SII

IFD/PTD Series
Printer Driver
Operations Manual

Target Devices

◆ IFD501-01SK-E
◆ IFD501-01UK-E
◆ IFD001-01SK-E
◆ IFD001-01UK-E
◆ PTD50P01-E
◆ PTD00P01-E

Target Printer Drivers

◆ SII IFD50x (2inch)
◆ SII IFD50x (3inch)
◆ SII IFD00x (2inch)
◆ SII IFD00x (3inch)
◆ SII PTD50 (2inch)
◆ SII PTD50 (3inch)
◆ SII PTD00 (2inch)
◆ SII PTD00 (3inch)

Seiko Instruments Inc.

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Chapter 1 Introduction

1.1   Overview

This document provides the specifications, functions, and operating instructions of software for Microsoft Windows provided by Seiko Instruments Inc. (hereinafter referred to as "SII") for SII thermal printers.

1.2   Operating Description

Operating instructions and screenshots described in this document are explained assuming that the operating system uses standard settings during the installation. The operating instructions and screenshots may be different if the operating system settings have been changed.

1.3   Operating System Abbreviations

Operating systems described in this document use the following abbreviations:

- Microsoft Windows   =>   Windows
- Microsoft Windows Vista   =>   Windows Vista
- Microsoft Windows XP   =>   Windows XP

1.4   Printer Folder Representation

[The printer folder] described in this document means the folder displayed for the following operations:

For Windows Vista

[Start] => [Control Panel] => [Hardware and Sound] => [Printer] => [Printers] folder

For Windows XP

[Start] => [Control Panel] => [Printers and Faxes] => [Printers and Faxes] folder

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1.5   Other Representations

The terms below used in this document have the following meanings:

- ***Printer Technical Reference***   => [Each target devices of INTERFACE BOARD TECHNICAL REFERENCE or CHIP SET TECHNICAL REFERENCE]
- ***Auto Status Response***   =>A status data retrieved by executing a command of SII thermal printer [Automatic Status Response].

1.6   System Requirements

System requirements for the printer driver are as follows:

Item	Specifications
Supported Host Computer	PC-AT Compatible Machines (DOS/V Machines)
Supported Operating Systems	■ Windows XP Home Edition ■ Windows XP Professional Edition ■ Windows Vista Home Basic ■ Windows Vista Home Premium ■ Windows Vista Business ■ Windows Vista Ultimate
Communication Methods	■ USB Communications ■ Serial Communications (RS-232C) ■ Parallel Communications

For settings of printer side, refer to the "Appendix D Condition of Function Settings".

Chapter 2 Installation

2.1 Overview

The following describes the procedure to install the printer driver.
To install the printer driver, log on to the computer with administrator privileges.

2.2 Driver Model

For appropriate printer driver types, refer to the "Appendix A Driver Model".

2.3 Installation Methods

The following describes the procedure for installation of the printer driver.
Installation varies depending on the method of connecting to the printers.

For Windows Vista

Serial / Parallel Port

1. Click [Add a printer] in the printer folder, the host will display the [Add Printer].
2. Select [Add a local printer].
3. Click [Use an existing port], select the printer port and then click [Next].
4. Select the best match for hardware and then click [Next].
5. Type a name for this printer and then click [Next] and proceed with the installation.

USB Port

1. Turn on the printer and connect it to the USB port on the computer.
2. When the printer is recognized, the host will display the [Found New Hardware Wizard].
3. Select [Locate and install driver software (recommended)].
4. Click [Continue] in the [User Account Control] window, and then select [Don't search online] in the [Found New Hardware Wizard].
5. Select [I don't have the disc. Show me other options.].
6. Select [Browse my computer for driver software (advanced)].
7. Search for printer driver and then click [Next].
8. Select the best match for hardware and then click [Next] and proceed with the installation.

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For Windows XP

Serial / Parallel Port

1. Click [Add a printer] in [Printer Tasks] to the left of the printer folder window.
2. Click [Next>] in [Add Printer Wizard].
3. Select [Local printer attached to this computer] and then click [Next>].
4. Click [Use the following port], select the printer port and then click [Next>].
5. Select the best match for hardware and then click [Next>].
6. Type a name for this printer and then click [Next>].
7. Click [No] in [Print test page] and then click [Next>].
8. Confirm printer setting and then click [Finish] and proceed with the installation.

USB Port

1. Turn on the printer and connect it to the USB port on the computer.
2. When the printer is recognized, the host will display the [Found New Hardware Wizard].
3. Select [No, not this time] and then click [Next>].
4. Select [Install from a list or specific location (Advanced)] and then click [Next>].
5. Select [Search for the best driver in these locations] the best driver found will be installed and then click [Next>].
6. Select the best match for hardware and then click [Next>] and proceed with the installation.

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2.4 Notes

- For serial communications, match the printer's serial port settings with the host settings. Please refer to "Chapter 4 Setting Properties" or instructions on how to configure those settings.

- For serial communications, selecting [Yes] to [Do you want to print a test page?] during the installation wizard may result in garbled output if there are any differences in the communications settings between the computer and printer.

- When the printer is connected to a different USB port on the computer, the host will recognize it as another printer, and again require for printer driver installation. When reconnecting the USB cable after installation, reconnect it to the same USB port that was connected during installation.

- For second or subsequent installations, you may be asked where the printer driver files are located again. Specify the location of the printer driver files again.

- The [Windows Security] or [Windows Logo Test] warning may be displayed during installation, but proceed with the installation.

Warning dialog in Windows Vista

Warning dialog in Windows XP

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Chapter 3 Printing Preferences

3.1 Overview

Settings for paper and printing control can be set from the [Printing Preferences] window.

3.2 Printing Preferences Window

To display the [Printing Preferences] window, follow the steps below.

1. Right-click a printer icon in the printer folder to display the sub-menu.
2. Click [Printing Preferences…] from a displayed sub-menu.

3.3 Advanced Options

Detailed printing preferences can be changed from the [Advanced Options] window.
To display the [Advanced Options] window, follow the steps below.

1. Display [3.2 Printing Preferences Window] -mentioned [Printing Preferences] window.
2. Click [Advanced…] in the lower right of the [Printing Preferences] window to display the [Advanced Options] window.

3.3.1 Paper Size

Select the paper size to use for printing.
New paper sizes can be added from the [Print Server Properties].
For more details, refer to "5.4 How to Add New Paper Size".

3.3.2 Print Mode

Select the print processing mode (Page mode Priority and Standard mode).
- Page Mode Priority   : A paper size that can print with the page mode is printed with the page mode. In other cases, printed with standard mode.

- Standard Mode   :Print operation is conducted only in Standard mode.

* For the CPU-type model, Standard mode is always used. Item of the print mode is not displayed.

3.3.3 Print Density

Select the print density level.

3.3.4　Form Discharge

Select the paper discharge operation after printing.

- Enable : Paper is discharged to for length of selected paper.
- Disable : Paper is not discharged after printing regardless of the selected paper length.

* When using marked paper, be sure to select [Disable].

3.3.5　Cutter Control

- Full Cut : Enables paper full cutting.
- Partial Cut : Enables paper partial cutting.
- Non Cut : Disables paper cutting.

3.3.6　Function Settings

Function settings stored in printer memory can be displayed or changed.

Please operate this function in the condition that the printer is ready for printing.

For more details about function settings, refer to ***Printer Technical Reference***.

Concrete instructions for changing the function settings are as follows:

1. Click [Function Settings] => [Setup…] to display the current function settings.
2. Double-clicking the displayed item enters the edit mode.
3. After completing the setting change, click [Apply] to write the settings to the printer.
4. If you want to save the current settings on the list to a file, click .
5. If you want to restore the saved data from the file in which the settings were saved, click .
6. If you want to exit, click the button.

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Chapter 4 Setting Properties

4.1 Overview

Printer driver settings can be set from the [Properties] window.

4.2 Properties Window

To display the [Properties] window, follow the steps below.
1. Right-click a printer icon in the printer folder to display the sub-menu.
2. Click [Properties] from a displayed the sub-menu.

4.3 Notes

The following explains of each seat of the printer driver setting-related notes.

4.3.1 Ports Tab

- Select the [Enable bidirectional support] check box.

- When using the serial port, clicking [Configure Port] will display the COM Properties window.
  Configure the settings in accordance with the printer's communication settings.

4.3.2 Security Tab

- Users denied access privileges in [Print] disables the printing function.

- Users denied access privileges in [Manage Printers] cannot use some functions using bidirectional communication.
  But, this tab is not displayed by default in Windows XP standard display setting.
  Only for Professional Edition in Windows XP, the following operation can change to displayed setting.
  [Printers and Faxes] => [Tools] => [Folder Options…] => [View] => [Use simple file sharing (Recommended)] exclude a check.

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Chapter 5 Page Setup

5.1   Overview

The following explains the paper supported by the printer driver.

There are two types of usable paper sizes: the default size automatically installed (hereinafter referred to as "Factory default") and sizes that users can add (hereinafter referred to as "User defined").

To add user defined, refer to "5.4 How to Add New Paper Size".

5.2   Driver Models and Paper Sizes

Usable paper sizes vary depending on each Driver Model.
About usable paper sizes in each Driver Model, refer to "Appendix B Paper" – "(1) Paper Sizes".

5.3   Margin Sizes

The print margin is set for the paper when printing. Margin sizes may be different between the computer screen and the paper. For details about the print margin, refer to "Appendix B Paper" – "(2) Margin Sizes".

A larger paper width than the actual paper size available for the printer such as "A4" and "Letter" can be selected, but large margins are shown to the right and left on the computer (screen).

5.4   How to Add New Paper Size

The following explains the procedure for adding a new paper size.

① Click [Server Properties] from the [File] menu of the printer folder.
② Display the [Forms] tab in the [Print Server Properties] window.
③ Click the [Create a new form] check box.
④ Specifies the new paper size name in the [Form name] field over the factory default paper size name.
⑤ Click the [Metric] radio button.
⑥ Specifies the width for the new paper size in the [Width] field of the [Form description (measurements)].
⑦ Specifies the length for the new paper size in the [Height] field of the [Form description (measurements)].
⑧ Finally, click [Save Form] to complete the procedure for adding a new paper size.
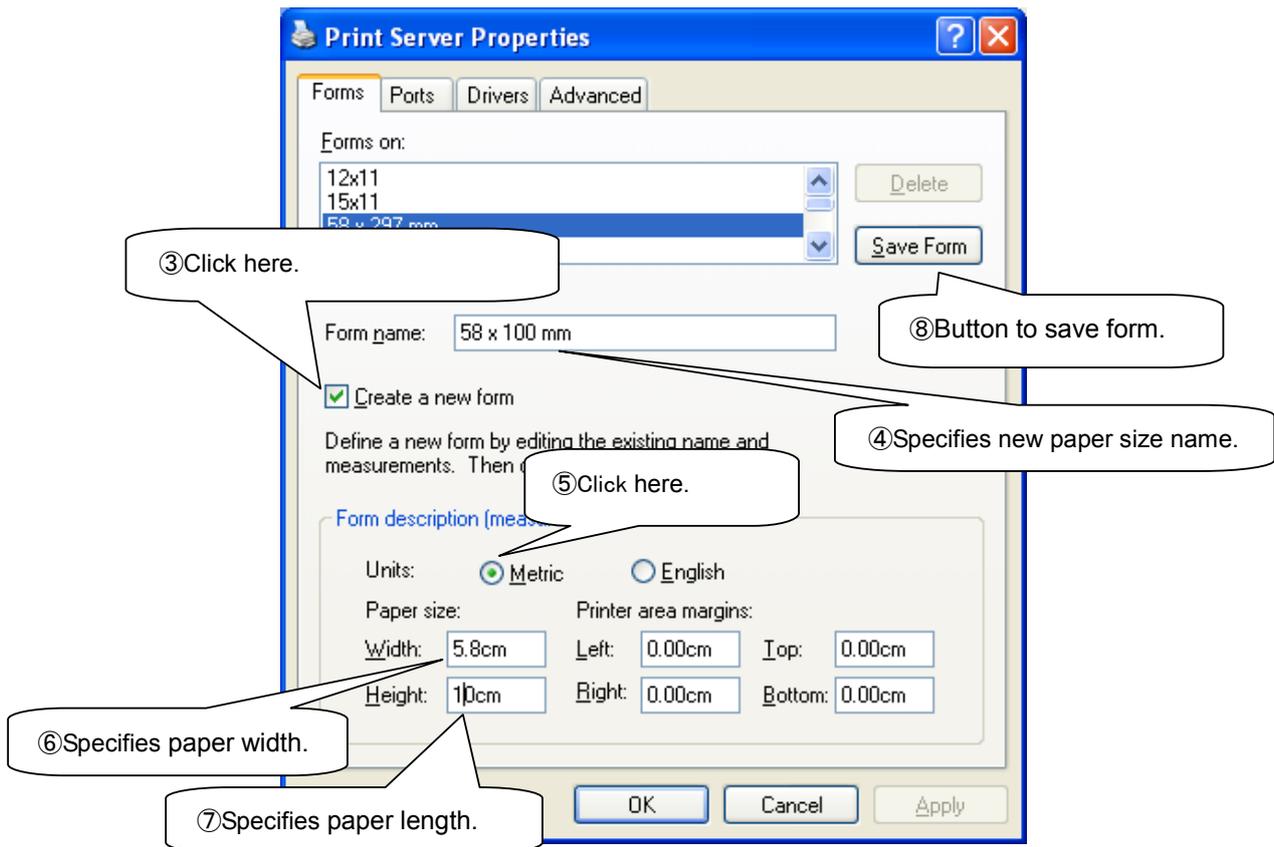
5.5   Notes

- The printable area is different from the paper size.
- If the paper size is set with margins of "0" the fixed margin size is used.
- Be sure to use [Metric] for [Units] in the [Form description (measurements)].

- Of the paper sizes listed in the [Forms] tab, those that correspond to the sizes specified in the "Appendix B Paper" – "(1) Paper Sizes" will be available for the printer driver.

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Chapter 6 Communications Library

6.1 Overview

The printer driver has a dynamic link library (hereinafter referred to as "DLL") for developers to control the printer directly.

6.1.1 Functions

DLL provides the following functions for application software to be developed.

- Transmitting data to the printer
- Receiving data from the printer
- Executing a printer reset

DLL is installed together with the printer driver and functions with the driver.
DLL can control the printer directly and makes the software development independent of the port type possible.

6.1.2 Library File

DLL file name is as follows:

SII_CAPD_API.DLL

6.1.3 File Storage Location

The DLL file is installed in the system folder of Windows.
Except in special circumstances, you do not have to set the path to the folder where the DLL file is stored.

[DLL Installed folder]
%WINDIR%¥System32
%WINDIR% means a Windows folder (e.g., c:¥Windows).

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6.2 Functions

6.2.1 List of DLL Functions

The following explains the functions of the DLL files.
For more details, refer to the attached sample program.

Function Name	Function Overview
OpenSiiPrinterA OpenSiiPrinterW	Create a printer object and retrieve ID
CloseSiiPrinter	Close the printer object and disable ID
GetSiiPrinterAutoStatus	Retrieve **Auto Status Response**
SetSiiPrinterCallbackStatus	Set the callback function that will be called by change of **Auto Status Response**
SetSiiPrinterData	Send data to the printer
GetSiiPrinterDataA GetSiiPrinterDataW	Retrieve response data from the printer
SetSiiPrinterReset	Hardware reset the printer

- **About the function name which have the parameter of string style.**

   A suffix of "W" or "A" for some function names means that the function name needed to be called varies depending on whether to use MBCS (multi-byte code) or Unicode as an parameter to be set with strings. For example, to call OpenSiiPrinter, use OpenSiiPrinterA for MBCS and OpenSiiPrinterW for Unicode.

   Please note that a suffix of "W" or "A" is omitted in the following function explanations.

6.2.2   Details of DLL Functions

The following is detailed specification of each function.

Common Specifications of All Functions

Return value

Returns an error code (≠ 0) for any failure of the function and Zero (= 0) in case of success.

Remarks

For the error code, refer to "6.4 Return Values (Error Codes)".

OpenSiiPrinter

Creates a printer object and retrieves ID.

DWORD OpenSiiPrinter (
LPCTSTR *pszName ,*
LPDWORD *pdwSessionId***)**

Parameters

pszName
Pointer to a null terminated string that specifies the name of the printer.

pdwSessionId
Pointer to a variable that receives ID to the specified.

Remarks

If the ID obtained from this function is not in use, close ID by calling the **CloseSiiPrinter** function.

The function will succeed regardless of the connection state between the printer and the computer.

If the connection destination of the printer driver is an unsupported port, the function will fail.

CloseSiiPrinter

Closes the printer object and disables ID.

DWORD CloseSiiPrinter (
DWORD *dwSessionId***)**

Parameters

dwSessionId
ID retrieved with the **OpenSiiPrinter** function.

Remarks

ID of the printer object is disabled.

Auto Status Response monitoring with the **SetSiiPrinterCallbackStatus** function is stopped.

GetSiiPrinterAutoStatus

Retrieves a current **_Auto Status Response_**.

DWORD GetSiiPrinterAutoStatus (
    DWORD _dwSessionId,_
    LPDWORD _pdwStatus_**)**

Parameters

 dwSessionId
  ID retrieved with the **OpenSiiPrinter** function.

 pdwStatus
  Pointer to a variable to receives **_Auto Status Response_**.

Remarks

 This function retrieves current **_Auto Status Response_**.

 Detecting disconnection with printer retrieves 0 as the current **_Auto Status Response_**.

 For more details about the data of **_Auto Status Response_** that can be retrieved, refer to "6.3 Printer Status Data".

SetSiiPrinterCallbackStatus

Sets the callback function that is called by change in *Auto Status Response*.

DWORD SetSiiPrinterCallbackStatus (
        DWORD *dwSessionId,*
        INT *(CALLBACK EXPORT* ∗ *lpfnCallBackStatus) (LPDWORD pdwStatus)***)**

Parameters

dwSessionId
    ID retrieved with the **OpenSiiPrinter** function.

lpfnCallBackStatus
    Function pointer of the callback function.

pdwStatus
    Pointer to a variable to receive *Auto Status Response* with the callback function.

Remarks

If there is a change of *Auto Status Response* then the registered callback function is called.

This function is stop calling with callback by calling the **CloseSiiPrinter** function or **GetSiiPrinterAutoStatus** function.

At first, the callback-function registered by this function will be only once called with the current *Auto Status Response*.

For more details about *Auto Status Response* returned by this function, refer to "6.3 Printer Status Data".

Even when receiving *Auto Status Response* from the printer if no difference with *Auto Status Response* is found then callback function is not called.

If there is a change of connection state with the printer then the callback function is called.

The detection of disconnection returns 0 as the current *Auto Status Response*. And the detection of re-connection returns the actual *Auto Status Response*.

Synchronization between *Auto Status Response* change and function call timing is not assured.

If calling this function again in a state where the callback function has already been registered using this function, previously registered function information will be disabled. If specifying null to *lpfnCallBackStatus*, *Auto Status Response* monitoring will be interrupted.

The return value of the callback function is ignored.

Writes data to the printer.

DWORD SetSiiPrinterData (
        DWORD *dwSessionId,*
        LPBYTE *pCmd,*
        DWORD *cbCmd,*
        LPDWORD *pcWritten***)**

Parameters

dwSessionId
    ID retrieved with the **OpenSiiPrinter** function.

pCmd
    Pointer to an array that stores printer data.

cbCmd
    Specifies the array size in bytes.

pcWritten
    Pointer to a value that receives the number of bytes of data that were written to the printer. If it is not necessary, null can be specified.

Remarks

The control of the function is not returned until the end of transmission or timeout.

The timeout for all ports is set to a time which is specified as timeout of the system (LPT port).
Timeout of a system (LPT port) is set by the following.

1. Select the printer port (LPTx) from the port sheet in the property dialog explained in "Chapter 4 Setting Properties".
2. A value of timeout is shown by clicking [Configure port...] button, and input new value of timeout.

   or

1. A value of timeout is able to change by editing a value of "TransmissionRetryTimeout" existing in the HKEY_LOCAL_MACHINE folder on registry by using registry editor (regedit.exe).

Be careful that target port is not changed by this operation.

The value of timeout can not be set less than 5 second.

The measuring of timeout becomes effective from the stopped state of data transmission.

Actual timeout may be longer than specified time.

To validate setting must restart your computer.

If a command to disable *Auto Status Response* is included in data to be output, the subsequent *Auto Status Response* may not be retrieved properly.

When the data is sent by multiple times, the command for *Auto Status Response* may interrupt in between each data blocks. In particular, when it outputs data (ex. image data) that the interrupt of other data is not forgiven on the way, please output all data by one time.

If the data size written to the printer is not same to the sizes specified by *cbCmd*, then this function will work as the following.

- If *pcWritten* set null, this function returns an error code.
- In other cases, the data size written is set in the variable specified by *pcWritten*, and this function returns a success code.

Retrieves response data from the printer.

DWORD GetSiiPrinterData (
               DWORD *dwSessionId,*
               LPTSTR *pValueName,*
               LPBYTE *pData,*
               DWORD *cbData,*
               LPDWORD *pcbNeeded***)**

Parameters

dwSessionId
    ID retrieved with the **OpenSiiPrinter** function.

pValueName
    Response command string that identifies data to be retrieved.

pData
    Pointer to a variable that stores response data.

cbData
    Number of data bytes that indicates the array size.

pcbNeeded
    Pointer to a variable that receives a necessary buffer size or the number of actually received bytes.

Remarks

This function retrieves a command response data from the printer by specifying to *pValueName* a command string listed in "Appendix C Response Command String".   For command response, refer to ***Printer Technical Reference***.

If you want to retrieve the response data size, calling the function while setting "0" to *cbData* stores the size to a variable specified by *pcbNeeded*. If there is no data to be returned, zero is stored.

Specifying "*GET_RAW_DATA_AUTO_STATUS*" to *pValueName* retrieves the history of ***Auto Status Response***. If the retrieved ***Auto Status Response*** is same as last ***Auto Status Response*** then it will be ignored. And if disconnection is detected, ***Auto Status Response*** is retrieved as all zero.

Specifying "*GET_RAW_DATA_EXEC_RESP*" to *pValueName* retrieves the history of execution command response (hereinafter called "*Execution Response*") that was output by **SetSiiPrinterData** function.

Specifying "*GET_RAW_DATA_CMD_RESP*" to *pValueName* retrieves the history of general command response that was output by **SetSiiPrinterData** function **excluding *Auto Status Response*** and *Execution Response*.

Each history data is recorded since the calling of **OpenSiiPrinter** function and held until up to 256 bytes.

Command strings listed in "Appendix C Response Command String" cannot be used for the **GetPrinterData** function, which is Win32API function.

If the function fails (the return value is not "0"), contents of all parameters are undefined.

The function fails by setting command to *pValueName*.

SetSiiPrinterReset

Hardware resets the printer.

DWORD SetSiiPrinterReset (
DWORD *dwSessionId***)**

Parameters

dwSessionId
ID retrieved with the **OpenSiiPrinter** function.

Remarks

A success of hardware-reset generates a waiting time of about 500 ms.

This hardware resets using communication lines (without using commands).

Reset using communication lines needs to be enabled in printer function settings.
For more details about printer function settings, refer to ***Printer Technical Reference***.

6.3 Printer Status Data

The following indicates the contents of the data of ***Auto Status Response*** that is retrieved by the DLL functions.

6.3.1 Overview

- ***Auto Status Response*** can also be retrieved with the **GetSiiPrinterAutoStatus** function, **SetSiiPrinterCallbackStatus** function and **GetSiiPrinterData** function.
For more details, refer to each function's section.

- ***Auto Status Response*** is stored to the variable specified by pdwStatus which is the parameter of the above function.

- The content of ***Auto Status Response*** is included up to the identifier bits stored from lowest byte (0-7 bit) of variable.

- If the printer is disconnected, then ***Auto Status Response*** is expressed as all bits including identifier are 0.

6.3.2 Notes

- Outputting a command that disables a response feature of ***Auto Status Response*** with the **SetSiiPrinterData** function may result in failure to return ***Auto Status Response*** properly.

- When the flow control of the serial connection is set to hardware, operation with the DSR terminal fixed to the Mark side is not supported.

- Communication failure with the printer or communication error occurrence may also result in the "disconnect state".

- If the DSR terminal and DTR terminal work together in the case of serial connection, cable disconnection is detected as the "disconnect state" but printer power-off is not.

- Even when the flow control of the serial connection is set to software, connect using a dedicated cable or a cable supporting 9-pin terminals introduced in [Serial Interface Connector Pin Assignment] of ***Printer Technical Reference***. Otherwise some of the functions may not operate properly because a serial cable cannot detect the connection state unless at least it TXD, RXD, DTR, and DSR terminals are connected to the host and the printer.

- For more details about [Automatic Status Response] printer command, refer to ***Printer Technical Reference***.

6.4 Return Values (Error Codes)

If the function succeeds, the return value is Zero (ERROR_SUCCESS). If the function fails, the return value is an error code. The error code is based on the Windows system error code.

For Windows error codes, refer to Microsoft documents (such as SDK System Error Codes).

The error content may be vague or unclear because of using the common codes (Windows error codes). To complement this, the following indicates error names (error codes) and probable causes.

Principal Windows System Error Codes and Probable Causes

Error Name (Error Code)	Probable Causes
ERROR_ACCESS_DENIED(5)	[Deny] is selected in [Print] or [Manage Printers] on the Security tab.
ERROR_BAD_ENVIRONMENT(10)	The DLL version does not match the printer driver.
ERROR_SHARING_VIOLATION(32)	A printer driver module for another model is operating the port.
ERROR_BUSY(170)	The printer is busy.
ERROR_DEVICE_NOT_CONNECTED(1167)	■The printer is disconnected. ■The printer is powered off.
ERROR_UNKNOWN_PORT(1796)	An unknown port is specified.
ERROR_UNKNOWN_PRINTER_DRIVER(1797)	An unknown printer driver is specified.
ERROR_INVALID_PRINTER_STATE(1906)	■The printer driver is in offline state. ■Bidirectional support is invalid.
ERROR_DEVICE_NOT_AVAILABLE(4319)	■The printer is in busy state. ■Communication is impossible.

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6.5 Sample Program

6.5.1 Overview

The sample program as a reference when using DLL for application (Visual C++ version 6.0) is attached.

6.5.2 Notes

- SII does not warrant that the sample program is error free nor does SII provide technical support for the program.

- The sample program may be changed without notice.

6.6 Notes

- The circuit assumes that SII products/interface boards are used or the recommended circuit state is kept. Usage for other circuits is not supported.

- All DLL functions are only available for local connection. Network connection via shared printers is not supported.

- When resetting the printer using DLL functions or reset command output, take enough time for the next data output process so that the printer reset is completed. Data output during the reset process may cause data errors.

- If sending the command data which are for the hardware-reset or the invalidation of **Auto Status Response** by the **SetSiiPrinterData** function, then the functions for **Auto Status Response** may be invalided

- Using DLL is only available when the bidirectional support is enabled.
  To confirm the validity of the bidirectional support, check whether [Enable bidirectional support] is selected at the bottom of the [Ports] tab as explained in "Chapter 4 Setting Properties".

[Setting Properties] – Bottom of the [Ports] tab

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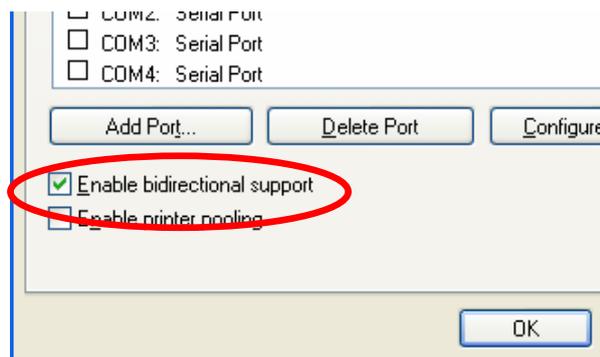
Chapter 7 Other Notes

- Due to the printer mechanism, the actual length of Form Discharge from the printer may be slightly different from the specified Paper Size.

- Printing functions using network connection via shared printers are also supported.
  However, the features of bidirectional communication (DLL) are only supported for locally connected printers.

- Test print by clicking [Print Test Page] on the [General] tab of the [Properties] window explained in "Chapter 4Setting Properties" will not properly image a printout on paper for compact printers, but it does not indicate a defect.

- The printer driver does not support printing with the fonts on the printer.

- Printer information retrieved by Windows features, such as the status member of PRINTER_INFO_X structure defined by the Windows Platform SDK, is not supported.

- Do not install other printer drivers to the same port.

- In case of serial connection, match the printer's serial port settings with the host settings.
  About the change method, clicking and setting the [Configure Port] after selecting the "COMx : Serial Port" on the [Port] tab of the [Properties] window explained in "Chapter 4 Setting Properties".

- In case of serial connection, the communication speed of 115200 bps is recommended. Other speed settings may cause unstable print speed and the decline of the quality. As other communication settings, set the bit length to "8 bits" and the flow control to "hardware".

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Chapter 8 Disclaimer

SII has carefully designed this software to ensure that it is trouble-free. However, SII is not liable for any damage or loss caused by or related to the use of this software.

Chapter 9 Revision History

Rev 0   Apr 2008
◆   First Edition.

Rev 1   Jun 2008
◆   Added a remark to [**SetSiiPrinterData**] in the [6.2.2 Details of DLL Functions].

Rev 2   Sep 2008
◆   Added a remark to [**SetSiiPrinterData**] in the [6.2.2 Details of DLL Functions].
◆   Changed the margin size when using paper cutting.
◆   Modified some formats.

Appendix A Driver Model

Driver models supporting the product (interface or CPU) are listed below.

Select a printer driver according to applications as installation.

List of Driver Models

Product Name	Usable Mechanism Model	Supported Driver Model
IFD501-01SK-E IFD501-01UK-E (Interface)	LTPD245 CAPD245	SII IFD50x (2inch)
	LTPD345 CAPD345	SII IFD50x (3inch)
PTD50P01-E (CPU)	LTPD245 CAPD245	SII PTD50 (2inch)
	LTPD345 CAPD345	SII PTD50 (3inch)
IFD001-01SK-E IFD001-01UK-E (Interface)	LTPD247 CAPD247	SII IFD00x (2inch)
	LTPD347 CAPD347	SII IFD00x (3inch)
PTD00P01-E (CPU)	LTPD247 CAPD247	SII PTD00 (2inch)
	LTPD347 CAPD347	SII PTD00 (3inch)

- The CPU type always runs in standard mode for printing. (Items selected in [Advanced Options] are not displayed.）
- Specifications other than above are common regardless of driver models.

Appendix B Paper

(1) Paper Sizes

Usable paper sizes in each driver model are as follows:

List of Paper Sizes

Driver Model	Factory Default or User Defined	Sizes (Limits)	
SII IFD50x (2inch) SII PTD50 (2inch) SII IFD00x (2inch) SII PTD00 (2inch)	Factory Default	A4 Letter 58×297 mm	
	User Defined	Width	58 mm
		Length	30–3276 mm
SII IFD00x (3inch) SII IFD50x (3inch) SII PTD00 (3inch) SII PTD50 (3inch)	Factory Default	A4 Letter 80×297 mm	
	User Defined	Width	80 mm
		Length	30–3276 mm

- If selecting a larger paper width than the actual paper size available for printers such as [A4] and [Letter], large margins are shown to the right of the paper on the computer (screen).

- The paper length for using mark paper has to be the following.
  # The paper length < [Distance between each marks] - [Top Margin Length] - 10mm

- For using the mark paper, the length of the paper or print is very short in comparison with the distance between each marks, it may need to change the setting of [Mark range] on Function Settings.

(2) Margin Sizes

Print margin sizes on the computer or the printer are as follows:

List of Margin Sizes (unit: mm)

Driver Model	Margin Position		Margin Size	
			Computer Side	Printer Side
SII IFD50x (2inch) SII PTD50 (2inch)	Top Margin	With Cut	12.5 mm	←
		No Cut	0 mm	←
	Bottom Margin	With Cut	0.5 mm	←
		No Cut	0 mm	←
	Right/Left Margins Total		Paper Width – 48 mm	10 mm
SII IFD00x (2inch) SII PTD00 (2inch)	Top Margin	With Cut	12.5 mm	←
		No Cut	0 mm	←
	Bottom Margin	With Cut	0.5 mm	←
		No Cut	0 mm	←
	Right/Left Margins Total		Paper Width – 54 mm	4 mm
SII IFD00x (3inch) SII IFD50x (3inch) SII PTD00 (3inch) SII PTD50 (3inch)	Top Margin	With Cut	12.5 mm	←
		No Cut	0 mm	←
	Bottom Margin	With Cut	0.5 mm	←
		No Cut	0 mm	←
	Right/Left Margins Total		Paper Width – 72 mm	8 mm

- Top margin sizes vary whether paper is cut or not.

- If the paper size on the computer and the actual size are different, the margin size on the computer is also different from the actual margin size to be output.

- [Computer Side] in [Margin Size] means a margin size for selected paper recognized on the computer.

- [Printer Side] in [Margin Size] means a margin size for paper actually output from the printer.

- When using [Marked Paper], the top and bottom margin sizes on the printer are different from the above value. (It depends on the printer's paper feed volume setting.)

Appendix C Response Command String

Command strings (*pValueName*) specified as the second parameter of **GetSiiPrinterData** function in DLL are listed below.

For [Printer Command] names, refer to the ***Printer Technical Reference***.

List of Command Strings

Supported Command String (*pValueName*)	Printer Command
GET_RAW_DATA_AUTO_STATUS	History data for ***Auto Status Response***
GET_RAW_DATA_EXEC_RESP	History data for *Execution Response*
GET_RAW_DATA_CMD_RESP	History data excluding ***Auto Status Response*** and *Execution Response*
AUTO_STATUS_BACK	***Auto Status Response***
FUNCTION_SET_RESP	Function Setting Response
REMAIN_NV_MEMORY_CAP	Remaining User Area Response
STATUS_DATA_SEND_PAPER	Status Response [Send Status Data of Paper Sensor]
STATUS_DATA_SEND_PRESENTER	Status Response [Send Other Status Data]
PRINTER_ID_SEND_DEV	Printer ID Send [Printer Model ID]
PRINTER_ID_SEND_TYPE	Printer ID Send [Type ID]
PRINTER_ID_SEND_ROM	Printer ID Send [ROM Version ID]
ERROR_HISTORY_RESP	Error History Response (n=0x80)

Appendix D Condition of Function Settings

For using the printer driver, the some items of the function setting stored in the memory of the printer needs to be the following settings.

The function setting can be also changed by printer driver to the settings that are unsupported condition by the printer driver. But the unsupported settings may cause a state that the printer driver does not work.

Item Name	Setting Condition
SWDIP5 – 2 (Print data handling when an error occurs)	1 : Disable