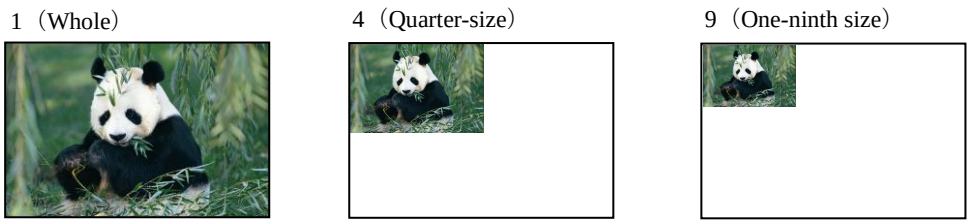
Page Order
When printing multiple images in the application, you can set the order.

Ex.) Print order



Pages Per Sheet
Prints the designated fractional size.

Ex.) Fractional size



2.2.2 Advanced Options

By selecting [Advanced] in the Layout window, various settings can be made using Advanced Options.

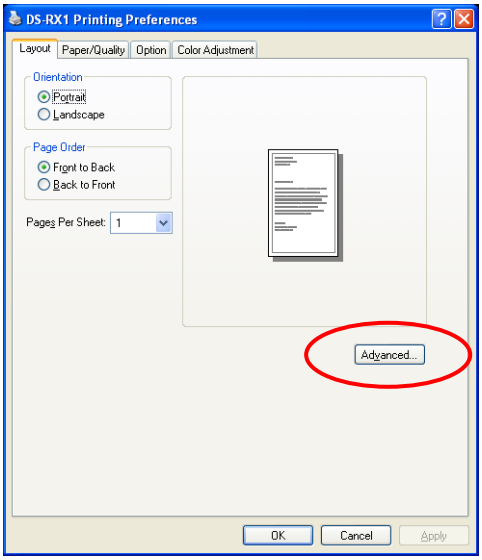


Fig 2.2.2.1 Advanced Settings

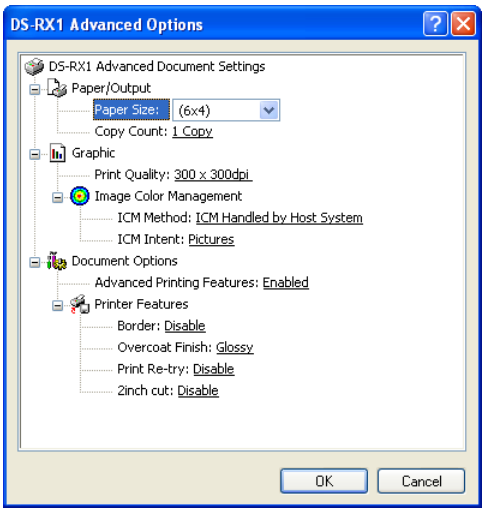


Fig 2.2.2.2 Advanced Options tab

Paper Size

You can designate the paper size. Please match the paper size to the media size with which the printer is equipped

Copy Count

You can designate the number of times an image will be printed.

Print Quality

You can designate the print quality.

Print Quality	Function
300 x 300dpi	Printing in the high-speed mode
300 x 600dpi	Printing in the high-quality mode (If the application can not set an asymmetric aspect resolution, please set the 600x600dpi.)
600 x 600dpi	Printing in the high-quality mode (Printer driver converts to 300x600dpi data, and sends it to the printer.)

ICM Method

ICM Method	Function
ICM Disabled	2.2.4 Synchronous with “Color Management: None” in paper option.
ICM Handled by Host System	2.2.4 Synchronous with “Color Management: ICM” in paper option. Performs color management with the driver.
ICM Handled by Printer	This is the same as setting “ICM Handled by Host System”.

ICM Intent

This designates the rendering method when using ICM. Always have the ICC profile for the DS-RX1 set to “Picture”. Please do not use it at other settings.

Advanced Printing Features

Always have it set to “Enabled”. Please do not use it at other settings.

Border

Synchronous with the border option in the paper option.

Overcoat Finish

The overcoat finish for the printed surface can be selected from the following two types.

Overcoat Finish	Function
Glossy	This finishes the print with a glossy surface.
Matte	This finishes the print with a matte (non-glossy) surface.

Print Re-try

This sets up whether print data in a printer buffer when the error of a printer occurs is printed after error recovery, or it does not print.

Print Re-try	Function
Disable	Printing data in a printer buffer is cleared in the case of a printer error. After an error recovery, the cleared image data must be re-sent. When using an application that has an error recovery function, select this option.
Enable	Printing data in a printer buffer is held in the case of a printer error. After an error recovery, the print process resumes with the saved data. However, if the power is turned OFF, the data will not be saved.

According to the contents of a printer error, the power supply of a printer needs to be re-switched on for error recovery. In this case, it is not dependent on a setup of Print Re-try, and printing data in a printer buffer is cleared.

Operation by Print Re-try setup in each error is shown below.

Contents of an error	Print Re-try setup is “Disable”	Print Re-try setup is “Enable”
Paper End	Please resend picture data not printed after error recovery.	Printing processing is resumed from data currently held in a printer buffer after error recovery. When paper initialization operation is performed, it is printed after paper initialization operation.
Ribbon End		
Cover Open		
Paper Jam (*1)		
Ribbon Error (*1)		
Paper Definition Error		
Data Error	For error recovery, the power supply of a printer once needs to be turned OFF. Therefore, print data in a printer buffer is cleared by power-supply OFF of a printer regardless of a setup of the Print Re-try function. Please resend picture data not printed after printer re-starting.	For error recovery, the power supply of a printer once needs to be turned OFF. Therefore, print data in a printer buffer is cleared by printer power-supply OFF even if the Print Re-try function is set to "Enable". Please resend picture data not printed after printer re-starting.
Head Position Error		
Power Supply Fan Stop		
Cutter Error		
Head Voltage Error		
Abnormal Head Temp.		
Abnormal Media Temp.		
Ribbon Tension Error		
RFID Module Error		
System Error		

*1: After an error stop, a paper or a ribbon should perform removal work of an error factor according to a printer user's manual.

2inch cut (Depending on the version of printer firmware being used, “Disable” may be the only option.)

In the case of the specific paper size, it sets up whether it cuts into two or more sheets by the length of 2 inches.

2inch cut	Function
Disable	It cuts in usual size.
Enable	By the length of 2 inches, in the case of (6x4) and PR(4x6) size, it cuts to two sheets, and, in the case of (6x8) size, it cuts to four sheets.

＜Multiple layout＞

When the DS-RX1 is using 6x8 size media, 2 image layout is possible. With the printer driver paper setting, multi-image layout is made possible, and the image sizes are as follows.

Layout designation

Driver paper setting (layout)	Paper Orientation	Image size width x height （mm）	Using media
(6x4) x 2	Portrait	(156.1x105.0) x 2	6x8
	Landscape	(105.0x156.1) x 2	
PR (4x6) x 2	Portrait	(105.0x156.1) x 2	6x8
	Landscape	(156.1x105.0) x 2	
Image layout median size		2.54	

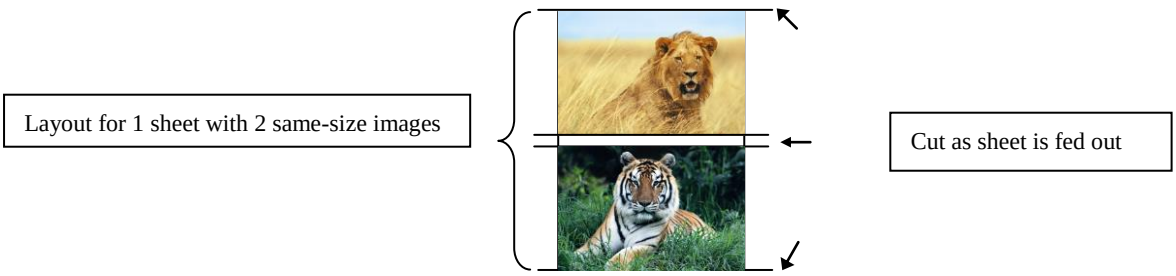
Multiple layout is possible under the following conditions.

1.The printer is using 6x8 size media.
2.The printer driver paper size is set to one of the above sizes.
3.Multiple images are sent from the application.

Note） Because the multi-image layout occurs on a per job basis, this works when there are multiple images for 1 job.If you want to print the same image, be sure to send the image data for each copy to be printed.The printer prints 2 images in one operation, and the paper is cut as it is fed out.

<Multi-image layout patterns>

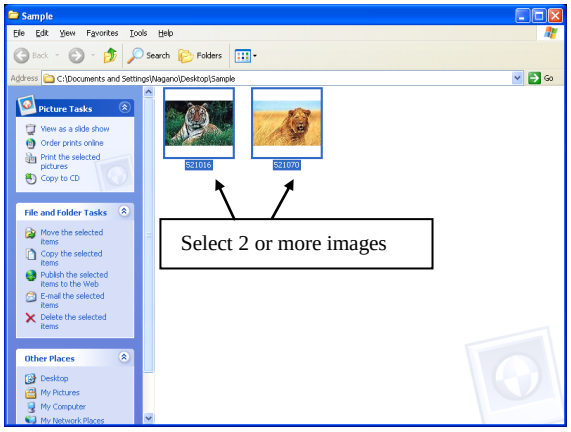
The following is possible for the multi-image layout pattern.



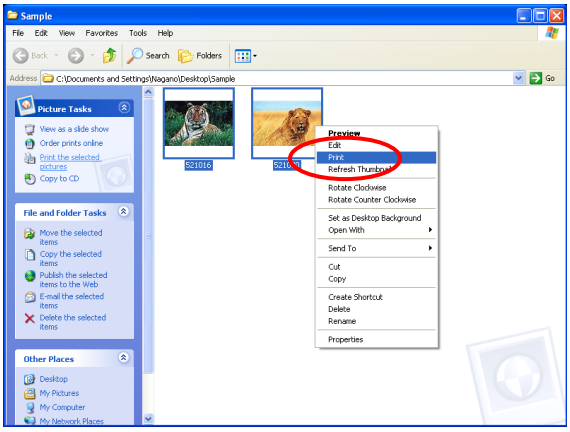
<Example of Application Use>

This is an example using Windows Explorer

Step 1. Select 2 or more images.

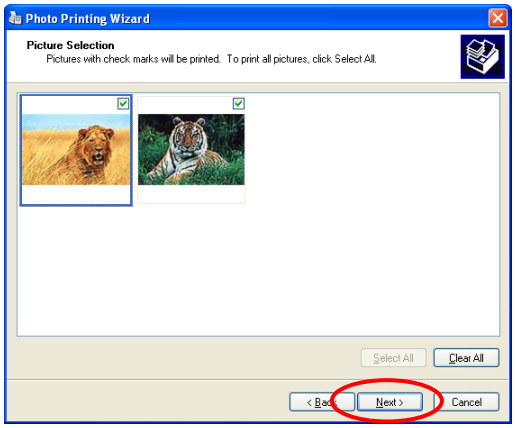


Step 2 Right-Click on the image, and from the pull-down menu select Print

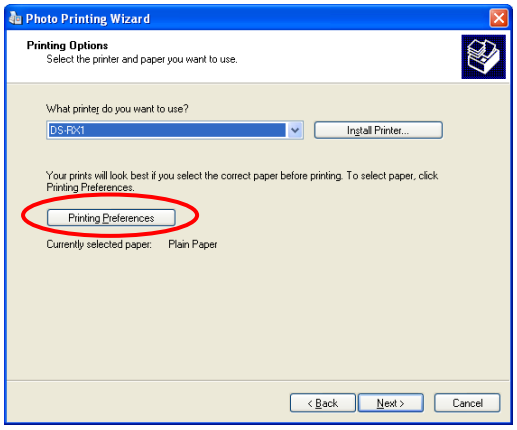


Step 3 Click on “Next”.

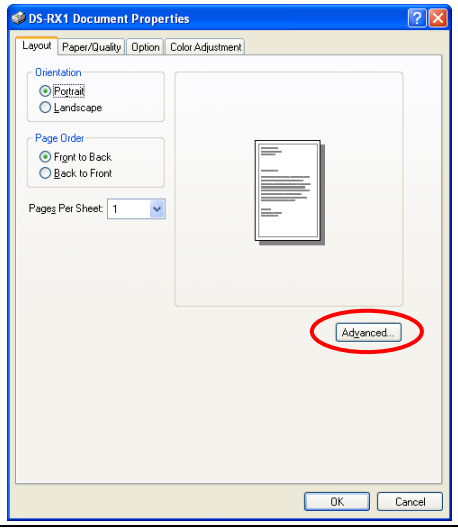
Step 4 Click on “Next”



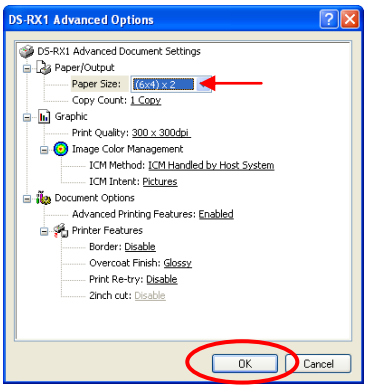
Step 5 Click on “Printing Preference”



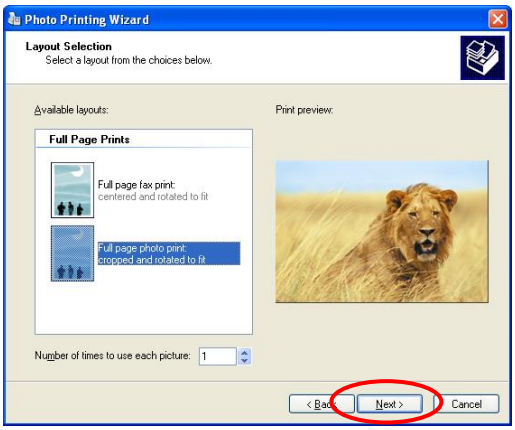
Step 6 Click on “Advanced”.



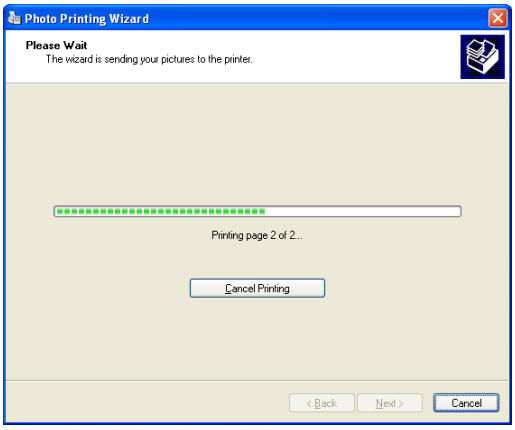
Step 7 Set the Paper Size to “(6x4)x2”. Then click “OK” on the windows from steps 7⇒6, returning to the window displayed in Step 5.



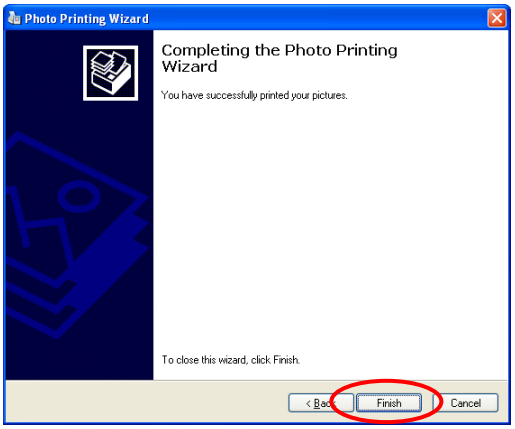
Step 8 Click on “Next”.



Step 9



Step 10 Click on “Finish”.



2.2.3 Paper/Quality

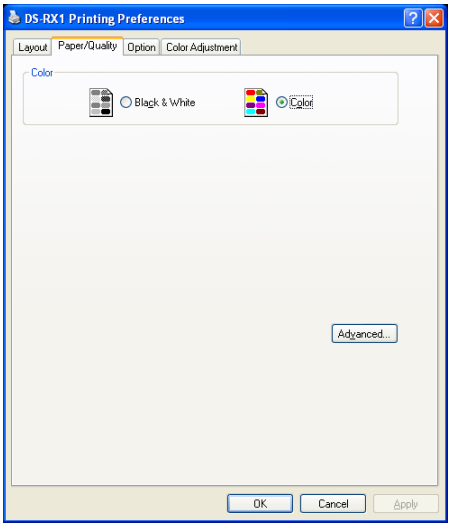


Fig 2.2.3 Paper/Quality tab

Color Please set to color print. Do not use for black and white printing.

2.2.4 Option

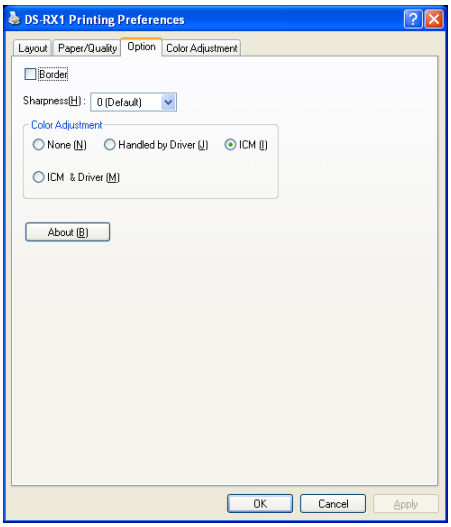


Fig 2.2.4.1 Paper option tab

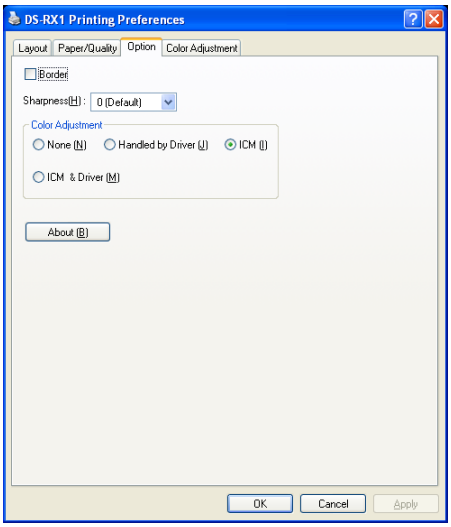


Fig 2.2.4.2 Sharpness setting

Border

Designates yes or no for border (check means with border). Synchronous with Border in the Advanced Settings.

Sharpness

Processes for 11 sharpness levels (Fig 2.2.4.2). 0(Initial setting) means there is no sharpness processing. Minus(-) blurs the image, and plus(+) increases the sharpness.

Color Adjustment

None

Synchronous with the ICM Method in the Advanced Settings. Checking this item disables ICM and the Color Adjustment tab, and color management does not occur from the driver.

Handled by Driver

Checking this item disables ICM and 2.2.5 Color Adjustment is enabled. The adjustment values for gamma, brightness, contrast, and chroma are shown.

ICM

Synchronous with the ICM Method in the Advanced Settings (ICM Handled by Host System). Checking this item enables color management from the driver.

ICM & Driver

If you check this, ICM (color management) and color adjustment will be enabled.

About

Displays the driver version.

2.2.5 Color Adjustment

If you check Handled by Driver in 2.2.4 Option, the respective color adjustment values in the Color Adjustment tab are reflected in the image.

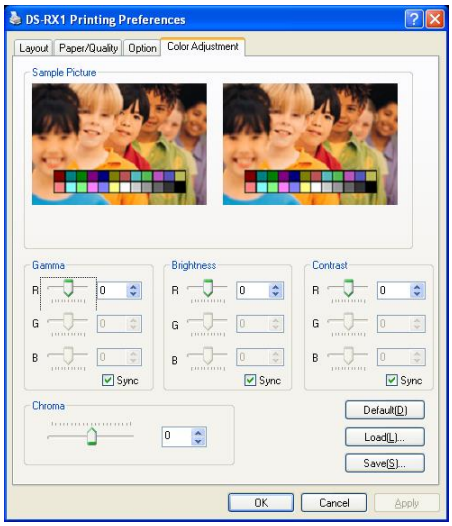


Fig 2.2.5 Color Adjustment tab

Setting ranges in the Color Adjustment tab are as follows:

Adjustment Item	Adjustment Value
Gamma	-100(dark) ~ 100(light) (0 means no adjustment, Gamma 2.0 ~ 0.5) Adjusts the density of the highlights in the image. The greater the gamma value, the brighter the highlights. Synchronous check box ON **:** Sets RGB at the same value OFF**:**Sets RGB at a different value
Brightness	-100(dark) ~ 100(light) (0 means no adjustment) Adjusts the brightness of the image. The larger the value, the greater the overall brightness of the image. Synchronous check box ON **:**Sets RGB at the same value OFF**:**Sets RGB at a different value
Contrast	-100(weak) ~ 100(strong) (0 means no adjustment) Adjusts the contrast of the image. The larger the value, the greater the contrast. Synchronous check box ON **:** Sets RGB at the same value OFF**:** Sets RGB at a different value
Chroma	-100(weak) ~ 100(strong) (0 means no adjustment) Adjusts the color saturation of the image.

2.3 Default Values for Various Settings

Default values for each option (at the time of installation) are shown below. If the printer driver does not work correctly after changing the options, please return the options to the default settings.
Note) According to the Service Pack and use environment of OS, the default value at the time of installation may differ from the following chart.

Tab	Options			Default
Layout	Orientation			Portrait
	Page Order			Front to Back
	Pages Per Sheet			1
Paper/Quality	Color			Color
Option	Frame			Disable
	Sharpness			0 (Default)
	Color Adjustment			ICM
Color Adjustment	Gamma			0
	Brightness			0
	Contrast			0
	Chroma			0
Advanced (Click [Advanced] button of Layout tab)	Paper/Output	Paper Size		(6 x 4)
		Copy Count		1
	Graphic	Print Quality		300 x 300dpi
		Image Color Management	ICM Method	ICM Handled by Host System
			ICM Intent	Pictures
	Document Option	Advanced Printing Features		Enable
		Printer Features	Border	Disable
			Overcoat Finish	Glossy
			Print Re-try	Disable
			2inch cut	Disable

Chart 2.3 Print Setting Default Values

2.4 Color Management

In [Color Management], this designates the color profile. Default at installation associates [RX1].

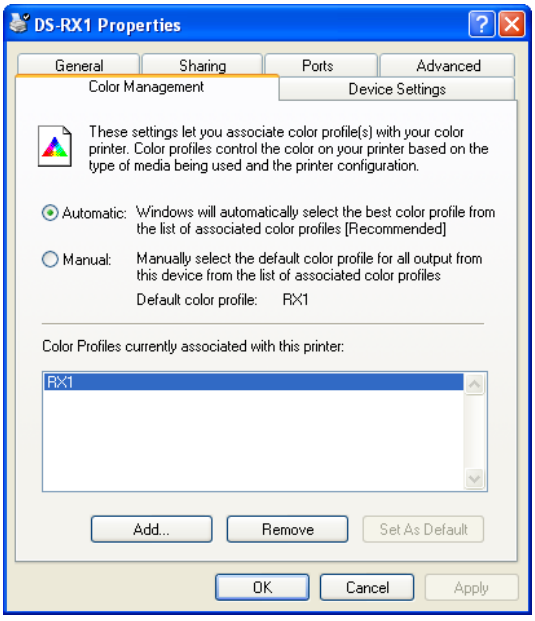


Fig 2.4 Color Management

2.5 Print Area

Depending on the paper size designated at the driver, the image size and pixel count will be as follows.

Paper	Paper Orientation	Image size（width x height）		Image pixel amount (width x height)		
		（inch）	（mm）	300 x 300 DPI	300 x 600 DPI	600x600 DPI
(5x3.5)	Portrait	5”x 3.5”	131.1 x 92.1	1548 x 1088	1548 x 2176	3096 x 2176
	Landscape	3.5”x 5”	92.1 x 131.1	1088 x 1548	2176 x 1548	2176 x 3096
(6x4)	Portrait	6”x 4”	156.1 x 105.0	1844 x 1240	1844 x 2480	3688 x 2480
	Landscape	4”x 6”	105.0 x 156.1	1240 x 1844	2480 x 1844	2480 x 3688
(5x7)	Portrait	5”x 7”	131.1 x 181.0	1548 x 2138	1548 x 4276	3096 x 4276
	Landscape	7”x 5”	181.0 x 131.1	2138 x 1548	4276 x 1548	4276 x 3096
(6x8)	Portrait	6”x 8”	156.1 x 206.2	1844 x 2436	1844 x 4872	3688 x 4872
	Landscape	8”x 6”	206.2 x 156.1	2436 x 1844	4872 x 1844	4872 x 3688
PR (3.5x5)	Portrait	3.5”x 5”	92.1 x 131.1	1088 x 1548	2176 x 1548	2176 x 3096
	Landscape	5”x 3.5”	131.1 x 92.1	1548 x 1088	1548 x 2176	3096 x 2176
PR (4x6)	Portrait	4”x 6”	105.0 x 156.1	1240 x 1844	2480 x 1844	2480 x 3688
	Landscape	6”x 4”	156.1 x 105.0	1844 x 1240	1844 x 2480	3688 x 2480

2.6 Print Drection

Regarding the print direction setting, the relationship between the application-generated image and the print (feed direction) is as shown in the following chart. The generated image is the image generated through enlargement/reduction to fit the size shown in 2.5 Print Area, without having the application rotate the original image.

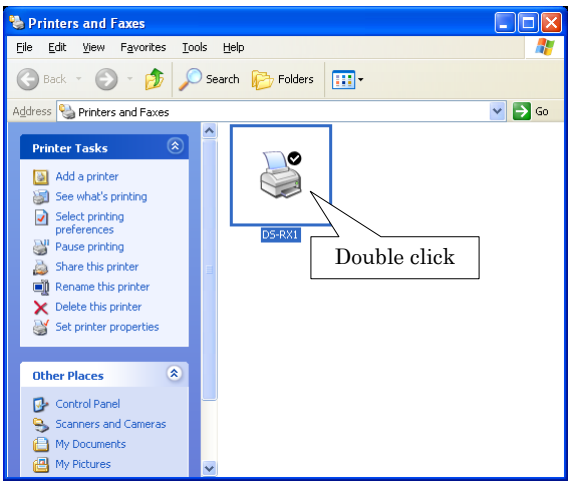
Original Image	Driver setting						
	Orientation setting	Paper setting					
		（5x3.5） （6x4） （6x4）x2		PR （3.5x5） PR （4x6） PR （4x6）x2		（5x7） （6x8）	
		Generation image	Output image (direction ↓)	Generation image	Output image (direction ↓)	Generation image	Output image (direction ↓)
	Portrait						
	Landscape						
	Portrait						
	Landscape						

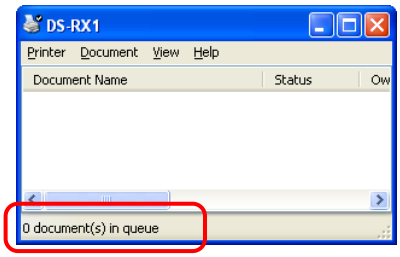
Chapter 3 Updating the Driver

In order to update the printer-driver, follow the steps shown below.

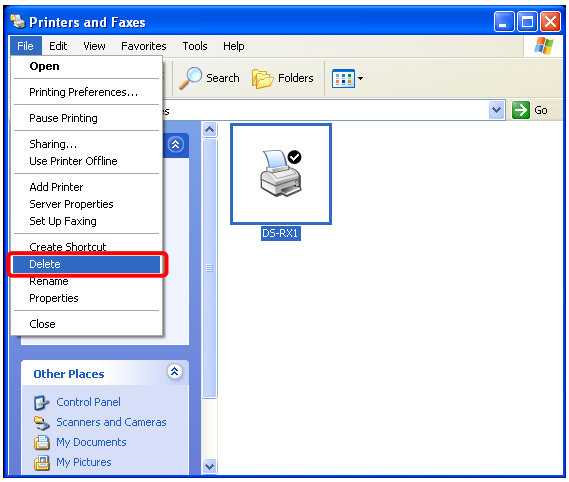
1. Driver Removal

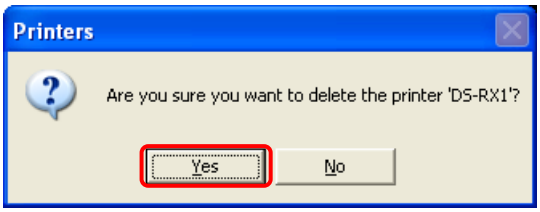
(1) Before removing the printer-driver, shut down all other applications. Also, double click the icon for the printer to be removed, and make sure there are no documents in the queue before you begin removal of the driver.



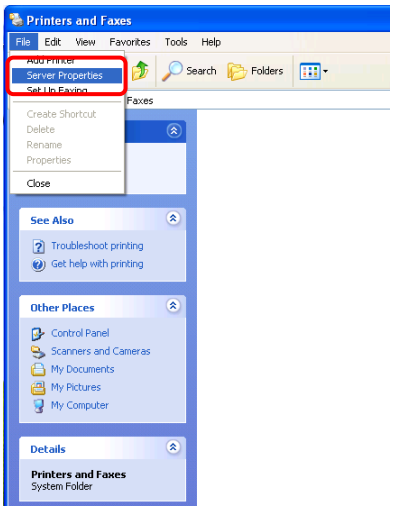


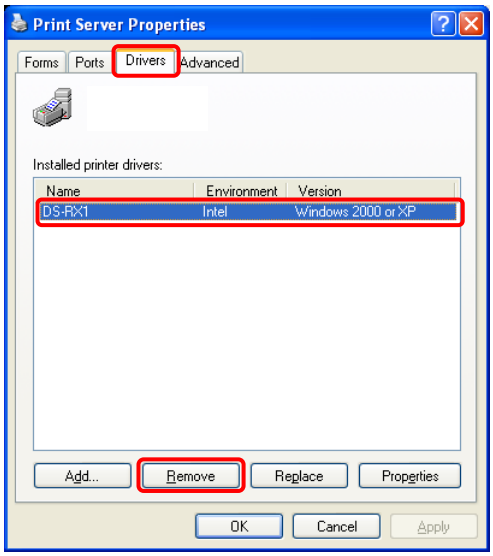
(2) From the [Printers and Faxes] window, select the DS-RX1 printer. Select [Delete this printer].
Are you sure you want to delete the printer “DS-RX1”? → select ”Yes” to remove the printer.

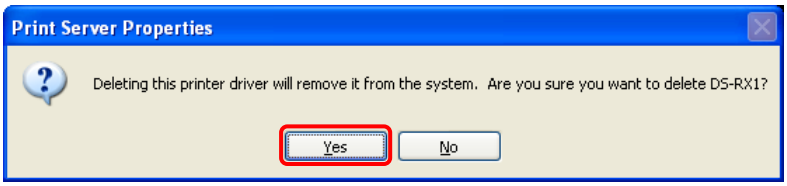




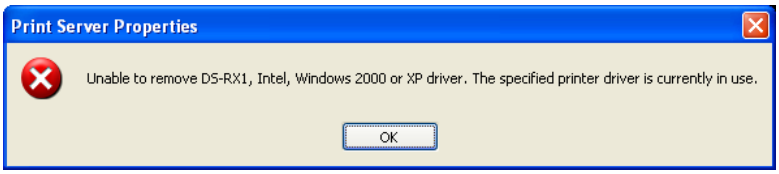
(3) After the DS-RX1 printer has been removed, in the same way select File → Server Properties
The Print Server Properties dialog box should appear. Select the Drivers tab. After selecting driver "DS-RX1", click "Remove". The confirmation box will appear. By clicking "Yes", the driver will be removed. After removal, reboot the computer.





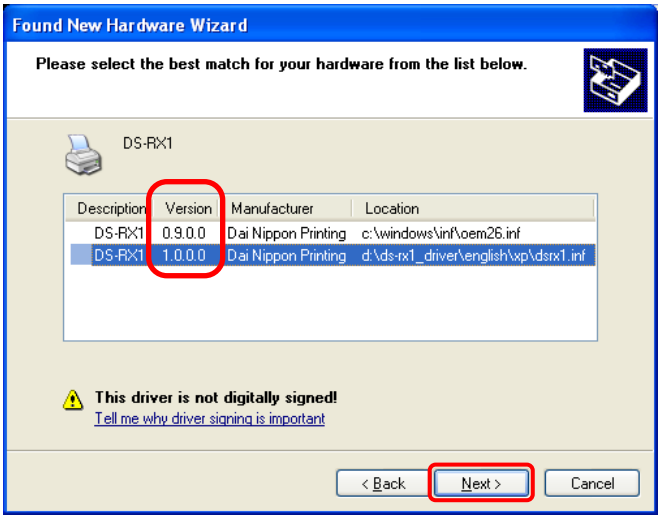


Note) Before removing the printer-driver, if the following error message appears, please reboot the computer. After the computer has been rebooted, repeat the steps to remove the printer-driver.



2. Installing the printer-driver upgrade

After removing the printer and printer-driver, install the new printer-driver. For installation steps, please refer to Chapter 1 "Install". If the following window appears during installation, check the "Version" section, select the newest version, and click the "Next" button.



3. Rebooting the computer

After installation of the printer-driver is complete, be sure to reboot the computer.
(Do not print immediately after installation. First reboot the computer.)

Chapter 4 Driver Removal

For steps to remove the printer-driver, refer to Chapter3 “1.Driver Removal”.

Dai Nippon Printing Co., Ltd.