

## **CITIZEN OPOS DRIVER 1.13**

**Setup Guide**

**For Ver. 1.13.1.2**

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**Revision Record**

<b>Date</b>	<b>Version</b>	<b>Description</b>
Feb. 10, 2011	1.00	New issue
Apr. 5, 2011	1.01	- The CT-S310II model was added to each item. (Page 5,6,7,14,34) - "Installation of the Windows driver" was changed. (Page 6)
Aug. 19, 2011	1.13.1.2	- Version number is changed to same version as driver itself. - Release Notes file was added to installation structure. (Page 11) - The setting of "Write Buffer" and "Detect the completion of printing" was added to "Details of settings". (Page 16) - "PE output at PNE=Invalid" was added to the memory switch setting table.(Page 35)

**Notes**

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# 1. Operating Environment

## Operating System

This driver supports the following Windows operating systems

- Windows XP
- Windows Vista
- Windows 7

From Windows Vista/7 and later version, operating system's registry structure is modified. Some applications that was programmed for Windows XP may not work correctly.

## Object Models

Object models of this product and the corresponding interface are as shown below.

For details of each model, refer to the Printer User's Guide.

Series of Model	Object Model	Interface	Printer Functions
CT-S281	CT-S281	Serial, USB	Standard
CT-S310	CT-S310	Serial, Parallel, USB, Ethernet	Standard (Paper with blackmark on front side is supported.)
	CT-S310-M1/M2	Serial, Parallel, USB, Ethernet	Paper with blackmark on back side is supported.
CT-S310II	CT-S310II	Serial, USB	Standard
CT-S601/651/801/851	CT-S601/651/801/851	Serial, Parallel, USB, Ethernet	Standard
	CT-S801/851-M	Serial, Parallel, USB, Ethernet	Blackmark paper is supported
	CT-S801-L	Serial, Parallel, USB, Ethernet	Label paper is supported.
CT-S2000	CT-S2000	Serial, Parallel, USB, Ethernet	Standard
	CT-S2000-M	Serial, Parallel, USB, Ethernet	Blackmark paper is supported
	CT-S2000-L	Serial, Parallel, USB, Ethernet	Label paper is supported.
CT-S4000	CT-S4000	Serial, Parallel, USB, Ethernet	Standard (Paper with blackmark on front side is supported.)
	CT-S4000-M	Serial, Parallel, USB, Ethernet	Paper with blackmark on back side is supported.
	CT-S4000-L	Serial, Parallel, USB, Ethernet	Label paper is supported.
CD-S500	CD-S500	Serial, Parallel, USB, Ethernet	Standard type (Without cutting feature)
	CD-S501	Serial, Parallel, USB, Ethernet	With cutting feature
	CD-S503	Serial, Parallel, USB, Ethernet	Rewinder equipped (With cutting feature)

## USB Interface Connection

Installation of printer driver is required when using this product with USB connection. In addition, the kind of driver for installation differs by the USB mode setting of printer.

- 1) In the case when USB Mode is Printer Class  
Perform the installation of Windows Driver. Designate USB Interface Port (Virtual Printer Port for USB) which is designated by the Windows Driver at OPOS Driver side.
- 2) In the case when USB Mode is Virtual COM  
Perform installation of Virtual COM Driver. Designate serial interface port designated on the Virtual COM driver at OPOS Driver side.

## Parallel Interface Connection

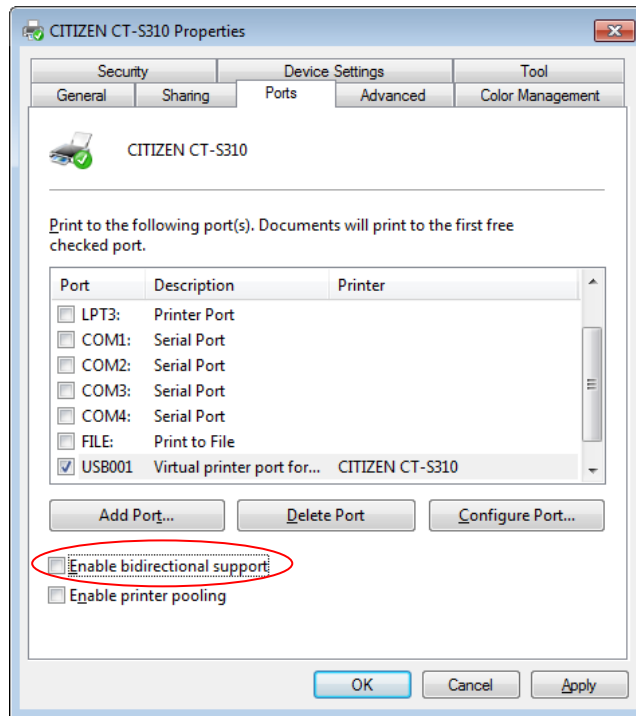
If the terminal and the printer are connected together through parallel interface, the installation wizard requesting you to install printer driver each time you start the terminal may start. To prevent this installation wizard from starting install Windows driver.

## Installing Windows Driver

Windows drivers corresponding to individual models are as shown below. For the method of Windows driver installation, refer to "Windows Driver Guide" supplied with Windows driver.

Object Model	Windows Driver Name	Printer Function
CT-S281	CITIZEN CT-S281	Standard
CT-S310	CITIZEN CT-S310	Standard (Paper with blackmark on front side is supported.)
CT-S310-M1/M2	CITIZEN CT-S310 Black Mark	Paper with blackmark on back side is supported.
CT-S310II	CITIZEN CT-S310II	Standard
CT-S601/651/801/851	CITIZEN CT-S601/651/801/851	Standard
CT-S801/851-M	CITIZEN CT-S801/851 Black Mark	Blackmark paper is supported.
CT-S801-L	CITIZEN CT-S801 Label	Label paper is supported.
CT-S2000	CITIZEN CT-S2000	Standard
CT-S2000-M	CITIZEN CT-S2000	Blackmark paper is supported.
CT-S2000-L	CITIZEN CT-S2000	Label paper is supported.
CT-S4000	CITIZEN CT-S4000	Standard (Paper with blackmark on front side is supported.)
CT-S4000-M	CITIZEN CT-S4000	Paper with blackmark on back side is supported.
CT-S4000-L	CITIZEN CT-S4000 Label	Label paper is supported.
CD-S500	CITIZEN CD-S500	Standard type (Without cutting feature)
CD-S501	CITIZEN CD-S501/503	With cutting feature
CD-S503	CITIZEN CD-S500/503	Rewinder equipped (With cutting feature)

\* This driver cannot be used with the status function (language monitor) of the Windows driver that shows the printer status. When using this driver, **install the Windows driver without the status function, or uncheck the "Enable bidirectional support" option under the Ports setting of the Windows driver.** (Need to reboot the computer in order for the changes to take effect.)



### **Installation of USB Virtual COM Driver**

Install virtual COM driver corresponding to each model. Please refer to [Virtual COM Driver Installation Guide] attached to virtual COM driver for the installation method of virtual COM driver.

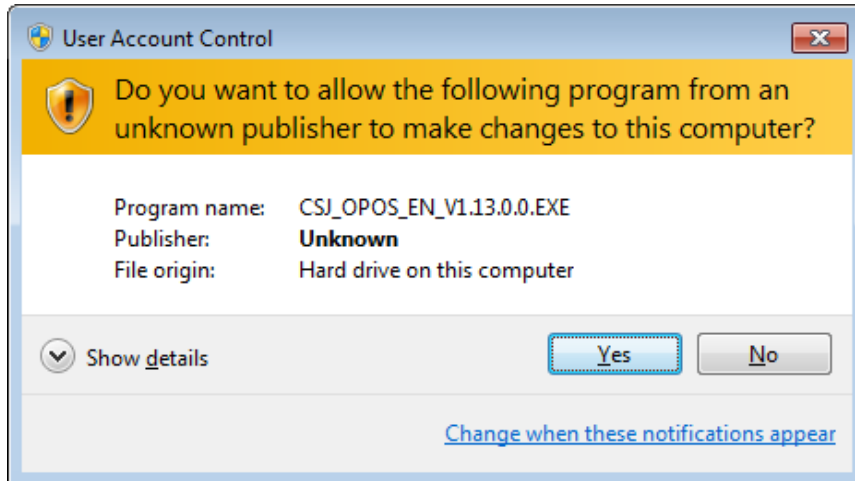
In addition, corresponding status of USB virtual COM mode for each model is shown on the table below;

Model Name	Corresponding Status for Virtual COM Mode	Port Name (Port Number)
CT-S281	Supported	Ctvrcom Virtual Communication Port (COM 7)
CT-S310	Supported	Ctvrcom Virtual Communication Port (COM8)
CT-S310-M1/M2		
CT-S601/651/801/851	Supported	Ctvrcom Virtual Communication Port (COM8)
CT-S801/851-M		
CT-S801-L		
CT-S310II	Supported	Ctvrcom Virtual Communication Port (COM8)
CT-S2000	Supported	Ctvrcom Virtual Communication Port (COM8)
CT-S2000-M		
CT-S2000-L		
CT-S4000	Supported	Ctvrcom Virtual Communication Port (COM8)
CT-S4000-M		
CT-S4000-L		
CD-S500	Not supported	-
CD-S501		
CD-S503		

## 2. Installation

The installation procedure for this product is described below.  
Before installation, shut down all applications in operation.

- 1) Run CSJ\_OPOS\_EN\_Vxxxx.exe (the installer, where xxxx represents the version).  
After starting, follow the installation procedure in accordance with the dialog.  
From Windows Vista/7 and later version, click "Yes" when the following "User Account Control" dialog is displayed.



- 2) Setup wizard starts. Click [Next].



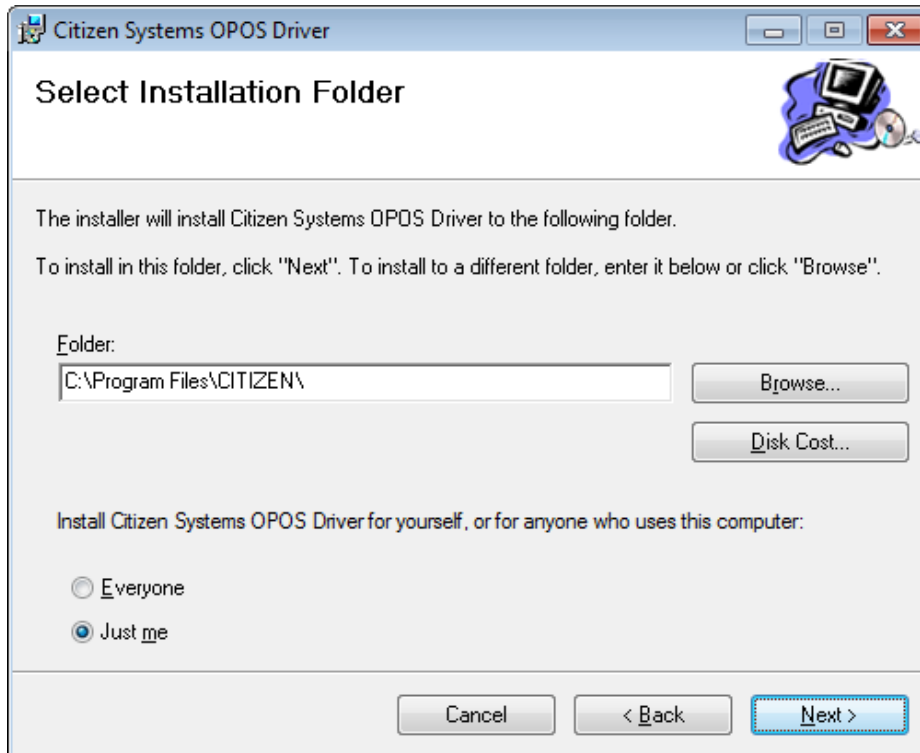
3) "License Agreement" window is displayed.

If you agree with the product license agreement, select "I Agree" and click [Next]. If you do not agree with the product license agreement, select "I Do not Agree" and click [Next] to exit the wizard.

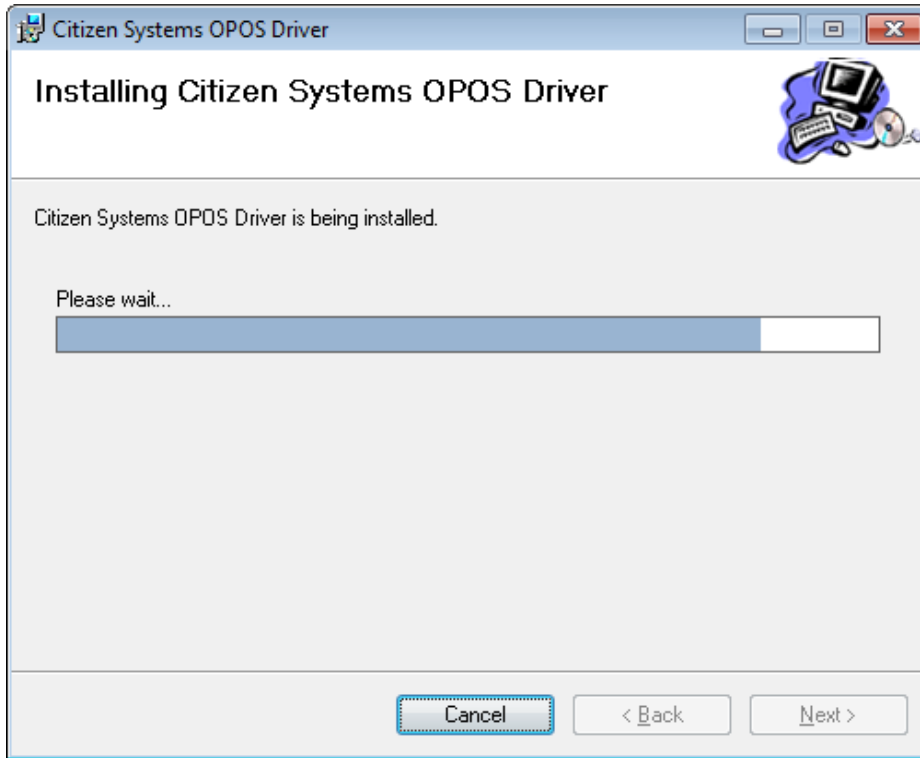


4) "Select Installation Folder" window is displayed.

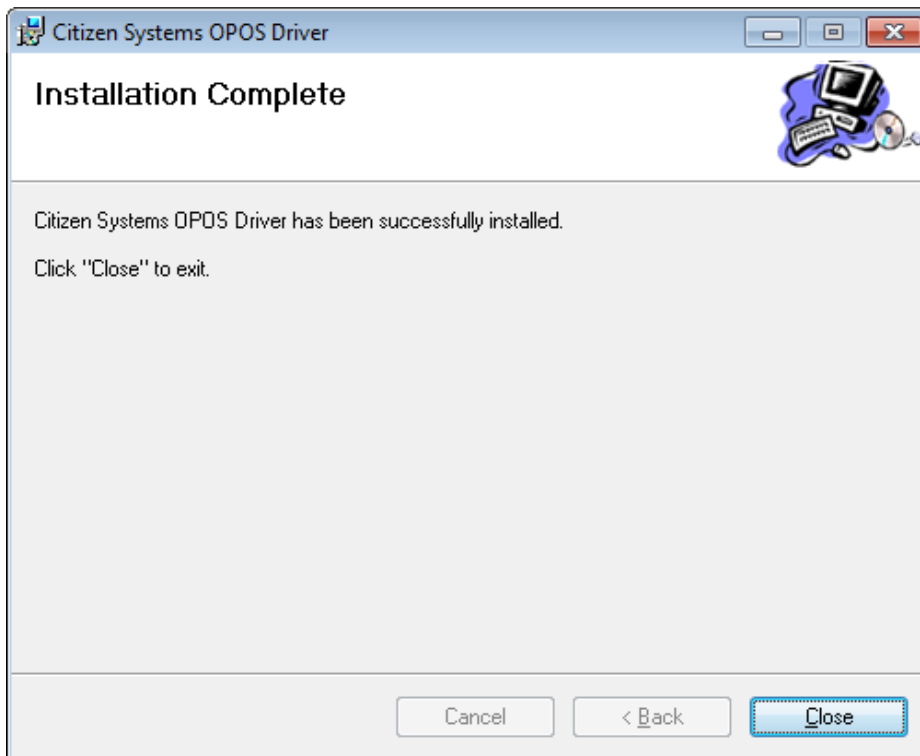
Specify the folder to install. If you use a default folder, click [Next]. If you want to change the folder, change the folder you want to install.



- 5) The installation progress status window is displayed.  
(It may take longer time to install depending on the environment or specifications of the terminal.)



- 6) When the installation is successful, "Installation Completed" window is displayed.  
Click [Close].



### 3. Configuration of Installation Files

The following provides the description on the installation files of this product.

"Install Folder"¥CITIZEN¥CITIZENServiceObject

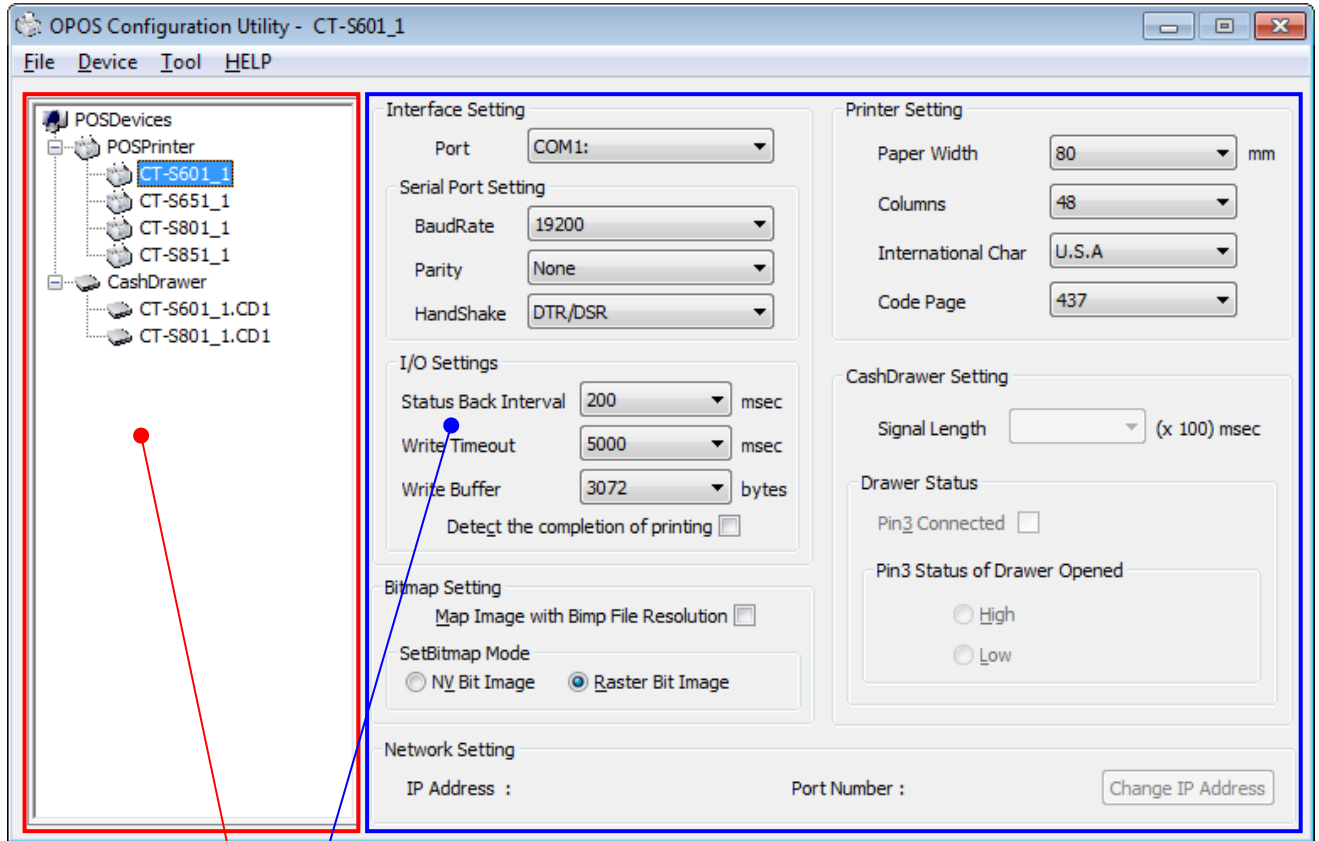
— BcWidth.DLL	(Enhanced Library of service object)
— CSJDSO.DLL	(Dot impact printer service object)
— CBMSocketMon.DLL	(Ethernet interface socket monitor)
— CBMPortMon.DLL	(Port Monitor)
— CSJTZO.DLL	(Line thermal printer service object)
— ConfigurationUtility.EXE	(OPOS driver setting tool)
— ConfigurationUtility.EXE.manifest	(Manifest file)
— Japanese.DLL	(Resource of OPOS driver setting tool)
— CSJCheckHealth.EXE	(Simple Program to execute some methods)
— MFC71CHS.DLL	} (Library of Service object and OPOS driver setting tool)
— MFC71CHT.DLL	
— MFC71DEU.DLL	
— MFC71ENU.DLL	
— MFC71ESP.DLL	
— MFC71FRA.DLL	
— MFC71ITA.DLL	
— MFC71JPN.DLL	
— MFC71KOR.DLL	
— MFC71U.DLL	
— MFC71.DLL	
— MSVCR71.DLL	
— MSVCP71.DLL	
— OPOSCashDrawer.OCX	(Cash drawer control object)
— OPOSPOSPrinter.OCX	(Printer control object)
— OPOSeulaE.RTF	(License Agreement of OPOS driver)
— ReleaseNotes_EN.txt	(Release Notes file)

## 4. OPOS Driver Setting Tool

This section provides the description of the method of using Configuration Utility. When this driver is installed, a shortcut icon is registered in the Windows Start Menu.

“Start” → “Program” → “CITIZEN” → “OPOS 1.13” → “Configuration Utility”

### Main Screen

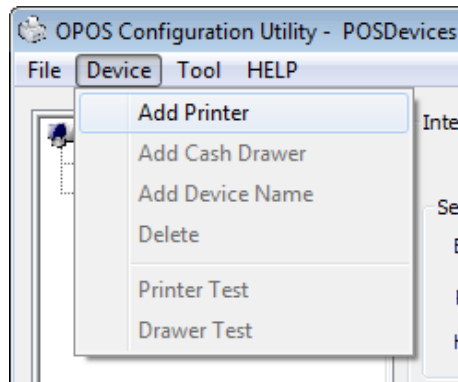


Setting view: Indicates the setting of each device (Direct change of setting is available).

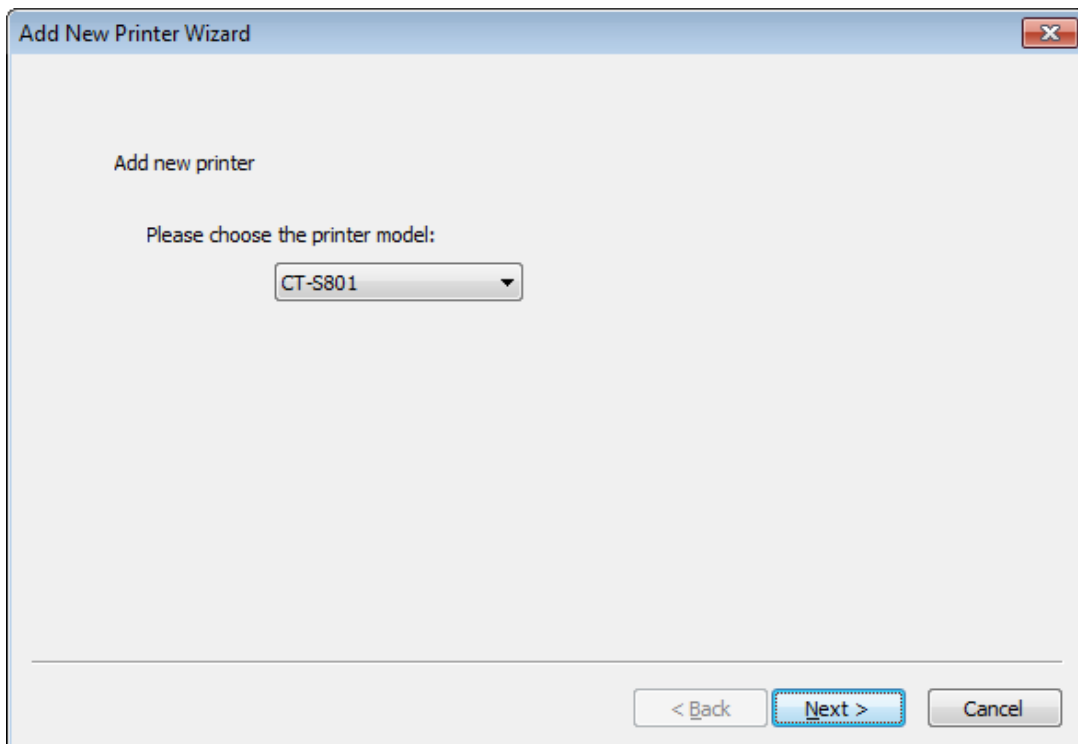
Device view: Tree of physical devices and logical devices is indicated.

## 4.1 Adding New Printer and Cash Drawer

- 1) Click "Add Printer" from the Device menu or the right-click menu (same menu is shown at each case) on the device view.

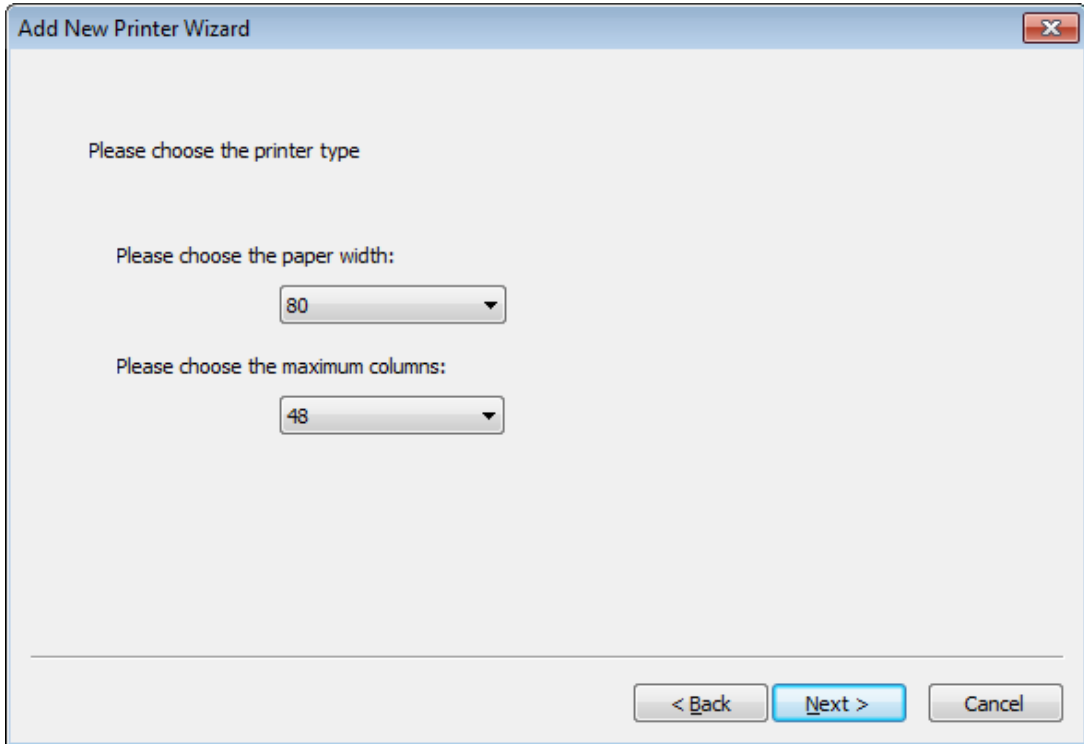


- 2) "Add Printer" wizard starts.  
Select the model to add and click [Next].  
(Here specify CT-S801.)



For the function of each printer, refer to the section in "1 Operating Environment".

- 3) "Choose the printer type" window is displayed.  
 Specify the size of paper width used and the maximum number of columns per line referring to the following table.  
 This setting is interlocked with the default value of the "RecLineChars/RecLineCharsList" property.  
 For details, refer to Application Development Guide of this product.



**CT-S280 Series**

Paper Size (mm)	Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList
58	32	384	32	32, 42, 48

**CT-S310 Series**

Paper Size (mm)	Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList	
80	58	30	360	30	30, 40, 45
		32	384	32	32, 42, 48
	42	504	42	42, 56, 63	
	48	576	48	48, 64, 72	

**CT-S310II Series**

Paper Size (mm)	Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList	
80	58	30	360	30	30, 40, 45
		32	384	32	32, 42, 48
	35	420	35	35, 46, 52	
	42	512	42	42, 56, 64	
	48	576	48	48, 64, 72	

**CT- S601/651/801/851 Series**

Paper Size (mm)		Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList		
83	80	60	58	30	360	30	30, 40, 45
				32	384	32	32, 42, 48
				35	420	35	35, 46, 52
	80	60	58	36	432	36	36, 48, 54
				42	512	42	42, 56, 64
				48	576	48	48, 64, 72
				53	640	53	53, 71, 80

**CT- S2000 Series**

Paper Size (mm)		Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList		
83	80	60	58	30	360	30	30, 40, 45
				32	384	32	32, 42, 48
				35	420	35	35, 46, 52
	80	60	58	36	432	36	36, 48, 54
				42	512	42	42, 56, 64
				48	576	48	48, 64, 72
				53	640	53	53, 71, 80

**CT-S4000 Series**

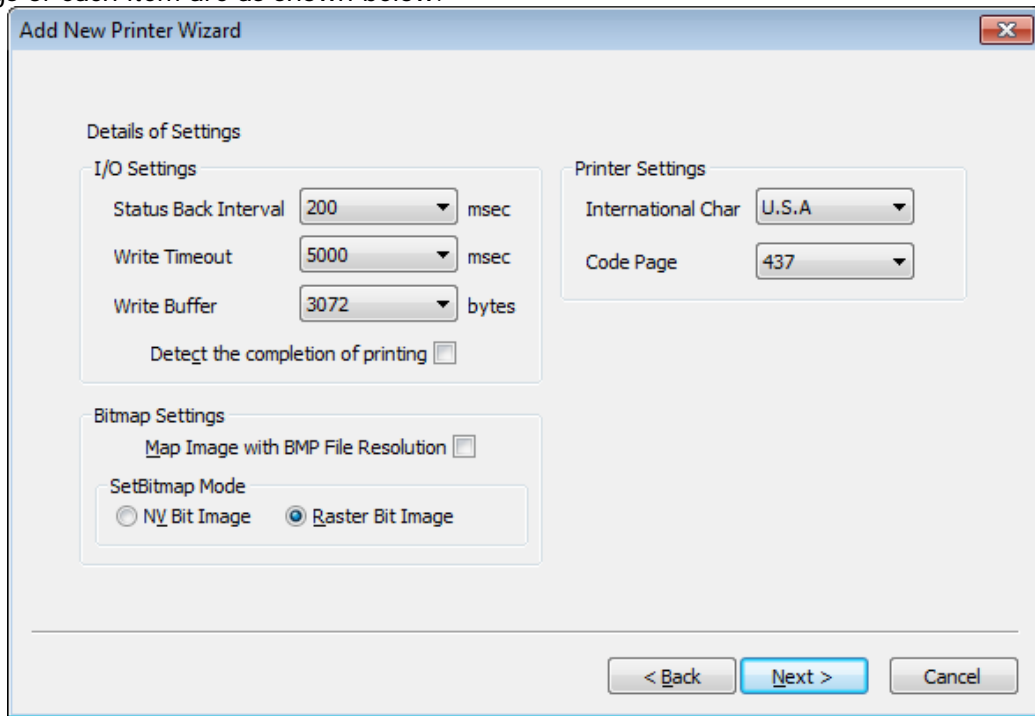
Paper Size (mm)		Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList	
112	82.5	80	42	512	42	42, 56, 64
			48	576	48	48, 64, 72
			55	660	55	55, 73, 82
	80	80	60	720	60	60, 80, 90
			69	832	69	69, 92, 104

**CD-S500 Series**

Paper Size (mm)		Max. print columns	RecLineWidth	RecLineChars	RecLineCharsList	
76.2	69.5	57.5	25	300	25	25, 30
			27	298	27	27, 33
	69.5	57.5	30	360	30	30, 36
			32	360	32	32, 40
			33	400	33	33, 40
			35	386	35	35, 42

After setting the above, click [Next].

- 4) "Details of settings" window is displayed.  
Settings of each item are as shown below.



### **Status Back interval**

Set the polling interval for acquiring printer status.  
Setting range: 100 to 900msec

### **Write Timeout**

Set the write timeout for output port.  
Setting range: 5000 to 1,000,000msec

### **Write Buffer**

Set the size of write buffer for output port.  
Setting range: 0 to 4,000,000msec

### **Detect the completion of printing**

By setting the set-up to be valid, the success / failure judgment of the method detect the completion of printing. For details of this setting, refer to Application Development Guide of this product.

### **SetBitmap Mode**

Specify the bit image mode of the SetBitmap method. For details of this mode, refer to Application Development Guide of this product.  
Set value: NV bit image/Raster bit image

### **Map image with BMP File Resolution**

By setting the set-up to be valid, output the bit image designated by SetBitmap and PrintBitmap according to BMP File resolution.

### **International Char**

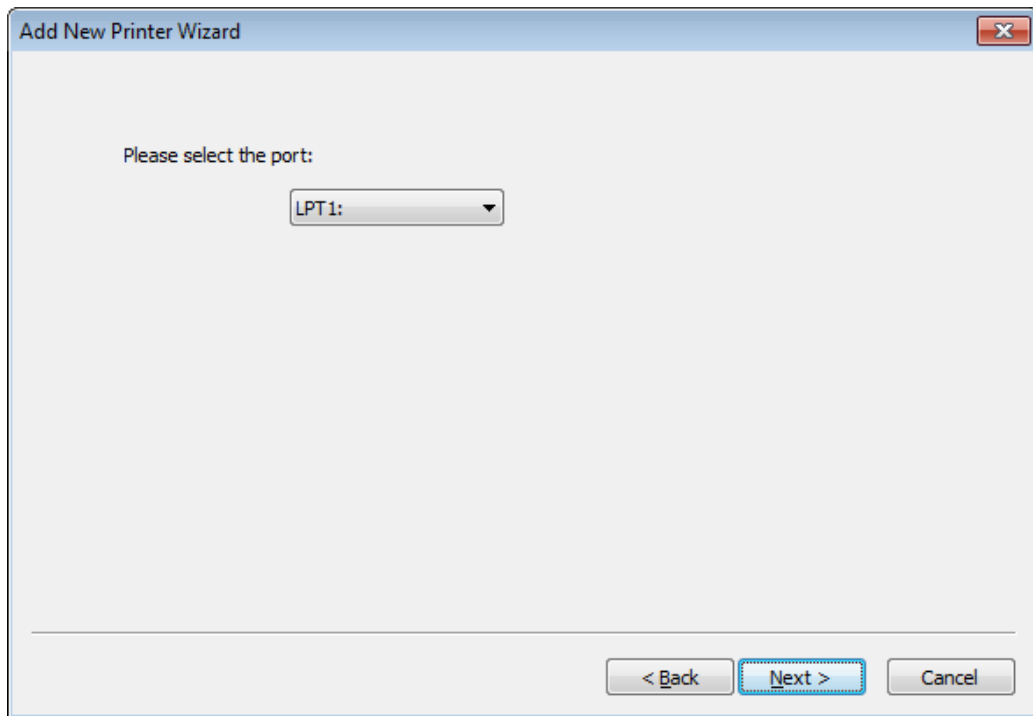
Specify a international character table to use.  
Set value: U.S.A/France/Germany/U.K./DenmarkI/Sweden/Italy/SpainI/Japan/Norway/Denmark II/Spain II/Latin America/Korea

### **Code Page**

Designate code page (Selection content differs by the model)  
Setting Value: 437/ 850/ 852/ 857/ 858/ 860/ 863/ 864/ 865/ 866/ 874/ 932/ 998/ 999/ 1252/  
User Defined

After the above setting, click [Next].

- 5) "Select the port." window is displayed.  
Select a port to be used and click [Next].

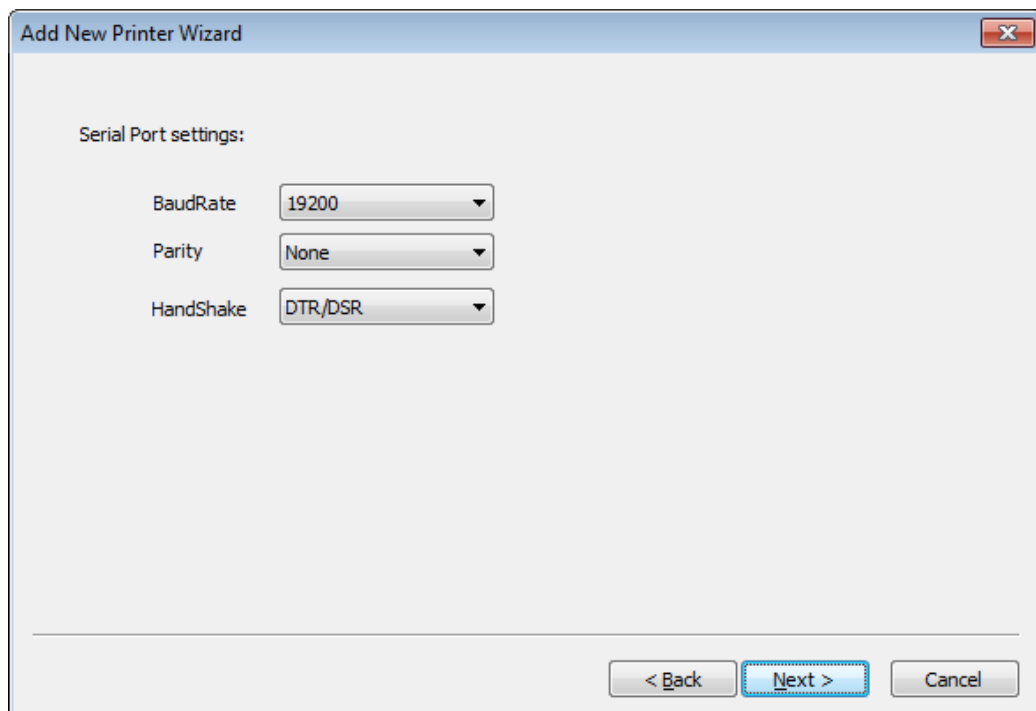


When the COM port is specified, the "Serial Port settings" window is displayed.  
Specify "Baud rate", "Parity", and "Flow control" and then click [Next].

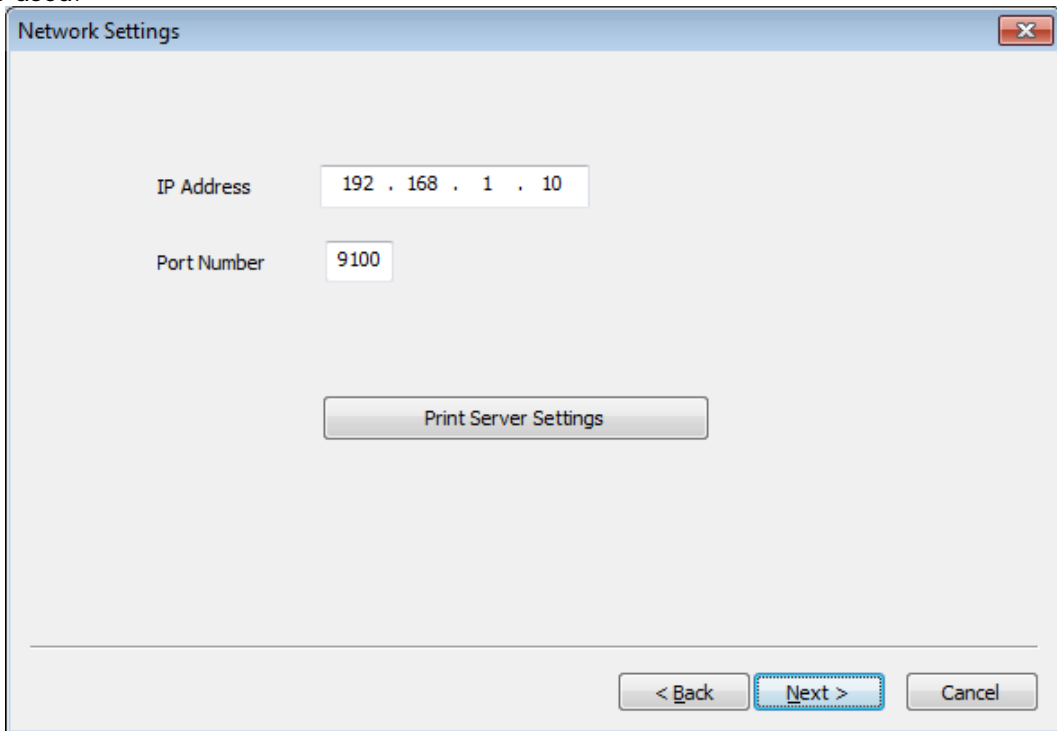
\* Data length of the printer must be 8 bits.

\* Communication is not available unless the serial port settings at the printer and at the terminal are the same.

For the serial port setting of the printer, refer to the printer User's Guide.



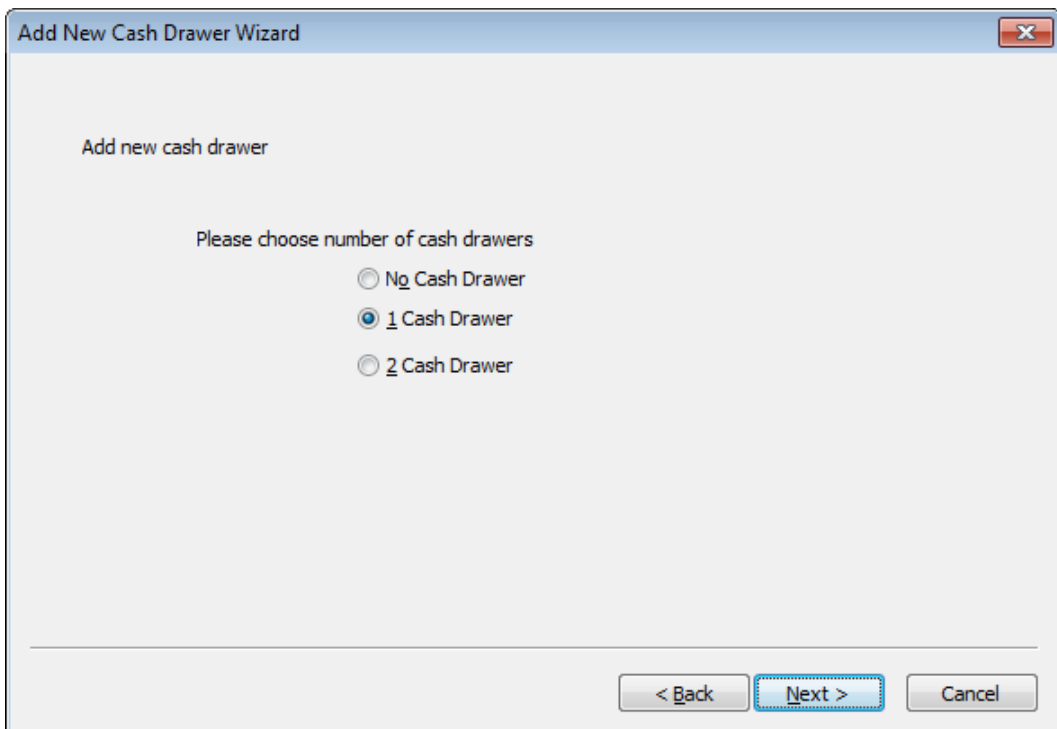
A window of [Network Setting] is displayed at NET designation. Enter [IP Address] and [Port Number] to be used.



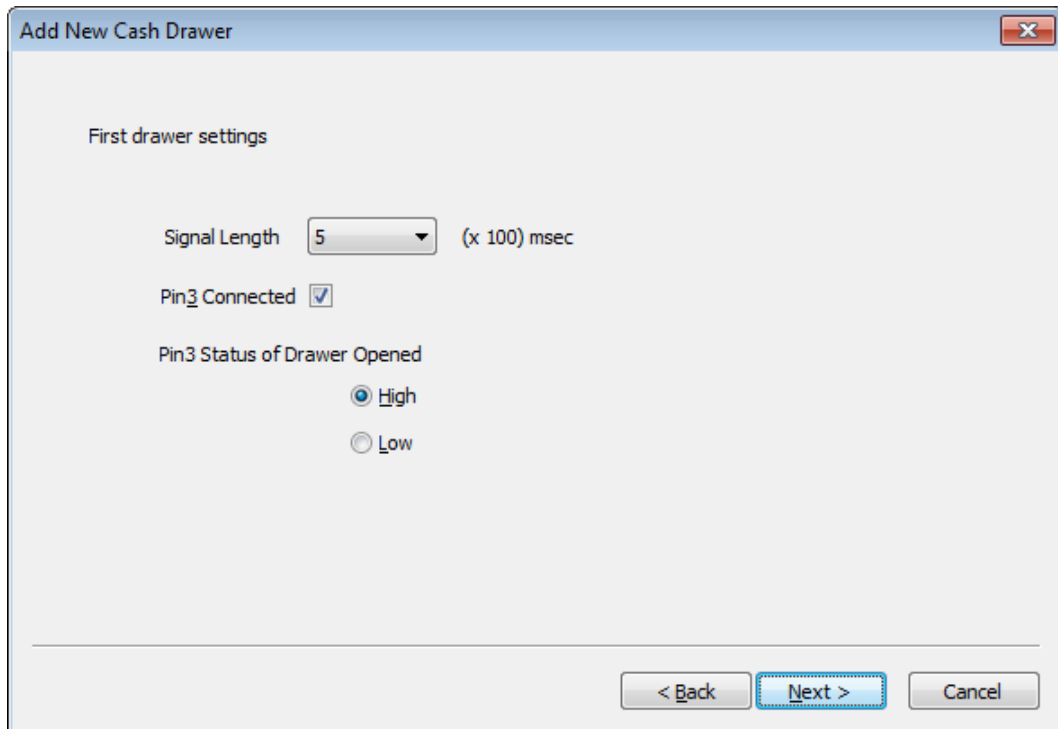
- \* When [Print Server Setting] is clicked, the print server setting tool is booted up. Please refer to the attached manual in the tool for the method of using the tool.
- \* Set [Job Receive Time Out] at [Print Server Setting].  
It is recommended to set [120] for the number of seconds until the connection being cut off.

After above setting, please click [Next].

- 6) Then the “Add new cash drawer” wizard starts.  
Specify the number of cash drawers connected to the printer and click [Next].



If "One Cash Drawer" or "Two Cash Drawers" is specified, the "First drawer settings" window is displayed.



### **Signal Length**

Specify the time width of the pulse signal output to the solenoid of the cash drawer.  
Setting range: 1 to 8 (x 100) msec

### **Pin3 Connected**

Check this when the pin 3 (drawer switch input) of the drawer kick connector is connected.

### **Pin3 Status of Drawer Opened**

Specify the drawer switch input signal level with cash drawer open.  
Setting value: High/Low

After the above setting, click [Next].

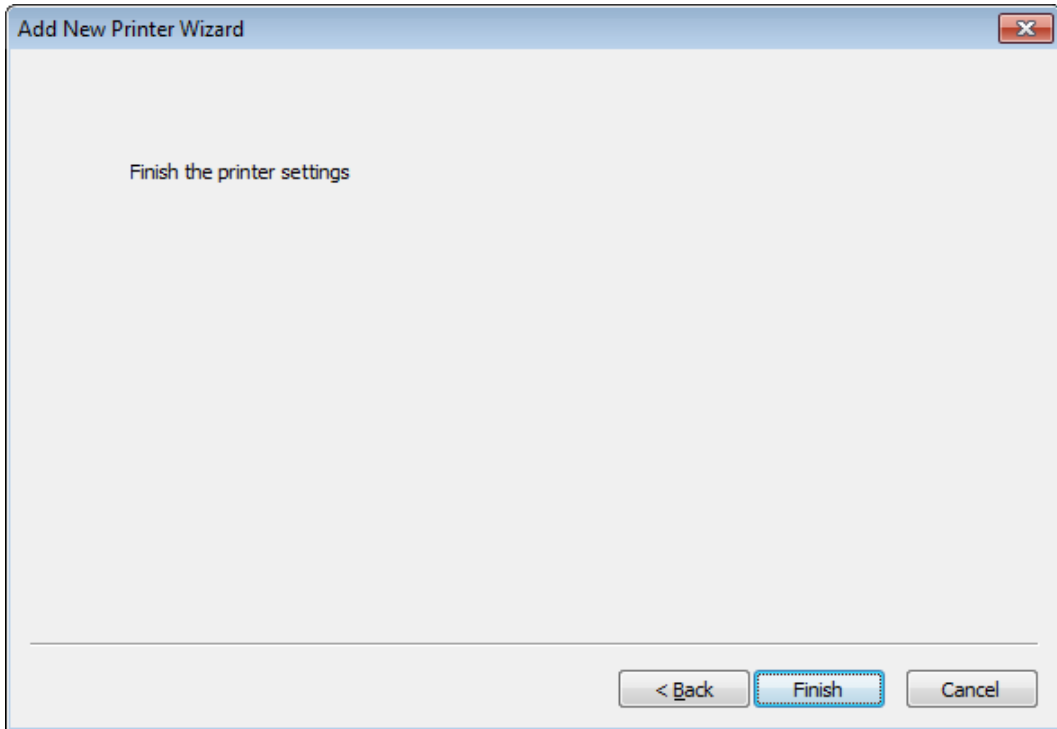
\* When "Two Cash Drawers" is specified, clicking [Next] causes the "Second drawer settings" window is displayed.

Set the second cash drawer as in the same manner as the above and click [Next].

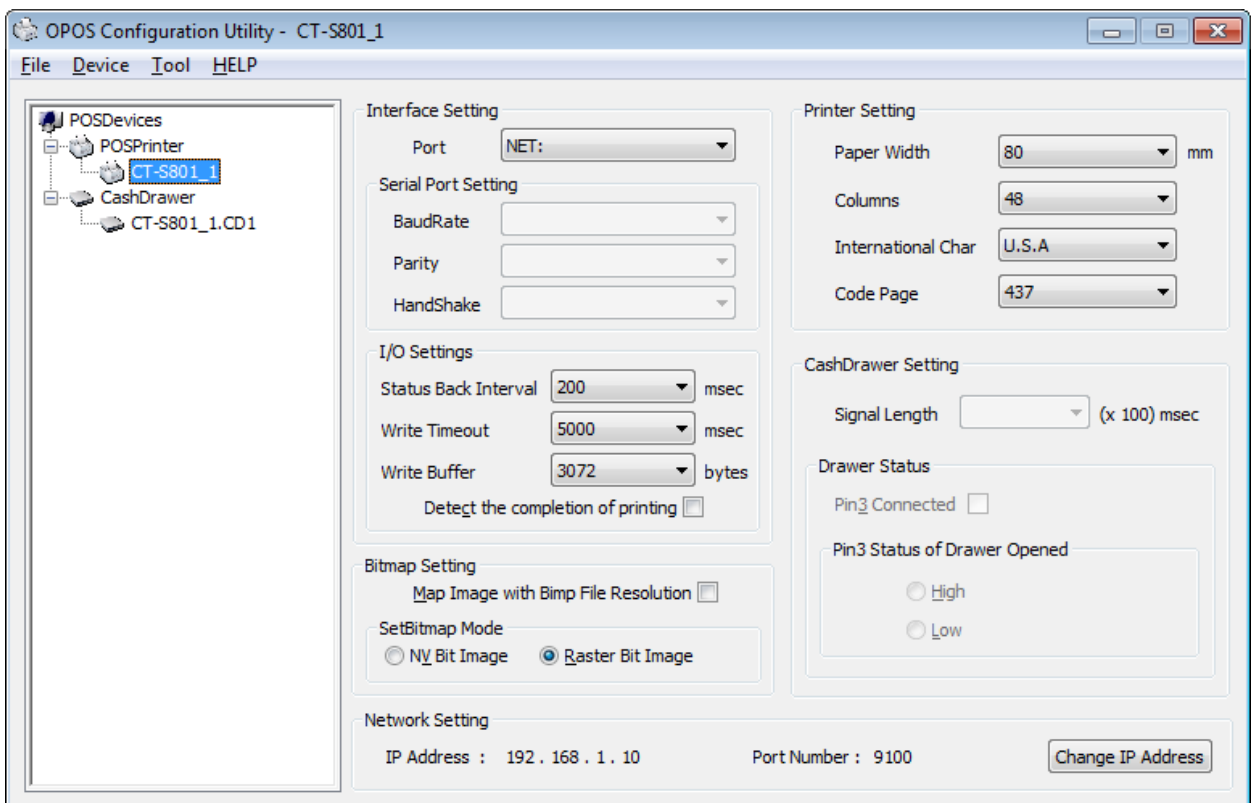
7) "Finish the printer setting" window is displayed.

Click [Finish]. Here, this tool performs registration processing for system registry.

\* It takes some time till registration of system registry is completed.



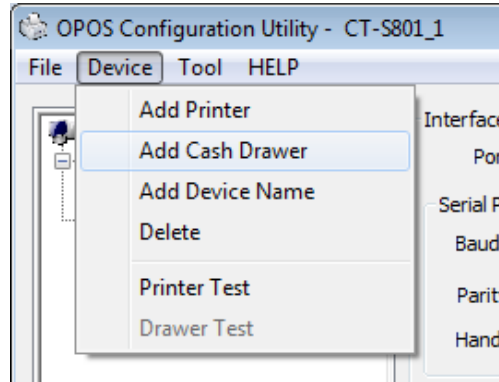
8) When this wizard is finished, the printer and the cash drawer registered in “Device view” and “Setting view” are indicated.



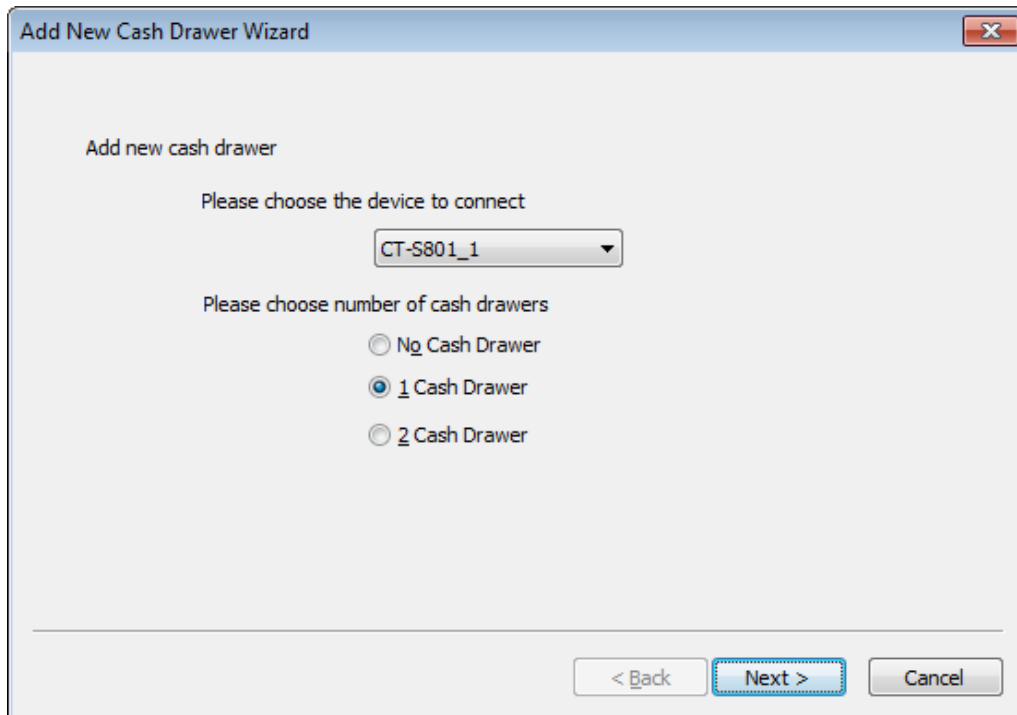
- \* Setting of each item can be changed directly from Setting View. Each time setting of item is changed, the change is reflected to the system registry immediately.
- \* When changing [IP Address] and [Port Number] in the items of [Network Setting], click [IP Address Change] for setting.

## 4.2 Adding New Cash Drawer

- 1) Click "Add Cash Drawer" from the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.
  - \* Be sure to execute Add Cash Drawer after finishing printer registration.



- 2) "Add new cash drawer" wizard starts.

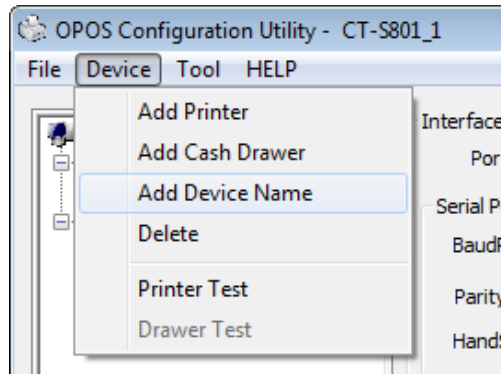


Following this step, refer to the description in "6) Then the "Add new cash drawer" wizard starts" of the section ["4.1 Adding New Printer and Cash Drawer"](#) and later, and perform adding drawer procedure in the same manner.

### 4.3 Adding Logical Device

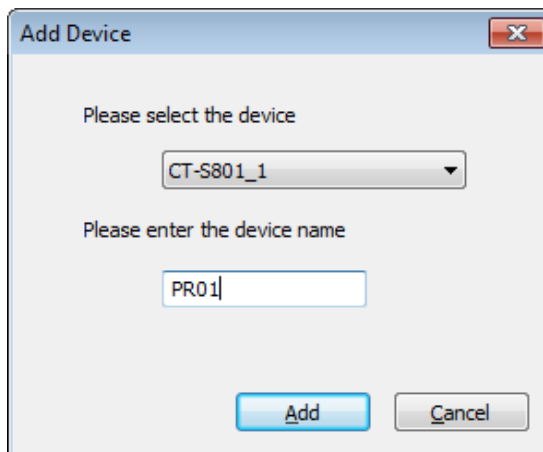
A logical device name can be assigned to the printer and cash drawer registered.

- 1) Click "Add Device Name" in the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.



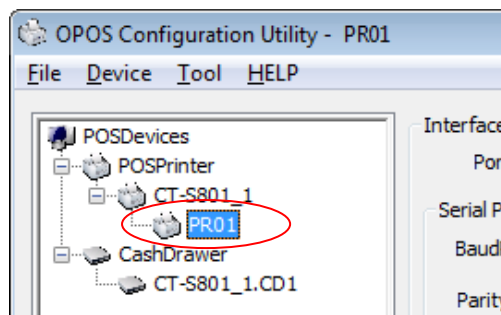
- 2) "Add Device" window is displayed.

The printer or cash drawer registered is shown in the list of "Select the device". Select the object printer or cash drawer and enter a logical device name in the text box of "Enter the device name".



After the above setting, click [Add]. If [Cancel] is clicked, the above setting is discarded.

- 3) After completion of the above procedure, the added logical device name is indicated on the Device view.

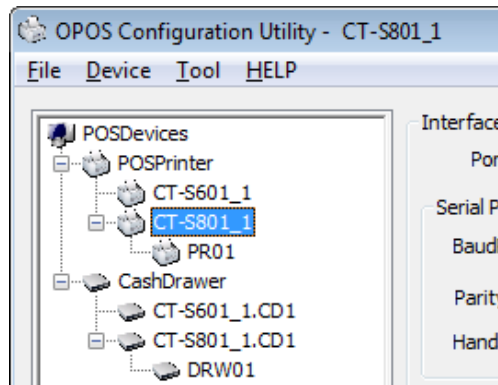


## 4.4 Deleting Device

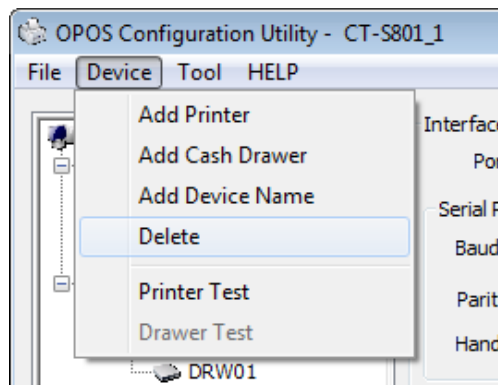
This section describes deletion of physical device (printer and cash drawer) registered.

### Deleting Printer

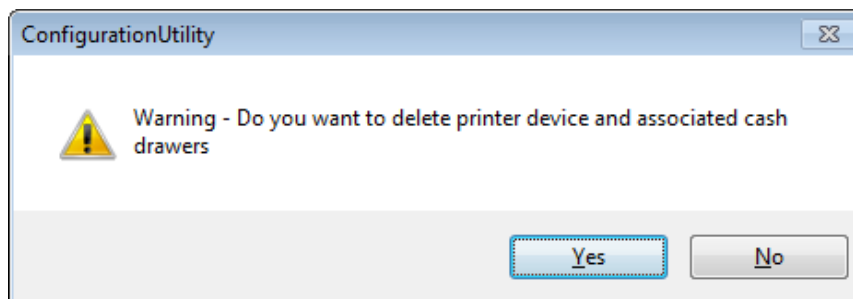
- 1) Select the printer you want to delete from the "POSPrinter" list of Device view.



- 2) Click "Delete Printer" in the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.



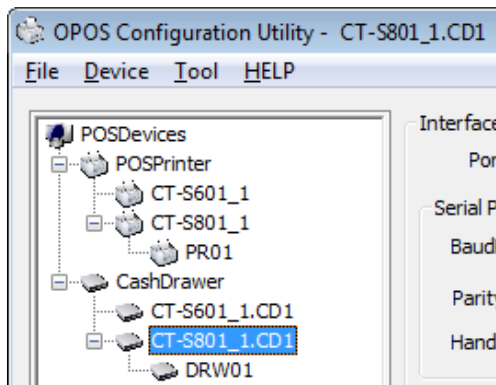
- 3) Message dialog "Warning - Do you want to delete printer device and assorted cash drawers" is displayed. Click [Yes (Y)]. If you click [No (N)], deleting the printer is aborted.



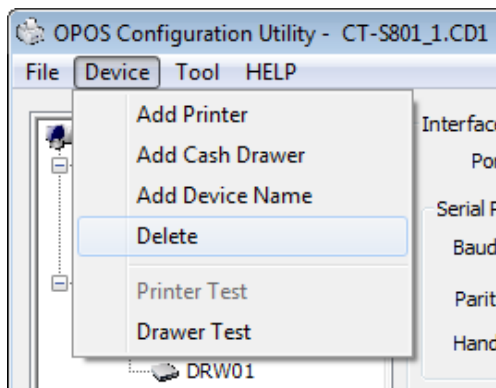
- \* When deleting a printer is carried out, all the registered drawer and logical device are deleted.

## Deleting Cash Drawer

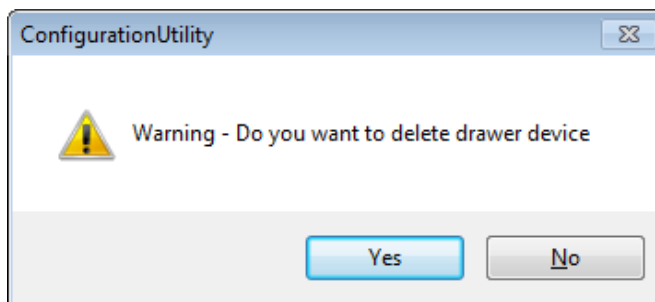
- 1) Select a cash drawer you want to delete from the “CashDrawer” list of the Device view.



- 2) Click “Delete Cash Drawer” on the “Device” menu or the right-click menu (same menu is shown at each case) on the device view.



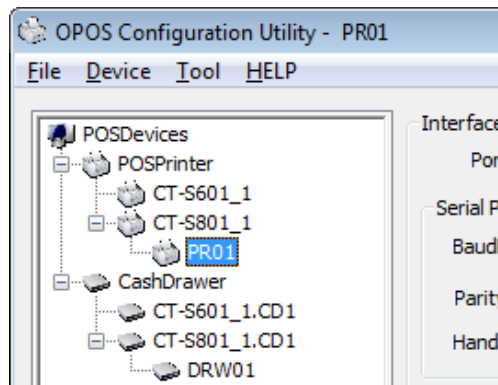
- 3) Message dialog “Warning – Do you want to delete drawer device and assorted cash drawers” is displayed.  
Click [Yes (Y)]. If you click [No (N)], deleting the drawer is aborted.



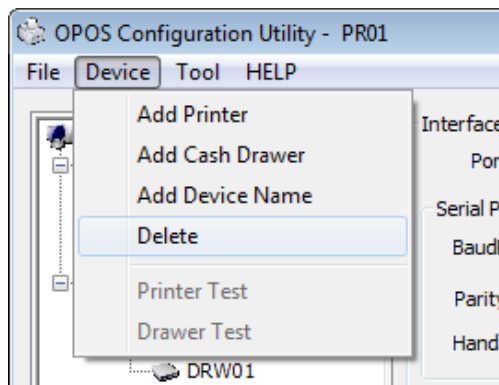
- \* When deleting a drawer is carried out, logical device is also deleted (printer is not deleted).

## Deleting Logical Device (Printer)

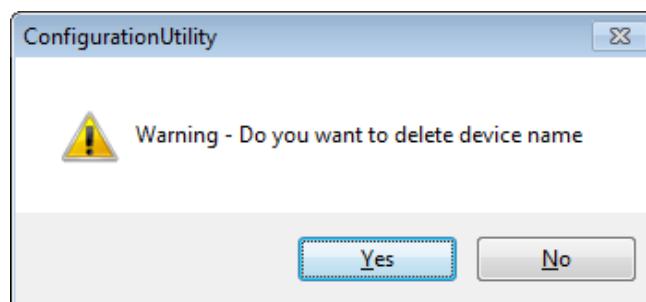
- 1) Select a logical device to delete from the "POSPrinter" of the Device view.



- 2) Click "Delete Device Name" on the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.

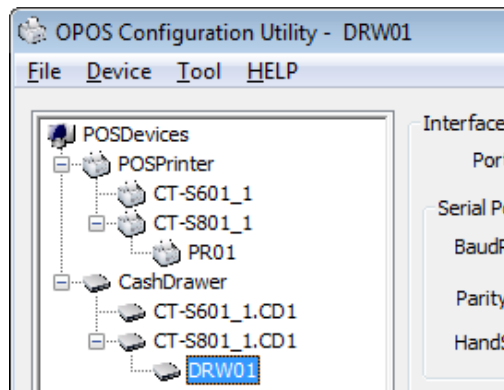


- 3) Message dialog "Warning - Do you want to delete device name" is displayed. Click [Yes (Y)]. If you click [No (N)], deleting the device name is aborted.

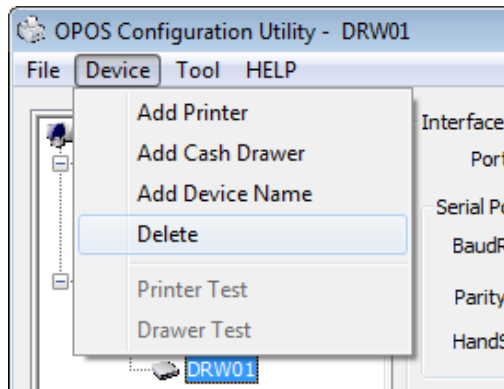


## **Deleting Logical Device (Cash Drawer)**

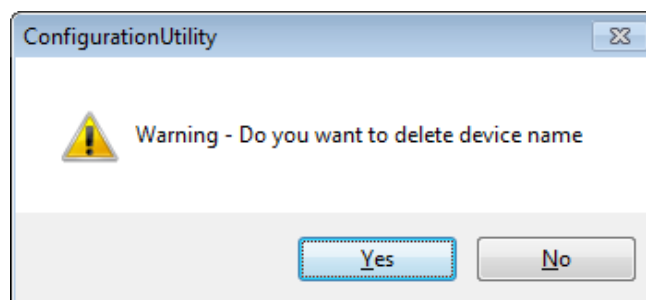
- 1) Select a logical device you want to delete from the "CashDrawer" list of the Device view.



- 2) Click "Delete Device Name" on the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.



- 3) Message dialog "Warning – Do you want to delete device name" is displayed. Click [Yes (Y)]. If you click [No (N)], deleting the device name is aborted.

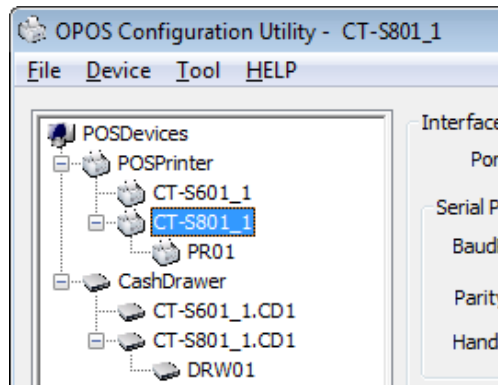


## 4.5 Testing Device

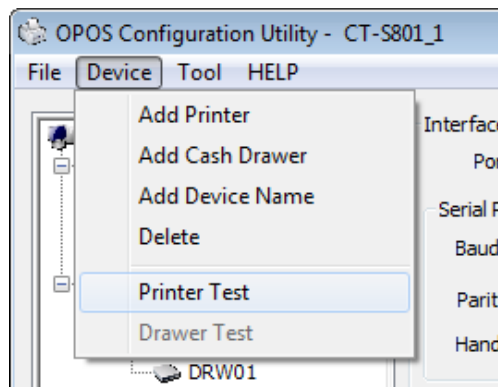
This section describes test physical device (printer and cash drawer) registered.

### Testing Printer

- 1) Select the printer you want to test from the "POSPrinter" list of Device view.

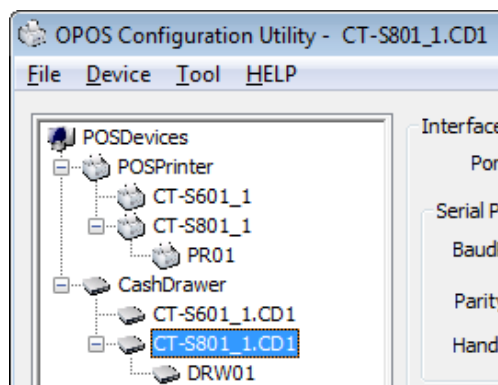


- 2) Click "Printer Test" in the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.  
This Configuration Utility executes some methods to diagnose selected printer.

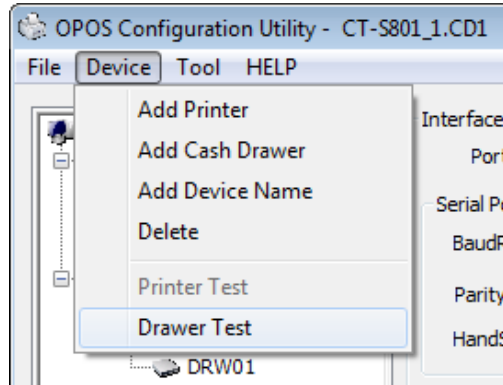


### Testing Cash Drawer

- 1) Select a device you want to test from the "CashDrawer" list of the Device view.



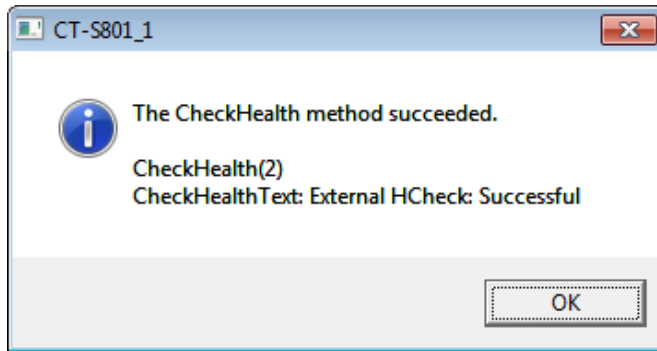
- 2) Click "Drawer Test" in the "Device" menu or the right-click menu (same menu is shown at each case) on the device view.  
This Configuration Utility executes some methods to diagnose selected cash drawer .



**Result of Test**

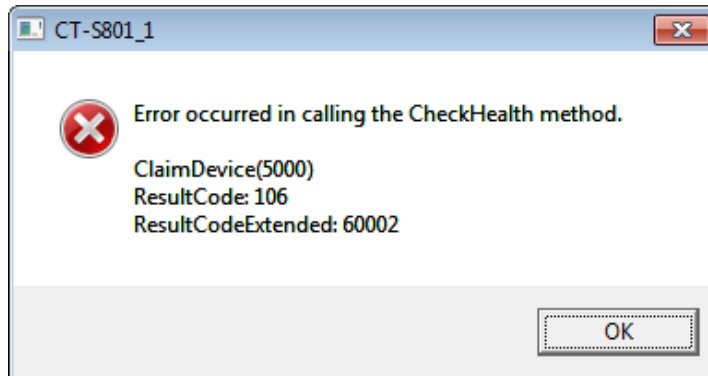
The following message is shown after the test was done correctly.

- \* It takes several seconds to test a printer. While this method is running, no other operations are disabled.



If any error occurred while testing, the following message is shown to describe the reason of the error.

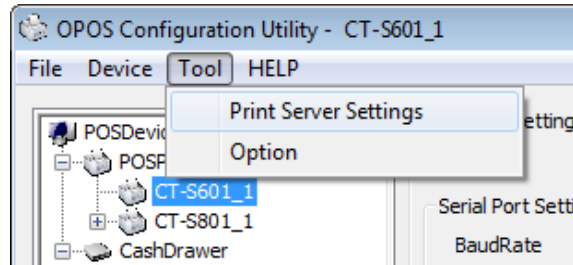
- \* The following sample is the case that a printer is not connected. It describes that an error occurred at ClaimDevice method.



## 4.6 Tool Menu

### Print Server Setting

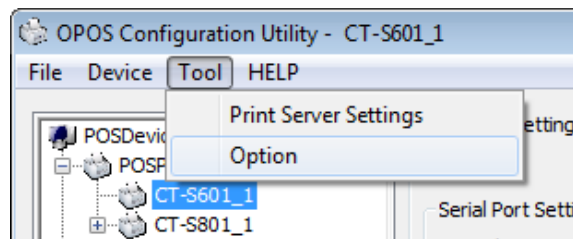
- 1) Click [Print Server Setting] from [Tool] Menu.



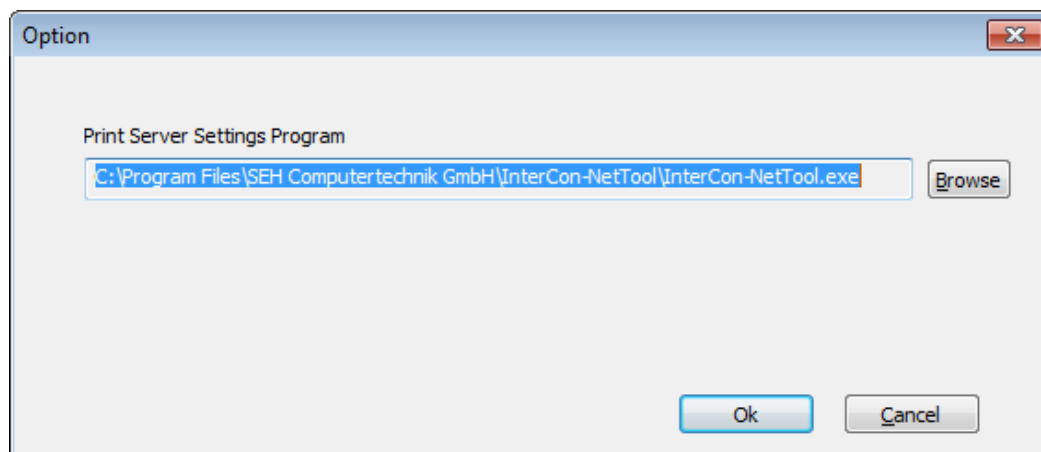
- \* When [Print Server Setting] is clicked, the print server setting tool is booted up. Please refer to the attached manual in the tool for the method of using the tool

### Option Setting

- 1) Click [Setting of Option] from [Tool] Menu.



- 2) [Option Setting] dialog is displayed.  
In case when print server setting program has not been installed into default directory, designation is possible from the screen.

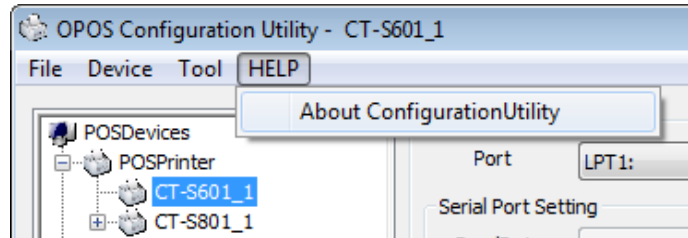


- \* C:¥Program Files¥SEH Computertechnik GmbH¥InterCon-NetTool¥InterCon-NetTool.exe is the default setting when OPOS driver installation.

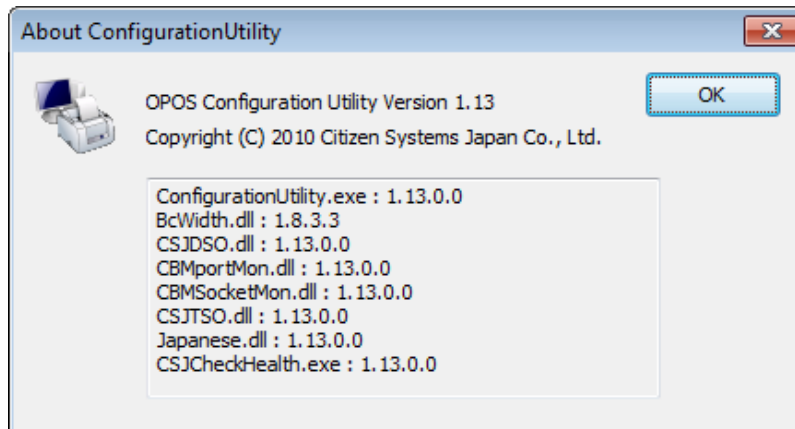
## 4.7 Help Menu

### Version Information

- 1) Click [Regarding Configuration Utility] from [Help] Menu.



- 2) [Regarding OPOS Configuration Utility] dialog box is displayed.  
Details on version information for OPOS Driver/OPOS Configuration Utility can be viewed.



## 5. Uninstall

Uninstall of this product is explained.

### Deleting System Registry

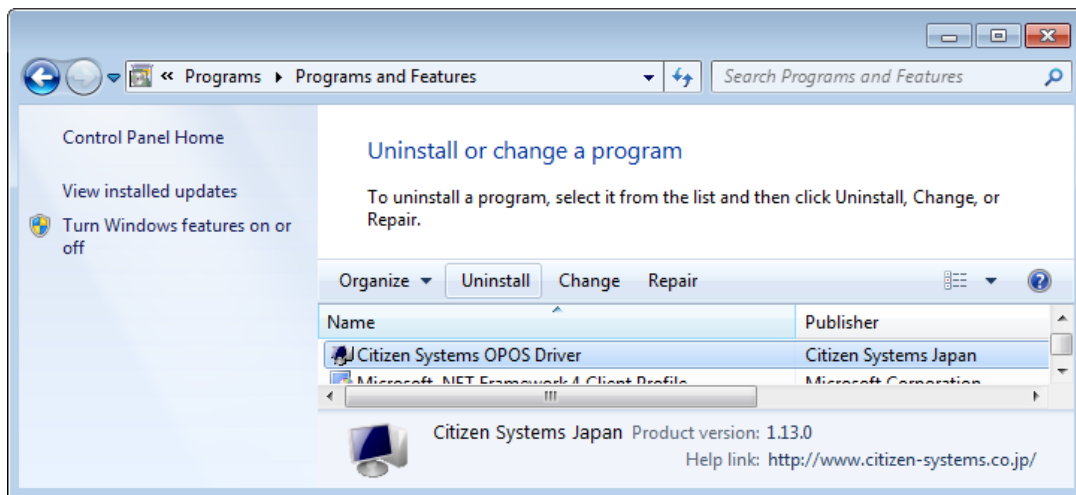
Physical and logical devices are deleted by Configuration Utility.

For the method of deleting device, refer to the section "[4.4 Deleting Device](#)".

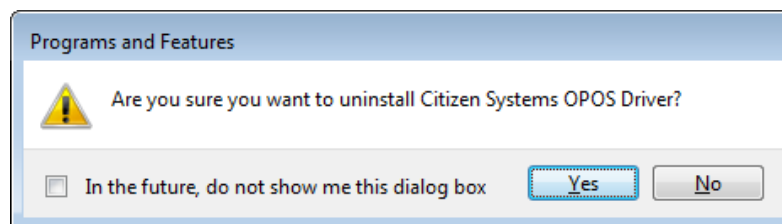
\* When upgrading this product, retaining the registered device setting is recommended.

### Deleting OPOS Driver

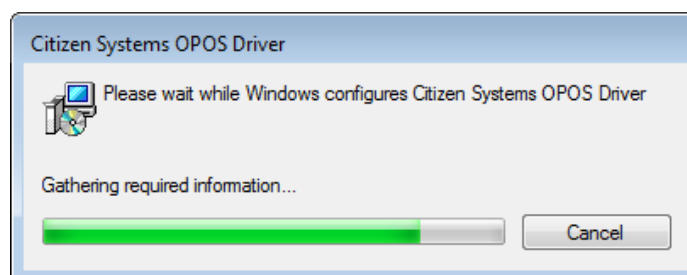
- 1) From the "Add or Remove Programs" in "Control Panel", select "Citizen Systems OPOS Driver" and click [Remove].



- 2) A message dialog "Are you sure you want to remove Citizen Systems OPOS Driver from you computer?" is displayed. Click [Yes (Y)]. If you click [No (N)], deleting this program is cancelled.



- 3) A dialog indicating the progress of uninstall process is displayed.



- 4) When the uninstall procedure is finished normally, "Citizen Systems OPOS Driver" is removed from the "Add or Remove Programs" list.

## 6. Printer Setting

Using this product assumes that the DIP switch and memory switch of the printer are set as shown below. For the details of the method of operating each switch and the content of setting, refer to User's Guide of each model.

### 6.1 CT-S281 Series

#### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

#### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	DSR signal (when serial interface is used)	OFF	DSR
1-8	INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full column print	ON	Wait data
3-1	Auto cutter restore	OFF	L/F enabled
3-7	CBM270-compatible mode	ON	compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Full cut command	OFF	Full cut
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-

## 6.2 CT-S310 Series

### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	DSR signal (when serial interface is used)	OFF	DSR
1-8	INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full column print	ON	Wait data
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31 Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Full cut command	OFF	Full cut
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-

## 6.3 CT-S310II Series

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full Col Print	ON	Wait Data
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
6-1	Act. For Driver	ON	Valid
7-6	DMA control	Enable	-
8-3	Line Gap Reduce	Invalid	-
8-4	Reduced Char	100% / 100%	-
8-5	Auto Side Shift	Invalid	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enable	-
9-4	JIS/Shift-JIS	Shift-JIS	-

## 6.4 CT-S601/651/801/851 Series

### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full column print	ON	Wait data
3-1	Auto cutter restore	OFF	L/F enabled
3-2	PE output at PNE	ON	Invalid
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
6-1	Act. For Driver	ON	Valid
7-6	DMA control	Enabled	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-
10-3	ACK output timing (when USB and parallel IF are used)	Before BUSY	-

## 6.5 CT-S2000 Series

### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full column print	ON	Wait data
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
7-6	DMA control	Enabled	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-
10-3	ACK output timing (when USB and parallel IF are used)	Before BUSY	-

## 6.6 CT-S4000 Series

### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
2-4	Full column print	ON	Wait data
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
5-5	Power OFF notify	Disabled	-
7-6	DMA control	Enabled	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-
10-3	ACK output timing (when USB and parallel IF are used)	Before BUSY	-

## 6.7 CD-S500 Series

### DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
SoftCtrl-1	Command Type	EPSON	-
SoftCtrl-5	Paper End (when USB and parallel IF are used)	DIS	At paper end Only Busy signal is output.
SoftCtrl-6	Paper Near-End (when USB and parallel IF are used)	DIS	At paper near-end Signal not output
SoftCtrl-8	Print Direct (Specifies print direction)	BI-DIR	Print from right or left end nearer from the print stop position.
SoftCtrl-9	Auto LF	OFF	-
SoftCtrl-11	Buffer Size	4Kbyte	-
SoftCtrl-12	Init Signal	ENB	Initialize signal enabled
Mechanical-2	Auto-Cutter	FREE	-
Mechanical-3	Color Ribbon	ON	Command switching

