

DP-DS620/DP-DS620 (A)
DP-DS820/DP-DS820 (A)

Continuous Panoramic Prints
Print Sample Application Manual

Ver. 1.11

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Introduction



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You cannot resale/use the DP-DS620 and the DP-DS820 without destination number (A) in the U.S.

Application Scope

This document is a continuous panoramic prints print sample application manual for the DP-DS620/DP-DS620 (A) and the DP-DS820/DP-DS820 (A).

1. Overview

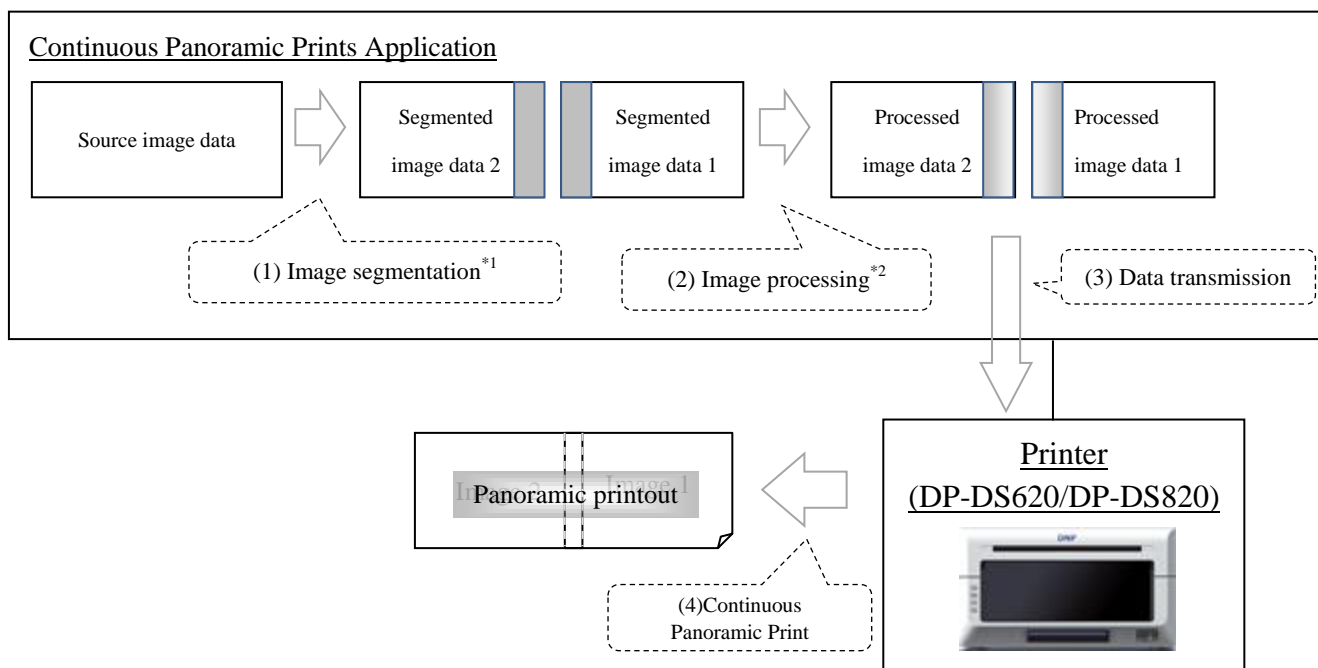
The continuous panoramic prints print sample application uses the continuous panoramic prints function of the DP-DS620/DP-DS620 (A) and the DP-DS820/DP-DS820 (A) to print panoramic pictures.

※ Refer to the separate document “DP-DS620_ContinuousPanoramaSpecification_Rev.1.0_English.pdf” for details about the panorama printing function.

2. Operation Overview

Continuous Panoramic Prints creates panoramic pictures by printing a regulation size images consecutively. The flow of image processing performed by the Continuous Panoramic Prints Application is shown below.

- ① The source image is segmented into 2 or 3 images according to the specified number of segments.
- ② Image data used in Continuous Panoramic Prints for the overlapped section is processed. ICC profile processing, done during normal printing, is performed at the same time.
- ③ The segmented image data files are sent to the printer one after another with the commands for Continuous Panoramic Prints.
- ④ After receiving the Continuous Panoramic Prints commands and the segmented image data files, the printer prints a Continuous Panoramic Prints by repeatedly printing a regulation size images.



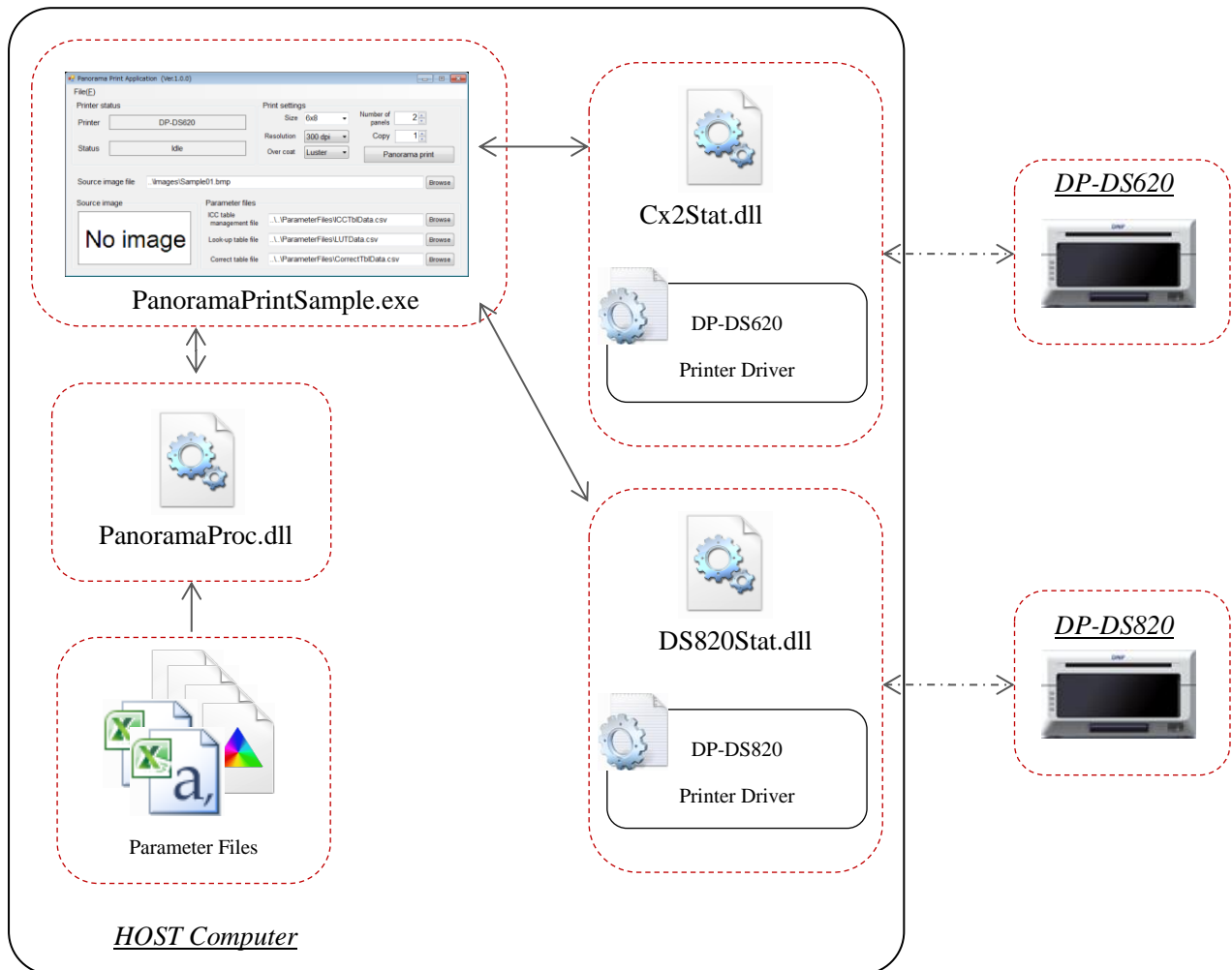
3. Operating Environment

Supported OS:	Windows7 and Windows8 (32-bit/64-bit versions)
System requirements (recommended)	CPU : 1.5GHz or faster RAM: 4.0GB or more Resolution : WXGA(1280x768) or better
Runtime software	.NetFramework 3.5 Microsoft Visual C++ 2008 SP1 runtime

4. Configuration

The Continuous Panoramic Prints Application runs with the file configuration shown below.

< File configuration >



5. File List

The Continuous Panoramic Prints Application is included in the Continuous Panoramic Prints sample package "PanoramaPrintApp" folder (SDK/ PanoramaPrintApp). Also, various kinds parameter files are included in "ParameterFiles" folder (SDK/ ParameterFiles).

5.1. PanoramaPrintApp Folder

Sub folder name	File name	Content
bin/	PanoramaPrintSample.exe	Executable file for the Continuous Panoramic Prints Application
	PanoramaProc.dll	File for the Continuous Panoramic Prints image segmentation and processing library for 32bit OS
	PanoramaProc64.dll	File for the Continuous Panoramic Prints image segmentation and processing library for 64bit OS
	Cx2Stat.dll	File for the DP-DS620 interface library for 32bit OS
	Cx2Stat64.dll	File for the DP-DS620 interface library for 64bit OS
	DS820Stat.dll	File for the DP-DS820 interface library for 32bit OS
	DS820Stat64.dll	File for the DP-DS820 interface library for 64bit OS
Images/	Sample01.bmp	Sample image

5.2. ParameterFiles Folder

Sub folder name	File name	Content
—	ICCTblData_0010.csv	Color conversion parameter table that was adjusted with gray pattern for DP-DS620 (*1)
	ICCTblData_0010aj.csv	Color conversion parameter table that was color adjusted for DP-DS620 (*1)
	ICCTblData_0020_PP.csv	Color conversion parameter table that was color adjusted for DP-DS820 PP media (*1)
	ICCTblData_0021_SD.csv	Color conversion parameter table that was color adjusted for DP-DS820 SD media (*1)
	LUTData_0010.csv	Look-up Table data for DP-DS620
	LUTData820_0010.csv	Look-up Table data for DP-DS820
	CorrectTableData.csv	Parameter table for environmental correction
ICCProfiles	xxxx_std.icc, xxxx_s0.icc ~ xxxx_s600.icc	ICC profiles that was adjusted with gray pattern for DP-DS620 xxxx : version
	xxxxaj_std.icc xxxxaj_s0.icc ~ xxxxaj_s600.icc	ICC profiles that was color adjusted for DP-DS620 xxxx : version
	PP_xxxx_STD.icc, PP_xxxx_S000.icc ~ PP_xxxx_S600.icc	ICC profiles that was color adjusted for DP-DS820 PP media xxxx : version
	SD_xxxx_STD.icc, SD_xxxx_S000.icc ~ SD_xxxx_S600.icc	ICC profiles that was color adjusted for DP-DS820 SD media xxxx : version
ICCProfiles/ colorData_936	xxxx_std.txt xxxx_s0.txt ~ xxxx_s600.txt	Original color profiles xxxx : version
CorrectFiles	CorrectDutyTable_Std.csv	File of a DUTY table used for environmental correction

*1 : Please chose a table to suit an output image, since the print result is different by the applied color conversion parameter table.

6. Installation Procedure

■ DP-DS620

- ① Install the DP-DS620 printer driver.
- ② Check that the firmware of the connected DP-DS620/DP-DS620 (A) is “DS620 01.30CP”.
- ③ Copy the content of the SDK folder to a folder of your choosing on your computer.

■ DP-DS820

- ① Install the DP-DS820 printer driver.
- ② Check that the firmware of the connected DP-DS820/DP-DS820 (A) is “DS820 00.50” later.
- ③ Copy the content of the SDK folder to a folder of your choosing on your computer.

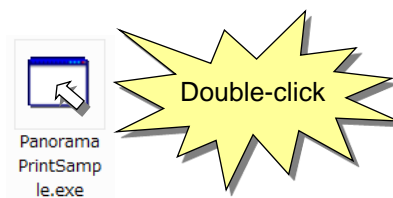
7. How to Use the Continuous panoramic prints Application

※ If the following message is displayed in the application, install Microsoft Visual C++ 2008 SP1 runtime components on your system. (Refer to 3. Operating Environment)



7.1. Launch Procedure

Double-click on the “PanoramaPrintSample.exe” icon to launch the Continuous Panoramic Prints Application.

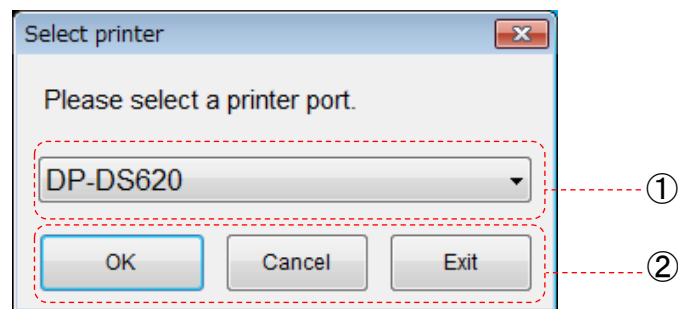


7.2. Screen Information

The following shows items displayed on the Continuous Panoramic Prints Application screen and the items in the input areas.

< Printer selection screen >

Select the printer you want to connect.



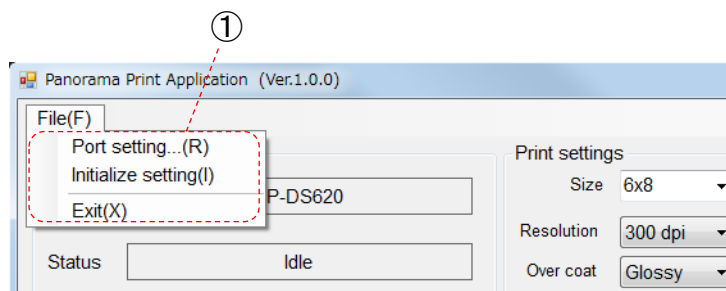
① Printer selection

A list of the connected printers is displayed in a combo box. Select the printer you want to use to print the Continuous Panoramic Prints.

② OK and Cancel buttons

- OK: Connects to the selected printer and closes the printer selection screen.
- Cancel: Closes the printer selection screen without connecting to the printer.
- Exit: Closes the Tool

< Menu on the main screen >

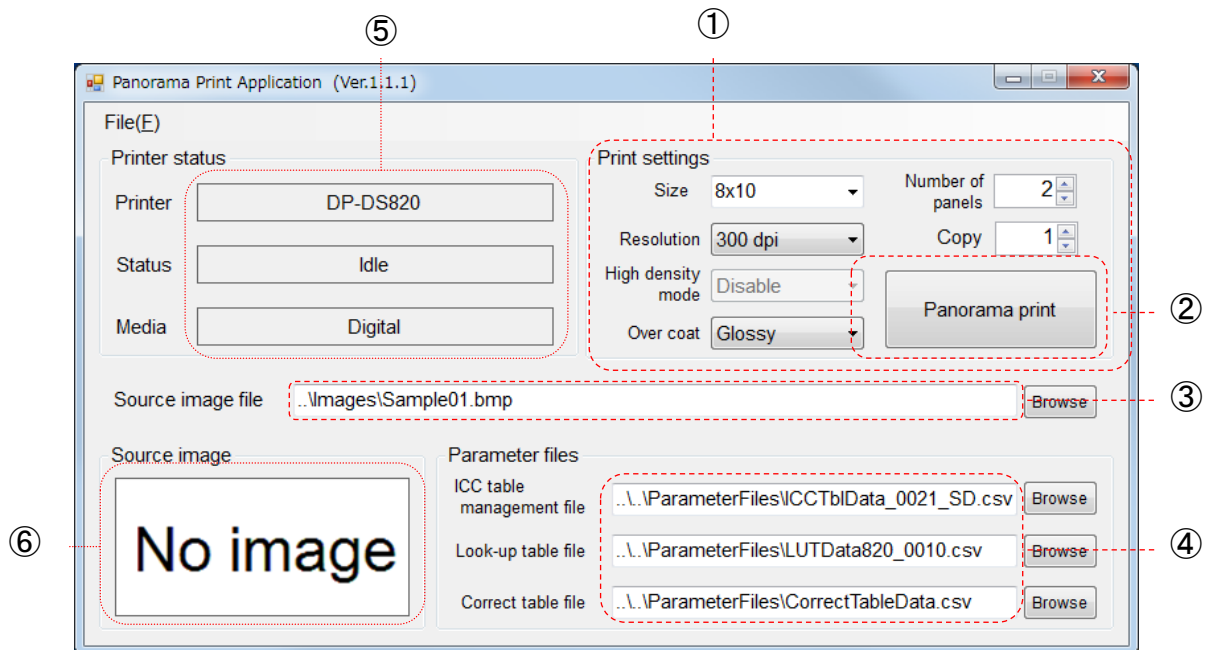


① File menu

- Port setting:
Displays the printer selection screen.
- Initialize setting
Return to the initial value. (Print settings, Source image file, Parameter files)
- Exit:
After displaying a confirmation dialog box, it closes Print Sample Application.

< Main screen >

On the main screen, you can operate and configure continuous panoramic prints.



■ Operation areas

① Print settings

Select the following basic settings for continuous panoramic prints.

- Size
Select the paper size. (DP-DS620 : 6x8 / DP-DS820 : 8x10, 8x12, A4)
- Resolution
Select the resolution. (300dpi/600dpi)
- High density mode [It is valid when Resolution is 600dpi and Printer is DP-DS820/DP-DS820 (A)]
Select the high density mode. (Enable/Disable)
- Over coat
Select the over coat process. (Glossy/Luster/Matte)
- Number of panels
Specify the number of images (number of segments of the source image) of the continuous panoramic prints. (2 or 3 images)
- Copy
Specify the print copies for Continuous Panoramic Prints.

② Print instruction

Instruct the process of continuous panoramic prints.

- Panorama Print : Panorama Image data is created and printed in one action.

③ Continuous Panoramic Prints image settings

Specify the source image data for the continuous panoramic prints.

- Source image file :

Specify the file of the source image data for panoramic print.

Click the “Browse” button and then select a file in the dialog box.

You may also drag and drop the image file to the sample application screen to select it.

④ Setting files for Continuous Panoramic Prints image processing

Specify the parameter files for Continuous Panoramic Prints image processing.

- ICC table management file

File with the management table for the color conversion data

- Look-up table file

LUT data file for the gradation processing.

- Correct table file

specify the Environmental Correction Table file.

Click the “Browse” button for each item and then select the file in the dialog box.

■ Display areas

⑤ Printer name and status display

- Printer

Displays the name of the connected printer. "Not connected" is displayed if no printer is connected.

- Status

Displays the status of the connected printer. "N/A" is displayed if no printer is connected.

⑥ Display of the source image data for continuous panoramic prints

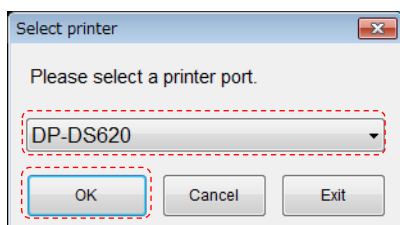
- Source image

Displays the source image data for continuous panoramic prints. The displayed image is clipped to match the display area. The size differs from that of the printed panoramic image.

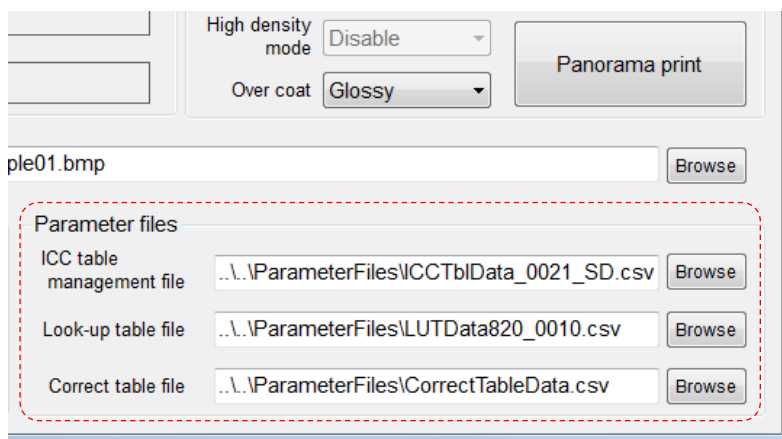
7.3. Operations

The following explains the procedure to print continuous panoramic pictures with the Print Sample Application.

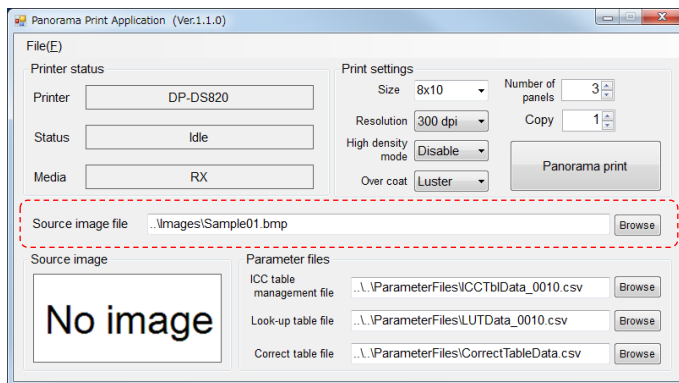
- ① Launch the Print Sample Application.
- ② Select the printer you want to use for continuous panoramic printing on the printer selection screen.
After the printer has been selected, click the “OK” button.



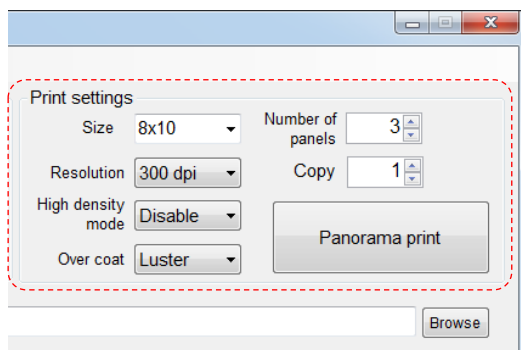
- ③ Specify the parameters for Continuous Panoramic Prints image processing on the main screen.
Check that the desired parameter files are specified in “ICC table management file” and “Look-up table file” and “Correct table file”.
If you want to use different parameter files, enter the desired parameter file names or select the files.
The ICC table management file is switched according to a selected printer or a media.
Also, the LUT file is switched according to a selected printer.



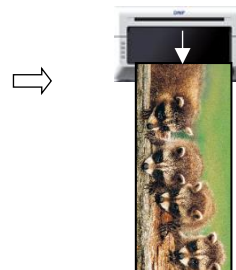
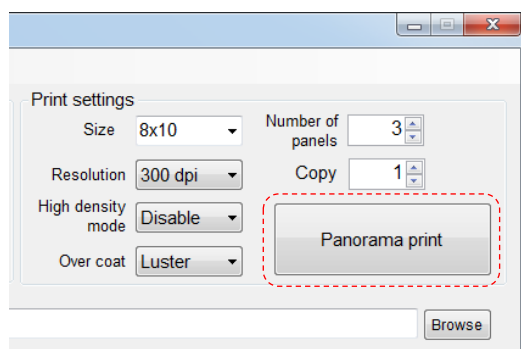
- ④ Select the image file of the Continuous Panoramic Prints image you want to print.
 You can select the image file by directly inputting its name, using the dialog box.
 The selected image file will be displayed in “Source image”.



- ⑤ Set the print settings of the Continuous Panoramic Prints.



- ⑥ When you click "Panorama Print", the printer prints the Continuous Panoramic Prints.



7.4. Errors

A list of error codes displayed when an error occurs in the Continuous Panoramic Prints Application is shown below.

< Error code list >

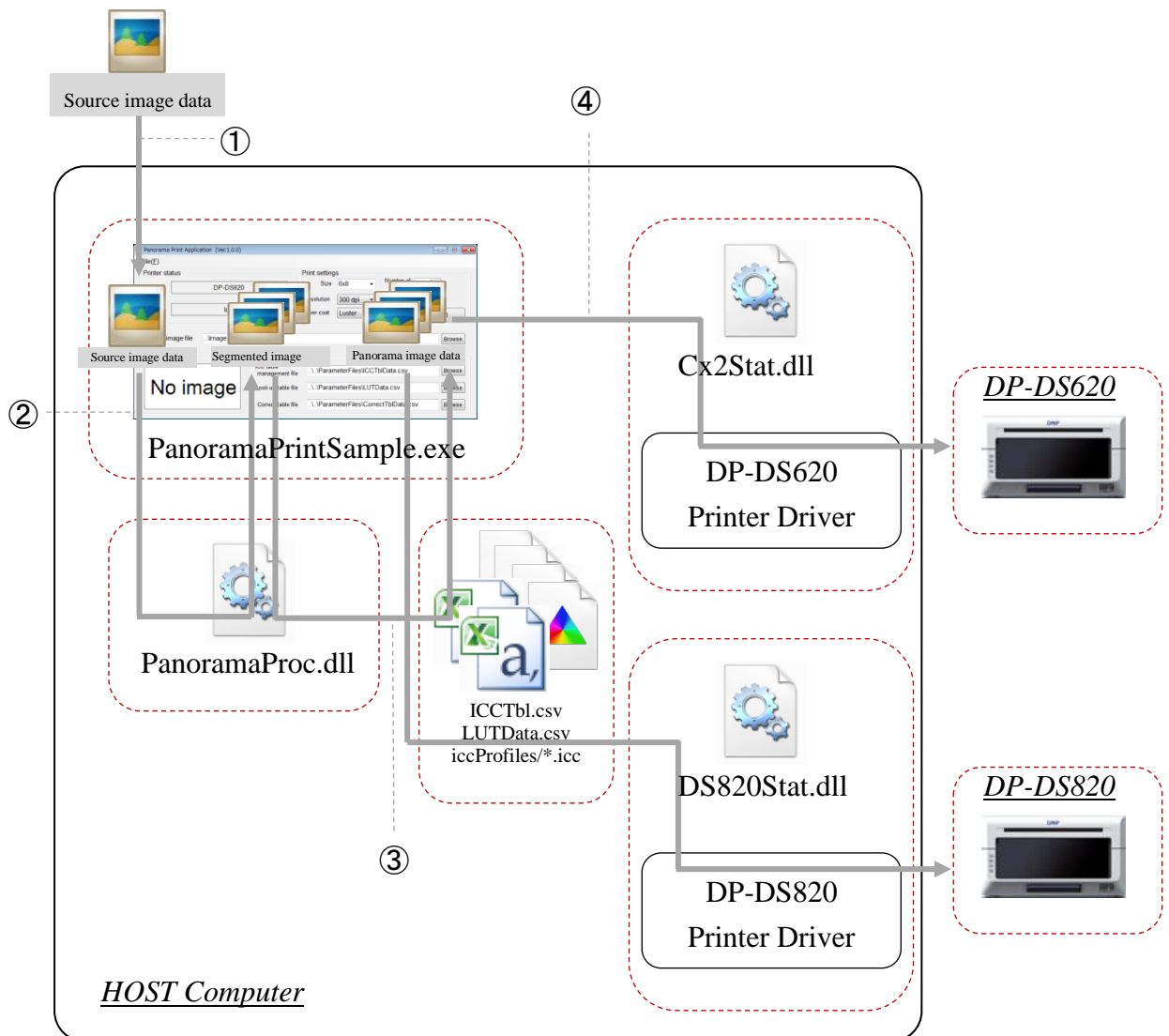
Error code	Content	Cause/Solution
-1	File open error	Program internal error
-2	Insufficient memory	Close unnecessary applications to guarantee enough memory space.
-3	Parameter error	Program internal error
-4	Incorrect status	Program internal error
-5	No data	No valid data in the setting file or image data.
-6	Internal parameter error	Program internal error
-7	Internal processing error	Error caused by the program internal operating environment
-8	Not supported error	Program internal error
-9	No DUTY data for internal processing	Program internal error
-10	Invalid operating environment	The printable device has not connected.
-101	Color Conversion Table File Open Error	Check the entries for “ICC table management file”
-105	No Data in Color Conversion Table File	Check the contents of the color conversion table file.
-110	Color Conversion Table File Format Error	Check the contents of the color conversion table file.
-201	Color Conversion Table File (ICC profile) Open Error	Check the color conversion data (ICC profile name) entered in the color conversion table file.
-206	Color Conversion initializing Error	Error caused by the program internal operating environment.
-207	Color Conversion Process Error	Color conversion with ICM not processed correctly. Error caused by the program internal operating environment.
-300	LUT File Open Error	Check the entries in the “Look-up table file”. Also, check the Correction Duty Table files entered in the Environmental Correction Table files.
-305	No Data in LUT File	Check the Correction Duty Table files entered in the LUT Data files and Environmental Correction Table files.
-310	LUT File Format Error	Check the Correction Duty Table files entered in the LUT Data files and Environmental Correction Table files.

Error code	Content	Cause/Solution
-311	Insufficient LUT file record count (min. 4)	Check the Correction Duty Table files entered in the LUT Data files and Environmental Correction Table files.
-400	Correction File Open Error	Check the entries in the “Correct table file”.
-405	No Correction File Data	Check the contents of the Environmental Correction Table file.
-410	Correction File Format Error	Check the contents of the Environmental Correction Table file.
-411	Correction File Content Redundancy	There is redundancy in the Environmental Correction Table file settings. Check the contents of the Environmental Correction Table file.

8. Appendix

8.1. Diagram of processes

- ① Load the source image file
- ② Segment the Continuous Panoramic Prints image
- ③ Process the segmented images
- ④ Print



8.2. Process flow

