

UPDATING DS40 FOR NEW 2X6 CUT FEATURE

USING THE VERSION UP TOOL TO UPDATE FIRMWARE

PURPOSE

This document details the use of the DS40 Version Up Tool and the installation of modified hardware required to support the 2x6 paper feature.



Attention

All printer drivers must be installed before using the Version Up Tool.
Failure to install the printer drivers will prevent the tool from working properly.

OVERVIEW

The DS40 Update v 1.40 firmware adds the 2" paper cut mode to the printer functions, which allows 2x6 strips to print from both 6x4 and 6x8 print pack media sets. The document will provide details on how to update firmware on the printer as well as install the modified hardware necessary to print. There is also a corresponding Printer Driver required to access and activate the new function.



Attention

The modification is not intended for end users; it is for professional use ONLY.



Note

This modification/update will require some disassembly of the printer, as well as the installation and adjustment of a required part to provide reliable operation of the printer.

Protect the Warranty

Incorrect installation of the hardware or installation by unqualified personnel which results in damage to the printer will NOT be covered by the product warranty. Similarly, installation of the firmware without the corresponding required hardware that results in damage to the printer will also void the warranty.

For end users that require assistance, DNP offers service to install the hardware and related firmware. Contact DNP Tech Support Services for shipping instructions and an RMA shipment tracking number.

This DNP product update modification kit is For Professional Use ONLY.

CONTENTS



Attention

This modification to the DNP DS40 photo printer is a set of hardware and firmware. The hardware is **REQUIRED** for use with the v1.40 firmware (2" cut mode) and must be performed by qualified personnel. Installation should **NOT** be attempted by untrained personnel.

DS40 VERSION UP TOOL EXECUTABLE FILES INCLUDED

The DS40 Version Up Tool has a specific executable file for each version to be updated. The executable file names, and their corresponding firmware and color control data versions are in Table 1.

Table 1

	For 32 bit OS	For 64bit OS
Folder	\DS40_140_Win32	\DS40_140_Win64
DS40 Version Up Tool Execute File Name	DS40_Firmware_Update_Tool_for_ 32bitOS.EXE	DS40_Firmware_Update_Tool_for_ 64bitOS.EXE
Firmware Version	DS40 1.40 (Data File Name DS40_0140.S)	
Color Control Data Version and Checksum Data file name in parenthesis ()	DS40_300_0130.CWD 1A03 (DS40_300_0130.CWD) DS40_600_0130.CWD 31C7 (DS40_600_0130.CWD)	
DLL file to use	CxStat.dll	CxStat64.dll



Attention

Save the all the files listed for your OS (including the DLL) in the same directory.

RUNNING THE DS40 VERSION UP TOOL

1. Make sure the printer is connected to the host computer, and then turn it on.



Note

The printer cannot be in an error state.

Check that there is paper and ribbon in the printer, the cover is closed, and there are no errors (printer LED should be green).



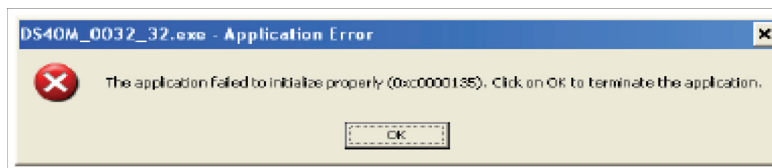
Attention

If there is a printing preferences window (for the printer driver), make sure it is closed. Do NOT open the preferences while running the Version Up Tool.



Attention

To support both the 32 and 64 bit operating systems, the Version Up Tool uses .NET Framework. If, when starting the Version Up Tool you see the following error, you must install Microsoft .net Framework.



Download .Net from: <http://msdn.microsoft.com/en-us/netframework/aa569263.aspx> (for Windows XP & later)

2. Run the DS40 Version Up Tool executable file (*.EXE)
3. If there are multiple printer ports, a printer select window will open (Figure 1).
Select the appropriate printer and then click OK.

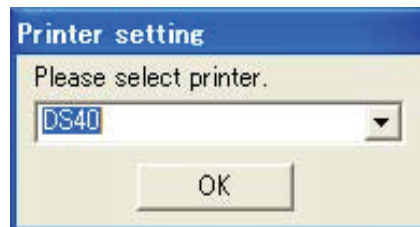
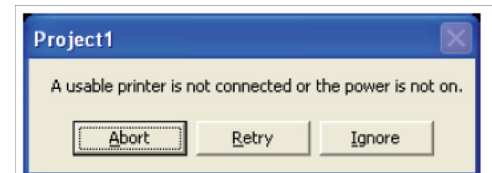


Figure 1. Printer Setting Window



Attention

If the tool cannot find the printer, a confirmation window will open. After checking that power is on and the USB is connected, click "Retry" to start the process again. Clicking "Abort" will stop the update process.



DS40 Version Up Tool Window Explanation

Once the DS40 Version Up Tool has found the printer, the following window (Figure 2) will open.

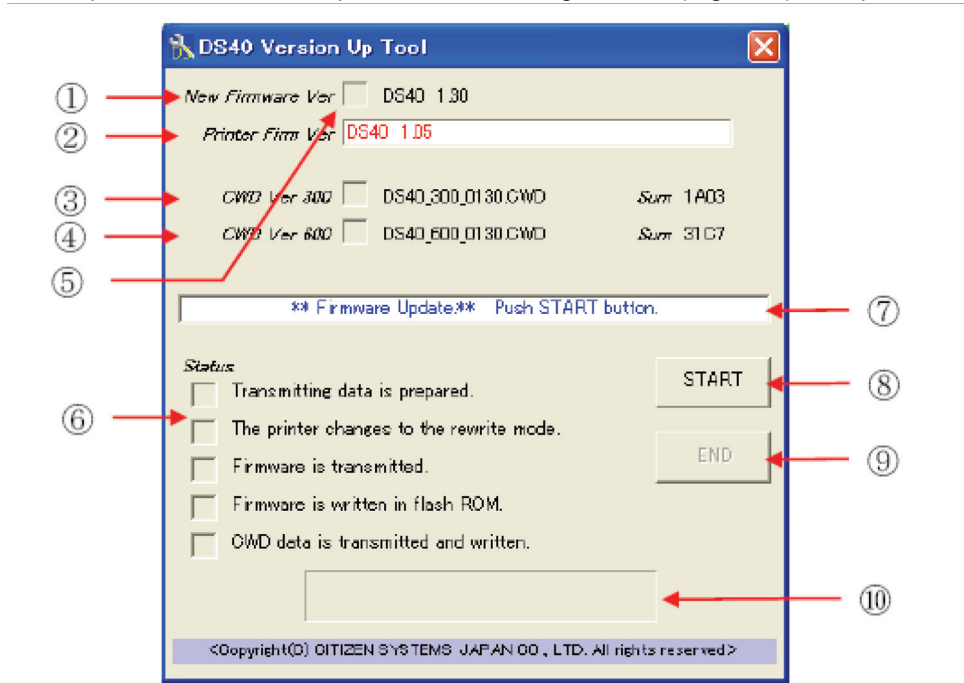


Figure 2. Tool Window

DS40 Version Up Tool Key

1	New Firmware	This displays the new firmware version that will be used in the update.
2	Printer Firm Ver	This displays the printer's current firmware version. If it differs from the new version, it will be displayed in RED .
3	CWD Ver 300	This displays the new color control data (300 dpi resolution) version and checksum value (Sum) to be updated. When the update is complete, the Sum value is displayed in BLUE .
4	CWD Ver 600	This displays the new color control data (600 dpi resolution) version and checksum value (Sum) to be updated. When the update is complete, the Sum value is displayed in BLUE .
5	Check Box	This box will have a check if the new firmware or color control data has already been written to the printer, or if the update has been completed.
6	Status	This checks the progress status for the update.
7	Indicator	This shows the printer's current status, and the application operating command.
8	START	Update START button, click to start the update.
9	END	Update END button, click to end the update.
10	Status Bar	Displays the progress of the update.

Starting the Update

1. On the DS40 Version Up Tool window, click the START button to begin the update.

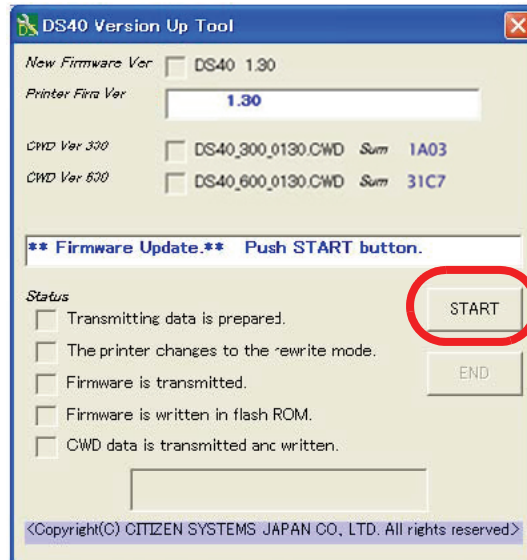
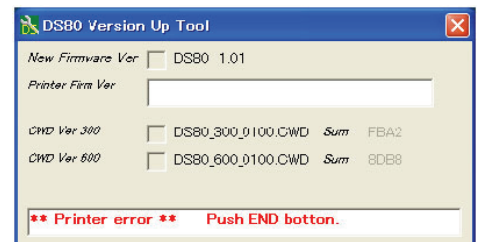


Figure 3. Click the START button



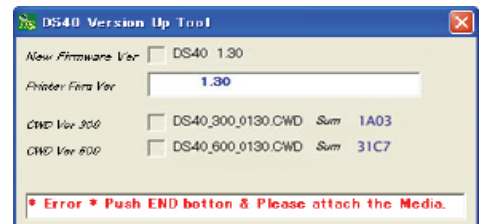
Attention

When starting the update, if the printer has an error, an error window will be displayed.
See image at right.
The same error is displayed if the USB cable is disconnected or if the power is off.



Attention

If the printer has a ribbon error, a media error window will be displayed.
See image at right.



If there is an error, click **END** or close the window to stop *DS40 Version Up Tool*, fix the error.
Be sure there are no errors (printer LED is green), and run *DS40 Version Up Tool* again. If the USB cable was disconnected or the power was off, check that the USB cable is connected and the power is turned on.



Attention

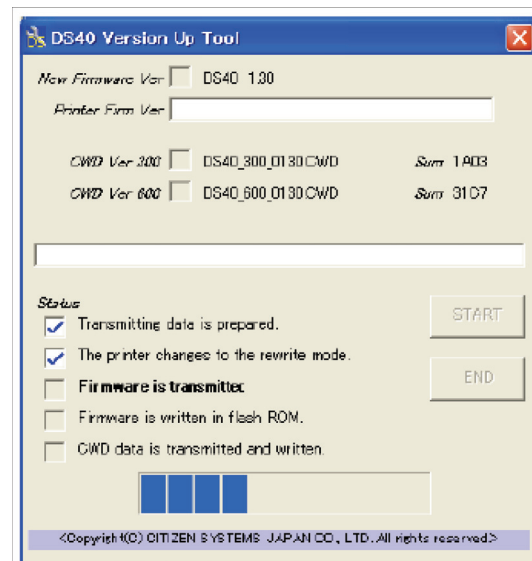
While updating:
DO NOT disconnect the USB cable.
DO NOT turn the power off.
DO NOT start or run other software at the same time as the update.

When you click START to begin the update, the window display will change.
You can check the update progress status from this window.

- When the printer enters REWRITE mode, the LED on the printer will change from solid green, to flashing green.
- When the firmware update is complete, the printer will beep, and the new firmware will be run automatically.

Note

At this time, the color control data update will begin.



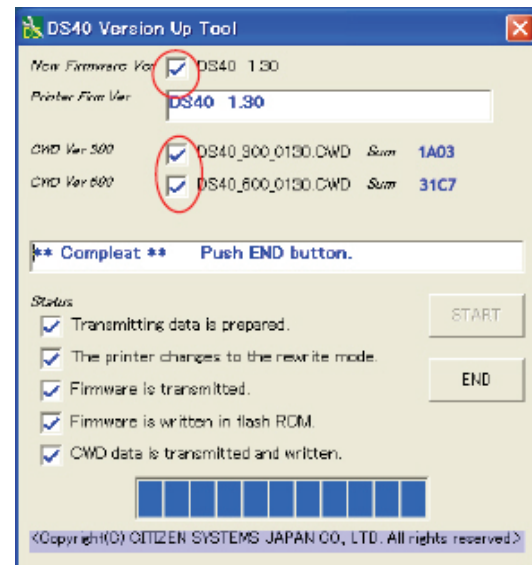
Finishing the Update

When all the updates are complete, the window display will change, and the LED will revert from a flashing green to a solid green.

- Confirm the New firmware and New CWD boxes are checked (circled in red in illustration above), and then click END or close the window to end the *DS40 Version Up Tool*.

Note

When you have finished ALL updates, reboot the host computer.



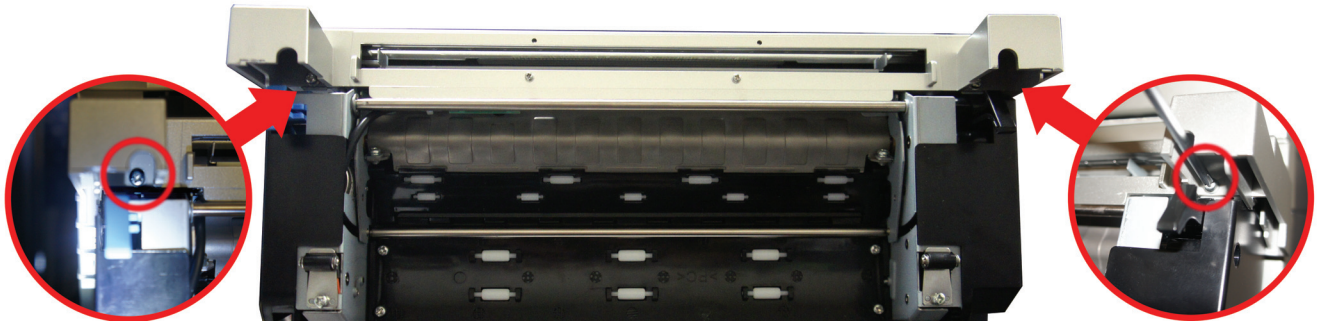
MAKING CHANGES TO PRINTER HARDWARE

Items you will need to change hardware:

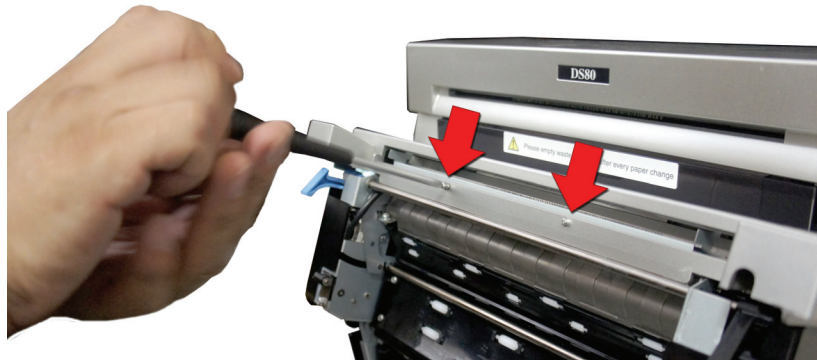
- ■ Phillips head screwdriver size 1
- ■ Phillips head screwdriver size 2

UPGRADE PROCEDURE

1. Remove the media and paper cassette from the printer.
2. Turn printer off and unplug it from the wall.
3. Remove the Front Case Upper by first removing 2 large screws.
Set the screws aside, do NOT lose them, you will need them to reattach the Front Case Upper.



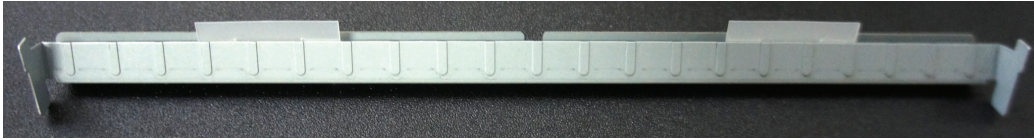
4. Remove the two small screws across the front of the cover also.



5. Remove the Cutter Guide by removing 2 small (M2) screws.
Set the screws aside, do NOT lose them, you will need them to attach the new cutter guide.



6. Install the new cutter guide with the anti-catch sheet using 2 small (M2) screws.



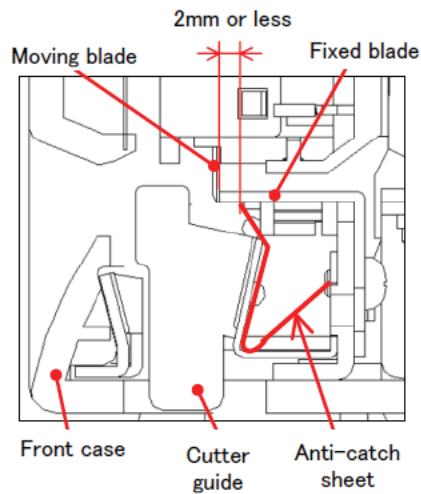
The edge of the anti-catch sheet should NOT touch the moving blade, nor be positioned too far in. It should be positioned within 2 mm of the fixed blade.



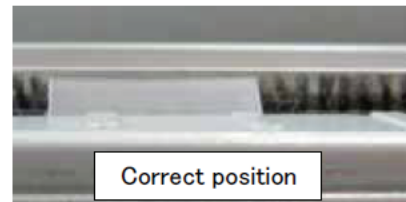
Attention

If the edge seems too far in during installation, try bending the sheet. If that does not work, do not use it.

7. Check the position of the edge of the anti catch sheet.



Anti-catch sheet position



Note

Anti-catch sheet position should be checked from above, looking down on the tabs.

8. Reattach the Front Case Upper.
9. Set the Paper Cassette back in--DO NOT install media.
10. Plug printer back in and allow printer to start up in error state; load media and wait for printer to return to ready state.
11. Check that the prints and cut scraps are fed out properly by running test prints.