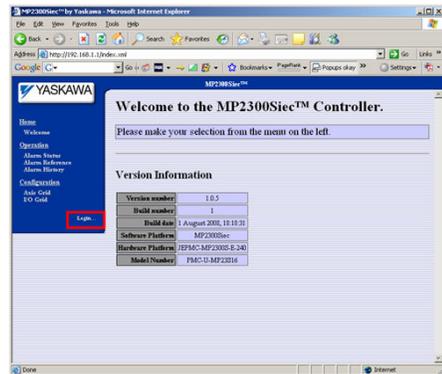![YASKAWA]

Product Note

Upgrading the MP2□□□iec Controller Firmware

Applicable Product: MP2□□□iec

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Title: Upgrading the MP2□□□iec Controller Firmware		

Product Note Overview

This document describes the two methods to upgrade the controller firmware on the MP2□□□iec controller.

NOTE: DO NOT EXTRACT THE FILES FROM THE ZIP.   THE CONTROLLER WILL EXTRACT THE FILE ITSELF.

<div style="border:1px solid">

Important!

Upgrading from any firmware version prior to 1.1.1 requires first upgrading to version 1.1.1, and then upgrading to a more recent version as a two step process.

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**Updating the Firmware (By enabling the supervisor mode via web server):**

1. To locate stored firmware versions on the local computer where MotionWorks IEC v1.0.6 or greater is installed, locate the following path:

   In this example, we are locating version 1.0.4:
   MotionWorks IEC InstallPath/MotionWorks IEC Configuration/ConfigTool/ControllerFirmware/MP23iec-v_1_0_4

   Firmware revisions are also available on **www.yaskawa.com**.   Search for FAQ **MTN-7LPUQC**, which will show a table of all firmware releases.

2. Open the web interface in a web browser and connect to the controller by entering the controller IP Address in the Address field.

3. Select Login from the left menu bar.
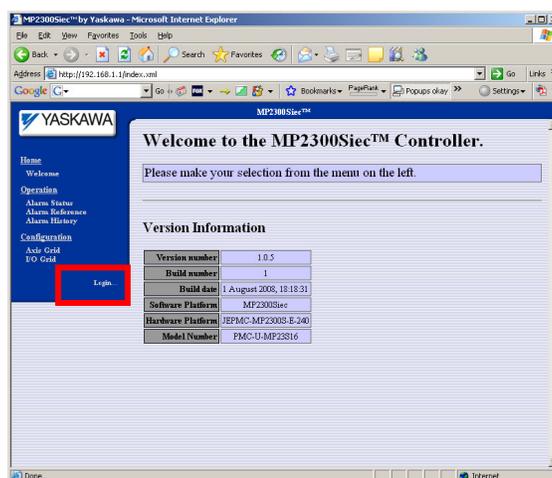
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4.   Login using the following login name and password:

Controller	Login	Password
MP2600iec	Admin	MP2600
MP2300Siec	Admin	MP2300S
MP2310iec	Admin	MP2300S
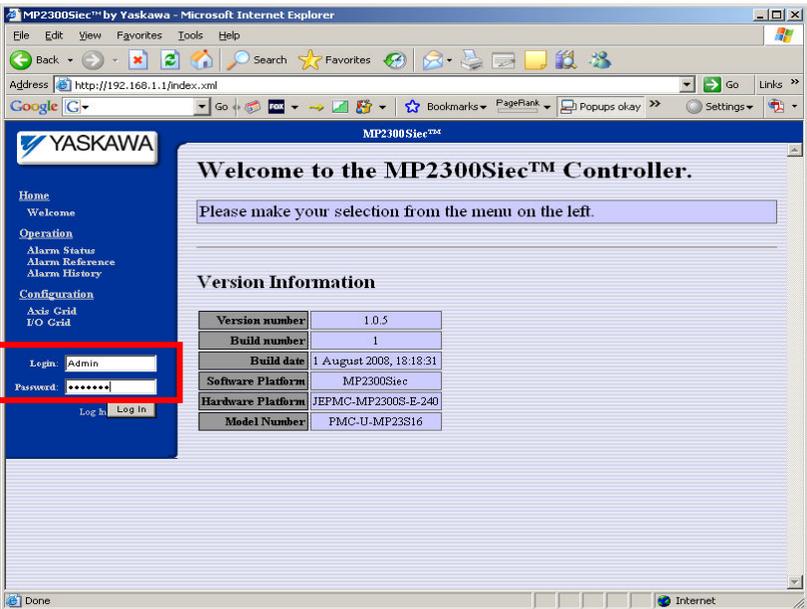
Note that the factory default login and passwords may be changed by the user according to the information supplied in product note **AN.MCD.09.069**.
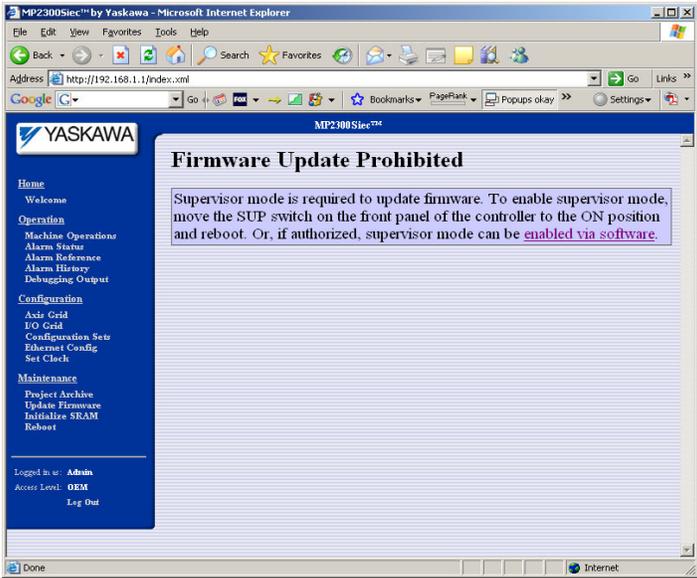
5.   Select Update Firmware from the left menu:
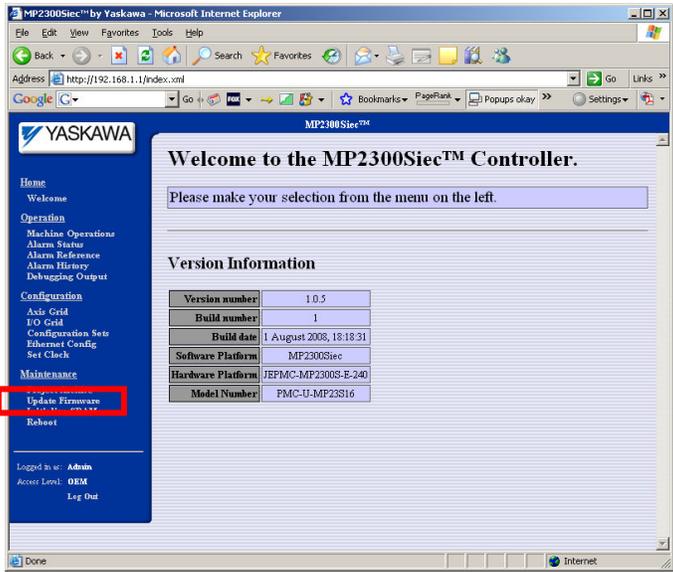
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6.   The firmware update screen will appear:

7.   Click on the 'enabled via software' hyperlink in the text message area.

8.   Reboot the controller by clicking on the 'Reboot Controller' button on the update page:
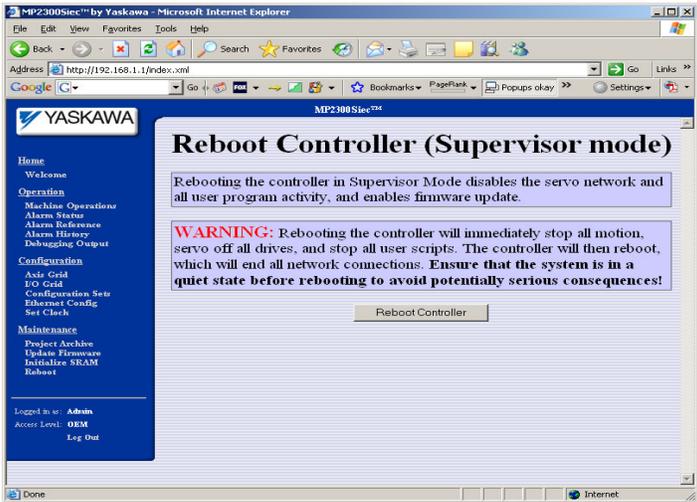
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9. After the controller has finished rebooting, the following page will be displayed:
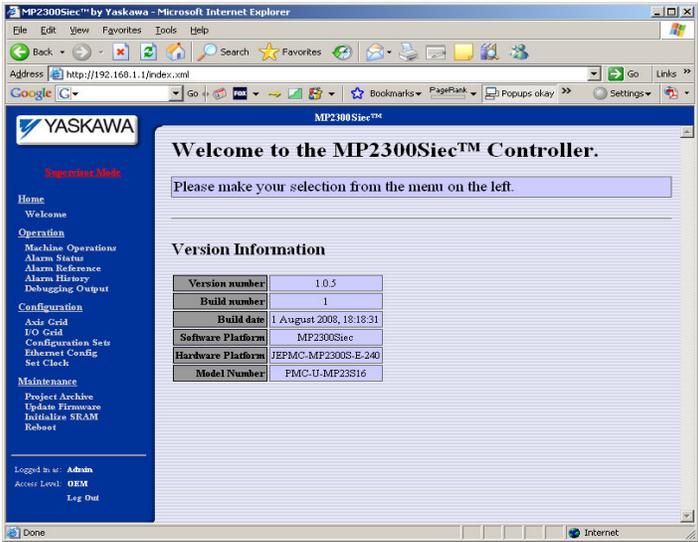
10. Click the 'Update Firmware' link in the left menu.

11. Select the firmware.zip file that you wish to upgrade the firmware: **NOTE: DO NOT EXTRACT THE FILES FROM THE ZIP. THE CONTROLLER WILL EXTRACT THE FILE ITSELF.**

12. Click 'Browse' to locate the file.

13. Click 'Upload' to upload the firmware file to the controller.

14. After the versions have been verified, a message box will inform you what is currently loaded on the controller, and what version you are attempting to upgrade.

15. Click on the 'Update' button to update the controller firmware.

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16. **Do not power cycle the controller or attempt to click on any of the menu bar links while the upgrade is taking place!**
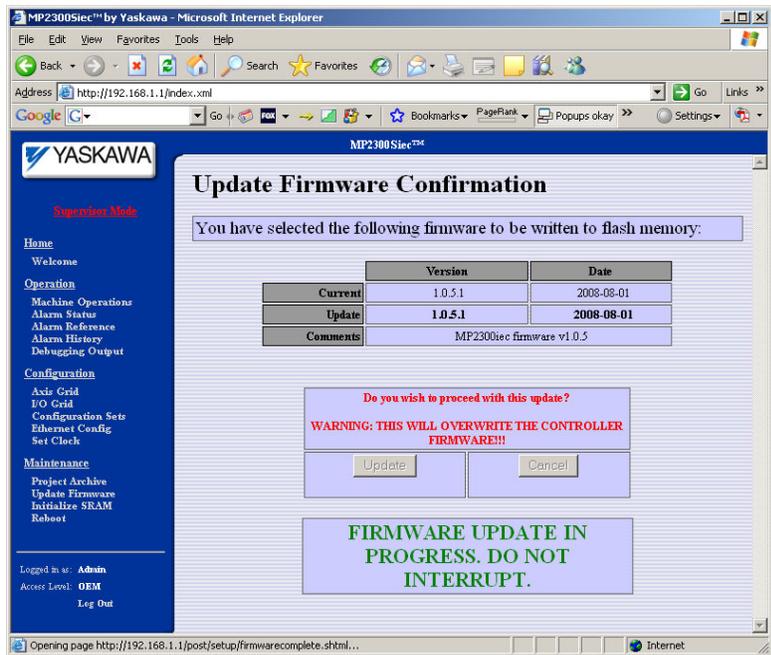
17. Verify correct version loaded on the controller by clicking 'Welcome' to refresh in the left menu bar.

## Updating Firmware (By using the SUP DIP Switch):

1. Flip on the SUP switch on the MP2300Siec controller.
2. Reboot the controller. Controller will boot up in supervisor mode.
3. Login to the controller.
4. Point web browser at the controller. Go to the firmware update page.
5. Select the appropriate firmware.zip file. The file checksums will be automatically verified.
6. Click on the "Update" button to confirm update. Wait until firmware update finishes.
7. Flip off the SUP switch.
8. Reboot the controller. Wait until controller restarts.
9. Verify correct version loaded on the controller by clicking 'Welcome' in the left menu bar.

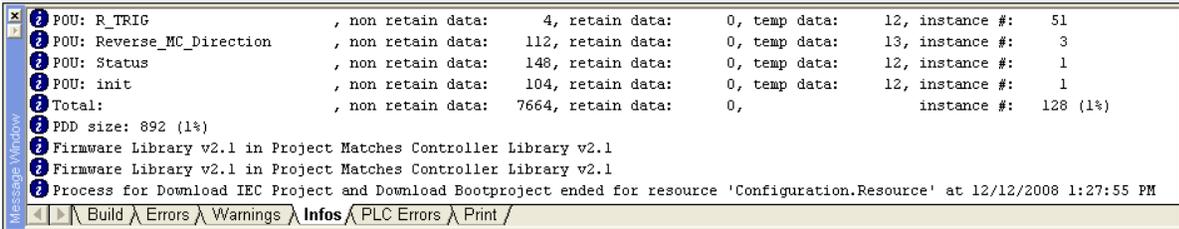| Subject: Product Note	Product: MP2□□□iec	Doc#: PN.MCD.08.083
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Firmware Library Version Checking

There are two components to the firmware.   One component resides on the controller hardware (the "Firmware",) and the other is referenced by the application project on your computer (the "Firmware Library".) A check is performed to verify that the function block list, and I/O interface of the supported functions are compatible.
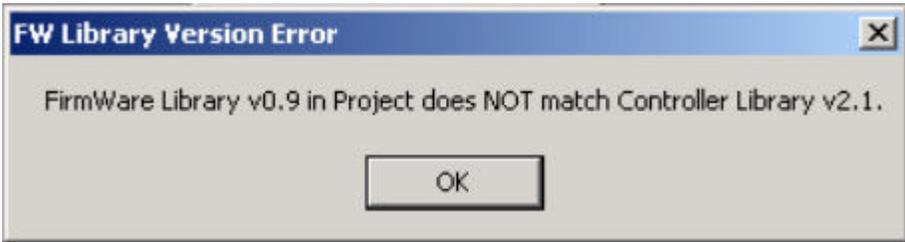
A message that may appear when downloading refers to the interface version check that was performed. Two possible results are shown below:
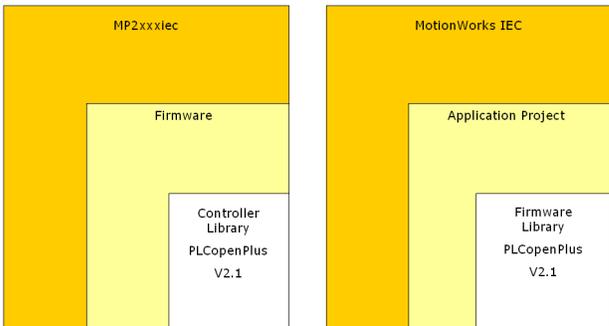
1) [EQUAL] Firmware Library v.xx in Project Matches Controller Library v.xx.   (Shown in the "Infos" message window)

2) [NOT EQUAL] Firmware Library v.xx in project NOT match Controller Library v.xx.   This will appear as a message box.

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If the controller has a higher revision than the application's firmware library:

Yaskawa's Recommendation:

Obtain the recommended firmware library that matches the controller firmware version.   Firmware libraries are available on **www.yaskawa.com**.   Search for FAQ **MTN-7LPUQC**, which will show a table of all firmware libraries.

1. Delete the PLCopenPlus firmware library from the project, and re-select a Firmware library from the following folder: "C:\Program Files\Yaskawa\MotionWorks IEC Configuration\MW IDE\MotionWorks IEC\PLC\FW_LIB" for prior PLCopenPlus firmware libraries.   This will in effect "downgrade" the application to match the function block capabilities on the hardware.
2. Locate the folder that has the same firmware library version as the one listed on the hardware.
3. See page 14 for more instructions on changing the firmware library.

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If the controller has a lower revision than the application's firmware library:

For example, if a function block in the firmware library received an upgrade that changed the number of input or outputs, a download error will result because the I/O linking to the function blocks will fail. Also, there may be new function blocks in the library, that if added to the application program, the hardware will not know of, and cause an error.

Yaskawa's recommendations:

1. If a machine has been in production for a long time, and minimal maintenance work is required in the program, Yaskawa recommends downgrading the firmware library in the MotionWorks IEC software to match the hardware. There is no need to upgrade the hardware if it has been working satisfactorily in the field.

2. Delete the PLCopenPlus firmware library from the project, and re-select a Firmware library from the following folder: "C:\Program Files\Yaskawa\MotionWorks IEC Configuration\MW IDE\MotionWorks IEC\PLC\FW_LIB" for prior PLCopenPlus firmware libraries. This will in effect "downgrade" the application to match the function block library on the hardware.

3. Locate the folder that has the same firmware library version as the one listed for the hardware.

4. See page 14 for more instructions on changing the firmware library.

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Upgrading A Firmware Library

1. Download an appropriate firmware library zip file from **http://www.yaskawa.com/**.
2. Extract the ZIP to the following location:

   C:\Program Files\Yaskawa\MotionWorks IEC Configuration\MW IDE\MotionWorks IEC\PLC\FW_LIB
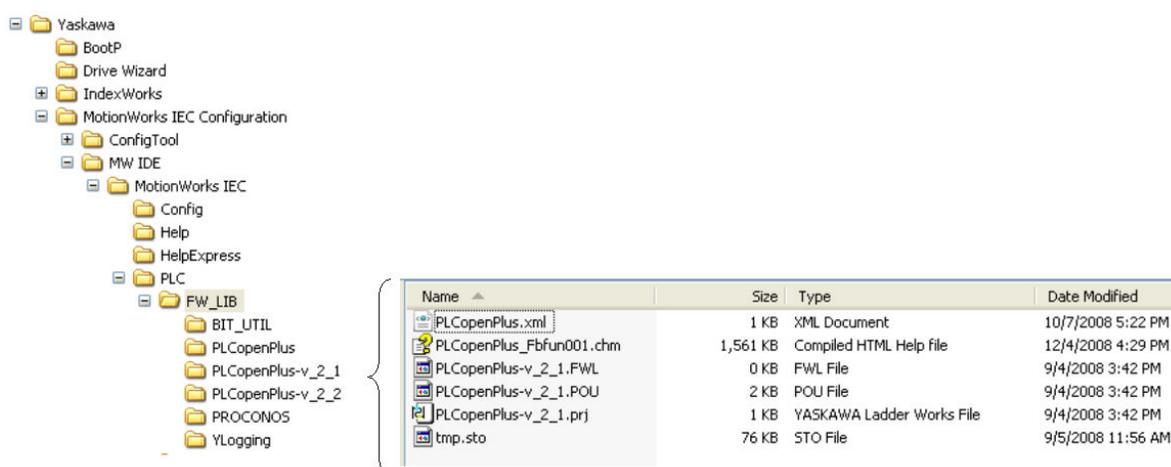
Any directory location will work, but this is the location where firmware libraries are located during the installation process.

3. Open MotionWorks IEC
4. Open a project.
5. Go to the Project Tab of the Project Tree Window
6. Open The Libraries Folder
7. Right click on the firmware library to delete, and delete it
8. Right click on the heading "Libraries" and <Insert> firmware library.   Search the paths mentioned in step 2 above and select the appropriate FWL file.