



SEIKO INSTRUMENTS USA INC.

SMART LABEL PRINTER

ADMINISTRATION NOTES

6.6

DOCUMENTATION

SLP 100/410

SLP 200/420

SLP 240/430

SLP 440

SLP 450

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About this Document

This document is intended for system administrators and advanced users to customize the Smart Label Printer to their environment.

Fine Print

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Default Paths

After a normal installation, the Smart Label application program uses the following paths to locate and save files:

PrivateDocuments

Windows special folder ID: CSIDL_PERSONAL

Typical path: C:\Documents and Settings\UserName\My Documents\

Files:

Smart Label Printer\LABELS.SLL	Label Library (Optional – created by end user)
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PrivateData

Windows special folder ID: CSIDL_APPDATA

Typical path: C:\Documents and Settings\UserName\Application Data\

Files:

Smart Label Printer\SlpConfig.xml	Printer and global program settings (primary location)
Smart label Printer\SEIKOSLP.INI	Configuration settings – created by program
Smart Label Printer\SEIKOSLP.SLP	Program default settings – created by program
Smart Label Printer\SLPAdmin.xml	Optional – created by Administrator (see below)

PublicDocuments

Windows special folder ID: CSIDL_COMMON_DOCUMENTS

Typical path: C:\Documents and Settings\All Users\Documents\

Files:

Smart Label Printer\LABELS.SLL	Label Library (data base)
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PublicData

Windows special folder ID: CSIDL_COMMON_APPDATA

Typical path: C:\Documents and Settings\All Users\Application Data\

Files:

Smart Label Printer\SlpConfig.xml	Printer and global program settings (secondary location)
Smart Label Printer\SlpLabels.xml	Label type data
Smart Label Printer*.log	Various log files – created by program

ProgramFiles

Windows special folder ID: CSIDL_PROGRAM_FILES

Typical path: C:\Program Files\Seiko Instruments USA Inc\Smart Label Printer <version>\

Files:

Default Labels.sll	Factory default Label Library (data base)
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Notes

- 1) Files are installed by the Setup program, except as noted (i.e., “created by ...”).
- 2) If the user does not specify a label library, the application software will look for a file with the default name (LABELS.SLL) in the PrivateDocuments folder. If not found, the software will then look in the PublicDocuments folder.

3) If the path to the label library is changed, the Smart Label program may still look for the file in the original location. This is because the path of the current label library is saved in the SlpConfig.xml file. You may also need to change the path specified in that file.

Specifying Alternate Paths

Some installations may require that files are stored at a specific location (e.g., a different drive, file server, etc.). This may be accomplished by specifying the installation-specific paths in a special file named SLPAdmin.xml.

During startup, the application looks for this file at PrivateData\Smart Label Printer\SLPAdmin.xml. If the file is not found there, it will then look at PublicData\Smart Label Printer\SLPAdmin.xml. If the file is not found in either place, the default paths described above are used.

SLPAdmin.xml is a Unicode file, which can be created using the Windows NotePad utility (be sure to use “Save As”, instead of “Save”, and set “Encoding” to Unicode). The file has the following format:

```
<?xml version="1.0"?>
<SLP_Admin version="1.0">
  <Paths>
    <PrivateDocuments>C:\Documents and Settings\UserName\My Documents</PrivateDocuments>
    <PublicDocuments>C:\Documents and Settings\All Users\Documents</PublicDocuments>
    <PublicData>C:\Documents and Settings\All Users\Application Data</PublicData>
    <PrivateData>C:\Documents and Settings\UserName\Application Data</PrivateData>
  </Paths>
</SLP_Admin>
```

Note that any, or all, of the four paths may be specified in this file. A path specified in this file will override the corresponding default path. Likewise, any path(s) not defined in this file will assume the default setting (as described in “Default Paths”, above). Furthermore, an administrator may place this file in both PrivateData and PublicData folders, so some paths can be specified for individual users, and others paths specified for all users.

Program Configuration Settings

Printer and SmartCapture settings for the Smart Label program (SLPWIN.EXE) are stored in a file name SLPConfig.xml. By default, this file is located in PublicData\Smart Label Printer folder (e.g., C:\Documents and Settings\All Users\Application Data\Smart Label Printer\SLPConfig.xml).

Some installations may desire to have these settings saved on a per-user basis. This can be accomplished by copying the SLPConfig.xml file from the PublicData folder to the desired PrivateData folder (e.g., PrivateData\Smart Label Printer\SLPConfig.xml).

Note that the Smart Label program looks for this file in the PrivateData folder and, if not found there, in the PublicData folder. Therefore, any users that do not have a private SLPConfig.xml file will use the “global” settings in the PublicData folder.

External Label Processing

The Smart Label program is capable of executing a user-defined program each time a label is printed. This allows some additional processing to be performed for each printed label (e.g., add to a database, create a form letter, etc.). This feature is implemented by adding a “RunOnPrint” section to the SLPAdmin.xml file:

```
<?xml version="1.0"?>
<SLP_Admin version="1.0">
  <RunOnPrint>
    <Enable>1</Enable>
    <InfoFilePath>C:\Temp</InfoFilePath>
    <ExecuteProgram>C:\Windows\notepad.exe</ExecuteProgram>
    <Wait>0</Wait>
  </RunOnPrint>
</SLP_Admin>
```

There are four settings for Run-On-Print, defined are follows:

Setting	Description
Enable	Set to 1 to enable, or 0 to disable, the Run-On-Print feature.
InfoFilePath	Path to where the Label Information file will be stored. The file name is in the format, “Label_2322022955_0001.xml” and the last four digits (e.g., “0001”) are incremented for each label.
ExecuteProgram	Path to the user program to execute. The program will be executed with a command line that includes the path of the Label Information file. For example, C:\Windows\notepad.exe Label_2322022955_0001.xml
Wait	Set to 0 to allow the Smart Label program to continue while the user program executes. Set to 1 to have the Smart Label program wait until the user program terminates before continuing, effectively preventing multiple instances of the user program.

When executed, the user program will be passed one parameter, which is the name of the Label Information file. The file should be deleted after the contents are read, to prevent the accumulation of obsolete files.

The user program should read the Label Information file, delete the file, process the information, and exit as fast as possible. If another label is printed while the user program is still executing, a second instance of the program will be started. This could cause problems.

Ideally, the user program should be written so that it detects when a second instance is started, and handles the situation gracefully. Alternatively, the Smart Label program can wait for the user program to terminate, by setting Wait to 1. Note that using the wait feature will reduce printer throughput to the extent determined by the execution time of the user program.

Remote Desktop Connection

If users create a printer connection in a Citrix, shared VNC, or similar environment, the printer name may be decorated each time a user creates a new session. The decoration is usually a suffix following the printer name. To delimit the actual printer name from the decoration, SLP will look for a “#” character between the real name and the suffix. If the SLP software is unable to connect to a printer in such an environment, try appending a “#” character to the printer name, so it appears between the printer name and the suffix (e.g., “Smart Label Printer 450# (from P51_MUSTANG) in session 3”). Administrators should give all label printers unique names on their network so the SLP software can find the default printer correctly.

Smart Label Run-time Diagnostic Logging

The Smart Label software is capable of generating a verbose run-time log file, which may be helpful in diagnosing certain problems. Diagnostic logging is turned off, by default. There are two registry script files (located in the same folder as the Smart Label application), which may be executed to enable or disable Diagnostic logging:

Turn debugging on

Run SLPDebugOn.reg – double click it.

Turn driver debugging off

Run SLPDebugOff.reg – double click it.

The log file is named SlpDebug.log and is located in the Windows CSIDL_COMMON_APPDATA folder (e.g., C:\Documents and Settings\All Users\Application Data\Smart Label Printer).

System Printer Driver Run-time Diagnostic Logging

Driver debug logging should only be used to capture the state of the driver when a failure is expected. The log file will grow even when the printer is idle, and there is no limit to the size. This will also have a slight impact on system performance.

You must have administrator privileges to perform the following commands. (On Vista, you will need to right-click on the Command Prompt icon, and select "Run as administrator" when opening the prompt to restart the spooler. You will also need to run the .reg files as administrator, which means you either should run regedit as admin and import the .reg file, or run the .reg files from an elevated command prompt.)

Values -

Turn driver debugging on

Run SLPDriverDebugOn.reg - either double click, or on Vista, type the name of the file (with path if necessary) in an elevated command prompt.

Agree to the prompts about changing the registry.

Open a command prompt (or use the current elevated prompt if Vista).

Execute the following 2 lines in the command prompt:

```
net stop spooler  
net start spooler
```

The debug file will be written to C:\slp.log.

Turn driver debugging off

Run SLPDriverDebugOff.reg - either double click, or on Vista, type the name of the file (with path if necessary) in an elevated command prompt.

Agree to the prompts about changing the registry.

Open a command prompt (or use the current elevated prompt if Vista).

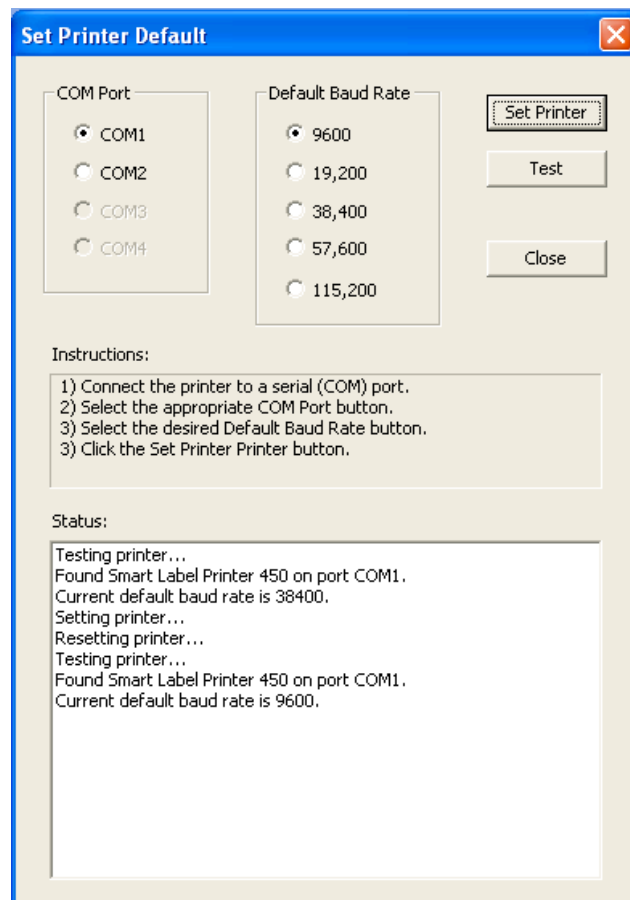
Execute the following 2 lines in the command prompt:

```
net stop spooler  
net start spooler
```

Changing Printer's Serial Baud Rate Settings

Some embedded systems have serial ports with slow baud rates. And sometimes these baud rates are incompatible with the default baud rates of the Smart Label Printers. The 440 and 450 printers have an EEPROM that can store the default baud rate that the printer should use when it powers up. Within the standard application install is a program called "SlpSelect.exe". Executing SlpSelect.exe as described below will present a private interface for changing the baud rate of attached printers.

1. Attach an SLP 440 or SLP 450 to the serial port of your computer. **(The USB cable should not be attached.)** If your printer did not come with a serial cable please contact support. You may qualify for a free serial cable from Seiko Instruments USA Inc.
2. Execute SlpSelect.exe /default [port] [baudrate]
 - a. port is one of COM1, COM2, COM3 or COM4
 - b. baudrate is 9600, 19200, 38400, 57600, 115200For example:
> SlpSelect.exe /default COM1 9600
3. Follow the instructions on-screen.



Factory baud rate for the SLP 440 is 115,200. Factory baud rate for early SLP 450 models is 38,400 and 115,200 for later models.