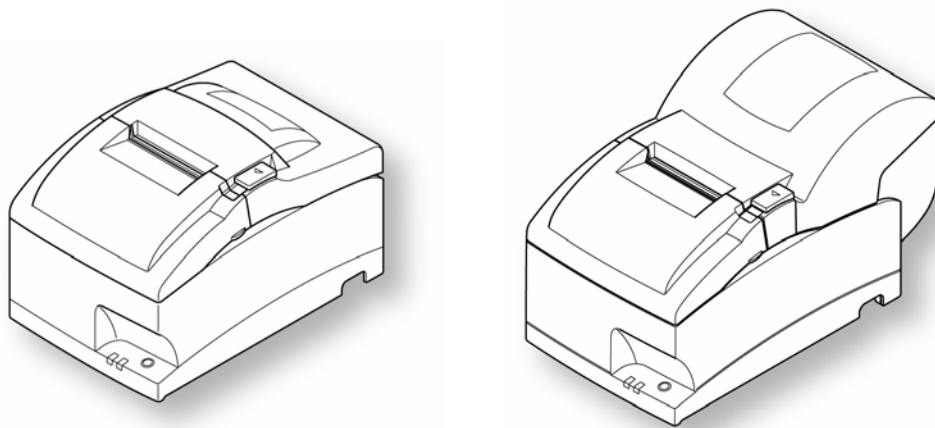


POS Printer
SP712/742
Software Manual



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1. Installing & Uninstalling

1.1 Installing

This driver software runs on Windows 2000 and Windows XP.

Before using the SP700 with either of these operating systems, you must first install this software.

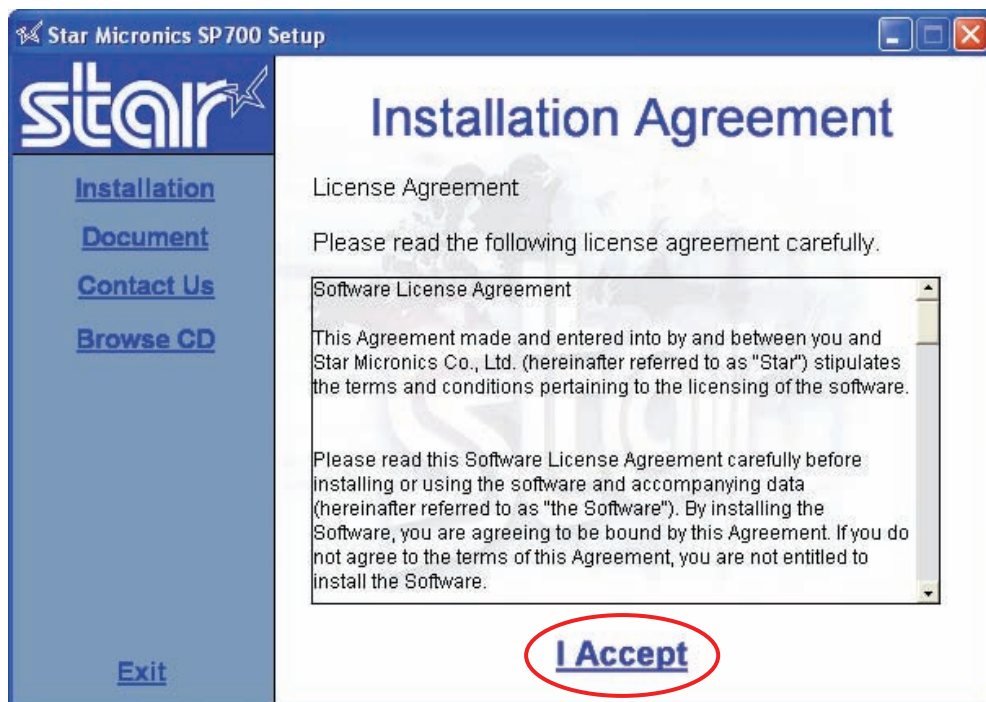
To install the software, proceed as follows.

Important: If connecting by USB, please complete steps ① to ⑧ before connecting the SP700 to your computer.

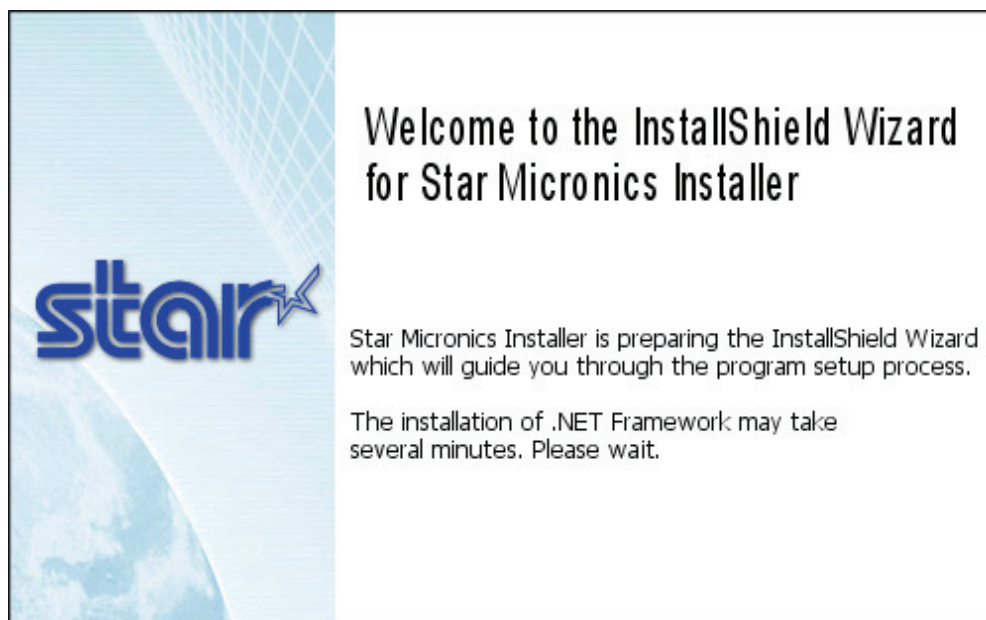
- ① Insert the driver & utility CD-ROM that shipped with your SP700 into your computer. The computer's Autorun feature automatically starts the installation wizard, and the following window appears. Click **Installation** to begin the installation.



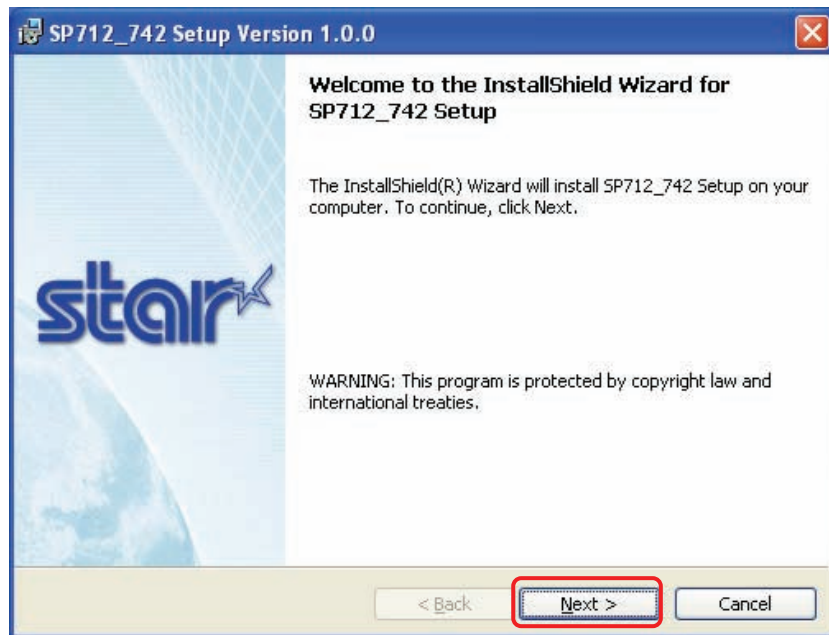
- ② Click **I Accept**.



The following window appears, and the wizard prepares to start the installation.

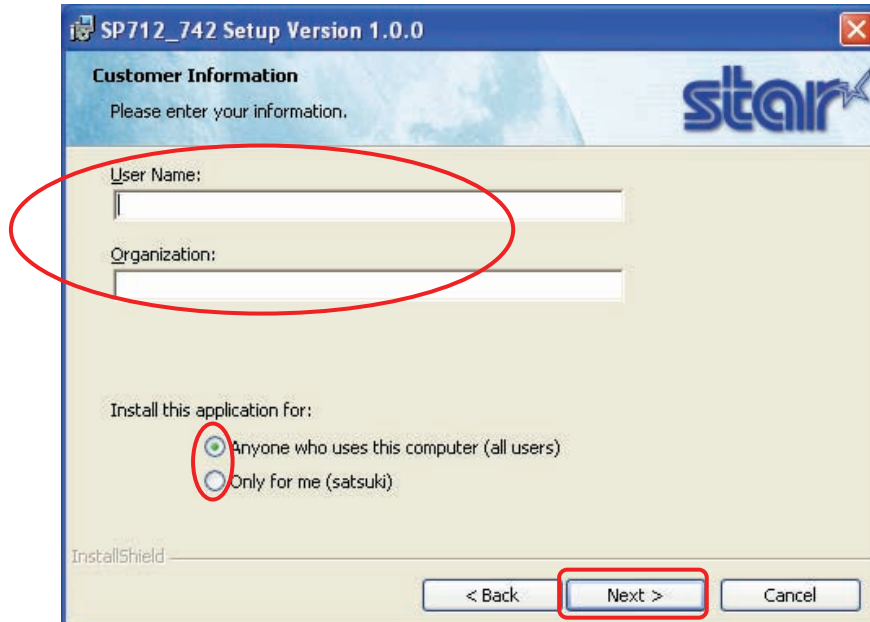


- ③ Click **Next**.



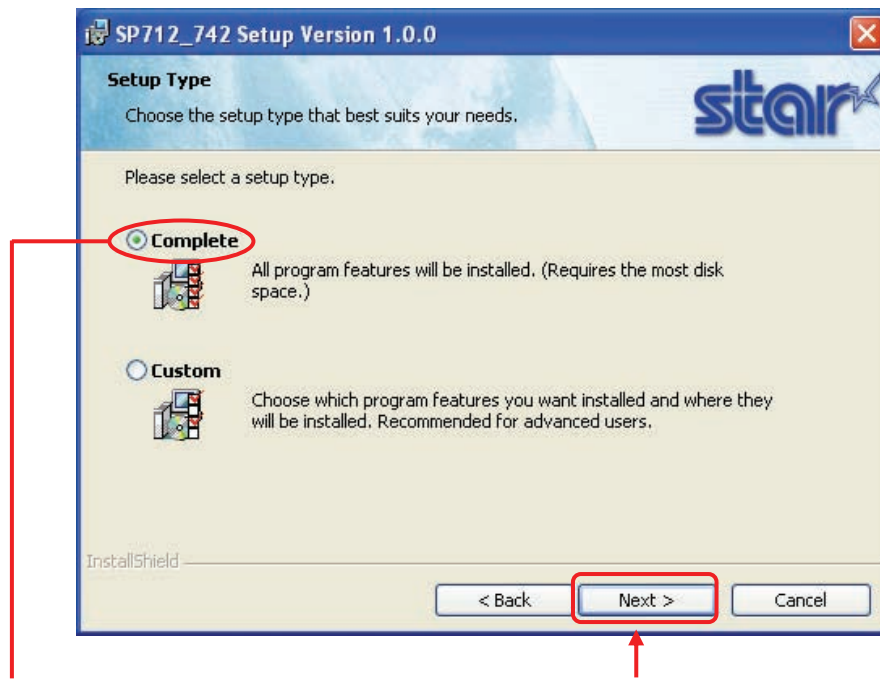
- ④ Enter your user information.

Enter your user name and the name of your organization, and then select whether the installed program is to be available to all users of this computer or only to you. Then click **Next**.

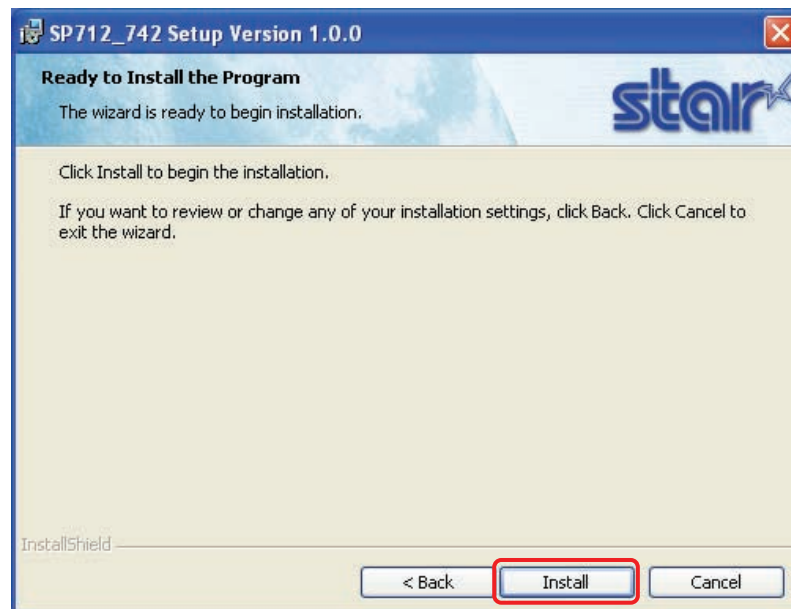


- ⑤ Select the type of setup.

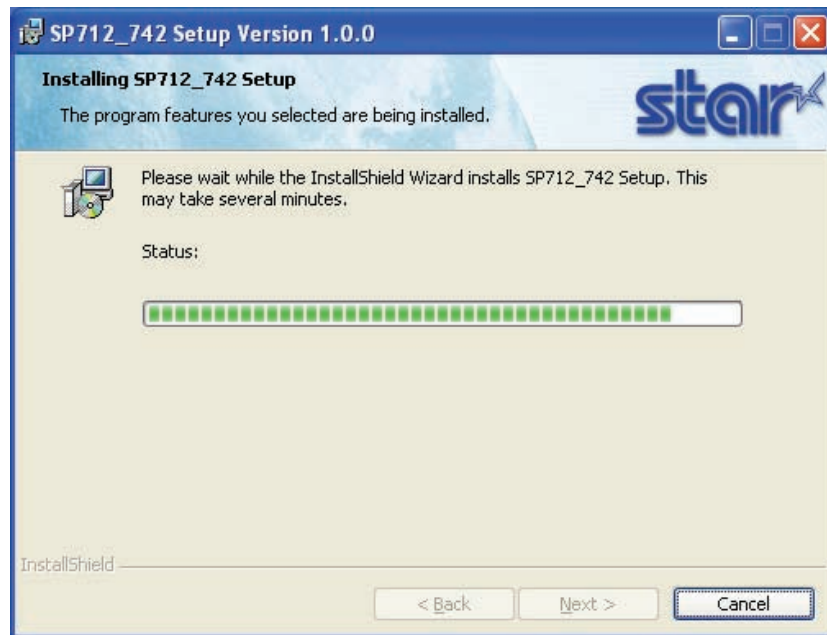
Select **Complete**, so as to install all of the program's features. Then click **Next**.



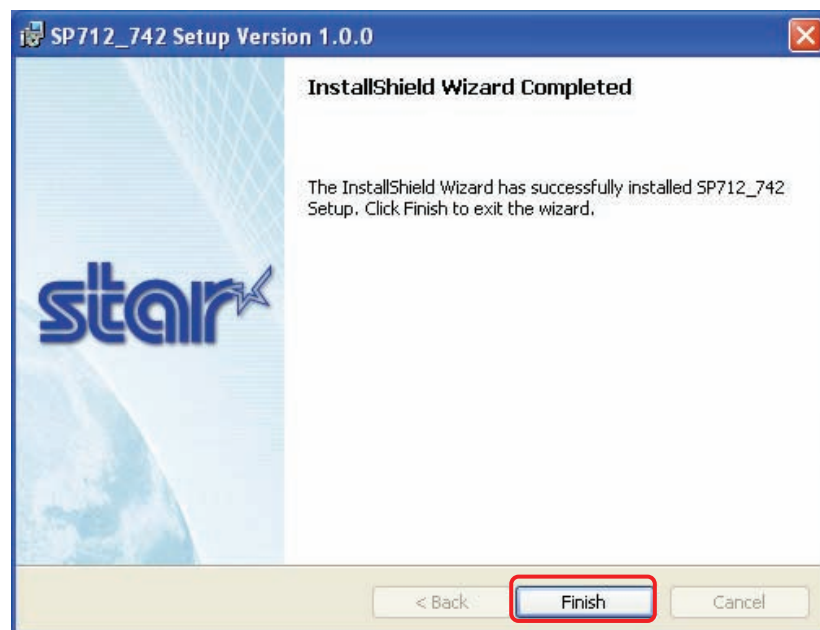
- ⑥ Click **Install** to start the installation.



The wizard installs the program.



- ⑦ When the installation is completed, the following window appears. Click **Finish** to close the window.



- ⑧ Click **Exit** to close the Autorun menu.



- ⑨ Load a paper roll into the SP700, and connect the SP700 to your computer.

Note: For information about how to load paper and how to connect the printer to your computer, refer to the SP700's hardware manual. To view the manual, click **Document** at the Autorun menu, then select **Hardware Manual** from the document list.

Important: The remaining installation steps vary according to the type of connection. If connecting by USB, proceed to section 1.1.1, "If USB Connection," on the next page. If connecting with a non-USB interface, go to section 1.1.2, "If Non-USB Connection," on page 8.

1. 1. 1 If USB Connection...

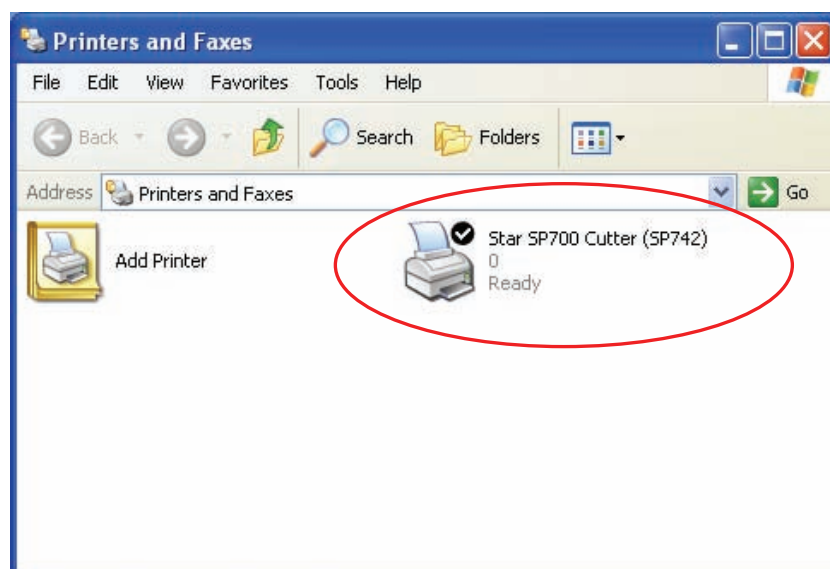
- ① Turn on the SP700's power switch.

The Windows plug-and-play feature detects the connection of the printer hardware and automatically installs the driver software.

The Found New Hardware popup will appear briefly at the bottom right of the Windows desktop to indicate that system had detected the new hardware.



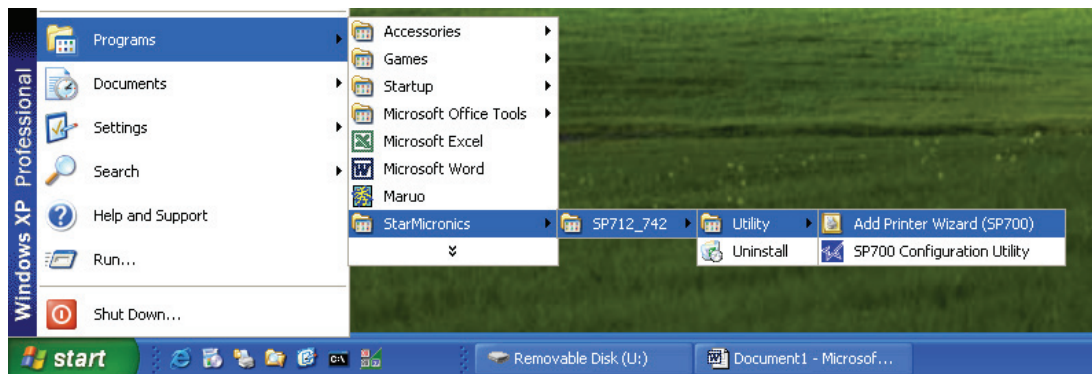
- ② From the Windows Start menu, select Printers and Faxes and confirm that **Star SP700 Cutter (SP742)** appears in the folder. (Note that the actual display will vary according to the specific type of printer connected.) If the printer is displayed, the installation is finished.



1. 1. 2 If Non-USB Connection...

If you are connecting the printer through a TCP/IP interface cable, you must now select the port.

- ① Turn on the SP700's power switch.
- ② At the Start menu, select **Programs → Star Micronics → SP712_742 → Utility → Add Printer Wizard (SP700)**.

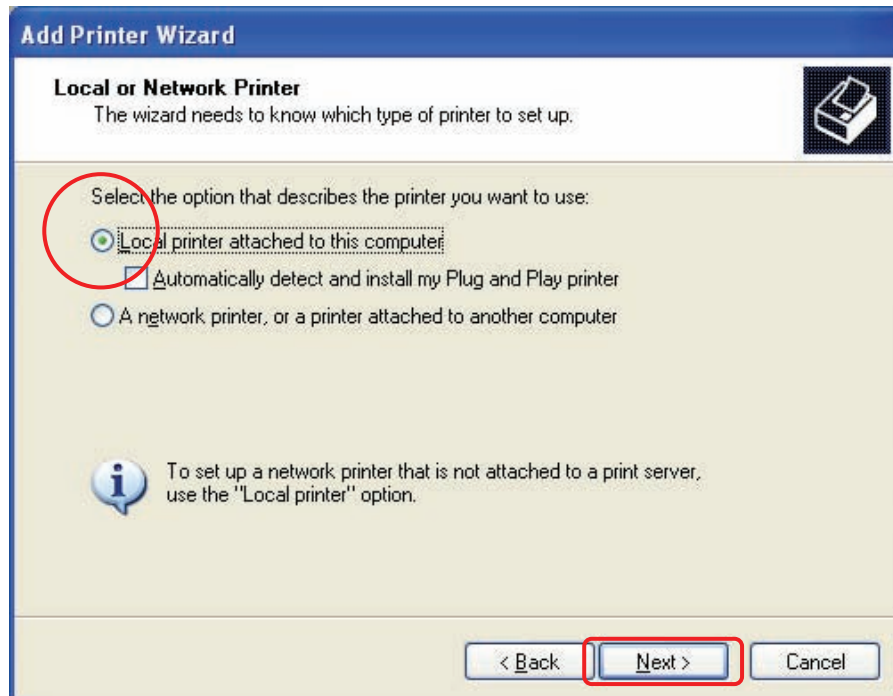


- ③ When the wizard appears, click **Next**.

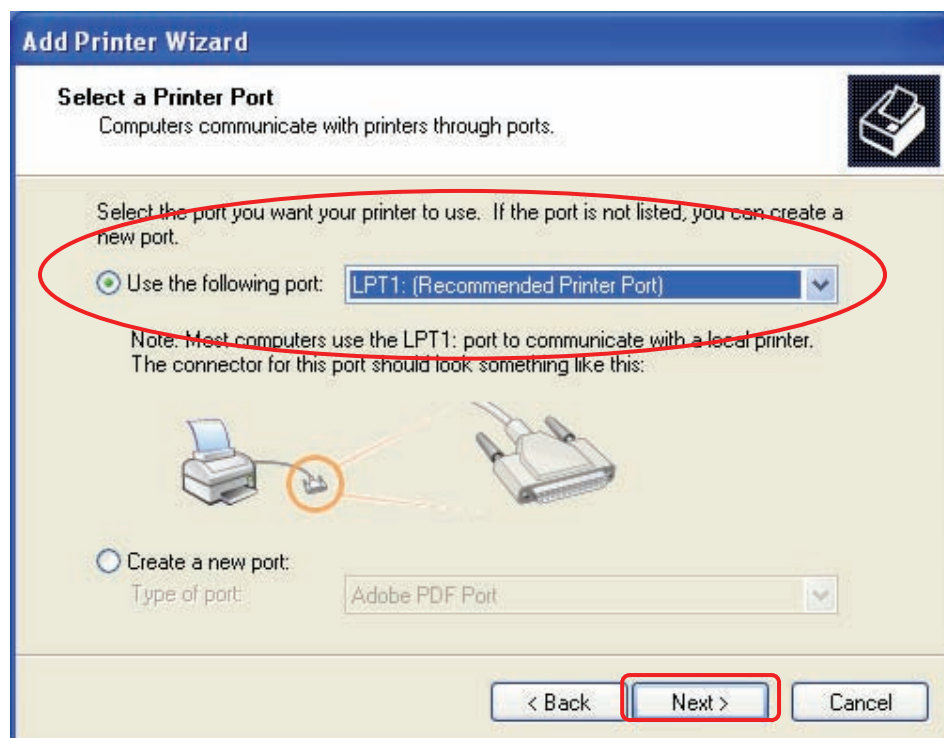


④ Select the printer type.

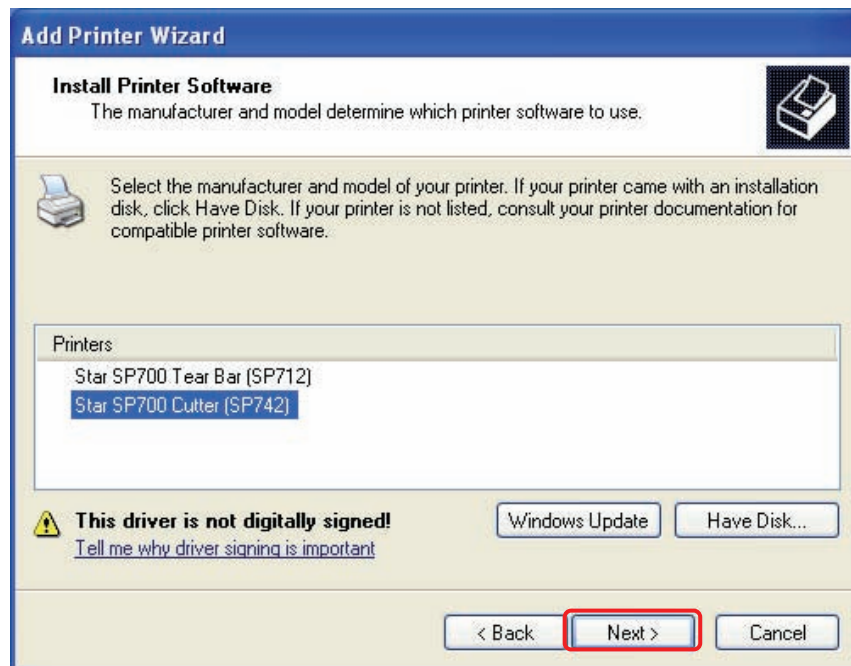
Select **Local printer attached to this computer**. Be sure that there is no check in the checkbox next to **Automatically detect and install my Plug and Play printer**. (If there is a checkmark there, remove it.) Then click **Next**.



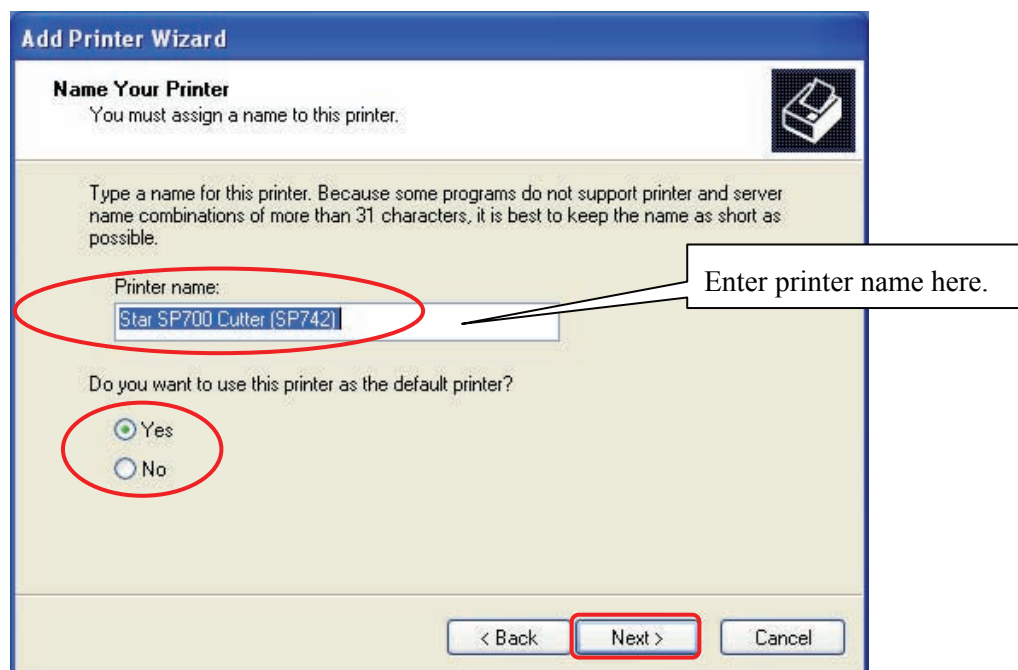
⑤ Select the appropriate printer port, and then click **Next**.



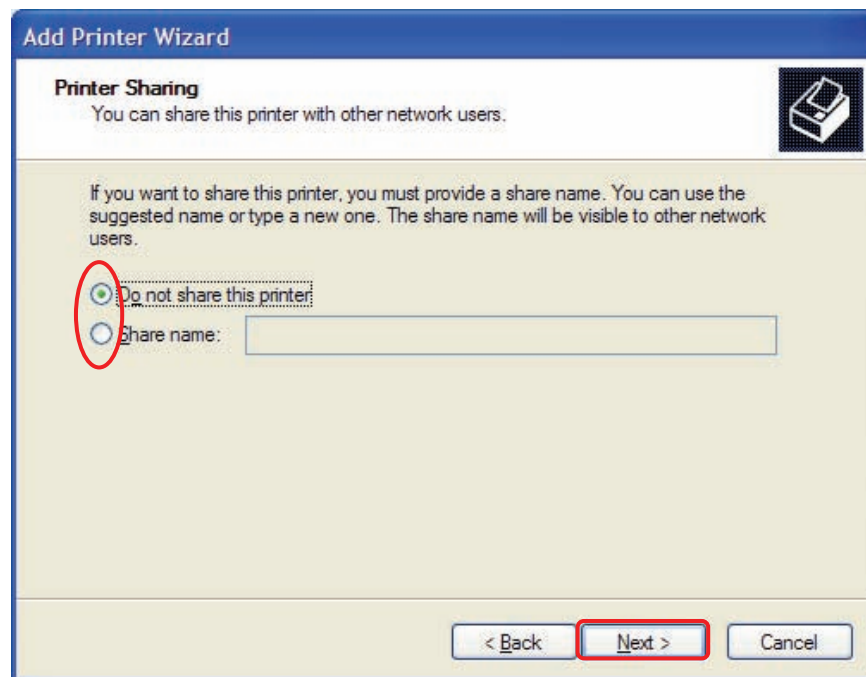
- ⑥ Confirm that the connected printer appears selected in the printer list, and then click **Next**.



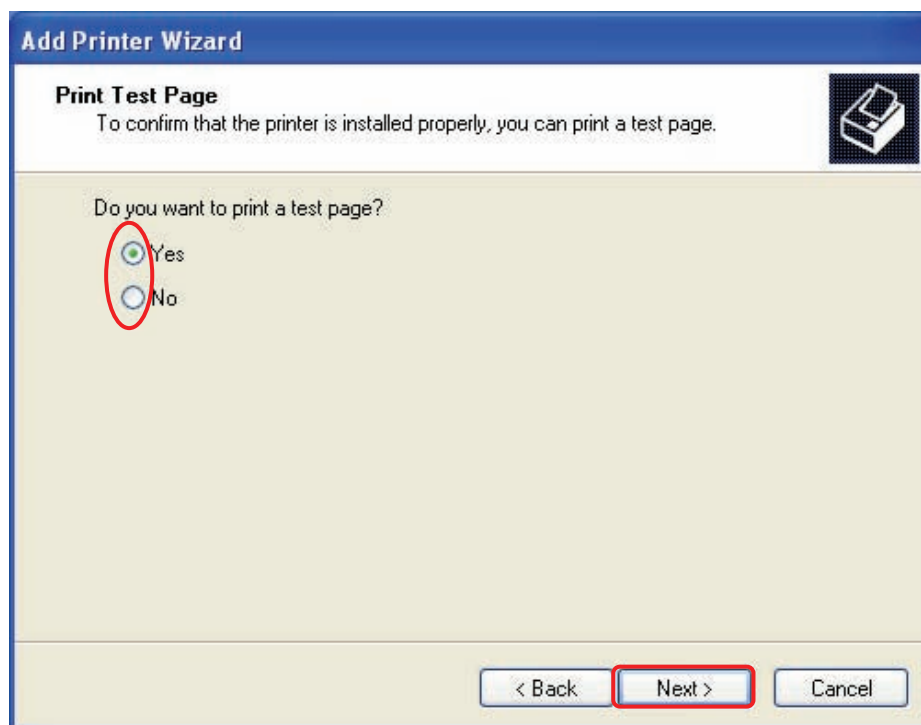
- ⑦ You are prompted to set the printer name that will appear next to the SP700 printer icon in the **Printers and Faxes** folder. If you are happy with the default name, leave it unchanged; if not, overwrite with the name of your choice. You may also select whether or not to use the SP700 as your default printer. After making the appropriate settings, click **Next**.



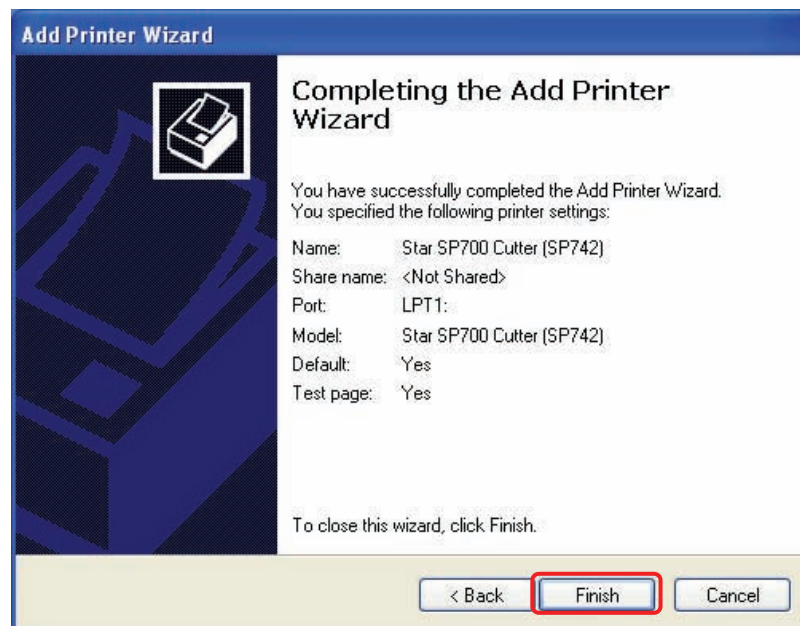
- ⑧ Make the appropriate printer-sharing settings, and then click **Next**.



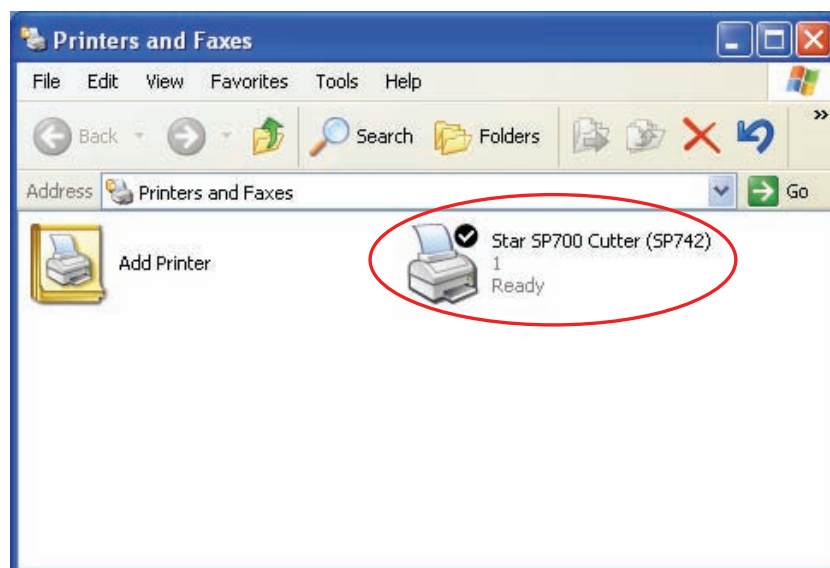
- ⑨ If you wish to print a test page at this time, select **Yes**. Otherwise, select **No**. Then click **Next**.



- ⑩ Click **Finish** to complete the installation.

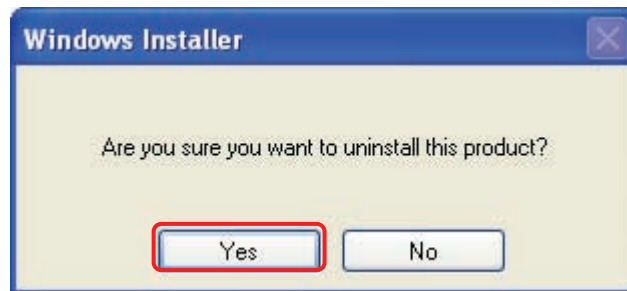


- ⑪ From the Windows Start menu, select **Printers and Faxes** and confirm that **Star SP700 Cutter (SP742)** appears in the folder. If the printer appears there, installation has completed successfully.

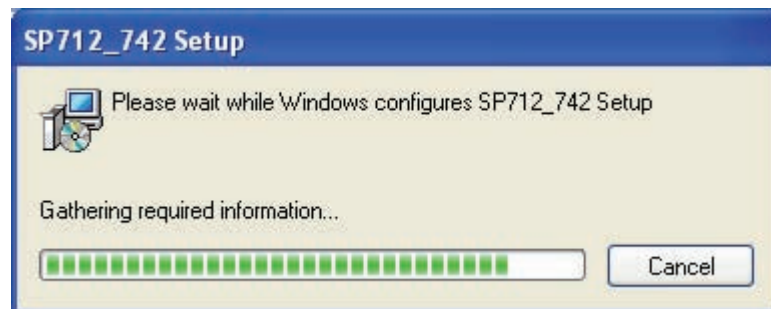


1.2 Uninstalling

- ① Turn off the SP700's power switch.
- ② At the Windows Start menu, select **Programs** → **Star Micronics** → **SP712_742** → **Uninstall**. When the following confirmation dialog appears, click **Yes**.



- ③ The uninstaller removes all of the SP700 software from your computer.



2. Features

2.1 Star SP700 Setup Utility

The Star SP700 setup utility provides an easy way to set the printer's memory switches, to load logos into nonvolatile printer memory, and to make other such hard print settings.

It also offers an easy way to set up an Ethernet interface card.

Note that you may choose to select the utility only, without also installing the driver software.

Important: This utility is not supported on Windows versions prior to Windows 2000 SP3.
--

2.2 OPOS Driver

OPOS (Open Point of Service) is an architecture supporting Win32-based POS access. The architecture makes it easy for Windows-based POS systems to access POS peripherals.

The driver makes it easy for the printer not only to output data to peripherals but also to read the current operating status of peripherals. In addition, the driver enables use of any of the many existing OPOS-compliant applications.

The driver provided here conforms to OPOS Version 1.8. For more information, refer to the separate OPOS Manual.

2.3 JavaPOS Driver

JavaPOS (Java for Retail Point of Sale) is an architecture that supports access to Java-based POS peripherals. It offers the same kind of advantages as OPOS while adding the extra advantage of platform independence. Another advantage is support for inexpensive system configurations, since the minimal requirements for a Java virtual computer environment are quite low. And yet another advantage is the ability to use a wide base of existing JavaPOS applications.

The driver provided here is fully compliant with Version 1.4 of the JavaPOS standards, as established by the JavaPOS standards committee.

2.4 Port Emulator

This feature sets up a virtual serial port, making it possible for applications that support only serial printers to access your printer through a USB or Ethernet connection.

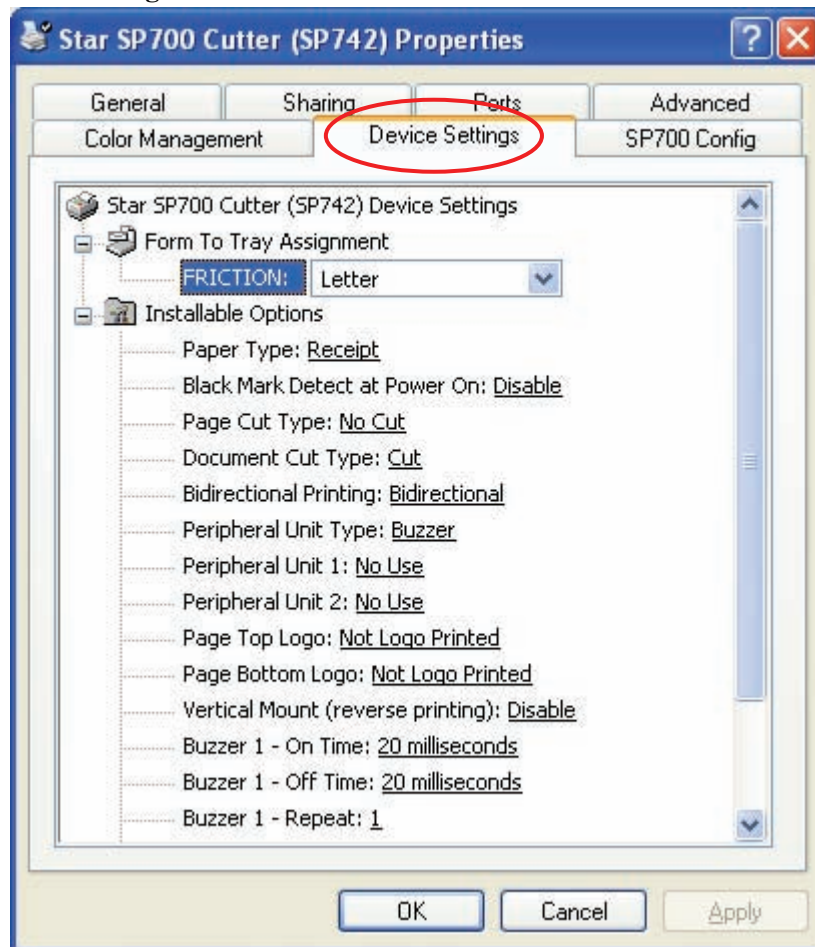
Important: Some applications do not support this feature. Note that this feature is not supported on Windows versions prior to Windows 2000 SP3.

3. Windows 2000/XP Printer Driver Settings

3.1 Setting the Printer

You can use the driver to set up various printer operations. Begin by opening the Properties dialog, as follows.

- ① From the Windows **Start** menu, select **Printers and Faxes**. This opens the **Printer and Faxes** folder.
- ② In the folder, right-click the Star SP700 Cutter (SP742) icon, and select **Properties** to open the printer's Properties dialog.
- ③ Click the **Device Settings** tab.

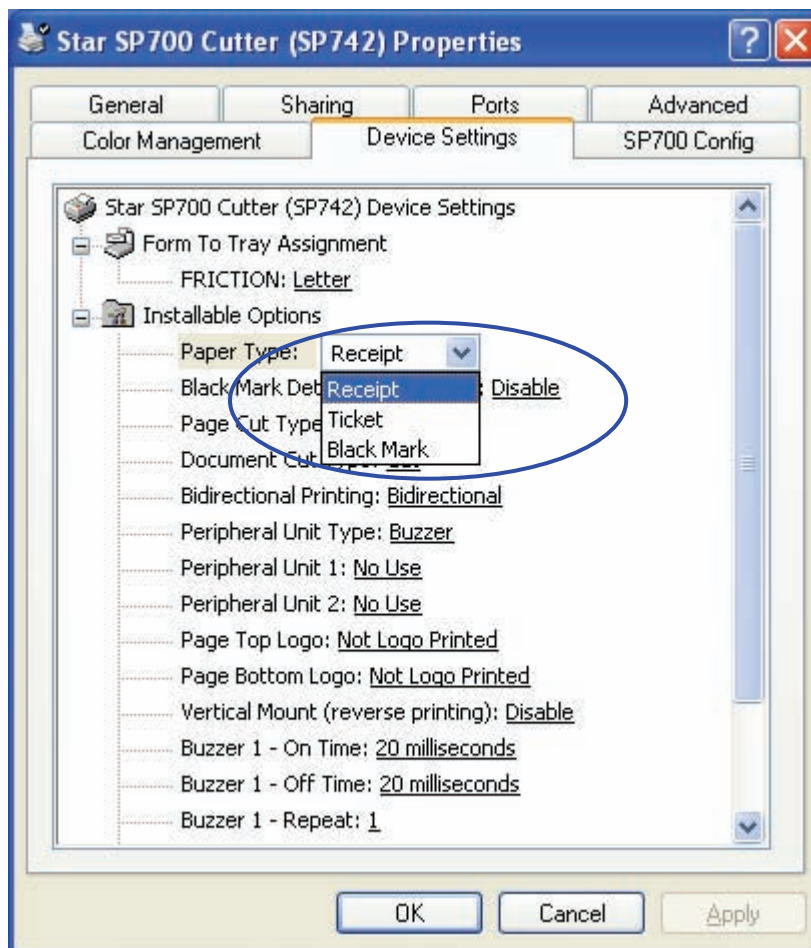


3. 1. 1 Setting the Paper Type

Set this to the appropriate paper type. Available settings are as follows.

Setting	Default	Meaning
Receipt	☐	Variable length: the printer does not output white-space padding at the end of the page data.
Ticket	☐	Fixed length: the printer outputs white-space padding up to the end of the fixed-length page.
Black Mark	☐	Fixed length: the printer outputs white-space padding up to the next black mark.

Setting the paper type:

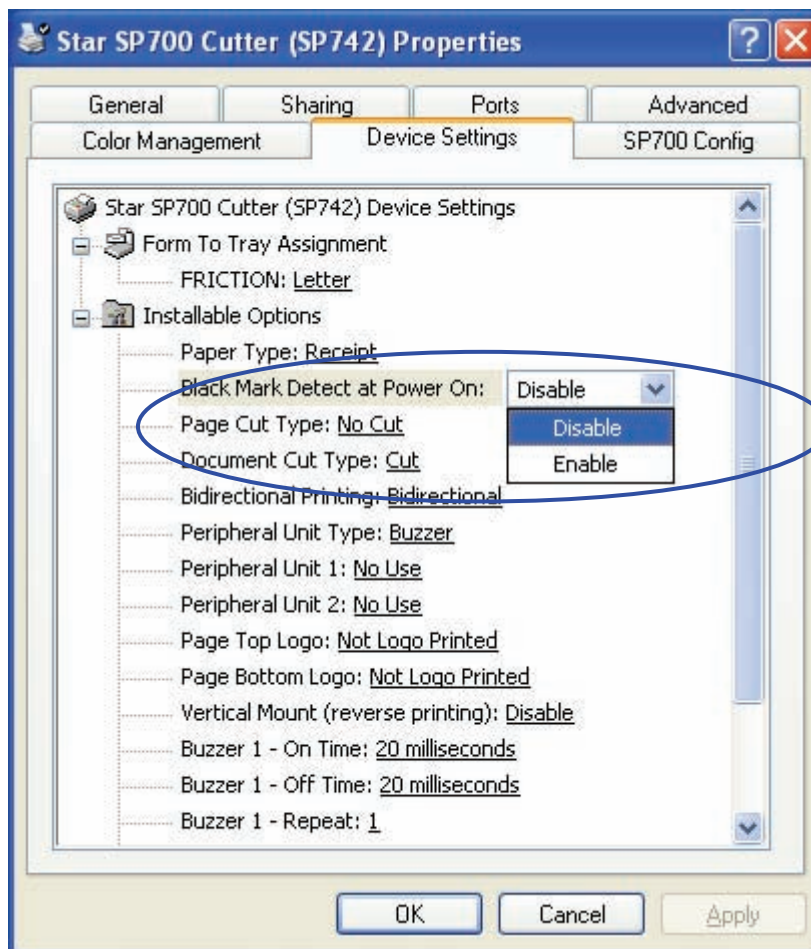


3. 1. 2 Enabling/Disabling Black Mark Detection

If this feature is set to **Enable**, the printer will detect the black mark position when turned on. Available settings are as follows.

Setting	Default	Meaning
Disable	☐	At power on, does not execute paper feed in accordance with detection of black mark position.
Enable	☐	At power on, feeds paper according to black mark position.

Enabling or disabling black mark detection:



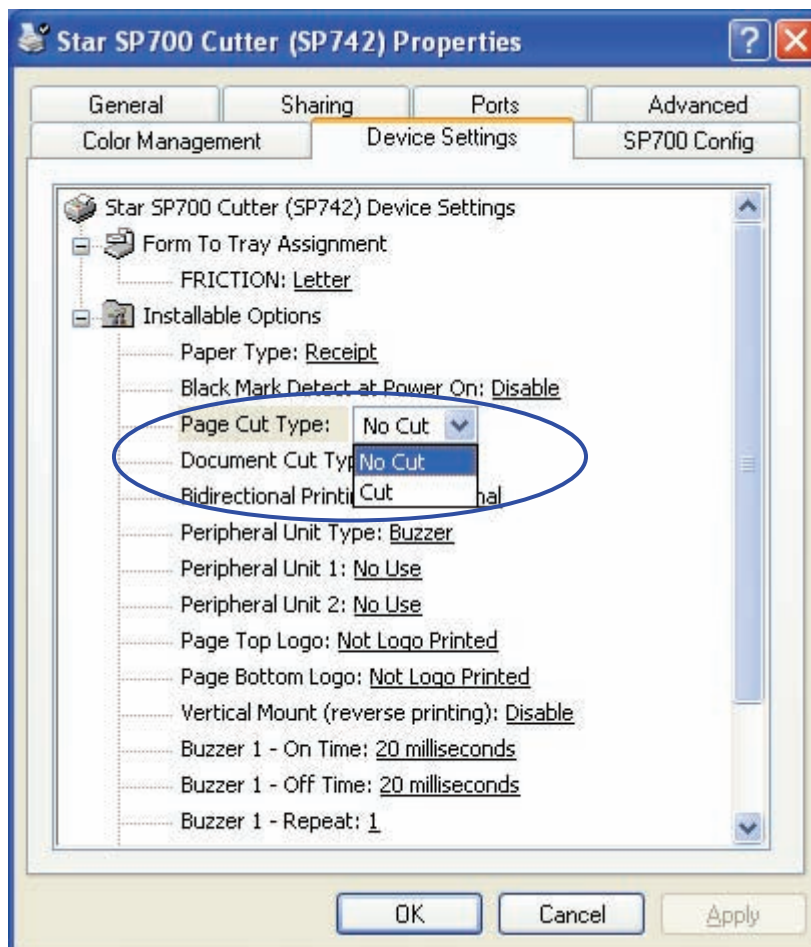
3. 1. 3 Enabling/Disabling Page Cutting (SP742 Cutter)

Set this feature to **Cut** if you want the printer to cut the paper at the end of each non-final page of a document.

Available settings are as follows.

Setting	Default	Meaning
No Cut	☐	Printer does not feed or cut paper.
Cut	☐	Printer feeds paper to cut position, and then cuts it.

Enabling or disabling page cutting:

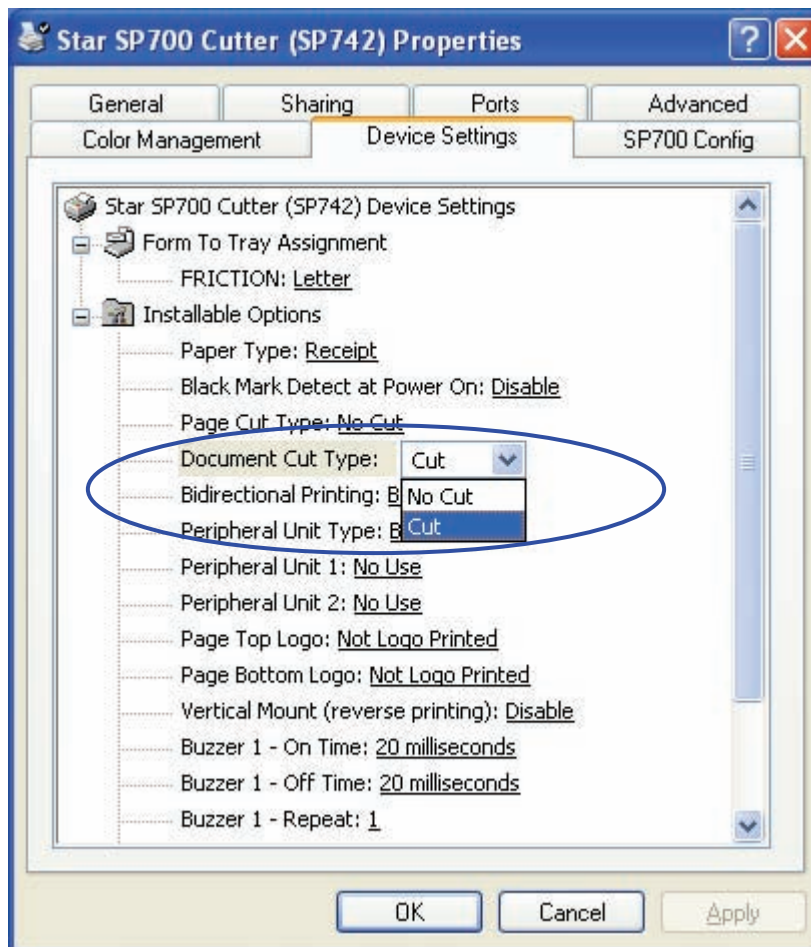


3. 1. 4 Enabling/Disabling Document Cutting (SP742 Cutter)

Set this feature to cut if you want the printer to cut the paper at the bottom of the final page of the document. Available settings are as follows.

Setting	Default	Meaning
No Cut		Printer does not feed or cut paper.
Cut	☐	Printer feeds paper to cut position, and then cuts it.

Enabling or disabling document cutting:



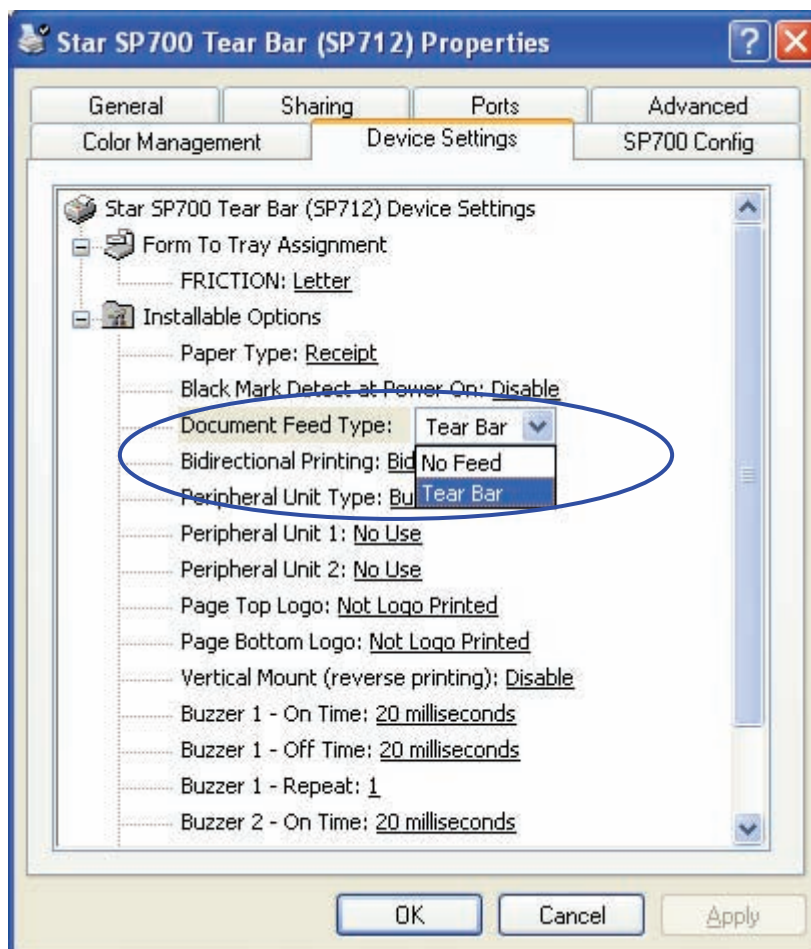
3. 1. 5 Enabling or Disabling Paper Feed (SP712 Tear Bar)

This setting selects whether the printer feeds the paper after printing the document.

Available settings are as follows.

Setting	Default	Meaning
No Feed		The printer does not feed the paper after completing printout of the document.
Tear Bar	☐	After completing printout of the document, the printer feeds the paper to the tear bar (the cut position).

Enabling or disabling paper feed at document completion:

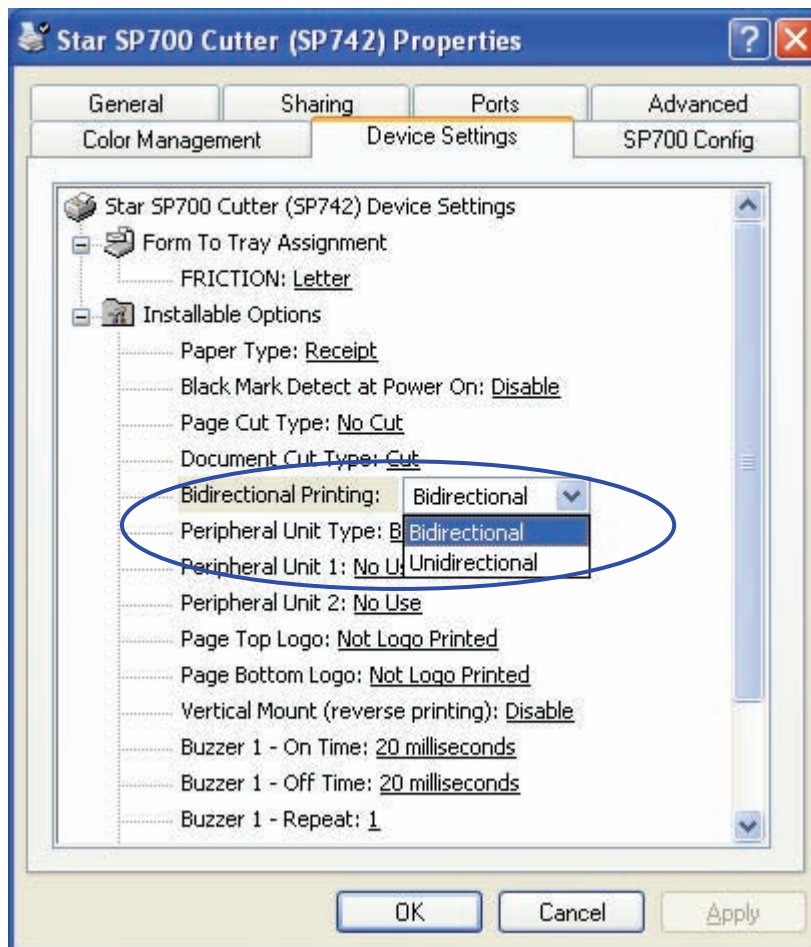


3. 1. 6 Selecting the Print Method

Use this feature to select either unidirectional or bidirectional printing. Note that the setting affects both the print speed and the print quality. Available settings are as follows.

Setting	Default	Meaning
Bidirectional	☐	Printer prints in both directions.
Unidirectional	☐	Printer prints in one direction only.

Setting the print method:

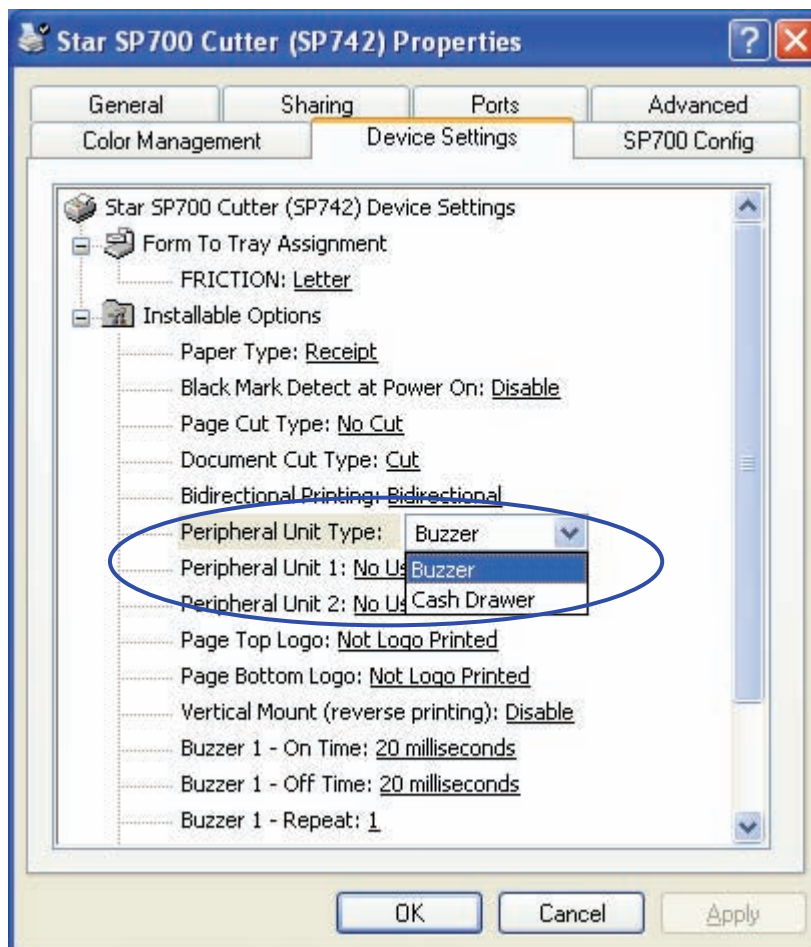


3. 1. 7 Setting the Peripheral Device Type

Sets the type of peripheral device that you are using. Available settings are as follows.

Setting	Default	Meaning
Buzzer	☐	Using buzzer.
Cash Drawer	☐	Using cash drawer.

Setting the peripheral type:



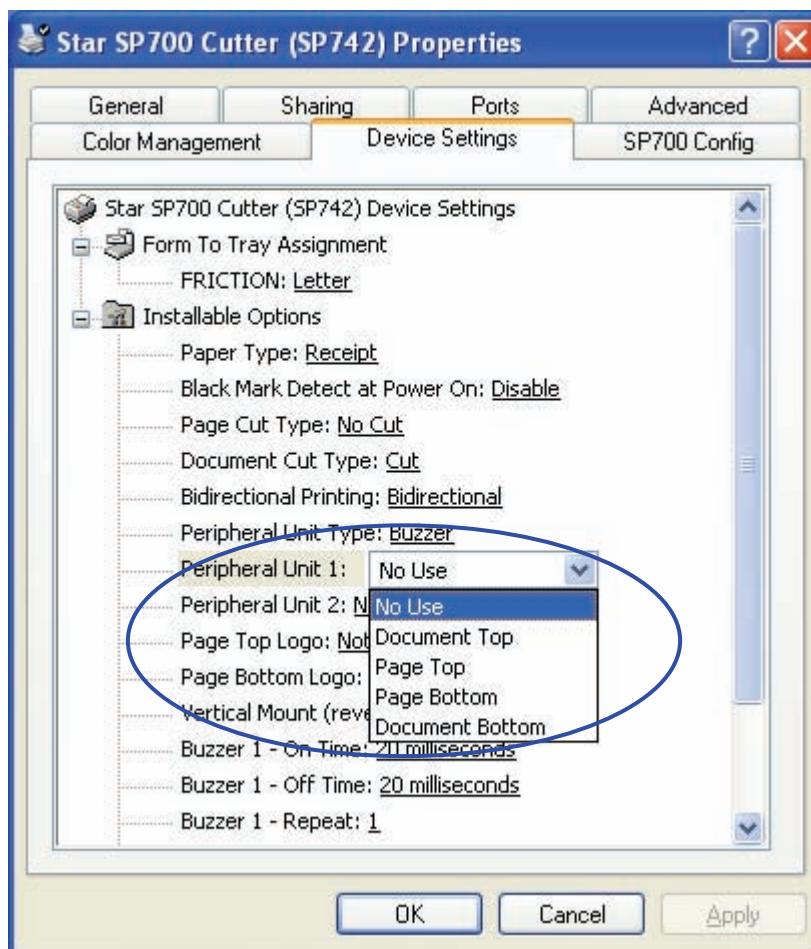
Important: Buzzers are available as an option. Note that it is not possible to use buzzers and cash drawers at the same time.

3. 1. 8 Setting the Use of Peripheral Unit 1

This entry sets the usage of the peripheral selected by the Peripheral Unit Type setting in section 3.1.7, “Setting the Peripheral Device Type.” Available settings are as follows.

Setting	Default	Meaning
No Use	○	Peripheral Unit 1 is not used.
Document Top		Peripheral Unit 1 operates at the top of the document.
Page Top		Peripheral Unit 1 operates at the top of each page.
Page Bottom		Peripheral Unit 1 operates at the bottom of each page.
Document Bottom		Peripheral Unit 1 operates at the end of the document.

Setting the operational timing for Peripheral Unit 1:



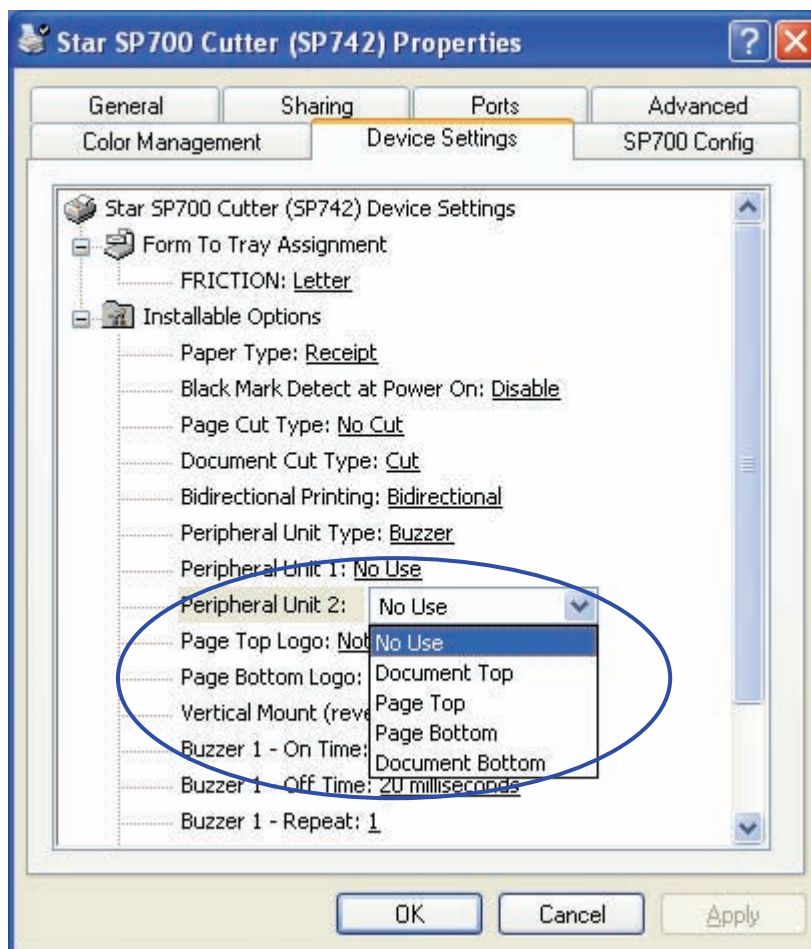
Note: You can make settings for two peripherals (although there is only one connection site). The Peripheral Unit 1 setting, described here, sets the operation for the first peripheral. The setting for Peripheral Unit 2 (see the next section) sets the operation for the second.

3. 1. 9 Setting the Use of Peripheral Unit 2

This entry sets the usage of the peripheral selected by the Peripheral Unit Type setting in section 3.1.7, “Setting the Peripheral Device Type.” Available settings are as follows.

Setting	Default	Meaning
No Use	○	Peripheral Unit 2 is not used.
Document Top		Peripheral Unit 2 operates at the top of the document.
Page Top		Peripheral Unit 2 operates at the top of each page.
Page Bottom		Peripheral Unit 2 operates at the bottom of each page.
Document Bottom		Peripheral Unit 2 operates at the end of the document.

Setting the operational timing for Peripheral Unit 2:

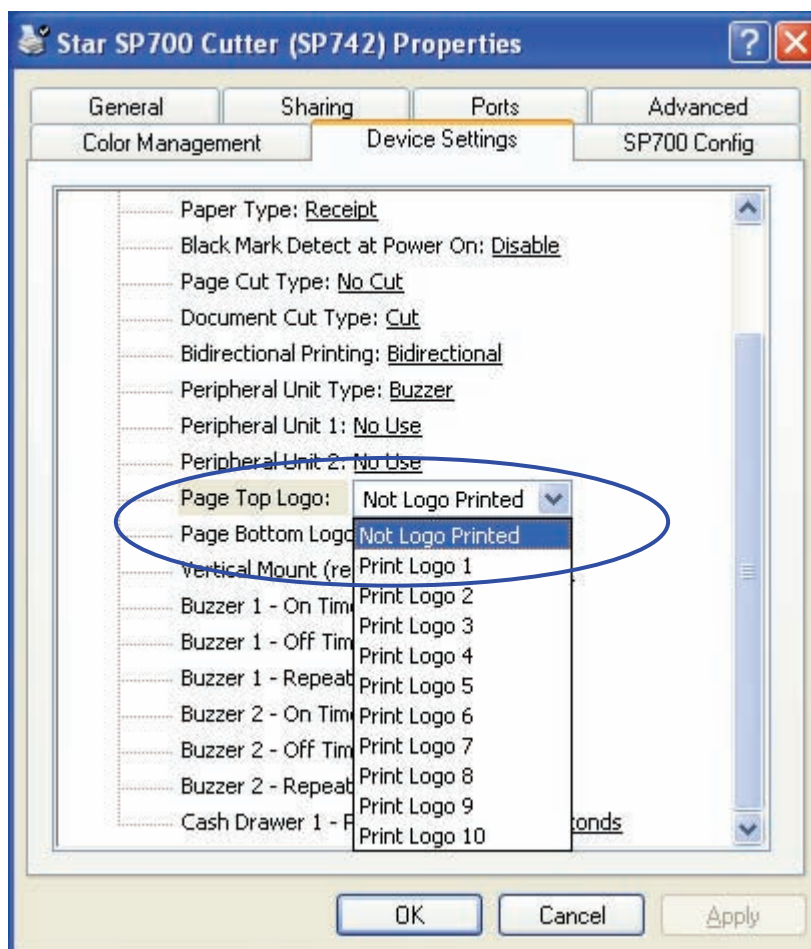


3. 1. 10 Selecting the Logo for the Top of the Page

Before making this setting, you must load logos into the printer's nonvolatile memory. These NV logos are identified by their logo numbers. To select the top-of-page logo, choose the appropriate logo number. Available settings are as follows.

Setting	Default	Meaning
Not Logo Printed	○	No logo printed at the page top.
Print Logo 1,...,10		Prints the selected logo at the page top.

Selecting the top-of-page logo:



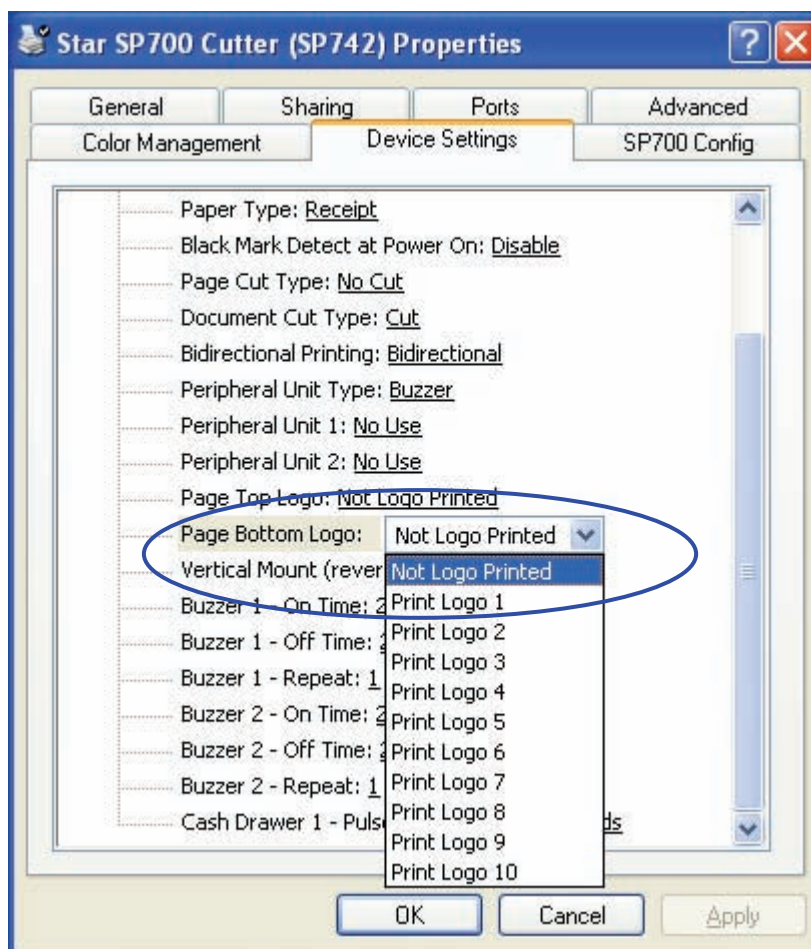
Note: For information about how to load logos into the printer, see section 4.1.2, “NV Logos.”

3. 1. 11 Selecting the Logo for the Bottom of the Page

Before making this setting, you must load logos into the printer's nonvolatile memory. These NV logos are identified by their logo numbers. To select the bottom-of-page logo, choose the appropriate logo number. Available settings are as follows.

Setting	Default	Meaning
Not Logo Printed	○	No logo printed at the page bottom.
Print Logo 1,...,10		Prints the selected logo at the page bottom.

Selecting the bottom-of-page logo:



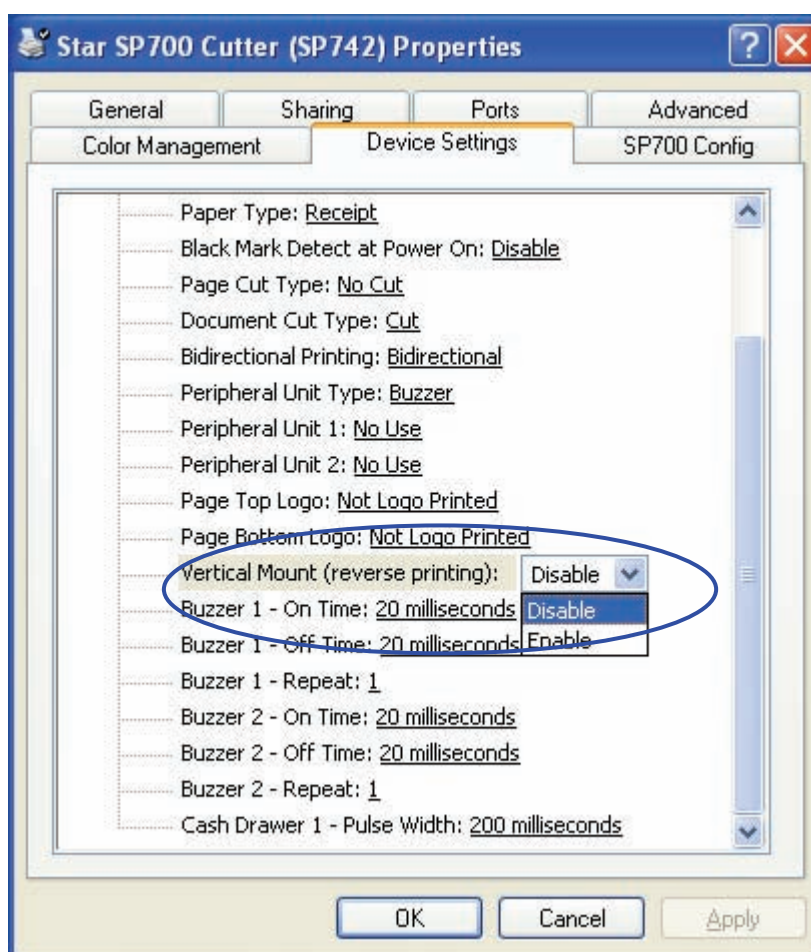
Note: For information about how to load logos into the printer, see section 4.1.2, "NV Logos."

3. 1. 12 Using Inverted Printing (When Printer is Mounted Vertically)

Set this entry to **Enable** if the SP700 is mounted on the wall or is stood up vertically. This setting makes it possible for the customer to view the printout in the correct orientation when the printer is installed vertically. Available settings are as follows.

Setting	Default	Meaning
Disable	☐	Print normally.
Enable	☐	Printing is inverted, top to bottom. (Use when printer is mounted on wall or standing vertically.)

Selecting normal or inverted printing:



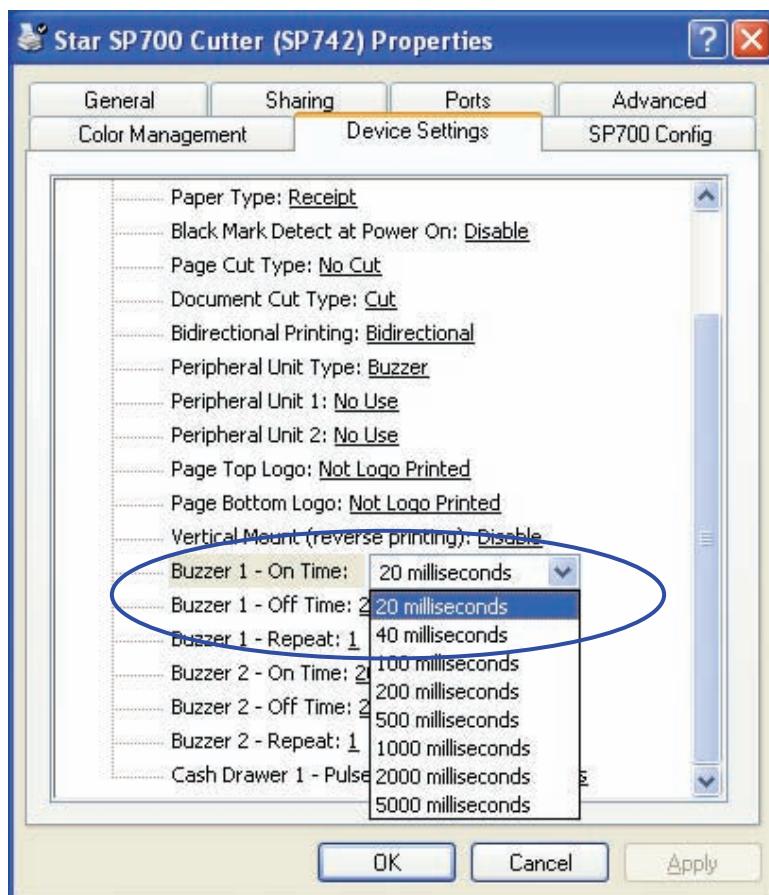
Important: When inverted printing is in use, black mark detection and usage of the control font are both disabled.

3. 1. 13 On Duration for Buzzer 1

This entry sets the sounding duration for buzzer 1 (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
20 milliseconds	○	Sounds for 0.02 second.
40 milliseconds		Sounds for 0.04 second.
100 milliseconds		Sounds for 0.1 second.
200 milliseconds		Sounds for 0.2 second.
500 milliseconds		Sounds for 0.5 second.
1000 milliseconds		Sounds for 1.0 second.
2000 milliseconds		Sounds for 2.0 seconds.
5000 milliseconds		Sounds for 5.0 seconds.

Setting the on duration for buzzer 1:

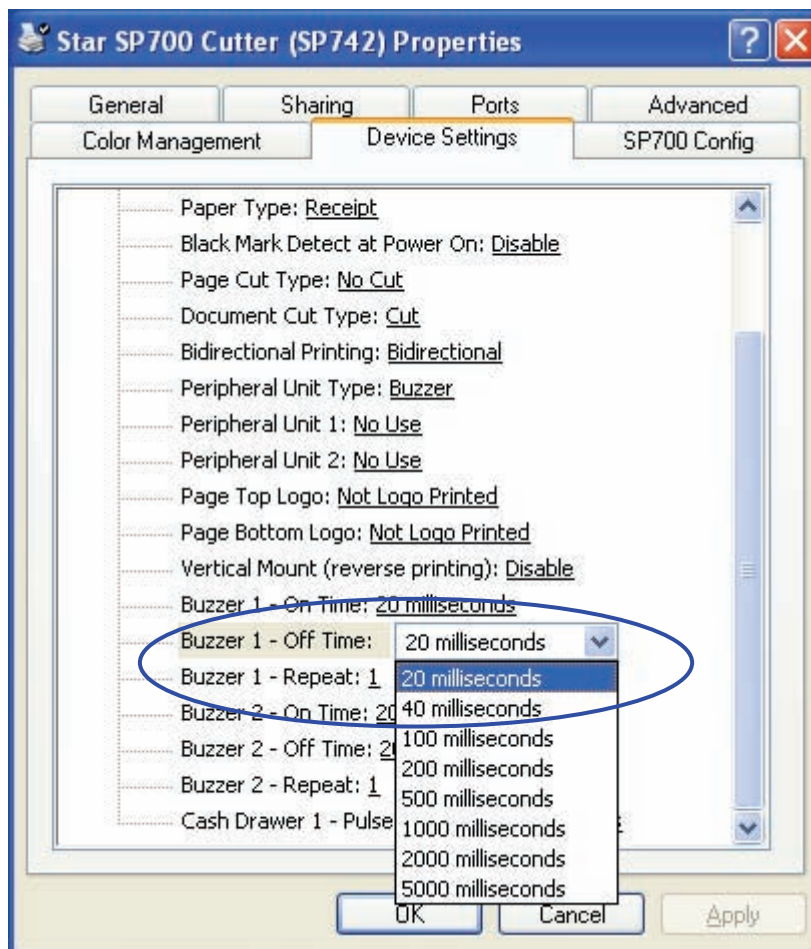


3. 1. 14 Off Duration for Buzzer 1

This entry sets the off duration for buzzer 1 (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
20 milliseconds	○	Off for 0.02 second.
40 milliseconds		Off for 0.04 second.
100 milliseconds		Off for 0.1 second.
200 milliseconds		Off for 0.2 second.
500 milliseconds		Off for 0.5 second.
1000 milliseconds		Off for 1.0 second.
2000 milliseconds		Off for 2.0 seconds.
5000 milliseconds		Off for 5.0 seconds.

Setting the off duration for buzzer 1:

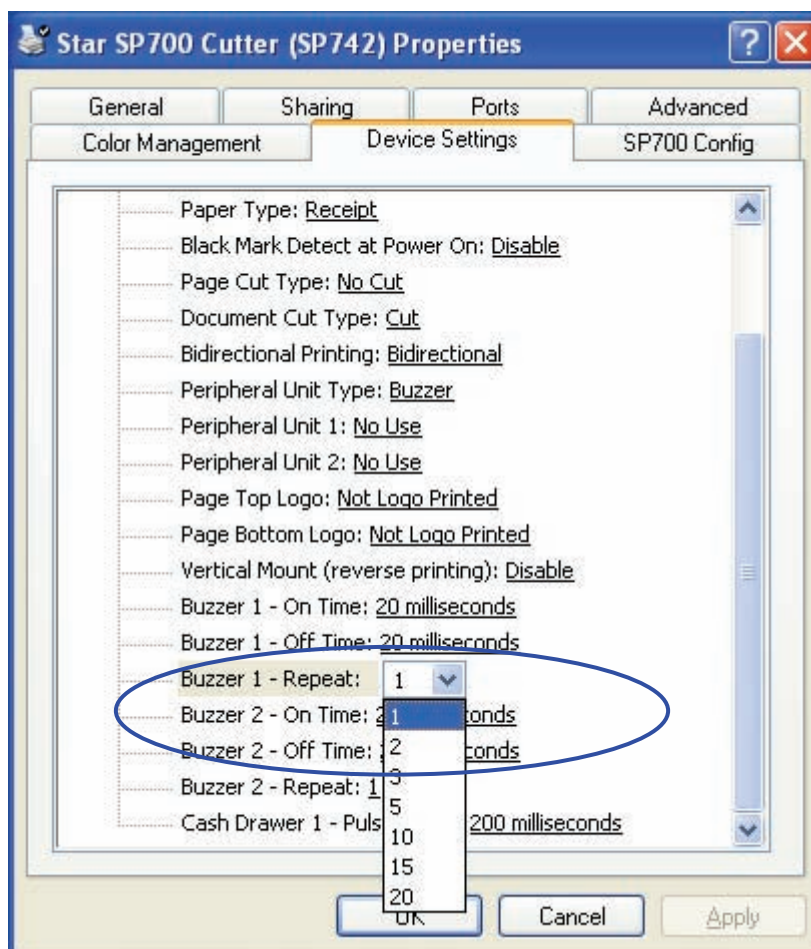


3. 1. 15 Number of Buzzes from Buzzer 1

This entry sets the number of times that buzzer 1 will buzz (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
1	○	Buzzes once.
2		Buzzes twice.
3		Buzzes three times.
5		Buzzes five times.
10		Buzzes ten times.
15		Buzzes fifteen times.
20		Buzzes twenty times.

Setting the number of buzzes for buzzer 1:

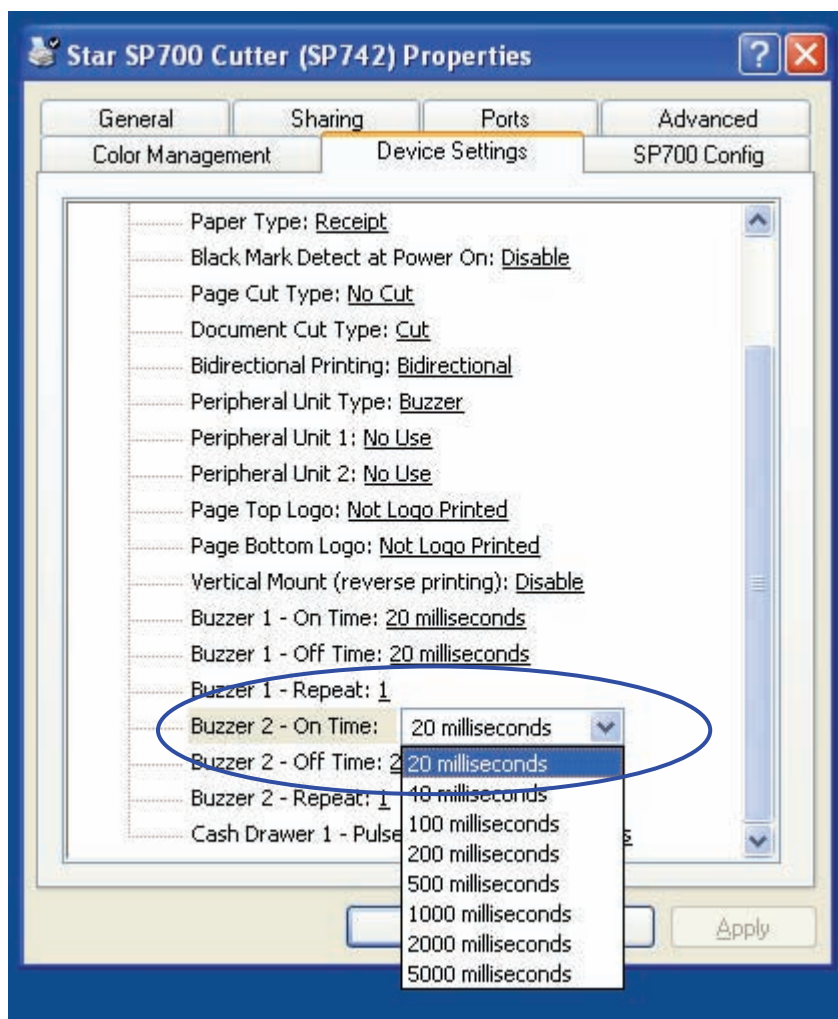


3. 1. 16 On Duration for Buzzer 2

This entry sets the sounding duration for buzzer 2 (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
20 milliseconds	○	Sounds for 0.02 second.
40 milliseconds		Sounds for 0.04 second.
100 milliseconds		Sounds for 0.1 second.
200 milliseconds		Sounds for 0.2 second.
500 milliseconds		Sounds for 0.5 second.
1000 milliseconds		Sounds for 1.0 second.
2000 milliseconds		Sounds for 2.0 seconds.
5000 milliseconds		Sounds for 5.0 seconds.

Setting the on duration for buzzer 2:

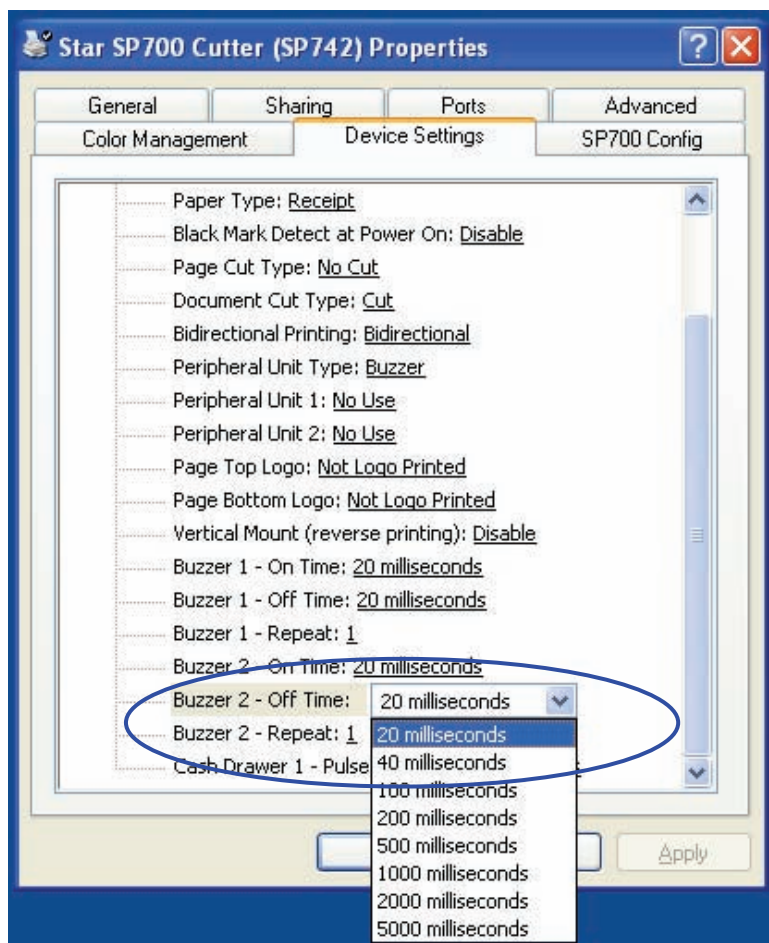


3. 1. 17 Off Duration for Buzzer 2

This entry sets the off duration for buzzer 2 (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
20 milliseconds	○	Off for 0.02 second.
40 milliseconds		Off for 0.04 second.
100 milliseconds		Off for 0.1 second.
200 milliseconds		Off for 0.2 second.
500 milliseconds		Off for 0.5 second.
1000 milliseconds		Off for 1.0 second.
2000 milliseconds		Off for 2.0 seconds.
5000 milliseconds		Off for 5.0 seconds.

Setting the off duration for buzzer 2:

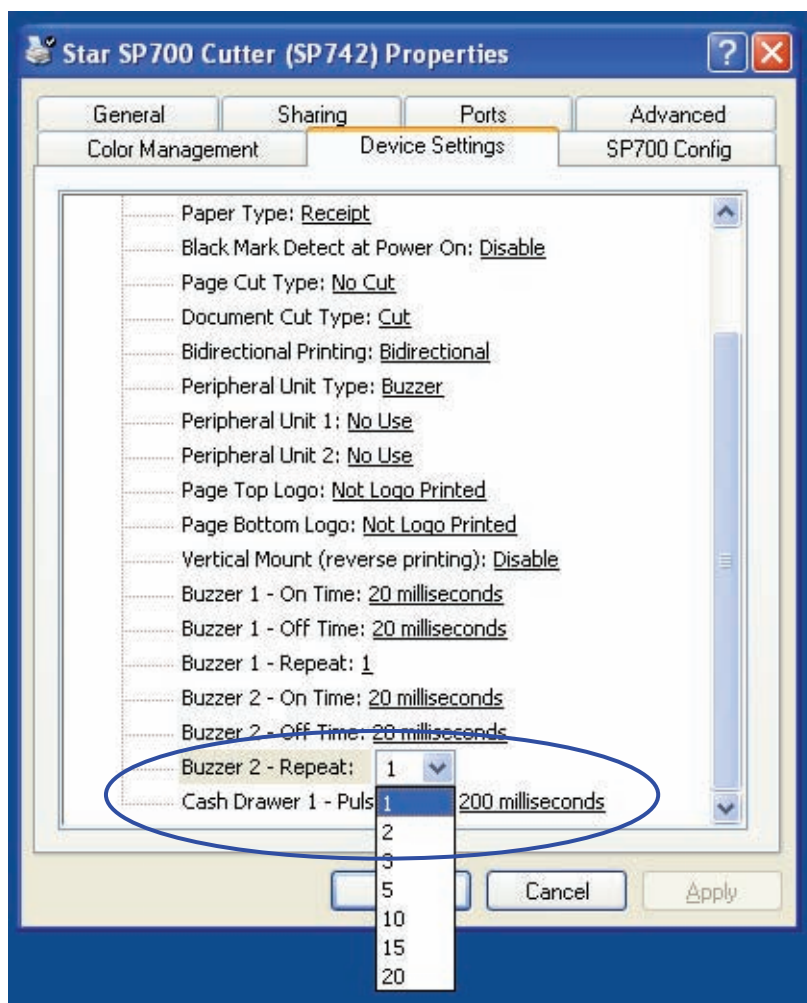


3. 1. 18 Number of Buzzes from Buzzer 2

This entry sets the number of times that buzzer 2 will buzz (when Peripheral Unit Type is set to Buzzer). Available settings are as follows.

Setting	Default	Meaning
1	○	Buzzes once.
2		Buzzes twice.
3		Buzzes three times.
5		Buzzes five times.
10		Buzzes ten times.
15		Buzzes fifteen times.
20		Buzzes twenty times.

Setting the number of buzzes for buzzer 2:

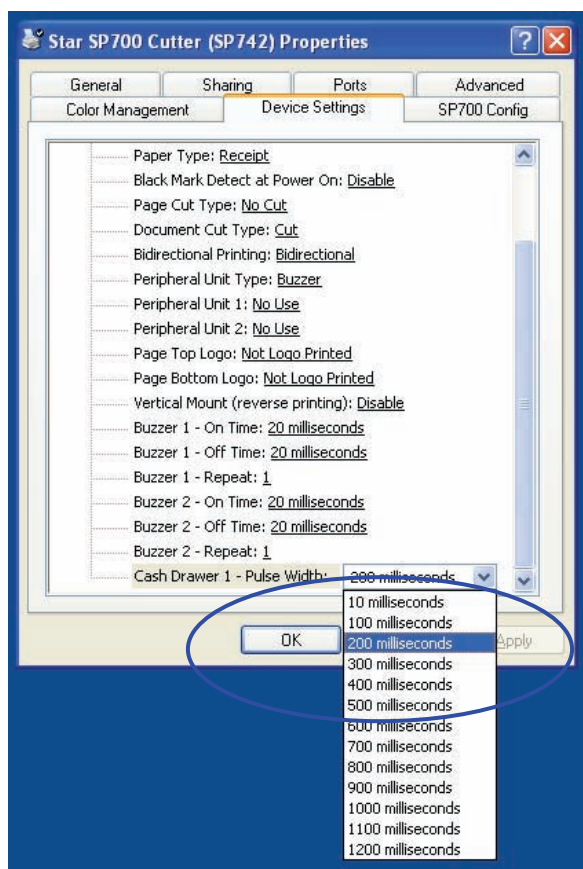


3. 1. 19 Pulse Width for Cash Drawer 1

This entry sets the pulse width for cash drawer 1. Available pulse widths are as follows.

Setting	Default	Meaning
10 milliseconds		Pulse width is 0.01 second.
100 milliseconds		Pulse width is 0.1 second.
200 milliseconds	○	Pulse width is 0.2 second.
300 milliseconds		Pulse width is 0.3 second.
400 milliseconds		Pulse width is 0.4 second.
500 milliseconds		Pulse width is 0.5 second.
600 milliseconds		Pulse width is 0.6 second.
700 milliseconds		Pulse width is 0.7 second.
800 milliseconds		Pulse width is 0.8 second.
900 milliseconds		Pulse width is 0.9 second.
1000 milliseconds		Pulse width is 1.0 second.
1100 milliseconds		Pulse width is 1.1 seconds.
1200 milliseconds		Pulse width is 1.2 seconds.

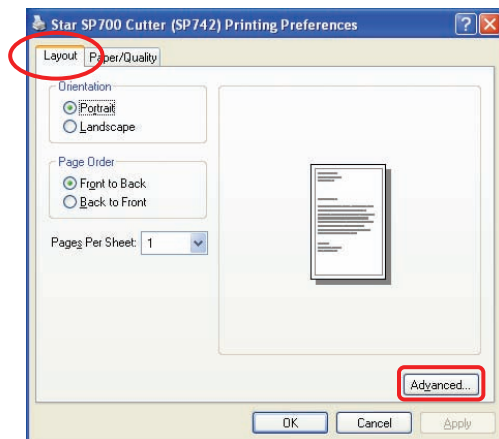
Setting the pulse width for cash drawer 1:



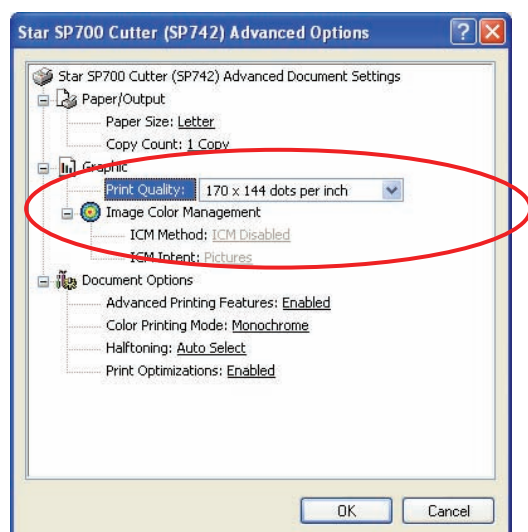
3. 1. 20 Setting the Print Quality

To open the dialog, proceed as follows.

- ① From the Windows **Start** menu, select **Printers and Faxes**. This opens the **Printers and Faxes** folder.
- ② In the folder, right-click the **Star SP700 Cutter (SP742)** icon, and select **Printing Preferences** to open the printer's Printing Preferences dialog.
- ③ Click the **Layout** tab, and then click the **Advanced** button.



- ④ At the Advanced Options dialog, set **Graphic** → **Print Quality** to the desired setting.



Available settings are as follows.

Setting	Default	Meaning
170 x 144 dots per inch	☐	Print width is 170 dpi; print height is 144 dpi.
170 x 72 dots per inch	☐	Print width is 170 dpi; print height is 72 dpi.
85 x 72 dots per inch	☐	Print width is 85 dpi; print height is 72 dpi.

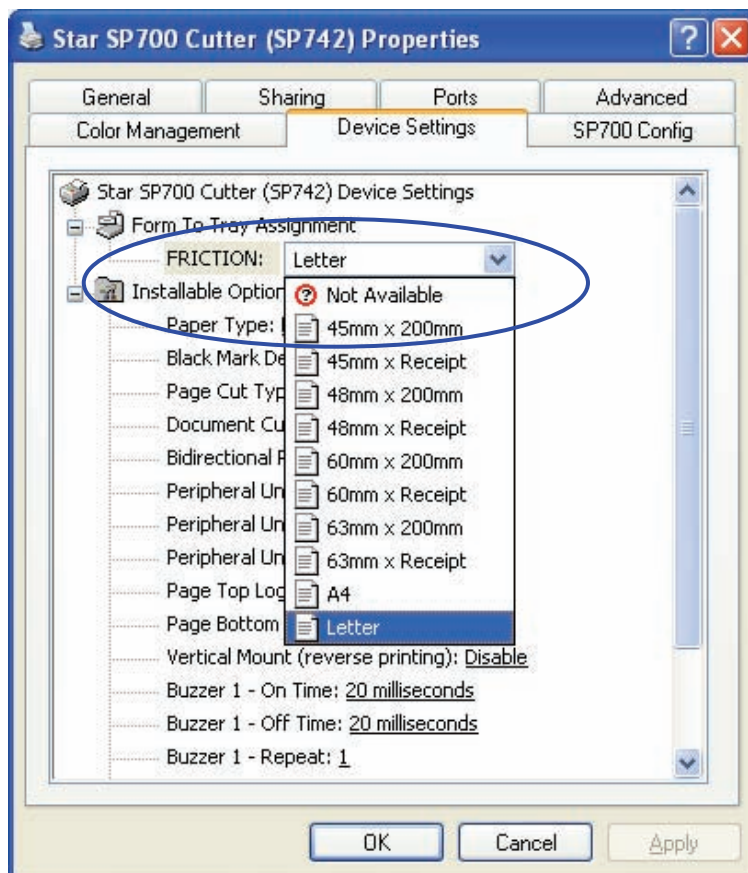
3.2 Setting the Paper Size

This driver supports both standard sizes and user-defined sizes.

3.2.1 Standard Sizes

The following standard sizes are supported.

Setting	Default	Width	Length
45mm × 200mm		45 mm	200 mm
45mm × Receipt		45 mm	3,000 mm
48mm × 200mm		48 mm	200 mm
48mm × Receipt		48 mm	3,000 mm
60mm × 200mm		60 mm	200 mm
60mm × Receipt		60 mm	3,000 mm
63mm × 200mm		63 mm	200 mm
63mm × Receipt		63 mm	3,000 mm
A4		210 mm	297 mm
Letter	○	8.5 inches	11 inches



Note: The width value denotes the printable range, and should be set smaller than the actual paper size to leave room for margins. If you are using 57.5 mm-wide paper rolls, for example, you should set the width no greater than 48 mm.

Note also that “Receipt” length denotes variable length. If you wish to carry out journal printing (without page breaks), select a Receipt-length paper size (such as 48mm × Receipt) and set the paper type (see Section 3.1.1) to Receipt.

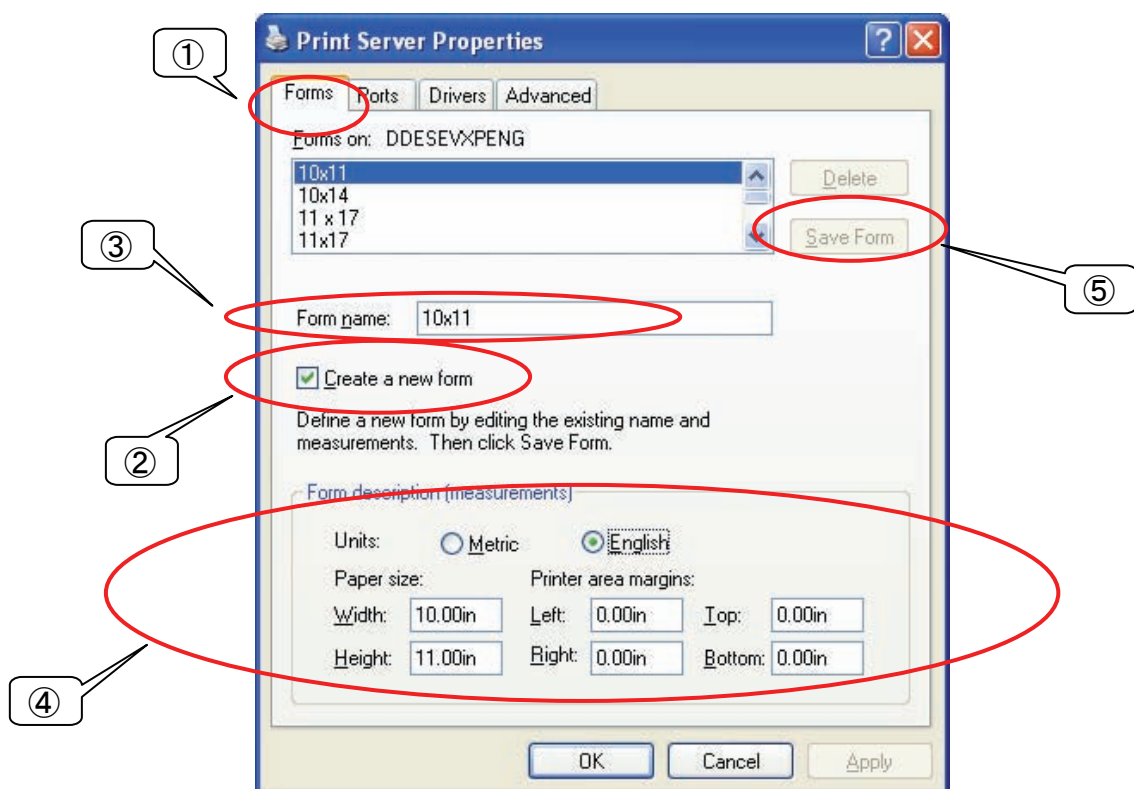
3. 2. 2 Setting Up User-Defined Paper Sizes

You can create user-defined paper sizes using the **Server Properties** dialog, accessible through the File menu of the **Printers and Faxes** window. The procedure is as follows.

- ① From the **File** menu on the **Printers and Faxes** window, open the **Server Properties** dialog, and click the **Forms** tab.
- ② Place a check in the checkbox next to **Create a new form**.
- ③ In the **Form name** textbox, overwrite the current name with a new name for the custom size you are defining.
- ④ In the **Form description (measurements)** area, select the appropriate **Units** and enter the desired **Width** and **Height** settings.

Important: Set all four margins (left, right, top, and bottom) to 0.

- ⑤ Click the **Save Form** button, and then click the **OK** button.



Important: This driver can only use user-defined sizes whose width and length are within the range appropriate for the SP700. Supported ranges are as follows.

Width: 25.4 to 63 mm

Height: 25.4 to 3,276 mm

3.3 Device Fonts

This driver is equipped with a variety of device fonts. As these fonts were designed specifically to match the characteristics of the SP700, they offer clearer printing than TrueType fonts.

The supported device fonts are shown below.

Font Name	Width (dots)	Height (dots)	Columns at 63 mm (210 dots)	Comments
Printer 4.5cpi	18	9	11	Dot matrix fonts
Printer 4.5cpi Tall	18	18	11	
Printer 7cpi	12	9	17	
Printer 7cpi Tall	12	18	17	
Printer 8.5cpi	10	9	21	
Printer 8.5cpi Tall	10	18	21	
Printer 9cpi	9	9	23	
Printer 9cpi Tall	9	18	23	
Printer 14cpi	6	9	35	
Printer 14cpi Tall	6	18	35	
Printer 17cpi	5	9	42	
Printer 17cpi Tall	5	18	42	
Printer 4.5cpi (RED)	18	9	11	
Printer 4.5cpi Tall (RED)	18	18	11	
Printer 7cpi (RED)	12	9	17	
Printer 7cpi Tall (RED)	12	18	17	
Printer 8.5cpi (RED)	10	9	21	
Printer 8.5cpi Tall (RED)	10	18	21	
Printer 9cpi (RED)	9	9	23	
Printer 9cpi Tall (RED)	9	18	23	
Printer 14cpi (RED)	6	9	35	
Printer 14cpi Tall (RED)	6	18	35	
Printer 17cpi (RED)	5	9	42	
Printer 17cpi Tall (RED)	5	18	42	

Font Name	Width (dots)	Height (dots)	Columns at 72 mm (210 dots)	Comments
Control	—	—	—	Control font
ESC-FONT	—	—	—	

3. 4 Control Font

The control font is not a printable font, but is instead used to execute specific operations at the SP700. Each character of the font is assigned to a particular operation, and causes the printer to execute that operation.

3. 4. 1 Control Font Characters and Their Operations

The operations that can be executed through the control font are shown below.

Character	Operation
A	Drive cash drawer 1 (50 ms)
B	Drive cash drawer 1 (100 ms)
C	Drive cash drawer 1 (150 ms)
D	Drive cash drawer 1 (200 ms)
E	Drive cash drawer 1 (250 ms)
d	Drive cash drawer 2 (200 ms)
6	Output LF
7	Output CR
F	Auto-cutter: Full Cut
P	Auto-cutter: Partial Cut
G	Print NV Bit Image 1 in regular mode
H	Print NV Bit Image 1 in regular mode
I	Print NV Bit Image 3 in regular mode
J	Print NV Bit Image 4 in regular mode
K	Print NV Bit Image 5 in regular mode
Q	Print NV Bit Image 1 in double-wide mode
R	Print NV Bit Image 2 in double-wide mode
S	Print NV Bit Image 3 in double-wide mode
T	Print NV Bit Image 4 in double-wide mode
U	Print NV Bit Image 5 in double-wide mode
V	Print NV Bit Image 1 in double-height mode
W	Print NV Bit Image 2 in double-height mode
X	Print NV Bit Image 3 in double-height mode
Y	Print NV Bit Image 4 in double-height mode
Z	Print NV Bit Image 5 in double-height mode
[	Print NV Bit Image 1 in 4x mode
]	Print NV Bit Image 2 in 4x mode
^	Print NV Bit Image 3 in 4x mode

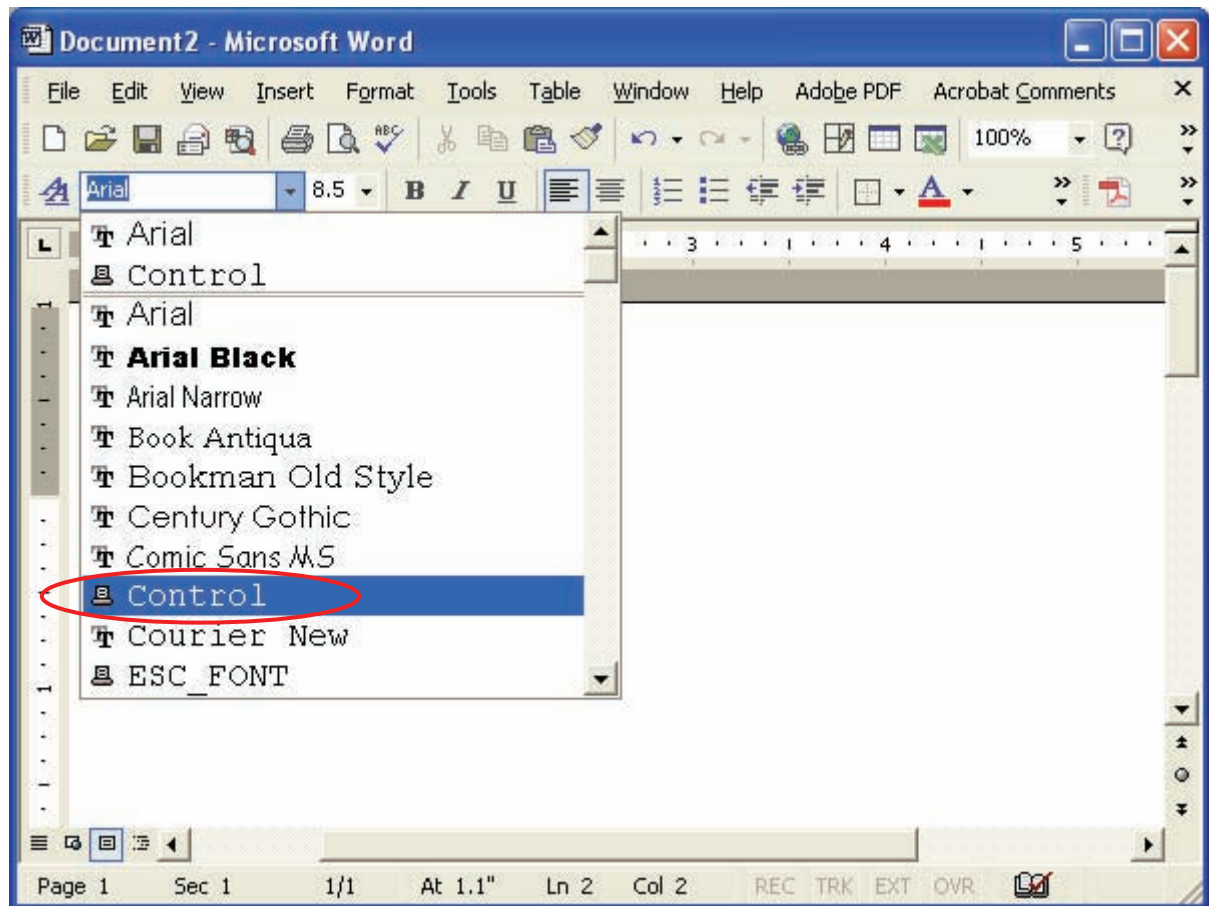
Character	Operation
_	Print NV Bit Image 4 in 4x mode
`	Print NV Bit Image 5 in 4x mode
a	Align left
b	Align center
c	Align right
e	Set new line to 3 mm (1/8 inch)
f	Set new line to 4 mm (1/6 inch)
g	International character select: USA
h	International character select: France
i	International character select: Germany
j	International character select: England
k	International character select: Denmark I
l	International character select: Sweden I
m	International character select: Italy
n	International character select: Spain I
o	International character select: Japan
p	International character select: Norway
q	International character select: Denmark II
r	International character select: Spain II
s	International character select: Latin America
t	Print using black/white inversion
u	Cancel black/white inversion
v	Customer display: Start data transfer
w	Customer display: End data transfer
x	Customer display: Clear the display

Important: The SP700 ignores control font characters associated with operations that it does not support.

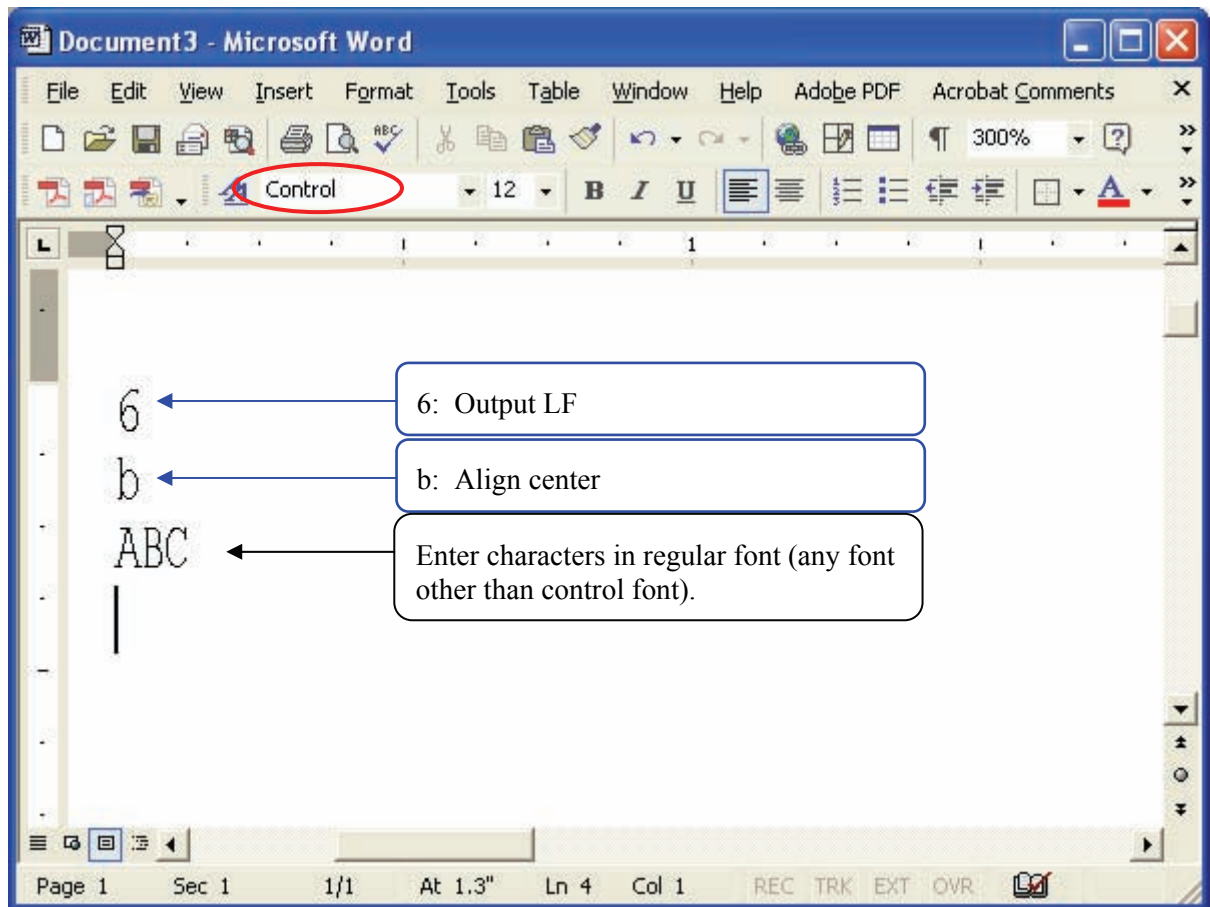
3. 4. 2 Using the Control Font

The following is an example of how to use the control font.

- ① Select the **Control** font from the font list.



- ② Input the character for each operation you wish to execute. (Refer to the listing in section 3.4.1 .)

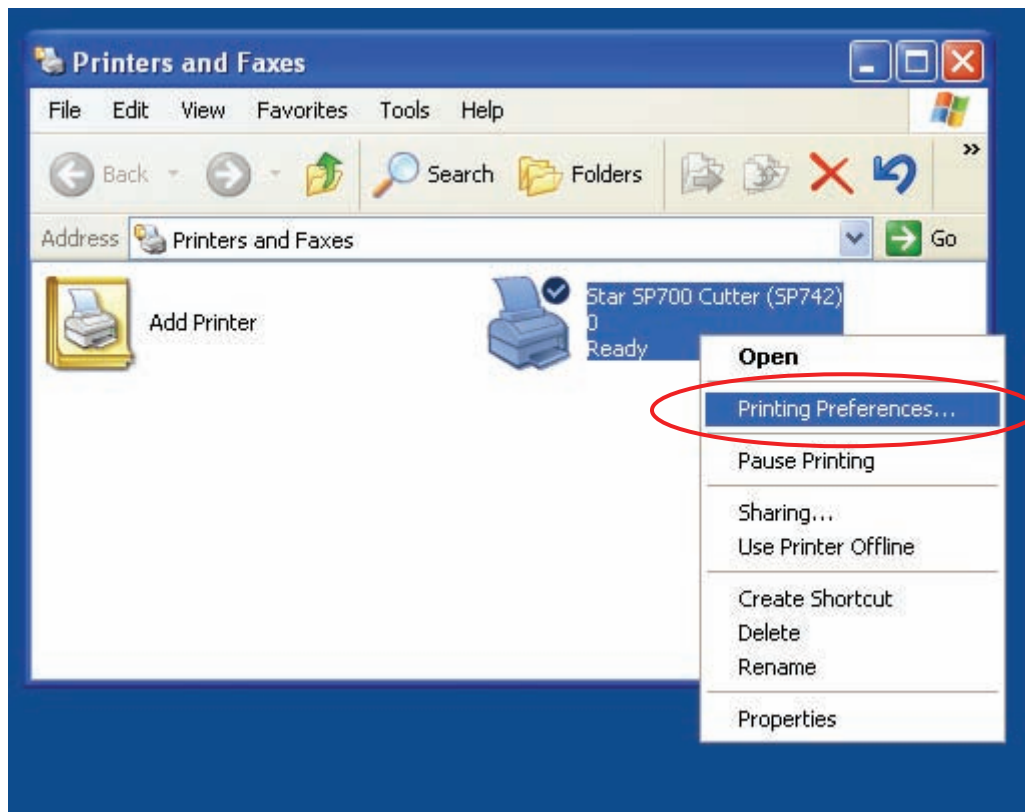


When printing is executed, the printer carries out the operations assigned to the letters of the control font. In the example above, the printer executes a linefeed and then prints “ABC” at the center of the page.

3.5 Selecting Color Printing

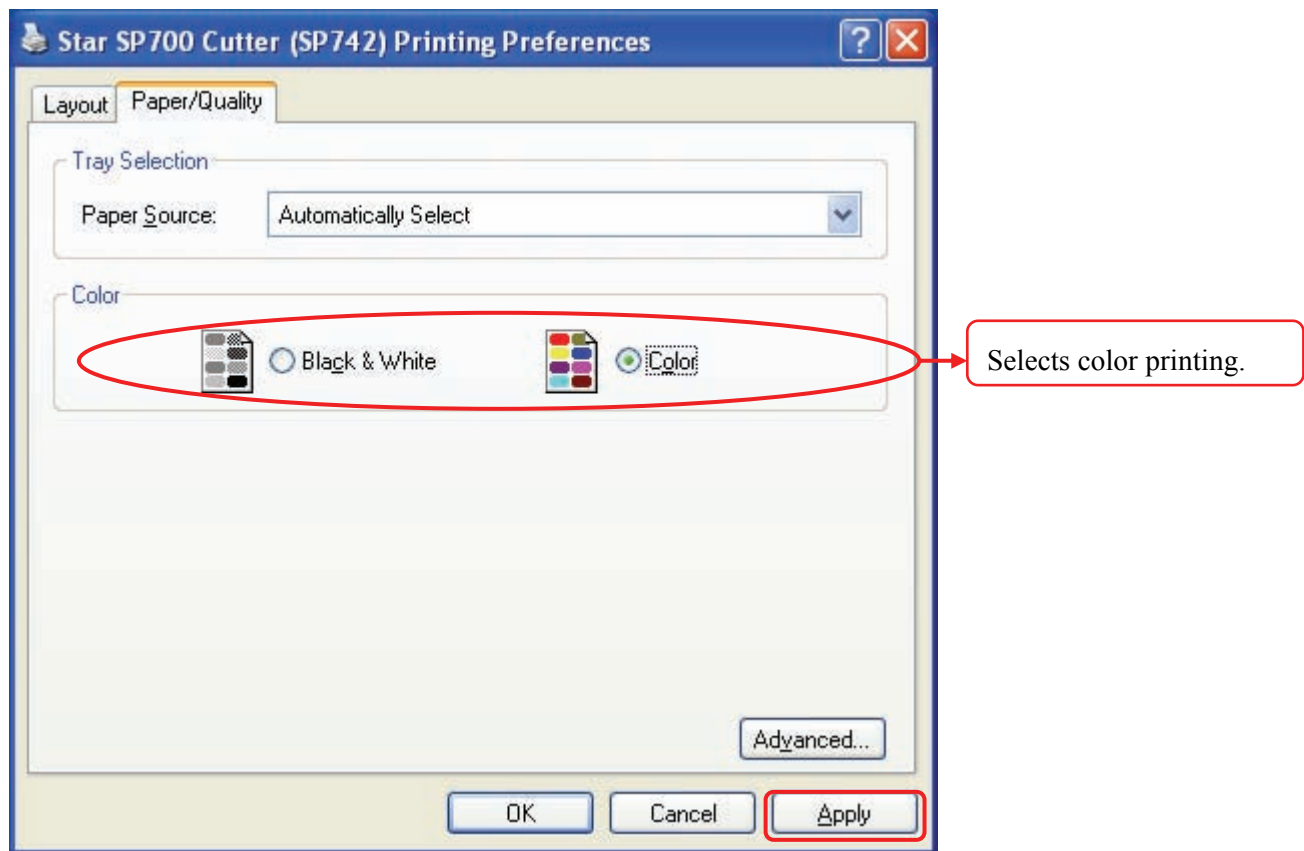
This driver supports two-color printing. Before you can use two-color printing, however, you must select color printing at the driver, as follows.

- ① From the Windows **Start** menu, select **Printers and Faxes**. This opens the **Printers and Faxes** folder.
- ② In the folder, right-click the Star SP700 Cutter (SP742) icon, and select Printing Preferences to open the Printing Preferences dialog.



- ③ Click the **Paper/Quality** tab, select **Color**, and click **Apply**.

Setting the paper source and selecting monochrome or color printing:



Note: Before using color printing, make sure that a two-color ribbon is installed in the printer.

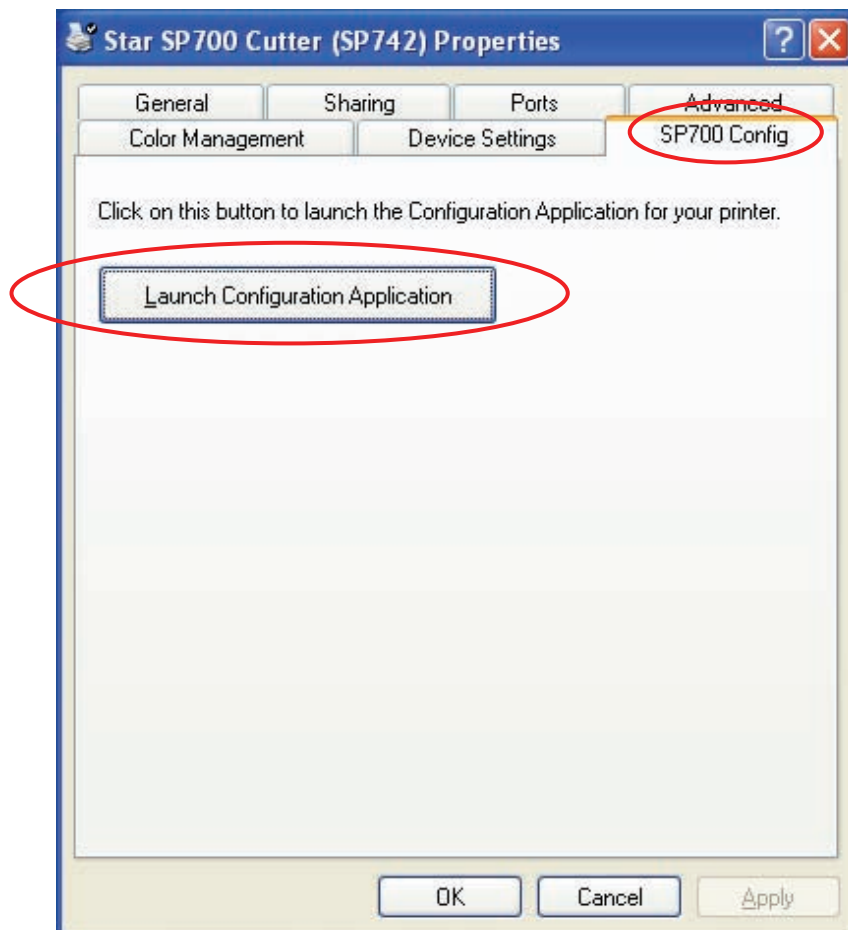
4. SP700 Configuration Utility (Windows 2000/XP)

The SP700 Configuration Utility allows you to configure your printer and carry out print tests. You can select either **Star Line mode** or **ESC/POS mode** emulation for implementing these settings, as appropriate.

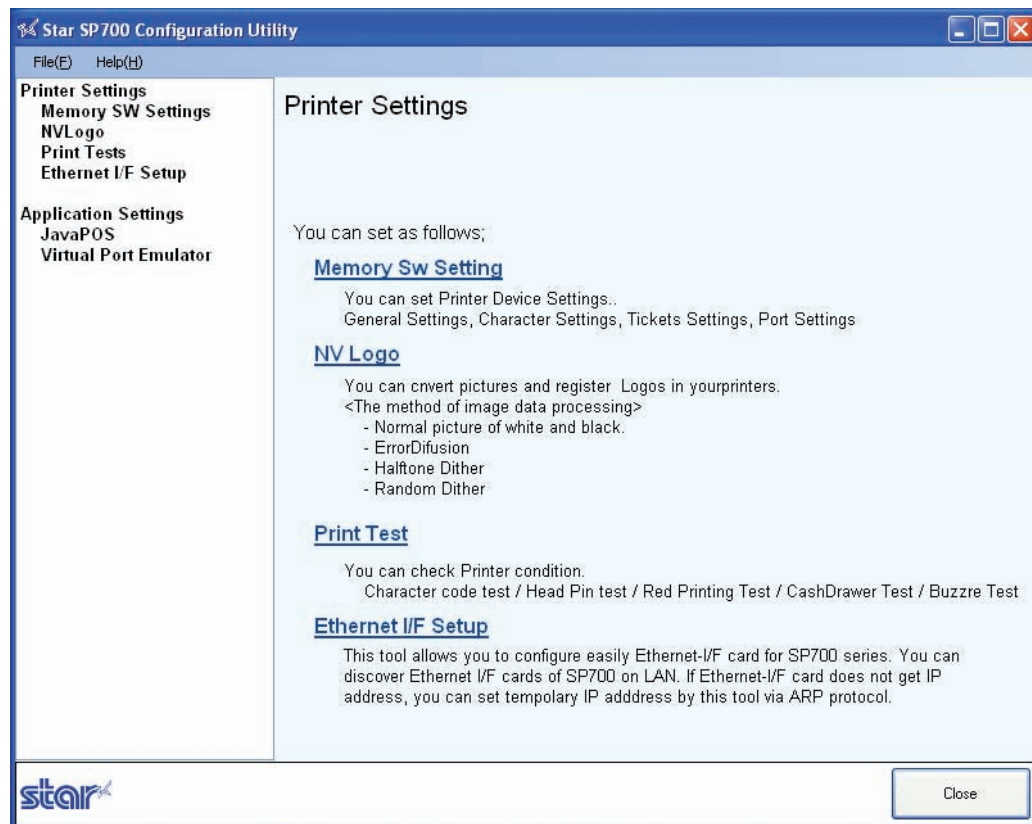
At the printer side, you can switch the emulation between **Star Line mode** and **ESC/POS mode** by DIP switch. For details about DIP switch settings, refer to the **SP700 Hardware Manual**.

One way to open this application is to go to the Windows **Start** menu and select **Programs → Star Micronics → SP712_742 (or SP717_747) → Utility → SP700 Configuration Utility**. An alternative way to access the utility is as follows.

- ① From the Windows **Start** menu, select **Printers and Faxes**. This opens the **Printers and Faxes** folder.
- ② In the folder, right-click the Star **SP700** icon, and select **Properties** to open the printer's Properties dialog.
- ③ Click the **SP700 Config** tab.
- ④ Click the **Launch Configuration Application** button.

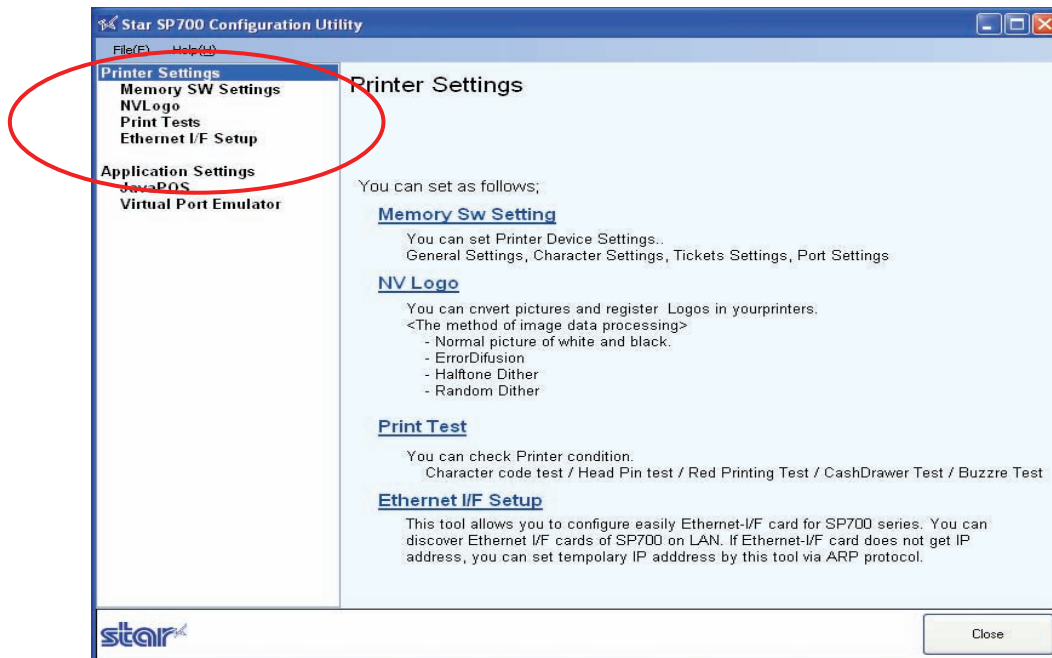


- ⑤ The SP700 Configuration Utility window opens.



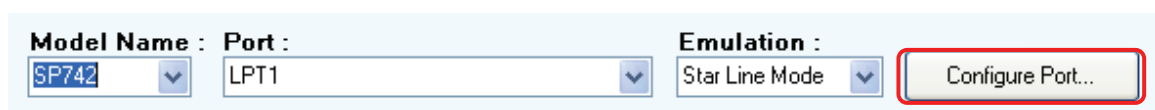
4.1 Printer Settings

Use **Printer Settings** to set the printer memory switches, to set up logos in the printer's nonvolatile memory, and to carry out print tests.



If you select **Memory SW Settings**, **NVLogo**, or **Print Tests**, the top part of the window will display the name of the connected printer, the name of the port it is connected to, the current emulation, and a **Configure Port** button.

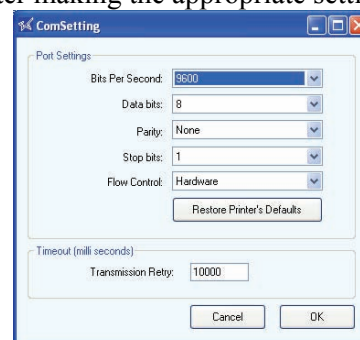
Note: The default emulation is **Star Line mode**. You can change the emulation by opening the drop-down menu and selecting **ESC/POS mode**.



Clicking the **Configure Port** button opens the corresponding port configuration dialog. The dialog varies according to the port type, as shown below. After making the appropriate settings, click **OK** to close the dialog.



If LPT Port

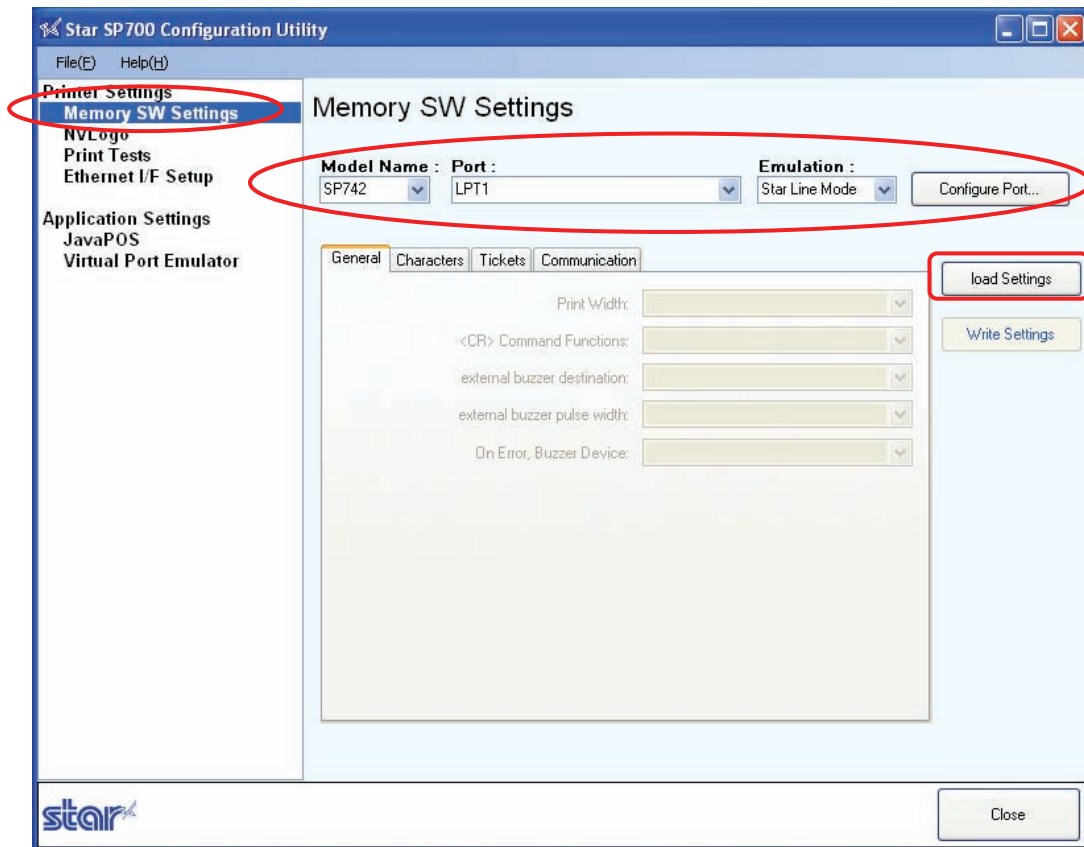


If COM Port

4. 1. 1 Memory Switches

To set the memory switches, first click **Memory SW Settings** in the left pane.

Then click the **load Settings** button to read the printer's current memory switch settings.



- Important:**
- ① Before clicking the button to get the settings, confirm that your Port and Emulation settings match the actual connection port and the emulation currently set at the printer side.
 - ② If the port is set to the USB printer class, this software will not be able to read the current memory switch settings, and will instead display the factory default settings. You may proceed to enter the desired changes and write them into the SP700.

To change any of the settings, open the corresponding drop-down menu and select the desired change. After completing your changes, click **Write Settings** to write the new settings into the SP700.

Memory SW Settings

Model Name : SP742 **Port :** LPT1 **Emulation :** Star Line Mode Configure Port...

General | Characters | Tickets | Communication(Parallel)

Print Width: 210 Dots (63mm)

<CR> Command Functions: Ignored

external buzzer destination: external buzzer1

external buzzer pulse width: 400ms

On Error, Buzzer Device: Buzzer of Print Head

load Settings **Write Settings**

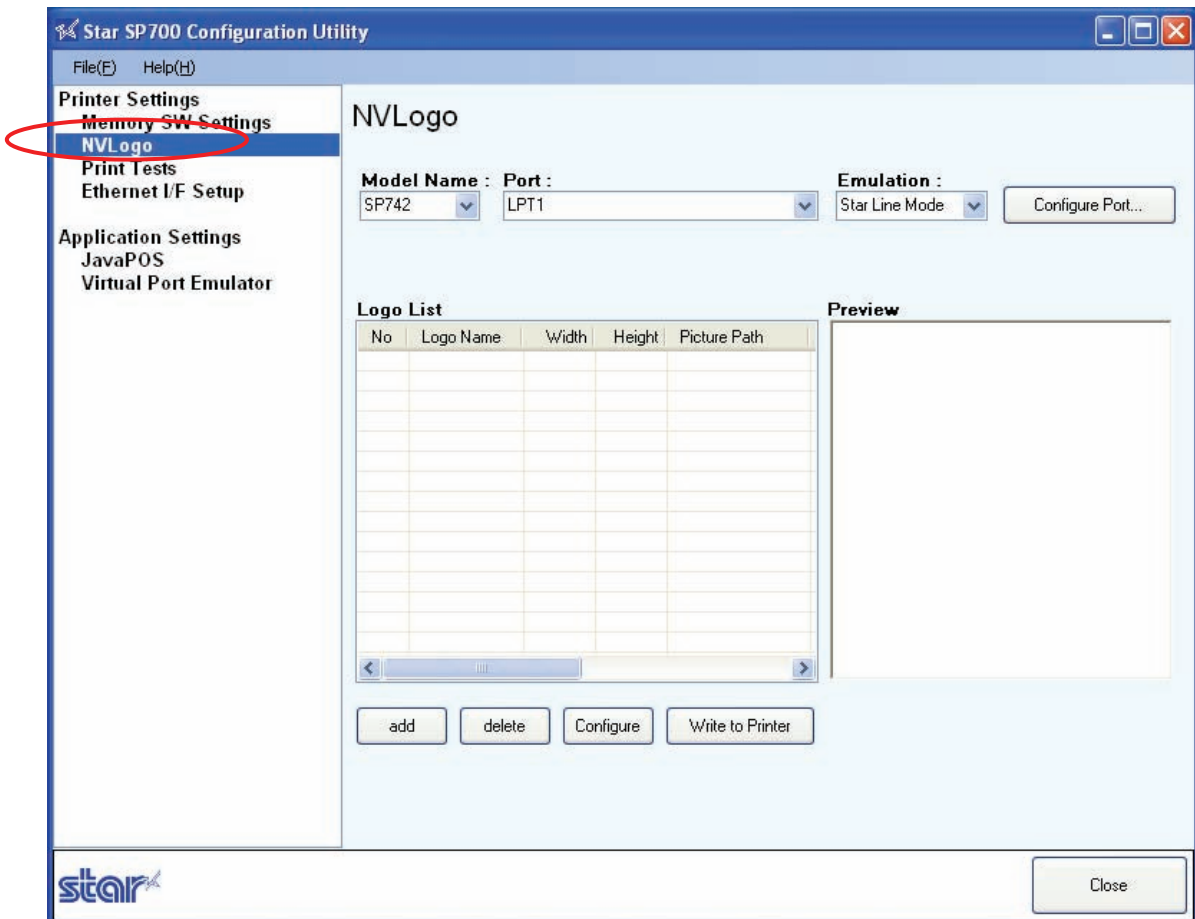
Close

Important: Your changes do not become effective until you click the **Write Settings** button. Be sure to click the button after making your changes.

Note: For details about memory switch functions and settings, refer to the separate **Product Specifications**.

4. 1. 2 NV Logos

This feature lets you set logos into the printer's nonvolatile memory. To begin, click **NVLogo** in the left pane.

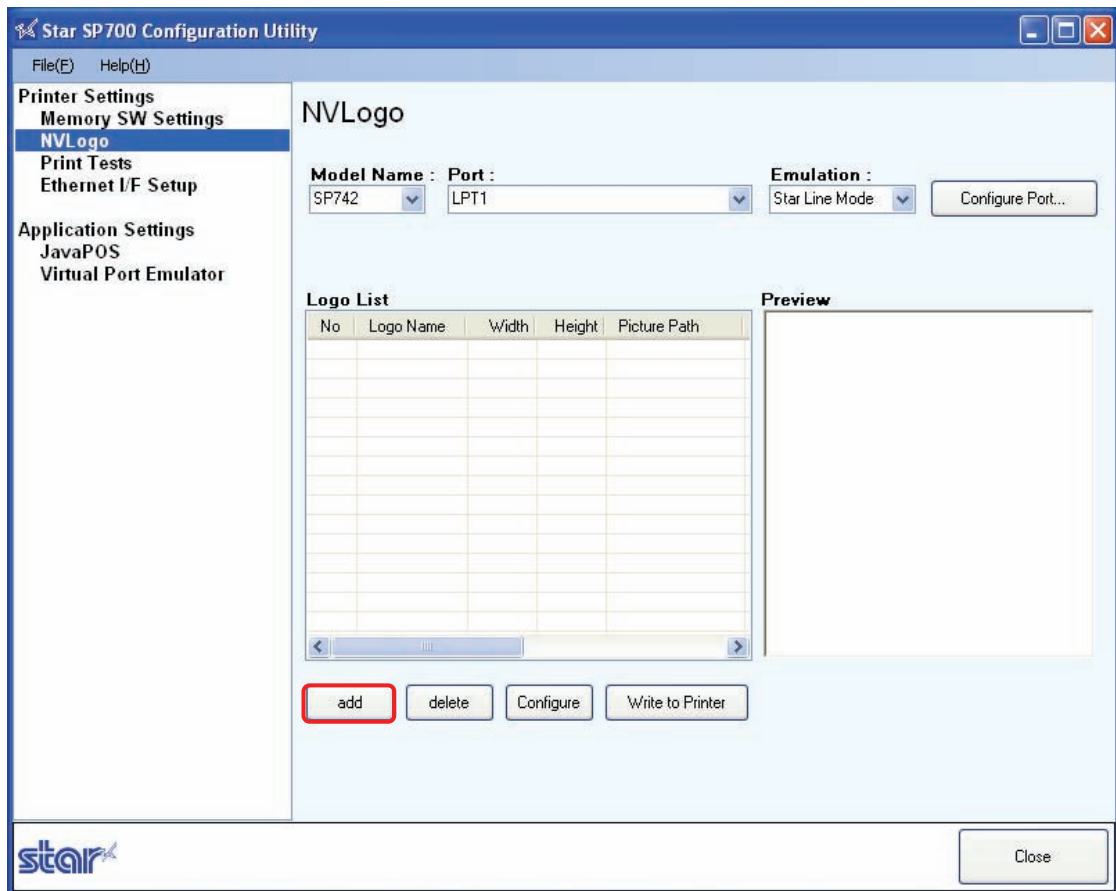


You use this feature to write logos into the SP700. Once loaded, the logos can be selectively printed at selected locations on the printouts (such as at the top or bottom of each page).

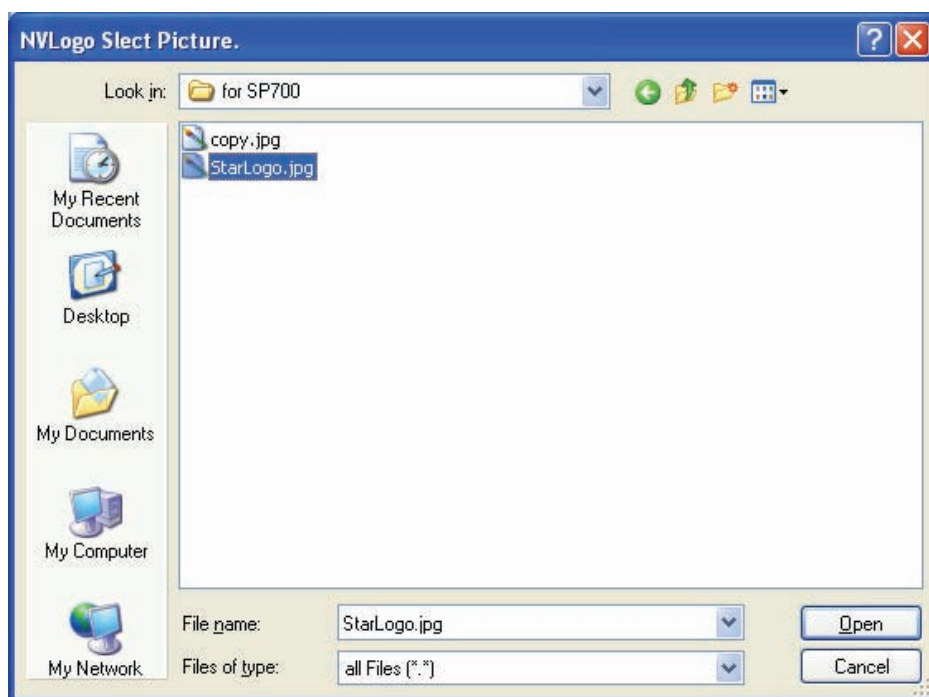
Note that the tool described here is used only to adjust the logo images and set these images into the printer so that they will be available for subsequent printing. To select which logos are actually printed, and where, you must use the printer driver.

To adjust a logo image and load it into the printer, proceed as described as follows.

- ① Click the **add** button.



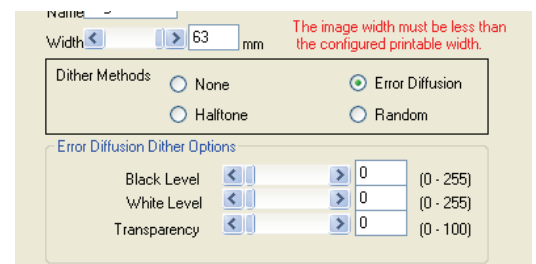
- ② Select the image that you want to write into the printer.



- ③ The following window opens, displaying the image. You can now proceed to name and adjust the image, as follows.



If Dithering is Off



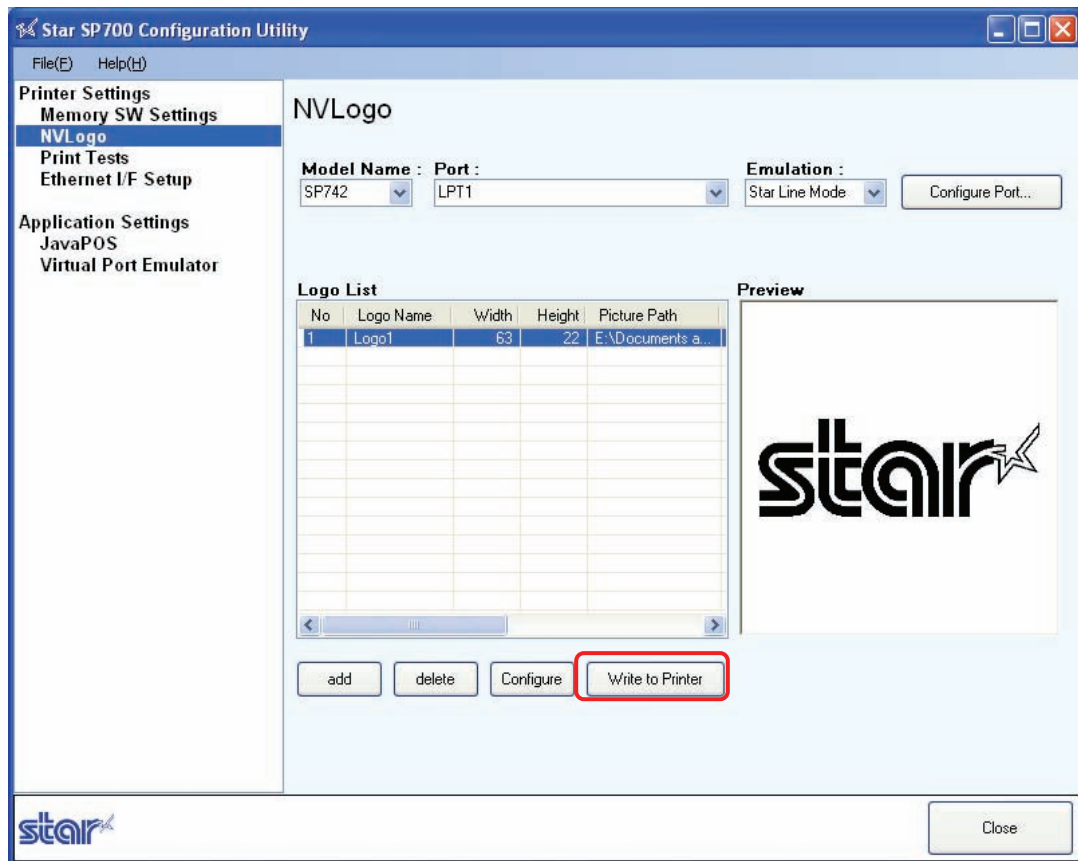
If Dithering is On

- In the **Name** field, enter a name for the image.
- Adjust the width by entering a width value or moving the slider.
- Select the appropriate dithering method.
- Set the other **options (brightness or dither options)** as appropriate.

Note: The "options" vary according to whether dithering is on or off: if off, you can set the brightness; if on, you can set the dithering options. Try various combinations until you find the settings that give optimal print results.

Important: The computer displays the image in unprocessed form, and cannot provide a reliable preview of what the printed logo will look like. Because the SP700 properties differ from the computer's display properties, on-screen preview images may not accurately reflect print densities and other such characteristics. It is strongly recommended that you run a test print before writing the image into the printer.

- ④ Click the **OK** button to move the image into the logo list. To set up additional logos, repeat the process as many times as necessary. Once you have moved all logos into the logo list, click **Write to Printer** to write them into the printer's memory.



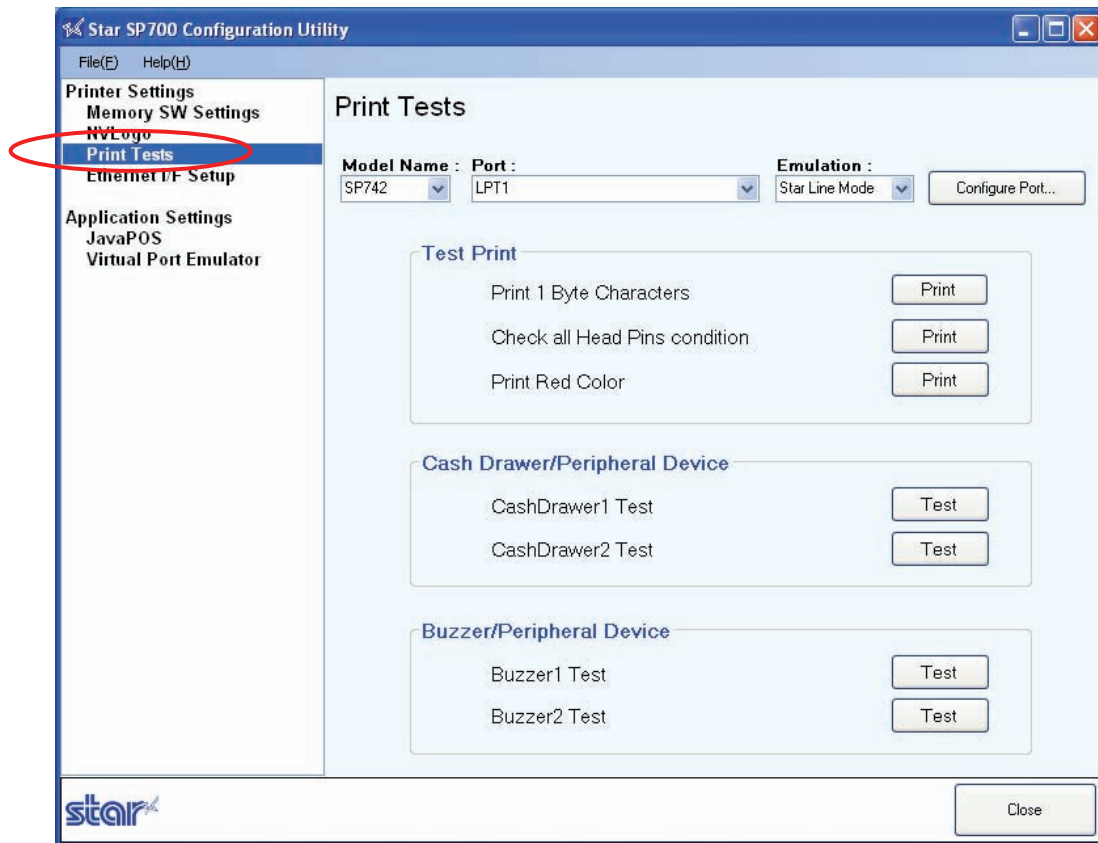
Note: Total NV memory capacity for logos is 256KB.

Important: Be sure to enter all logos into the logo list before clicking the Write to Printer button. The write operation will erase and overwrite all previous logo data stored at the printer side.

4. 1. 3 Printer Tests

This page allows you to execute test prints and peripheral tests. Three different test prints are available, each checking a different aspect of printer operation. You can also check the operation of each connected peripheral.

To access these tests, click **Print Tests** in the left pane.



Test Prints

■ Print 1-Byte Characters

Click **Print** to print out the 1-byte character table.

■ Check all Head Pins Condition

When you click **Print**, the printer tests each of the head pins, one by one. If the print from any pin is missing or defective, please contact your dealer for advice.

■ Print Red Color

Click **Print** to print out a red sample.

Note: Before running the “Print Red” test, be sure that a two-color ribbon is installed in the printer.

Cash Drawers

■ Cash Drawer1 Test

Click **Test** and confirm that cash drawer 1 moves correctly.

■ Cash Drawer 2 Test

Click **Test** and confirm that cash drawer 2 moves correctly.

External Buzzers

■ Buzzer 1 Test

Click **Test** and confirm that buzzer 1 operates correctly.

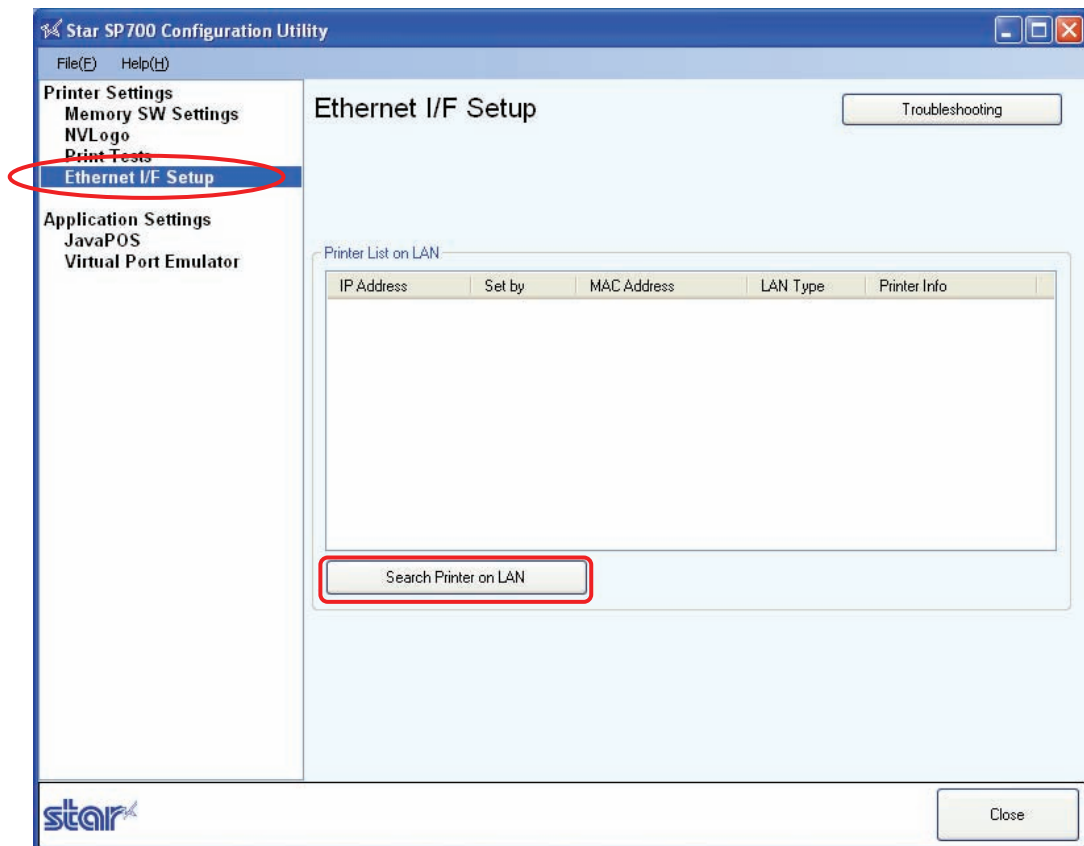
■ Buzzer 2 Test

Click **Test** and confirm that buzzer 2 operates correctly.

Important: Buzzers are available as an option. Note that it is not possible to use buzzers and cash drawers at the same time.

4. 1. 4 Ethernet Interface

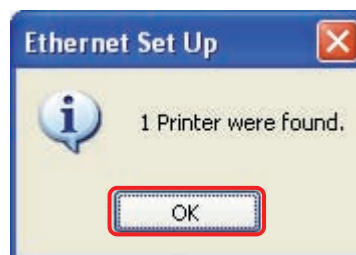
Use this page to set up your printer's Ethernet connection. To begin, click **Ethernet I/F Setup** in the left pane.



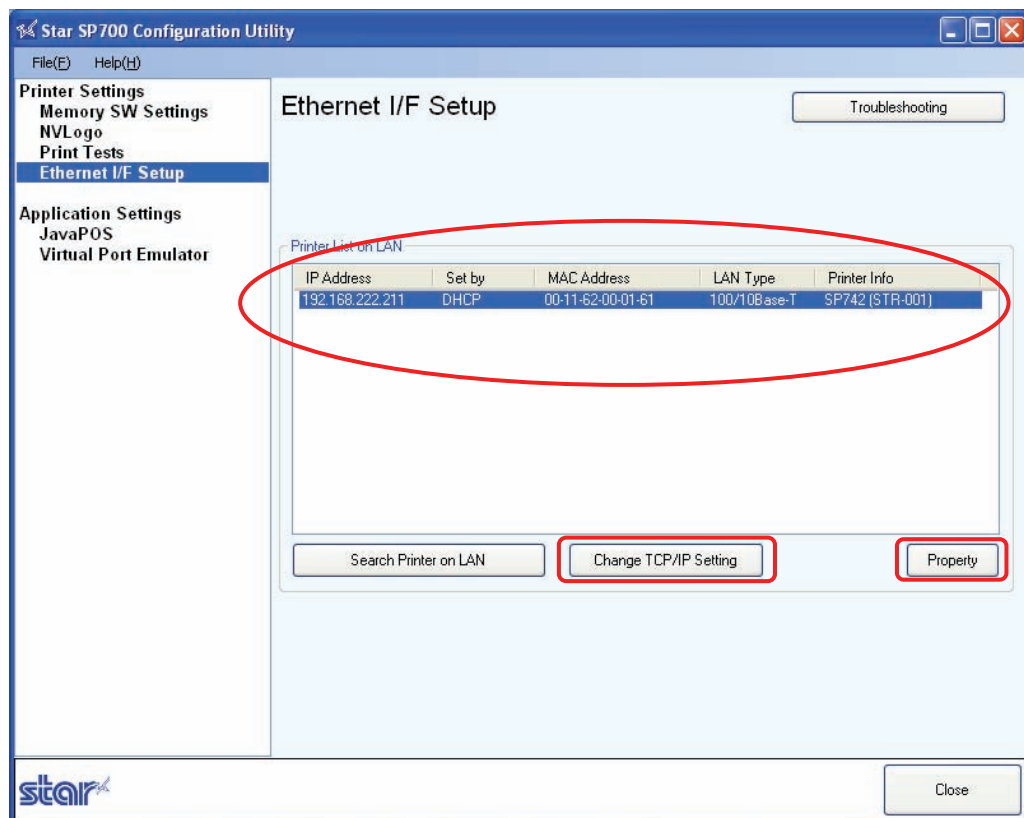
Click the **Search Printer on LAN** button to generate a list of the printers connected on your LAN. When the SP700 is returned, select it in the list and enter the relevant settings as described below. Note that the setup procedure varies according to whether or not the IP address is assigned dynamically by a DHCP server.

■ If the IP Address is Assigned Automatically by DHCP Server

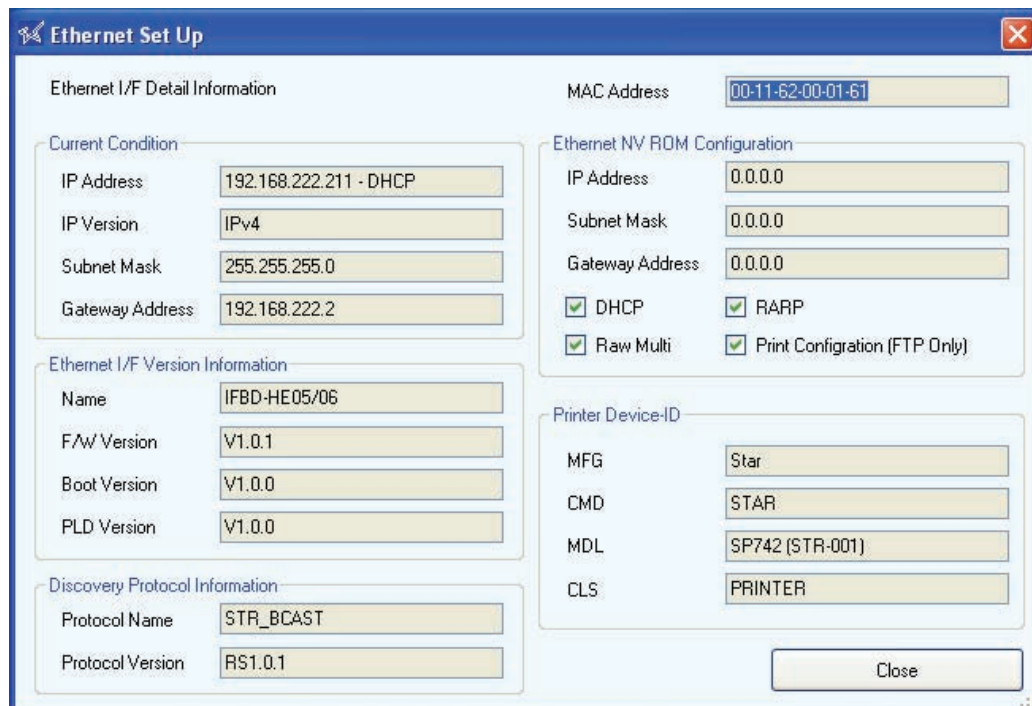
- ① When all connected LAN printers have been found, the following dialog appears. Click **OK** to continue.



- ② The list shows all of the connected LAN printers.



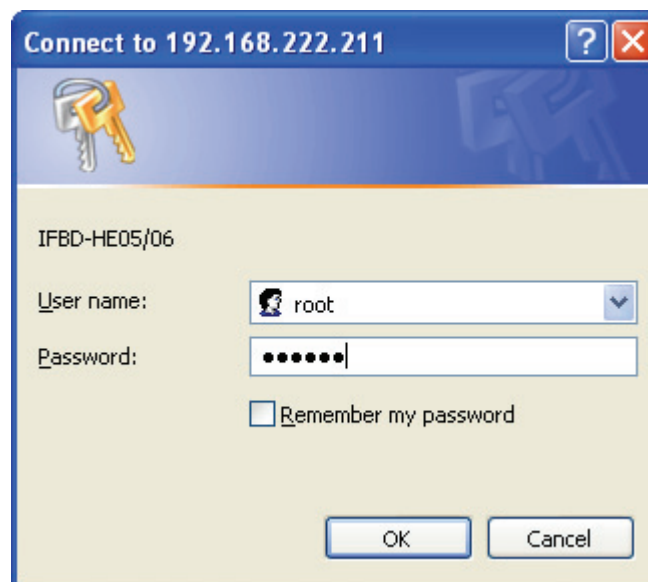
You can now click the **Property** button to view the current state of the LAN printer selected in the printer list.



- ③ When you click the **Change TCP/IP Setting** button, the utility detects the Ethernet interface card type and displays the corresponding user name and the default password. Click **OK** to proceed.



- ④ At the connection dialog, enter the user name and password returned in the previous step. Then click **OK**.



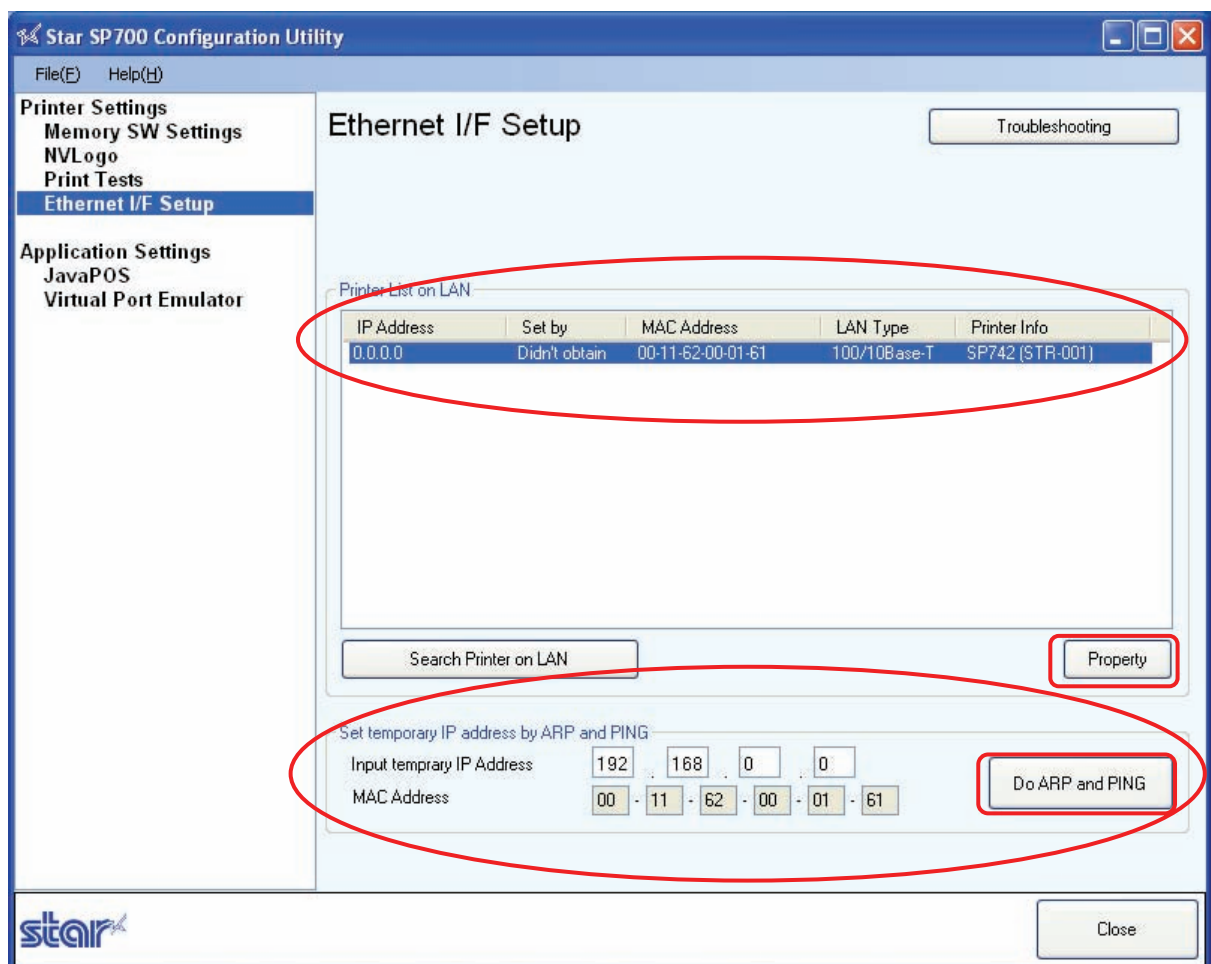
Note: If you wish, you can change the password from the browser.

■ If the IP Address is Not Assigned by DHCP Server

- ① When all connected LAN printers have been found, the following dialog appears. Click OK to continue.

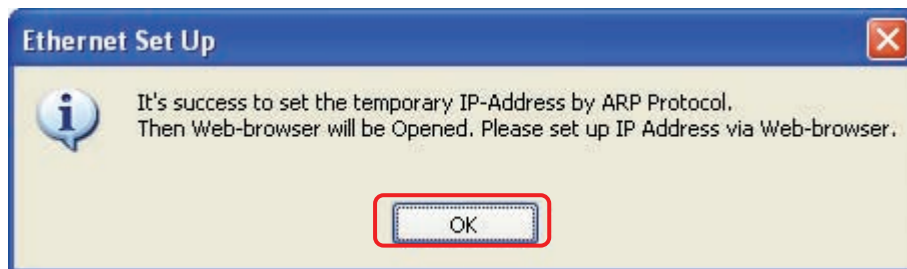


- ② The list shows all of the connected LAN printers.



In order to proceed to the TCP/IP configuration page, you will need an IP address for the printer. Since you do not have a dynamically set address, you can instead proceed to set a temporary address. After entering the address, click the **Do ARP and PING** button.

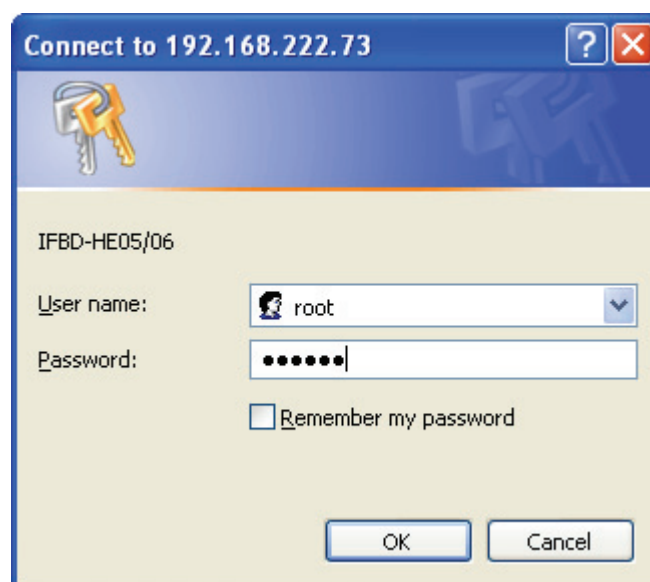
- ③ If APR and PING succeed in allocating the temporary address, the following dialog appears. Click **OK** to proceed.



- ④ The utility detects the Ethernet interface card type and displays the corresponding user name and the default password. Click **OK** to proceed.

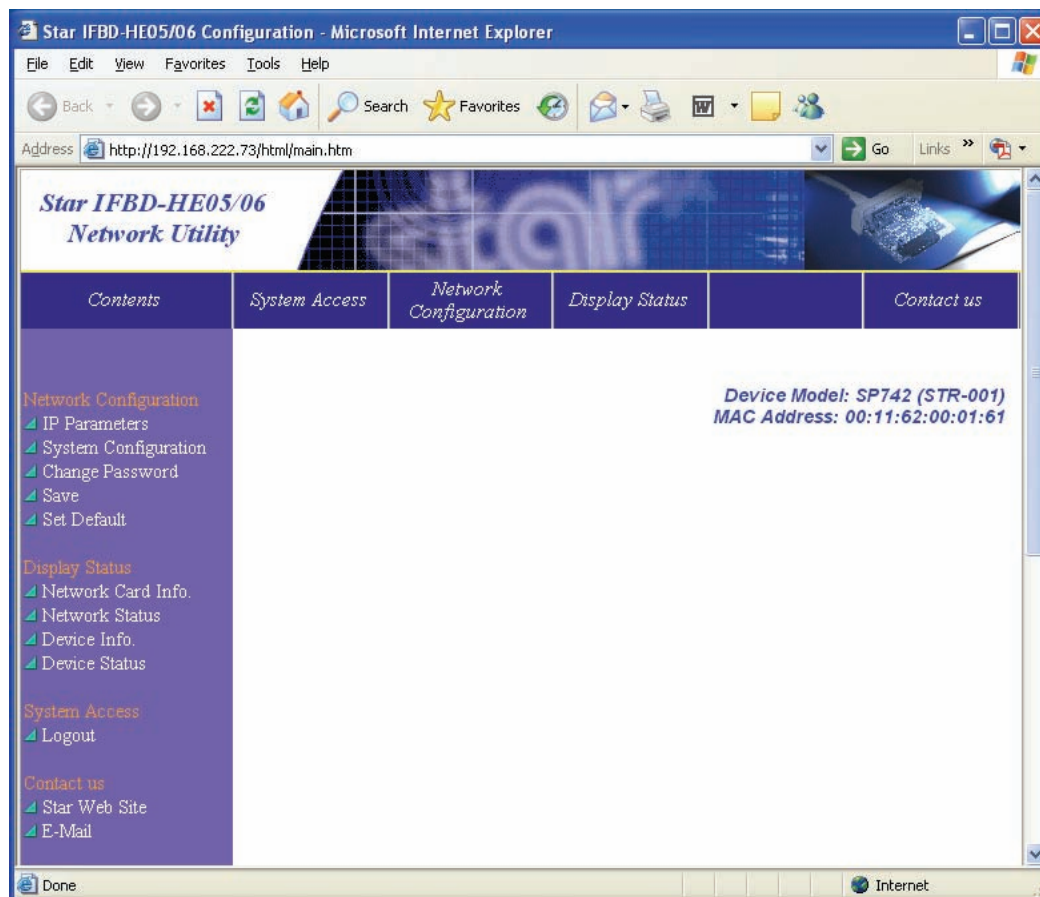


- ⑤ At the connection dialog, enter the user name and password returned in the previous step. Then click **OK**.



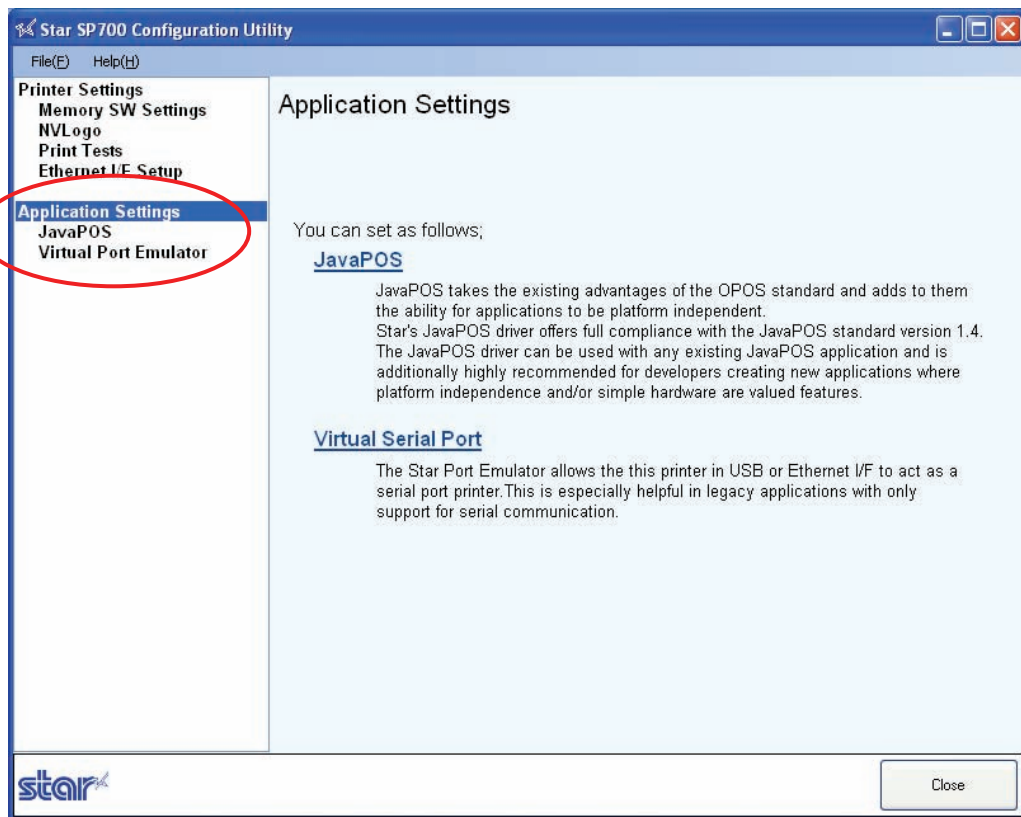
Note: If you wish, you can change the password from the browser.

- ⑥ Your web browser opens and displays the configuration page. Use this page to enter the appropriate TCP/IP settings.



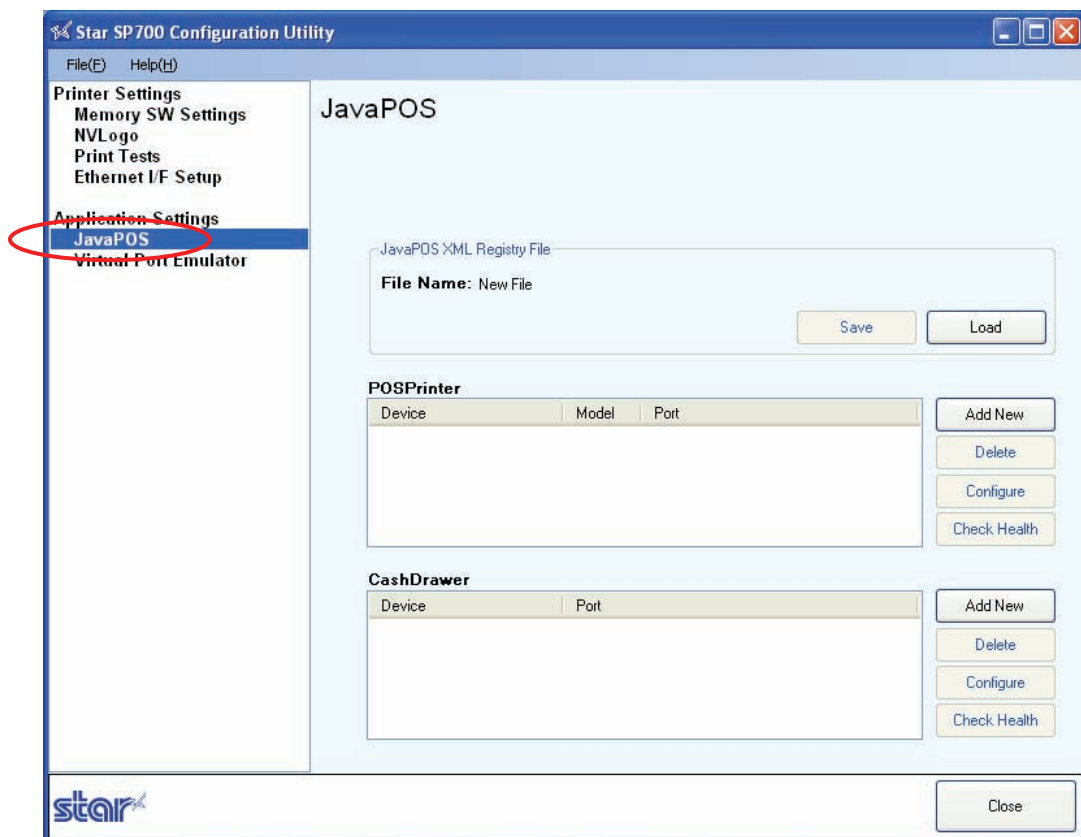
4. 2 Application Settings

Use the **Application Settings** to set up JavaPOS operation and port emulation.

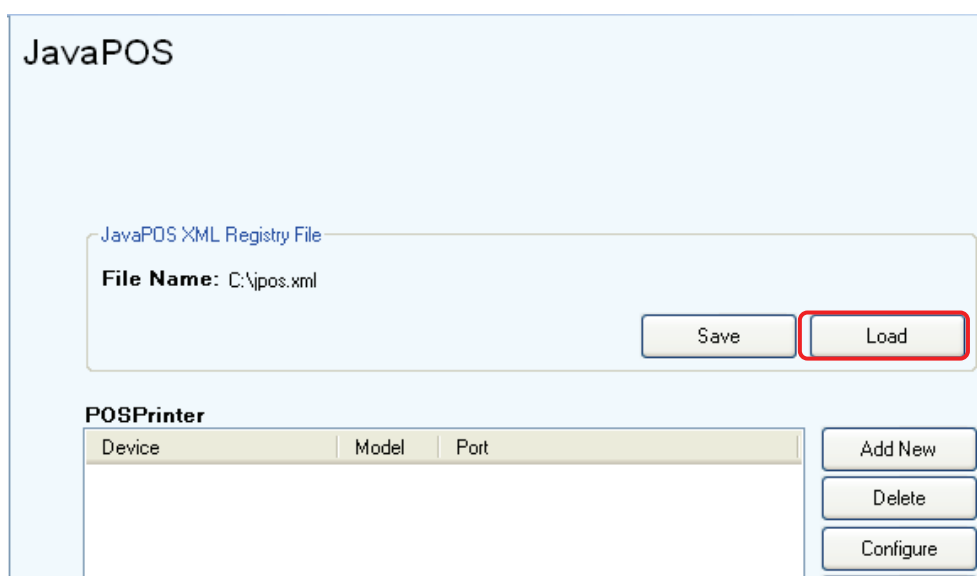


4. 2. 1 JavaPOS

To set up JavaPOS, begin by clicking **JavaPOS** in the left pane.

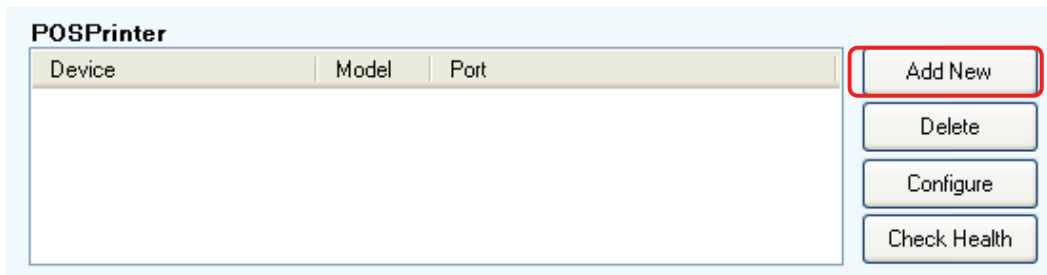


Now click the **Load** button to load the existing JavaPOS XML registry file.



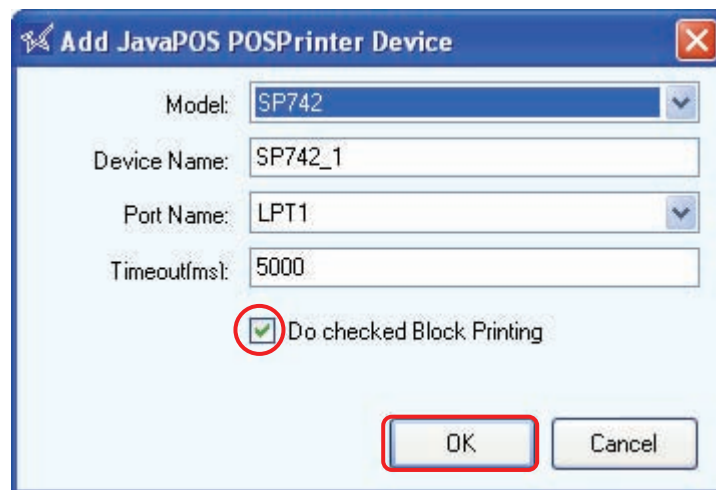
■ Adding a JavaPOS Printer

Click the **Add New** button.



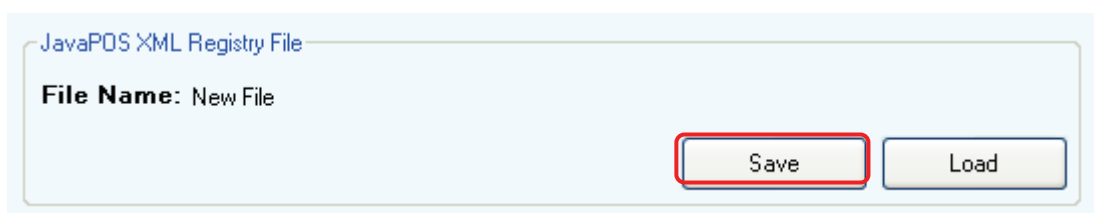
You can now use the following dialog to enter the appropriate settings for the new printer.

If you enable **Do checked Block Printing**, you will be able to check whether print data have correctly been sent to the printer.



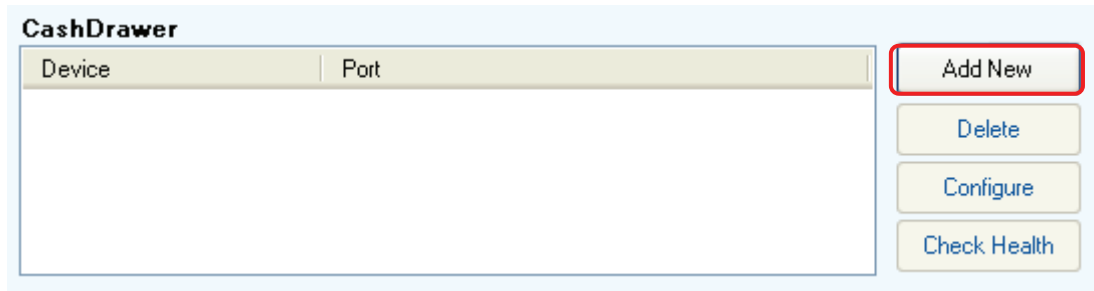
You can now click **OK** to add the printer.

When you have finished making settings, click the **Save** button to save the JavaPOS XML registry file.



■ Adding a Cash Drawer

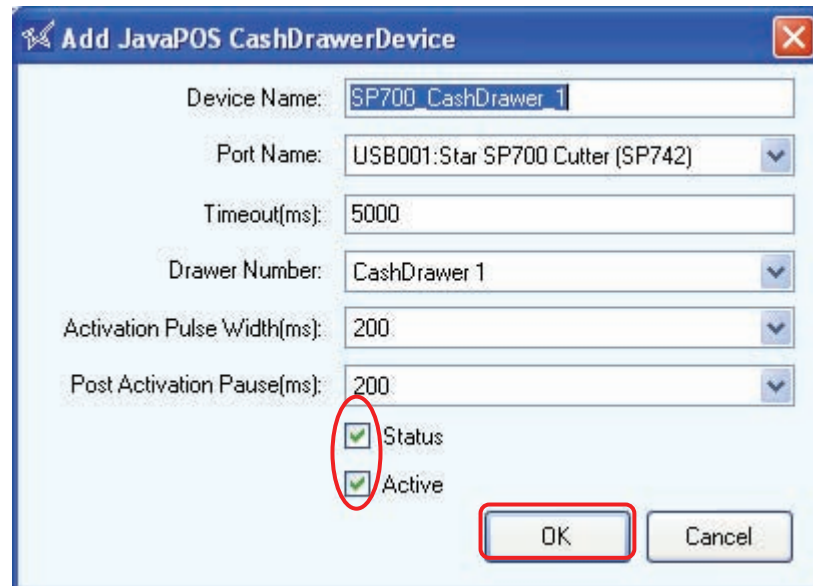
Click the **Add New** button.



You can now use the dialog shown below to enter the appropriate settings for the new drawer. Check the **Status** checkbox if you wish to monitor the drawer status (open or closed).

Important: Status monitoring is effective only if the cash drawer is equipped with a compulsion switch.

Set the **Active** checkbox according to the operation of the compulsion switch installed on your cash drawer. If the compulsion switch is in open state when the cash drawer is open, check the checkbox. If the switch is in closed state (shorted) when the cash drawer is open, clear the checkbox.



Enter other settings as follows.

● **Drawer Number**

Choose whether the selected drawer is recognized as Cash Drawer 1 or Cash Drawer 2.

● **Activation Pulse Width (ms)**

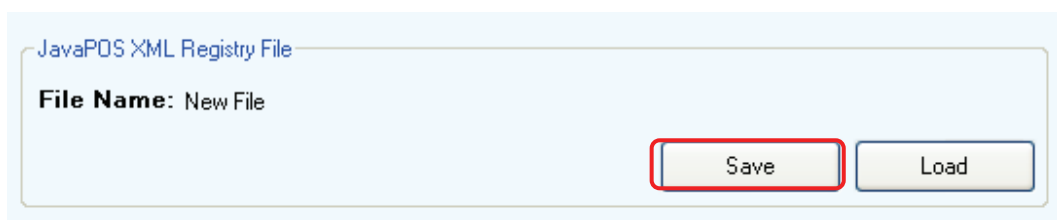
Select the pulse width for the selected cash drawer.

● **Post-Activation Pause (ms)**

Select the length of the pause between activation signals to the selected drawer.

After making the settings, click **OK** to add the cash drawer.

When you have finished making settings, click the **Save** button to save the JavaPOS XML registry file.



■ **Deleting a JavaPOS Printer or Cash Drawer**

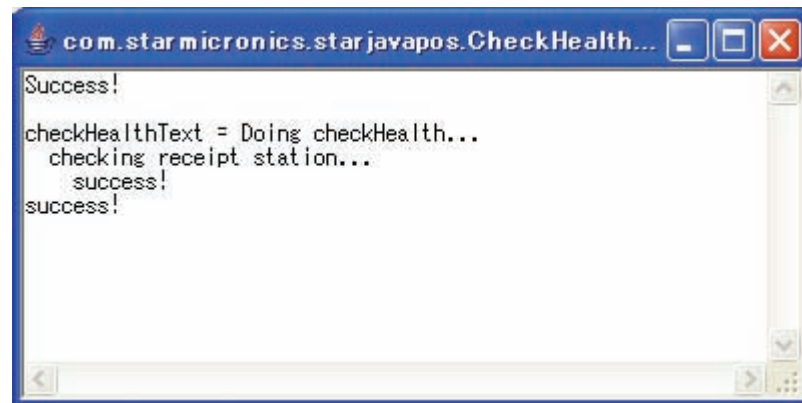
- ① Select the device to be deleted, and click the corresponding **Delete** button.
- ② A confirmation dialog appears. To complete the deletion, click **Yes**.



■ **Check Health**

The **Check Health** button can be used to run a system check to determine whether the selected printer or drawer is correctly connected and whether it is responding correctly to the JavaPOS driver.

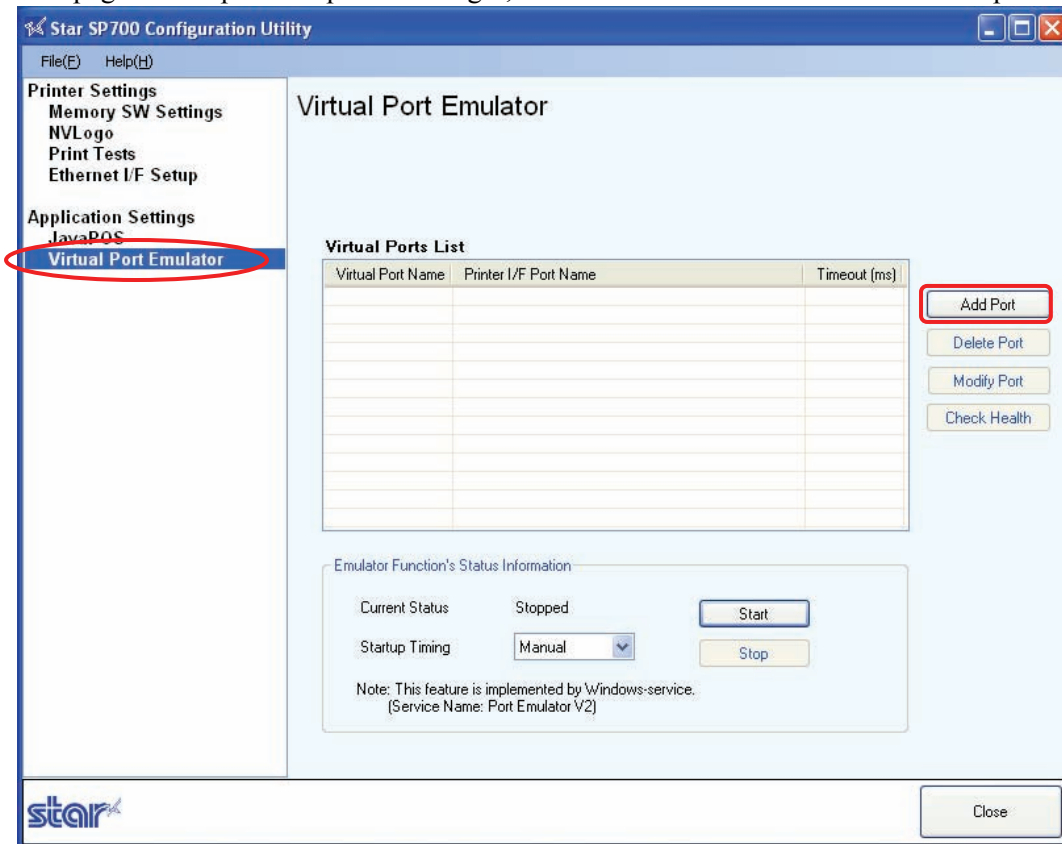
When you click the **Check Health** button for a printer, the utility first runs an initial printer check. It then runs a print test of all of the printer's print-related functions. If the check is successful, the utility returns the following dialog.



Important: Before running a health check, be sure to click the Save button so as to save the JavaPOS XML registry file.

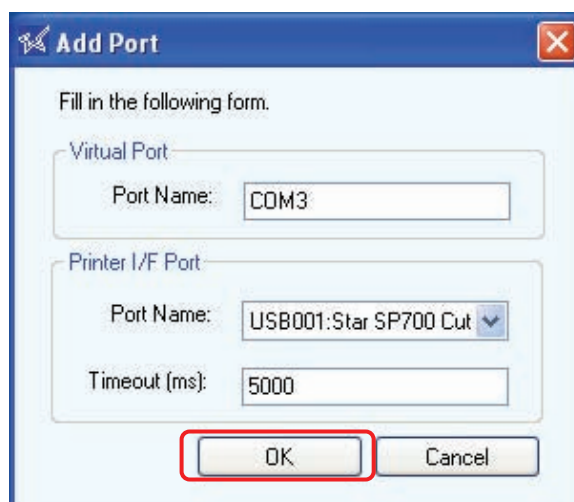
4. 2. 2 Port Emulator

Use this page to set up virtual ports. To begin, click **Virtual Port Emulator** in the left pane.

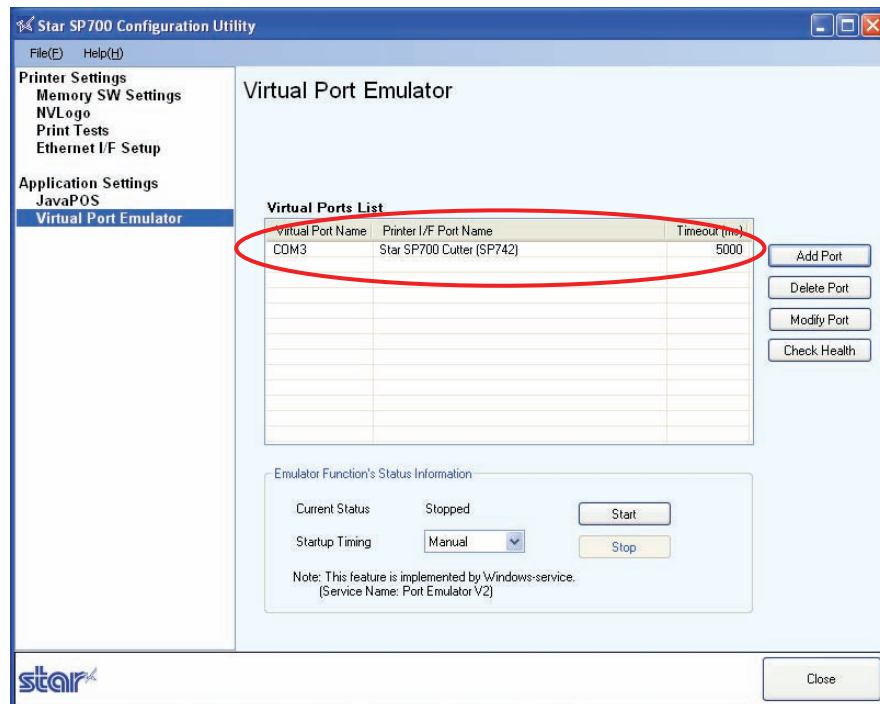


- ① To add a virtual port, click the **Add Port** button to open the **Add Port** dialog (shown below). Enter values for all of the settings, and then click **OK**. The **Port Name** set under **Virtual Port** will then become the output port name used by POS applications.

For the **Port Name** of the **Printer I/F Port**, select the actual printer interface name. Selection is limited to USB and Ethernet ports.



- ② The utility creates the virtual port.



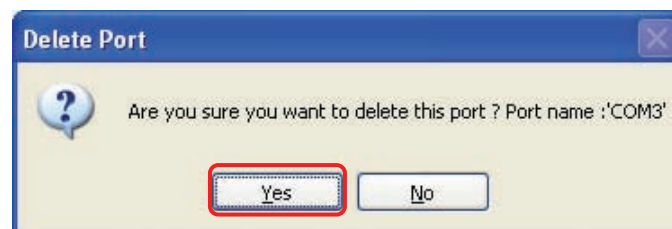
- ③ Select whether the port emulation starts automatically, or must be manually started..

If you set the **Startup Timing** to **Automatic**, the port emulation will start automatically when the system starts up. This is the more commonly used setting. If you choose **Automatic**, you should then click the **Start** button to start the emulation. You will not need to click the **Start** button again, as the emulator will subsequently start automatically.

If you set the **Startup Timing** to **Manual**, you will need to click the **Start** button to start the emulation before using it.

■ Deleting a Virtual Port

- ① Select the virtual port in the list, and then click **Delete**.
- ② A confirmation dialog appears. To complete the deletion, click **Yes**.



■ Check Health

When you click the **Check Health** button, the utility checks the port.

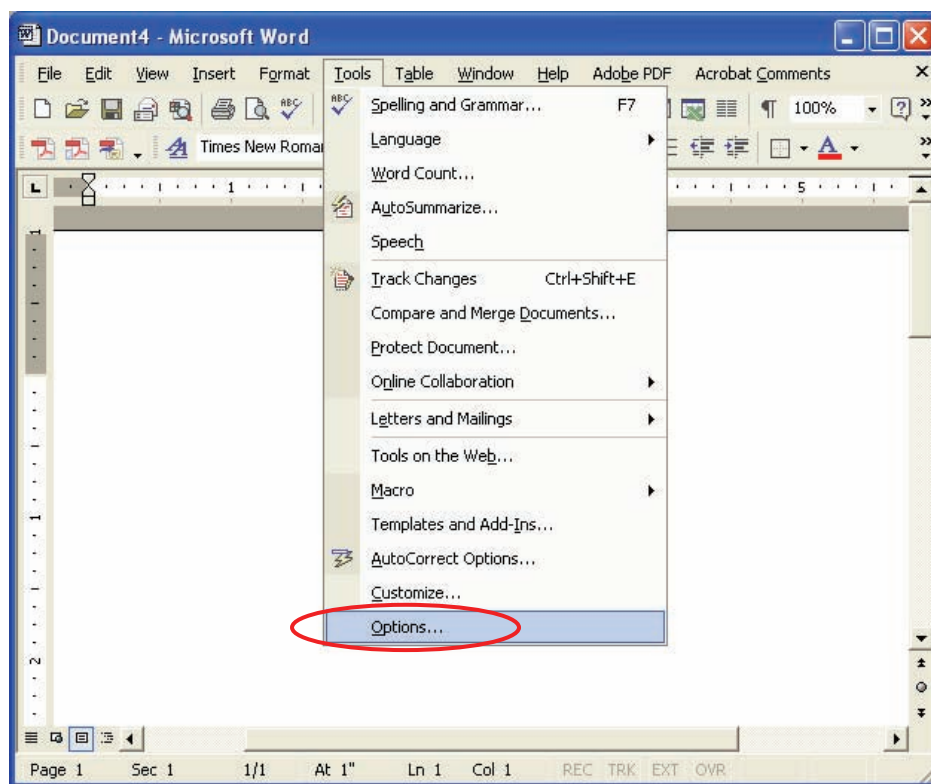
5. Document Printing Guidelines

- This driver does not require margin settings. Please set all margins to 0.
- The driver supports four predefined custom sizes as well as arbitrary user-defined sizes. Feel free to use user-defined sizes as needed. (See Section 3.2.2, “Setting Up User-Defined Paper Sizes.”)
- It is recommended that you use the driver’s device fonts. Use of device fonts enables faster printing.

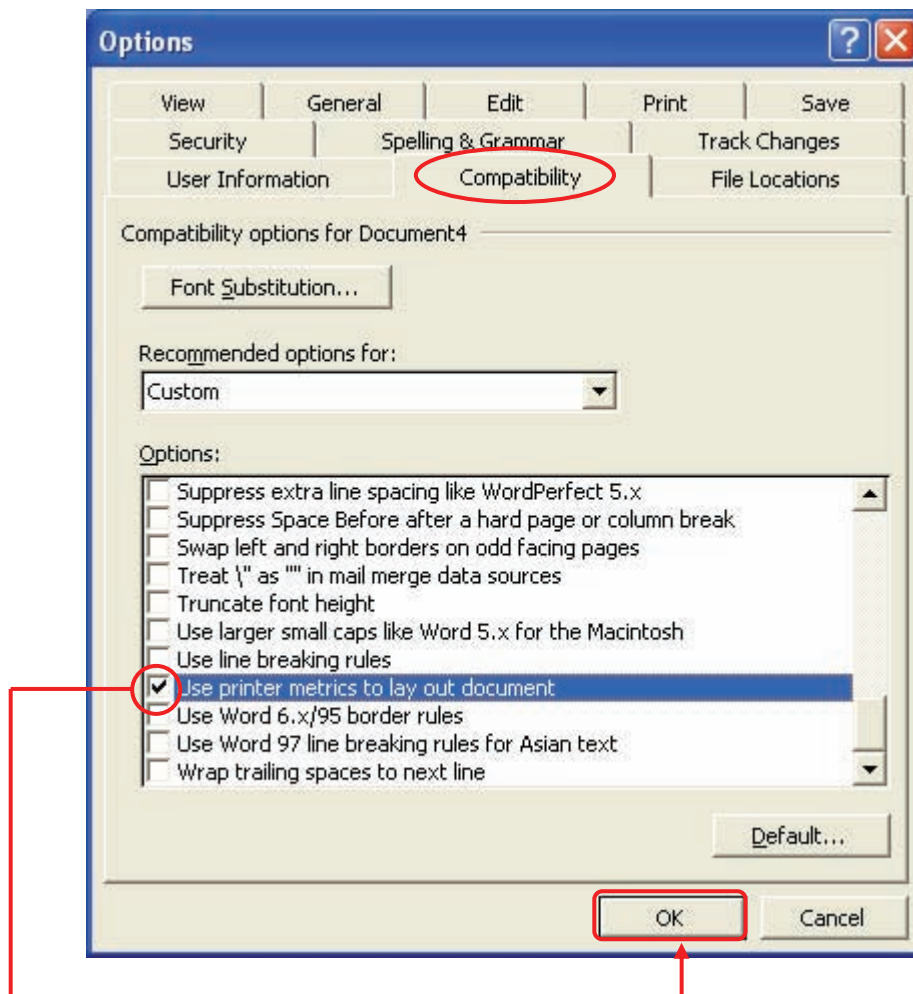
5.1 Issue When Printing from Microsoft Word

On Microsoft Word versions starting from Word 97, device fonts will not work correctly when printing under default conditions. To enable correct use of device fonts, proceed as follows.

- ① Open Microsoft Word’s **Tools** menu, and click **Options**.



- ② Click the **Compatibility** tab, and in the **Options** area check the checkbox next to **Use printer metrics to lay out document**. Then click **OK**.



- ③ Open Word's **File** menu, and select **Save** to save the document.

5.2 Restrictions and Precautions

- Please do not use more than one device font on a single line. Mixing device fonts on a single line may result in skewed printing.
- Do not include graphic data (Windows fonts, ruled lines, etc.) on the same line with a device font, as this too may cause skewed print results.
- Remember that the "Control" device font is used only to control the printer and cannot be used for normal character printing. Be sure that you do not select this font for characters you wish to print.

6. Revision History

Rev. No.	Date	Changes
Rev. 1.0	Dec. 2006	First edition

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