OPOS Guide

OPOS Guide

1 Purpose

This document provides information on using OPOS on a JS-950WS.

2 Preparation

The following equipment is needed to install OPOS drivers.

1. JS-950WS Note: The operating system and device drivers are already installed.
2. USB keyboard
3. External USB CD-ROM drive
4. USB mouse Note: This is an optional tool but is useful during installation process.
5. OPOS Drivers
   - ☐ MSR (Virtual COM) Driver
   - ☐ iButton (Virtual COM) Driver
   - ☐ Fingerprint OPOS Driver
   - ☐ JS-950WS OPOS Driver
     Including Cash Drawer, 2-Line Customer Display, 4-Line Customer Display, FontEditor, iButton Test Program, OposMgrVc6)
6. POS Specific Devices
   - ☐ Cash Drawer (DIN type)
   - ☐ Cash Drawer (RJ-11 type)
   - ☐ 2-Line Customer Display (Internal COM6, JS-950RD-010)
   - ☐ 4-Line Customer Display (Internal COM6, JS-950RD-020)
   - ☐ MSR (USB, JS-950MG-010)
   - ☐ Fingerprint Sensor Unit (USB, JS-950FS-010)
   - ☐ Dallas Key Reader Unit (USB, JS-950DP-010, displayed as “i-Button”)

3 Basic Flow

Below is the basic flow for setting up a JS-950WS with OPOS drivers and Windows XP Pro.

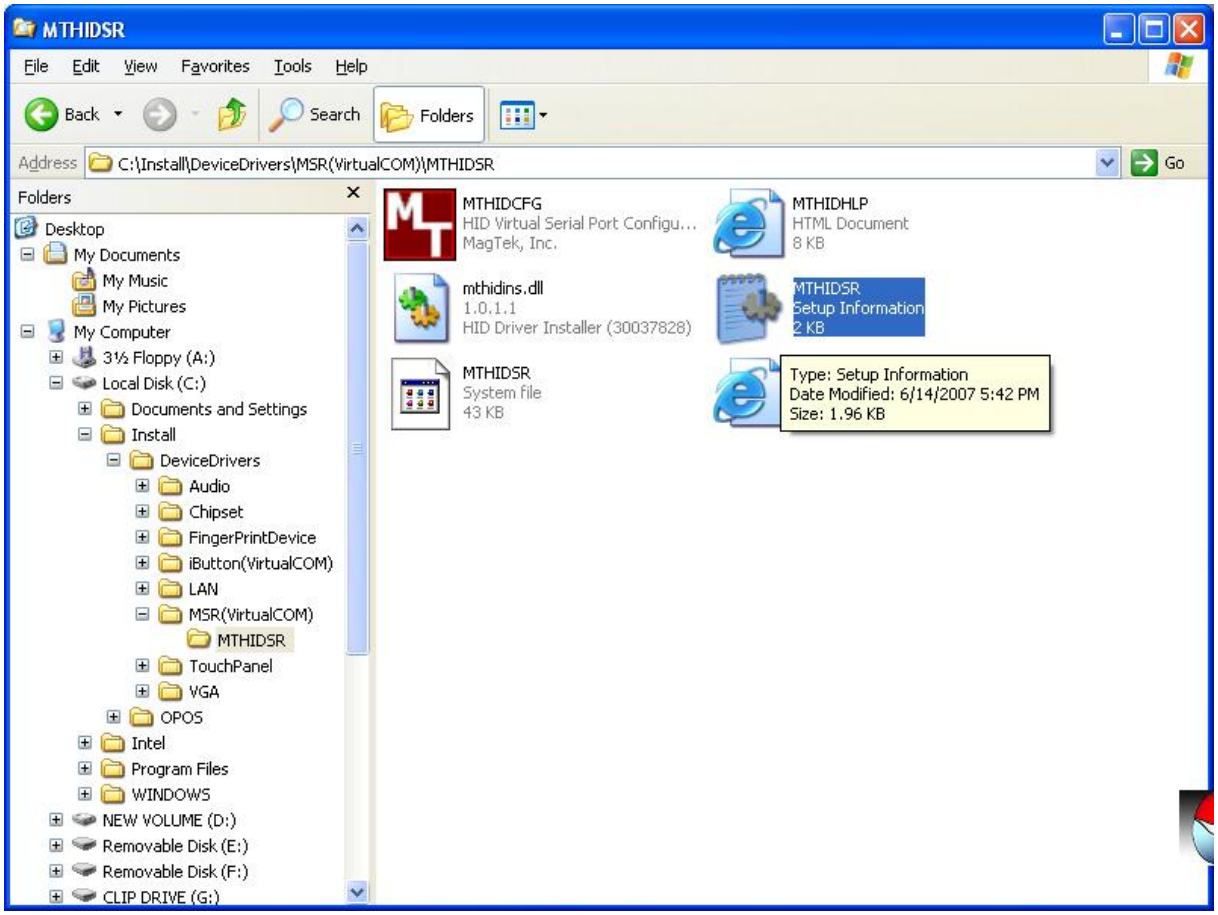
1. Prepare the JS-950WS- should have the operating system installed
2. Install OPOS Drivers
   - ☐ Install MSR (Virtual COM) Driver
   - ☐ Install iButton (Virtual COM) Driver
   - ☐ Install Fingerprint OPOS Driver
   - ☐ Install JS-950WS OPOS Driver

4 Operation

4.1 Install MSR (Virtual COM) Driver

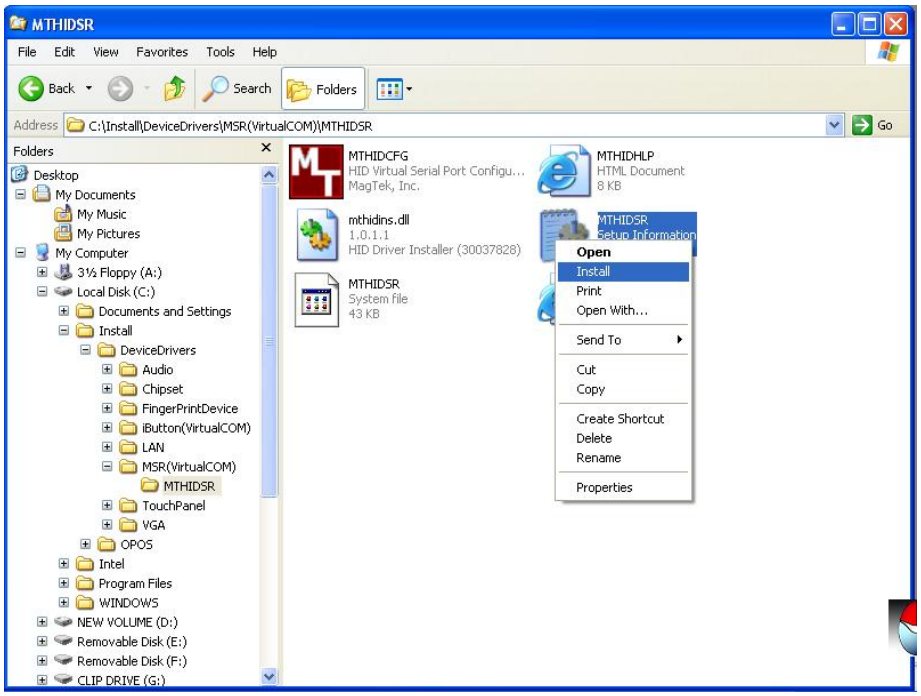
4.1.1 Install MSR (HID Driver) Driver

If already connected, unplug a MSR unit.



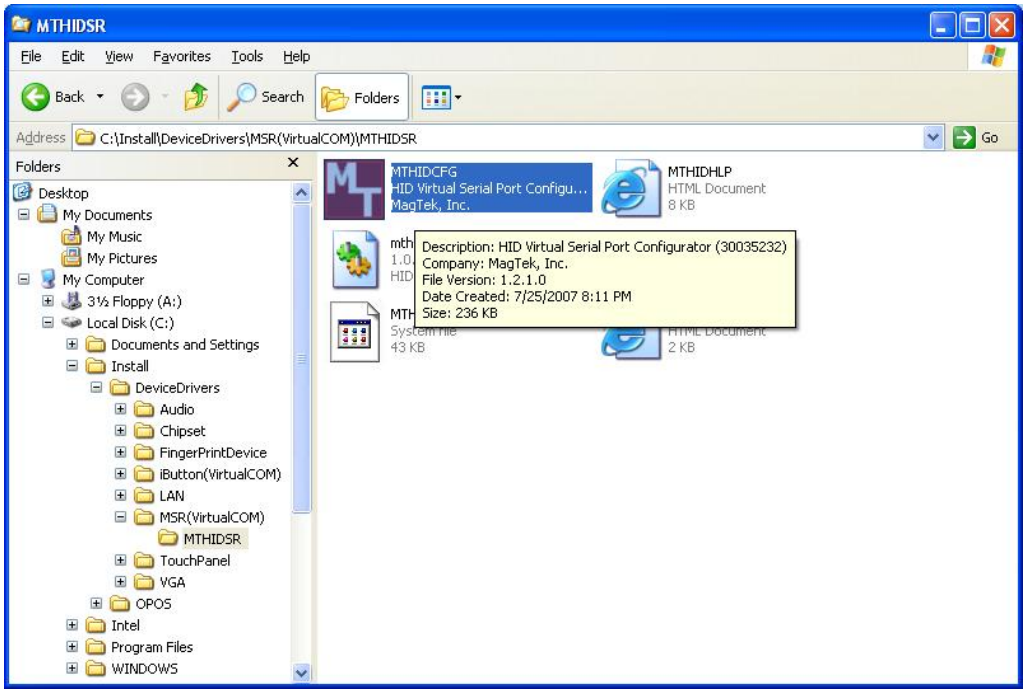
4.1.2 Install the “MTHIDSR.inf”

Select “MTHDSR.inf” and right-click, select “Install”.



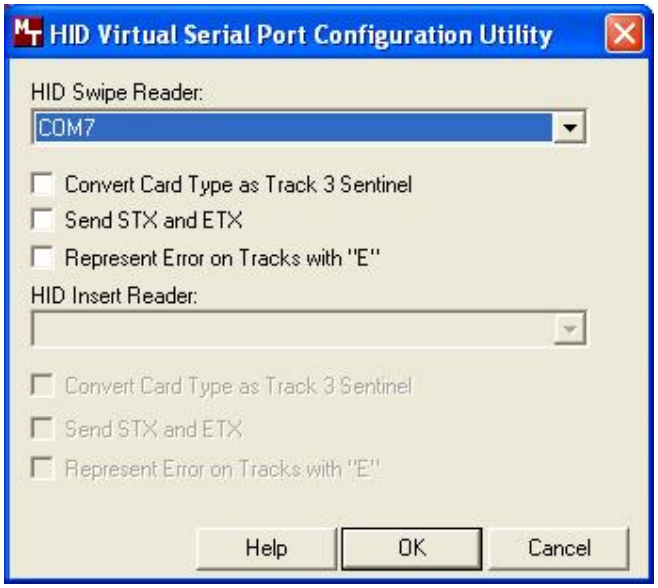
4.1.3 Configure Virtual COM Port

Run “MTHIDCFG.exe”



4.1.4 Configure HID Virtual Serial Port

Select "COM7" using the HID Swipe Reader drop down list.



Click OK and reboot.

4.1.5 View/Edit HID Swipe Reader Driver Parameters

Close any application that is using the port.

Press [Start] ---> [Run]. Type **MTHIDCFG** and press Enter.

The Configuration utility will appear displaying the current configuration. To quit without changes, click Cancel. Click on OK to save any changes and restart the drivers.

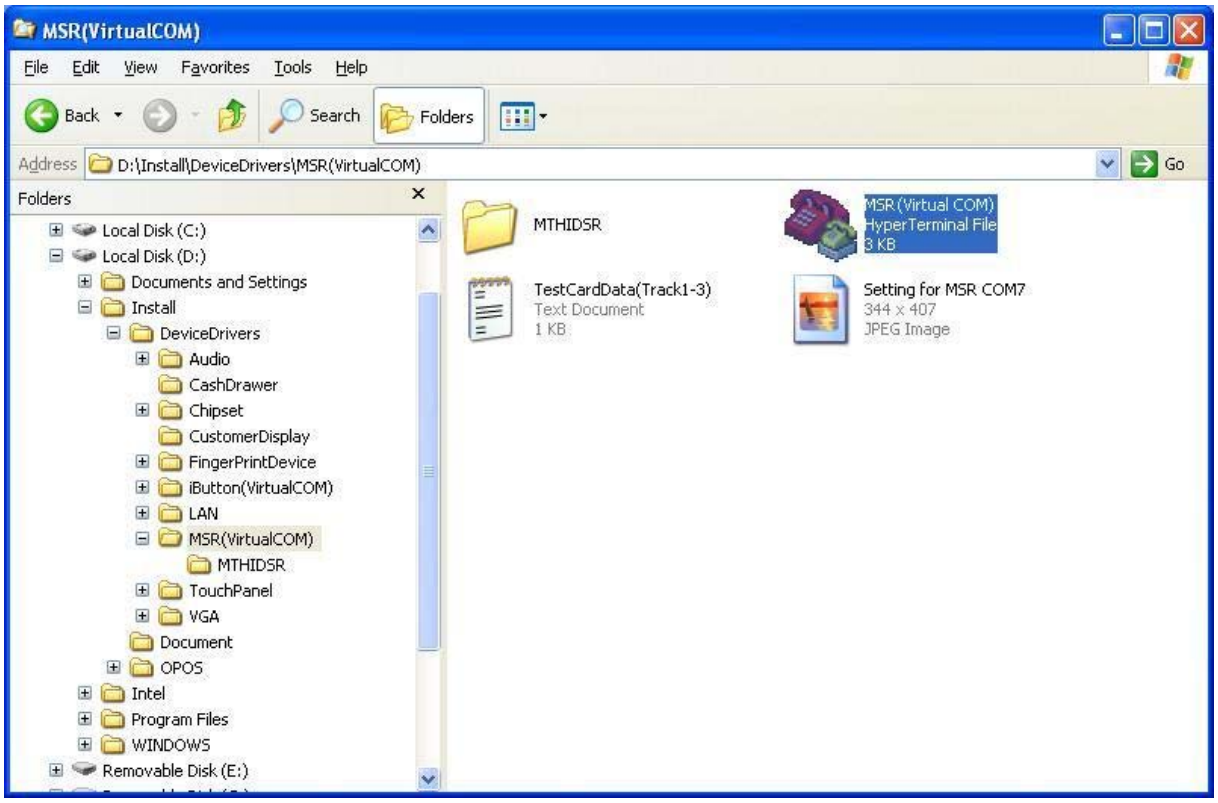
4.2 Checking MSR Driver

Plug MSR device into USB port after booting.

4.2.1 Run “MSR (Virtual COM).ht”

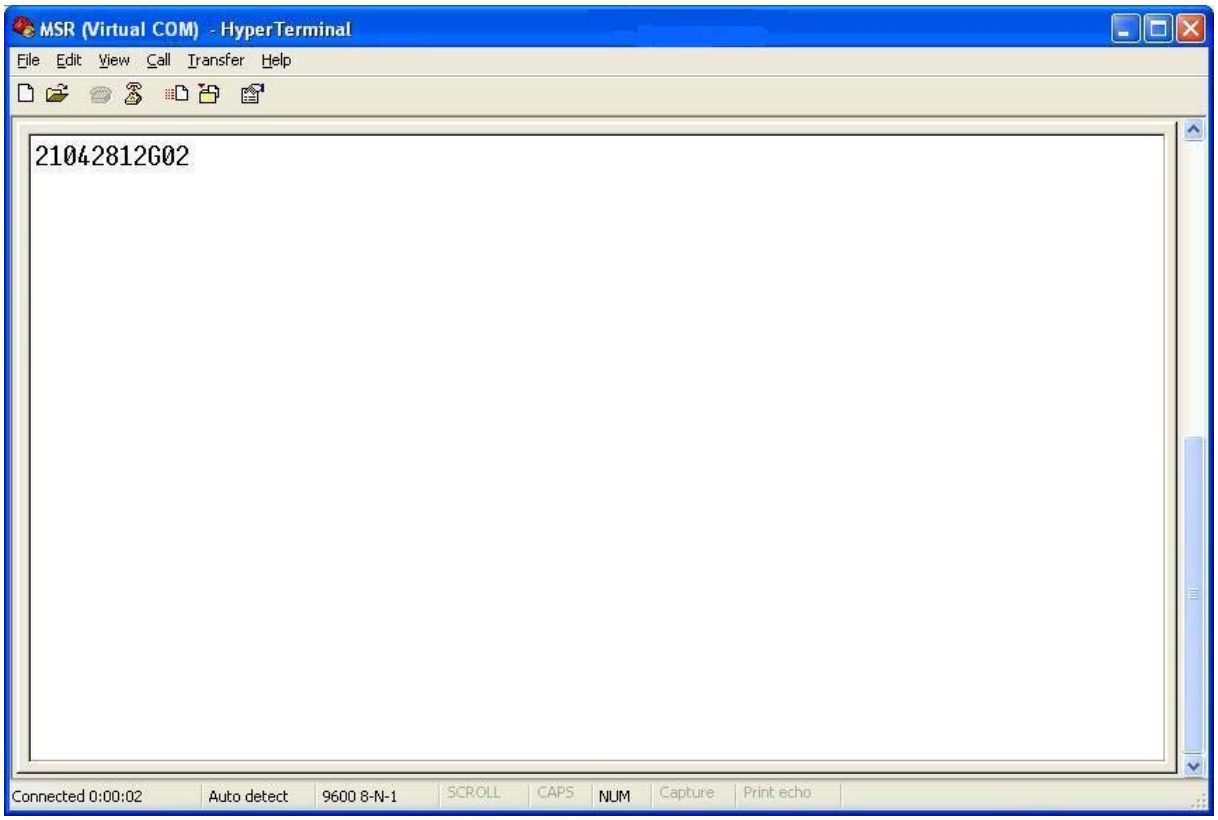
This document assumes that the Virtual COM port number is recognized as COM 7.

Run “MSR (Virtual COM).ht”.



4.2.2 Swipe a card

The following screen is displayed.

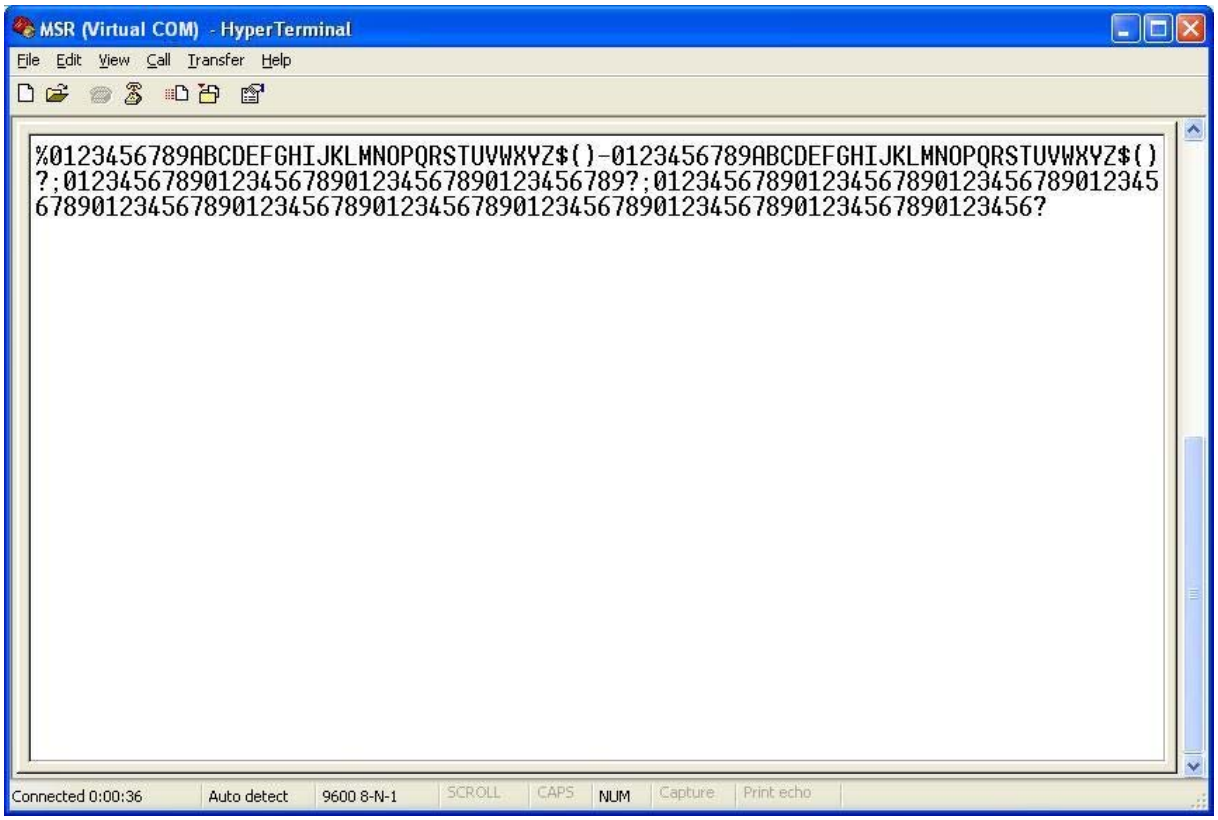


Note:

If you cannot find the above screen, change COM port number per instructions below;

- Press [disconnect] button 
- Click “File” → “Properties”
- Select (Change) the COM port at “Connect using”
- Press [Configure] button
- Confirm that the setting is the same as 4.2.3 MSR Settings (Virtual COM).

Please swipe a Magnetic Card, data is displayed similar to the screen below.



Note: Below is sample data:

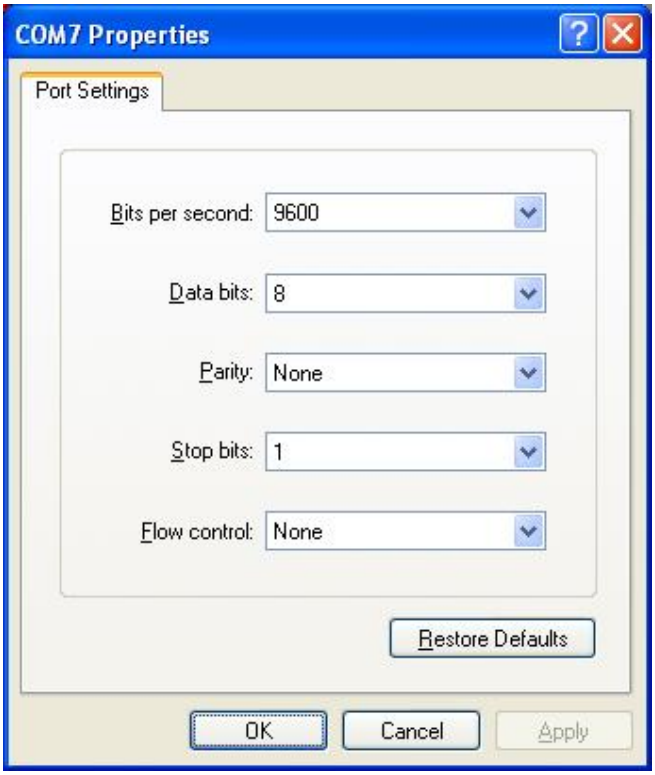
Track1=0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ$()-0123456789ABCDEFGHIJKLMNO
PQRSTUVWXYZ$()

Track2=0123456789012345678901234567890123456789

Track3=0123456789012345678901234567890123456789012345678901234567890123456789012345678901
2345678901234567890123456789012345678901234567890123456

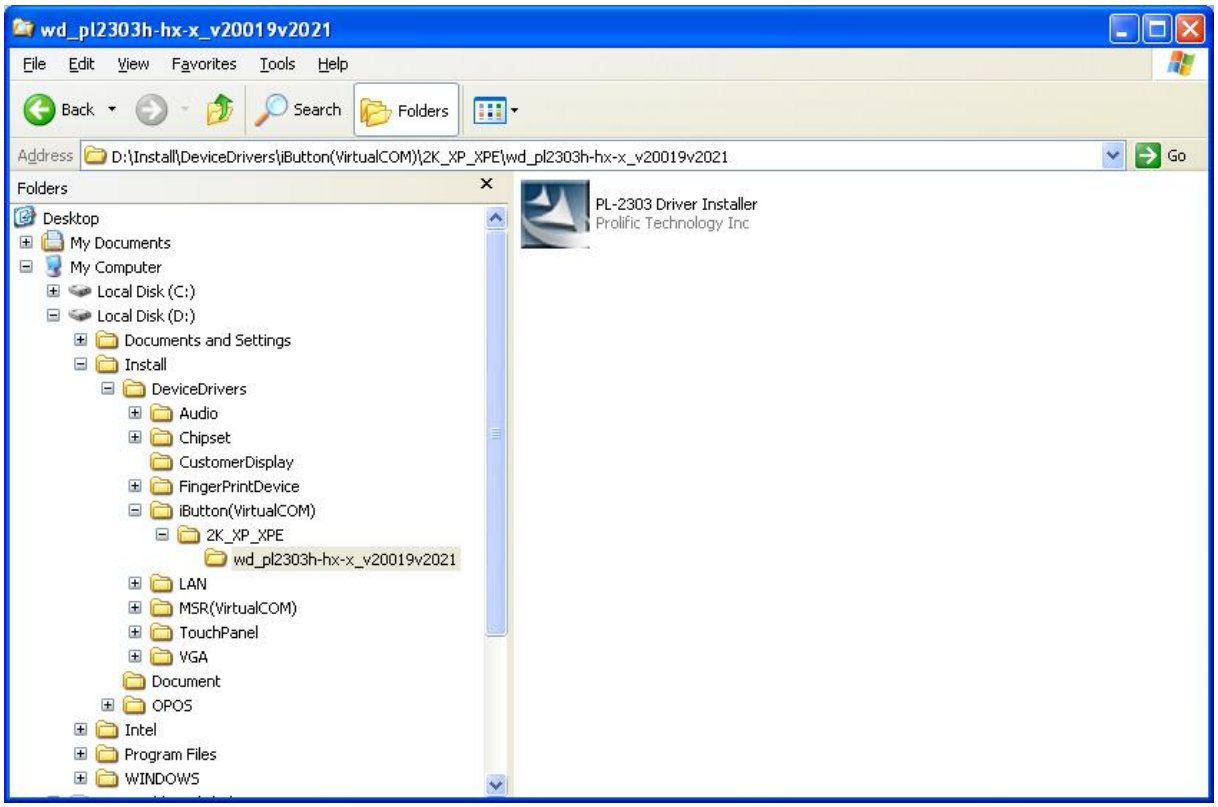
4.2.3 MSR Settings (Virtual COM)

MSR settings should be set as per the screen below.



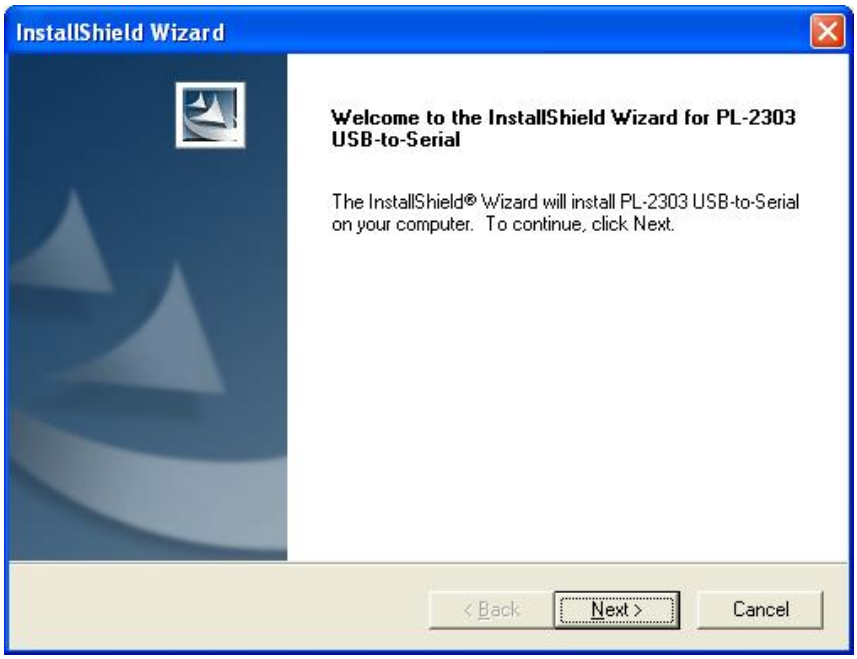
4.3 Install iButton (Virtual COM) Driver

4.3.1 Run “Install_USB232.exe”



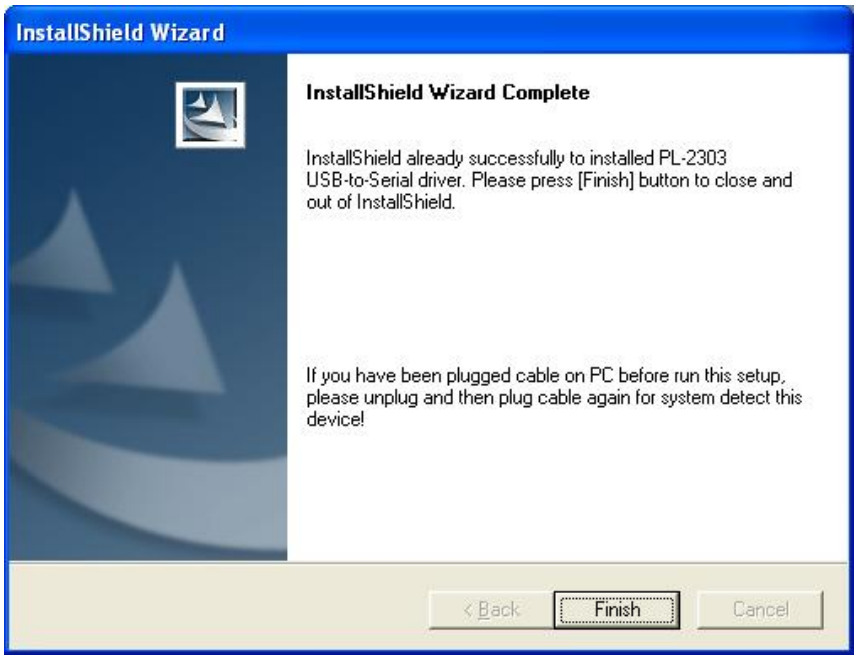
4.3.2 “Welcome” Screen

Press [Next] to proceed.



4.3.3 Complete iButton Driver Installation

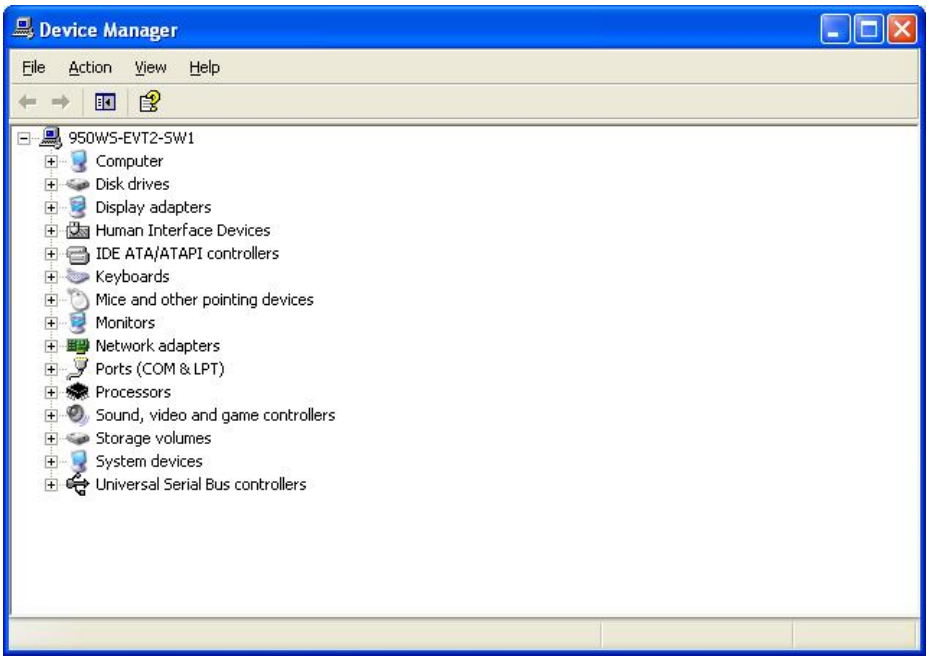
Press [Finish] to complete installation.



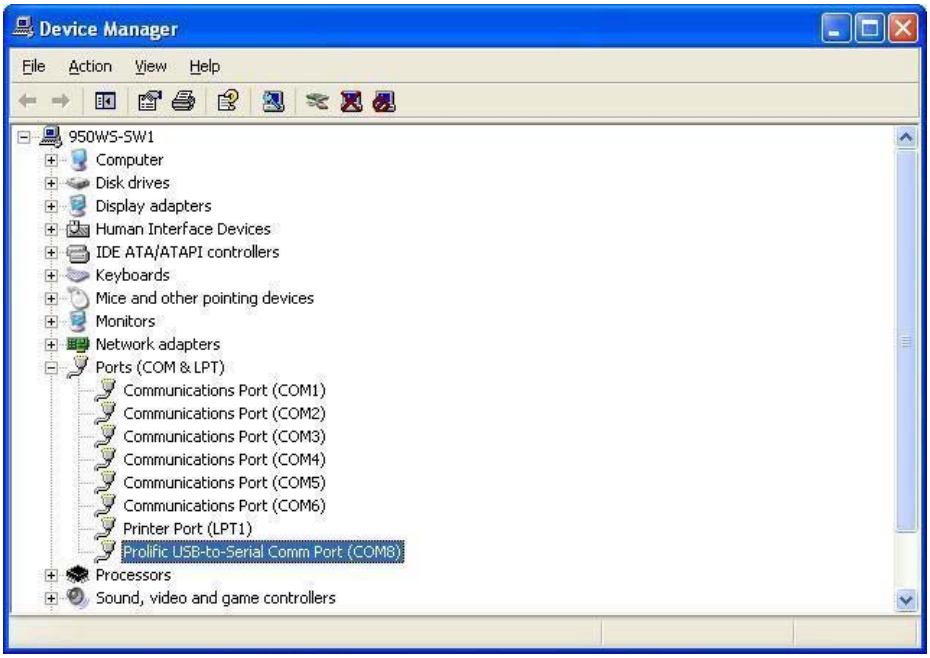
4.4 Validate iButton Driver

4.4.1 Confirm “Prolific USB-to Serial Com Port”

Plug the iButton device into USB port. After a moment, Press [Start] ---> [Control Panel] ---> [Performance and Maintenance] ---> [System]. Select [Hardware] Tab and press [Device Manager].

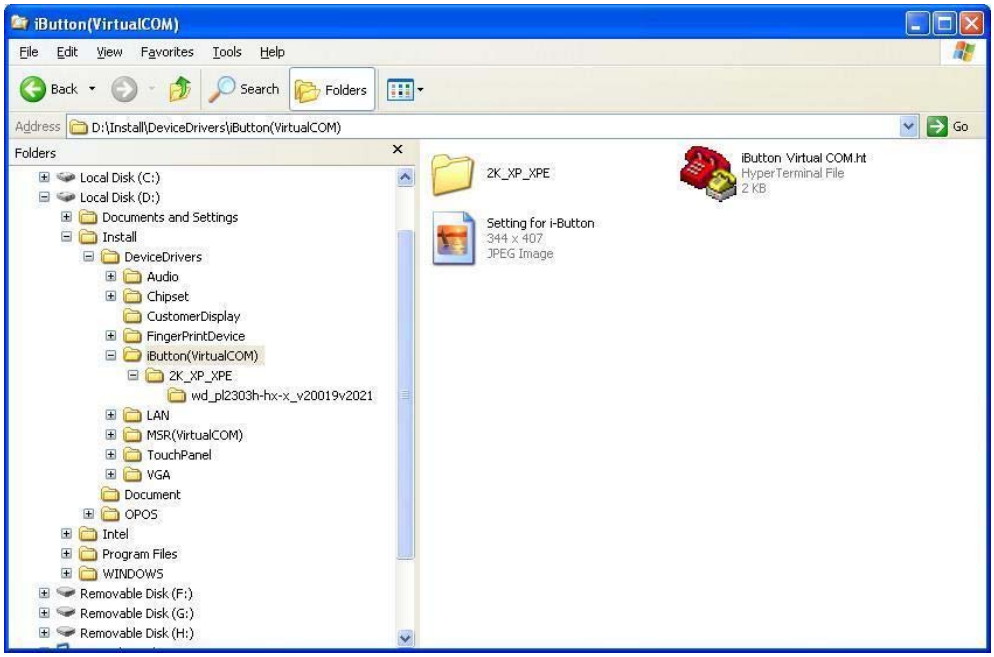


Expand [Ports (COM & LPT)], and confirm “Prolific USB-to Serial Com Port (COM7)] is listed.

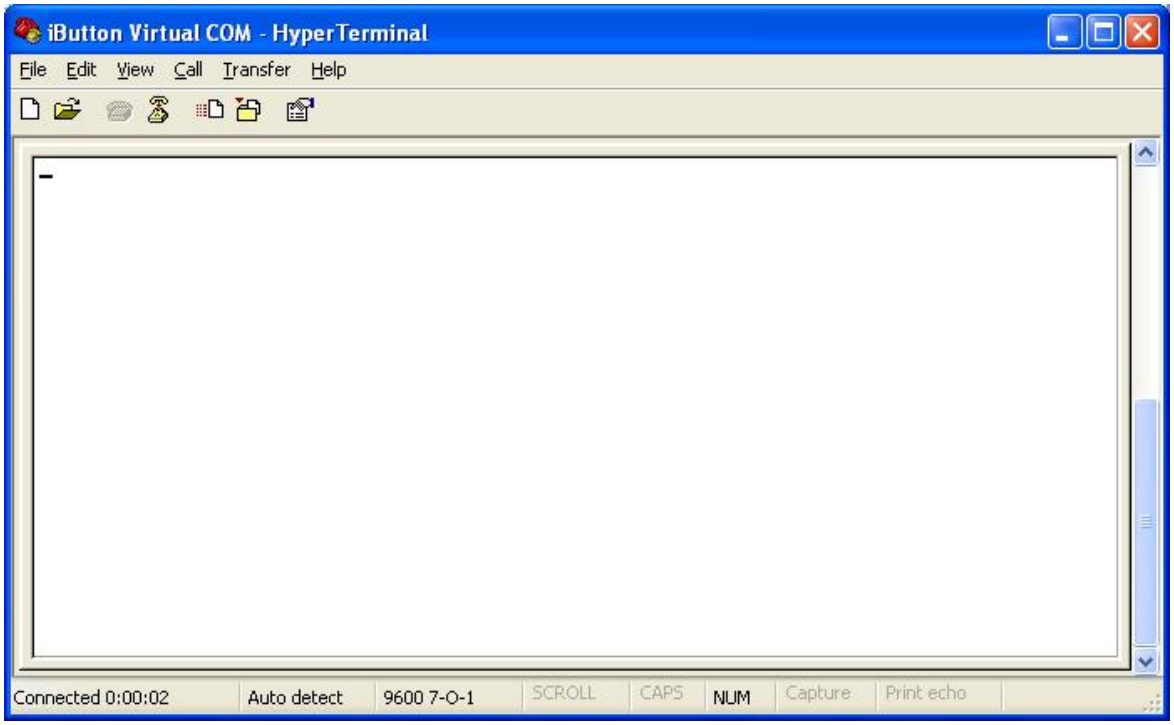


The driver may be recognized as any other COM port number, for example, COM8, COM9 or etc. It’s depends on your installed drivers.

4.4.2 Run “IButton Virtual COM.ht”

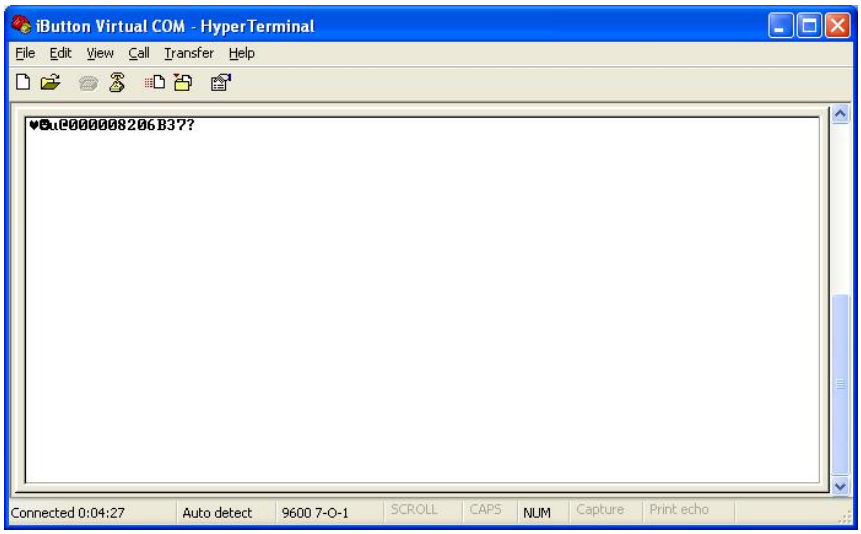


Below is how the screen should appear.



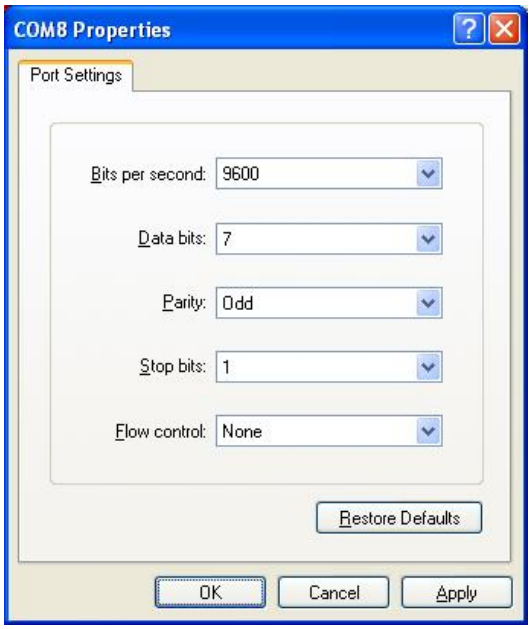
4.4.3 Read the iButton key

Attach and detach the iButton key to the iButton probe. The iButton unit will read the iButton key and display the key data similar to the screen below:



4.4.4 "iButton Virtual COM.ht" Setting

If test fails to display the card data, check the setting of COM8. The default setting is shown in the following screen.



Note: Depending on the environment, iButton may be recognized as a different COM Port number

"Call" ---> "Disconnect". 

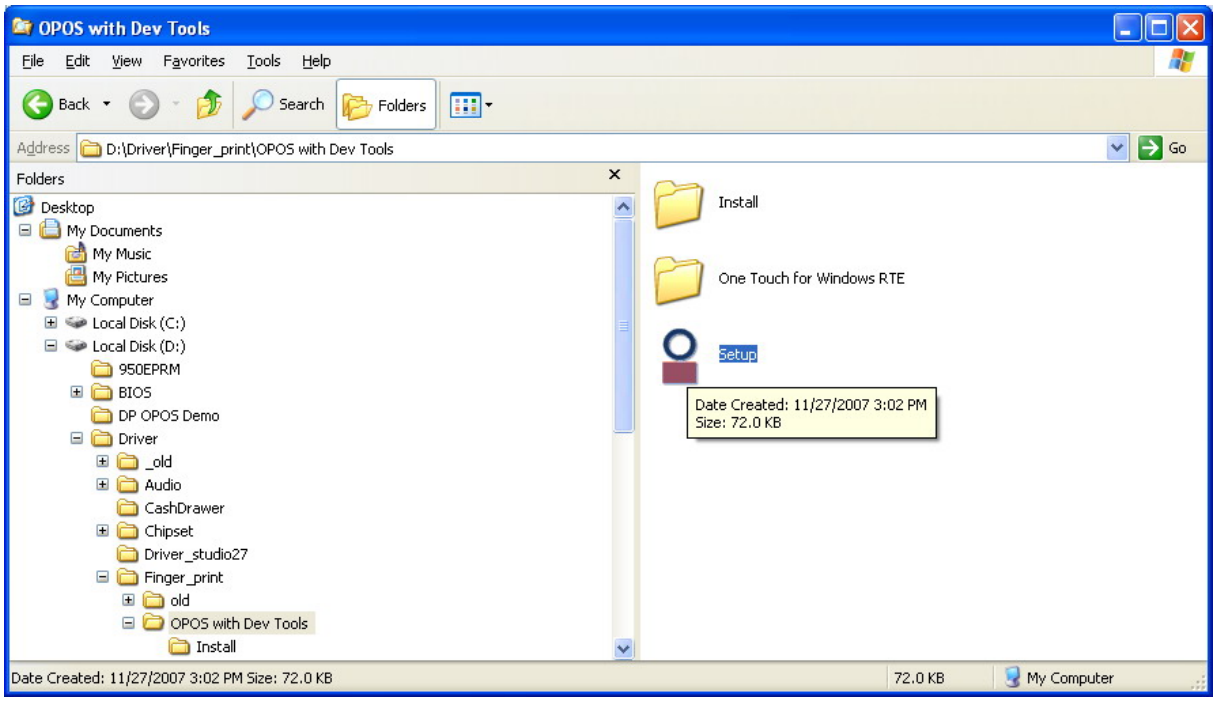
"File" ---> "Properties" ---> confirm the "Connect using:" is set as "COMx".

Press [Configure], he above screen will display.

4.5 Install Fingerprint OPOS Drivers

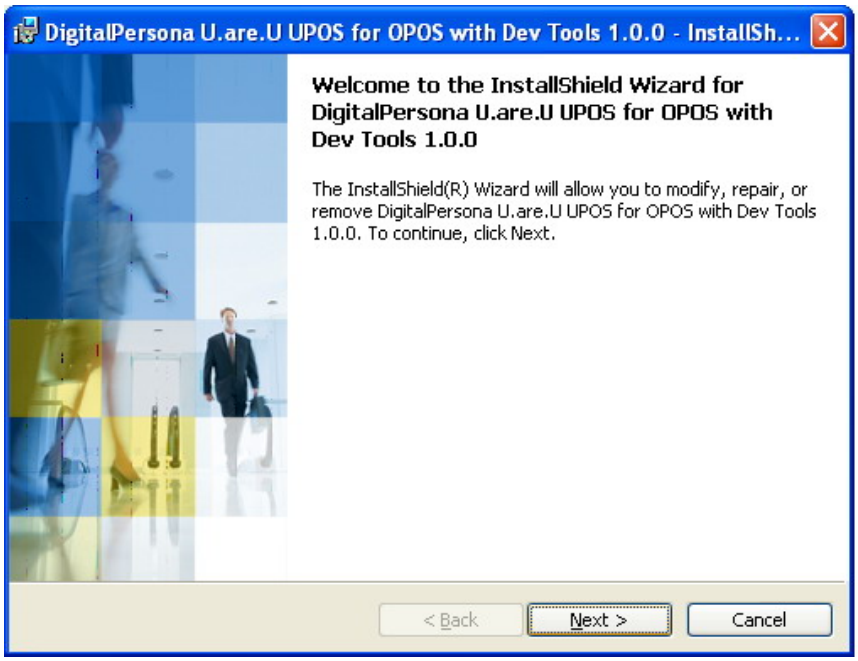
Note: UNINSTALL any other Fingerprint Device Drivers that may be installed, for example “Digital Persona Platinum Fingerprint Recognition Software 3.2.0”.

4.5.1 Run “Setup.exe”



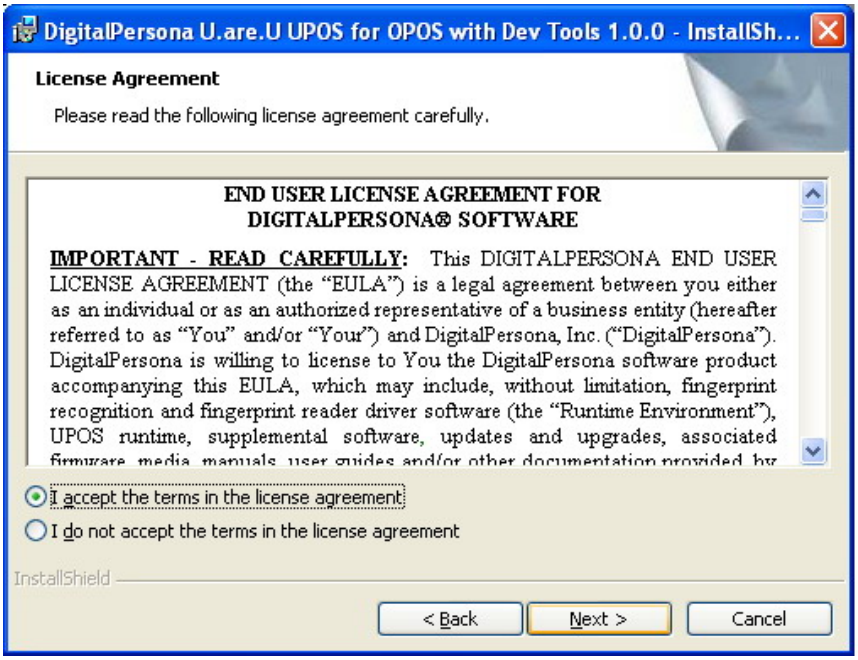
4.5.2 “Welcome” Screen

Read information on screen, press [Next] to proceed.



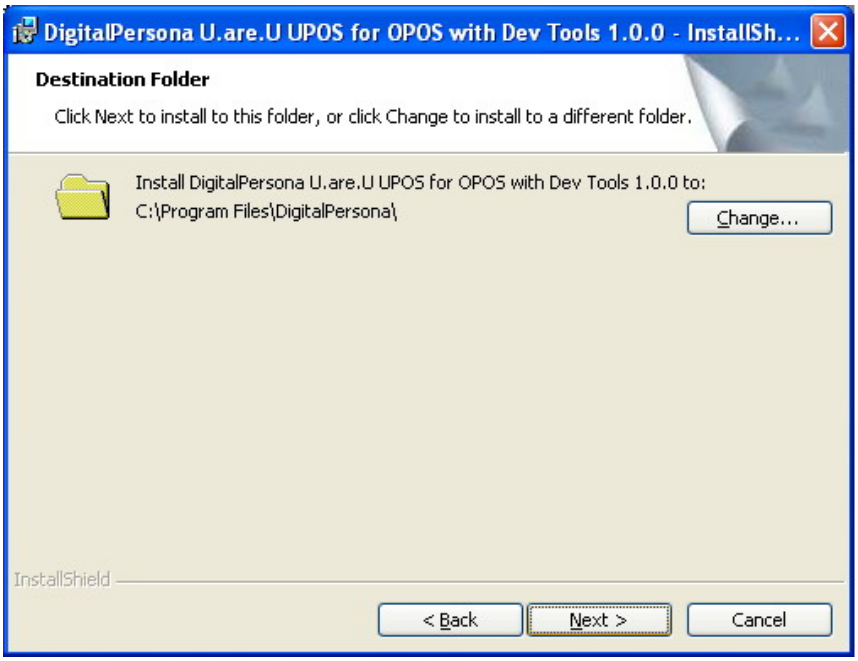
4.5.3 “License Agreement” Screen

Read License Agreement, select “I accept the license agreement” and press [Next] proceed.



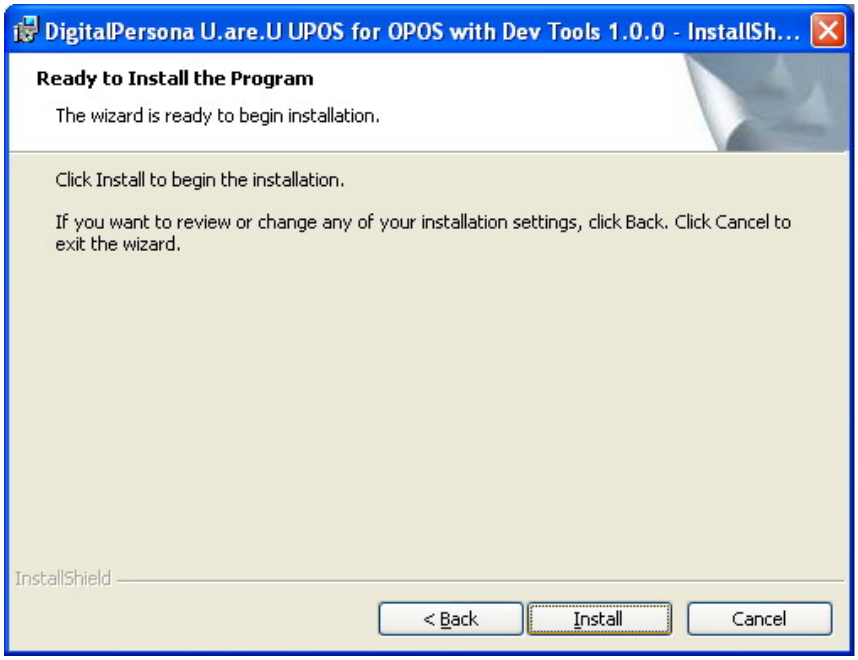
4.5.4 Destination Folder

Press [Next].



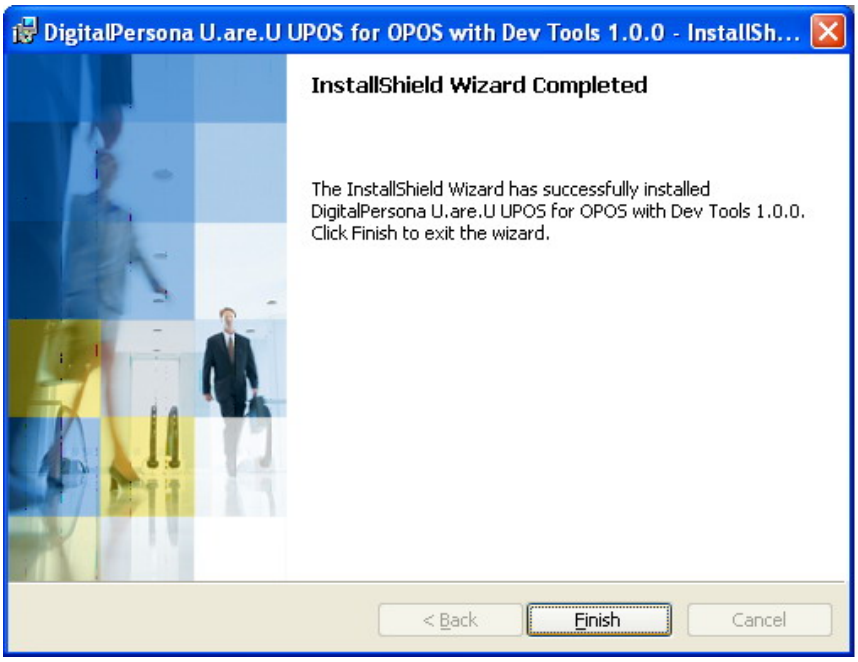
4.5.5 Ready to Install

Press [Install].



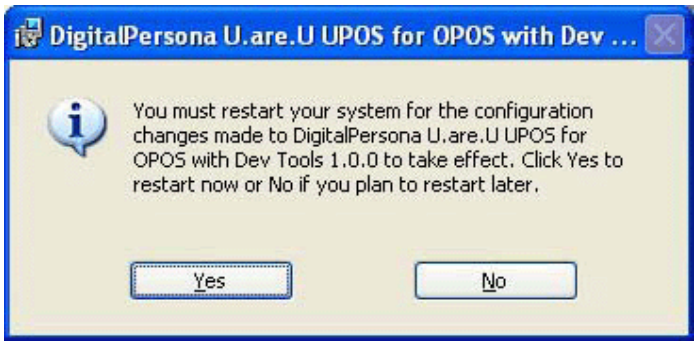
4.5.6 Complete Installation for Fingerprint Sensor Unit Driver

Press [Finish] to complete installation.



4.5.7 Rebooting

Press [Yes] to reboot JS-950WS.



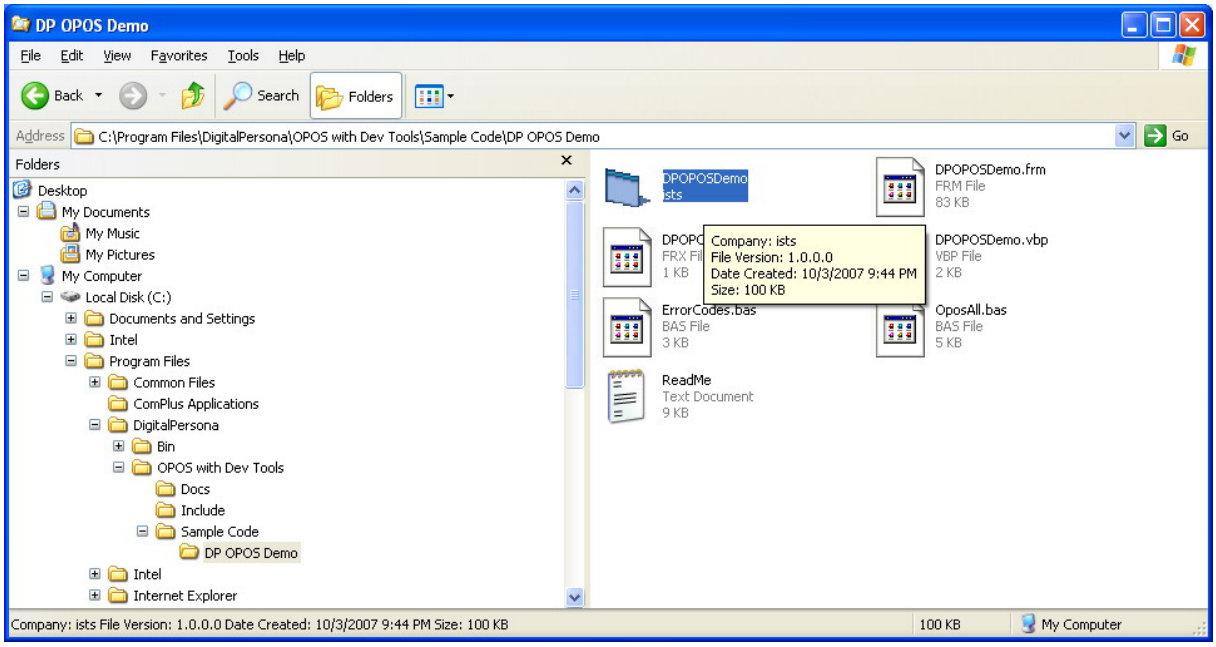
4.6 Validate Fingerprint OPOS driver

4.6.1 Fingerprint Sensor Unit

Plug the Fingerprint Sensor Unit into USB port.

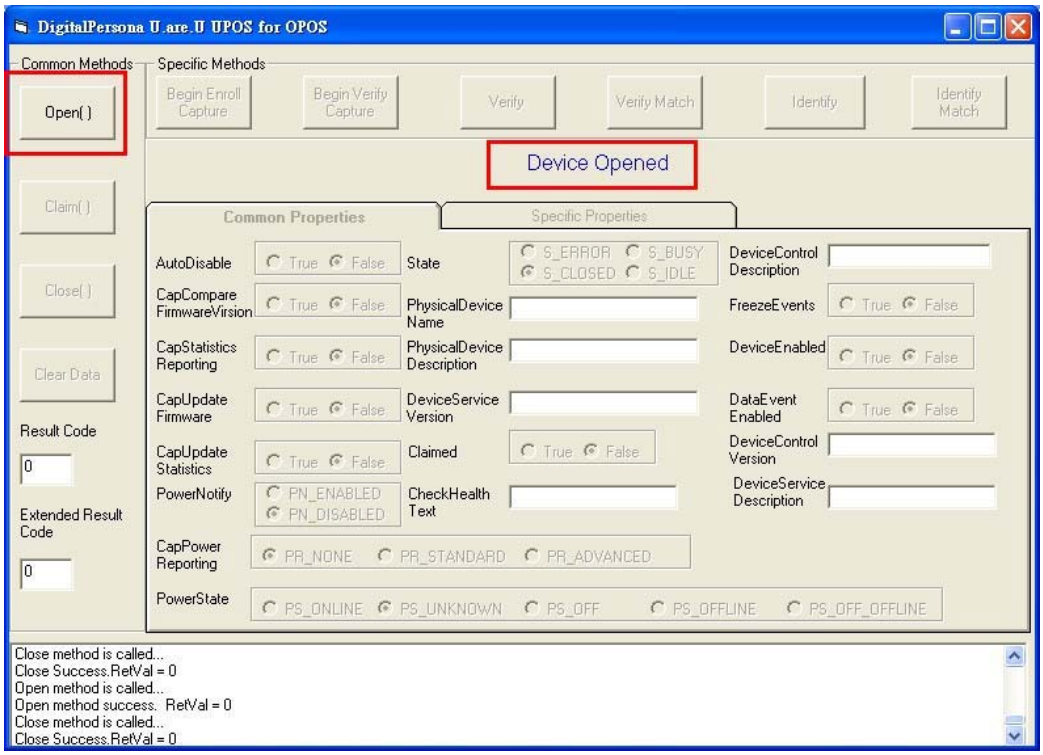
4.6.2 Run DPOPOSDemo.exe

Run DPOPOSDemo.exe.



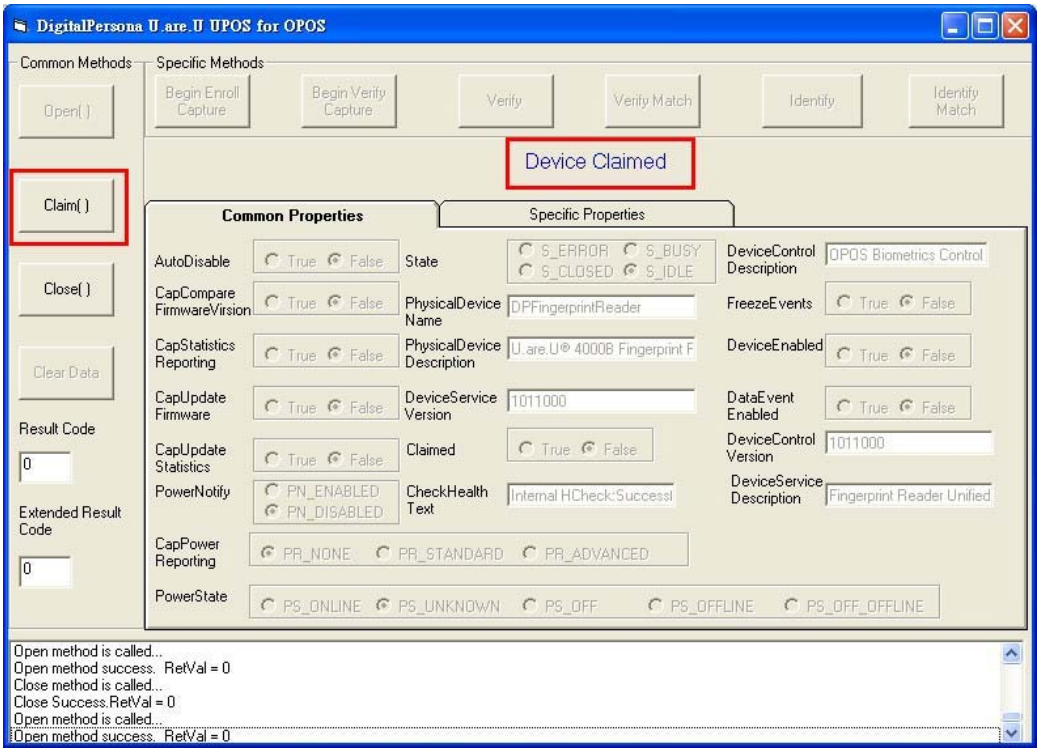
4.6.3 Open Connection

Click [Open()] button. The "*Device Opened*" message appears.



4.6.4 Claim Fingerprint Reader

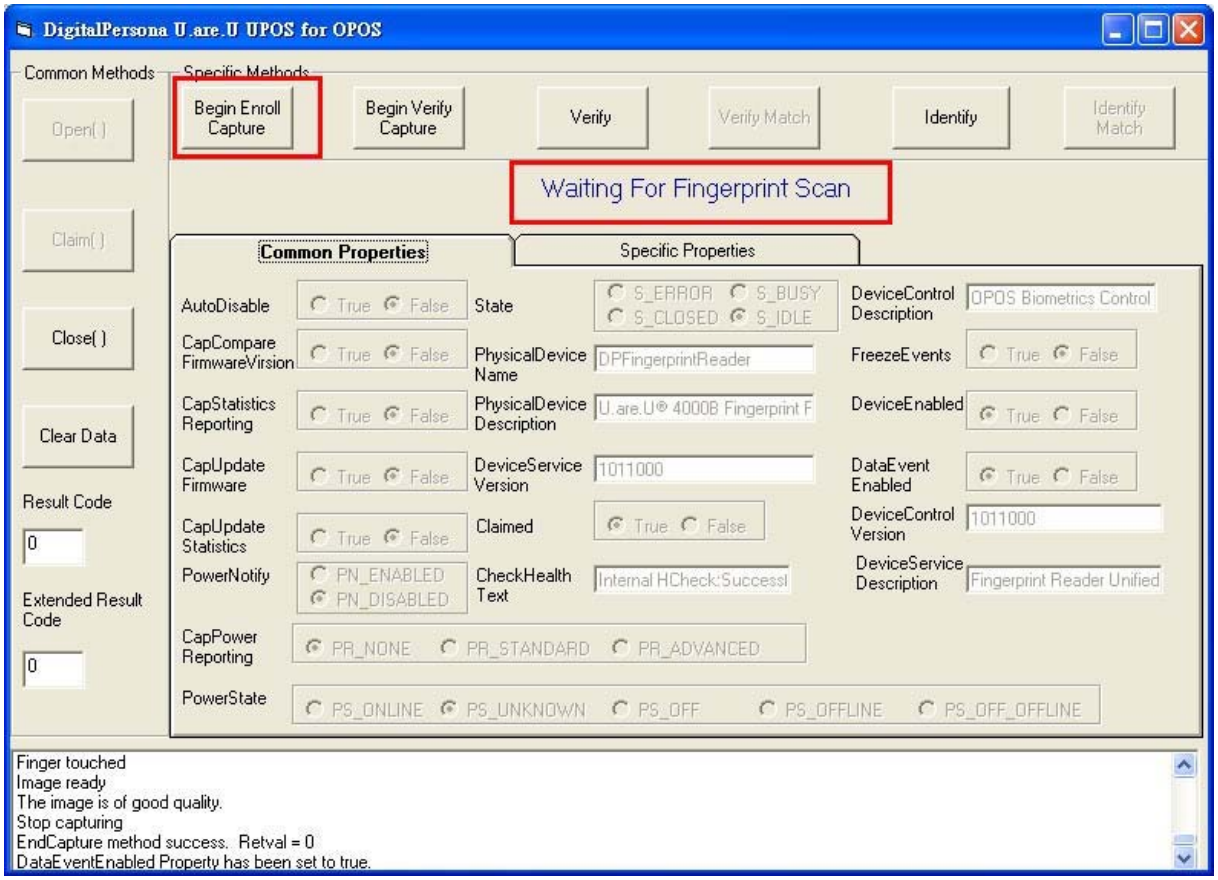
Click [Claim()] button. The "*Device Claimed*" message appears.



4.6.5 Fingerprint Enrollment

Click [Begin Enroll Capture] button. The "*Waiting For Fingerprint Scan*" message appears.

Touch the Fingerprint Reader four times. Follow the instructions that appear in the area under the control box at the bottom of the window. If successful, an enrollment template is created and the "*Fingerprint Image Scanned*" message appears.

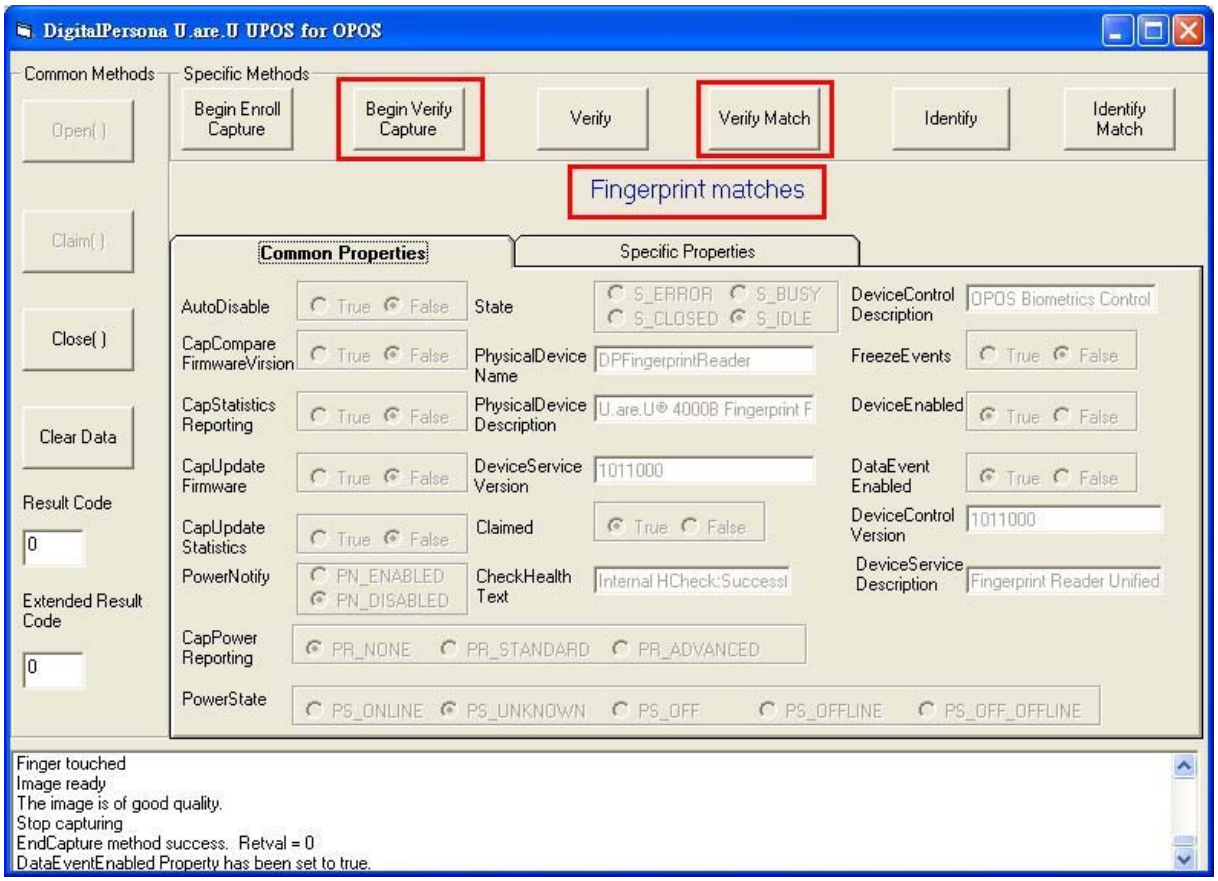


4.6.6 Fingerprint Verification

Click [Begin Verify Capture] button. The "*Waiting for Fingerprint Scan*" message appears.

Touch the Fingerprint Reader. If successful, a verification template is created and the Fingerprint Image Scanned message appears.

Click [Verify Match] button. A match is performed using the latest enrollment template available as well as the verification template that was just created. The result appears in the area under the Specific Methods control box: "*Fingerprint matches*" or "*Fingerprint does not match*".

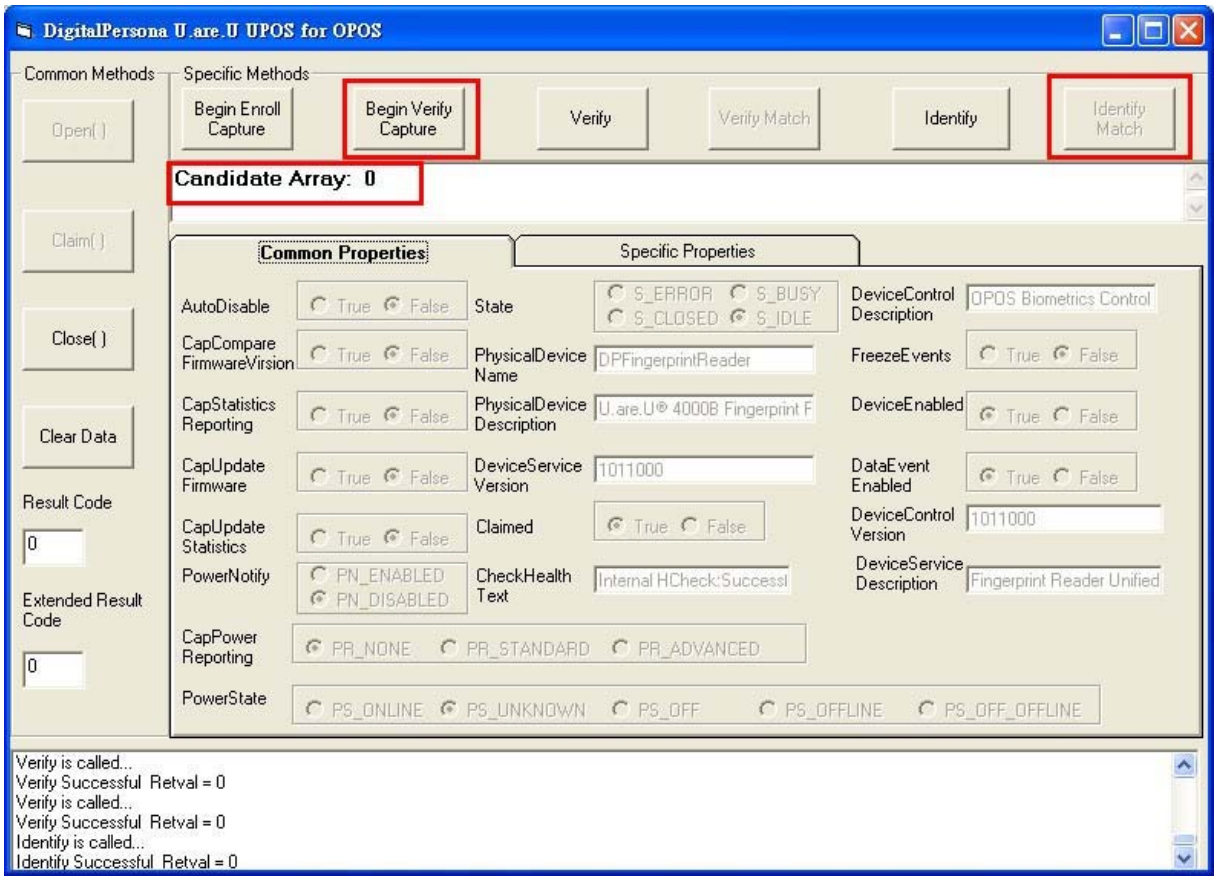


4.6.7 Fingerprint Identification

Click [Begin Verify Capture] button. The "*Waiting for Fingerprint Scan*" message appears.

Touch the fingerprint reader. If successful, a verification template is created and the "*Fingerprint Image Scanned*" message appears.

Click [Identify Match] button. A match is performed using all of the enrollment templates available as well as the verification template that was just created. A candidate ranking is generated by listing only the indices of the enrollment templates that match. The result appears in the area under the Specific Methods control box, for example,
"*Candidate Array: 0*" or, if none of the templates matches, "*Candidate ranking array is empty*".



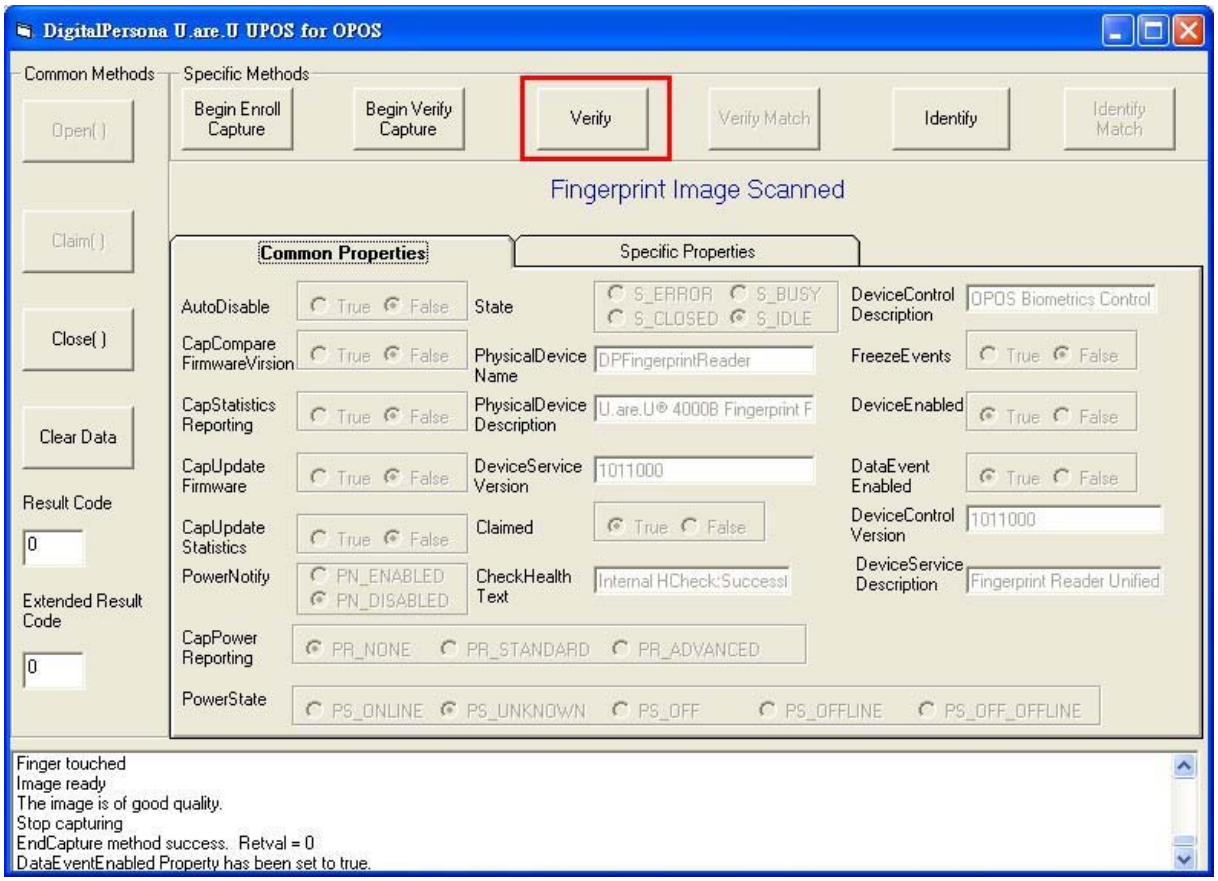
4.6.8 Fingerprint Verification (using on-the-fly verification template)

Click [Verify] button. The "*Waiting for Fingerprint Scan*" message appears.

Touch the fingerprint reader. If successful, a verification template is created on-the-fly. A match is performed using the latest enrollment template available as well as the verification template. The result appears in the area under the Specific Methods control box: "*Fingerprint matches*" or "*Fingerprint does not match*".

Note:

If you do not place your finger on the fingerprint reader within the stipulated time (10 seconds), the operation times out and the "*Timeout error...*" message appears.

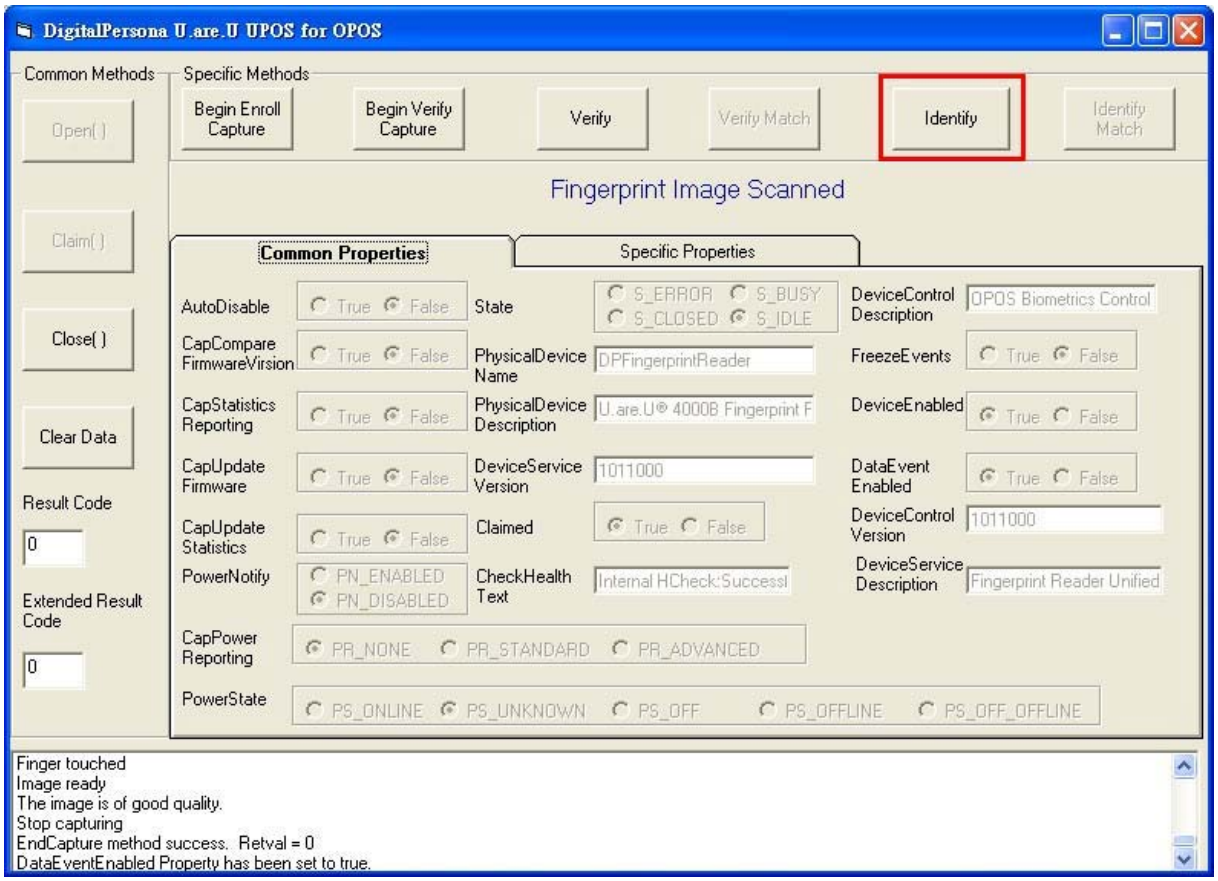


4.6.9 Fingerprint Identification (using on-the-fly verification template)

Click [Identify] button. The *"Waiting for Fingerprint Scan"* message appears.

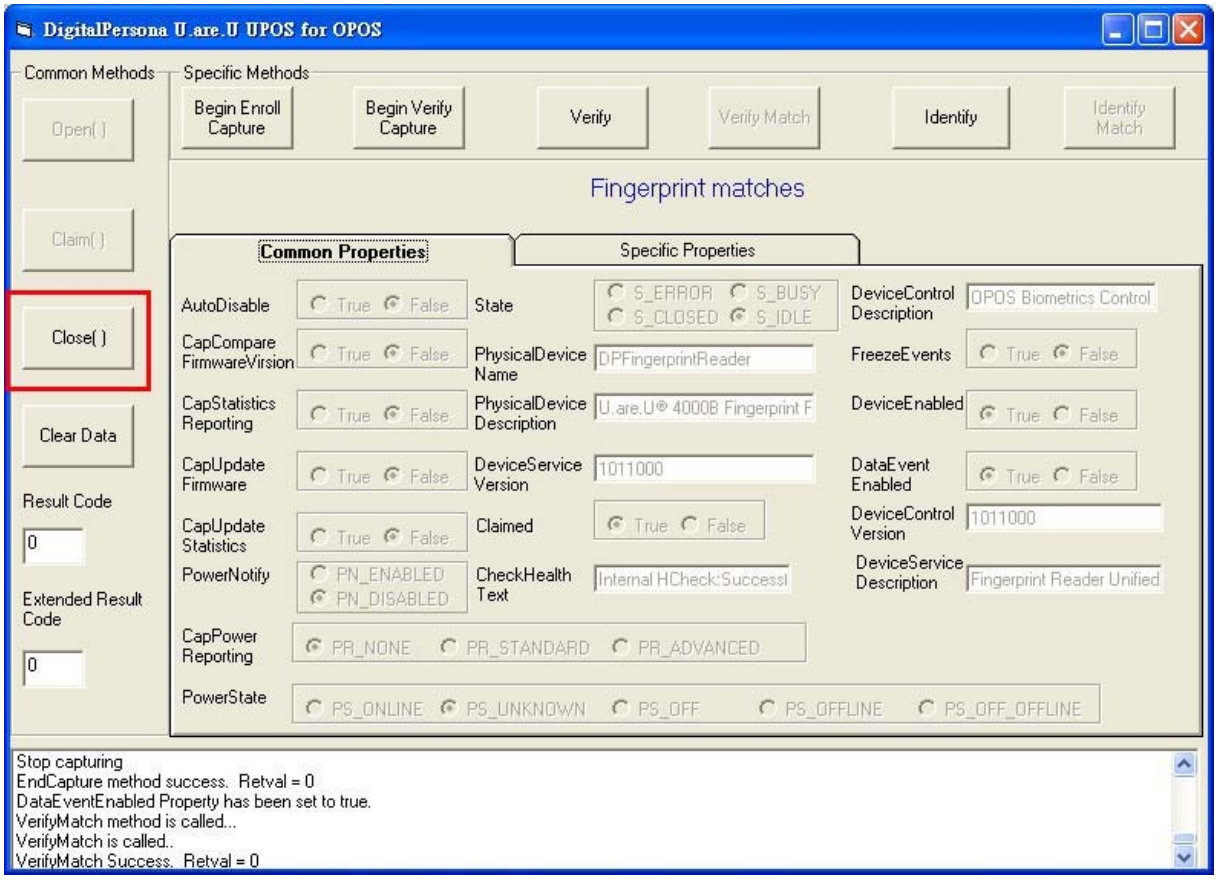
Touch the fingerprint reader. If successful, a verification template is created on-the-fly. A match is performed using all of the enrollment templates available as well as the verification template. A candidate ranking is generated by listing only the indices of the enrollment templates that match. The result appears, for example, "*Candidate array: 0*", or, if none of the templates matches, "*Candidate ranking array is empty*".

Note: If you do not place your finger on the fingerprint reader within the stipulated time (10 seconds), the operation times out and the *"Timeout error..."* message appears.



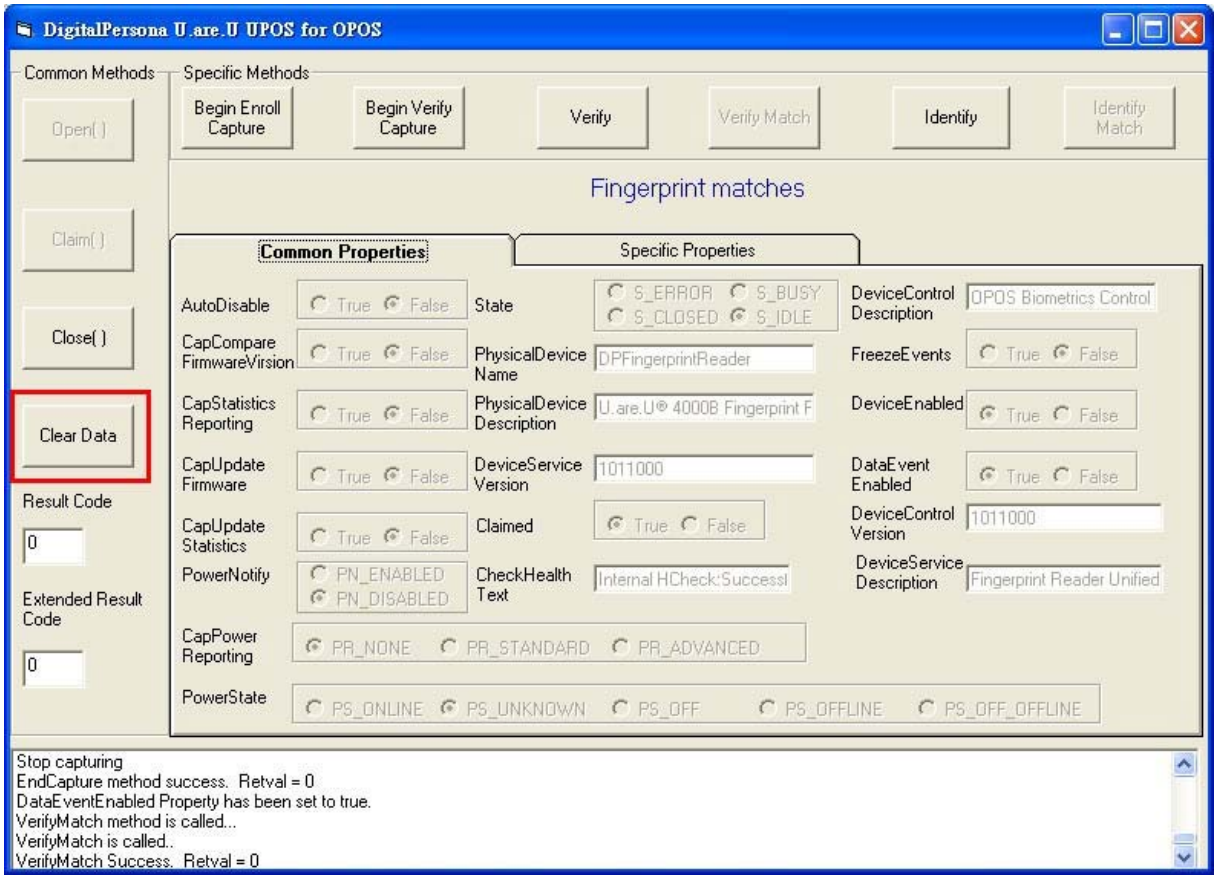
4.6.10 Close Fingerprint Reader Connection

Click [Close()] button. If successful, the connection with the fingerprint reader will close, all of the controls other than the [Open()] button are disabled, and the properties are reset, or cleared.



4.6.11 Clear Enrollment Template Array Set and Verification Template

Click [Clear Data] button. If successful, the enrollment template array set and the verification template are cleared. A new verification template and a set of enrollment templates can now be created.



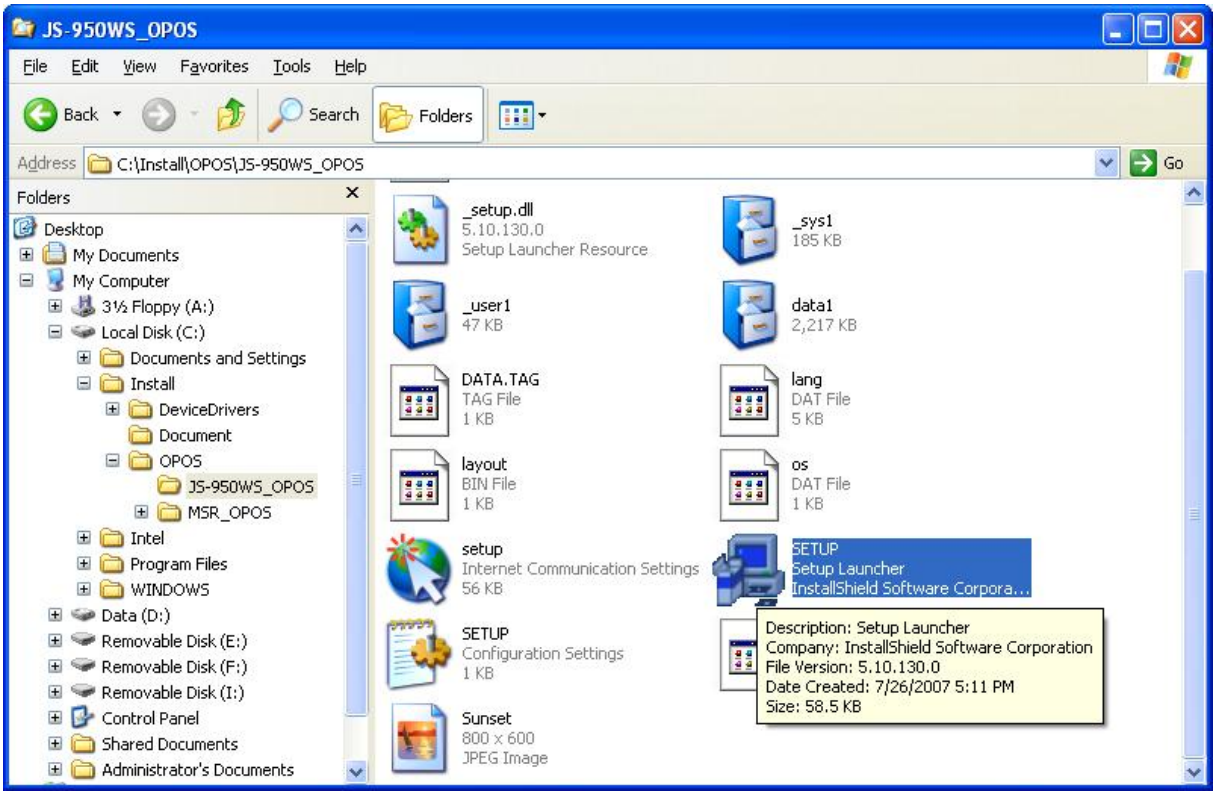
4.6.12 Complete Fingerprint OPOS Driver Validation

When finished, press the “X” mark at the top right corner of the window.

4.7 Install JS-950WS OPOS Drivers

IMPORTANT: Install **MSR (Virtual COM)** driver, **iButton (Virtual COM)** driver and **Fingerprint OPOS** driver before installing JS-950WS OPOS drivers.

4.7.1 Run "Setup.exe"



4.7.2 “Welcome” Screen

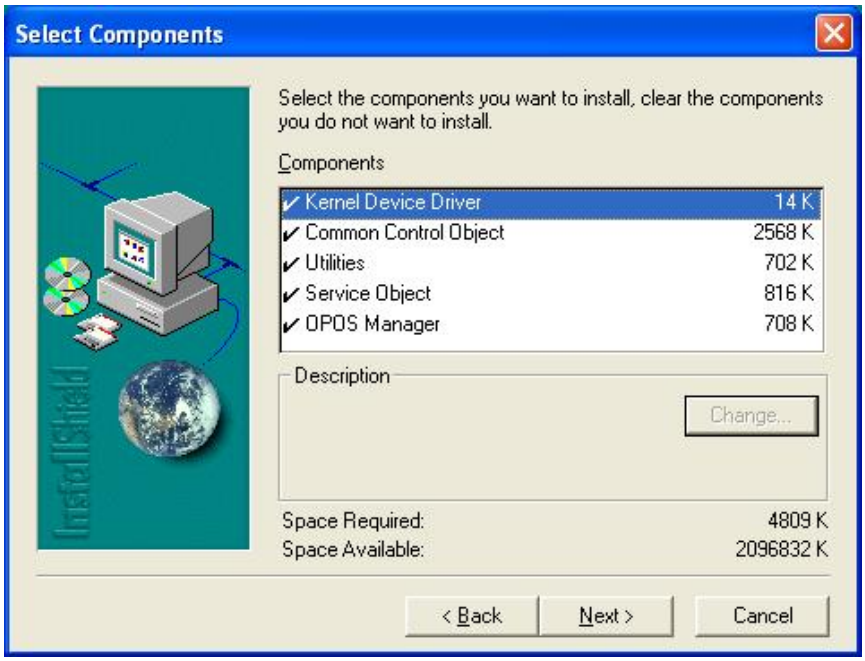
Read the information on the screen, press [Next] to proceed.

4.7.3 “Destination Folder” Screen

Press [Next].

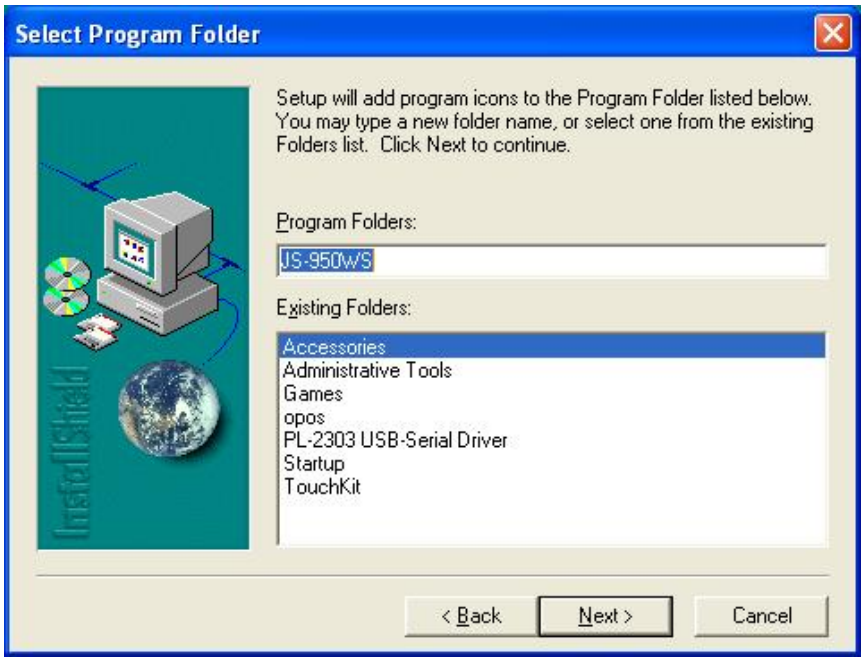
4.7.4 Select Components

Press [Next].



4.7.5 Program Folder

Press [Next].



4.7.6 Complete Installation for JS-950WS OPOS Driver

Select to reboot computer and press [Finish] to complete installation.

4.8 Validate JS-950WS OPOS Drivers

4.8.1 Plug in All Devices

Plug all the devices that require validation into appropriate jacks. A list of devices is provided below:

- ☐ Cash Drawer (DIN type, detected as the Cash Drawer 1)
- ☐ Cash Drawer (RJ-11 type, detected as the Cash Drawer 2)
- ☐ 2-Line Customer Display (Internal COM6, JS-950RD-010)
- ☐ 4-Line Customer Display (Internal COM6, JS-950RD-020)
- ☐ MSR (USB, JS-950MG-010)
- ☐ Fingerprint Sensor Unit (USB, JS-950FS-010)
- ☐ Dallas Key Reader Unit (USB, JS-950DP-010, displayed as “i-Button”)

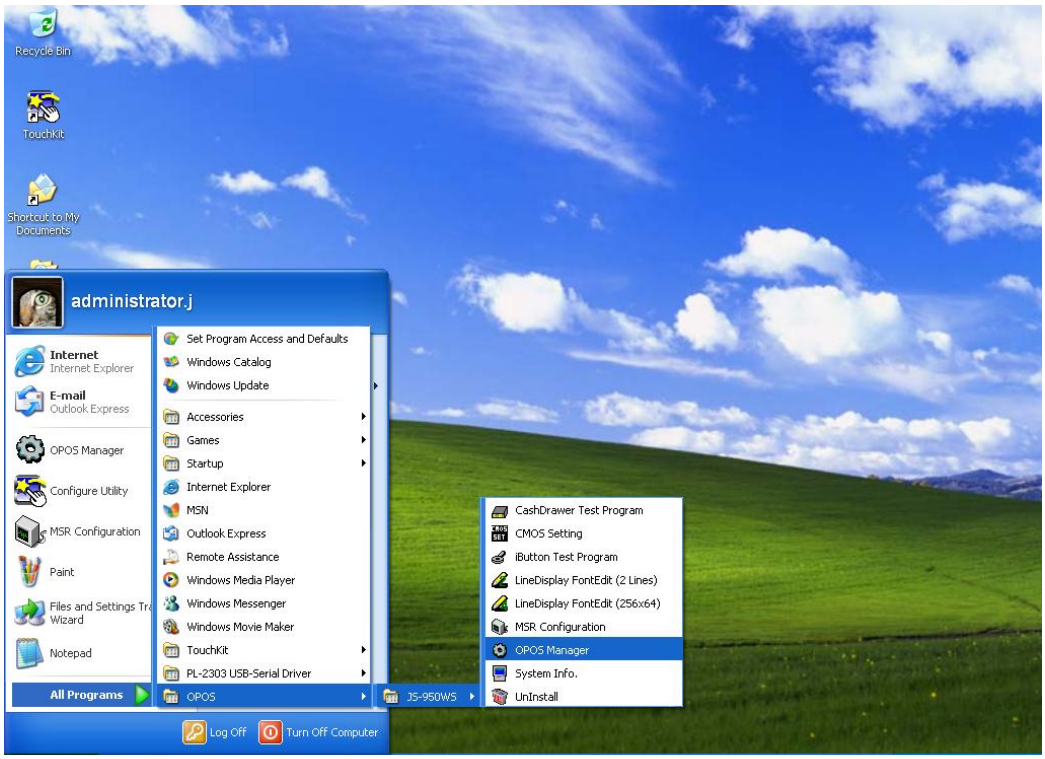
Note: All devices- other than USB type- **MUST** be plugged in **BEFORE POWER IS ON.**

4.8.2 Cash Drawer OPOS Drivers

Validate the Cash Drawer OPOS Drivers and Devices.

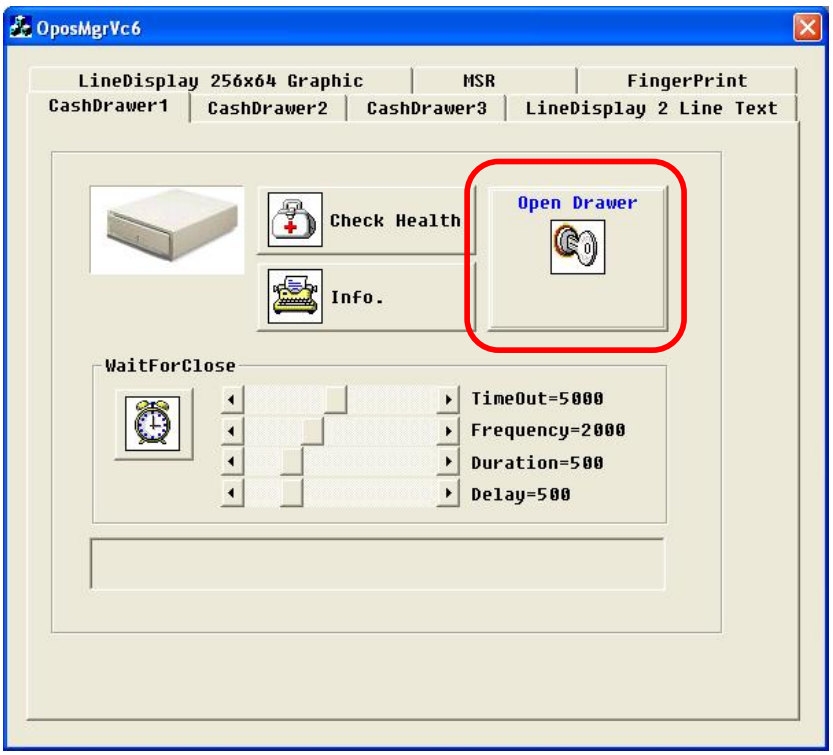
4.8.2.1 Run “OPOS Manager”

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [OPOS Manager]

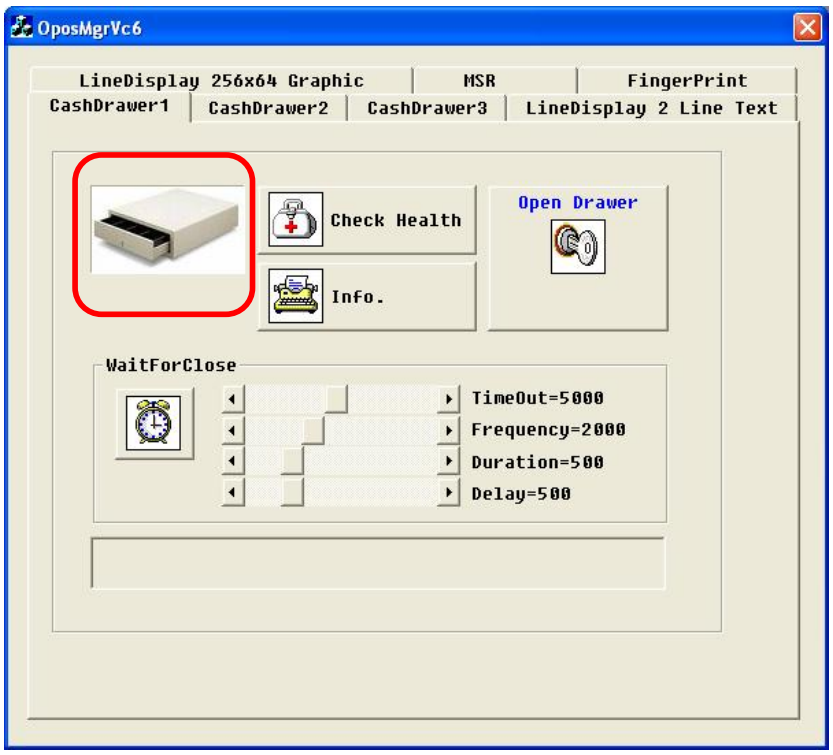


4.8.2.2 Open the Cash Drawer 1

Press [Open Drawer] button.

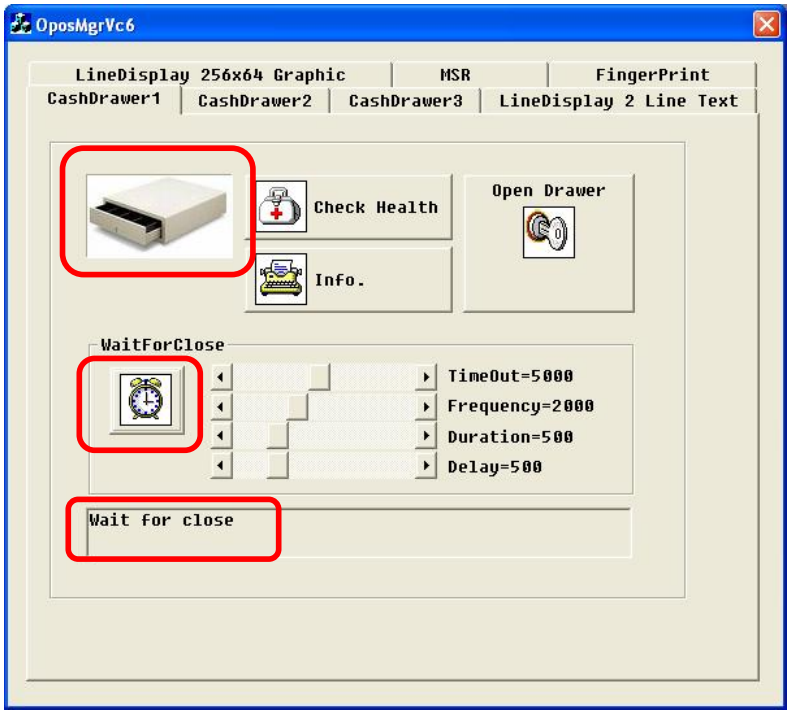


Confirm Cash Drawer 1 (PS/2) opened and the screen has changed to display open cash drawer.



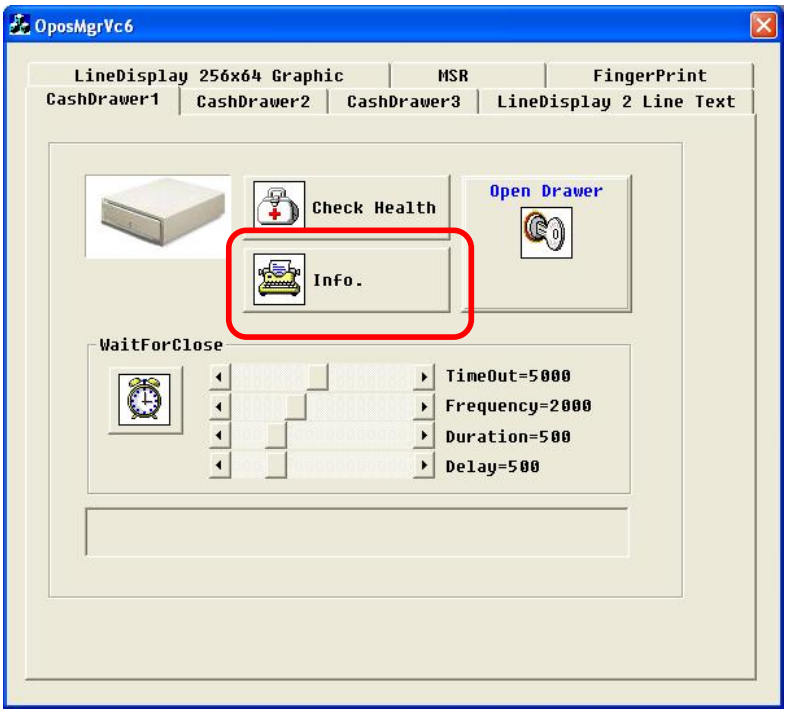
4.8.2.3 “WaitForClose” of Cash Drawer 1

While Cash Drawer 1 is open, press [WaitForClose] button. After waiting 5 seconds a beeping sound will be heard until the drawer is closed.



4.8.2.4 Cash Drawer 1 “OPOS Information”

Press [Info.] button to check the OPOS version.



The following screen appears containing the OPOS information for Cash Drawer 1.

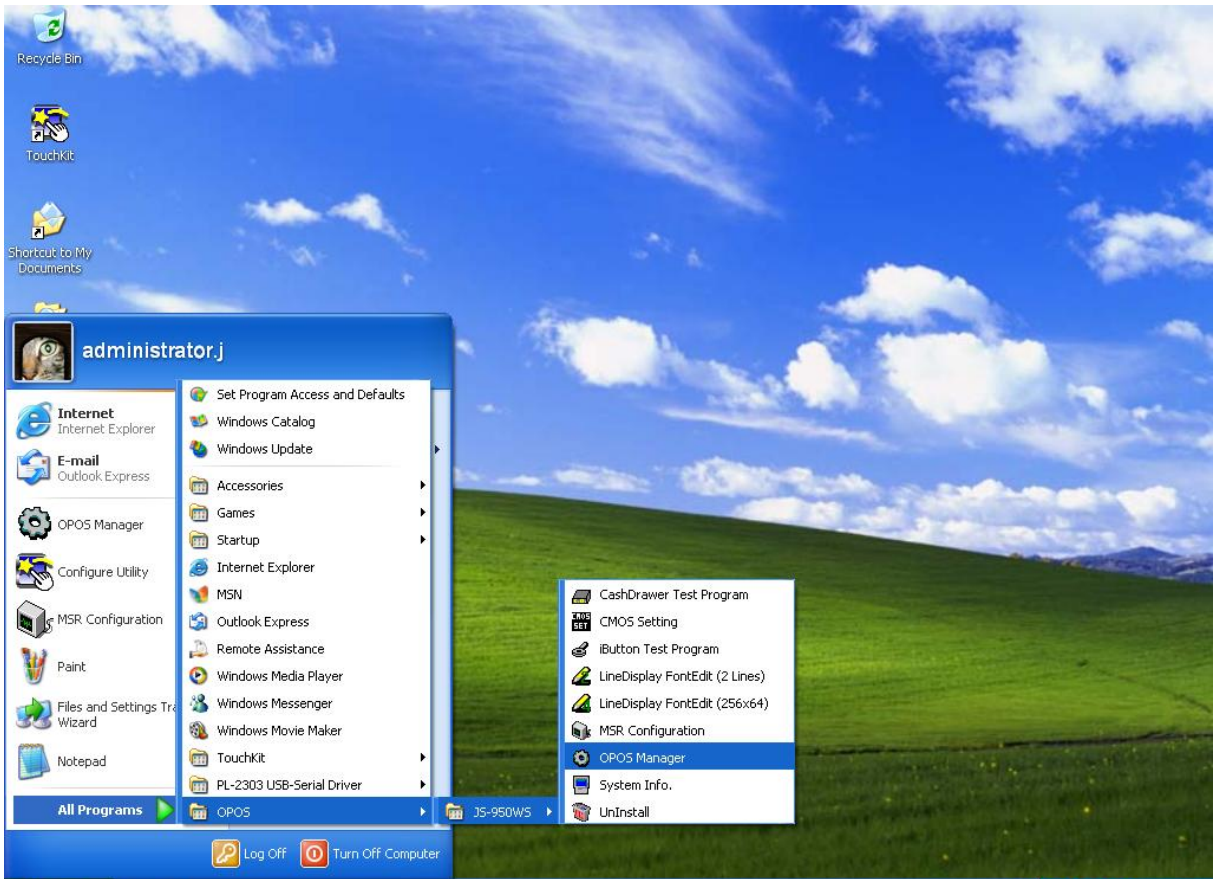
4.8.2.5 Cash Drawer 2

Repeat the above for Cash Drawer 2.

4.8.3 2-Line Customer Display OPOS Drivers

4.8.3.1 Run “OPOS Manager”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [OPOS Manager]

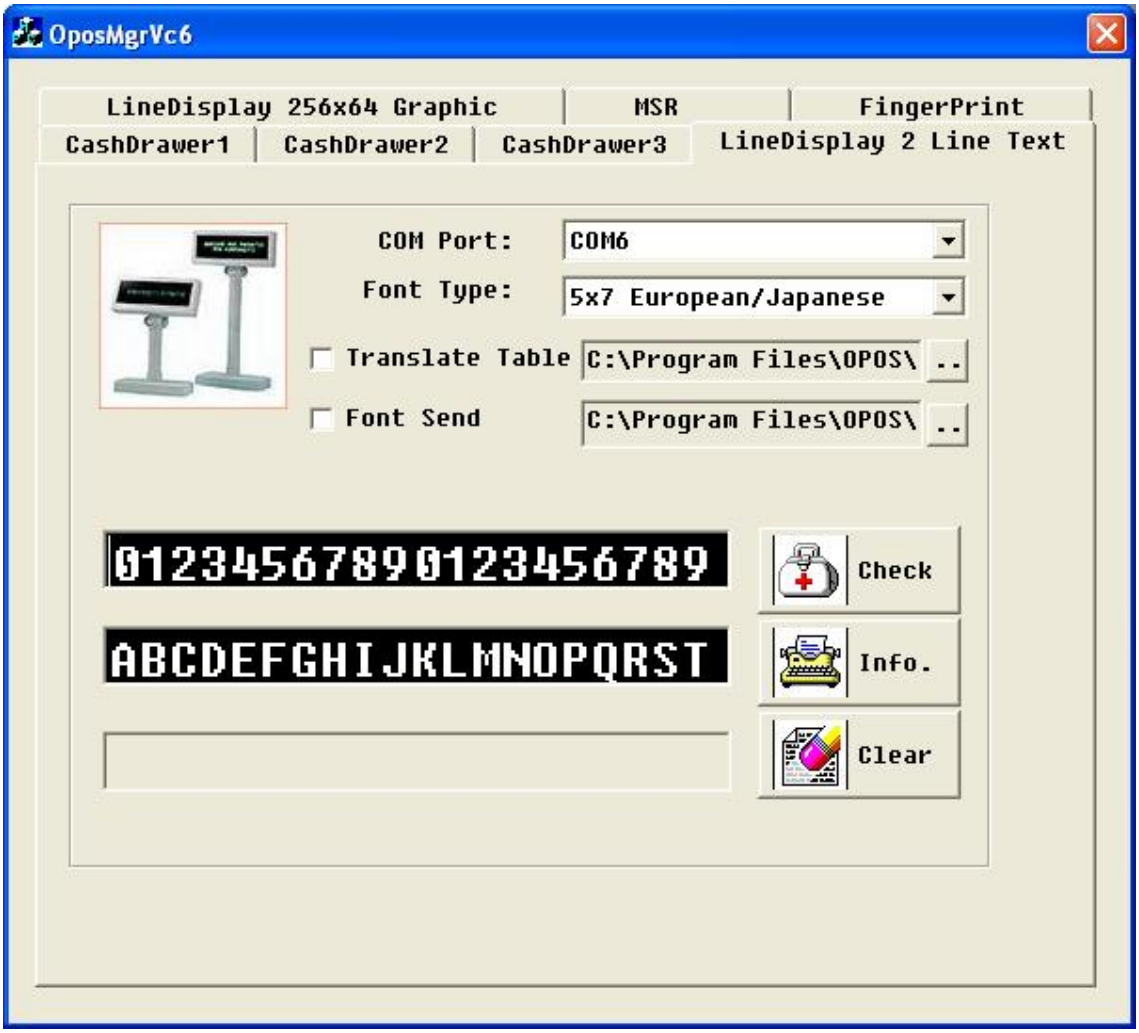


4.8.3.2 2-Line Customer Display

Select the “LineDisplay 2 Line Text” tab, confirm the characters are displayed on the 2-Line Customer Display Unit.

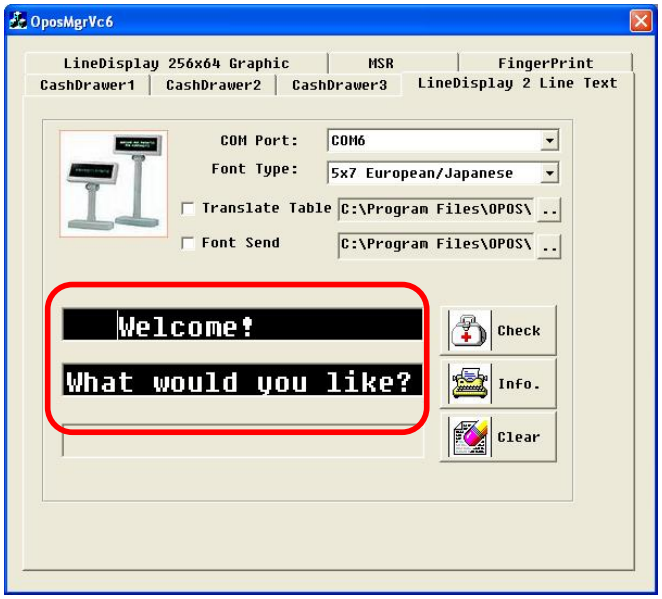
Note:

The settings for the following are saved in the Windows Registry: (1) COM port, (2) Font Type, (3) Translate Table, (4) Font Send. OPOS SO can read and recognize them when calling the OPOS “Open” method. The POS application does NOT need any changes to use these features.



4.8.3.3 Input Characters

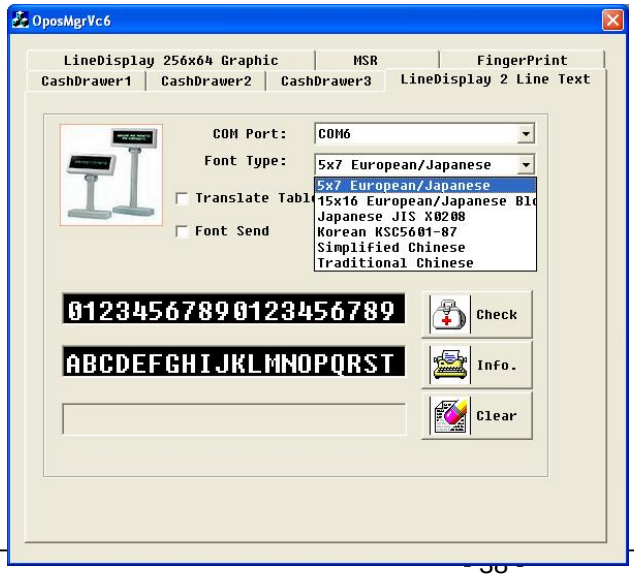
Input characters in the text box, and confirm the same characters are displayed on the 2-Line Customer Display.



4.8.3.4 Change Font Type

When the application uses optional font types select the “Font Type” using the “list box”. Examples of font types are listed below:

- ☐ 5x7 European/Japanese --- single byte character font
- ☐ 15x16 European/Japanese Bold --- single byte character font
- ☐ Japanese JIS X0208 --- Japanese multi-byte (double-byte) character font.
- ☐ Korean KSC5601-87 --- Korean multi-byte (double-byte) character font.
- ☐ Simplified Chinese --- Simplified Chinese multi-byte (double-byte) character font.
- ☐ Traditional Chinese --- Traditional Chinese multi-byte (double-byte) character font.

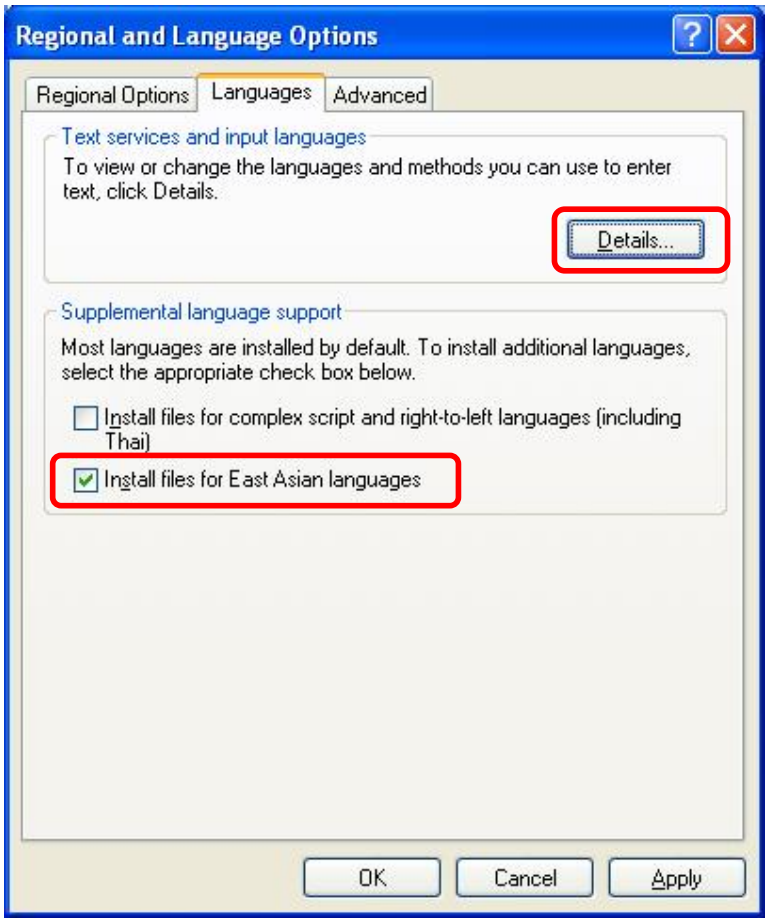


4.8.3.5 Input East Asian Languages

If you would like to input East Asian languages, please follow instructions below to change Windows setting.

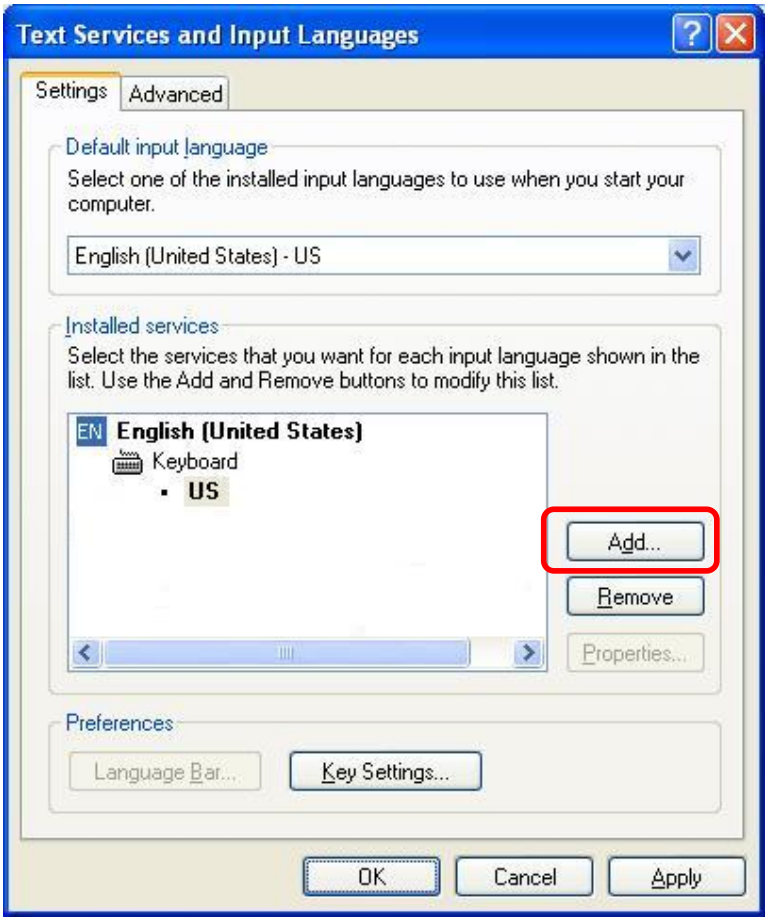
Press [Start] ---> [Control Panel] ---> [Date, Time, Language, and Regional Options] ---> [Regional and Language Options], and then select “Languages” tab.

Check the “Install files for East Asian languages”. Follow the Windows displayed it instructions.

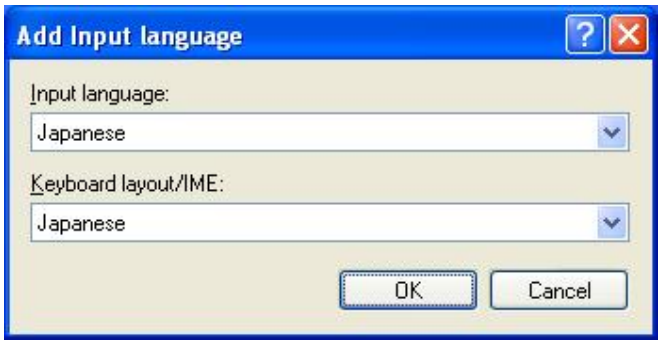


Press [Details...] button to proceed.

Press [Add…].

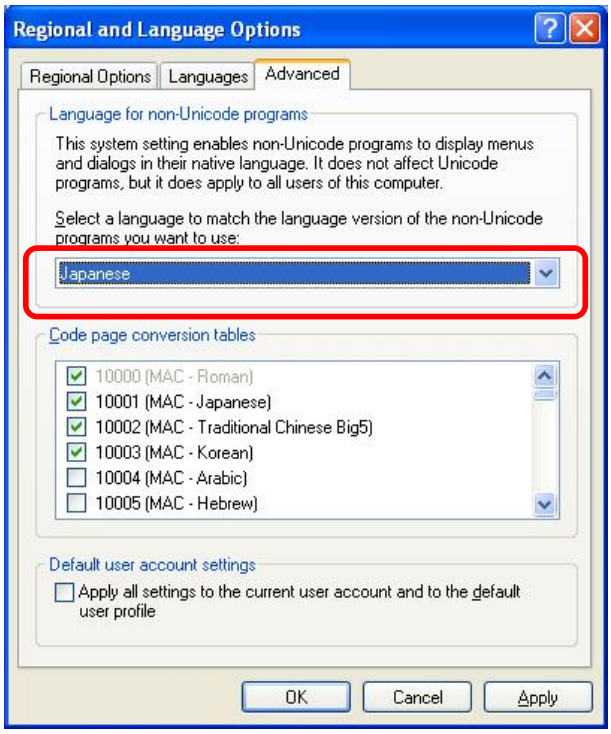


Select the language you'd like to use.



For example, Japanese language has been added. Press [OK].

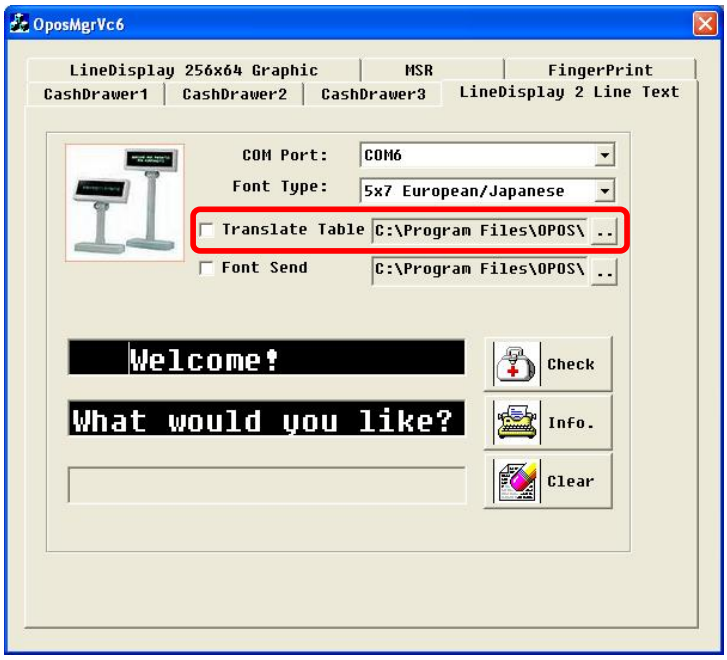
Select “Advanced” tab and select your language as the “Language for non-Unicode program”. If Windows requests “reboot”, please reboot.



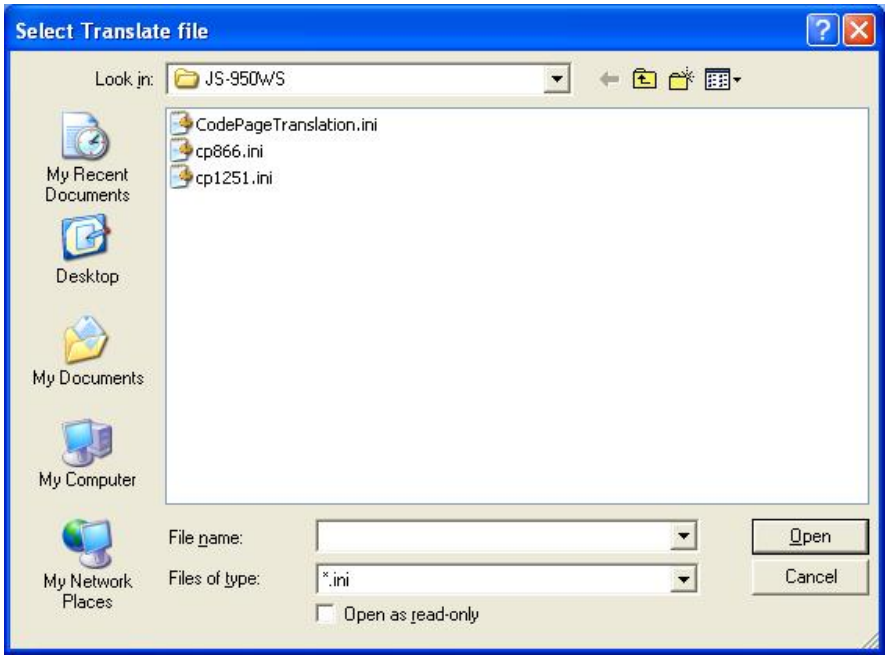
After reboot, you can input East Asian languages into OposMgrVc6 using Windows IME (Input Method Editor).

4.8.3.6 Translation of Code Page

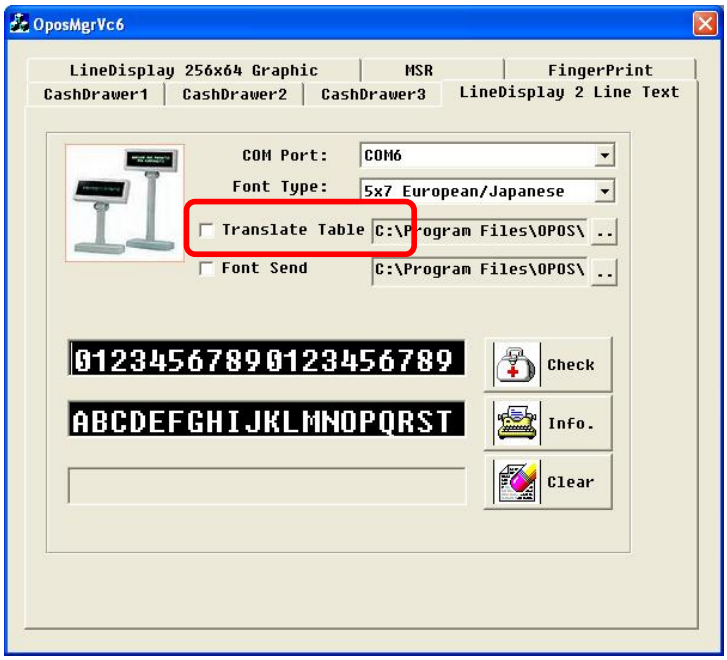
Press […] button when the application uses the code page translation feature.



Select the *.ini file you'd like.



Check “Translate Table”.



Example;

The new file “Test.ini” was created and its content is displayed below.

[translation table]	; *[section]*
AplChar0=0	; Key = Value
AplChar1=1	
...	
AplChar35=35	
AplChar36=248	**; Changed only this line.**
AplChar37=37	
…	
AplChar255=255	

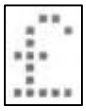
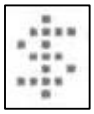
Note:

[section]: The section name must be “translation table”.

[key]: “key” is a character code used by an Application Program. It must be “AplChar” with a numeric character “XXX” from 0 to 255 in sequential order.

[value]: “value” is a character code defined in the 2-Line Customer Display. It must be a numeric character “YYY” from 0 to 255.

For example, when an application program sends the code “36 (0x24)” the Customer Display shows

 instead of  .

If an application program continues sending the codes “52 (0x34)”, 46 (0x2E)”, 57 (0x39)”, 57 (0x39)” the Customer Display shows as below:

Enable translation: 

Disable translation: 

The 2-Line Customer Display has two types of font tables:

(1) Alphabetic font table

Original 170FR Alphabets TableOfCodePage_20070111.xls

D7 D6 D5 D4		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
		0	0	0	1	1	1	1	1	0	0	0	0	1	1	1	1
		0	1	1	0	0	1	1	1	0	0	1	1	0	0	1	1
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0000	0			SP													
0001	1	DIM1	DC1														
0010	2	DIM2	DC2														
0011	3	DIM3	DC3														
0100	4	DIM4	DC4														
0101	5		DC5														
0110	6		CM1														
0111	7		CM2														
1000	8	BS	CM3														
1001	9	HT															
1010	A	LF	SB														
1011	B		ESC														
1100	C	CLR															
1101	D	CR															
1110	E																
1111	F																

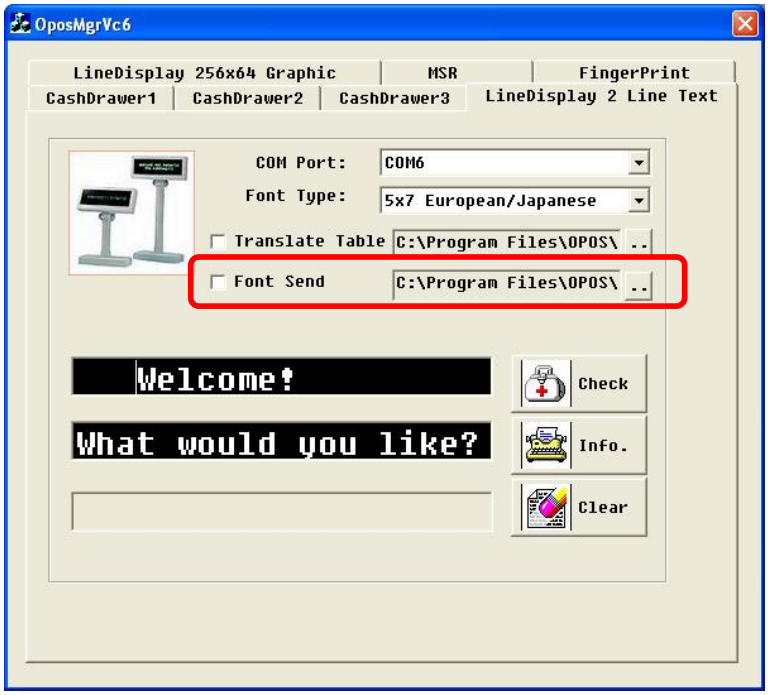
(2) Japanese font table

	D7	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	D6	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
	D5	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
	D4	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
D3 D2 D1 D0		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0 0 0 0	0			SP	0	@	P	`	p	ｱ	ﾀ	SP	ー	ﾀﾞ	ﾐ	■	ﾟ
0 0 0 1	1	DIM1	DC1	!	1	A	Q	a	q	ｲ	ﾁ	｡	ｱ	ﾁﾞ	ﾑ	■	ﾀ
0 0 1 0	2	DIM2	DC2	"	2	B	R	b	r	ｳ	ﾂ	｢	ｲ	ﾂﾞ	ﾒ	■	ﾄ
0 0 1 1	3	DIM3	DC3	#	3	C	S	c	s	ｴ	ﾃ	｣	ｳ	ﾃﾞ	ﾓ	■	ﾅ
0 1 0 0	4	DIM4	DC4	$	4	D	T	d	t	ｵ	ﾄ	､	ｴ	ﾄﾞ	ﾔ	■	ﾆ
0 1 0 1	5		DC5	%	5	E	U	e	u	ｶ	ﾅ	･	ｵ	ﾅﾞ	ﾕ	■	ﾇ
0 1 1 0	6		CM1	&	6	F	V	f	v	ｷ	ﾆ	ｦ	ｶ	ﾆﾞ	ﾖ	■	ﾈ
0 1 1 1	7		CM2	'	7	G	W	g	w	ｸ	ﾇ	ｧ	ｷ	ﾇﾞ	ﾗ	■	ﾉ
1 0 0 0	8	BS	CM3	(	8	H	X	h	x	ｹ	ﾈ	ｨ	ｸ	ﾈﾞ	ﾘ	■	ﾊ
1 0 0 1	9	HT		)	9	I	Y	i	y	ｺ	ﾉ	ｩ	ｹ	ﾉﾞ	ﾙ	■	ﾋ
1 0 1 0	A	LF	SB	*	:	J	Z	j	z	ｻ	ﾊ	ｪ	ｺ	ﾊﾞ	ﾚ	■	ﾌ
1 0 1 1	B		ESC	+	;	K	[	k	{	ｼ	ﾋ	ｫ	ｻ	ﾋﾞ	ﾛ	■	ﾍ
1 1 0 0	C	CLR		,	<	L	¥	l	|	ｽ	ﾌ	ｬ	ｼ	ﾌﾞ	ﾜ	■	ﾎ
1 1 0 1	D	CR		-	=	M	]	m	}	ｾ	ﾍ	ｭ	ｽ	ﾍﾞ	ﾝ	■	ﾏ
1 1 1 0	E			.	>	N	^	n	~	ｿ	ﾎ	ｮ	ｾ	ﾎﾞ	ﾞ	■	ﾐ
1 1 1 1	F			/	?	O	_	o	■	ﾀ	ﾏ	ｯ	ｿ	ﾏﾞ	ﾟ	■	ﾑ

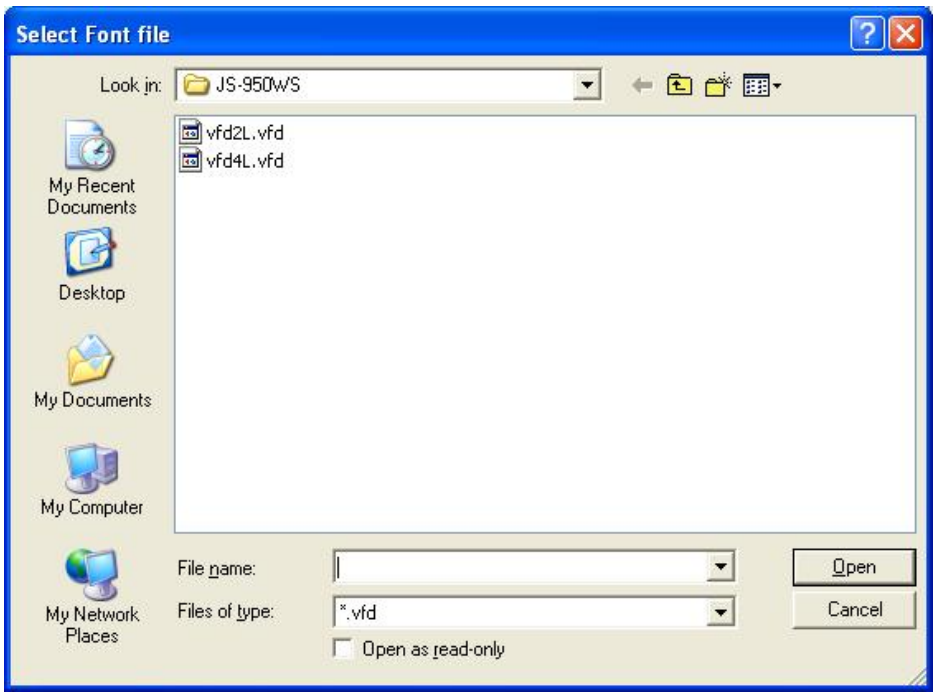
SP : SPACE

4.8.3.7 Font Send

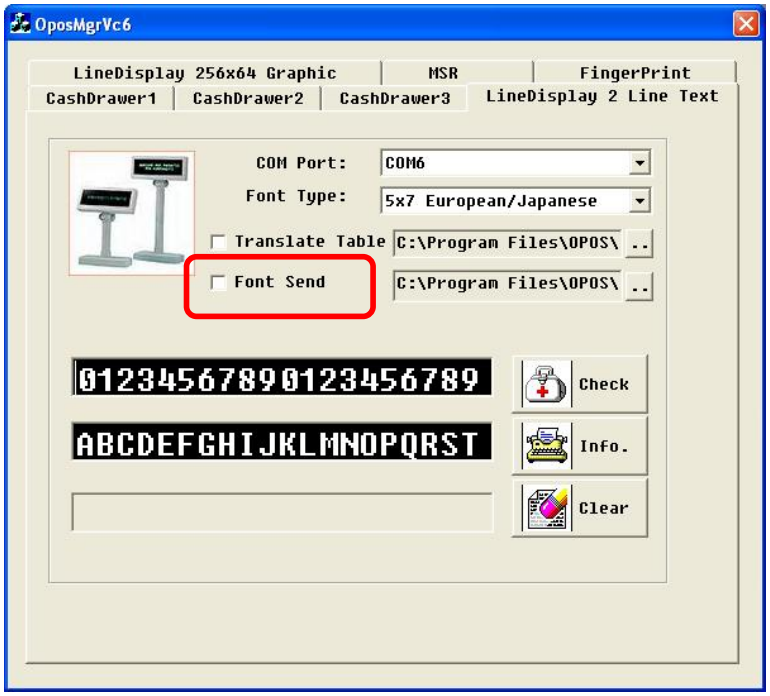
Press […] button when the application uses the Font Send feature.



Select vfd2L.vfd file.



Check “Font Send”.



For example;

The contents of file “2vfd2L.vfd” are shown below. (5X7 Font)

instead of AplChar65 (A).

instead of AplChar68 (D).

When characters “ABCDEF” are input in the text box the characters are displayed on the 2-Line Customer Display as:

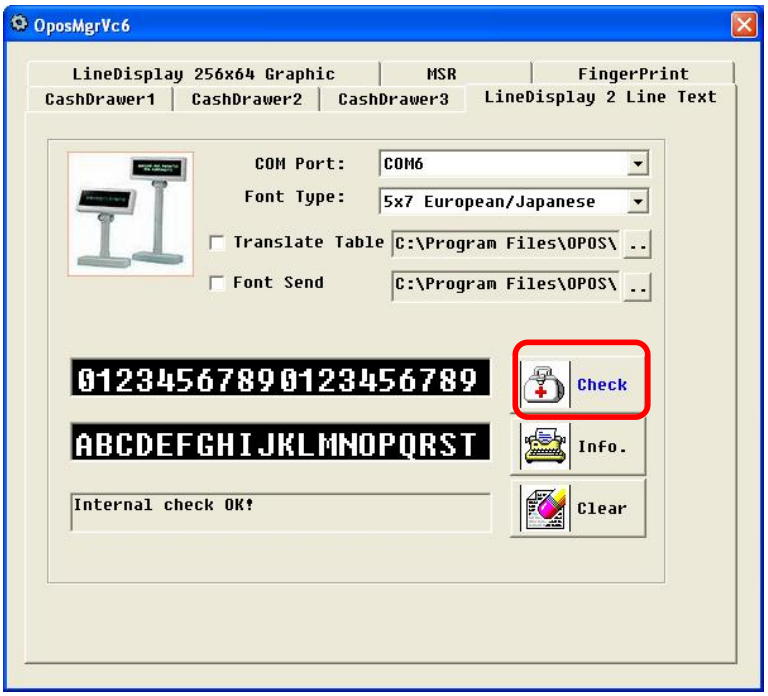
Enable Font Send: 

Disable Font Send: 

4.8.3.8 Check Health of 2-Line Customer Display

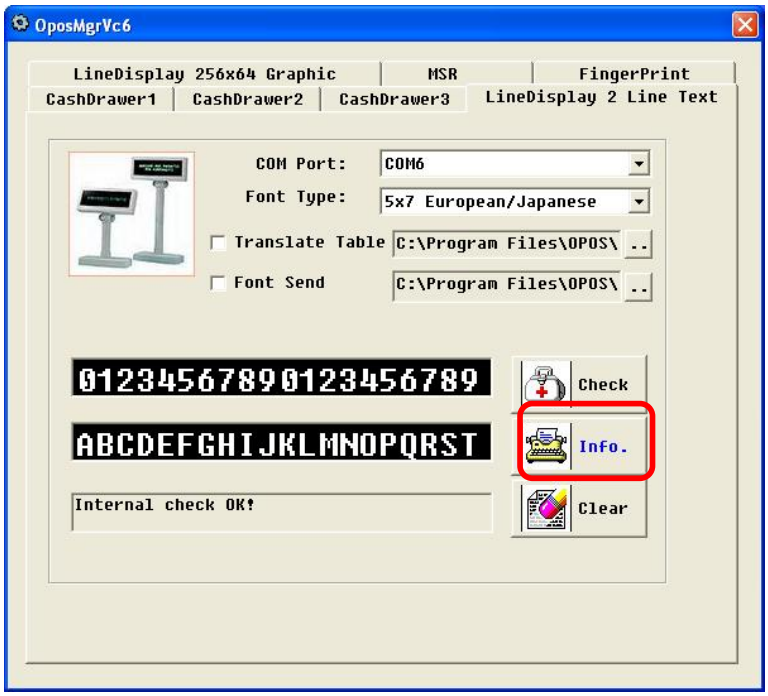
Press [Check] button to check the health. The text box will show “Internal check OK!”

“CheckHealth-Internal” is displayed on the 2-Line Customer Display.



4.8.3.9 Check “OPOS Information” of 2-Line Customer Display

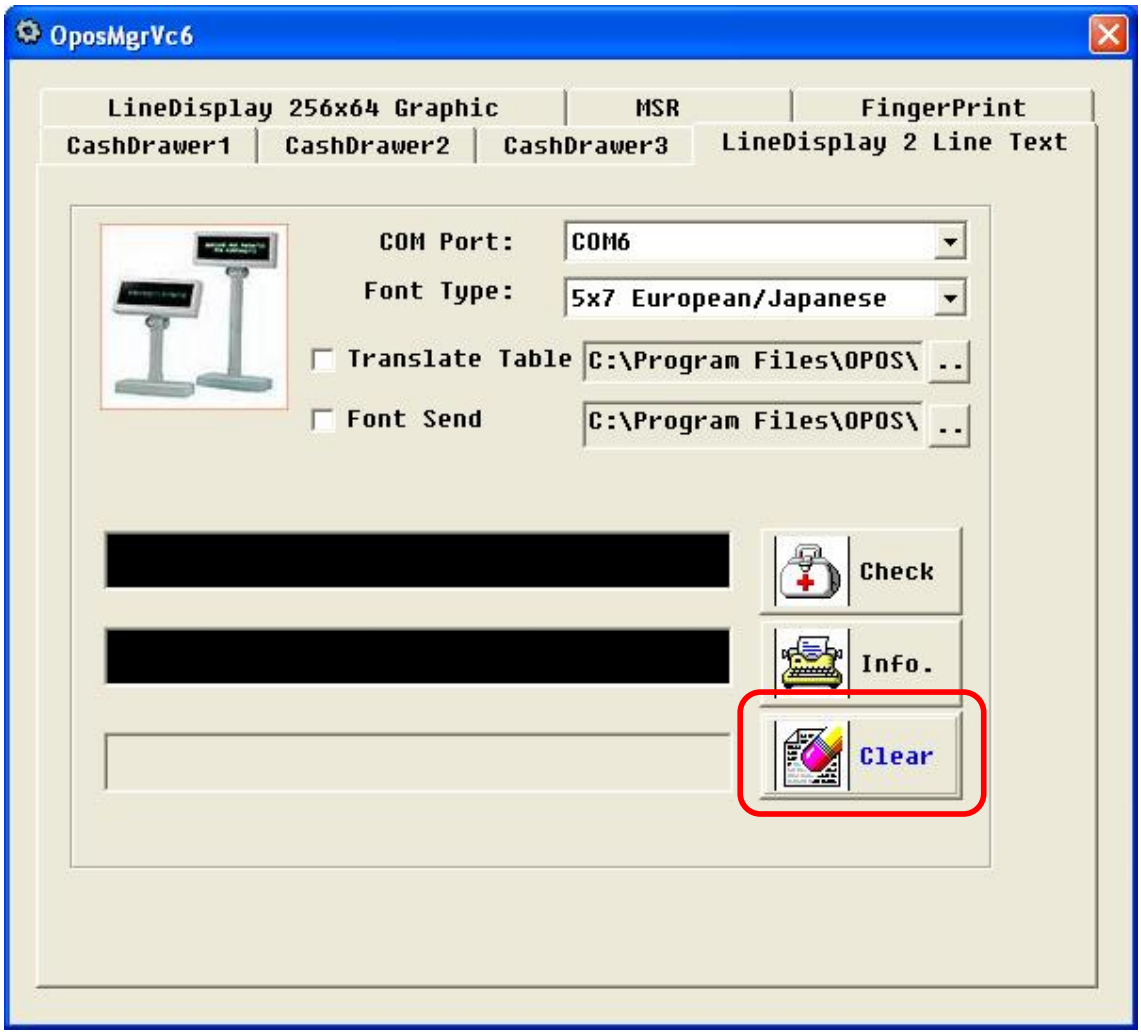
Press [Info.] button to check the OPOS Information for the 2- Line Customer Display.



The following appears containing the OPOS Information of 2-Line Customer Display.

4.8.3.10 Clear Characters

Press [Clear] button to clear characters for the 2-Line Customer Display.

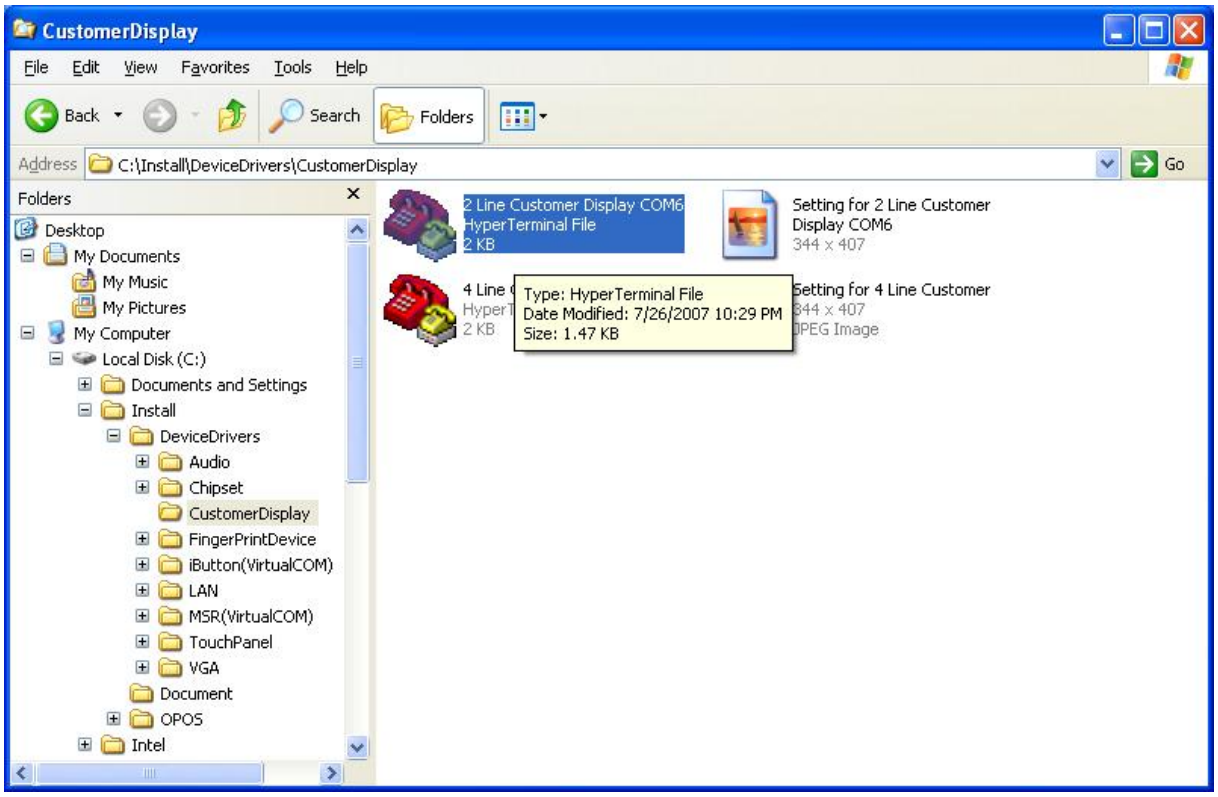


4.8.4 Troubleshooting the 2-Line Customer Display

4.8.4.1 Plug in USB Keyboard

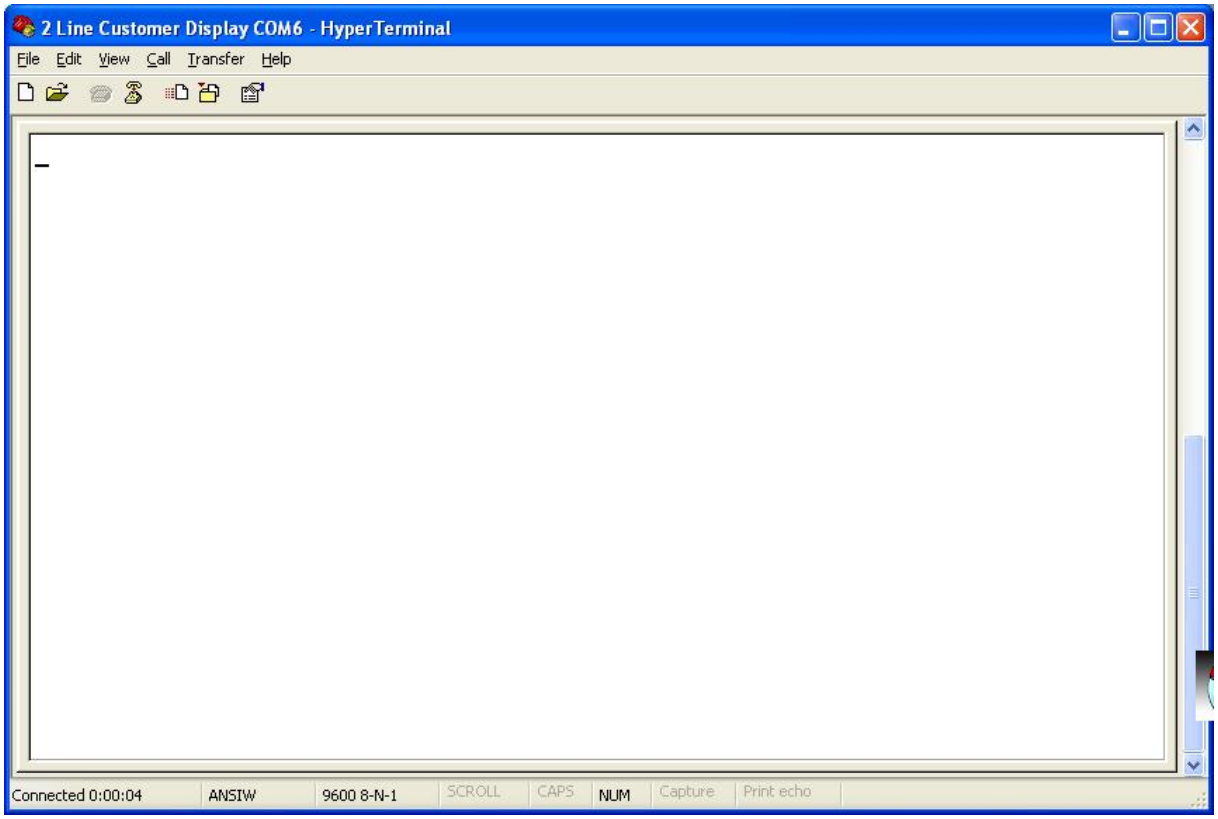
Plug the USB Keyboard into a USB port in order to send character data and confirm the 2-Line Customer Display is connected.

4.8.4.2 Run “2-Line Customer Display COM6.ht”



4.8.4.3 Confirm Characters on 2-Line Customer Display

Using the keyboard enter characters in the following screen, confirm the same characters appear on the 2-Line Customer Display.



Note:

The above screen does not show the characters that were entered.

4.8.4.4 2-Line Customer Display Settings

If the 2-Line Customer Display fails to display, check the setting of COM6. The default setting is shown in the following screen.

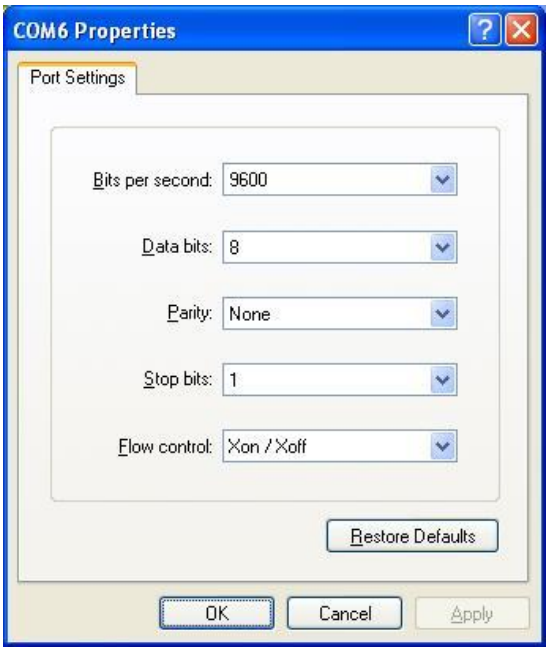
Note:

The following screen appears as below in the “Hyper Terminal”:

“Call” ---> “Disconnect”.

“File” ---> “Properties” ---> confirm “Connect using:” is set to “COM6”.

Press [Configure], the following screen will appear.

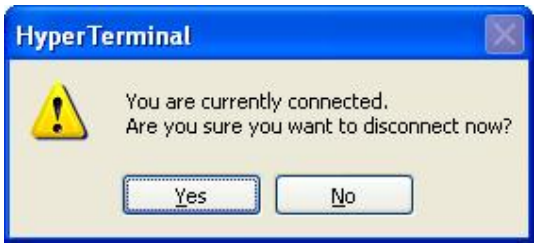


Note:

COM 6 is assigned for both 2-Line and 4-Line Customer Display, which means that both cannot be used both at the same time.

4.8.4.5 Complete 2-Line Customer Display Validation

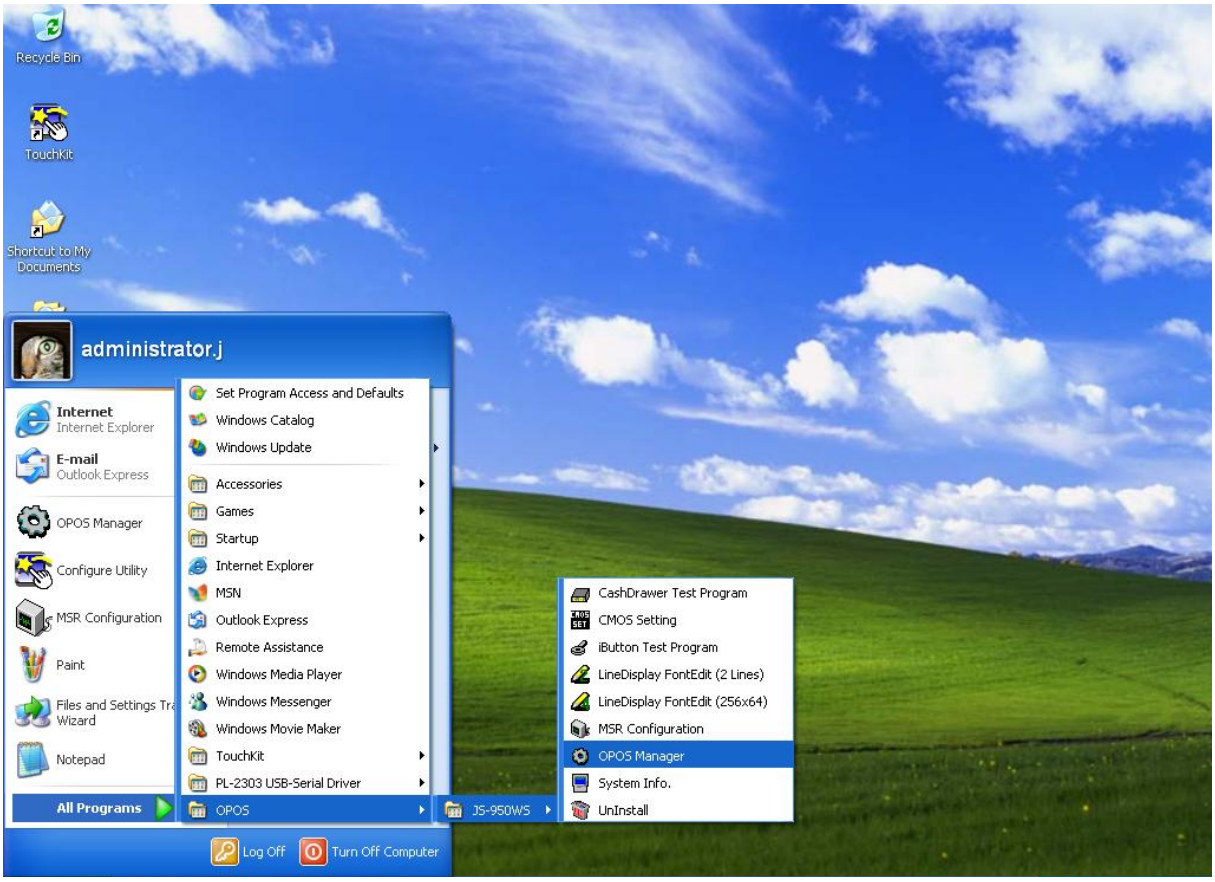
When complete, press the “X” at the top right corner of the “Hyper Terminal”. The following screen appears, press [Yes] to disconnect.



4.8.5 4-Line Customer Display OPOS Drivers

4.8.5.1 Run “OPOS Manager”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [OPOS Manager]



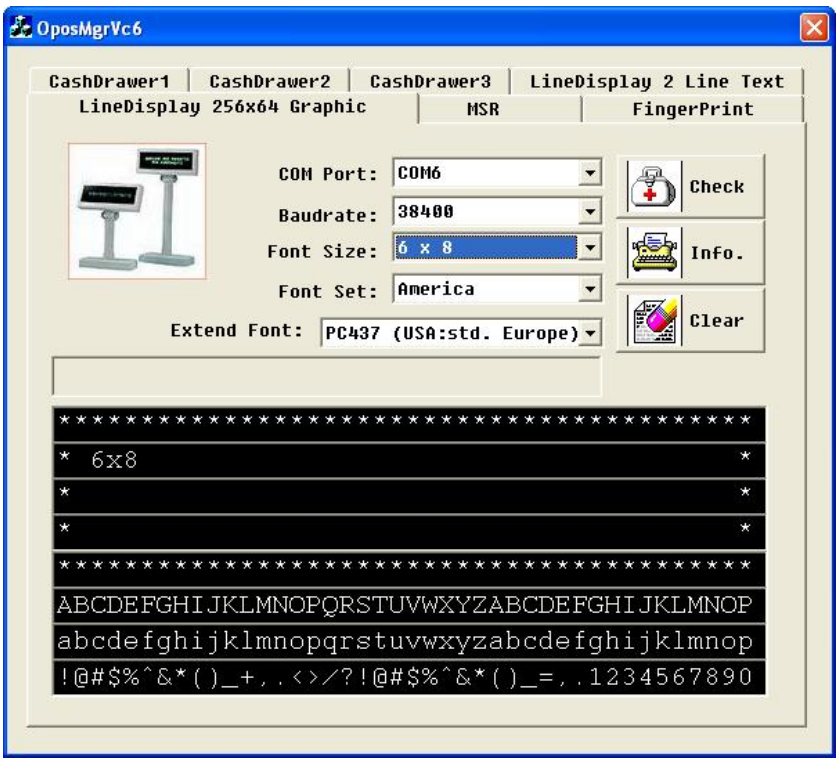
4.8.5.2 4-Line Customer Display

Select the “LineDisplay 256x64 Graphic” tab, confirm the characters are displayed on the 4-Line Customer Display Unit.

Note:

The following settings are saved into the Windows Registry: (1) COM port, (2) Baud rate, (3) Font Size, (4) Font Set, (5) Extend Font.

OPOS SO can read and recognize them when calling the OPOS “Open” method; a POS application does NOT need any changes to use these features.



4.8.5.3 Change Font Size

When the application uses optional font sizes select the “Font Size” using the “list box”. Below is a list of font options:

- ☐ 6x8 --- 42 digits, 8 lines can be displayed.
- ☐ 8x16 --- 32 digits, 4 lines can be displayed.
- ☐ 16x16 --- 16 digits, 4 lines can be displayed. This is useful for multi-byte (double- byte) .
- ☐ 16x32 --- 16 digits, 2 lines can be displayed.

4.8.5.4 Change Font Set

When application uses optional font set, use the font sets listed below:

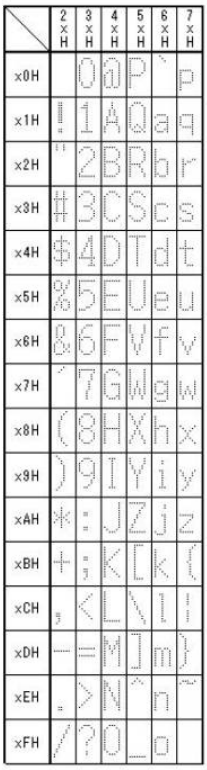
(1) For 6x8, 8x16, and 16x32 Font Size.

This list is available for the code set from 32 (0x20) to 127 (0x7F).

- ☐ [n=00H] America
- ☐ [n=01H] France
- ☐ [n=02H] Germany
- ☐ [n=03H] England
- ☐ [n=04H] Denmark1
- ☐ [n=05H] Sweden
- ☐ [n=06H] Italy
- ☐ [n=07H] Spain1
- ☐ [n=08H] Japan
- ☐ [n=09H] Norway
- ☐ [n=0AH] Denmark2
- ☐ [n=0BH] Spain2
- ☐ [n=0CH] Latin America
- ☐ [n=0DH] Korean

NOTE: “n” refers to the ID number. See diagram below.

The following diagram is a common Font Set from 32 (0x20) to 127 (0x7F) in case of “8x16” Font Size.



The following diagram is a Font Set Table. The “n” refers to the ID number.

n	00H America	01H France	02H Germany	03H England	04H Denmark1	05H Sweden	06H Italy	07H Spain1	08H Japan	09H Norway	0AH Denmark2	0BH Spain2	0CH Latin America	0DH Korean
23H	#	#	#	£	#	#	#	₧	#	#	#	#	#	#
24H	$	$	$	$	$	¤	$	$	$	¤	$	$	$	$
40H	@	à	§	@	@	É	@	@	@	É	É	à	à	@
5BH	[	°	Ä	[	Æ	Ä	°	¡	[	Æ	Æ	¡	¡	[
5CH	\	ç	Ö	\	Ø	Ö	\	Ñ	¥	Ø	Ø	Ñ	Ñ	₩
5DH	]	§	Ü	]	Å	Å	é	¿	]	Å	Å	¿	¿	]
5EH	^	^	^	^	^	Ü	^	^	^	Ü	Ü	è	è	^
60H	`	`	`	`	`	è	ü	`	`	è	è	`	ü	`
7BH	{	é	ä	{	æ	ä	à	¨	{	æ	æ	¡	¡	{
7CH	|	ù	ö	|	ø	ö	ò	ñ	|	ø	ø	ñ	ñ	|
7DH	}	è	ü	}	å	å	è	}	}	å	å	ó	ó	}
7EH	~	¨	ß	~	~	ü	ì	~	~	ü	ü	ú	ú	~

(2) For 16x16 Font Size

The below can be selected as Font Set. This is available for the multi-byte (double-byte) code set.

- ☐ Japanese (JIS X0208)
- ☐ Korean (KSC5601-87)
- ☐ Simplified Chinese (GB2312-80)
- ☐ Traditional Chinese (Big-5)

Refer to the section 4.8.3.5 Change Windows setting to input East Asian languages for more details.

4.8.5.5 Extended Font

If the application uses optional extended font, select from the “Extended Font” set listed below.
Extended font means that the code set is between 128 (0x80) to 255 (0xFF).

- ☐ [n=0] PC437 (USA: std. Europe)
- ☐ [n=1] Katakana
- ☐ [n=2] PC850 (Multilingual)
- ☐ [n=3] PC860 (Portuguese)
- ☐ [n=4] PC863 (Canadian-French)
- ☐ [n=5] PC865 (Nordic)
- ☐ [n=16] WPC1252
- ☐ [n=17] PC866 (Cyrillic #2)
- ☐ [n=18] PC852 (Latin2)
- ☐ [n=19] PC858
- ☐ [n=255] User Table

Note (1): “n” refers to the ID number. See diagrams below.
Note (2): “User Table [n=255]” can be used and defined by “LineDisplay Font Editor (256x64)”.
Note (3): Cannot input the extended font code into the “OposMgrVc6”.
If you’d like to input extended font codes into “OposMgrVc6”, please copy the extended font codes from the text file to “OposMgrVc6”. Since the text box for “OposMgrVc6” was specially developed for all purposes of JS-950WS, it is not available to do the [Alt] + [numeric keys].

The following diagrams are Font Set Tables. “n” refers to the ID number.

n=0 **PC437 (USA:std. Europe)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	░	└	╨	α	≡
x1H	ü	æ	í	▒	┴	╤	ß	±
x2H	é	Æ	ó	▓	┬	╥	Γ	≥
x3H	â	ô	ú	│	├	╙	π	≤
x4H	ä	ö	ñ	┤	─	╘	Σ	⌠
x5H	à	ò	Ñ	╡	┼	╒	σ	⌡
x6H	å	û	ª	╢	╞	╓	µ	÷
x7H	ç	ù	º	╖	╟	╫	τ	≈
x8H	ê	ÿ	¿	╕	╚	╪	Φ	°
x9H	ë	Ö	⌐	╣	╔	┘	Θ	∙
xAH	è	Ü	¬	║	╩	┌	Ω	·
xBH	ï	¢	½	╗	╦	█	δ	√
xCH	î	¥	¼	╝	╠	▄	∞	ⁿ
xDH	ì	₧	¡	╜	═	▌	φ	²
xEH	Ä	ƒ	«	╛	╬	▐	ε	■
xFH	Å	á	»	┐	╧	▀	∩	

n=1 **Katakana**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	▁	！	｠	ー	タ	ミ	ロ	日
x1H	▂	｜	｡	ア	チ	ム	▒	月
x2H	▃	▒	｢	イ	ツ	メ	▓	火
x3H	▄	▓	｣	ウ	テ	モ	0	水
x4H	▅	▔	､	エ	ト	ヤ	▉	木
x5H	▆	▕	･	オ	ナ	ユ	◆	金
x6H	▇	▖	ｦ	カ	ニ	ヨ	◆	土
x7H	█	→	ｧ	キ	ヌ	ラ	◆	年
x8H	▉	←	ｨ	ク	ネ	リ	▶	円
x9H	▊	↑	ｩ	ケ	ノ	ル	◀	分
xAH	▋	↓	ｪ	コ	ハ	レ	▲	入
xBH	▌	／	ｫ	サ	ヒ	ロ	▼	大
xCH	▍	：	ｬ	シ	フ	ワ	＜	中
xDH	▎	；	ｭ	ス	ヘ	ン	＞	小
xEH	▏	＜	ｮ	セ	ホ	゛	½	王
xFH	▐	＞	ｯ	ソ	マ	゜	¼	

n=2 **PC850 (Multilingual)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	░	└	ð	Ó	-
x1H	ü	æ	í	▒	┴	Ð	ß	±
x2H	é	Æ	ó	▓	┬	Ê	Ô	‗
x3H	â	ô	ú	│	├	Ë	Ò	¾
x4H	ä	ö	ñ	┤	─	È	õ	¶
x5H	à	ò	Ñ	Á	┼	ı	Õ	§
x6H	å	û	ª	Â	ã	Í	µ	÷
x7H	ç	ù	º	À	Ã	Î	þ	¸
x8H	ê	ÿ	¿	©	╚	Ï	Þ	°
x9H	ë	Ö	®	╣	╔	┘	Ú	¨
xAH	è	Ü	¬	║	╩	┌	Û	·
xBH	ï	ø	½	╗	╦	█	Ù	¹
xCH	î	£	¼	╝	╠	▄	ý	³
xDH	ì	Ø	¡	¢	═	╬	Ý	²
xEH	Ä	×	«	¥	╧	╨	¯	■
xFH	Å	ƒ	»	╕	╤	▀	´	

n=3 **PC860 (Portuguese)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	░	└	╨	α	≡
x1H	ü	À	í	▒	┴	╥	ß	±
x2H	é	È	ó	▓	┬	╙	Γ	≥
x3H	â	ô	ú	│	├	╘	π	≤
x4H	ã	õ	ñ	┤	─	╒	Σ	⌠
x5H	à	Õ	Ñ	╡	┼	╓	σ	⌡
x6H	Á	Ú	ª	╢	╞	╫	µ	÷
x7H	ê	ù	º	╖	╟	╪	τ	≈
x8H	ê	ì	¿	╕	╚	┘	Φ	°
x9H	Ê	Ò	Ò	╣	╔	┌	Θ	∙
xAH	è	Ù	¬	║	╩	╓	Ω	·
xBH	ì	¢	½	╗	╦	╫	δ	√
xCH	Ô	£	¼	╝	╠	╪	∞	ⁿ
xDH	ì	Ù	¡	╜	═	╬	φ	²
xEH	À	₧	«	╛	╧	╨	ε	■
xFH	Ã	Ó	»	╕	╤	▀	∩	

n=4 **PC863 (Canadian-French)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	!	▒	└	╨	α	≡
x1H	ü	È	"	▒	┴	╤	ß	±
x2H	â	Ê	ô	▒	┬	╥	Γ	≥
x3H	à	ô	û	│	├	╙	π	≤
x4H	¶	Ë	'	┤	─	╘	Σ	⌠
x5H	§	Î	⌴	╡	┼	╒	σ	⌡
x6H	Ⓐ	ù	³	╢	╞	╓	µ	÷
x7H	ⓒ	û	¨	╖	╟	╫	τ	≈
x8H	ⓑ	Ø	¹	╕	╚	╪	Φ	°
x9H	ⓔ	Ô	¬	╣	╔	┘	Θ	∙
xAH	ⓐ	Ù	¬	║	╩	┌	Ω	·
xBH	ⓘ	¢	½	╗	╦	▓	δ	√
xCH	ⓘ	£	¼	╝	╠	═	∞	ⁿ
xDH	ⓘ	¥	¾	╜	╬	▒	φ	²
xEH	ⓐ	₧	«	╛	╧	▐	ε	■
xFH	ⓢ	ƒ	»	┐	╨	▒	∩	

n=5 **PC865 (Nordic)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	▒	└	╨	α	≡
x1H	ü	æ	í	▒	┴	╤	ß	±
x2H	â	Æ	ó	▒	┬	╥	Γ	≥
x3H	ä	ô	ú	│	├	╙	π	≤
x4H	à	ö	ñ	┤	─	╘	Σ	⌠
x5H	å	ò	Ñ	╡	┼	╒	σ	⌡
x6H	ⓐ	û	ª	╢	╞	╓	µ	÷
x7H	ⓒ	ù	º	╖	╟	╫	τ	≈
x8H	ⓔ	ÿ	¿	╕	╚	╪	Φ	°
x9H	ⓔ	Ö	⌐	╣	╔	┘	Θ	∙
xAH	ⓐ	Ü	¬	║	╩	┌	Ω	·
xBH	ⓘ	ø	½	╗	╦	▓	δ	√
xCH	ⓘ	£	¼	╝	╠	═	∞	ⁿ
xDH	ⓘ	Ø	¡	╜	╬	▒	φ	²
xEH	ⓐ	₧	«	╛	╧	▐	ε	■
xFH	ⓐ	ƒ	»	┐	╨	▒	∩	

n=16 **WPC1252**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	€			°	À	Ð	à	ð
x1H		‘	¡	±	Á	Ñ	á	ñ
x2H	‚	’	¢	²	Â	Ò	â	ò
x3H	ƒ	“	£	³	Ã	Ó	ã	ó
x4H	„	”	¤	´	Ä	Ô	ä	ô
x5H	…	•	¥	µ	Å	Õ	å	õ
x6H	†	–	¦	¶	Æ	Ö	æ	ö
x7H	‡	—	§	·	Ç	×	ç	÷
x8H	ˆ	˜	¨	¸	È	Ø	è	ø
x9H	‰	™	©	¹	É	Ù	é	ù
xAH	Š	š	ª	º	Ê	Ú	ê	ú
xBH	‹	›	«	»	Ë	Û	ë	û
xCH	Œ	œ	¬	¼	Ì	Ü	ì	ü
xDH			-	½	Í	Ý	í	ý
xEH	Ž	ž	®	¾	Î	Þ	î	þ
xFH		Ÿ	¯	¿	Ï	ß	ï	ÿ

n=17 **PC866 (Cyrilic #2)**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	А	Р	а	░	└	╨	р	Ё
x1H	Б	С	б	▒	┴	╤	с	ё
x2H	В	Т	в	▓	┬	╥	т	Є
x3H	Г	У	г	│	├	╙	у	є
x4H	Д	Ф	д	┤	─	╘	ф	І
x5H	Е	Х	е	╡	┼	╒	х	і
x6H	Ж	Ц	ж	╢	╞	╓	ц	Ї
x7H	З	Ч	з	╖	╟	╫	ч	ї
x8H	И	Ш	и	╕	╠	╪	ш	°
x9H	Й	Щ	й	╣	╡	┘	щ	∙
xAH	К	Ъ	к	║	╢	┌	ъ	·
xBH	Л	Ы	л	╗	╣	█	ы	√
xCH	М	Ь	м	╝	╗	▄	ь	№
xDH	Н	Э	н	╜	╝	▌	э	¤
xEH	О	Ю	о	╛	╜	▐	ю	■
xFH	П	Я	п	┐	╛	▀	я	

n=18 **PC852 (Latin2)**

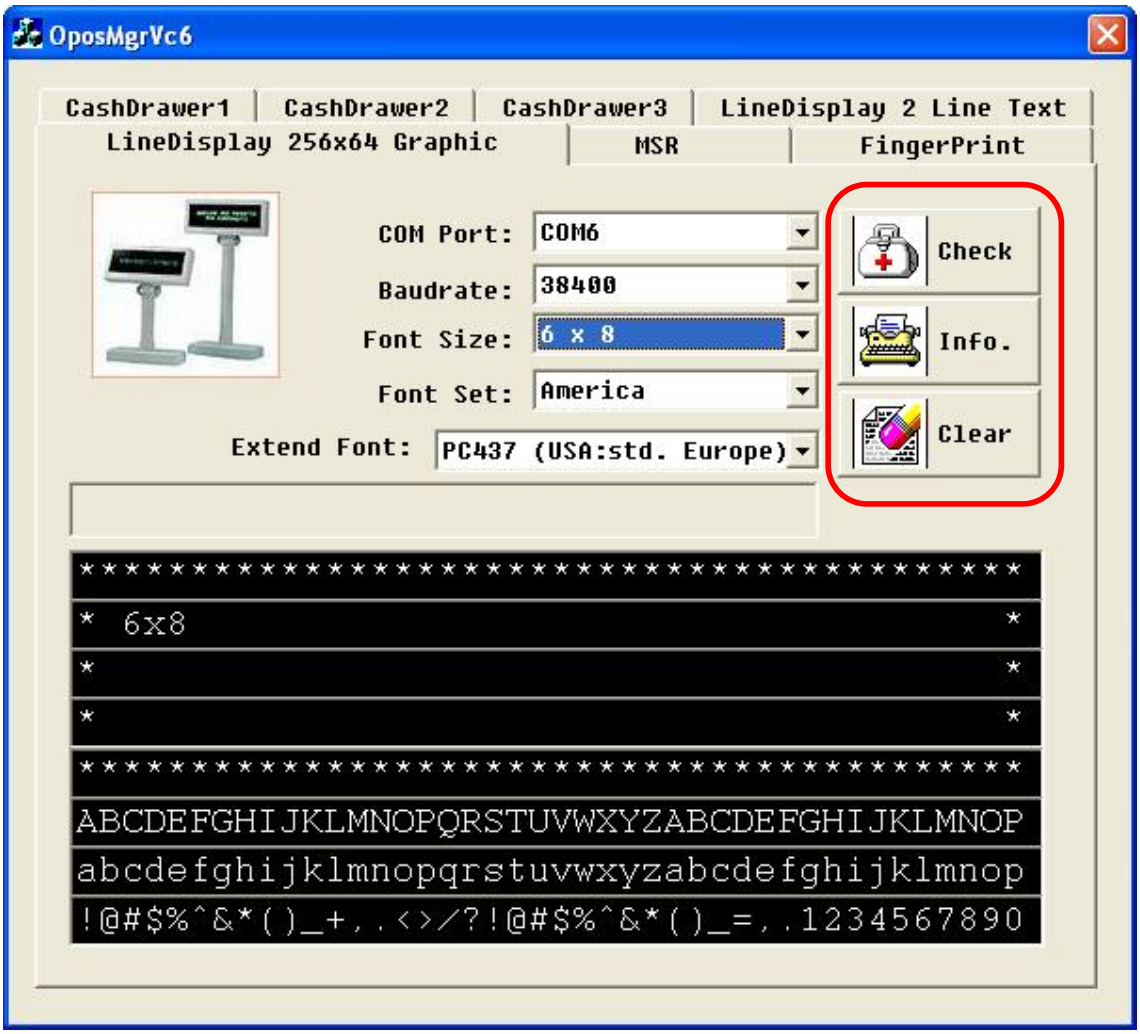
	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	░	└	ð	Ó	-
x1H	ü	Ľ	í	▒	┴	Đ	ß	ˇ
x2H	é	ľ	ó	▓	┬	Ď	Ô	˘
x3H	â	ď	ú	│	├	É	Ň	˛
x4H	ä	ň	Á	┤	─	ě	ń	˝
x5H	ů	Ĺ	ą	Ą	┼	Ň	Ń	Ř
x6H	ć	Í	Ž	Ą	Ą	Ť	Ś	÷
x7H	ç	Ś	ž	Ę	ą	Ť	ś	¸
x8H	ł	ś	Ę	Ş	Ľ	ę	Ř	°
x9H	ë	Ö	ę	╣	╗	˘	Ů	¨
xAH	Ő	Ü		╝	╜	˛	ř	˙
xBH	ő	Ť	Ź	╖	╕	▒	Ů	Ů
xCH	Ť	ť	Č	╜	╛	▒	Ý	Ř
xDH	Ź	Ł	Ş	Ż	═	˘	Ý	ř
xEH	Ą	Ż	ˇ	Ż	╬	Ů	ť	▒
xFH	Č	Ż	˙	˛	Ř	▒	˝	

n=19 **PC858**

	8xH	9xH	AxH	BxH	CxH	DxH	ExH	FxH
x0H	Ç	É	á	░	└	ð	Ó	-
x1H	ü	æ	í	▒	┴	Đ	ß	±
x2H	é	Æ	ó	▓	┬	É	Ô	‗
x3H	â	ô	ú	│	├	È	Õ	½
x4H	ä	ö	ñ	┤	─	Ê	Ö	¶
x5H	à	ò	Ñ	Á	┼	ê	Ò	§
x6H	å	û	ª	Â	ã	ı	Ú	÷
x7H	ç	ù	º	À	Ã	ˆ	Ú	¸
x8H	ê	ÿ	¿	©	╚	¢	Ì	°
x9H	ë	Ö	®	╝	╗	¥	Û	¨
xAH	è	Ü	¬	½	╜	¦	Ù	·
xBH	ï	¢	¼	╖	╕	▒	Ü	¹
xCH	î	£	¾	╛	╘	▒	Ý	³
xDH	ì	¥	¡	«	═	╒	Ý	²
xEH	Ä	×	«	╪	╫	╓	Ì	▒
xFH	Å	ƒ	»	┐	Ø	▒	´	

4.8.5.6 Validate 4-Line Customer Display

To validate the 4-Line follow the same steps used for validating 2-Line Customer Display.



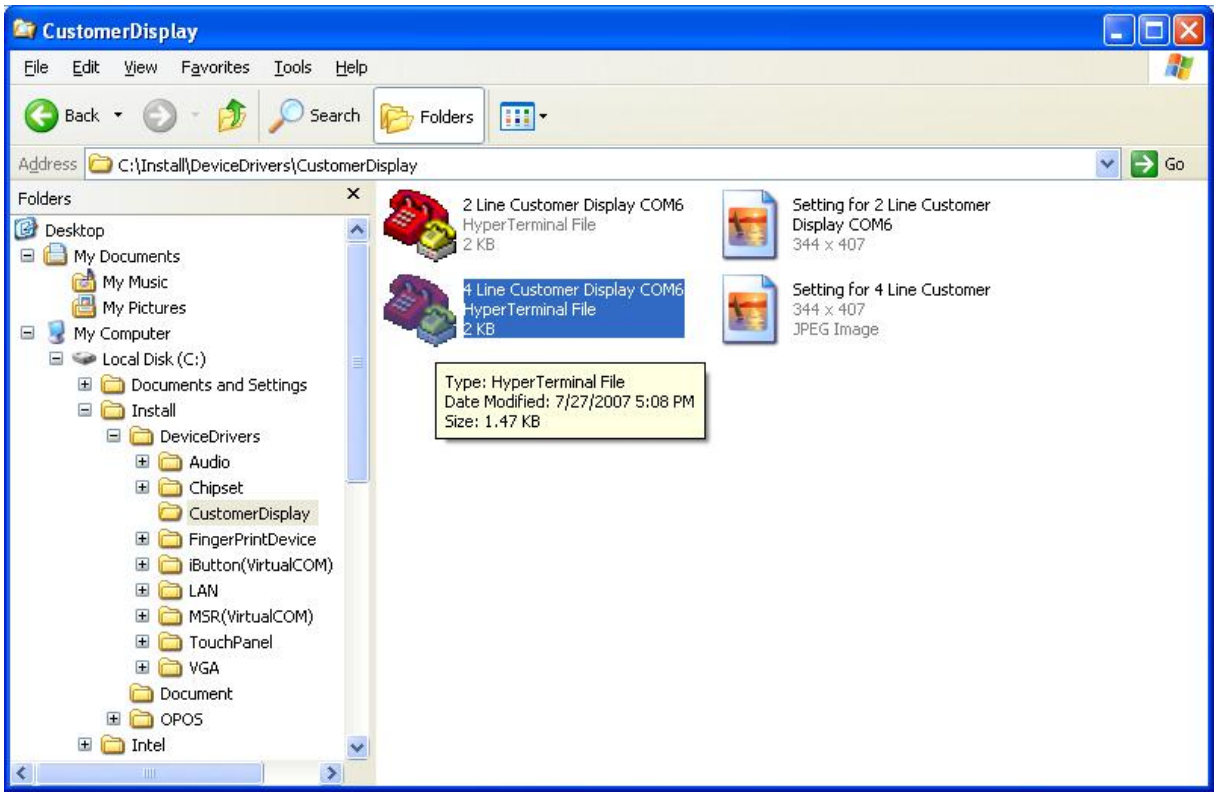
4.8.6 Troubleshooting 4-Line (Graphic) Customer Display

This section provides assistance with issues with the 4-Line Customer Display.

4.8.6.1 USB Keyboard

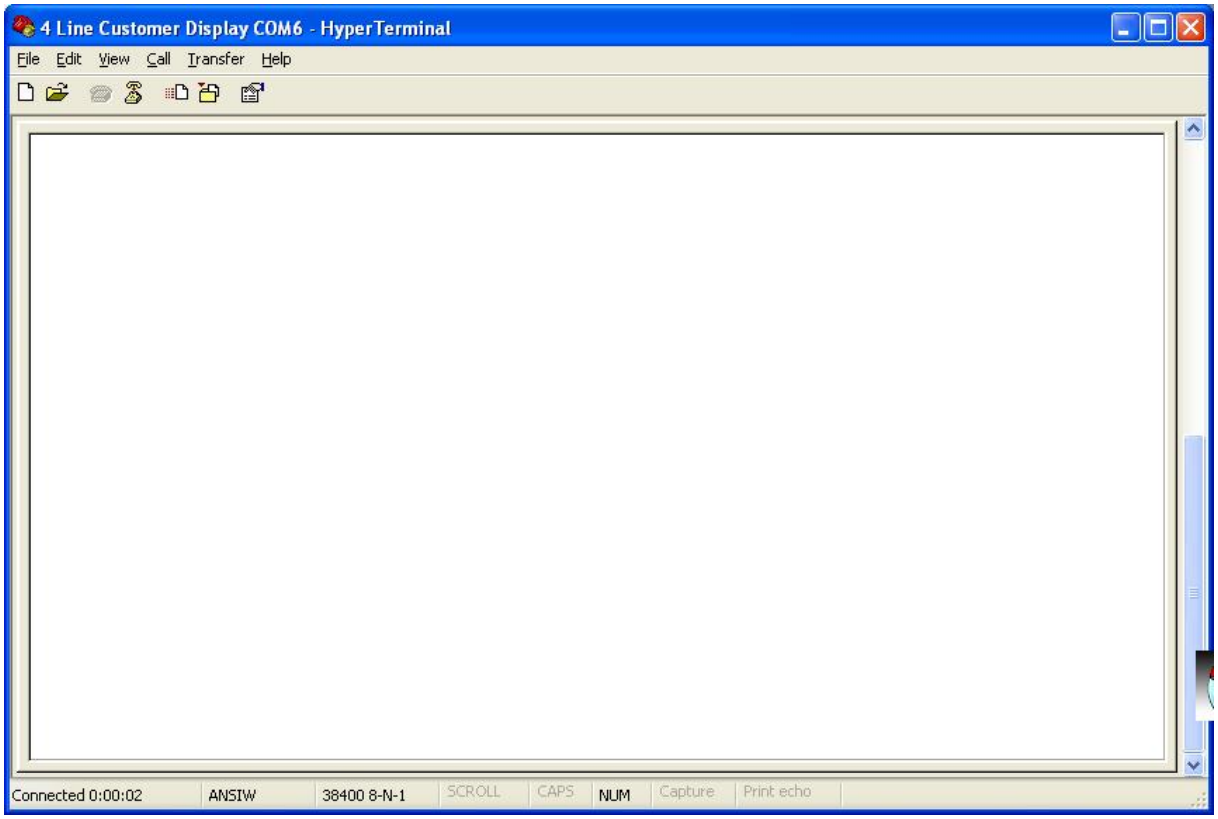
Plug the USB Keyboard into a USB port to send character data, confirm the 4-Line Customer Display is connected

4.8.6.2 Run “4 Line Customer Display COM6.ht”



4.8.6.3 Characters on 4-Line Customer Display

Using the keyboard enter characters into the following screen and confirm the same characters appear on the 4-Line Customer Display.



Note:

The above screen does not display the entered characters.

4.8.6.4 4-Line Customer Display Setting

If the 4-Line Customer Display fails to display, check the setting of COM6. The default setting is shown in the following screen.

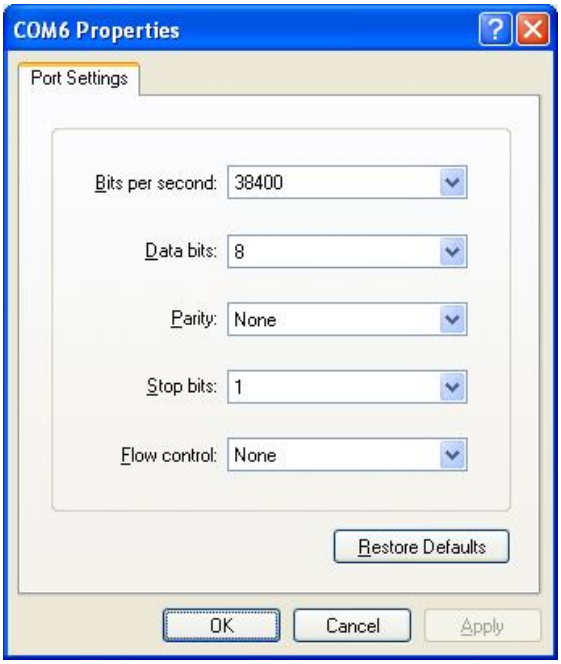
Note:

The following screen appears in “Hyper Terminal”;

“Call” ---> “Disconnect”

“File” ---> “Properties” ---> confirm the “Connect using:” is set as “COM6”

Press [Configure], the following screen displays.

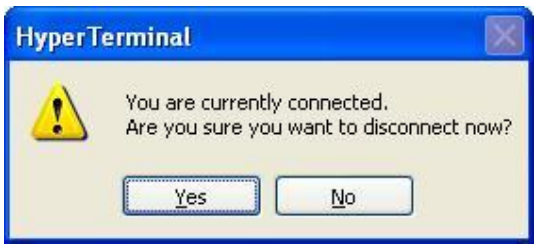


Note:

COM 6 is assigned for both 2-Line and 4-Line Customer Display, which means both cannot be used at the same time.

4.8.6.5 Complete Validation of 4-Line Customer Display

Press the “X” mark at the top right corner of the “Hyper Terminal” window. The following screen appears, press [Yes] to disconnect.

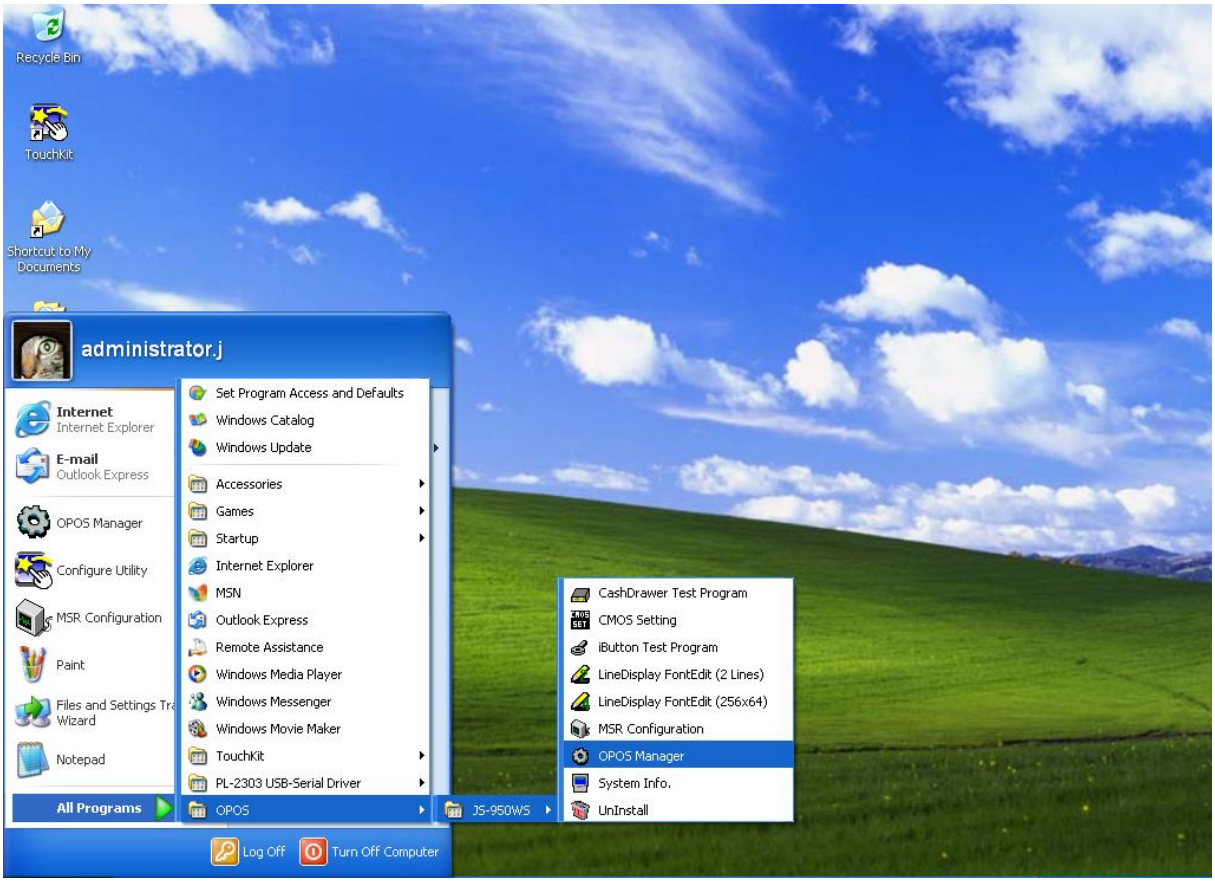


4.8.7 MSR OPOS Drivers

Plug the MSR Device into USB port.

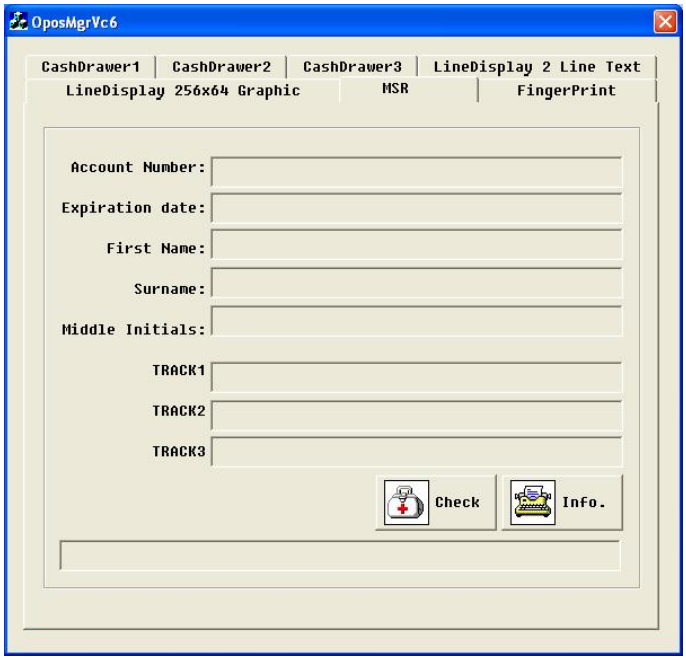
4.8.7.1 Run “OPOS Manager”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [OPOS Manager]

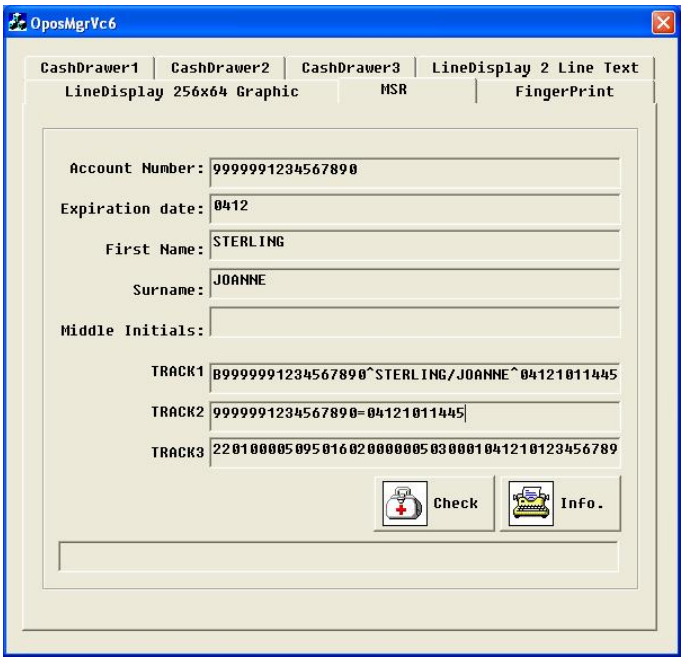


4.8.7.2 Swipe a card

Select the “MSR” tab.



Confirm card data is displayed on the screen after swiping a card



The above data displayed on screen is as below.

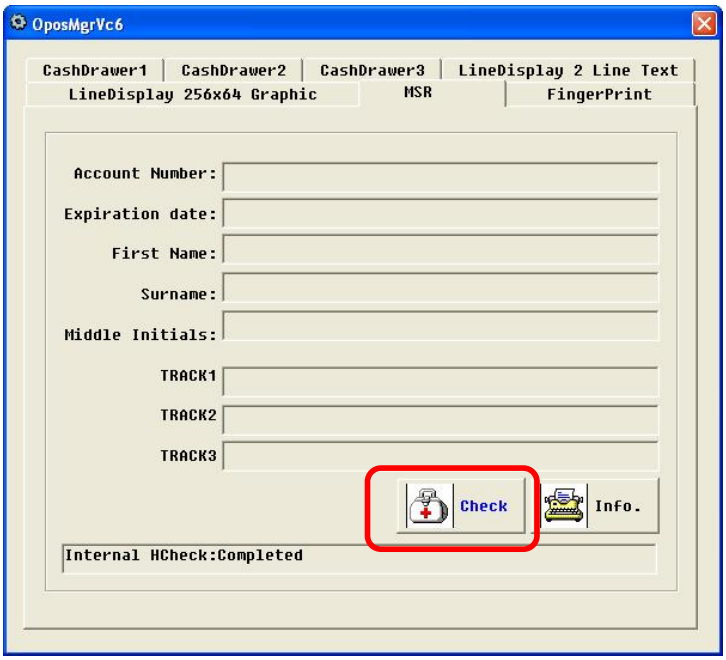
Track1=B9999991234567890^STERLING/JOANNE^04121011445

Track2=9999991234567890=04121011445

Track3=019999991234567890=0010122010000509501602000000503000104121012345678 9

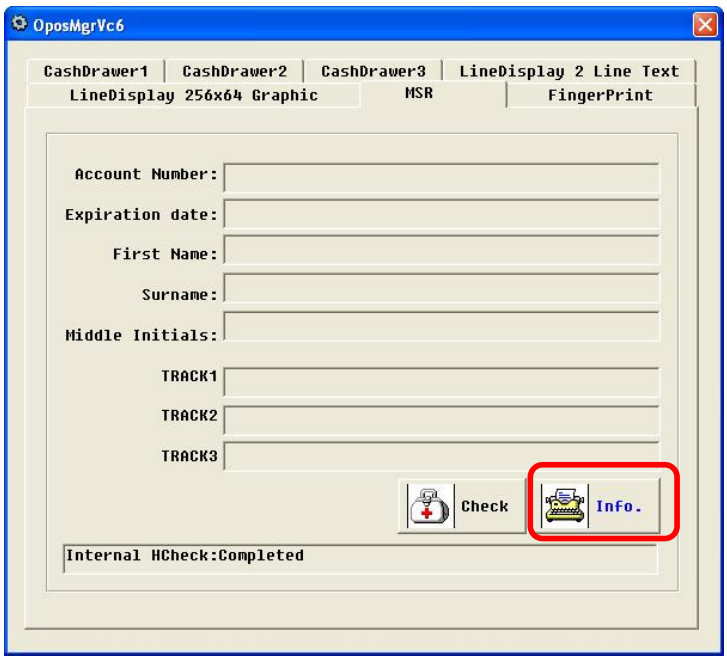
4.8.7.3 Validate MSR

Press [Check] button to validate the MSR Feature. The text box will show “Internal HCheck : Completed”



4.8.7.4 “OPOS Information” of the MSR

Press [Info.] button to check the OPOS version.



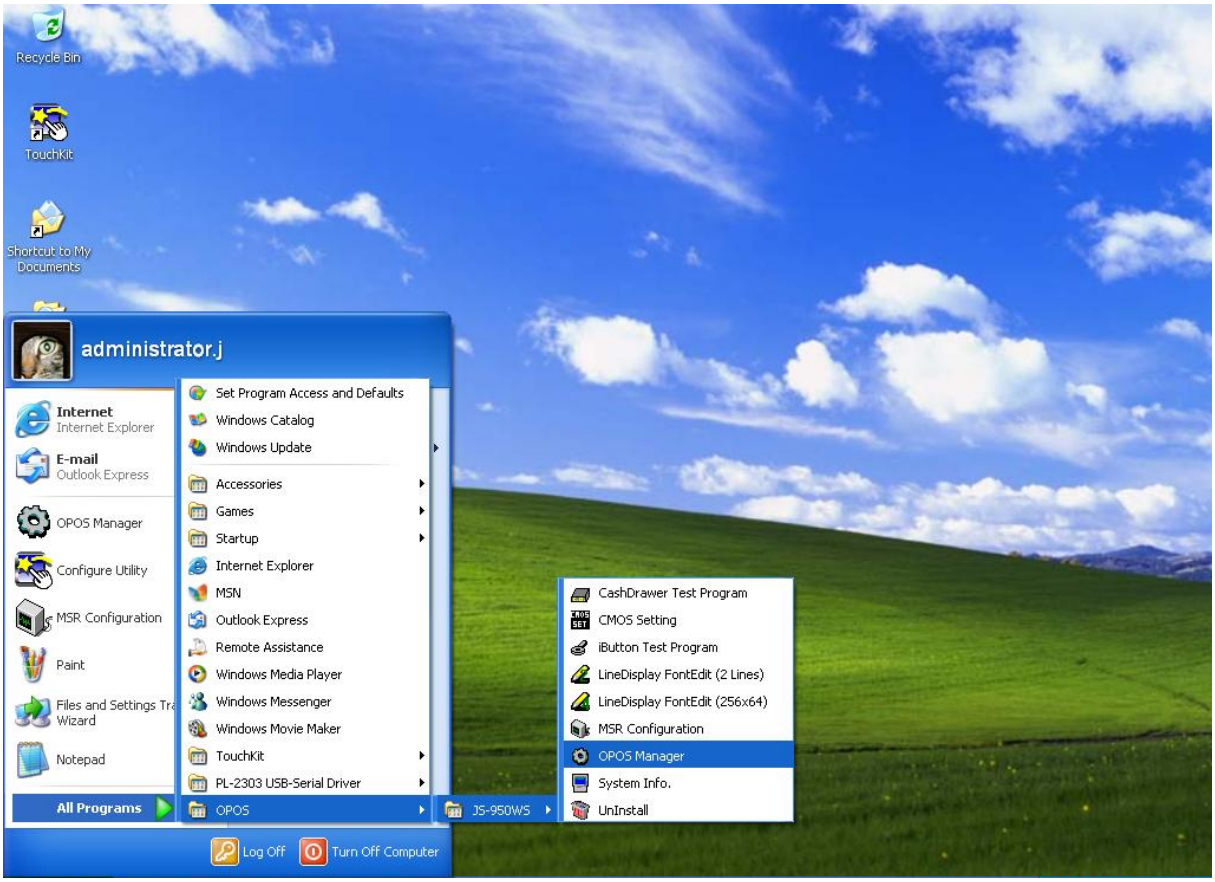
The following screen appears containing the OPOS information for the MSR.

4.8.8 Fingerprint OPOS Drivers

Plug the Fingerprint Device into USB port.

4.8.8.1 Run “OPOS Manager”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [OPOS Manager]

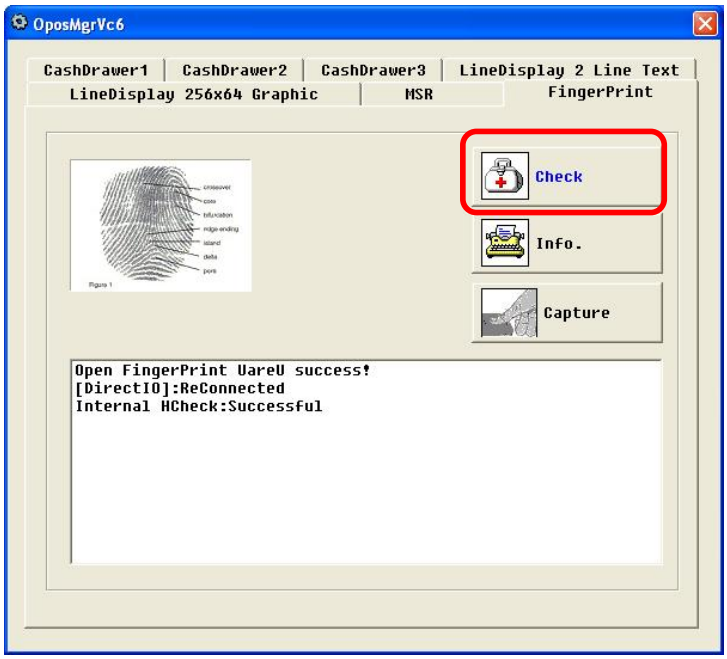


4.8.8.2 Capture Finger's Image

Select the "FingerPrint" tab.

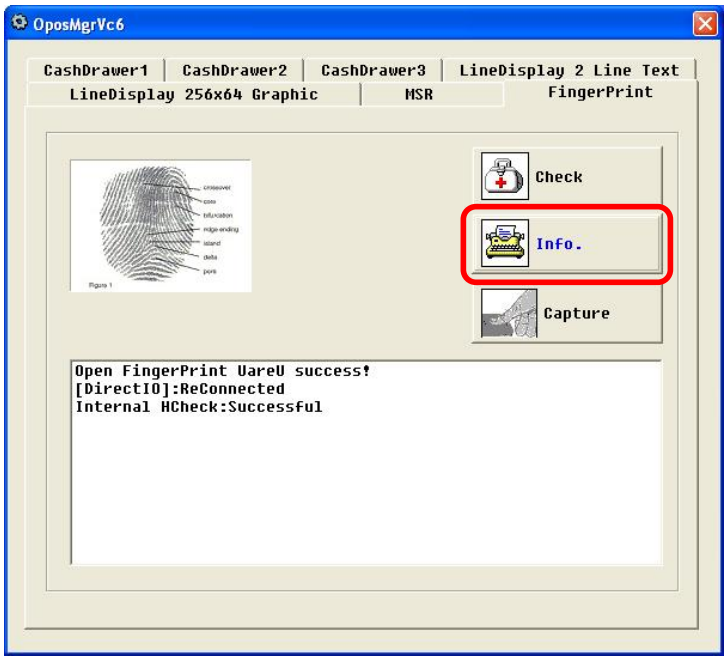
4.8.8.3 Validate FingerPrint Device

Press [Check] button to check the FingerPrint feature. The text box will show "Internal HCheck :Successful"



4.8.8.4 Validate the “OPOS Information” of the FingerPrint

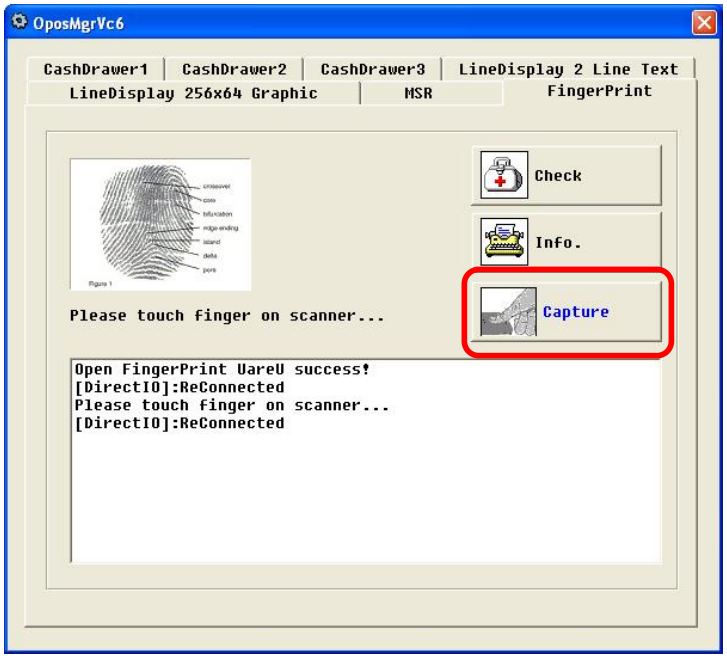
Press [Info.] button to check the OPOS version.



The following screen appears containing the OPOS information for FingerPrint.

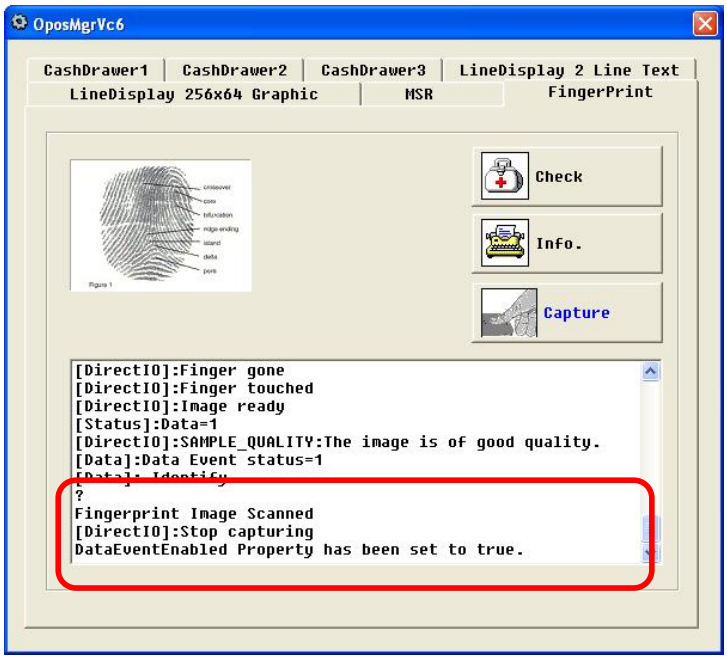
4.8.8.5 Capture Finger's Image

Press [Capture] button to capture Finger's image.



Touch finger on scanner 4 times.

The message displayed indicates that the driver is working properly.

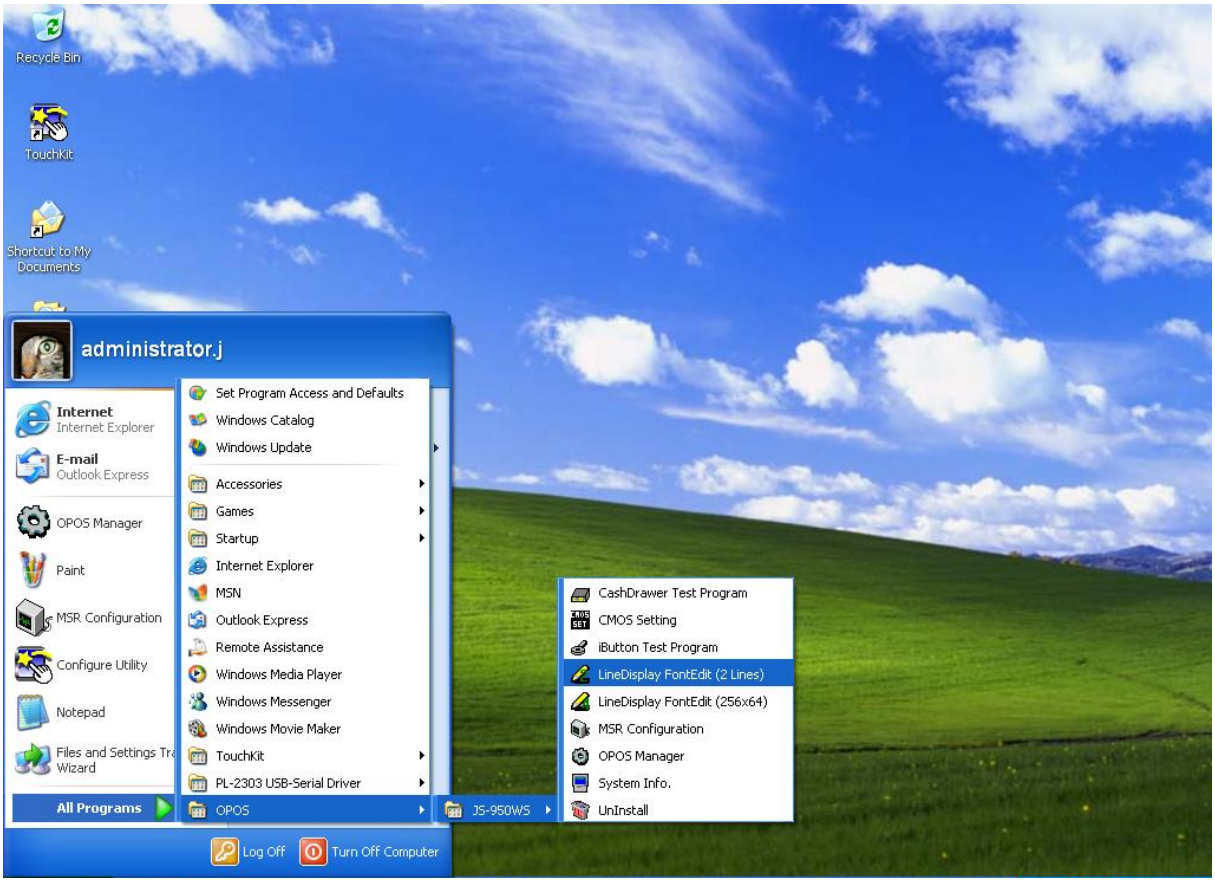


4.8.9 LineDisplay FontEditor (2 Lines)

Special fonts for the 2-Line VFD can be defined using the “LineDisplay FontEditor (2 Lines)” utility.

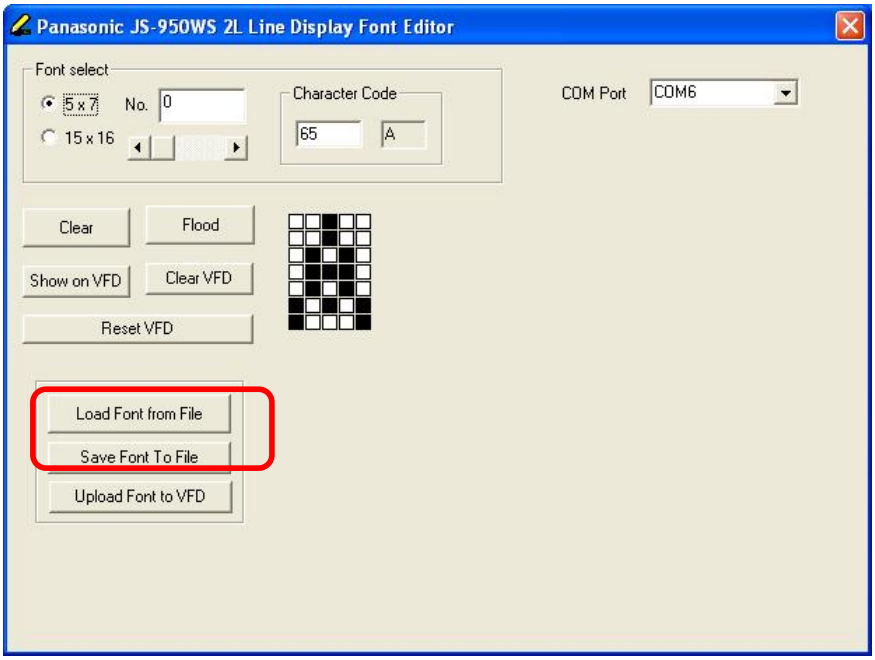
4.8.9.1 Run “LineDisplay FontEditor (2 Lines)”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [LineDisplay FontEditor (2 Lines)]

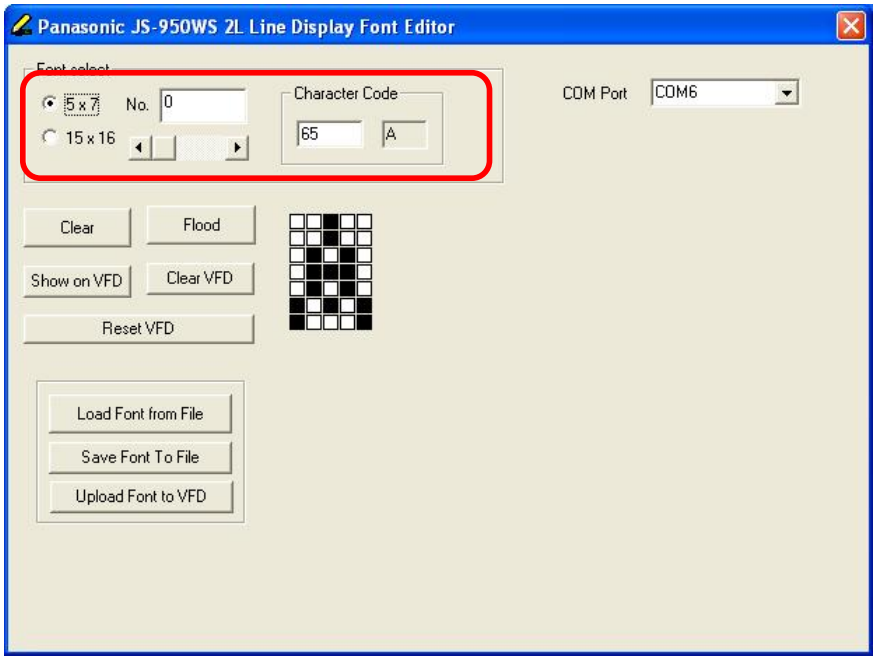


4.8.9.2 Special Font for 2-Line Customer Display

Fonts that you may already have can be loaded using the [Load Font from File] button. Edited fonts can also be saved. They can be saved over the original file or as a new file through the [Save Font To File] button.



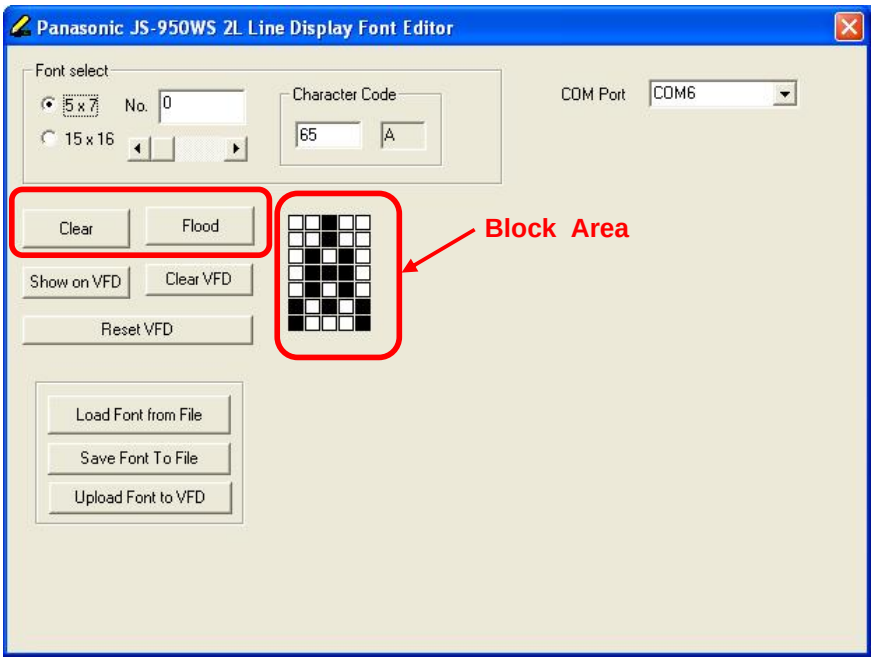
For each “5x7” and “15x16” font sizes, user can define up to 8 fonts to replace the selected **character code**.



“Block area”: Used by clicking the left key of mouse to directly fill or clear Black color of selected blocks.

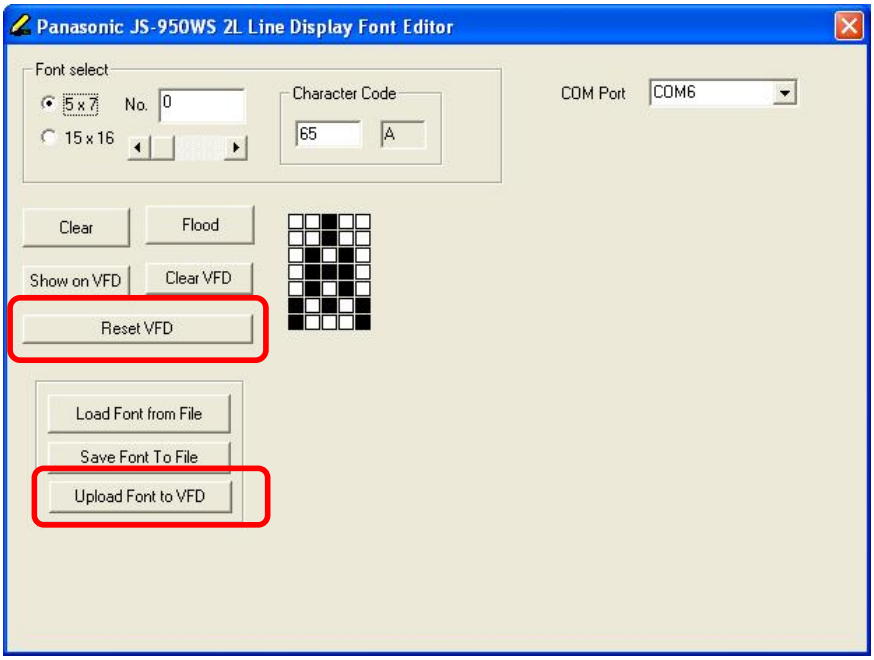
[Flood] button: Fill black color into all blocks.

[Clear] button: Clear black color for all blocks.



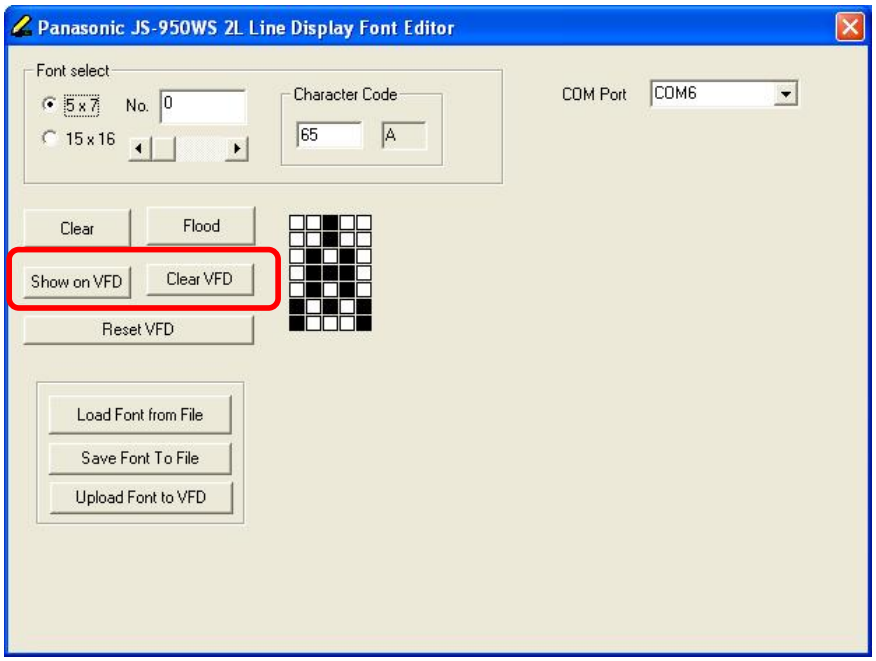
[Reset VFD] button: Clear the memory used to store user defined fonts.

[Upload Font to VFD] button: In order tot display fonts on the VFD, they must be uploaded to the VFD memory.



[Show on VFD] button: Once new font is defined and uploaded to VFD memory, click button to directly show the new font on VFD.

[Clear VFD] button: Clear the displayed font on VFD.

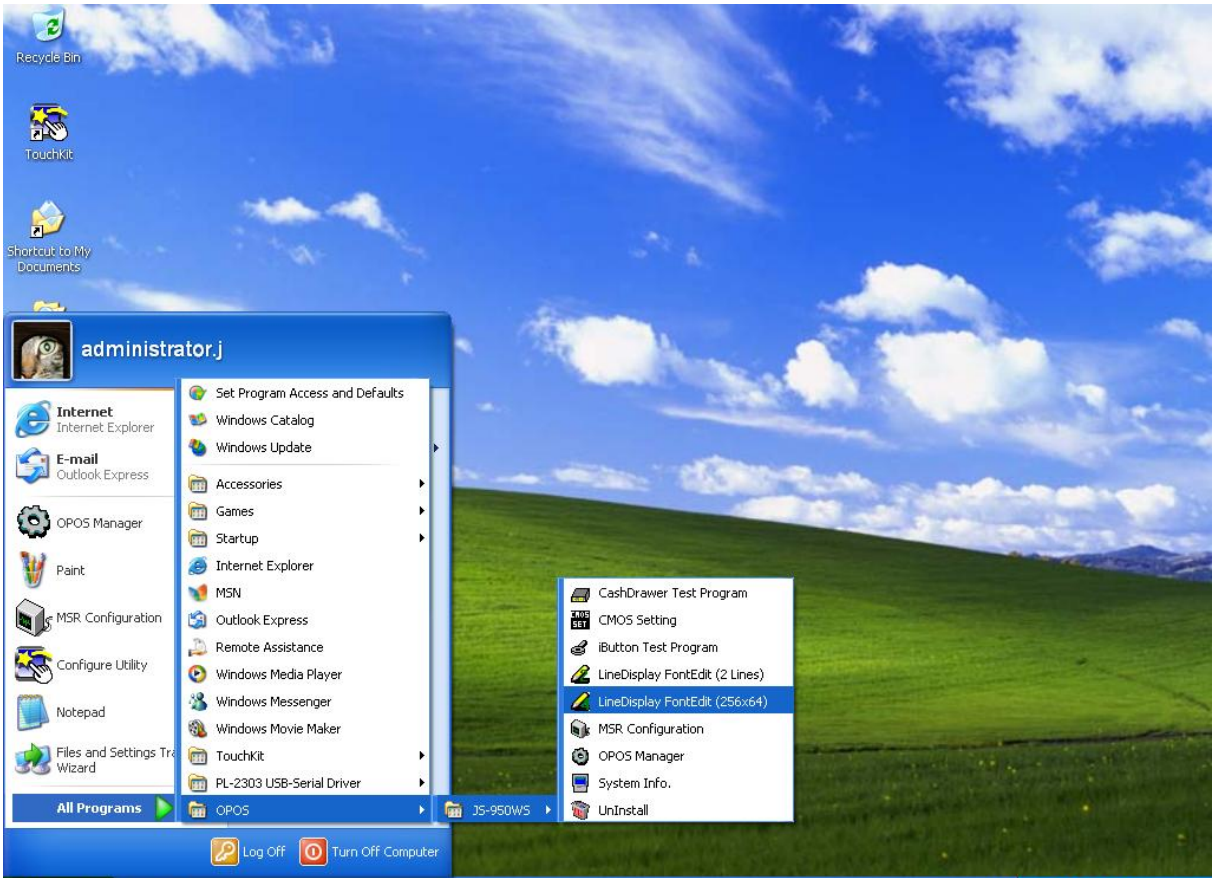


4.8.10 LineDisplay FontEditor (256x64)

Special fonts for use in the 4-Line VFD and be made using the “LineDisplay FontEditor (256x64)” utility.

4.8.10.1 Run “LineDisplay FontEditor (256x64)”

Press [Start] ---> [All Programs] ---> [JS-950WS] ---> [LineDisplay FontEditor (256x64)]

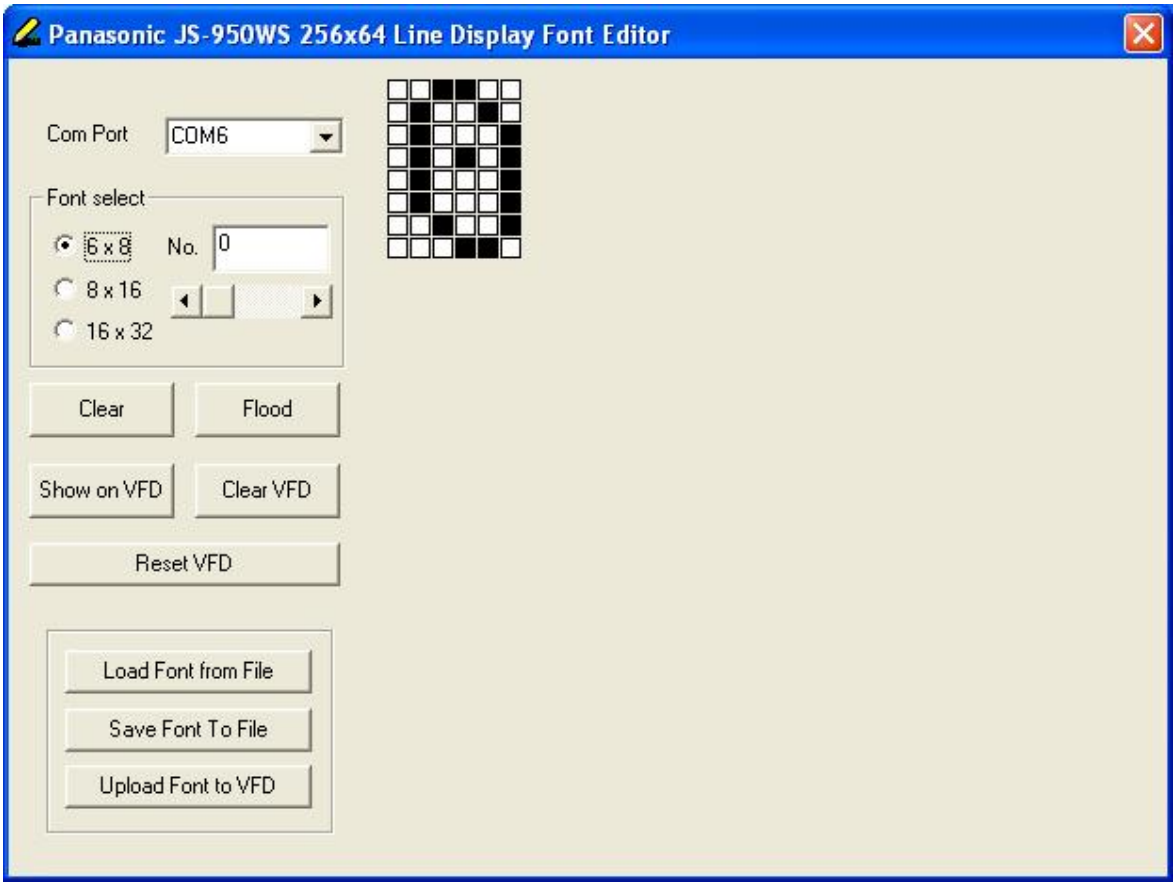


4.8.10.2 Special font for the 4 Line Customer Display

For each 6x8, 8x6 and 16x32 font sizes, user can define 128 fonts in the User Table of the Extend Font. This is used the same as Line LineDisplay FontEditor (2 Lines).

Note:

Your original “Font No.” is mapped to “Extend Font”, i.e. “Font No. 0” is recognized as extend font code “128 (0x80)”, so “Font No. 1” is “129 (0x81)”, “Font No. 2” is “130 (0x82)”…”Font No. 127” is “255 (0xFF)”.



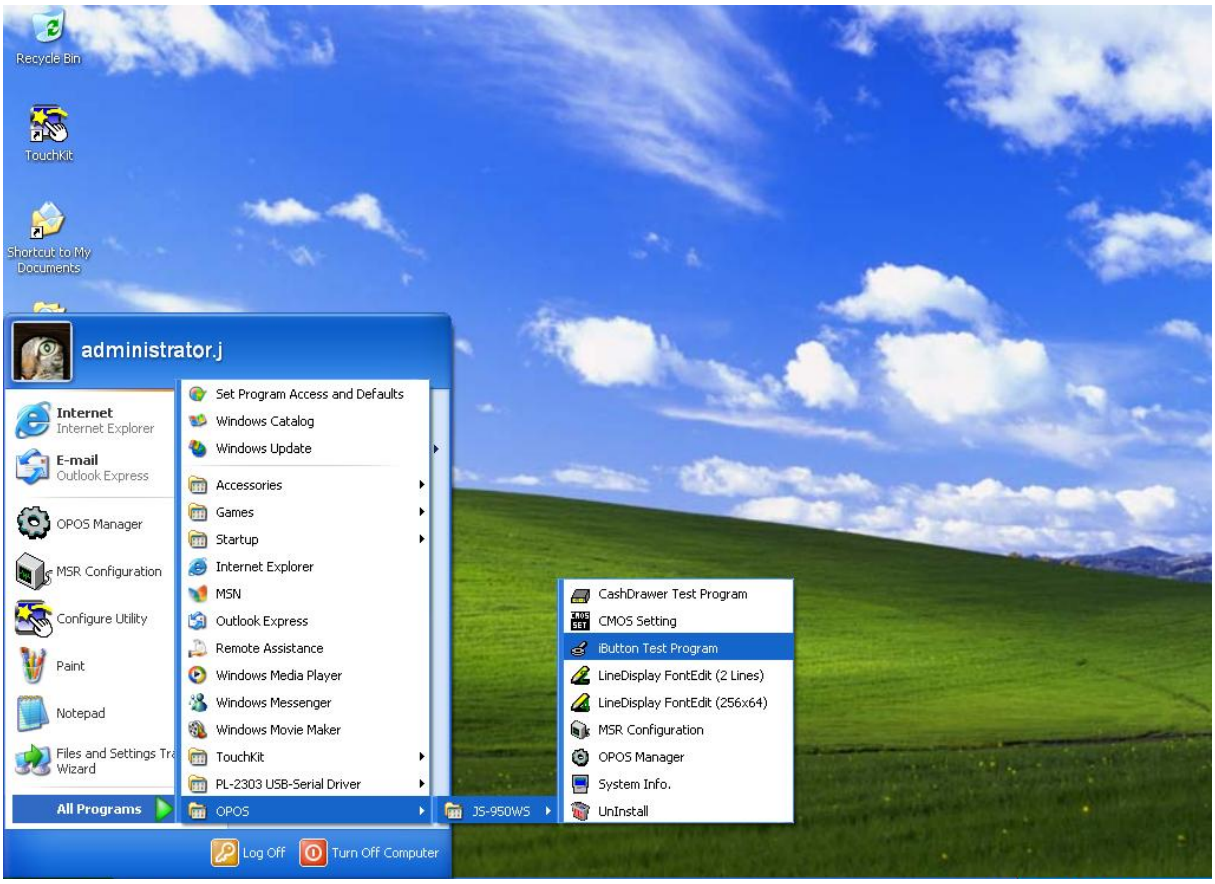
4.8.11 iButton Drivers

Please check the iButton Drivers.

Please plug the iButton Device into USB port.

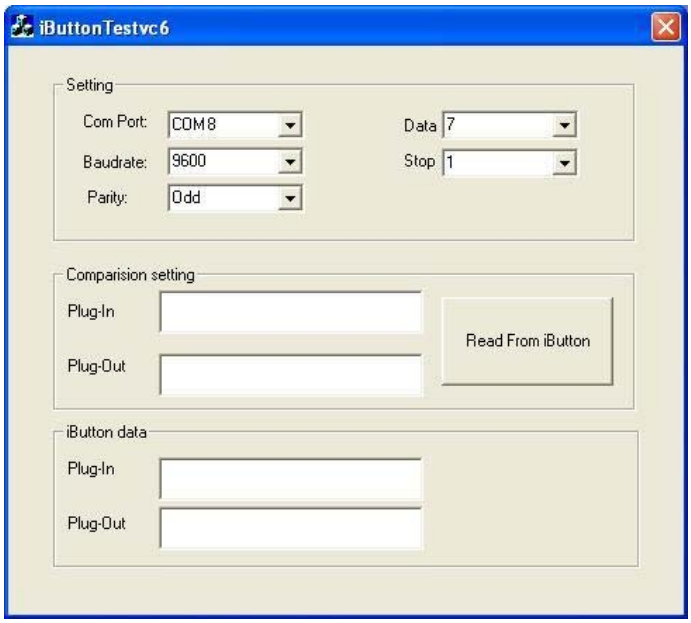
4.8.11.1 Run “iButton Test Program”

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [iButton Test Program]

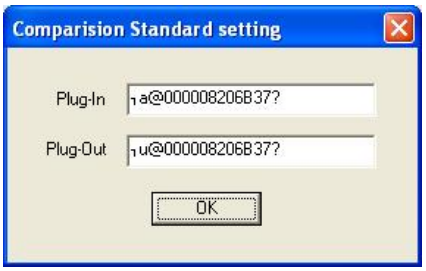


Set parameters according to the screen below and press [Read From iButton].

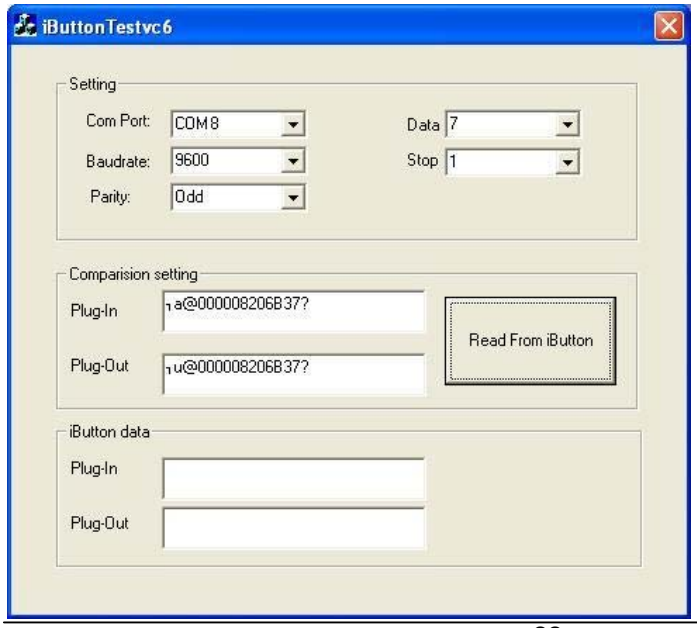
Note: Please refer to the “4.4.1 Confirm “Prolific USB-to Serial Com Port”” to confirm Com Port Number.



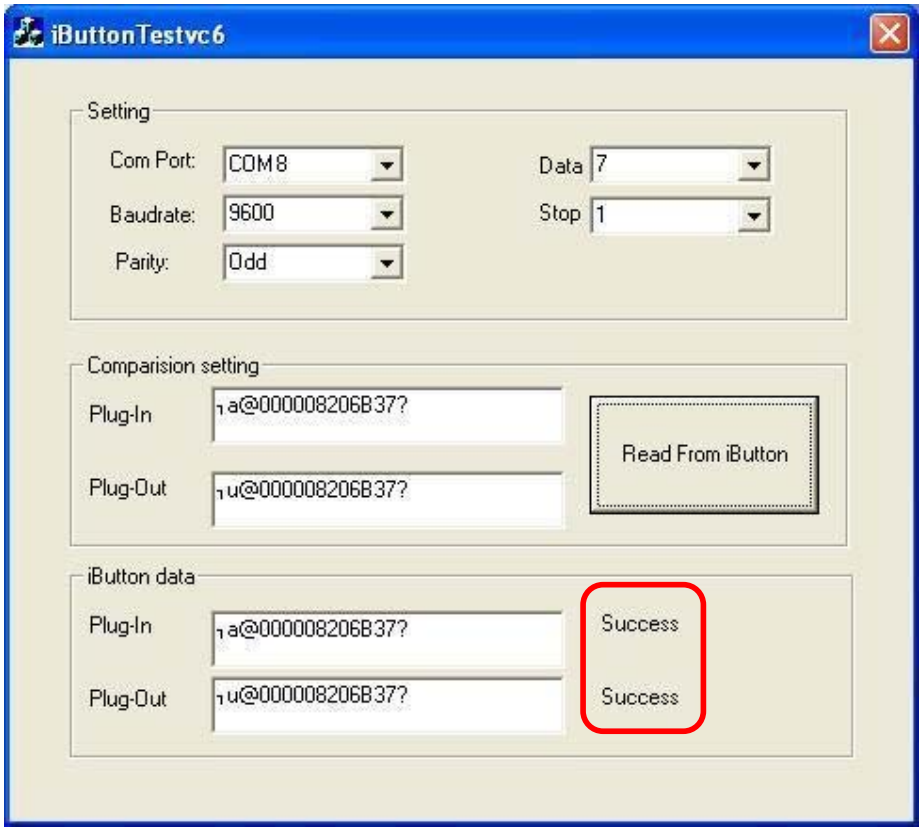
Touch the iButton key on the probe. The data will display as below, press [OK]



Please touch the iButton Key on the probe in the following screen.



The comparison results are displayed in the following screen. For example, if the key is the same, “Success” will be displayed.



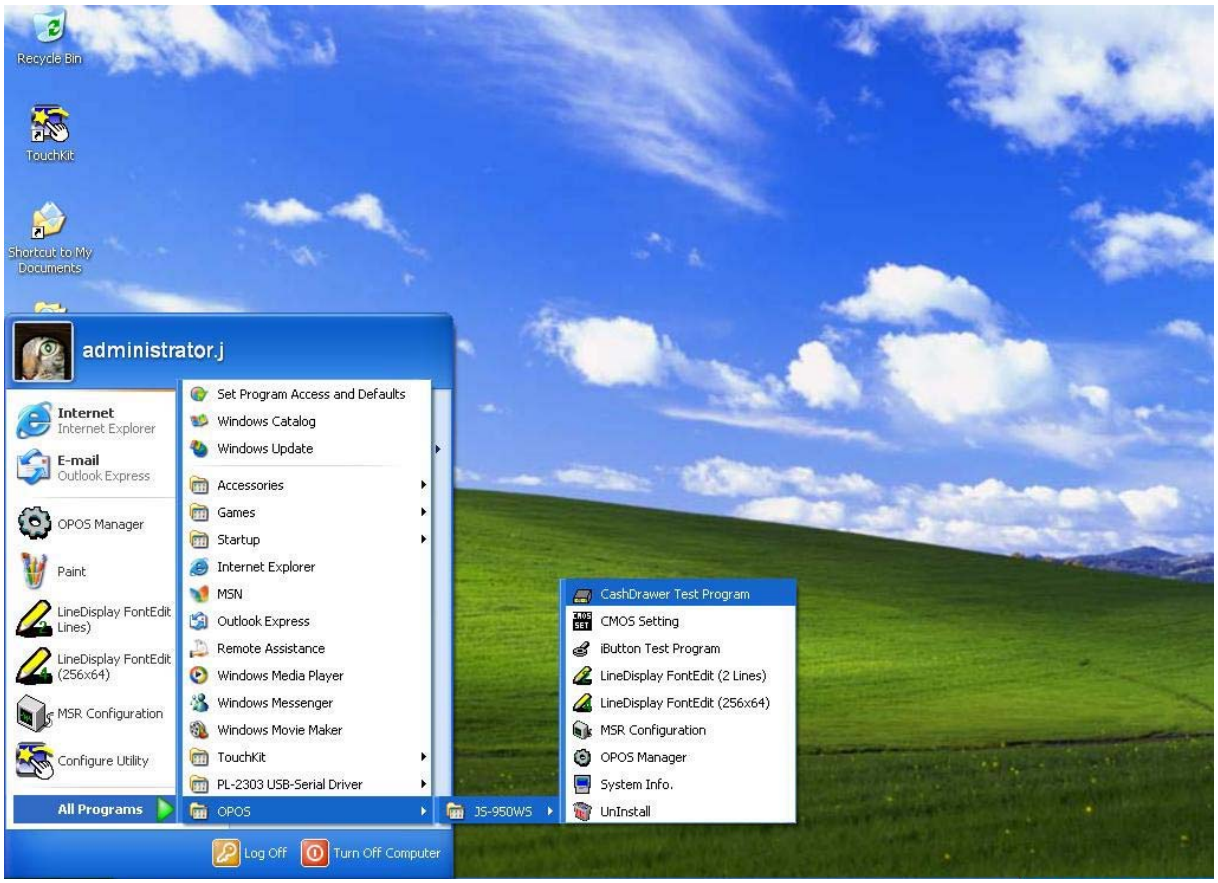
4.8.12 CashDrawer Test Program

Plug Cash Drawers (PS/2 or RJ-11 type) into each connector- system must be off.

This application can access CashDrawer directly (not through OPOS), the user can use “CashDrawer Test Program” to check whether Cash Drawers work.

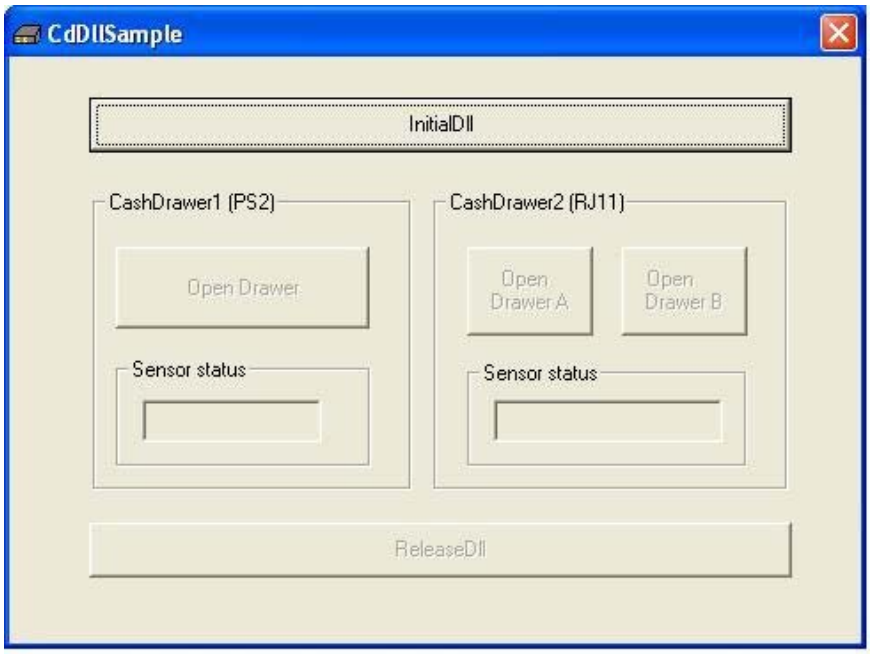
4.8.12.1 Run “CashDrawer Test Program”

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [CashDrawer Test Program]



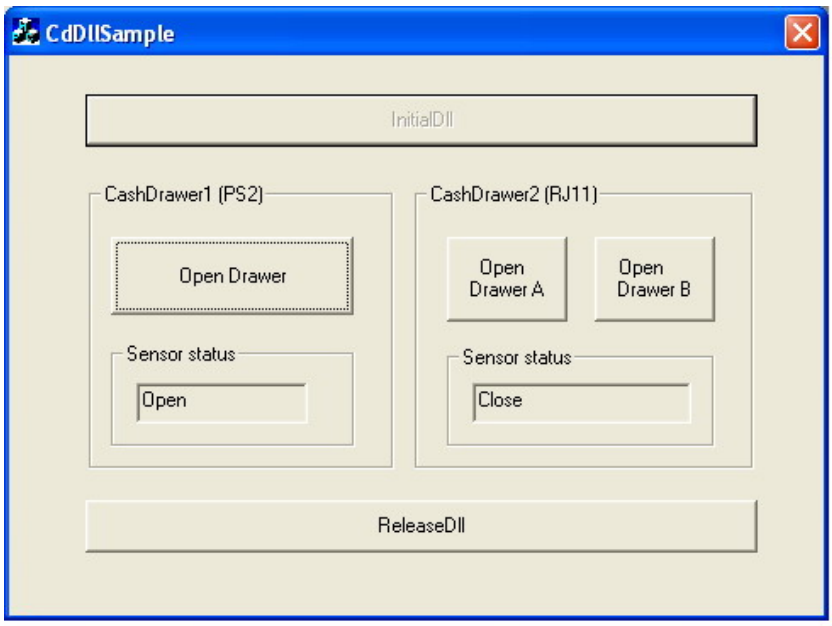
4.8.12.2 Run CashDrawer Test Program

Press [InitialDll].



4.8.12.3 PS2 Cash Drawer Test

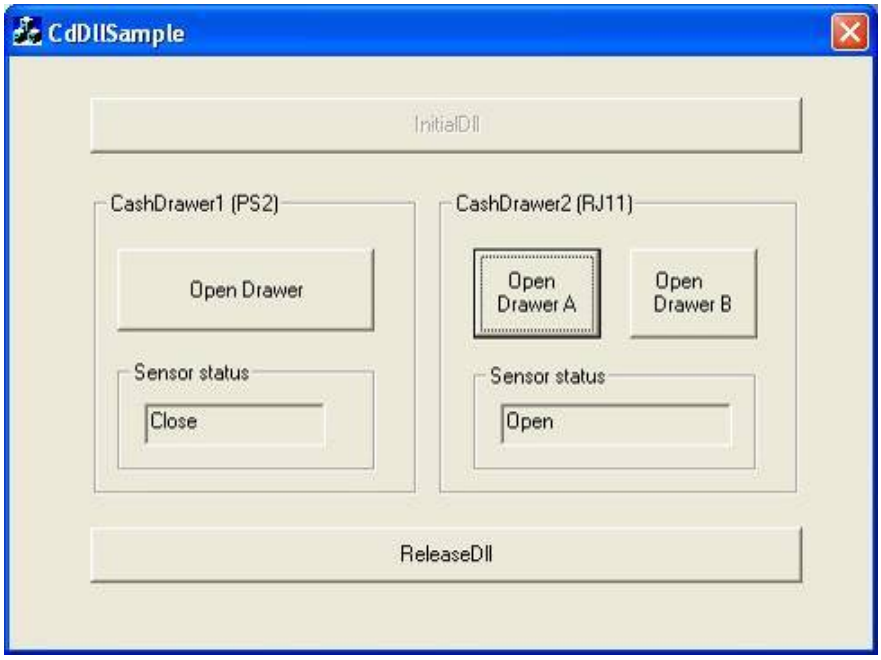
Press [Open Drawer] at “CashDrawer1 (PS2)”, the cash drawer connected to PS/2 will open.



Note: When cash drawer is closed the “Sensor status” will display “Close”.

4.8.12.4 RJ-11 Cash Drawer Test

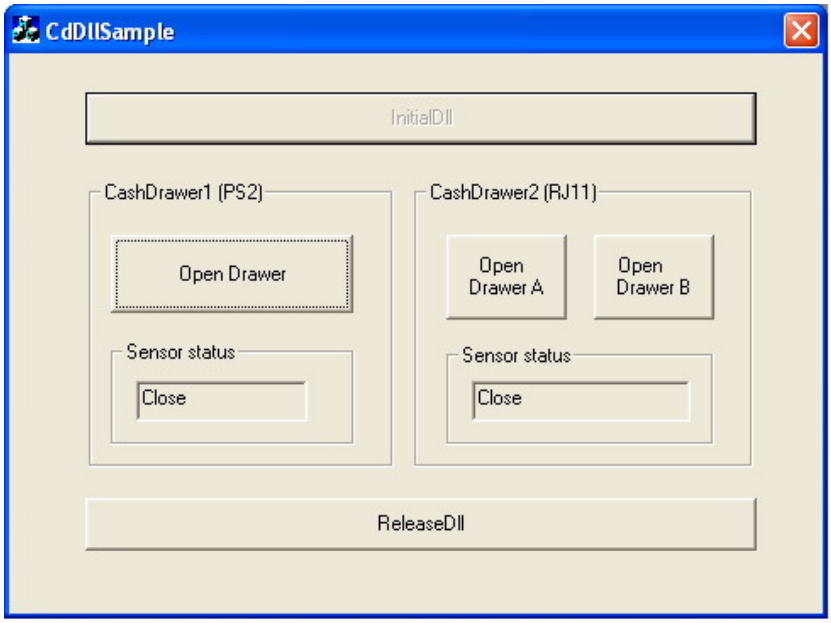
Press [Open Drawer A] at “CashDrawer2 (RJ-11)”, the cash drawer connected to RJ-11 will open.



Note: When cash drawer is closed the “Sensor status” will display “Close”.

4.8.12.5 Complete Cash Drawer Driver Validation

Press [ReleaseDll] and then [X] mark to complete cash drawer testing.



4.8.13 CMOS Setting

Through the CMOS utility the user is able to change the following BIOS settings under the Windows environment:

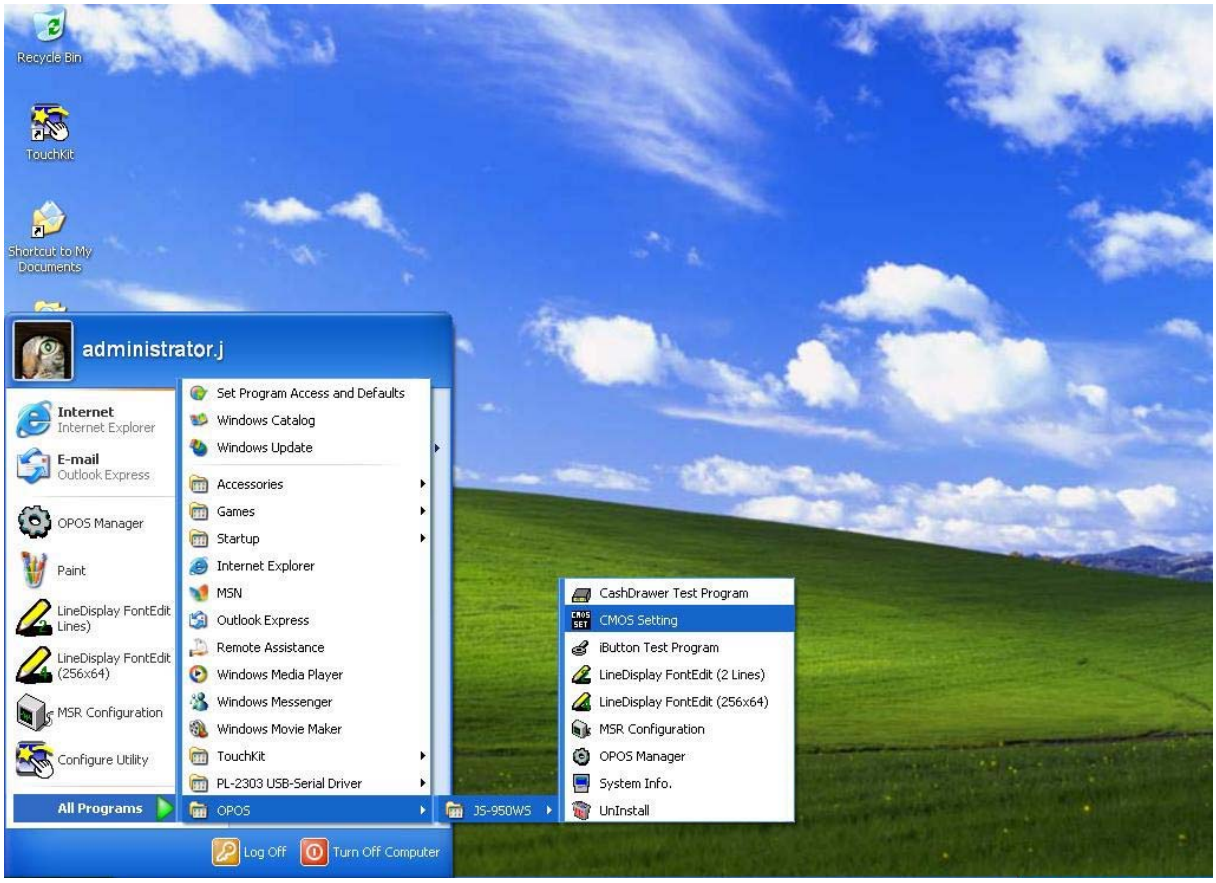
(1) Boot Select

(2) SATA Mode

Keep in mind that the changed settings will be affective after when system is reboots.

4.8.13.1 Run “CMOS Setting”

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [CMOS Setting]



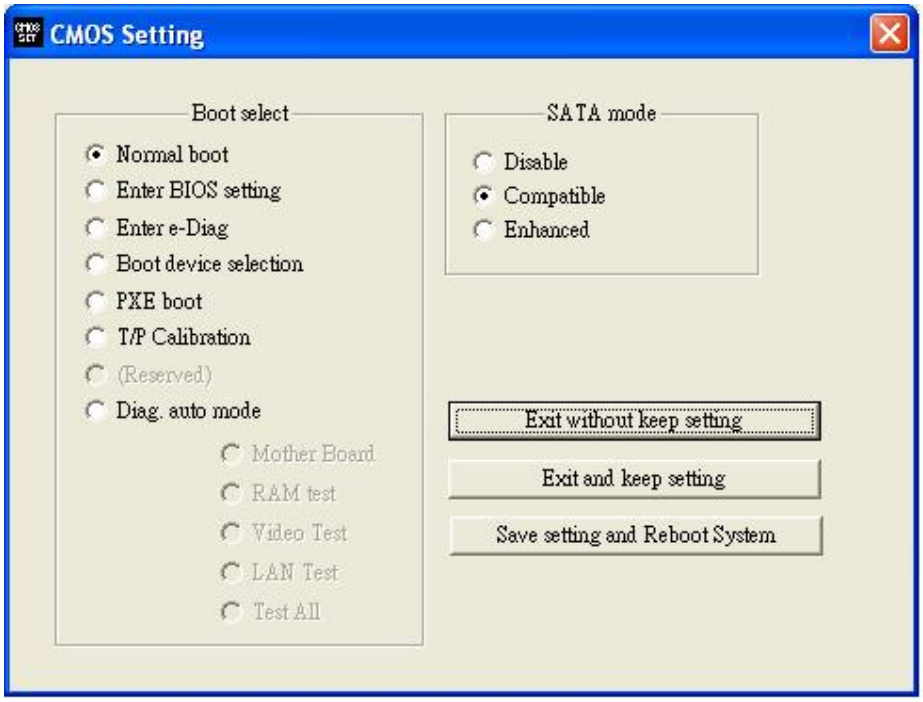
Boot select: Sets the next booting mode.

SATA mode: Sets SATA HDD mode.

Exit without keep setting: Exit the program and do not save the setting.

Exit and keep setting: Exit the program and save the setting.

Save setting and Reboot System: Save the setting and auto reboot the system.

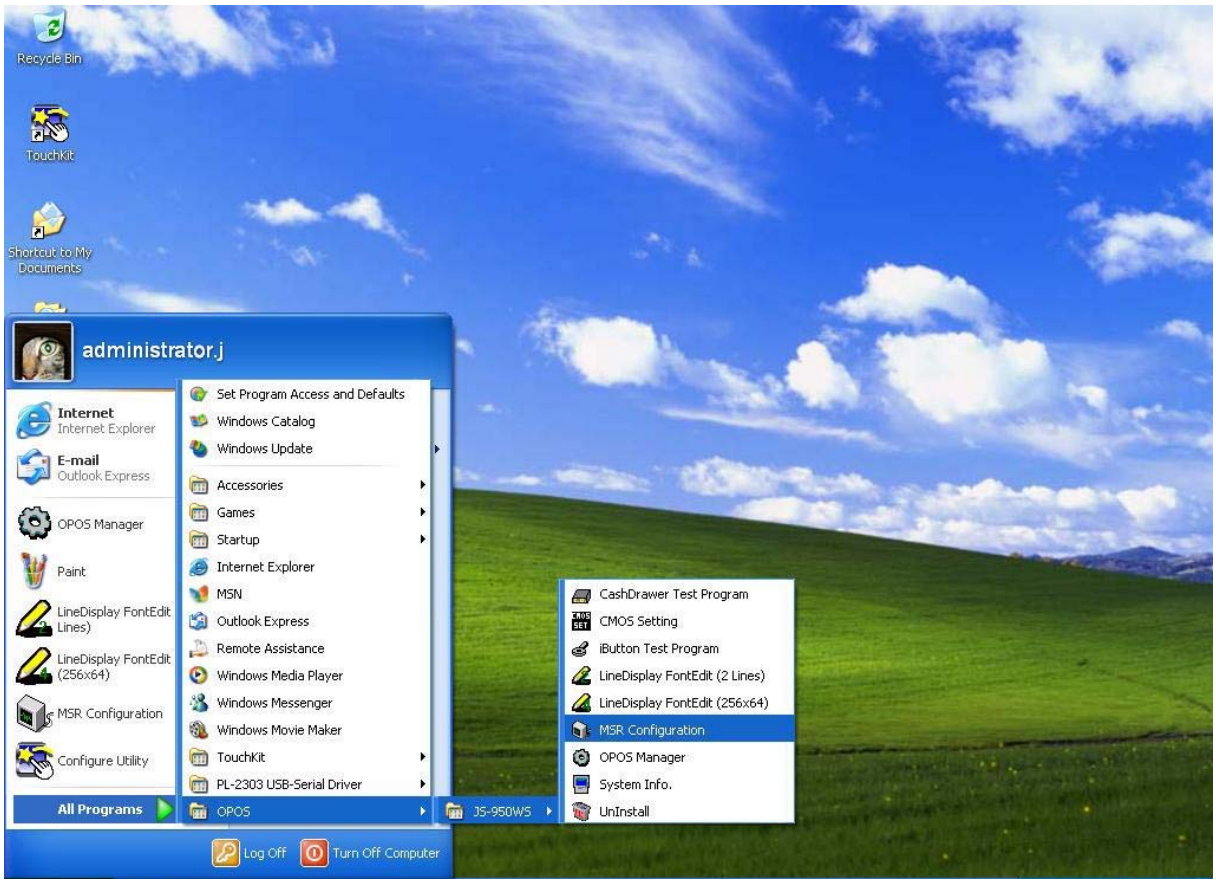


4.8.14 MSR Configuration

If **the virtual COM port for MSR** needs to be changed, executing the MSR Configuration is necessary. Once configuration is complete the MSR functions of OPOS manager will work.

4.8.14.1 Run "MSR Configuration"

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [MSR Configuration]



Press [Apply] to configure MSR Virtual Comport.

Note: MSR device must be plugged in.

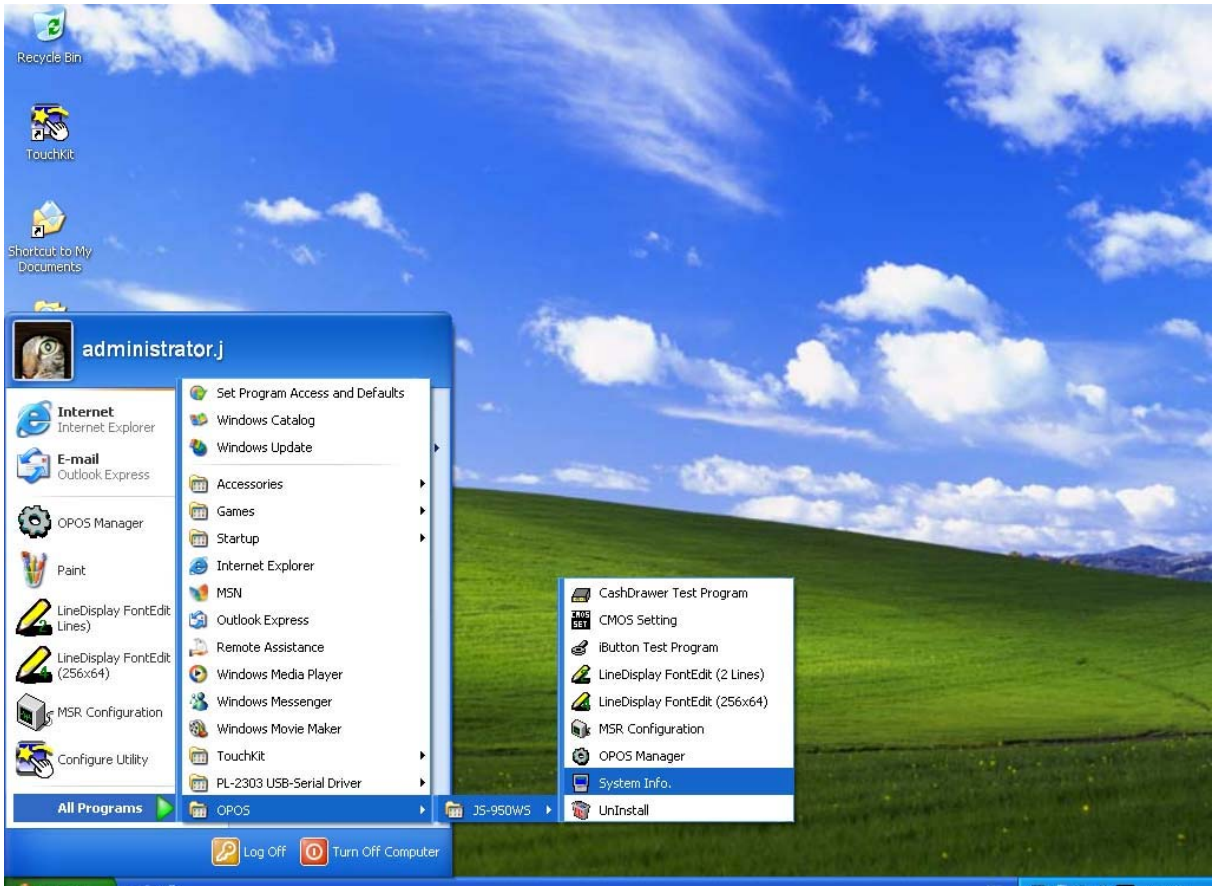
4.8.15 System Information

Running “System Info” will provide the following information.

- ☐ Main Body Model Number and Serial Number
- ☐ Display Model Number and Serial Number
- ☐ UTR (Used Time Record)

4.8.15.1 Run “System Info.”

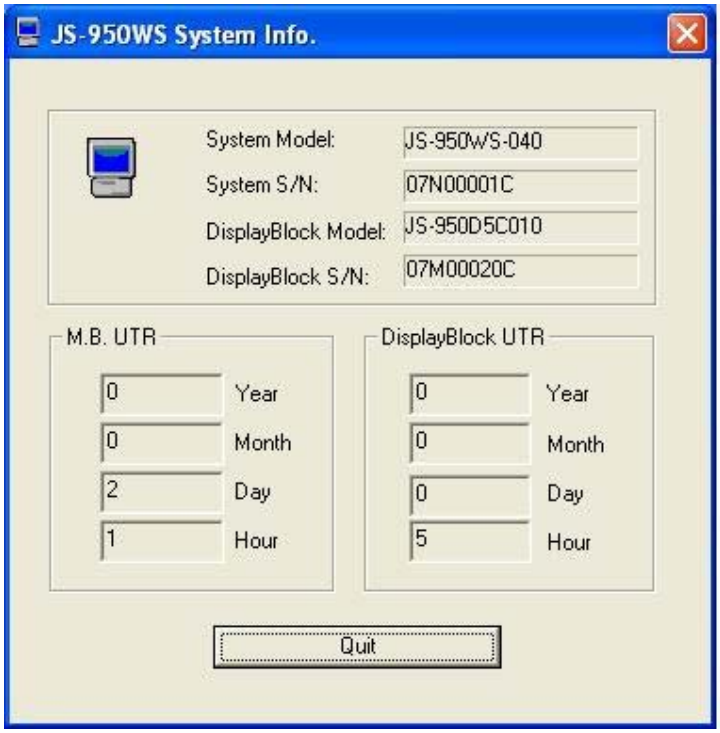
Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [System Info.]



4.8.15.2 Check System Information

The window below provides the System Information.

“UTR” means “Used Time Recorder”. The UTR counts the spending time every hour using BIOS for Main body and Display Block (LCD).



KNOWN ISSUE (BIOS Version PSGY0100):

Executing "**System standby**" or "**System hibernates**" will cause the UR count to be incorrect. In order to make sure UTR is working properly, do not execute "System standby" and "System hibernates" if the system BIOS version is “PSGY0100”.

4.8.16 Monitor Switch

Monitor Switch utility allows the user to turn 1st and 2nd display on/off.

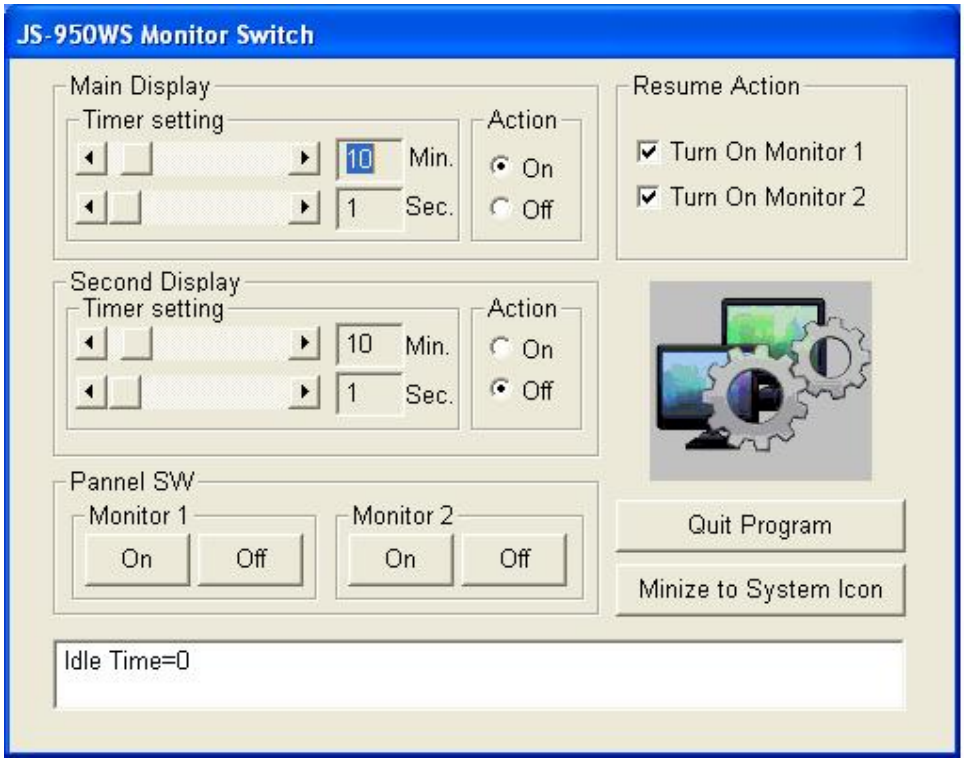
4.8.16.1 Operate "JS-950WS Monitor Switch"

Double Click [JS-950WS Monitor Switch] icon in system tray.

Idle Time: The timer will keep counting until the user presses a key or moves mouse. The timer is measured in seconds.

”Timer setting” & “Action”: User can set timer to turn on or off the Main and Second displays.

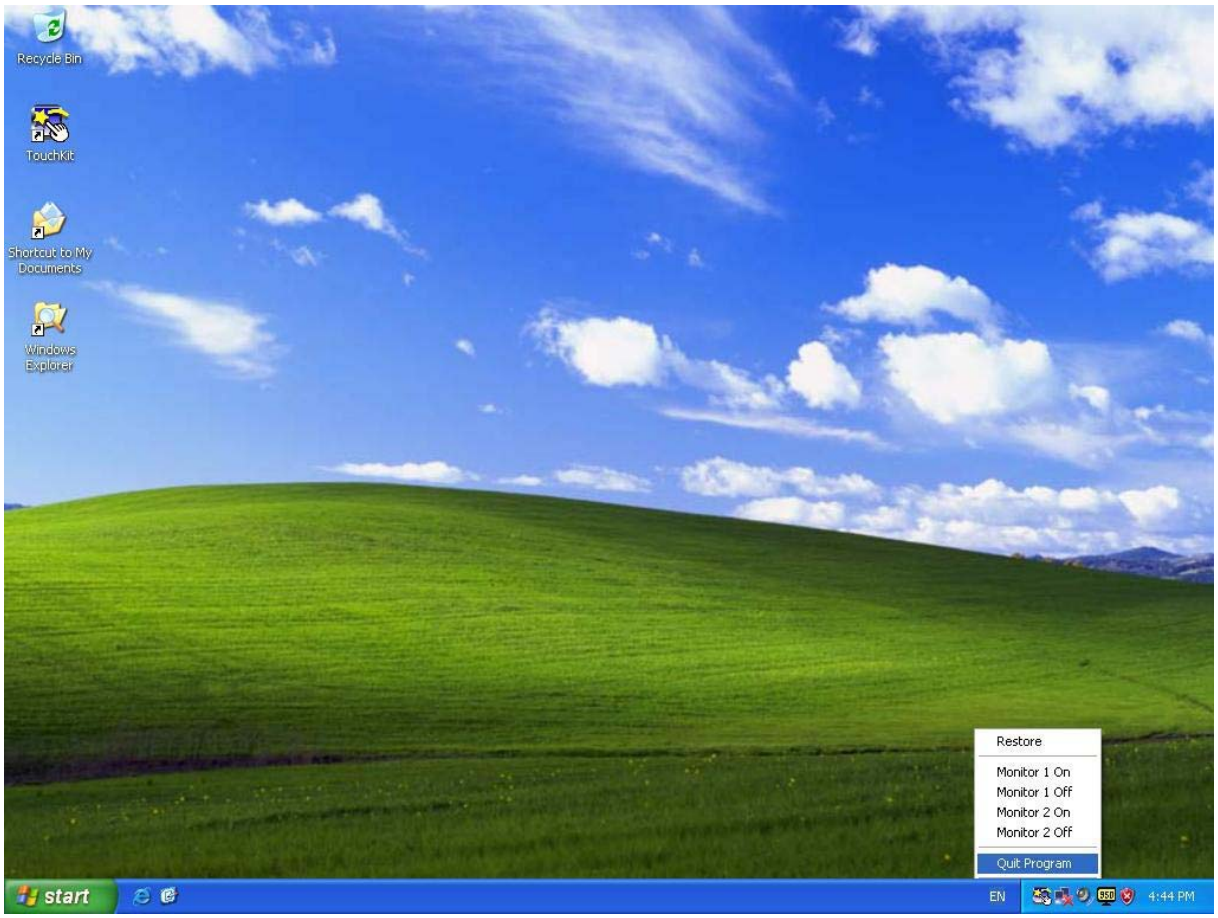
Resume Action: User can place check marks for those items of “Resume Action” function, and then it’s able to resume Monitor 1 and 2 after user presses any key or moves mouse.



4.8.17 Uninstall JS-950WS OPOS Drivers

4.8.17.1 Close "JS-950WS Monitor Switch"

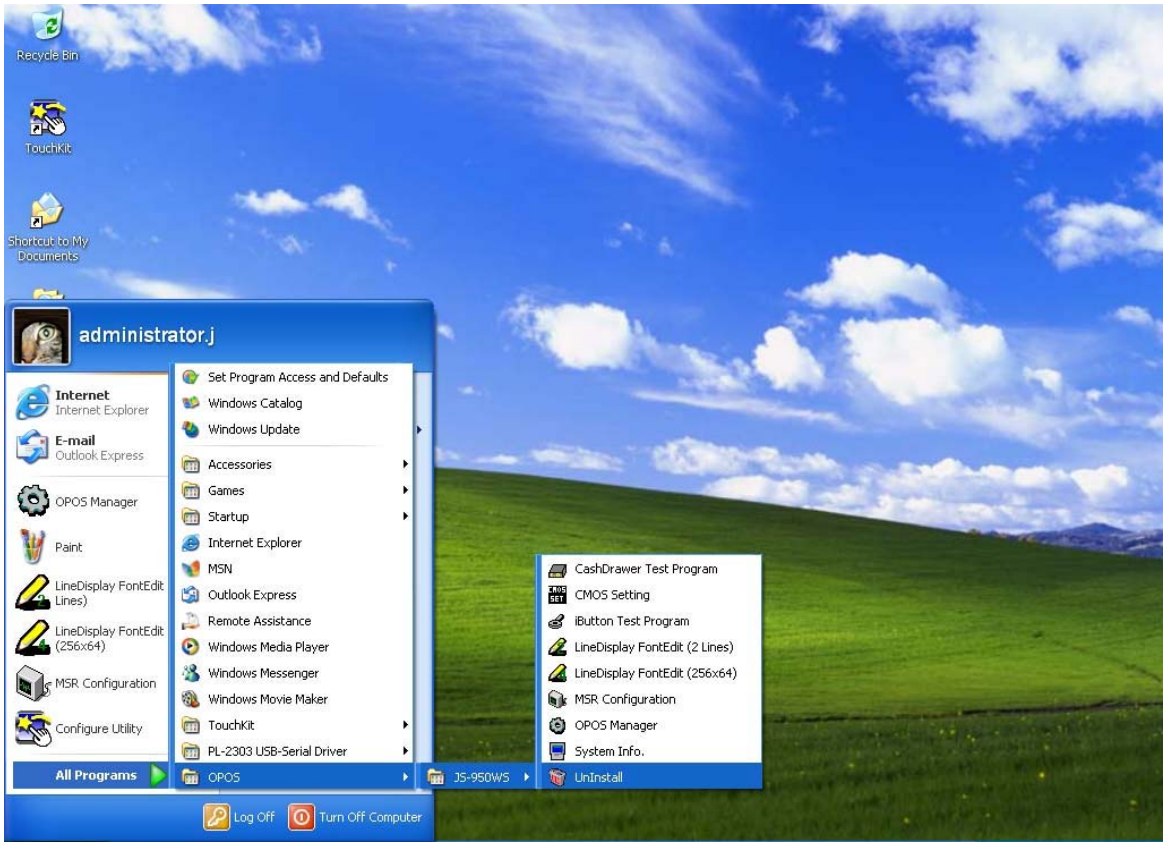
If executed, the "JS-950WS Monitor Switch" in the system tray **must be closed**, before JS-950WS OPOS drivers can be uninstalled.



Press [Yes] to quit program.

4.8.17.2 Run “Uninstall”

Press [Start] ---> [All Programs] ---> [OPOS] ---> [JS-950WS] ---> [Uninstall]

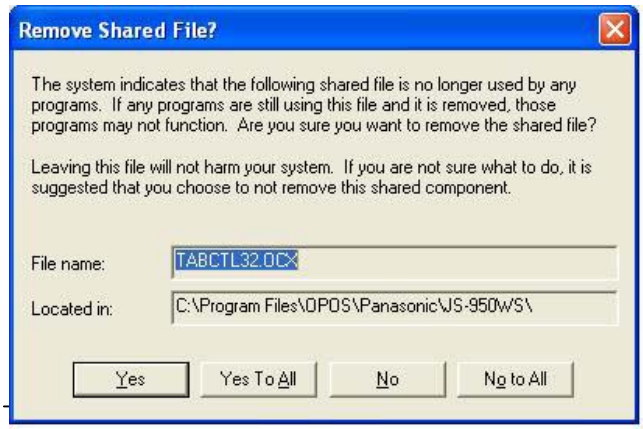


4.8.17.3 Confirm File Deletion

Press [Yes] to remove.

4.8.17.4 Remove Shared File

Press [Yes To All] to remove file.



4.8.17.5 Complete Uninstall JS-950WS OPOS Drivers

Press [OK] to complete uninstall.

4.8.18 JS-950SD (2nd Display Unit) Setting

Follow the instructions in the hardware manual for setting up the JS-950SD (2nd Display Unit). Once setup is complete, turn on.

The **JS-950WS OPOS driver** must be installed prior to setting up the JS-950SD because the backlight for the JS-950SD has the default setting of DISABLED. Another option would be to change the **BIOS setting** to enable the 2nd Display's backlight rather than installing JS-950WS OPOS driver.

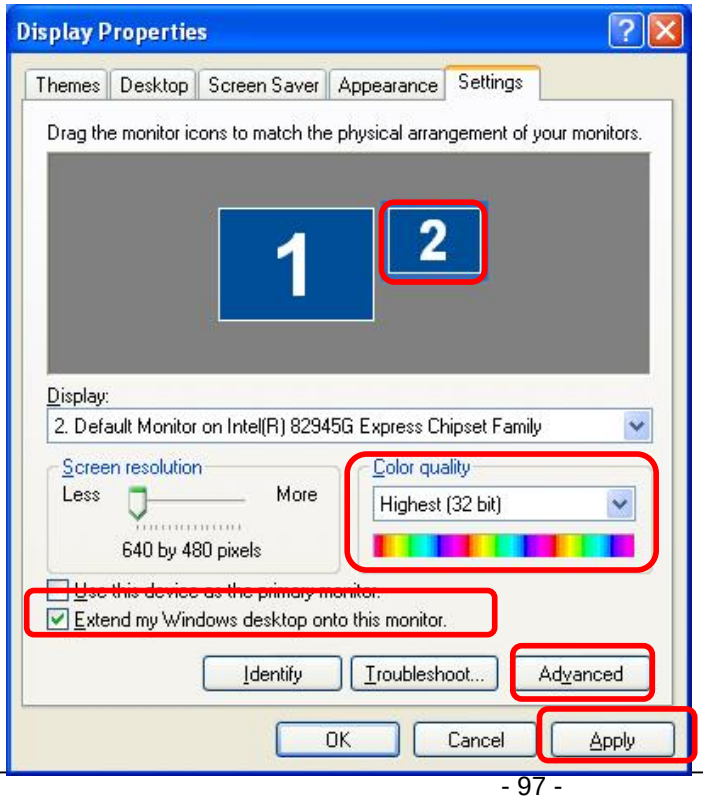
Follow steps below to change BIOS Setting:

- Connect Keyboard ---> Power on ---> Press [DEL] key ---> BIOS setting appears
- Press right/left [arrow] keys to select "Chipset" ---> Select "South Bridge Configuration" and press [Enter] ---> Select "Set 2nd LCD Backlight" and press [Enter] ---> Select "Enabled" and press [Enter].
- Press [F10] key and select [OK] to save setting and reboot.

4.8.18.1 Video Setting

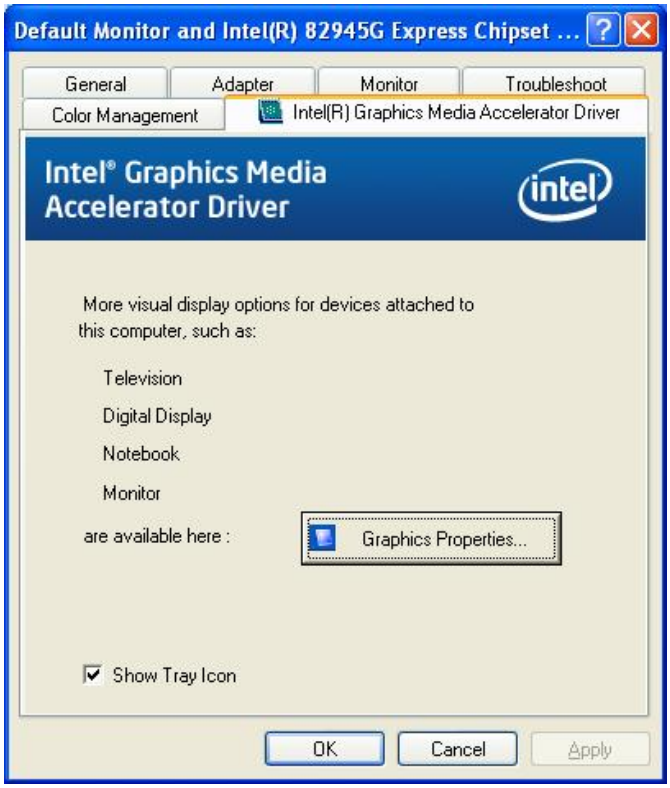
Set the Display Properties.

- Press [Start] ---> [Control Panel] ---> [Appearance and Themes] ---> [Display]
- Select [Settings] Tab
- Click the 2 (Blue colored square)
- Check the [Extend my Windows desktop onto this monitor]
- Select [Highest (32 bit)] in [Color quality]
- Press [Apply] and press [Advanced].



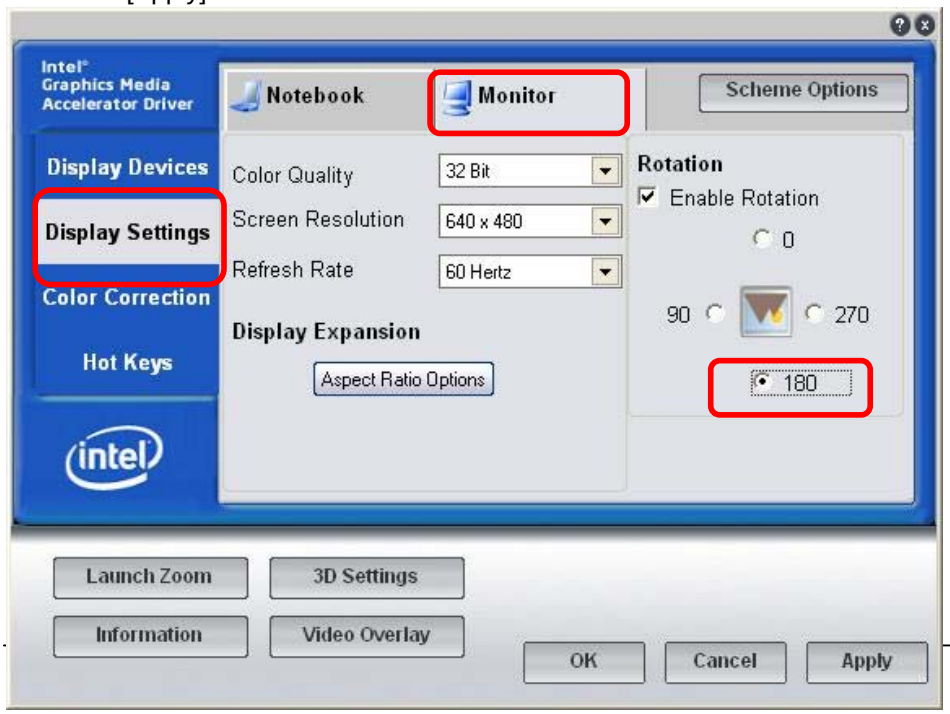
4.8.18.2 Launching Intel Graphic Driver Utility

Select [Intel(R) Graphics Media Accelerator Driver], press [Graphics Properties …].



4.8.18.3 2nd Display by Intel Graphic Driver Utility Settings

- Click [Display Settings]
- Click [Monitor]
- Select [180] in [Rotation]
- Press [Apply]

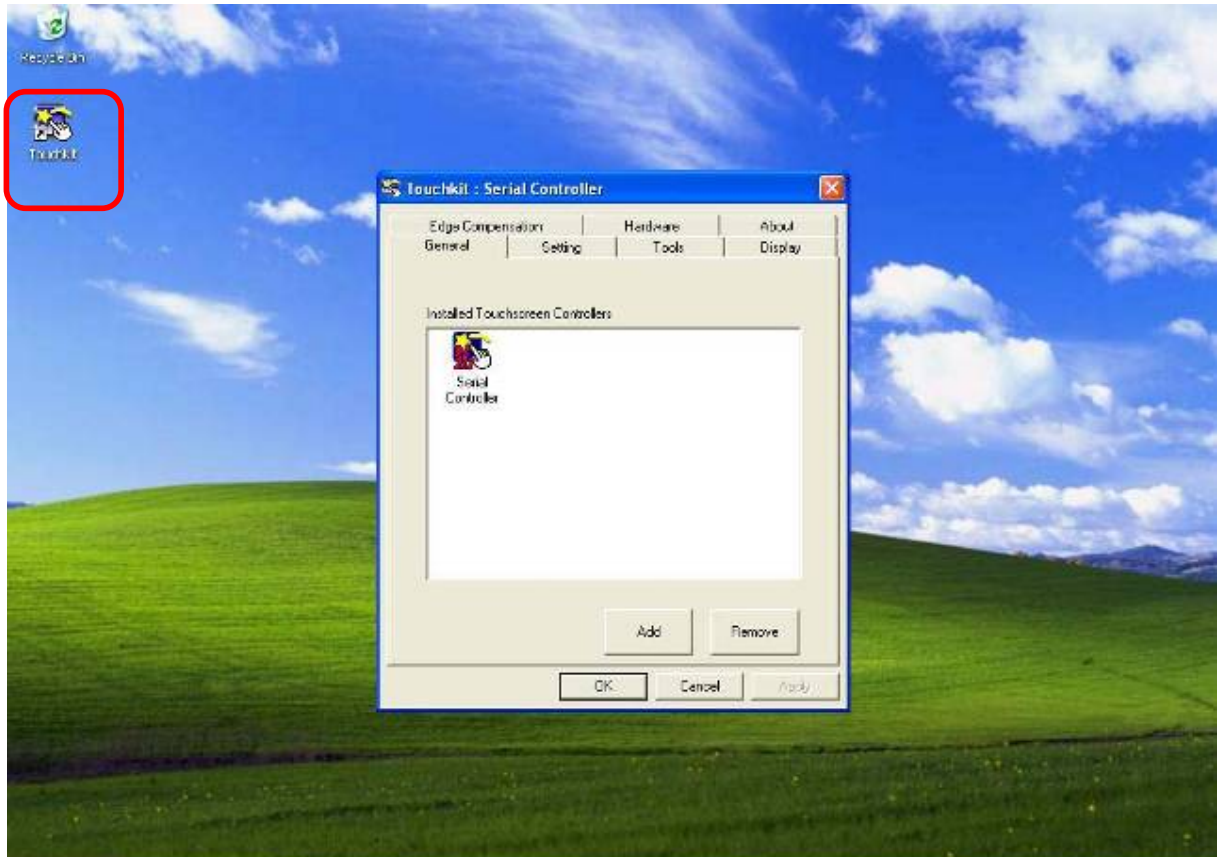


4.8.18.4 Confirm JS-950SD

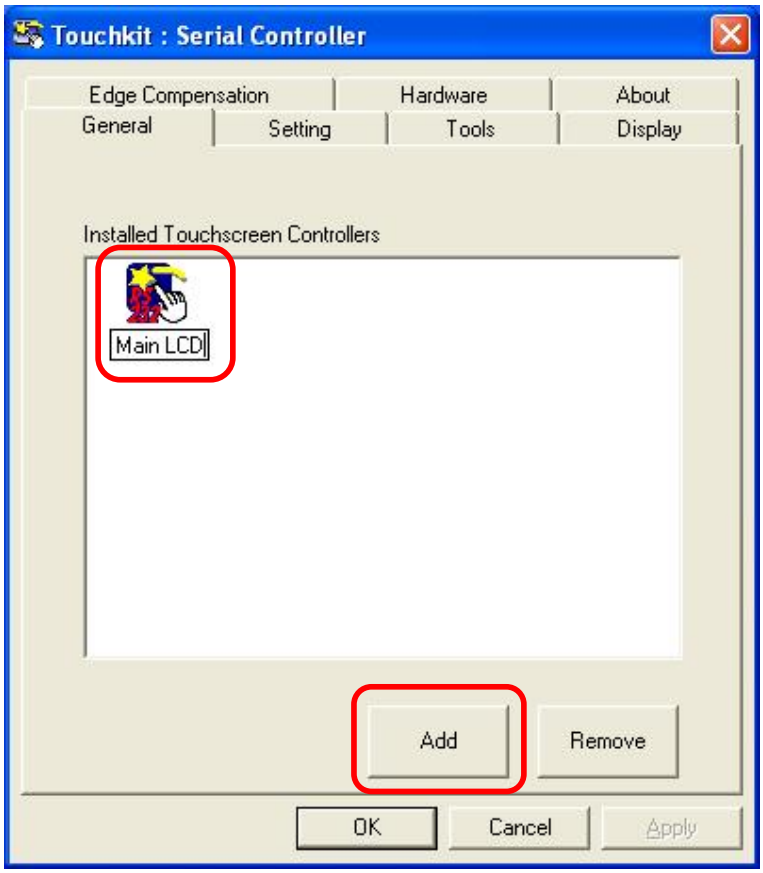
After confirming the 2nd Display Screen, press [OK] to keep the 2nd Display settings.

4.8.18.5 2nd Touch Panel Setting

Double-click the “Touchkit” found on the desktop. Select the “General” tab.

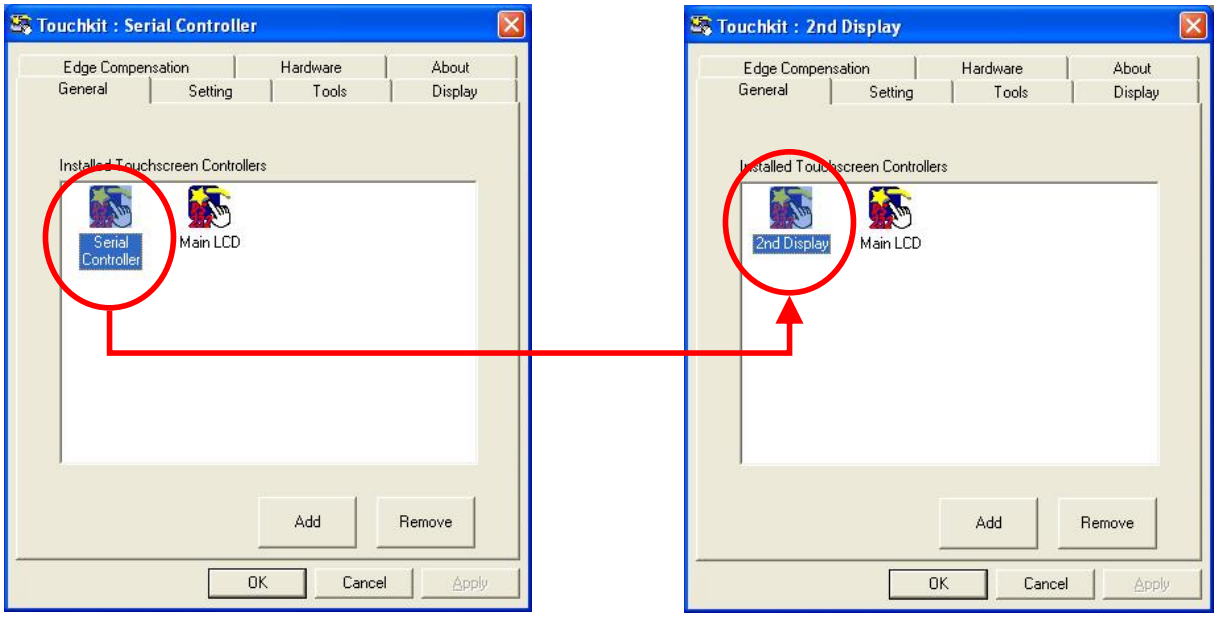


Change the name from “Serial Controller” to “Main LCD”- see example below. Press [Add] to add 2nd Display Serial Controller.



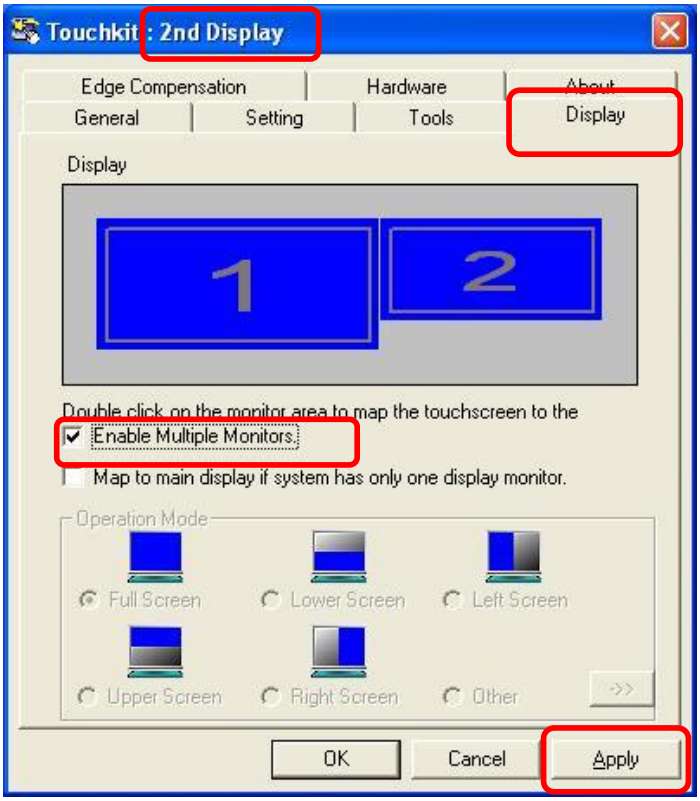
Press [Yes] to add this controller, may need to wait **<u>several minutes</u>**.

Select “Serial Controller” icon and change the name to “**2nd Display**”.

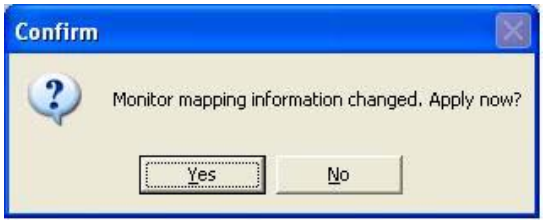


From the Touchkit screen select the “Display” tab and check “Enable Multiple Monitors”. Press [Apply].

Note: confirm the title of the window is “Touchkit : **2nd Display**”.

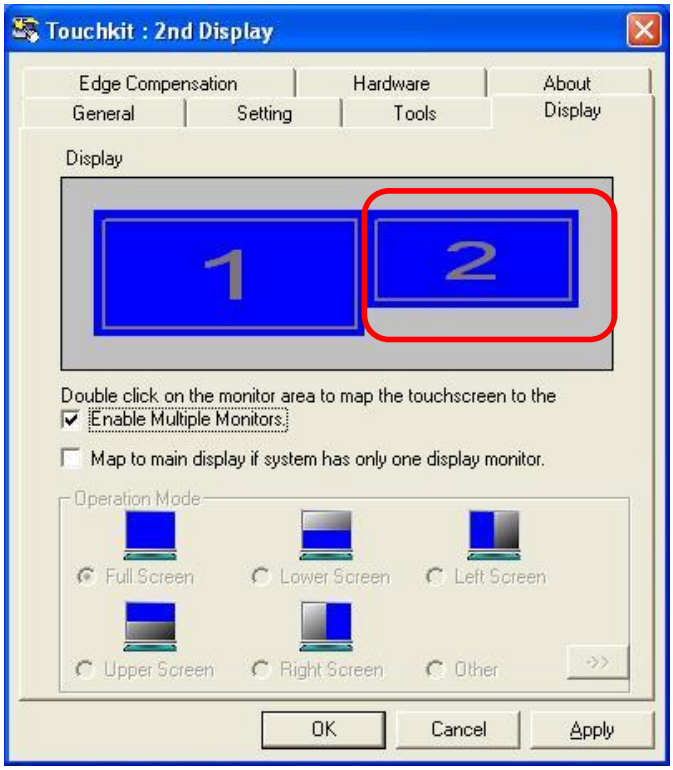


Press [Yes] to apply.



Read information and press [OK] .

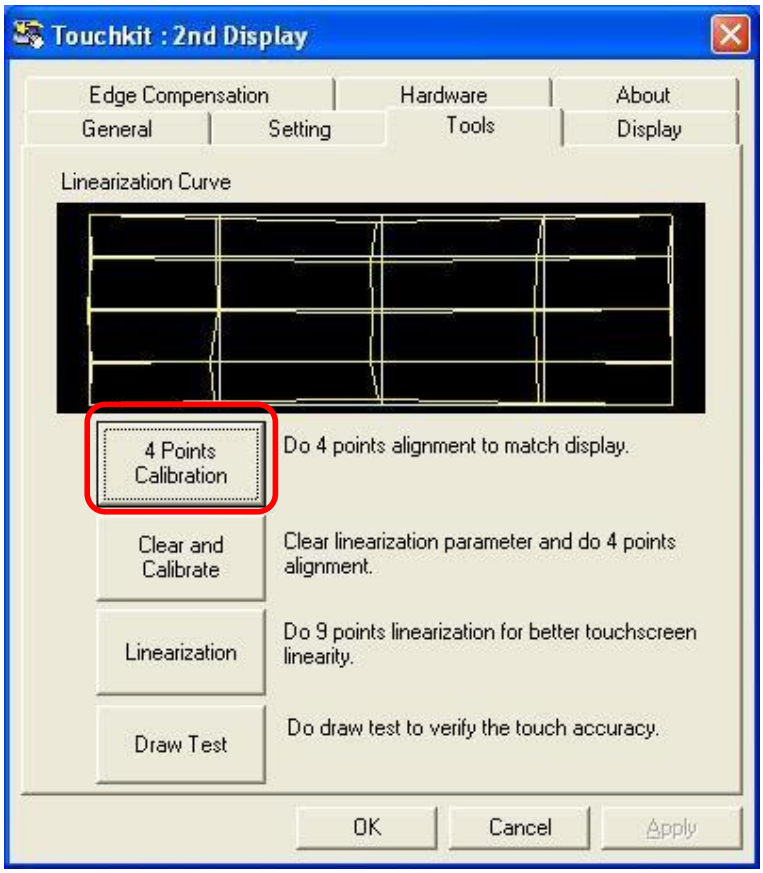
Double Click the 2 (Blue colored square).



Press [Yes] to Map.

4.8.18.6 2nd Display 4 Points Calibration

Press [4 Points Calibration].

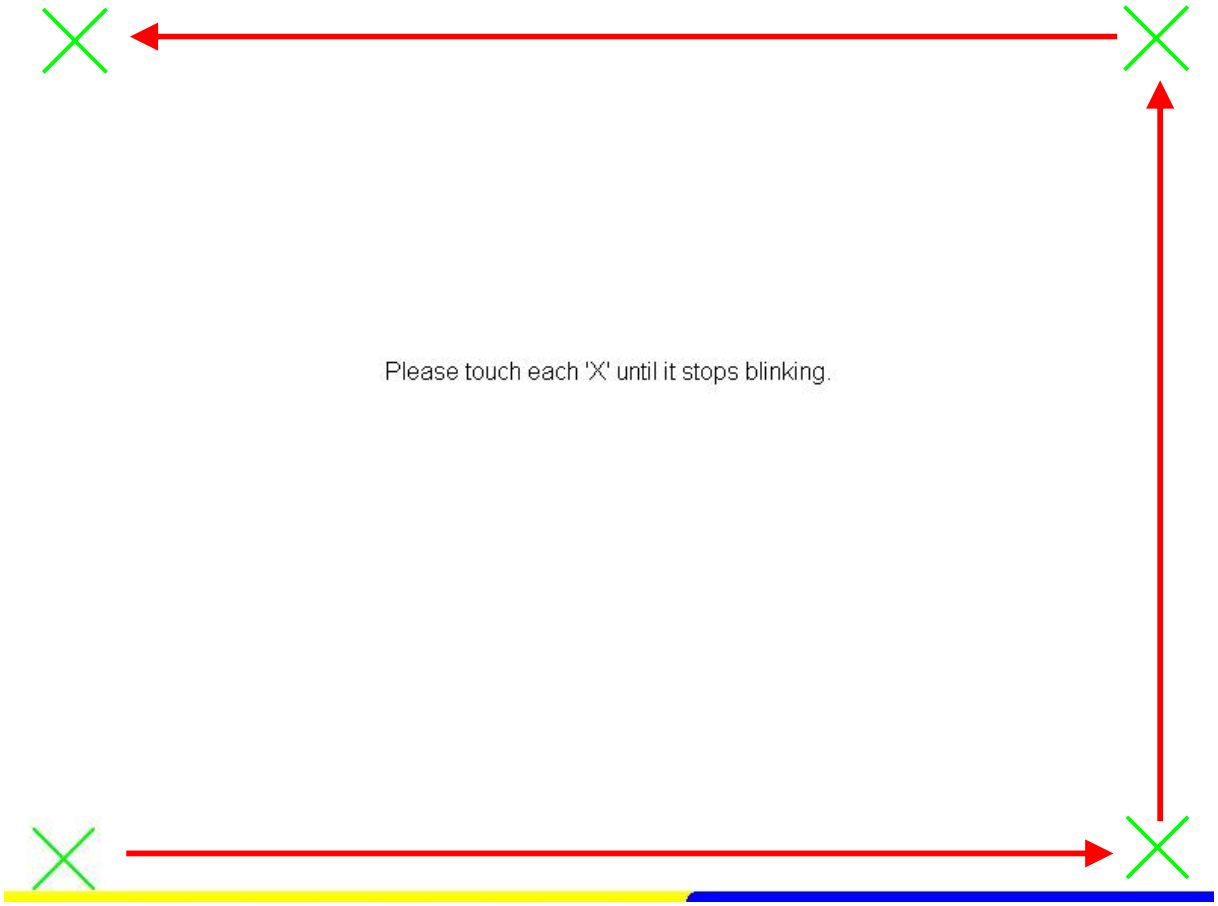


Caution:

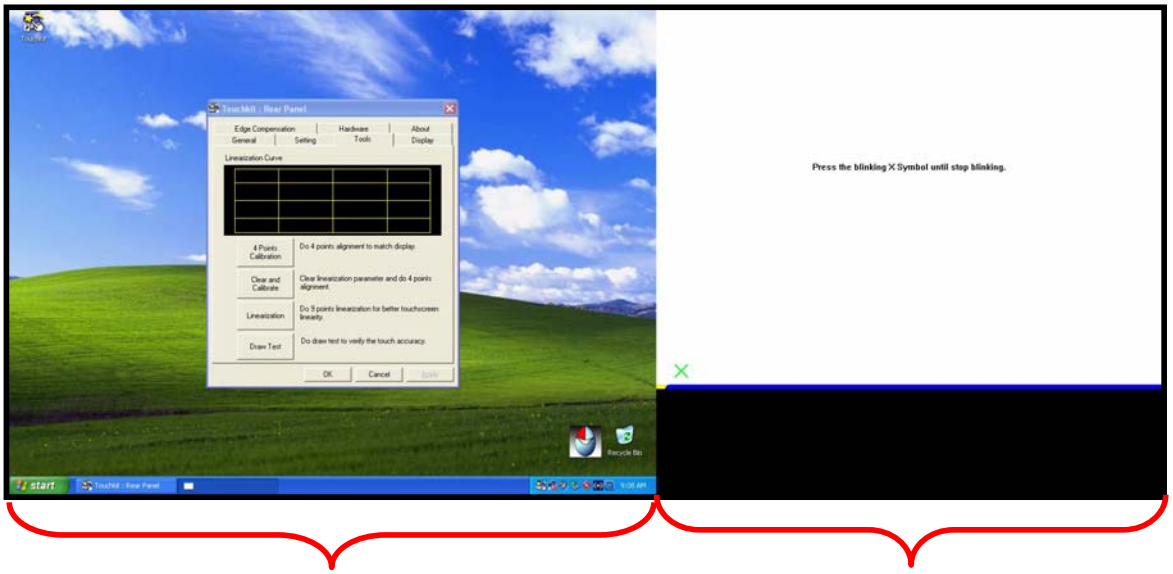
Do not press buttons other than [4 Points Calibration] or [Draw Test] because touch panel may not work properly.

4.8.18.7 2nd Display 4 Points Calibration

Press each “X” mark in following screen.



Below is a sample screen of the 15” LCD with 1024 x 768 resolution as the main display.

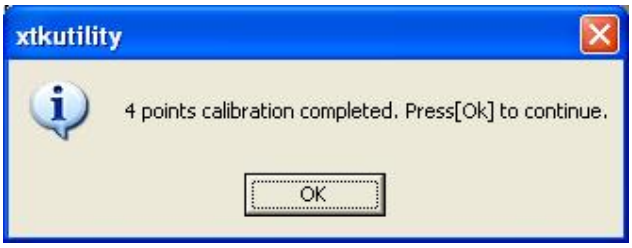


Main LCD
(1024 x 768 resolution)

2nd Display Screen
(640 x 480 resolution)

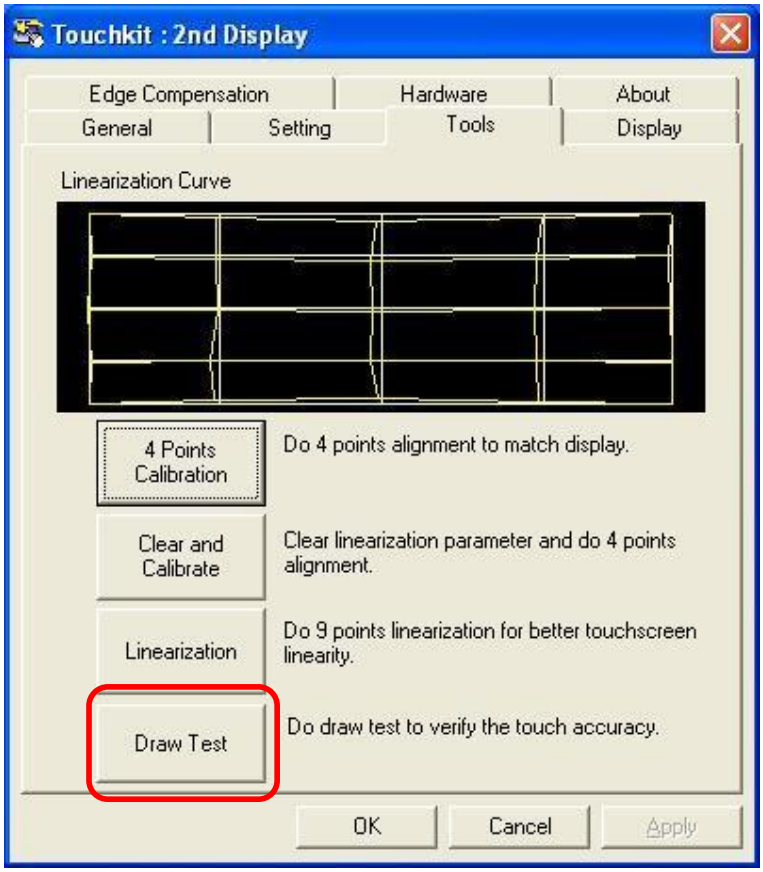
4.8.18.8 Complete 4 Points Calibration

Press [OK].



4.8.18.9 Draw Test

Press [Draw Test].



Caution:

Do not press buttons other than [4 Points Calibration] or [Draw Test] because touch panel may not work properly.

4.8.18.10 Draw Test

Use your finger to draw on the touch panel, confirm the line is drawn correctly.

If line is correct, press [Quit].