

Windows Driver User's Manual

ELLIX 20 Thermal Receipt Printer

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1. Foreword

This manual explains how to install and use Windows printer drivers for SAM4s ELLIX 20 printers. These drivers make it possible for Windows applications to print to SAM4s ELLIX 20 printers. Please read this manual carefully so that you can take full advantage of the driver's capabilities.

2. Operating Environment

SAM4s ELLIX 20 printer drivers can run on any of the following operating systems.

- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Windows 2003 Server
- Microsoft Windows Vista (x86)

3. Installing the Driver

3.1 Printer Settings

This section is explained the way of following Printer Settings.

- Printer Resolution
- Paper Size
- Orientation

In Windows 2000/XP/2003 Server and Windows Vista, it can be set in the printer's "Device Control" dialog.

4. Main Specifications

4.1 Printer Fonts

These drivers support use of printer fonts as well as Windows fonts. Use of printer fonts permits faster printing. Available printer fonts are listed below.

“Built-in fonts of a printer” can be specified with the application programs. The “built-in fonts” are as follows.

- Printer Font (type A, Large)
- Printer Font (type B, Small)

The font names what the user can choose in to the application are as follows. 2 types of character-height can be chosen in each font. They are two kinds of the FonAXxX (Ext.) font and the FonAXxX. The character code of 128 bytes of 80H - FFH varies in the difference in these printer fonts. A **FonAXxX font** supports ANSI character code (Code Page 2 : 850). And, a **FonAXxX (Ext.) font** supports IBM expansion character code (Code Page 0 : 437). A **FonAXxX (255) font** supports space page. (Code Page 255).

Printer Fonts			Character size(dot)	Sizes (point)
FontA 1x1	FontA 1x1 (Ext.)	FontA 1x1 (255)	FontA1x1 (12x24)	9.5
FontA 1x2	FontA 1x2 (Ext.)	FontA 1x2 (255)	FontA1x2 (12x48)	19
FontA 2x1	FontA 2x1 (Ext.)	FontA 2x1 (255)	FontA2x1 (24x24)	9.5
FontA 2x2	FontA 2x2 (Ext.)	FontA 2x2 (255)	FontA2x2 (24x48)	19
FontA 2x4	FontA 2x4 (Ext.)	FontA 2x4 (255)	FontA2x4 (24x96)	38.5
FontA 4x2	FontA 4x2 (Ext.)	FontA 4x2 (255)	FontA4x2 (48x48)	19
FontA 4x4	FontA 4x4 (Ext.)	FontA 4x4 (255)	FontA4x4 (48x96)	38.5
FontA 4x8	FontA 4x8 (Ext.)	FontA 4x8 (255)	FontA4x8 (48x192)	77
FontA 8x4	FontA 8x4 (Ext.)	FontA 8x4 (255)	FontA8x4 (96x96)	38.5
FontA 8x8	FontA 8x8 (Ext.)	FontA 8x8 (255)	FontA8x8 (96x192)	77
FontB 1x1	FontB 1x1 (Ext.)	FontB 1x1 (255)	FontB1x1 (9x17)	7
FontB 1x2	FontB 1x2 (Ext.)	FontB 1x2 (255)	FontB1x2 (9x34)	13.5
FontB 2x1	FontB 2x1 (Ext.)	FontB 2x1 (255)	FontB2x1 (18x17)	7
FontB 2x2	FontB 2x2 (Ext.)	FontB 2x2 (255)	FontB2x2 (18x34)	13.5
FontB 2x4	FontB 2x4 (Ext.)	FontB 2x4 (255)	FontB2x4 (18x68)	27
FontB 4x2	FontB 4x2 (Ext.)	FontB 4x2 (255)	FontB4x2 (36x34)	13.5
FontB 4x4	FontB 4x4 (Ext.)	FontB 4x4 (255)	FontB4x4 (36x68)	27
FontB 4x8	FontB 4x8 (Ext.)	FontB 4x8 (255)	FontB4x8 (36x136)	54.5
FontB 8x4	FontB 8x4 (Ext.)	FontB 8x4 (255)	FontB8x4 (72x68)	27
FontB 8x8	FontB 8x8 (Ext.)	FontB 8x8 (255)	FontB8x8 (72x136)	54.5
Hangeul	Korean Version OS ONLY		--	9.5

Printer font for special function	Function	Size (font / dot)
FontControl	Open Drawer 1/2	(10 / 12 x 24)
	Cut receipt	
	Cut receipt(without paper feeding)	
	Justification(Left/Center/Right)	
	Output HT, Output LF, Output CR	
	Barcode printing	
	Print NV bit image	

4.2 Special Functions

SAM4s ELLIX 20 Printer can be used to execute a variety of special non-printing functions, as indicated in the table below. You can execute these functions by selecting the printer's special "FontControl" font and then sending the appropriate character code to the driver. (Note that you cannot use the "FontControl" font to print normal characters)

Character	Special Function	Note
5	HT is output	
6	LF is output	
7	CR is output	
a	Open Drawer 2 (50ms drive pulse width)	
b	Open Drawer 2 (100ms drive pulse width)	
c	Open Drawer 2 (150ms driver pulse width)	
d	Open Drawer 2 (200ms drive pulse width)	
e	Open Drawer 2 (250ms drive pulse width)	
g	Cut Receipt (partial cut) without paper feeding	
p	HRI characters are not added to the bar code	
q	HRI character are added at the top of the bar code using Font A	
r	HRI characters are added at the bottom of the bar code using Font A	
s	HRI characters are added at the top of the bar code using Font B	
t	HRI characters are added at the bottom of the bar code using Font B	
w	Text is aligned left	
x	Text is centered	
y	Text is aligned right	
A	Open Drawer 1 (50ms drive pulse width)	
B	Open Drawer 1 (100ms drive pulse width)	
C	Open Drawer 1 (150ms driver pulse width)	
D	Open Drawer 1 (200ms drive pulse width)	
E	Open Drawer 1 (250ms drive pulse width)	
G	NV bit image No 1 is printed in the Normal mode	
H	NV bit image No 2 is printed in the Normal mode	
I	NV bit image No 3 is printed in the Normal mode	
J	NV bit image No 4 is printed in the Normal mode	
K	NV bit image No 5 is printed in the Normal mode	
P	Cut Receipt (partial cut)	
[NV bit image No 1 is printed in the Double Height Double Width mode	
]	NV bit image No 2 is printed in the Double Height Double Width mode	
^	NV bit image No 3 is printed in the Double Height Double Width mode	
_	NV bit image No 4 is printed in the Double Height Double Width mode	
`	NV bit image No 5 is printed in the Double Height Double Width mode	

4.3 Resolutions

The resolution setting supported by SAM4s ELLIX 20 printer is **180 x 180**.

4.4 Paper Sizes

The paper sizes supported by SAM4s ELLIX 20 printer are as follow.

- 80 x 3276 mm
- A4 x 80 mm
- B5 x 80 mm
- 58 x 3276 mm
- A4 x 58 mm

The following table shows the recommended margins for SAM4s ELLIX 20 printer. Refer to this table when setting margins from your printing applications.

Printer	Margins				Printer Area
	Left[mm]	Right[mm]	Top[mm]	Bottom[mm]	Width[mm]
SAM4s ELLIX 20	0	0	0	0	80

4.5 Printing Bar Codes

The paper sizes supported by SAM4s ELLIX 20 printer are as before. In this driver, a printer font for printing bar code is also provides. Select the printer font corresponding to the bar code type to be printed, so simply enter the code to print bar code. Input codes are display in text format. Printing of bar codes can be done.

When choosing printer font Code 128, the code set selection character (which is "{A", "{B", "{C") must be always specified at the head of the text.

For example, specify "{B1234", when printer letter "1234".

Printer Font Name	Size	Supported Characters
Codabar	10	Numeric: 0 ~ 9 Symbols: \$, +, -, ., /, : Letters: A ~ D
Code39	10	Numeric: 0 ~ 9 Symbols: \$, +, -, ., / Letters: A ~ Z
EAN13	10	Numeric: 0 ~ 9
EAN8	10	Numeric: 0 ~ 9
ITF	10	Numeric: 0 ~ 9
UPC-A	10	Numeric: 0 ~ 9
UPC-E	10	Numeric: 0 ~ 9
Code93	10	ASCII CODE: 0 ~ 127
Code128	10	ASCII CODE: 0 ~ 127
PDF417	9.5	--

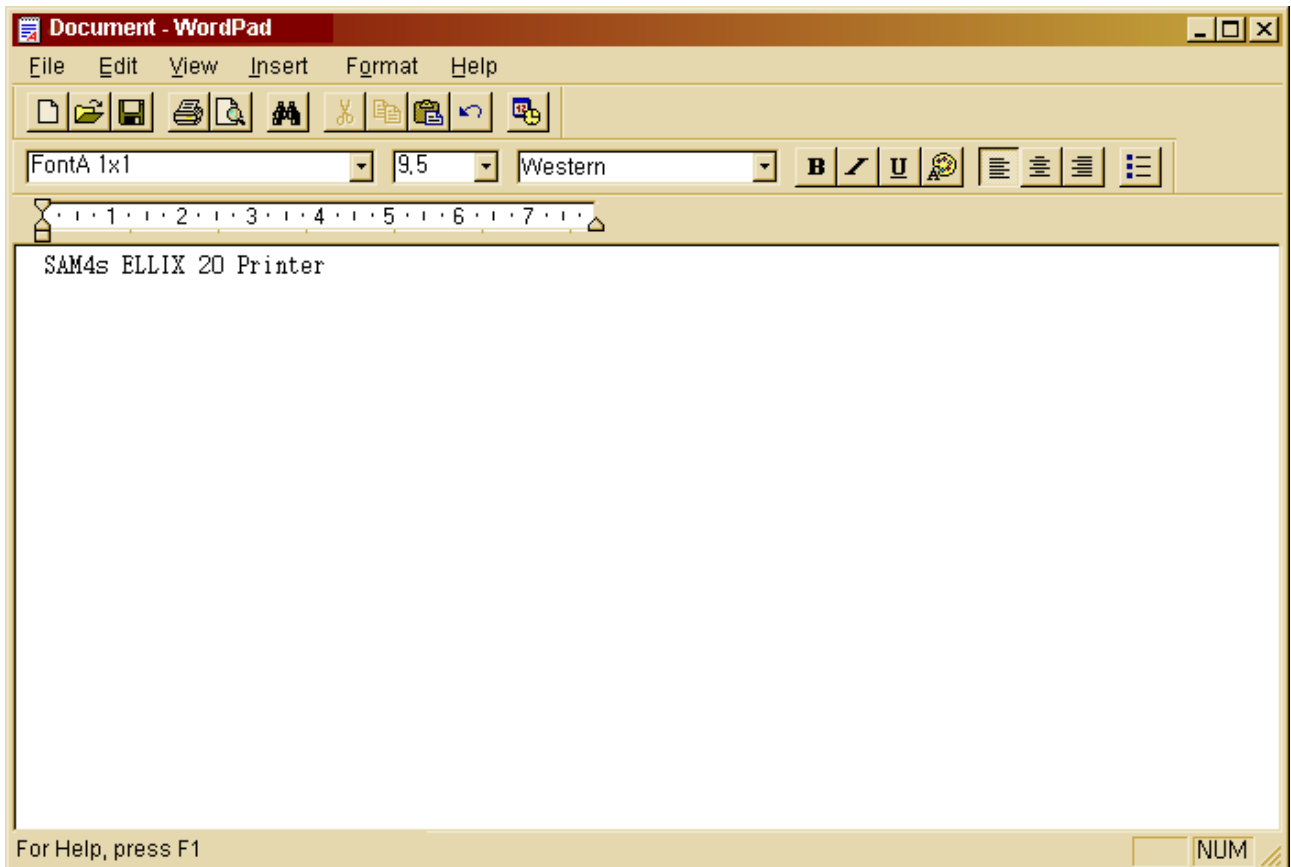
5.SAM4s ELLIX 20 Printer with WordPad

5.1 WordPad Environment

WordPad is more adequate to test printer than Microsoft Word. Make it sure that SAM4s ELLIX 20 has been chosen as default printer and then go further with WordPad like below.

- Size [Refer to Section 4.5, "Paper Sizes"]
- Resolution [Refer to Section 4.4, "Resolutions"]
- Margins [Refer to Section 4.5, "Paper Sizes"]

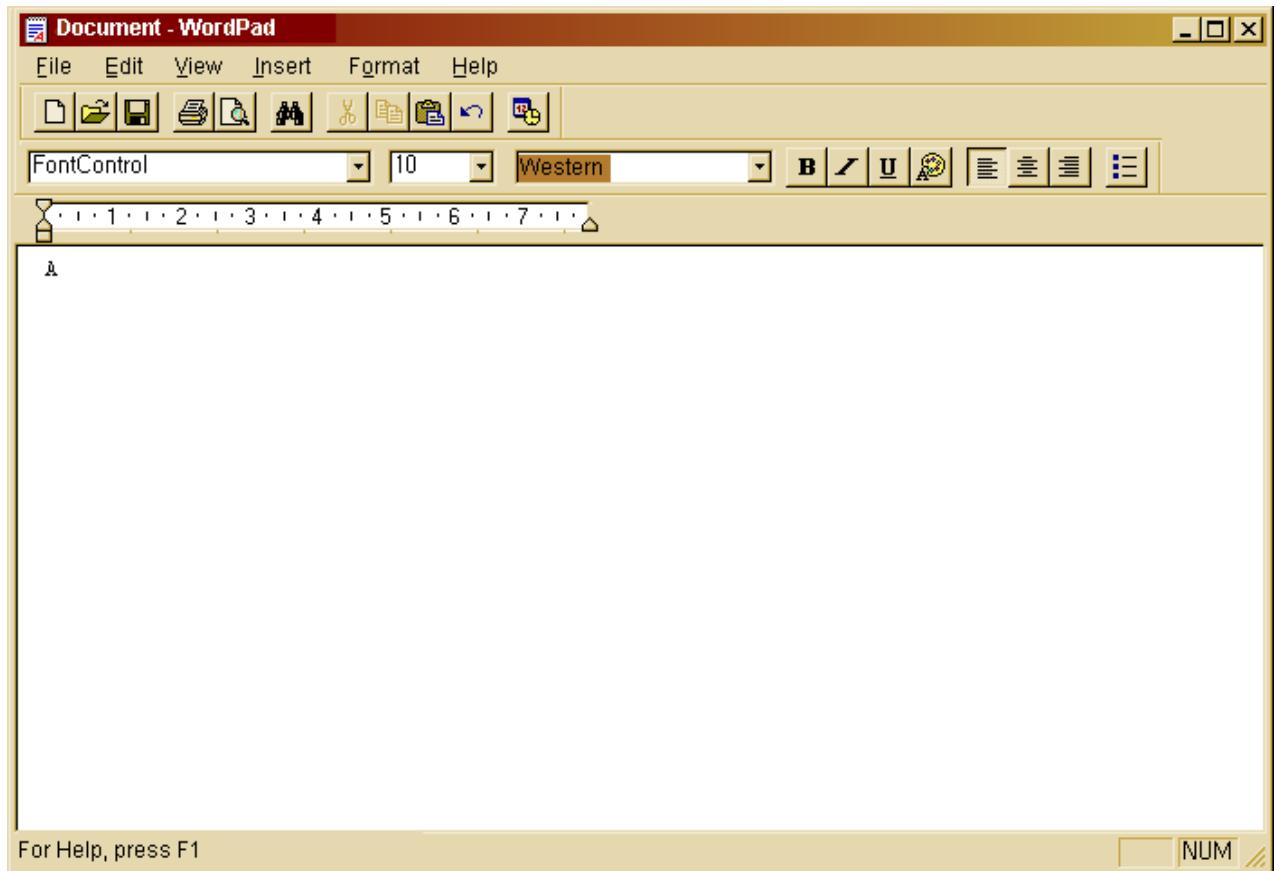
5.2 Printing Text



1. Select the font you wish to use from the font list.
2. Select the font size you wish use from the font-size list.
3. Type in some text into the WordPad text-input area.
4. Open the File menu, and click on Print.

For fastest printing, select a printer font form the font list.

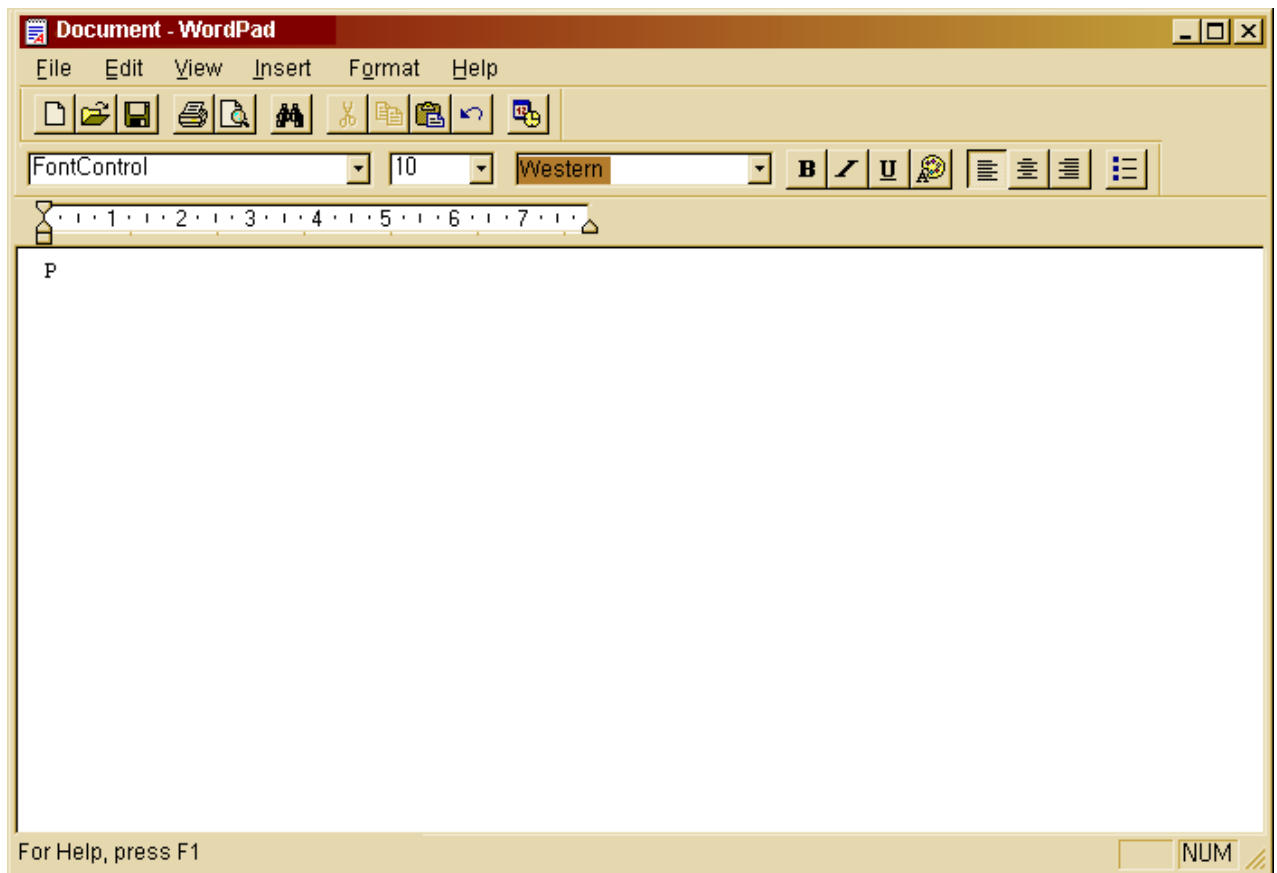
5.3 Opening the Cash Drawer



1. Select the "FontControl" font from the font list.
2. Set the font size to 10.
3. Type an "A" into the WordPad text-input area.
4. Open the File menu, and click on Print.

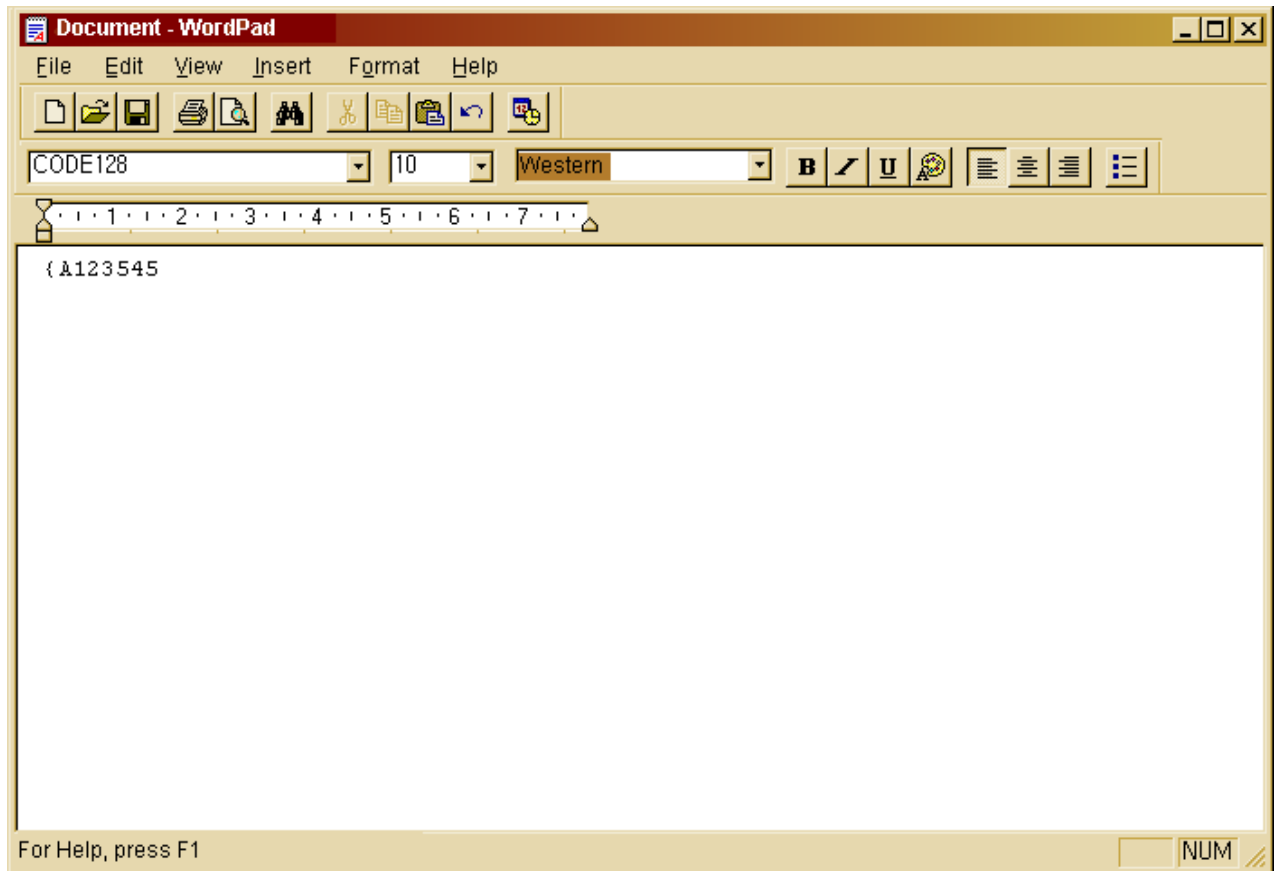
Clicking on Print will cause cash drawer #1 to open at a drive speed of 50ms. By changing the character that you input at Step 3, you can select different driver speed or open the other drawer. Refer to Section 4.2, "Special Functions", for a listing of characters and their functions.

5.4 Cutting the Paper



1. Select the "FontControl" font from the font list.
2. Set the font size to 10.
3. Type in an "P".
4. Open the File menu, and click on Print.

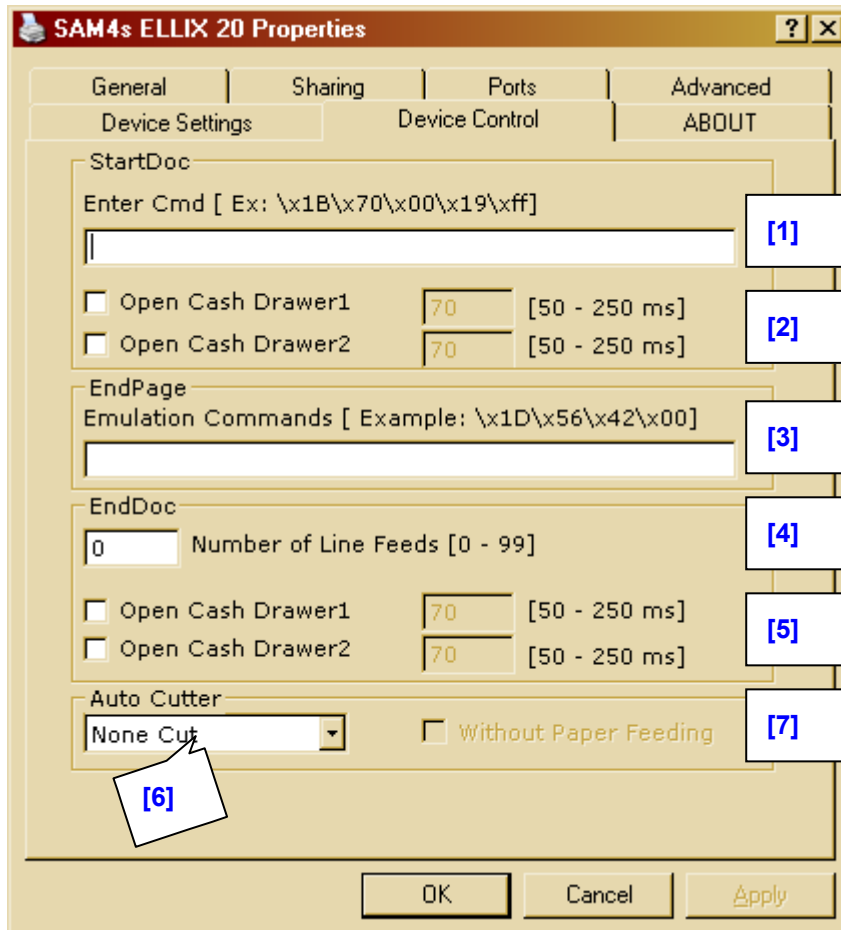
5.5 Bar Code Printing



1. Select the "Code128" font from the font list.
2. Set the font size to 10.
3. Type in an "{A123545"
4. Open the File menu, and click on Print.

6. Using SAM4s ELLIX 20 Printer Properties

6.1 Device Control



[1] You can be entered a command you wanted to at the point of starting document.

Ex) `\x1B\x70\x00\x19\xff` = Open Drawer 1 (50ms drive pulse width)

[2] You can fire cash drawer 1 or 2.

[3] You can be entered a command you wanted to at the point of ending page.

Ex) `\x1D\x56\x42` = Cut Receipt, Type the command to cut.

[4] This is where you enter the number of line feeds that will be done after a document is printed.

[5] You can fire cash drawer 1 or 2.

[6] Whether to cut or not at the end of receipt.

[7] Cutting without paper feeding.

6.2 About



You can configure the version of Windows Driver from 'About' tab.