

Reference

Writing control data and checking the checksum

July 08, 2016

Dai Nippon Printing Co., Ltd.

1. Procedure to update the firmware with DS2W-Tools

Rewriting the firmware using DS2W-Tools can be performed as shown below.

(Note) When rewriting the firmware or color control data, get the status, and check that the status is "Idle" (with no errors) before starting the rewriting. Also, do not perform any actions such as turning the printer OFF or opening the printer cover during the rewriting process.

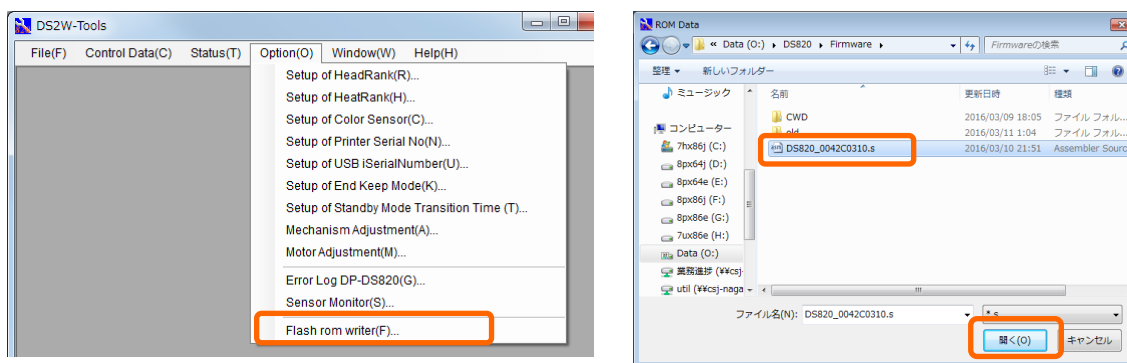
(1) Start DS2W-Tools

Depending on your operating system, run "DS2W-Tools32.exe" or "DS2W-Tools64.exe".

(2) Write the firmware

With [Flash rom writer (F)] under the [Option (O)] menu, select the write file, and click on [Open] to start writing the firmware.

When complete the firmware update, the printer is restarted.

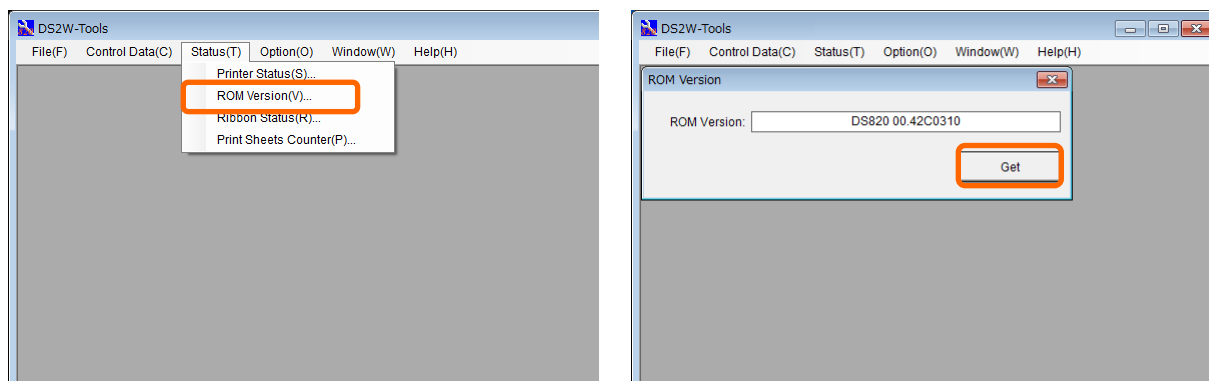


(3) Check the firmware version

With [Rom Version (V)] under the [Status (T)] menu, check the version of the firmware.

Click on [Get] to get the version.

(If you can't get the version immediately after updating, click on [Get] again.)



2. Procedure to update the color control data with DS2W-Tools

Rewriting the color control data using DS2W-Tools can be performed as shown below.

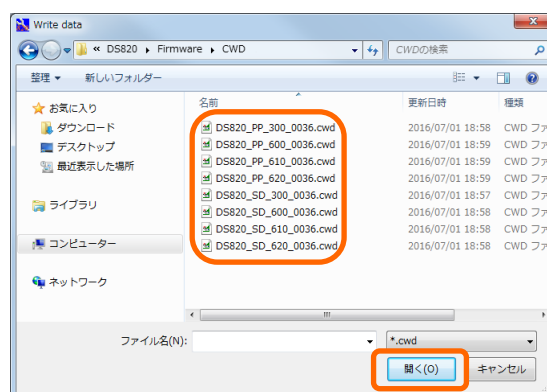
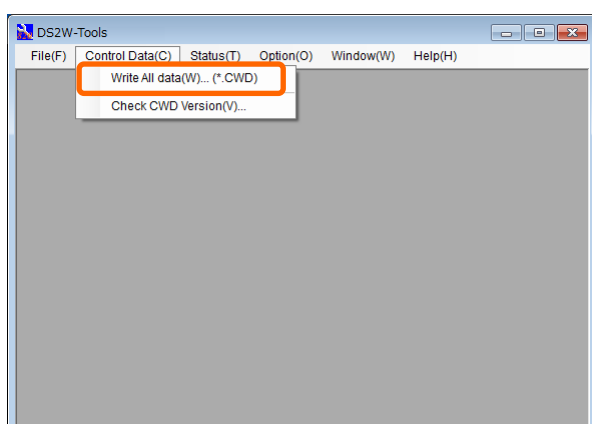
(Note) When rewriting the firmware or color control data, get the status, and check that the status is "Idle" (with no errors) before starting the rewriting. Also, do not perform any actions such as turning the printer OFF or opening the printer cover during the rewriting process.

(1) Start DS2W-Tools

Depending on your operating system, run "DS2W-Tools32.exe" or "DS2W-Tools64.exe".

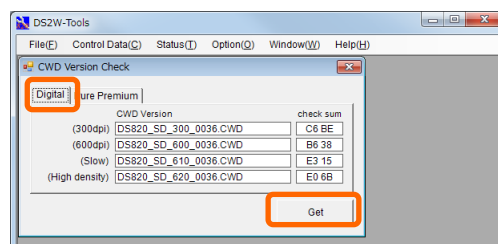
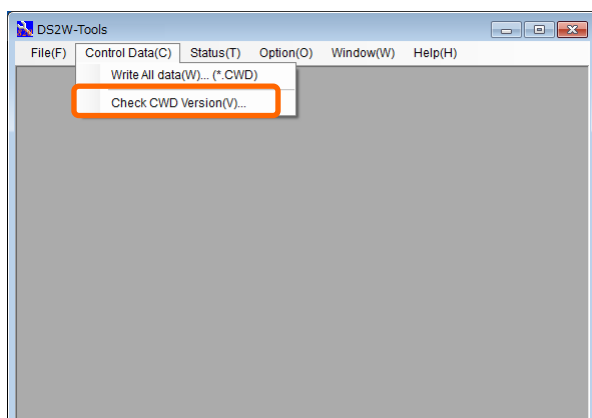
(2) Write the color control data. (Digital media [SD], Pure Premium media [PP])

With [Write All Data(*.CWD)] under the [Control Data(C)] menu, select the CWD file, and click on [Open]. This will write the control data. (Multiple files can be selected.)

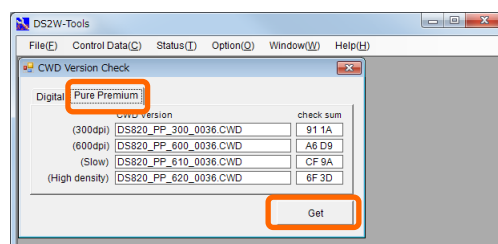


(3) Confirm the color control data version and checksum

Open the DS2W-Tools [Control Data(C)] menu and use [CWD Version Check] to check the version and checksum of the color control data that were written. Click on [Get], and the respective version/checksum will be displayed.



Digital media : CWD version & checksum.



Pure Premium media : CWD version & checksum.

2. Procedure to update when using SDK

If you write the firmware and the color control data using Status API, you can follow the same procedure as above. Then check that the writing occurred properly by checking the version and checksum(The color control data only).

■ Using API (Firmware)

- | | |
|-------------------------|--|
| 1. GetStatus() | Check that the status is "Idle" (with no error). |
| 2. SetFirmwUpdateMode() | Switch to firmware update mode. |
| 3. SetFirmwDataWrite() | Write firmware data. |
| 4. GetFirmwVersion() | Check the firmware version. |

■ Using API (Color control data)

- | | |
|------------------------|--|
| 1. GetStatus() | Check that the status is "Idle" (with no error). |
| 2. SetColorDataClear() | Clear the control data. |

Media Type : SD

- | | |
|---------------------------------|---|
| 3. SetColorDataVersion() | Set the 300dpi control data version. |
| 4. SetColorDataWrite() | Write the 300dpi control data. |
| 5. SetColorDataVersion() | Set the 600dpi control data version. |
| 6. SetColorDataWrite() | Write the 600dpi control data. |
| 7. SetColorDataVersion() | Set the slow printing control data version. |
| 8. SetColorDataWrite() | Write the slow printing control data |
| 9. SetColorDataVersion() | Set the high density printing control data version. |
| 10. SetColorDataWrite() | Write the high density printing control data |
| 11. GetColorDataVersionResEX() | Check the 300dpi control data version. |
| 12. GetColorDataChecksumResEX() | Check the 300dpi control data checksum. |
| 13. GetColorDataVersionResEX() | Check the 600dpi control data version. |
| 14. GetColorDataChecksumResEX() | Check the 600dpi control data checksum. |
| 15. GetColorDataVersionResEX() | Check the slow print control data version. |
| 16. GetColorDataChecksumResEX() | Check the slow print control data checksum. |
| 17. GetColorDataVersionResEX() | Check the high density print control data version. |
| 18. GetColorDataChecksumResEX() | Check the high density print control data checksum. |

Media Type : PP

Repeat 3 – 18.

Of the strings listed above, GetColorDataVersionResEX()・GetColorDataChecksumResEX() are used to check the color control data version and checksum.

These API were added to the DP-DS820, and they get the explicit color control data that was designated.

You can also use GetColorDataVersion() • GetColorDataChecksum () provided on standard printers. These API dispense with designating the color control data to get, and determine the data to be read using the printer's status. After writing 300dpi color control data, the 300dpi version and checksum will be read, while after writing 600dpi color control data, the 600dpi version and checksum will be read. The same is true for the slow-printing color control data. It will get the latest color control data that has been updated/used.

The slow-printing color control data can only be gotten after it has been written, and cannot be gotten after turning the power ON or printing.

When using GetColorDataVersion() • GetColorDataChecksum (), the relationship between the printer use status and the color control data types are as follows:

Printer status	Control Data version and checksum
After writing 300dpi control data	300dpi
After writing 600dpi control data	600dpi
After writing slow print control data	Slow
After writing high density print control data	High density
After turning power ON	300dpi
300dpi After printing	300dpi
600dpi After printing	600dpi