

OPOS Driver MANUAL

Installer Manual

Installer

Version 1.00 Nov. 2011

Notes

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Section 1. Development Outline

This section describes development outline for the OPOS Driver.

1.1 Features

OPOS Driver offers standardized API functions that interface with peripherals used in POS systems through ActiveX controls that can be run in Visual Basic, operating on the using OS platforms. Through these standardized API functions, you can develop powerful, open POS systems easily.

1.2 Operating Environment

The OPOS Driver operates under the following environment.

- Computer Hardware
 - IBM PC/AT or compatible
 - * Please follow the specifications recommended by your OS for system requirements (CPU, RAM, etc.).

- Operating Systems
 - Windows 7
 - Windows Vista
 - Windows XP
 - Windows Embedded POSReady 2009
 - * For the details of each operation system version, refer to the release note included in the Installation disks.
 - * Internet Explorer: Version 5.0 or higher (Recommend)
 - * There are unsupported devices in Windows Vista or newer.
 - For details of contents, please refer to the release notes included in the Installer disks.

- Accessible Serial Ports
 - COM1, COM2, COM3, and COM4 (extended port functions allow use of COM5 though COM10)

- Accessible Parallel Ports

LPT1, LPT2, and LPT3 (operation is unverified in LPT3)

- Accessible USB ports

USB equipment must be connected to the IBM PC/AT compatible machines that are equipped with USB connectors or use USB expansion cards. If the USB device cannot be identified when an IBM PC/AT compatible machine equipped with a USB connector is in use (especially for machines put on the market prior to the English version of Windows 98 being available), contact the manufacturer.

- Accessible Network

Ethernet support applies to TCP/IP compliant networks.

The setup of a compliant network should be handled by a qualified network administrator.

- Supported Languages

Microsoft Visual Basic Version 6.0 or above

Microsoft Visual C++ Version 6.0 or above

- Accessible Devices

For details of support devices, please read the release notes included in the Installer disks.

1.3 Necessary System Components

In order to develop an application using OPOS Driver, the following hardware and software are necessary.

- Computer Body Parts

IBM PC/AT Interchange Machine

* Please follow the specifications recommended by your OS for system requirements (CPU, RAM, etc.).

- Operating System

Windows 7

Windows Vista

Windows XP

Windows Embedded POSReady 2009

- Hard Disk, Memory

At least 10M bytes hard disk capacity is needed except for recommended blank capacity of using OS.

- Package

These disks include software, manuals and sample programs.

Please confirm that your package contains all the following items.

Sample Programs:

OPOS Driver Install Disk contains practical sample program guides using common API for each device. The method for use is described on the sample program guide. Please copy onto the hard disk as necessary.

Manuals:

On-line manuals are included on OPOS Driver Disk.

USER'S MANUAL

Information on OPOS Driver installation and setup.

APPLICATION DEVELOPMENT GUIDE

Programming examples and explanations of factors governing of peripherals. The Application Development Guide is divided into common subjects and device subjects. The common subjects portion contains general information about OPOS and device classes. The device subjects portion contains information for each device. Please refer to common subjects and device subjects for the device being used.

Section 2. Installation

Running the OPOS Driver Installer program can perform all the processing required for installation of the OPOS Driver. To ensure optimal use of the OPOS, various functions are offered during installation. Please read this manual for details.

When installing or reinstalling, first ensure that all running application programs are closed; both those use the OPOS files as well as any other applications.

After installing of OPOS Driver, it is necessary to confirm the setup, such as port and device settings. For details, please refer to the "Section 5. SetupPOS Utility" of the "OPOS Driver MANUAL User's Manual (Installer/ SetupPOS/ RP1USB)" manual.

The OPOS Driver install program is explained in the following.

2.1 Features of the Installer

This Installer is created using InstallShield 12.

The Installer performs the following operations:

- Specifies the destination directory for installation
- Specifies the destination start menu folder for installation
- Specifies the initial settings for OPOS
- Specifies REG files
- Installation type
 - Full installation ("Common CO")
 - Custom installation
 - Selection of device class units, Selection of CO
- Installation of the manual and the Sample Program
- Installation of the driver of RP1USB
- Uninstallation type
 - Full uninstallation (all)
 - Custom uninstallation
 - Selection of the SO
- Add-in (Service Pack, File update)
- Silent mode installation/uninstallation

2.2 Explanation of Installer Disks

There is only a CD-ROM install disk. The installation from the FD is not supported. Install according to the following procedure.

2.3 Installation

The procedure of install is as follows:

The installation can be done only by authorized users for the PC to be installed. Please request the authorized users for help.

Installation of the RP1USB Driver is required when the USB devices are to be used.

Without the installation in advance, the devices used with USB port cannot be registered normally.

For details of RP1USB Driver, please refer to the "Section 6. RP1USB Driver" of "OPOS Driver MANUAL User's Manual (Installer/ SetupPOS/ RP1USB)".

2.3.1 First Installation

Without the installation of OPOS Driver in advance, install according to the following procedure.

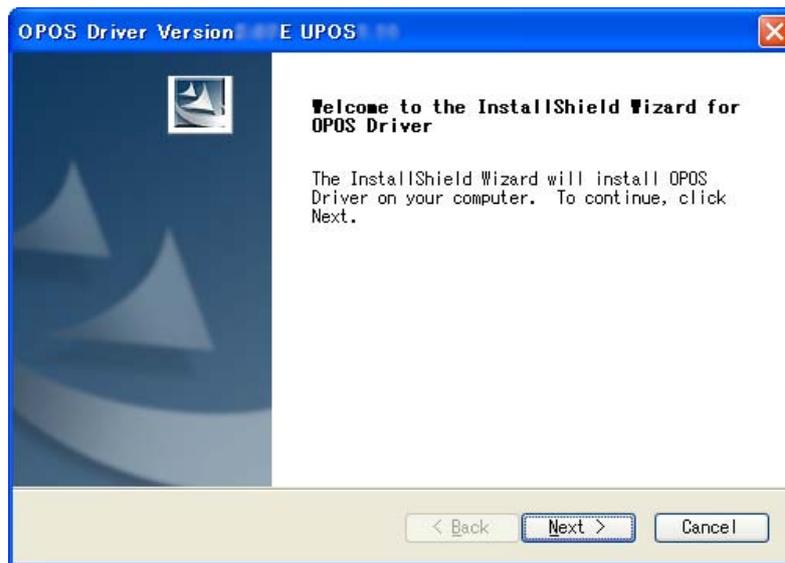
<Installation Procedure>

- (1) Run the ST-EP4_OPOS.exe program.

If Setup is executed while other program is running, its operation is not guaranteed. It is suggested to close all programs before executing Setup.

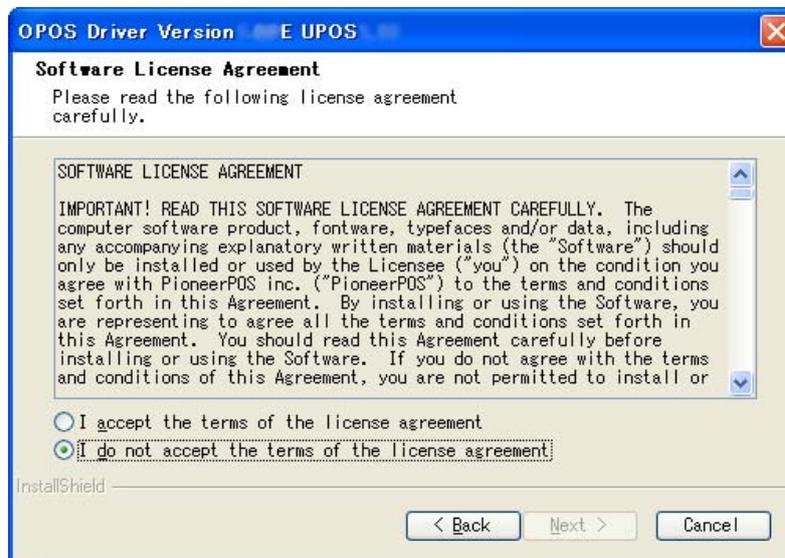
Startup of the Setup program may take some time.

- (2) The “Welcome” dialog is displayed.



Read the contents and then select the [Next] button if agreed with the contents.

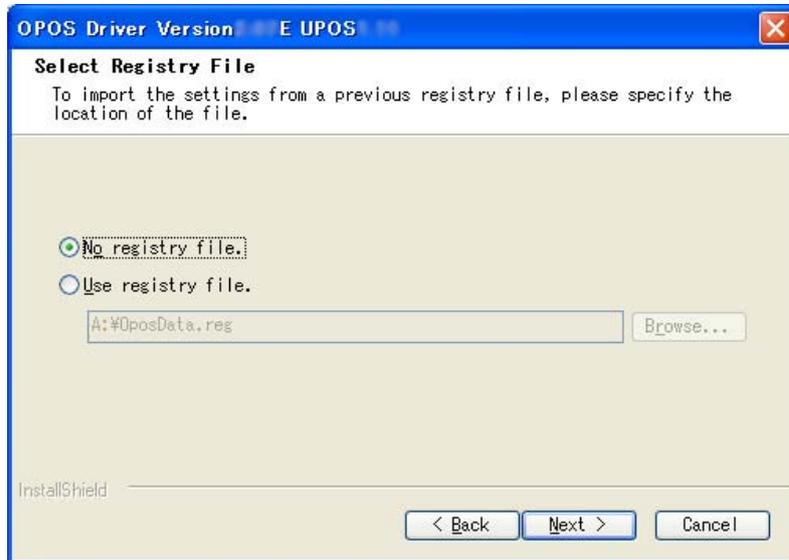
- (3) The “Software License Agreement” dialog box is displayed.



To install the OPOS Driver, the user must agree to the contents of the displayed agreement. Read the contents. Select “I accept the terms of the license agreement” if agreed with the Software License Agreement. After the selection, the [Next] button becomes effective. Select the [Next] button. If the Software License Agreement is not acceptable, select “I do not accept the terms of the license agreement”. Then, select the [Cancel]

button. Exits installation. Select the [Back] button for returning to the previous dialog box.

- (4) The “Select Registry File” dialog box is displayed.

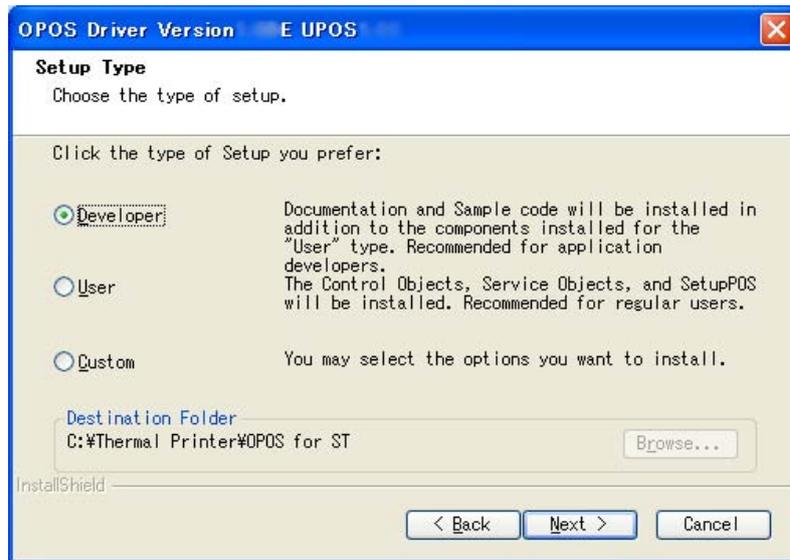


Select “No Registry File” not to use the REG file. Then, select the [Next] button. Select “Use Registry File” to use the REG file. Enter the full path REG file name after the text box is enabled. Then, select the [Next] button. Press the [Browse...] button to specify the folder name that includes the REG file. The REG file is a file for restoring information related to OPOS Driver. Use the SetupPOS utility to create this file. If an improper Registry File is selected, an error message will be displayed and it will not be possible to move to the next dialog box. Follow the directions of the error message and confirm that the Registry File is correct. When the Registry File is set correctly, subsequent information can be referred from the Registry File.

Select the [Back] button for return to the previous dialog box.

Select the [Cancel] button for quitting.

(5) The “Setup Type” dialog box is displayed.



Select a setup type to be installed. Selectable types are “Developer”, “User” and “Custom”.

The details of type are as follows :

Developer

Components:

Full installation of programs

Manual

SampleProgram

CO:

<First installation> CCO

User

Components:

Full installation of programs

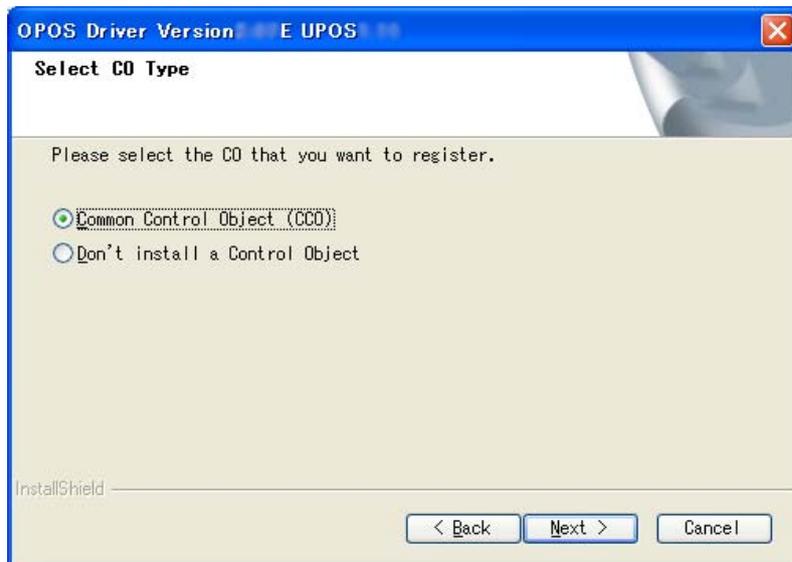
CO:

<First installation> CCO

Custom

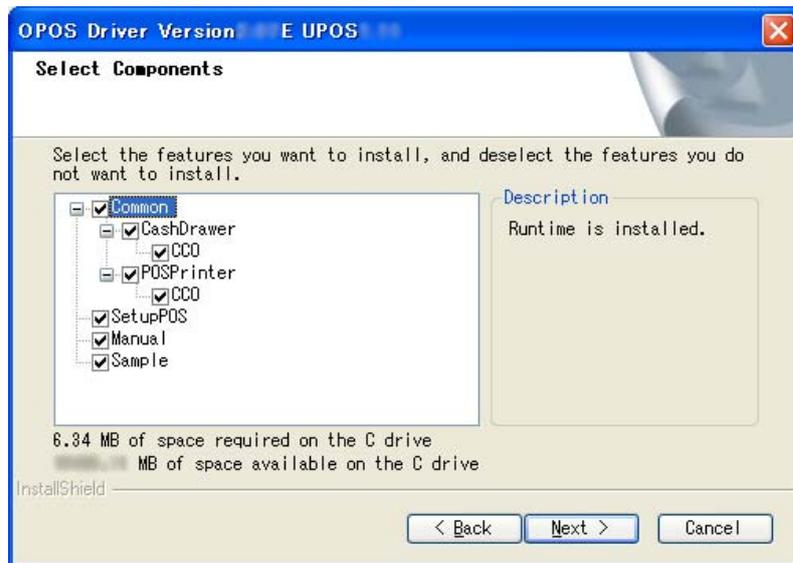
Select components to be installed.

- (6) After selecting a type, press the [Next] button.
When the "Developer" or the "Users" have been selected, the "Start Copying Files" dialog box is displayed. Confirm the contents and select the [Next] button. See (10).
When the "Custom" has been selected, the "Select CO Type" dialog box is displayed.
Select the [Back] button for return to the previous dialog box.
Select the [Cancel] button for quitting.
- (7) The "Select CO Type" dialog box is displayed.



- Select the CO that has a priority for registration. The CO registered here will be valid for all devices.
When the type is decided, select the [Next] button.
Select the [Back] button to return to the previous dialog box.
Select the [Cancel] button for quitting.

- (8) The “Select Components” dialog box is displayed.



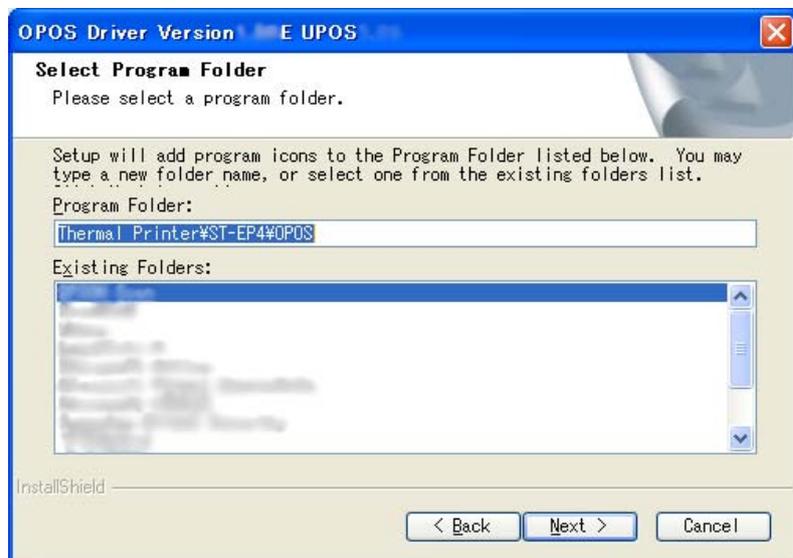
Select the necessary components.

To go to the next dialog box, select the [Next] button.

Select the [Back] button for return to the previous dialog box.

Select the [Cancel] button for quitting.

- (9) The “Select Program Folder” dialog box is displayed.



The previously decided folder name is displayed in “Program Folder”. If the Registry File is specified, this information is referred from the Registry File. Normally, default values should be used. The folder name can be changed, or an existing folder can be selected, but if an existing folder is used,

please select it only after obtaining an understanding of the folder's attributes. The folder must have COMMON attributes.

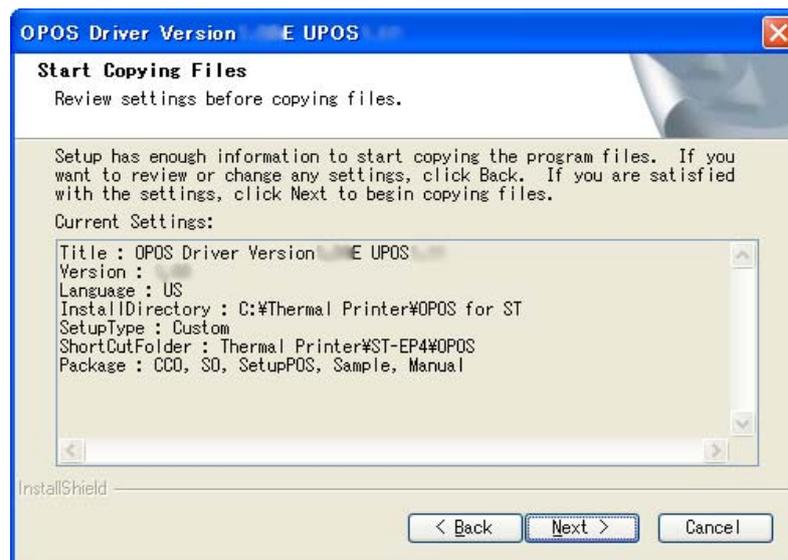
To go to the next dialog box, select the [Next] button.

Select the [Back] button for return to the previous dialog box.

If the [Back] button is selected, the set folder name will be canceled.

Select the [Cancel] button for quitting.

(10) The "Start Copying Files" dialog box is displayed.

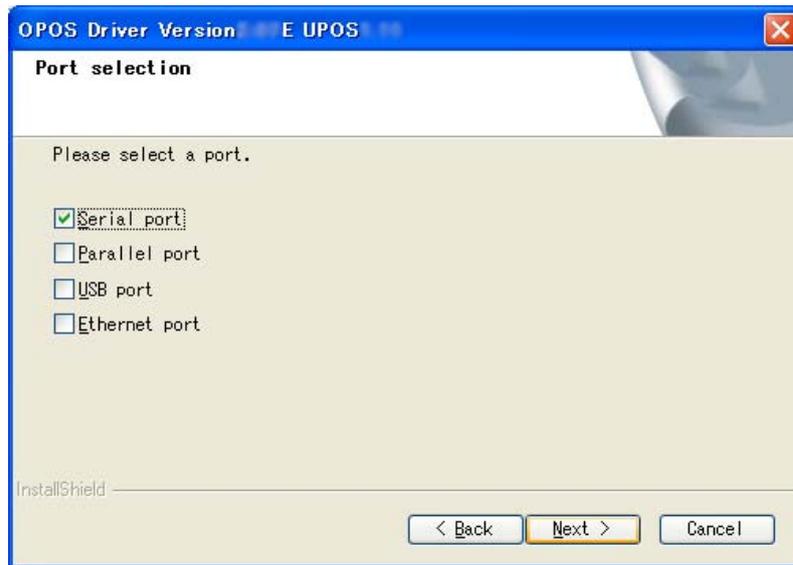


This dialog box shows the information that has already been set. Confirm the contents and select the [Next] button.

Select the [Back] button for return to the previous dialog box.

Select the [Cancel] button for quitting.

(11) The “Port selection” dialog box is displayed.

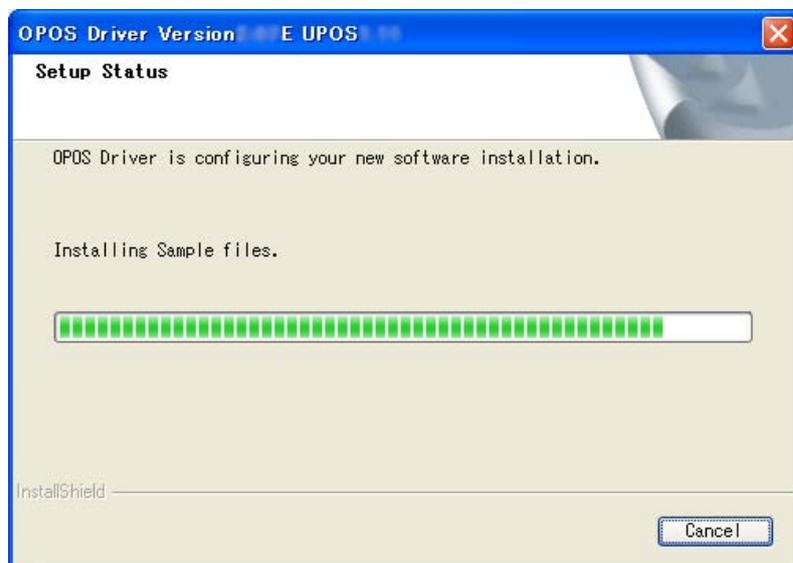


Select the port.

When the USB port was selected, the RP1USB driver is installed.

Select the [Cancel] button for quitting.

(12) The “Setup Status” dialog box is displayed.



The progress is shown on the status bar.

The [Cancel] button works at this point, but do not press the [Cancel] button unless there is a particular reason.

Operation after pressing the [Cancel] button is not guaranteed. If pressed, be sure to perform a reinstallation.

At this point, all the information necessary for the version upgrade shall be updated. It may take a few minutes for all the operations to be completed.

- (13) When all the operations are completed, the “Setup Complete” dialog box is displayed.

Select in the check box whether or not to display the release note on the installed OPOS Driver. It is strongly recommended to read the notes.

- (14) If system files are renewed because of the installation, rebooting of system may be requested. In this case, please specify whether rebooting right away or later, and execute the rebooting.

If later rebooting is specified, make sure to reboot after the completion of the installation. The operation under the un-rebooted environment is not guaranteed at all.

- (15) Installation is completed. The SetupPOS utility starts up. Confirm the settings in accordance with the setup described in “Section 5. SetupPOS Utility” of “OPOS Driver MANUAL User’s Manual (Installer/ SetupPOS/ RP1USB)”.

When system rebooting is executed, SetupPOS utility does not start automatically. Please start SetupPOS utility from start menu.

2.3.2 Overwriting Installation

When performing an overwrite installation, user information, specified installation destination, and specified program folder in the previous installation will remain effective. This information cannot be changed.

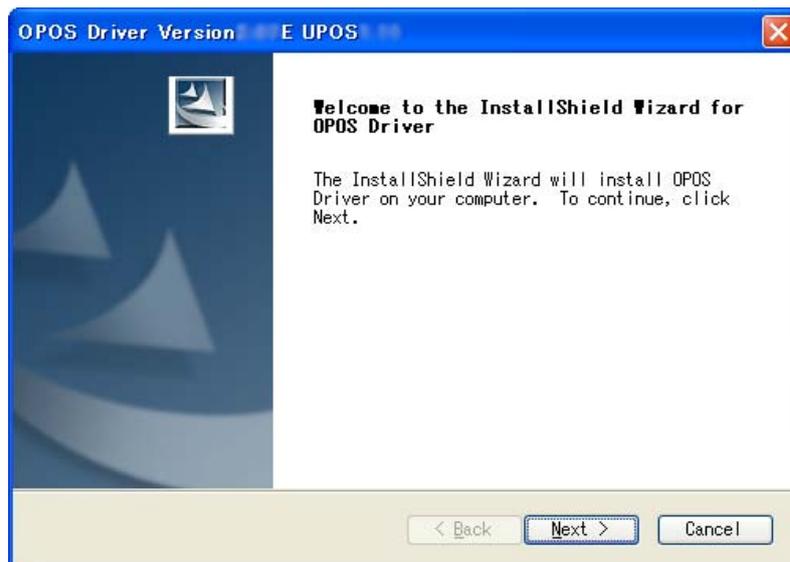
If you try to install the new version, Add-in Installation starts. In this case, only the installed devices and files are overwritten.

<Installation Procedure>

- (1) Run the ST-EP4_OPOS.exe program.

Before running ST-EP4_OPOS.exe, close the other programs already running. Otherwise, installation may fail. It takes some time for Setup to start. Wait a while. Compares the module already installed with the module contained in the package. If there is a possibility that problem occurs, the "Question" dialog box is displayed and a summary is notified.

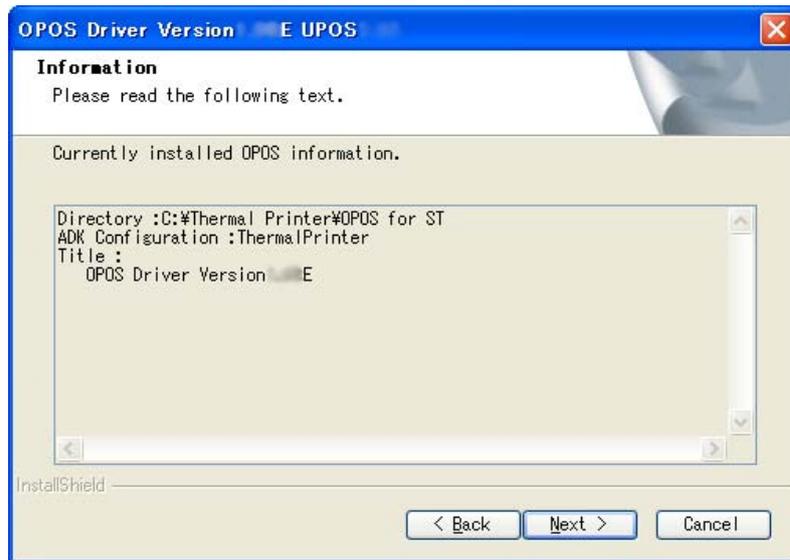
- (2) The "Welcome" dialog box is displayed.



Read the contents and then select the [Next] button if agreed with the contents.

Select the [Cancel] button for quitting.

- (3) The “Information” dialog box is displayed.

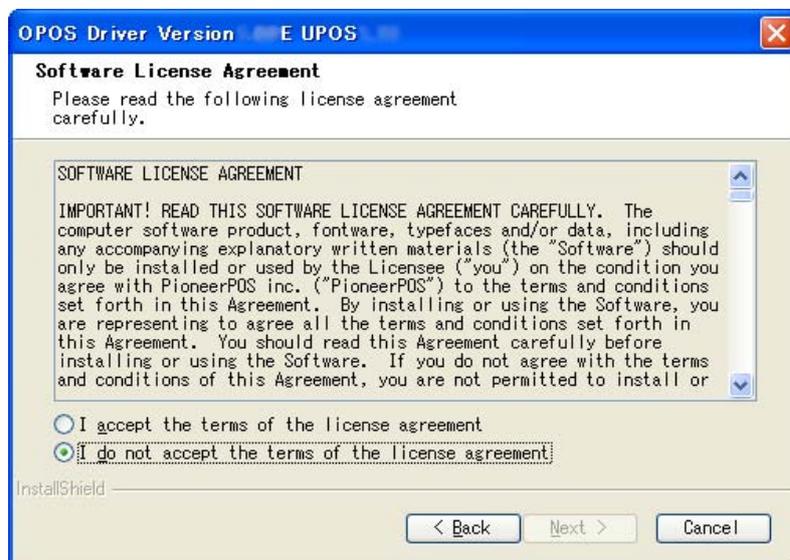


This dialog box displays information on the settings of the already installed OPOS Driver. Confirm the contents of the list and select the [Next] button if the contents are satisfactory.

Select the [Back] button to return to the previous dialog box.

Select the [Cancel] button for quitting.

- (4) The “Software License Agreement” dialog box is displayed.

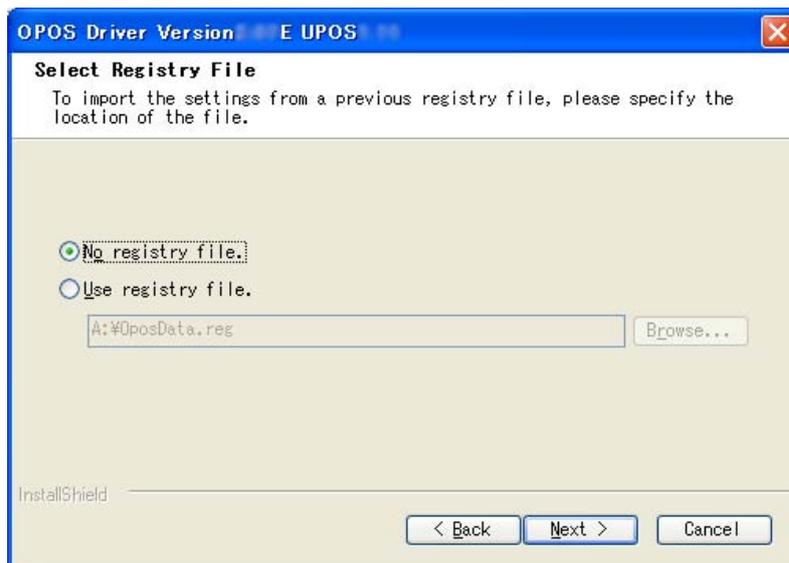


To install the OPOS Driver, the user must agree to the contents of the displayed agreement. Read the contents. In addition, select “I accept the terms in the License” if agreed with the Software License Agreement. After

the selection, the [Next] button becomes effective. Select the [Next] button. If the Software License Agreement is not acceptable, select “I do not accept the terms in the License Agreement”. Then, select the [Cancel] button. Exits installation.

Select the [Back] button for returning to the previous dialog box.

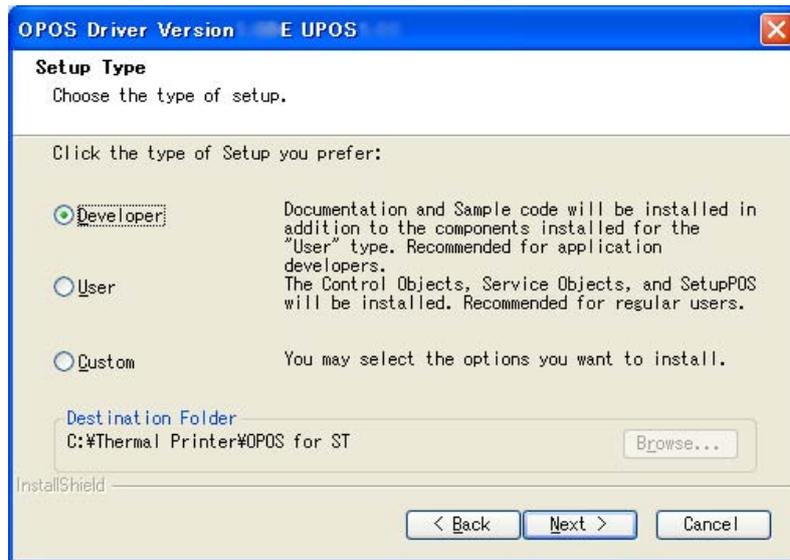
- (5) The “Select Registry File” dialog box is displayed.



Select “No Registry File” not to use the REG file. Then, select the [Next] button. Select “Use Registry File” to use the REG file. Enter the full path REG file name after the text box is enabled. Then, select the [Next] button. Press the [Browse] button to specify the folder name that includes the REG file.

The REG file is a file for restoring information related to OPOS Driver. Use the SetupPOS utility to create this file. If an improper Registry File is selected, an error message will be displayed and it will not be possible to move to the next dialog box. Follow the directions of the error message and confirm that the Registry File is correct. When the Registry File is set correctly, subsequent information can be referred from the Registry File. Select the [Back] button to return to the previous dialog box. Select the [Cancel] button for quitting.

(6) The “Setup Type” dialog box is displayed.



Select a setup type to be installed. Selectable types are “Developer”, “User” and “Custom”.

The details of type are as follows:

Developer

Components:

Full installation of programs

Manual

SampleProgram

CO:

<Overwrite installation> Complies with content that has already been installed.

User

Components:

Full installation of programs

CO:

<Overwrite installation> Complies with content that has already been installed.

Custom

Select components to be installed.

When you chose the “Developer” or “User”:

Proceeds to the [Start Copying Files] dialog box. See (9).

When you chose the “Custom”:

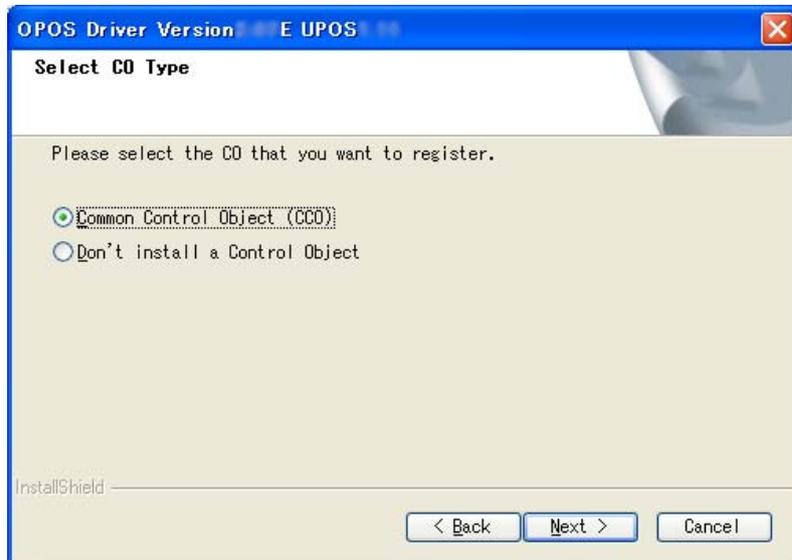
Go to the "Select Components" screen in order to overwrite the base and

minor versions. See (8).

Go to the "Start Copying Files" screen in order to overwrite the SP version.

See (9).

(7) The "Select CO Type" dialog box is displayed.



Select the CO that has a priority for registration. The CO registered here will be valid for all devices.

When the type is decided, select the [Next] button.

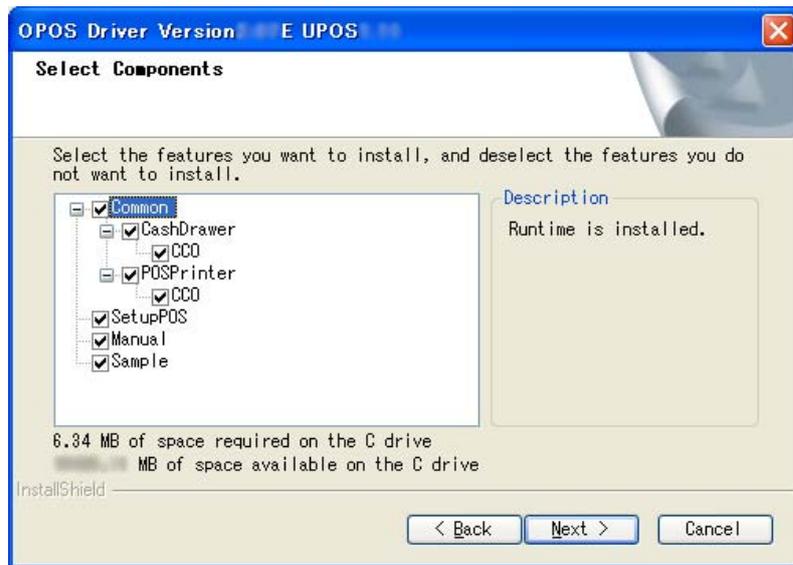
Select the [Back] button to return to the previous dialog box.

Select the [Cancel] button for quitting.

To overwrite the base and minor versions, go to the "Select Components" screen. See (8).

To overwrite the SP version, go to the "Start Copying Files" screen. See (9).

- (8) The “Select Components” dialog box is displayed.



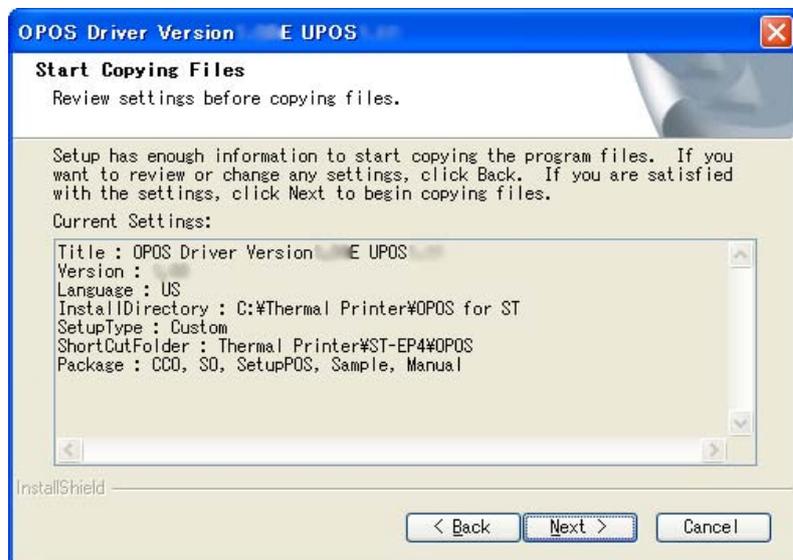
Select the necessary components.

To go to the next dialog box, select the [Next] button.

Select the [Back] button for return to the previous dialog box.

Select the [Cancel] button for quitting.

- (9) The “Start Copying Files” dialog box is displayed.

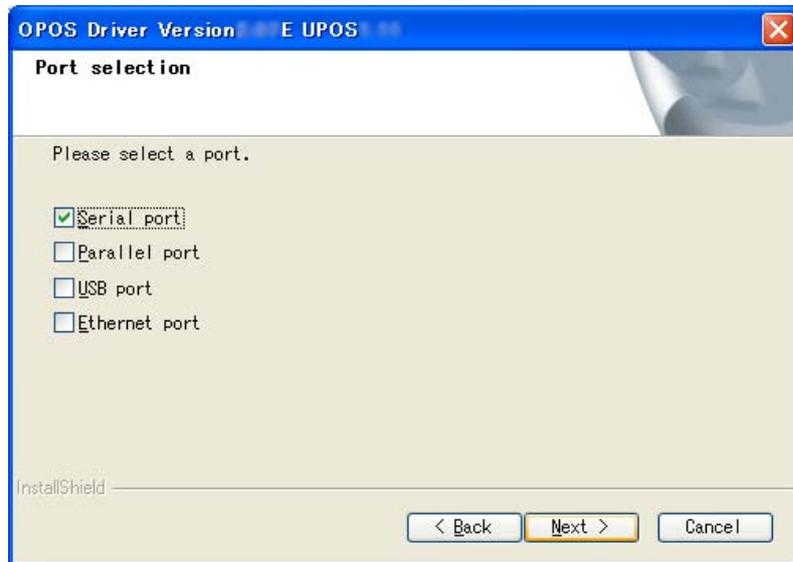


This dialog box shows the information that has already been set. Confirm the contents and select the [Next] button.

Select the [Back] button to return to the previous dialog box.

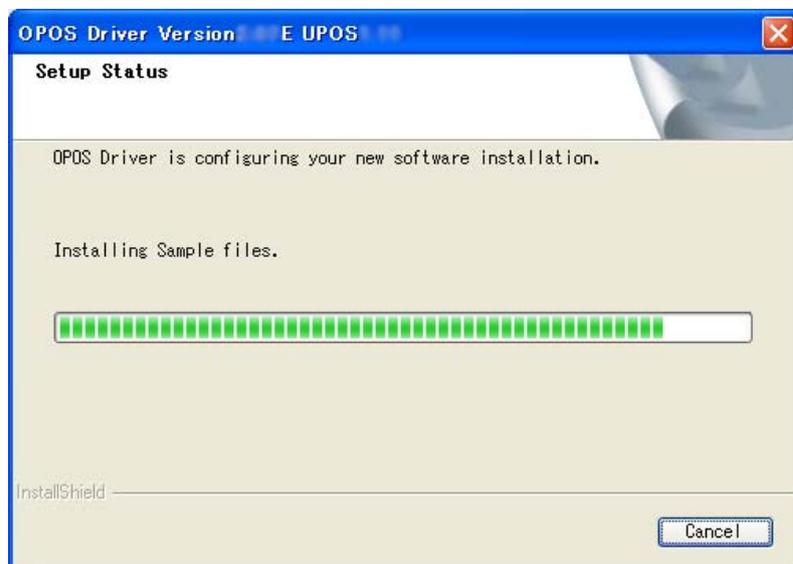
Select the [Cancel] button for quitting.

(10) The “Port selection” dialog box is displayed.



Select the method of connection used by device, select the [Next] button.
 When the USB port is selected, the RP1USB driver is installed.
 Select the [Back] button to return to the previous dialog box.
 Select the [Cancel] button for quitting.

(11) The “Setup Status” dialog box is displayed.

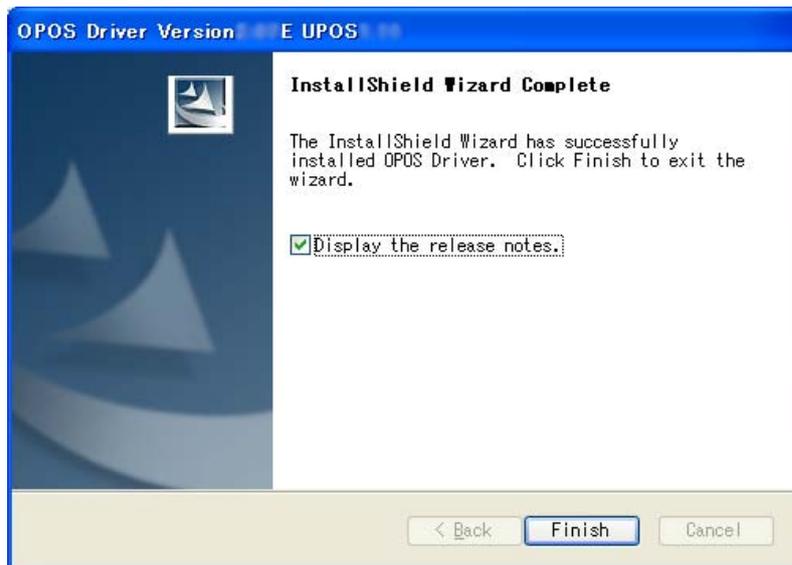


The progress is shown on the status bar.
 The [Cancel] button works at this point, but do not press the [Cancel] button unless there is a particular reason.

Operation after pressing the [Cancel] button is not guaranteed. If pressed, be sure to perform a reinstallation.

At this point, all the information necessary for the version upgrade shall be updated. It may take a few minutes for all the operations to be completed.

- (12) When all the operations are completed, the “InstallShield Wizard Complete” dialog box is displayed.



Select in the check box whether or not to display the release note on the installed OPOS Driver. It is strongly recommended to read the notes.

- (13) If system files are renewed because of the installation, rebooting of system may be requested. In this case, please specify whether rebooting right away or later, and execute the rebooting. If later rebooting is specified, make sure to reboot after the completion of the installation. The operation under the un-rebooted environment is not guaranteed at all.

- (14) Installation is completed. The SetupPOS utility starts up. Confirm the settings in accordance with the setup described in “Section 5. SetupPOS Utility” of “OPOS Driver MANUAL User’s Manual (Installer/ SetupPOS/ RP1USB)”.

When system rebooting is executed, SetupPOS utility does not start automatically. Please start SetupPOS utility from start menu.

2.4 Files to be installed

The following files are installed when the installation is normally completed.

- **Program files:**
These files are installed in the directory where the OPOS Driver is installed. Software files such as CO, SO, utilities, and device information files are included in this directory. To install these files, select “Program Files” in the “Select Install Module” dialog box at installation.
- **Include files:**
These files are installed in the Include folder under the folder where the OPOS Driver is installed. Files necessary for the OPOS such as C++ header file and VB header file for CO are included in this directory. To install these files, select “Program Files” in the “Select Install Module” dialog box at installation.
- **Sample:**
These files are installed in the Sample folder under the folder where the OPOS Driver is installed. Sample programs for VC++ and VB are included in this directory. To install these files, select “Sample” in the “Select Install Module” dialog box at installation.
When you use the sample program in the Windows XP and Windows Vista or newer, the Logon ID needs to be the Administrator account group.
- **Manuals:**
These files are installed in the Manual folder under the folder where the OPOS Driver is installed. To install these files, select “Manuals” in the “Select Install Module” dialog box at installation.

2.5 Types of Installation

There are two types of installation: full and custom.

Select the type in the “Install Type” dialog box.

- **Full installation**
Full installation installs all the supported devices. For supported devices, read the release note included in the Installer disks.
- **Custom installation**
Custom installation installs selected devices from the supported devices. Selectable units are device classes. If selecting custom installation in the “Install Type” dialog box, the “Select Components” dialog box appears. The displayed list shows the devices that can be installed. Check only the devices

that you want to install.

2.6 CO Registration

CCO can be installed and registered in OPOS Driver. In addition, you can also choose to register neither of the two, and thus it becomes possible to use the COs of another company.

When using multiple COs in this way, please note the following precautions.

Please note the following points when the multiple CO are used.

(When application is created with VB)

(1) Pasting control on form by adding VB component

In this case, character strings applicable to the CO type library is displayed in the "Component dialog" box.

As this character strings is an individual string, it is possible to select the CO to be actually used. If multiple COs is registered, select the CO that you want to use from the list of components.

(2) Creating CO by specifying Program ID using Create Object

In this case, specifies the program ID of the CO.

The program ID is character strings determined by the OPOS specifications.

Ex: the CO of a POSPrinter is "OPOS.POSPrinter".

If multiple COs of the same device class has been registered, the latest one is created.

If this method is used, it is also necessary to pay attention to the order of the registrations of COs.

(3) Creating CO using WithEvents

In this case, it is not possible to create "as Object"; it is necessary to create it "as Class Name".

The CO Class Name may be the same or different.

Before declaring a variable using WithEvents, components are selected using method (1), and the components selected in the "Component" dialog box can be used.

2.6.1 The method for updating the CCO

The CCO that is bundled with this product is the latest version at release time. Please use the following procedure to update to a later version.

<Installation Procedure>

- (1) Download the CCO installer from the following web site.
<http://www.monroecs.com/>
- (2) Installs by the downloaded CCO installer.

<Warnings>

- If you install OPOS Driver after updating the CCO, the CCO will become the older version.
Follow the above steps, then update the CCO again.
- If you uninstall OPOS Driver, the updated CCO will also be uninstalled.
Follow the above steps and then update the CCO again.

2.7 Installation Using the Registry File

The registry file is used when a user wants to restore an environment created on one PC to another PC. When the various settings are made with the SetupPOS utility, this information is retained in the registry. With the SetupPOS utility, only the information necessary for the registry is stored in a file. By specifying this file with the Installer, it is possible to restore the same environment.

To use this function, follow the procedure described below.

In this section, the originally created environment is called the "main PC", and the environment that you want to reconstruct is called "target PC".

<Procedure>

- (1) Install the OPOS Driver in the main PC, and set the necessary information and the various devices using the SetupPOS utility.
Use the SetupPOS utility to save the registry. At this point, pay attention to the following and create the files.
 - Specify "Register All".
- (2) Port information files (pcs.properties) will be retrieved from the following folder and saved to the same location as the registry file.
(System Drive):\Thermal Printer\portcommunicationservice
- (3) Perform installation on the target PC.
At this point, the following two methods are available. Select the method that suits the environment.
 - Installation using the normal installation method.

- Installation using the Silent Installation method.

For the normal installation method, take the procedures described in “2.3 Installation”. For installation using the Silent Installation method, see Section 3. “2.9. Silent Installation”.

When installing on the target PC, specify the registry file saved in procedure (1).

- (4) At the time of installation, specify the registry file saved in step (1).

<Restrictions>

- The Registry File must be created using the SetupPOS utility.
- It is a prerequisite that the Registry File contains the same version information as the version to be installed, or the same information as the installed environment.

Installation can not be done successfully in the following cases:

- If system drive is different:

(e.g. The original drive is C and the destination drive is D)

- If the physical port configuration is different:

(e.g. The original has COM1 and COM2, and the destination has only COM1)

- If the OS is different:

(e.g. The original is 32bit and the destination is 64bit)

- When a registry file is specified using the installer User Interface, install components are not determined automatically. Desired components should be selected using the installer User Interface.
- With the installation using the Registry File, the old version's information is not succeeded.
- Please close all applications and install OPOS when migrating the port configuration.

2.8 Add-in Functions (Service Pack)

The add-in function is a function installing the package containing update requirement only. A service pack is created based on the version exist. (This existed version is called the base version, in this section.) A service pack may be made available when devices are added or some kind of update becomes necessary after the release of the base version. For the latest service pack, please consult the manufacturer.

When you install the service pack, the registry information before the service pack has been installed is saved as a file in the destination folder for installation (file name: "OposReg.reg"). Use this registry file for Silent Installation of the base version to the target PC.

This function is also used when you overwrite an old version of OPOS Driver with a new version. In this case, the installed devices or the files only are all updated.

<Procedure>

- (1) Run the ST-EP4_OPOS.exe file on the service pack disk.
If Setup is executed with other programs' running, its operation is not guaranteed. It is suggested to close all programs before executing Setup. Startup of the Setup program may take some time.

- (2) Displayed message before the installation.
Before the installation, a message about the installed devices or files appears.
For service pack:
If a device included in the service pack is not installed, a warning message appears. This is because devices cannot be added after installing the service pack. (Refer to <Restrictions> below for details.)
To overwrite a new version:
If the devices and files included in the new version are not installed, a prompt message appears. All devices or files not listed in the message will be overwritten. To install other files, run the installation again after the update. Select [Next] to continue. Select [Cancel] to cancel the installation.

- (3) The "Welcome" dialog box is displayed.
Read the contents and then select the [Next] button if you agree with the contents.

- (4) The "Software License Agreement" dialog box is displayed.
To install the OPOS Driver, you must agree to the contents of the

displayed agreement. Read the contents and select "I accept the terms in the License" if agreed with the Software License Agreement. After the selection, the [Next] button becomes effective. Then, select the [Next] button. If the Software License Agreement is not acceptable, select "I do not accept the terms in the License Agreement". Then, select the [Cancel] button. Select the [Back] button to return to the previous dialog box.

- (5) The "Information List" dialog box is displayed.
Information of the installed OPOS Driver is displayed. Confirm the contents, and then select the [Next] button if the contents are acceptable.
- (6) The "Select Registry File" dialog box is displayed.
Select "Not Use Registry File" when the REG file is not used. Then select the [Next] button. Select "Use Registry File" to use the REG file. Enter the full path REG file name after the text box is enabled. The default value is "A:\OPOSDATA.reg". Then, select the [Next] button. Press the [Browse] button to specify the folder name that includes the REG file.
The REG file is a file for restoring information related to OPOS Driver. Use the SetupPOS utility to create this file.
If an improper Registry File is selected, an error message will be displayed and it will not be possible to go to the next dialog box. Follow the directions of the error message and confirm that the Registry File is correct. When the Registry File is set correctly, subsequent information can be referred from the Registry File. When installing by overwriting, the Registry File information will have priority over the installation information of the previous installation.
Select the [Back] button to return to the previous dialog box.
- (7) The "Select Installation Module" dialog box is displayed.
Select a module to be installed. Selectable modules are "Program Files", "Samples", and "Manuals".
Installed modules cannot be selected.
After selecting a module, press the [Next] button. Press the [Back] button to go back to the previous dialog box.
- (8) The "Start Copying Files" dialog box is displayed.
The dialog box shows the information, which has already been set.
Confirm the contents and select the [Next] button.
Select the [Back] button to return to the previous dialog box.

- (9) Copying of files, registration of DLL and OCX, and setting the registry begins.

The [Cancel] button works at this point, but do not press the [Cancel] button unless there is a particular reason. Operation after pressing the [Cancel] button is not guaranteed. If pressed, be sure to perform a reinstallation.

At this point, all the information necessary for the version upgrade shall be updated. It may take a few minutes for all the operations to be completed.

- (10) When all the operations are completed, the "Setup Complete" dialog box is displayed. Select in the check box whether or not to display the release note on the installed OPOS Driver. It is strongly recommended to read the notes.

- (11) Installation is completed. The SetupPOS utility starts up. Confirm the settings in accordance with the setup described in "Section 5. SetupPOS Utility" of "OPOS Driver MANUAL User's Manual (Installer/ SetupPOS/ RP1USB)".

When system rebooting is executed, SetupPOS utility does not start automatically. Please start SetupPOS utility from start menu.

<Restrictions>

- Be sure to install the base version before installing the service pack.
- As long as the service pack version number is higher than already installed service packs it can be installed without installing intermediate service packs. For instance, it is possible to add-in Service Pack Version 3 directly to the base version. It is not necessary to first add-in Service Pack Version 1 or 2.
- It is not possible to install a service pack older version than the one currently installed.
For instances; after Service Pack Version 3 has been installed, it is not possible to install Service Pack Version 1 or 2.
- The base version cannot be overwritten after installing the service pack. Also, the service pack alone cannot be uninstalled. In other words, after the service pack is installed, later installations of additional devices are not possible. Be sure to reinstall or overwrite the base version and the desired devices before installing the service pack.

2.9 Silent Installation

Installation can be performed without using the user interface. This is called "Silent Installation". This function uses the Registry File explained in the previous section. For details, please refer to the "2.7 Installation Using the Registry File" of this manual. This function is mainly used for installation on the target PC. Please use another installation function using normal user interface on the main PC. For description of target PC and main PC, please refer to the "2.7 Installation Using the Registry File" of this manual. When executing a Silent Installation, the registry information from the main PC is succeeded. OPOS Driver Manuals and the Sample Programs cannot be installed when using the Silent Installation function. To use this function, take the following procedures.

<Procedure>

Install the OPOS Driver on the main PC, and set the necessary information and the various devices using the SetupPOS utility. Then, save the registry using the SetupPOS utility.

- (1) Make a recording file.
Make a file for recording the operation of install. To install OPOS Driver, perform the following commands.
(Example) "Full Path\ST-EP4_OPOS.exe" /r /f1"c:\Temp\setup.iss
When the installation finished, the install operation is recorded to the "Setup.iss" file that is made in the Windows folder.
- (2) Use the "Export Registry" in SetupPOS utility to save the registry information. Select the [All] button
- (3) Port information files (pcs.properties) will be retrieved from the following folder and saved to the same location as the registry file.
(System Drive):\Thermal Printer\portcommunicationservice

(4) Specify the record file created in (1) by the "/f1" option.

(Example)

```
"Full Path\ST-EP4_OPOS.exe" /s /f1"c:\Temp\setup.iss"
/a"a:\OposData.reg"
```

The functions are added to Silent Installation by adding the following parameters to command lines.

The following parameters can be used at the same time. If you wish to use them at once, input the parameter you want to use after the parameter added to the command line.

Parameters do not distinguish capital and small letters. It is not necessary specifying only with small letters as the following examples show.

<Making a recording file>

Adding Parameter: "/r"

Example: "Full Path\ST-EP4_OPOS.exe" /r /f1"c:\Temp\setup.iss"

<Indicating the Silent Installation>

Adding Parameter: "/s"

Example: "Full Path\ST-EP4_OPOS.exe" /s /a"Full Path\OposData.reg" /f1"c:\Temp\setup.iss"

<Specify the substitute recording file name and the path name>

Adding Parameter: "/f1"

Example: "Full Path\ST-EP4_OPOS.exe" /s /f1"C:\Temp\Setup.iss" /a"Full Path\OposData.reg"

<Specify the substitute log file name and the path name>

Adding Parameter: "/f2"

Example: "Full Path\ST-EP4_OPOS.exe" /s /f2"C:\Temp\Setup.iss" /a"Full Path\OposData.reg" /f1"c:\Temp\setup.iss"

<Indicating that adds the registry >

Adding Parameter: "/a"

Example: "Full Path\ST-EP4_OPOS.exe" /s /a"Full Path\OposData.reg" /f1"c:\Temp\setup.iss"

<Rebooting after the Silent Installation>

Adding Parameter: “ /n”

Example: "Full Path\ST-EP4_OPOS.exe" /s /a"Full Path\OposData.reg"
/n /f1"c:\Temp\setup.iss

- The result is stored in the log file.

The log file is created with the name “Silence.log” in the target directory. All errors can be referred here. However, before the completion of the installation, the file is created in the root where Windows is (e.g. “C:\”) since the target directory is not decided until the completion of the installation. Please ensure no errors exist in the log file after the Silent Installation.

<How to view Silence.log>

[SilenceMode Log]

[Silence Mode Log Start]: Silence mode starts

[SilenceMode Log End] : Silence mode ends

ERROR : Error message

WARNING : Warning message

INFORMATION : Information

MESSAGE : Message

Messages are logged in the same way as the messages listed in Section 3. “2.10. Messages for Installation” of this manual.

Once the Silence.log file is created, results are added to this file. For the latest result, please see the line, which indicates the start of the latest Silent Installation.

<Restrictions>

- The registry file is necessary for the Silent Installation.
- The registry file saved by the base version can be used only for the Silent Installation of the base version. It cannot be used to install the service pack.
- When installing a service pack with Silent Installation function, registry files have to be made under the condition that the service pack is being installed in advance. When the environment in which the service pack has been installed is imported to the target PC with the Silent Installation, first, execute the Silent Installation with the base version and the registry file for the base version (created automatically in the destination folder for installation during the service pack installation), then execute the

Silent Installation with the service pack and the registry file for the service pack.

EX: Procedures for service pack Silent Installation

1. First Silent Installation of the OPOS Driver by using the following.

Example:

```
"Full Path\ST-EP4_OPOS.exe" /s /a"Full Path\OposReg.reg"  
/f1"c:\Temp\setup.iss
```

2. Next, Silent Installation of the service pack by using the following.

Example:

```
"Full Path\ST-EP4_OPOS.exe" /s /a"Full Path\OposData.reg"  
/f1"c:\Temp\setup.iss
```

Notes: The registry files such as "OposReg.reg" or "OposData.reg" are the example, which are already saved.

- When the environment (Main PC) for creating the registry files to be used is installing RP1USB Driver or parallel driver with this installer, the driver being installed is installed with Silent Installation regardless of parameter's presence. If you wish not to install those drivers to the target PC, please make a registry file with a PC that is not installing respective driver.

2.10 Messages for Installation

The program shows a user message when necessary after the execution or setting of an item selected in a dialog box. Follow the instructions in them. Conditions in which messages appear and the messages themselves are listed below.

2.10.1 Messages at the Time of Startup

Condition	Error Message
A user without administrator authority is attempting to perform installation. (Common to all of supported OS)	The user doesn't have Administrator authority.
The "Install.ini" file is not found.	The install.ini file cannot be found in the current directory. Aborting installation.
The "Relnote.txt" file is not found.	The Relnote.txt file cannot be found in the current directory. Aborting installation.
The contents of the "Install.ini" file are illegal and the contents are changed.	The setting files required for installation can either not be found, or they are corrupt.
The registry information is corrupted.	Registry information couldn't be read.
Attempting to install a previous version over a new version.	A newer version of OPOS is already installed.
Attempting to install a special version by overwriting but the special version does not allow overwriting installation.	This version cannot be overwritten.
Attempting to install a version that allows overwriting in the condition where a special version that does not allow overwriting installation is already installed.	This OPOS version cannot be overwritten.
A version in different language is already installed.	The language information of the installed OPOS is different. Installation cannot continue.

2.10.2 Messages during Installation

Condition	Error Message
There is not enough free space in the directory in which OPOS Driver to be installed.	The necessary free space cannot be secured to install OPOS.
Another application is using a file to be installed with OPOS Driver.	Cannot overwrite the subjected file. It may be in use. Please close all applications and restart installation.
Not a single component has been checked for custom installation.	The component is not checked.
The registry information contains illegal data.	An invalid registry information value was returned.
When there was a failure to load an installer internal DLL.	The specified file cannot be found. Please prepare a valid disk and restart installation.
When the selected CO type is different from the installed CO type.	The selected control objects type is not compatible with the one already installed. If you continue and install with this control objects type, the existing objects will be automatically removed and invalidated.
The registry recordation of uninstall information is failed.	Failed to record uninstall information. The uninstaller may not work correctly.
When the information for registered devices that is not supported by the current version is contained in the specified registry file.	Information for registered devices that is not supported by the current version is contained in the specified registry file. Since the use of this file as it is could lead to unexpected results, it is necessary to delete this device information. Do you wish to delete this device information? Click "Yes" to continue the install and delete this device information.

2.10.3 Message during Driver Installation after OPOS Driver Installation

Condition	Error Message
There is no driver supporting the OS currently used.	This OS is not supported.

2.10.4 Messages When the Silent Mode is specified

Condition	Error Message
An illegal value is specified for the Silent Installation command line.	An illegal command line parameter was input. Please define as follows: setup /a"RegData.reg"
An inexistent registry file is specified in the command line.	Registry File specified in the command line parameter can't be found.
The Silent mode's log file cannot be created.	Failed to create the silent installer log file.
The Silent Installer log file cannot be opened.	Failed to open the silent installer log file.
An unsupported registry file is specified in the parameter.	The registry file specified in the command line parameter cannot be found.

2.10.5 Messages Related to Registry File

Condition	Error Message
The registry file, which is not being installed, is specified for registry import or the parameter specification at starting up.	The version stored in the registry file does not match the version of this installation.
A registry file created with a different language version is specified at the time the parameter is specified during registry file selection or startup	The OPOS language stored in the registry file does not match the language of this installation.
A registry file created with a version that is not supported is specified.	The specified registry file contains version information that is not supported by this installation. This file cannot be used.
An internal processing of the registry file isn't performed smoothly due to some reasons.	Could not create a copy of the selected registry file. Registry file selection is disabled.
A registry file that was made by different version OS is specified when registry file import or the parameter is specified at startup.	The OPOS language stored in the registry file does not match the language of this installation.

2.10.6 Add-in Installation Messages

Condition	Error Message
Installation of an add-in service pack whose language is different from that of the base version is executed.	The language information of the installed OPOS is different. Installation cannot continue.
Installation of an add-in service pack over a wrong base version is executed.	The installed version is not supported.
Installing the base version in the condition where the add-in service pack has been installed.	This service pack is already installed for OPOS.
Installing a service pack alone without its base version is being installed.	The installed OPOS version does not support service packs.

Devices and files included in the add-in service pack have not been installed in the base version.	The following devices and files cannot be installed after the installation of service pack x. ---- ---- These files cannot be installed after service pack x is installed. If necessary, after installing the above files please reinstall the Service Pack. Do you wish to continue?
The devices and files included in the full package are not installed yet	The following devices and files cannot be installed after the installation of Ver2.xx. ---- ---- Only the files already installed will be updated. To install other files of OPOS Driver, please select "Custom" in the Setup Type dialog box and then add the necessary components. Do you wish to continue?
The standard package has already been installed and you have tried to install either the same version or an older version.	The files of this version have already been installed. Installation is not necessary.

2.11 Precautions for Installation

- Overwriting installation is not possible when an OPOS Driver of different version or language (US version, Japanese version) has already been installed.
- It is not possible to read registry information files stored in an OPOS Driver of different version (including the service pack) or language (US version, Japanese version).
- Be sure to install the devices stated in the REG file information that is specified in the registry file import (that is, the devices that had already been installed or registered when the Setup POS utility stores to the REG file). If these do not match, operation cannot be guaranteed.
- If the installation fails for some reason, or it is canceled during the execution, be sure to perform a reinstallation. In the condition where installation has failed or been canceled, the settings, etc. may not be completely removed even if uninstallation is performed. OPOS Driver may malfunction due to the failure of the first installation even after the reinstallation. It is recommended to uninstall OPOS Driver and install it again.
- When using USB devices, install the RP1USB Driver in advance. It is not possible to install the USB OPOS information unless the RP1USB driver is installed. Users of the RP1USB Driver should refer to "Section 6. RP1USB

Driver” of “OPOS Driver MANUAL User’s Manual (Installer/ SetupPOS/ RP1USB)”.

- Upon completion of the installation, a RP1USB folder that stores the installer of RP1USB Driver is created at the target folder.

Even if these drivers are not installed with this installer, they can be installed by execution of their installers later on.

However, do not install the Driver on OS that does not support. The operation after that is not guaranteed when the installation is performed.

Section 3. Uninstallation

The provided Uninstaller must be used to uninstall an installed OPOS Driver program. The following methods are available for uninstallation.

- Choose the "Add/Remove Programs" (on Windows XP) or the "Uninstall a program" (on Windows Vista or newer) in the Control Panel, and then select the "OPOS Driver ST-EP4".

When uninstalling, first make sure that all running applications are closed; both those used by OPOS as well as any other applications.

Only privileged users can use install programs. Please consult a user who has privilege for the machine.

3.1 Uninstallation Procedures

Perform uninstallation using the methods prescribed.

- (1) The "Information..." dialog box is displayed.
This dialog box displays the version(s) compatible with the Uninstaller. Confirm that the version to uninstall using the Uninstaller is listed. To continue, select Yes. To cancel the operation here, select No.
- (2) The "ADK Selection" dialog box is displayed.
All the currently installed OPOS Driver versions are displayed. Select the version to uninstall. Multiple versions cannot be selected. If you check the Complete uninstall of selected OPOS Driver check box, full uninstallation is performed. If the check mark is removed, it is possible to select the device(s) to be removed. When the selection has been made, select the [Next] button. If checked, go to step (4).
To return to the previous dialog box, select the [Back] button.

- (3) The “Selection of Devices to Delete” dialog box appears.
The “Selectable devices” window shows the currently installed devices. Select a device to be deleted, and then press the [Remove] button. The device is moved to the “Devices to delete” window. To return to the “Selectable devices” window, press the [Add] button. Move devices from the “Selectable devices” window to “Devices to delete” the window. To move all the devices shown in the “Selectable devices” window to the “Devices to delete” window, press the [All] button. All the devices are moved. When the selection is done, select the [Next] button. To return to the previous dialog box, select the [Back] button.
- (4) The “Confirm Deletion” dialog box appears.
Information related to the Uninstallation is displayed. Confirm the contents. Uninstallation starts when the [Start] button is selected. To return to the previous dialog box without starting deleting, select the [Back] button if you do not want to start deleting.
- The Uninstallation process starts. A progress bar indicates the status of the Uninstallation.
 - A message indicating completion is displayed on the progress bar when the Uninstallation is completed.

3.2 Types of Uninstallation

There are two types of Uninstallation: full and custom. The types of the Uninstallation can be selected by “Completely remove the selected ADK configuration” check box in the “Select ADK Version” dialog box.

- Full uninstall
Deletes all the devices registered in the selected version.
- Custom uninstall
Select the devices to be uninstalled from all the devices registered in the selected the devices using the “Selection of Devices to Delete” dialog box. The device can be specified by device classes.

3.3 Silent Uninstallation

It is possible to perform uninstallation without using the user interface. This is called Silent Uninstallation. When Silent Uninstallation is used, only full uninstallation is performed. Specify in the command line as follows:

<Procedure>

- Make a recording file.
Make a file for recording the operation of uninstall. To uninstall the OPOS Driver, perform the following commands.
(Example) "Full Path\ST-EP4_OPOS.exe" /r /f1"c:\Temp\setup.iss
When the uninstallation finished, the uninstall operation is recorded to the "Setup.iss" file that is made in the Windows folder.
- Using the (1) recording file for Silent Uninstall. Specify the record file created in (1) by the "/f1" option.
(Example)"Full Path\ST-EP4_OPOS.exe" /s /f1"c:\Temp\Setup.iss

The functions are added to Silent Installation by adding the following parameters to command lines.

The following parameters can be used at the same time. If you wish to use them at once, input the parameter you want to use after the parameter added to the command line.

Parameters do not distinguish capital and small letters. It is not necessary specifying only with small letters as the following examples show.

<Indicating the Silent Uninstallation>

Adding Parameter: /s

Example: "FullPath\ST-EP4_OPOS.exe" /s /f1"c:\Temp\setup.iss

<When the Silent Uninstallation finished, not displaying the dialog box>

Adding Parameter: /m

Example: "FullPath\ST-EP4_OPOS.exe" /s /z"/m" /f1"c:\Temp\setup.iss

To specify the "/m" option, use the "/z" option.

<Not to delete the file that is made and used by ElectronicJournal>

Adding Parameter: /e

Example: "FullPath\ST-EP4_OPOS.exe" /s /z"/e" /f1"c:\Temp\setup.iss

To specify the "/e" option, use the "/z" option.

<When the Silent Uninstallation finished, not to display the dialog box, and not to delete the file that is made and used by ElectronicJournal>

Adding Parameter: /m, /e

Example:

"FullPath\ST-EP4_OPOS.exe" /s /z"/m /e" /f1"c:\Temp\setup.iss

To specify the "/m" option and the "/e" option, use the "/z" option.

<Forced uninstall>

In some cases it may not be possible to reinstall the OPOS Driver.

The forced uninstall option can be used to resolve this issue.

Adding Parameter: /z"uninstall"

Example:

"FullPath\ST-EP4_OPOS.exe" /z"uninstall" /f1"c:\Temp\setup.iss

When this is complete, run the installer again without this parameter to reinstall the OPOS Driver.

Please note that the parameter "/s" is not added.

3.4 Messages for Uninstallation

The Uninstaller program shows user messages when necessary after the execution of dialog boxes or making of settings. Follow the instructions in them. Conditions in which messages appear and the messages themselves are listed below.

Condition	Error Message
A user who does not have Administrator authority is attempting to perform Uninstallation.	Administrator Access Required. Execute this program from an account with administrative access.
The Uninstaller is started while OPOS is not installed.	OPOS is not installed.
The Uninstaller of a version in a different language was executed.	The target language of OPOS is not installed.
The Uninstaller does not have the required information.	Internal Error Occurred. Premature program was preliminarily terminated. Some component may not have been deleted. Please manually delete remaining components.
The registry contains illegal information.	Unable to open registry. Program terminating.
The required information was not found in the registry.	Unable to get required information from registry. Program terminating.
Other files have been copied to the install directory.	Unable to remove directory. Remove directory manually.
An illegal value has been entered on the command line.	Invalid Parameter. Required format is: Uninstaller /s"X.xx"
The version that is not installed is specified as the command line parameter.	Version not installed or invalid command parameter.
The file to be uninstalled is being used by another application.	X.xx is being used by other application. To delete this file, exit the application using the file and push the "Retry" button. To leave this file, push the "Cancel" button.
Only the /S parameter is specified on the command line when multiple versions of OPOS are installed.	There is more than one installed version of OPOS. Use the command line option Uninstaller /s"X.xx" to uninstall a specific version or execute the user interface version.
The forced uninstall option has been used to resolve the issue.	Are you sure you want to completely remove the OPOS Driver and all of its features?

3.5 Precautions for Uninstallation

- Uninstallation is not possible when an OPOS Driver of different version or language (US version, Japanese version) is installed.
- The Uninstallation is executed on the condition that OPOS-related files are not in use. If OPOS-related files are in use, a message that files cannot be deleted is displayed. When this message is displayed, close the application that is using the OPOS-related files. Then try again to continue the Uninstallation process. If the Uninstallation is not retried, files alone will remain in the directory.
- Close Explorer for executing Uninstaller.
- This Uninstaller does not uninstall the RP1USB Driver that is provided by the installer. However, the system operation is not affected by those drivers.
- If the parameter "/m" is specified for the Silent Installer, it operates in Silent mode. For this reason, after the Silent Uninstaller is finished, do not execute the installer.

Section 4. Warnings

- The CO cannot be changed by an upgrade installation. To change the CO, please uninstall the current version and install a new version.
- If an installation is not completed successfully and reinstallation also fails, please do the following steps:
 - (1) Uninstall OPOS.
 - (2) Install OPOS version which is originally installed prior to installing this version.
 - (3) Install this version.