Firmware Update Guide

This manual explains how to update the firmware of the following machine:

- Multifunctional Printer: SP 3400SF/SP 3410SF
- Printer: SP 300DN/SP 3400N/SP 3410DN

You can download the firmware update package from our Web site.

♦ **About the firmware package**

The firmware packages on our Web site are each designed to be used for a specific model, and cannot be used for any other model.

Confirm the model of your machine, and download the appropriate firmware package for your model.

♦ **Disclaimer**

The supplier shall not be liable to you for any consequential, incidental or indirect damages (including, but not limited to, damages for loss of profits, business interruption or loss of business information, and the like) caused by failure of this software or loss of documents or data, nor for any other damages arising out of the use of this software, if the supplier has been advised of the possibility of such damages.

Before Updating the Firmware

Check your operating environment before beginning the update.

♦ **Compatible Operating Systems**

Your computer must be running one of the following operating systems: Windows 2000/XP (32/64 bit)/Vista (32/64 bit), or Mac OS 10.2.8,10.3,10.4,10.5.

♦ **Backing up the machine's settings**

After the firmware update, the machine's settings may return to their factory defaults.

Before you reconnect the machine for the update, we recommend that you back up the machine's settings by accessing the machine using a Web browser from a computer connected via a network.

Also, you can print out lists of scan and fax destinations or a configuration page using a Web browser or the machine's control panel. For details, see the manuals provided with the machine.

♦ **Connection**

Connect your computer and the machine through a network or directly by USB.

Caution

- We recommend that you update the firmware via USB. If you update the firmware over the network, the machine may receive data over the network such as a print job during the updates, which can interfere with the update process.

- If you are updating the firmware via USB, the printer driver for USB connection must be installed on your computer beforehand. However, if you are updating via a network, no printer driver is necessary.
- Make sure your computer is securely connected to the machine with the USB or network cable that you will be using for the firmware update.
- Disconnect any other cables that are not necessary for the firmware update, such as a telephone cable, from the machine.
- Make sure that your computer does not enter standby or hibernation mode during the update process. Following is a procedure for configuring this setting based on Windows XP as an example:
  1. On the **[Start]** menu, click **[Control Panel]**.
  2. Click **[Performance and Maintenance]**.
  3. Click **[Power Options]**.
  4. On the **[Power Schemes]** tab, select **[Never]** for **[System standby:]** and **[System hibernates:]**.

Updating the Firmware

Use the following procedure to update the firmware. Be sure to print the configuration page both before and after the update. Comparing pre- and post-update configuration pages allows you to check whether or not the update was successful.

Follow the procedure carefully.

CAUTION

- **Do not operate the machine using the control panel, access the machine using Web Image Monitor/Smart Organizing Monitor or perform fax transmissions, printing, or TWAIN scanning during the update process.**
- **The update may take a while to complete. Do not turn off the power during the update. Turn off the power only when "FW Update Done. *** Please reboot the Machine.***" appears in the firmware update tool window.**
- **Never disconnect the cable you are using for the updates during the update process.**

Important

- When using a computer running on a Windows operating system, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member to acquire this permission.
- The screens shown in the following procedure are examples based on Windows XP, unless otherwise stated.

1. **Connect your computer securely to the machine with the USB or network cable that you will be using for the firmware update. Disconnect any other non-essential cables.**

2. **Print the configuration page.**

   Use the following procedure to print the configuration page. Take note of the current firmware version (shown under "Firmware Version" on the configuration page).

   ❖ **SP 3400SF/SP 3410SF**

   A. Turn on the machine.

   B. Press the [User Tools] key on the machine's control panel.

   C. Press the [▲][▼] keys to select [Reports Print], and then press the [OK] key.

   D. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.

   ❖ **SP 300DN/SP 3400N/SP 3410DN**

   A. Turn the printer on while pressing and holding down the [Stop/Start] key. Hold this key down until the Alert indicator starts flashing. The configuration page will print out about 30 seconds after the Alert indicator starts flashing.
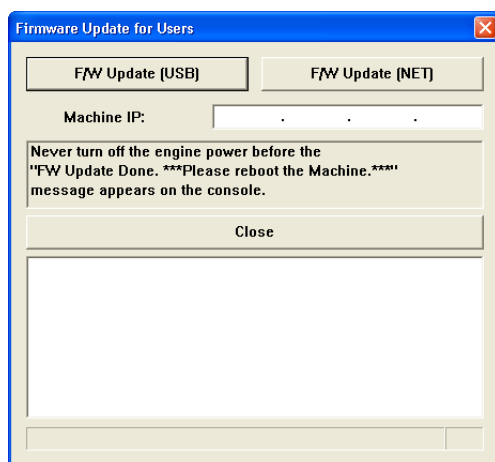
3. **Double-click the [FwUpdateTool.exe]** (Windows) **or [Firmware Update Tool]** (Mac OS X) **icon to launch the firmware update tool.**

   A dialog box with cautionary statements appears.
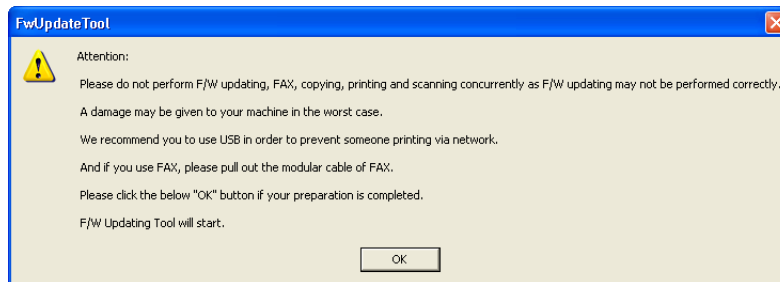
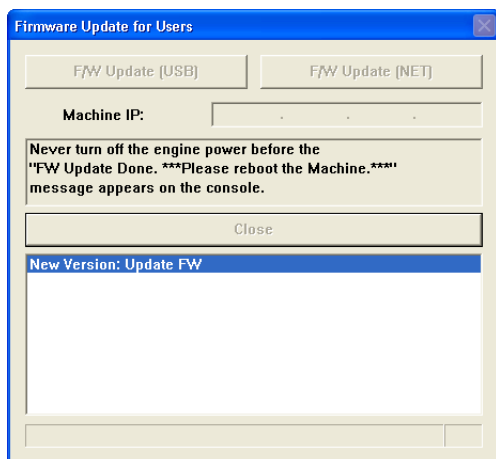4. **Read the cautionary statements carefully, and then click [OK].**
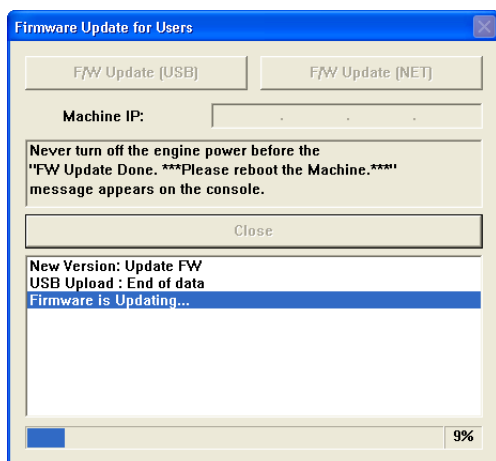
   The firmware update tool opens.

   Do not close the update tool unless you are instructed to do so.

5. For a USB connection, click **[F/W Update (USB)]**. For a network connection, enter the machine's IP address in **[Machine IP:]**, and then click **[F/W Update (NET)]**.
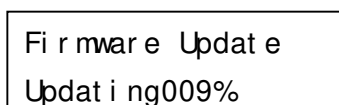

6. Check the firmware update tool window for messages and the update's current percentage of completion.

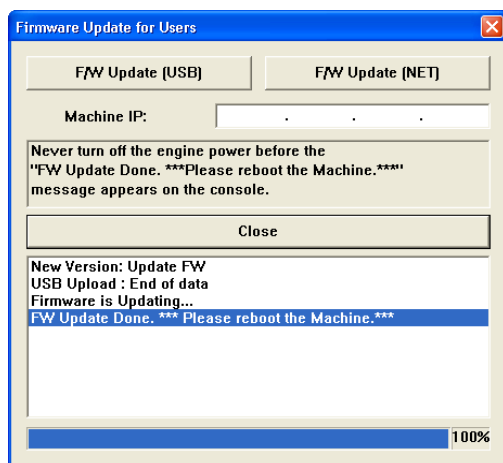Update progress is also shown on the machine's control panel.

❖ **SP 3400SF/SP 3410SF**

❖ **SP 300DN/SP 3400N/SP 3410DN**

The Alert indicator starts flashing and the Ready indicator lights up simultaneously.
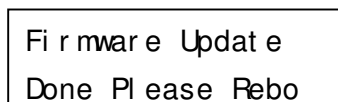
7. Wait until "FW Update Done. * Please reboot the Machine.***" appears in the firmware update tool window.**

Click [Close] to close the update tool.

Also check that "Firmware Update Done Please Reboot" appears on the machine's control panel.
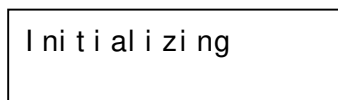
❖ **SP 3400SF/SP 3410SF**

```
Firmware Update
Done Please Rebo
```

❖ **SP 300DN/SP 3400N/SP 3410DN**

The Alert and Ready indicators start flashing simultaneously.

8. Turn off the power of the machine, and then turn it back on.

After you turn the power back on, the machine performs initialization.
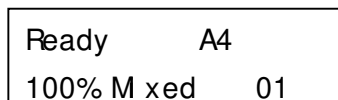
❖ **SP 3400SF/SP 3410SF**

```
Initializing
```

❖ **SP 300DN/SP 3400N/SP 3410DN**

All indicators flash once.

9. Wait until the machine enters standby mode.

❖ **SP 3400SF/SP 3410SF**

```
Ready        A4
100% Mixed      01
```

If initialization does not end after one minute, the update is not complete. In this case, see p.7 "If initialization does not end following a firmware update".

❖ **SP 300DN/SP 3400N/SP 3410DN**

When the Ready indictor lights up, turn the printer off. If the Alert and Ready indicators light up simultaneously, see p.7 "If initialization does not end following a firmware update".

10. **Print the configuration page again.**

Take note of the new firmware version (shown under "Firmware Version" on the configuration page).

❖ **SP 3400SF/SP 3410SF**

A. Press the [User Tools] key on the machine's control panel.

B. Press the [▲][▼] keys to select [Reports Print], and then press the [OK] key.

C. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.

The configuration page is printed out. Take note of the current firmware version (shown under "Firmware Version" on the configuration page).

❖ **SP 300DN/SP 3400N/SP 3410DN**

A. Turn the printer on while pressing and holding down the [Stop/Start] key. Hold this key down until the Alert indicator starts flashing. The configuration page will print out about 30 seconds after the Alert indicator starts flashing.

11. **Reconnect the cables as they were before the update.**

Note

- In addition to printing a configuration page, you can check the machine's firmware version by accessing the machine using a Web browser. For details, see the manuals provided with the machine.
- Depending on how it is configured, the machine might start up in fax mode following the firmware update.
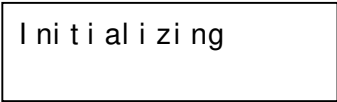
Troubleshooting

This section provides solutions to common update-related problems.

If initialization does not end following a firmware update

If initialization does not end after one minute following a firmware update, a power failure or similar interruption prevented the update from completing.

The following is the machine's control panel during initialization:

❖ **SP 3400SF/SP 3410SF**

```
Initializing
```

❖ **SP 300DN/SP 3400N/SP 3410DN**

The Alert and Ready indicators light up simultaneously.

If this happens, read p.1 "Before Updating the Firmware" carefully again, and then use the following procedure to recover from the failure and complete the update.

__Important__

- To be recovered following a failed update, the machine must be connected to a computer by USB.
- When using a computer running on a Windows operating system, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member to acquire this permission.
- The screens shown in the following procedure are examples based on Windows XP, unless otherwise stated.

1. **If you performed the update through a network connection, disconnect the network cable, and then connect the machine to your computer using a USB cable.**

2. **After confirming the machine has been initializing for more than one minute, double-click the [FwUpdateTool.exe] (Windows) or [Firmware Update Tool] (Mac OS X) icon to launch the firmware update tool.**
   A dialog box with cautionary statements appears.
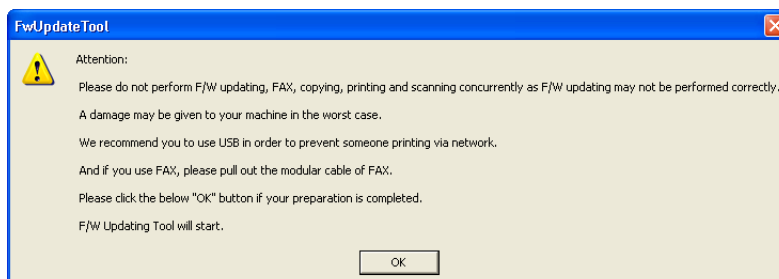
3. **Read the cautionary statements carefully, and then click [OK].**

   The firmware update tool opens.
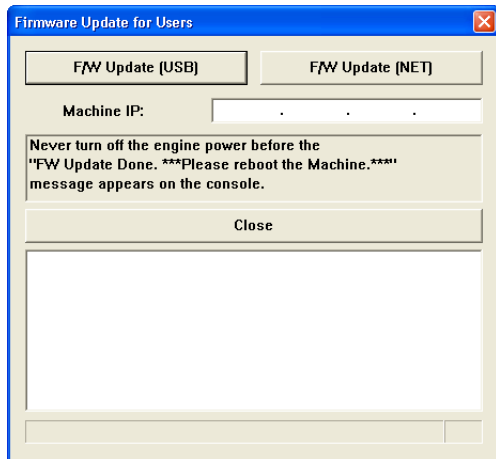
   Do not close the update tool unless you are instructed to do so.

4. **Click [F/W Update (USB)].**
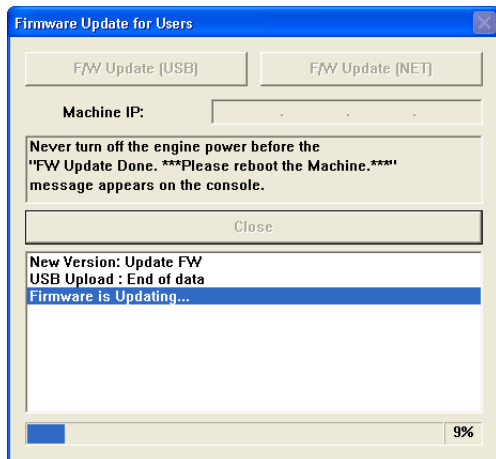
   Make sure that you keep the power of the machine turned on.

5. **Wait until the progress reaches 100%, and "FW Update Done. *** Please reboot the Machine.***" appears in the firmware update tool window.**

   Click [Close] to close the update tool.

6. **Turn off the power of the machine, and then turn it back on.**

   After you turn the power back on, the machine performs initialization.

   ❖ **SP 3400SF/SP 3410SF**

   ```
   Initializing
   ```

   ❖ **SP 300DN/SP 3400N/SP 3410DN**

   All indicators flash once.

7. **Wait until the machine enters standby mode.**

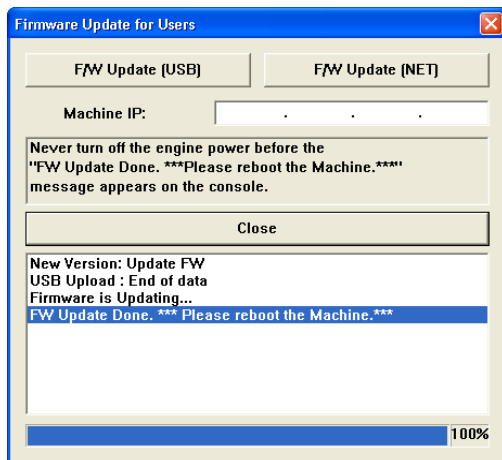   ❖ **SP 3400SF/SP 3410SF**

   ```
   Ready        A4
   100% Mixed      01
   ```

   ❖ **SP 300DN/SP 3400N/SP 3410DN**

   The Ready indicator lights up.

8. **Print the configuration page.**

   Take note of the current firmware version (shown under "Firmware Version" on the configuration page).

   ❖ **SP 3400SF/SP 3410SF**

   A. Press the [User Tools] key on the machine's control panel.

   B. Press the [▲][▼] keys to select [Reports Print], and then press the [OK] key.

   C. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.

   ❖ **SP 300DN/SP 3400N/SP 3410DN**

   A. Turn the printer on while pressing and holding down the [Stop/Start] key. Hold this key down until the Alert indicator starts flashing. The configuration page will print out about 30 seconds after the Alert indicator starts flashing.

9. **Reconnect the cables as they were before the update.**

Note

- In addition to printing a configuration page, you can check the machine's firmware version by accessing the machine using a Web browser. For details, see the manuals provided with the machine.
- Depending on how it is configured, the machine might start up in fax mode following the firmware update.

Firmware Update Tool Messages

The following table lists the firmware update tool messages that can appear during a firmware update, and explains the likely causes of those messages and what action to take when they appear.

(Messages are alphabetically ordered.)

Message	Causes	Solutions
Can't open ROM file. Please check ROM file.	The firmware file (*.brn) or setting file (*.ini) is not stored in the same folder as the update tool. (Note that the setting file only exists when you are using a computer running a Windows operating system.)	Make sure that the firmware file (*.brn) and setting file (*.ini) are stored in the same folder as the update tool. Also, make sure that you do not modify the setting file.
	The path to the location of the update tool is too long.	Make sure that the path to the update tool is not too long. For convenience, save the update tool in a subfolder directly under your computer's C: drive.
Connecting…	Your computer is searching the network for the machine.	Wait a while until the machine is found.
Downloaded file is broken! Do NOT use print, scan, fax and copy function at the same time.	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked while the machine was faxing, printing, scanning, or copying.	Wait for the current job to finish, disconnect any unnecessary cables from the machine, and then try again.
	The firmware file is damaged.	Download the firmware package from our Web site again.
FW Update Done. ***Please reboot the Machine.***	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked when the update process was already finished.	The update has already successfully finished. Reboot the machine to complete the update.

Message	Causes	Solutions
Machine is busy.	The machine is being operated through the control panel.	Cancel any operations being performed through the control panel. Put the machine into standby mode, and then perform the update again.
	• There is an unsent fax in the machine's memory. • There is a received fax waiting to be printed.	• Send or delete the unsent fax, and then try again.
	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked when the update was already in progress.	Clicking the [F/W Update (USB)] or [F/W Update (NET)] button during the update process does not interfere with any ongoing update.
Machine is not ready.	The USB cable is not connected.	Make sure the USB connection between the machine and computer is secure. If this message persists, try another USB cable.
	The USB printer driver is not installed in your computer.	Install the USB printer driver in your computer.
	The machine is turned off or an error has occurred.	Turn the machine's power off, wait a moment, and then turn it back on again. Then perform the update again. If this message reappears after you turn the power back on, see the manuals provided with the machine.
	The IP address specified for either the machine or your computer is invalid.	Check that both IP addresses are valid.
	The machine is not connected to the network properly.	Check that the machine is properly connected to the network.
Machine loses communication. ***Please check FW Update Done. Then reboot the Machine. ***	The firmware update tool is no longer able to acquire update progress from the machine because the connection between the machine and computer has been terminated.	Disconnecting the machine from the computer should not interrupt any ongoing update. Check the machine's control panel to see if the update has completed.

Message	Causes	Solutions
Net Upload : End of data	The firmware has been transferred to the machine successfully.	Follow the instructions in this manual to complete the update.
Net Upload : FAIL	The network cable was disconnected immediately after the [F/W Update (NET)] button was clicked.	Turn the machine's power off, wait a moment, and then turn it back on again. Disconnect any unnecessary cables from the machine, and then try again.
USB Upload : End of data	The firmware has been transferred to the machine successfully.	Follow the instructions in this manual to complete the update.
USB Upload : FAIL	The USB cable was disconnected immediately after the [F/W Update (USB)] button was clicked.	Turn the machine's power off, wait a moment, and then turn it back on again. Disconnect any unnecessary cables from the machine, and then try again.
Wrong Model.	The machine you were trying to update was not the correct model for the firmware you have downloaded from our Web site.	The firmware packages on our Web site are each designed to be used for a specific model, and cannot be used for any other model. Confirm the model of your machine, and download the appropriate firmware package for your model.

Control Panel Display Messages (SP 3400SF/SP 3410SF)

The following table lists the control panel display messages that can appear if an error occurred during a firmware update, and explains the likely causes of those messages and what action to take when they appear.

Message	Likely cause	Solution
Initializing	If this message remains on the control panel display for more than one minute following a firmware update, a power failure or similar interruption prevented the update from completing.	See p.7 "If initialization does not end following a firmware update" and use the procedure shown there to recover from the failure and complete the update. If the recovery fails and the indicators continue to flash alternately, contact your sales or service representative.

Control Panel Indicator Patterns (SP 300DN/SP 3400N/SP 3410DN)

The indicators of the control panel show the machine's status during and after firmware updates. If an update fails or does not complete normally, refer to the following table to resolve the problem.

Indicator pattern	Likely cause	Solution
The Alert and Ready indicators light up simultaneously.	If the Alert and Ready indicators light up simultaneously after you turn the machine's power back on following a firmware update, the update did not complete due to a power failure or similar interruption.	See p.7 "If initialization does not end following a firmware update" and use the procedure shown there to recover from the failure and complete the update. If the recovery fails and the indicators continue to flash alternately, contact your sales or service representative.

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The proper names of the Windows operating systems are as follows:

The product names of Windows 2000 are as follows:

- Microsoft® Windows® 2000 Professional

The product names of Windows XP are as follows:

- Microsoft® Windows® XP Professional
- Microsoft® Windows® XP Home Edition

The product names of Windows Vista are as follows:

- Microsoft® Windows Vista® Ultimate
- Microsoft® Windows Vista® Business
- Microsoft® Windows Vista® Home Premium
- Microsoft® Windows Vista® Home Basic
- Microsoft® Windows Vista® Enterprise

Note

- Some of the operating systems whose names appear in the trademark listing above may not be compatible for the use with this machine.

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