

UPS model: 9170+ UPS



Date: 09/1/2016

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Eaton 9170+ Flash Instructions

9170+ Flash Procedure

1. General Information

There are 3 types of Modules that can be flashed based on unit configuration. Part numbers for the modules can be located in the upper right hand corner of the module. See the pictures at the end of instructions for examples:

ASY-0673 Brown Label Split phase power module

ASY-0675 Orange Label optional charger Module

ASY-0674 White Label Universal Power Module

System refers to the Interface board in the UPS Chassis.

Before flashing the 9170+ the unit must be in the off mode. If your system is hardwired you must externally bypass the unit before proceeding. When performing this procedure, ensure you are using a straight thru 9 pin serial cable.

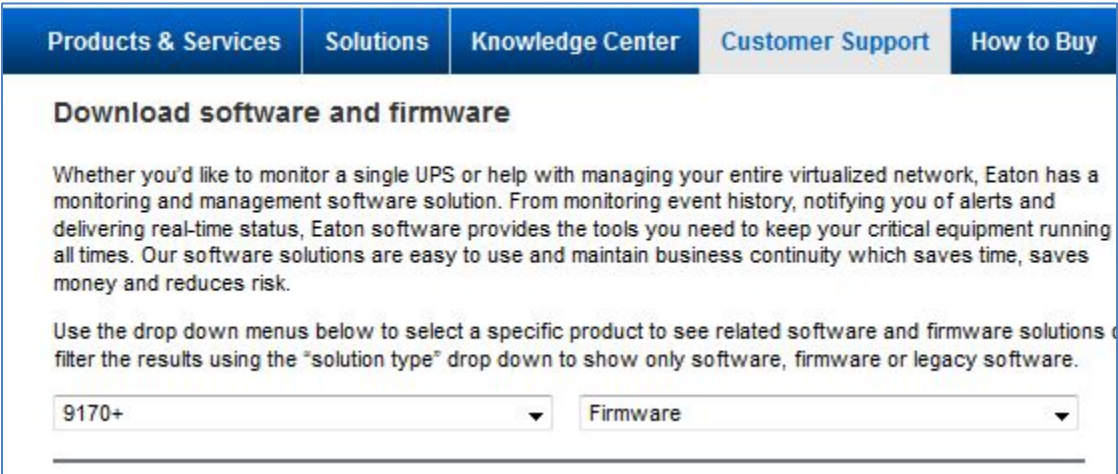
Before upgrading the firmware to the latest version, check to ensure your unit is at version V2.19 or greater for both the power modules and system. If your system is not at version 2.19 Ensure you upgrade the system and power modules to 2.19 before proceeding to a higher revision firmware level. (See verifying system flash section below to check you current version). Contact Eaton technical support at 1-800-356-5737 option 2 to obtain version 2.19 firmware.

The Charger module (ASY-0675) can be upgraded directly to latest firmware version.

If communication is interrupted at any time during the execution of the flash program this will cause damage to the power modules and interface board. It is recommended to flash half the power modules at any one time. Ensure all other power modules are pulled from the system before the flash executable is started.

2. Firmware download

1. Go to the Power Quality Website.
(<http://powerquality.eaton.com/Support/Software-Drivers/>)



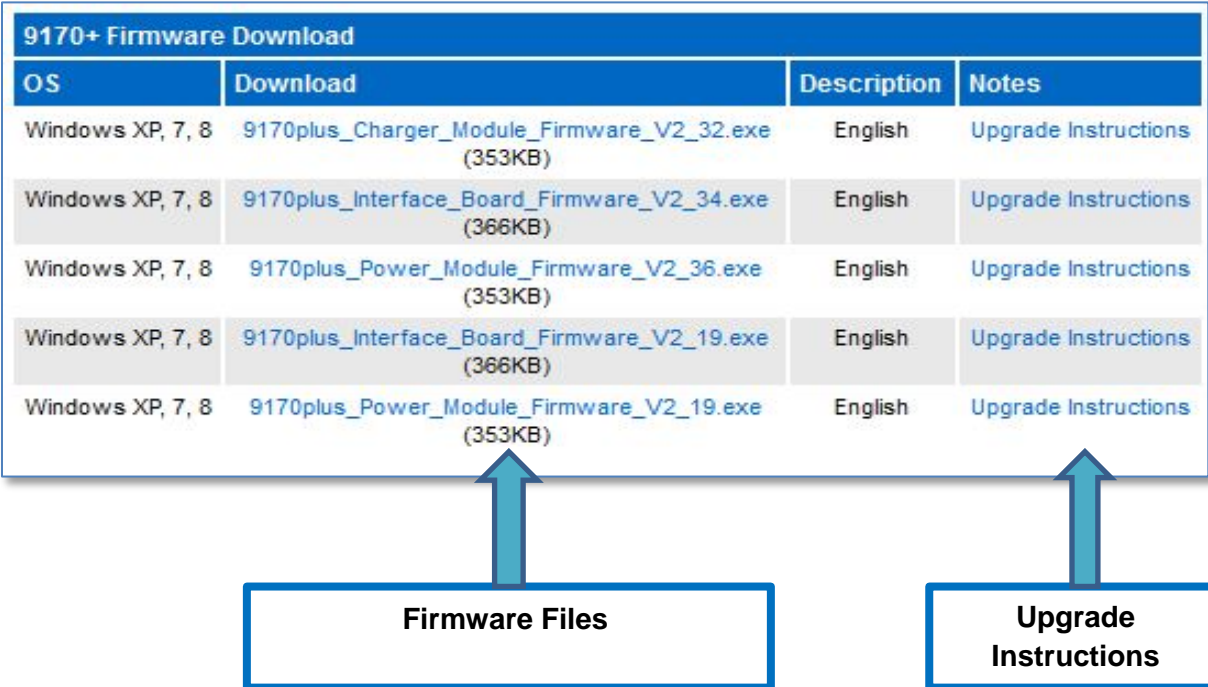
2. Select your product, **9170+**, and select your solution type, **Firmware**. Click on the Download 9170+ Firmware update link.



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3. Click on the required link.

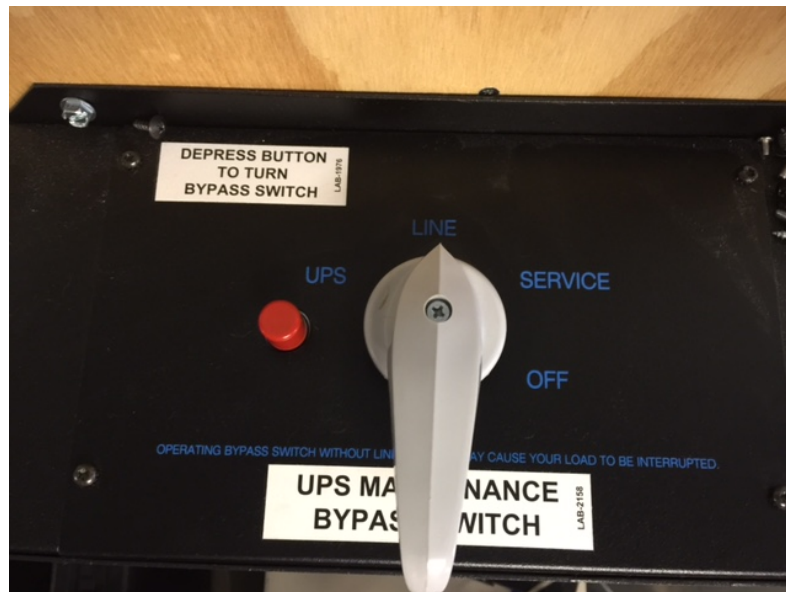


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3. Flash Procedure

1. Before starting the upgrade please ensure that if you have an external bypass switch that the switch is placed in the line position. If you do not have a bypass switch ensure the loads have been powered down prior to proceeding.



2. Turn UPS off via the front panel. When the UPS is in the off mode the display will read as follows.



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3. Connect a 9 pin serial cable to the communications port on the back of the UPS system.



4. There should be three executable files, the interface, power module and charger module (if applicable). Double click the appropriate .exe file you wish to flash and the file command window should then open up.

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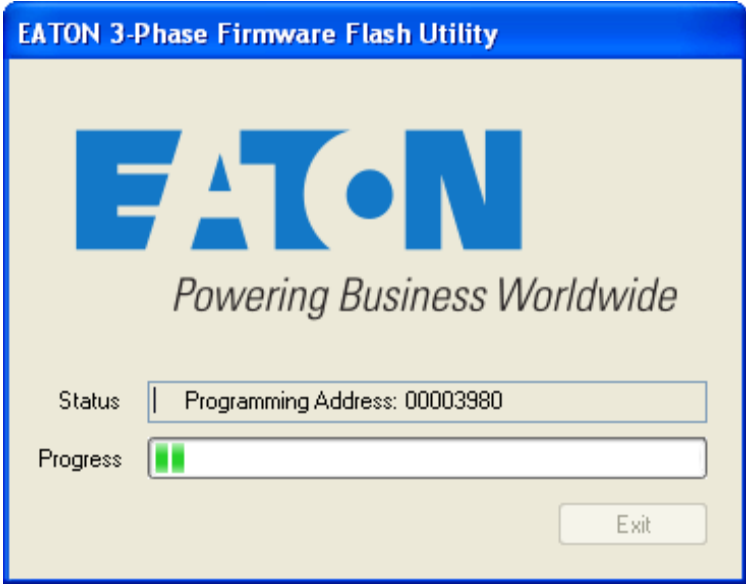
5. Choose the com port that you are using to communicate with the UPS.



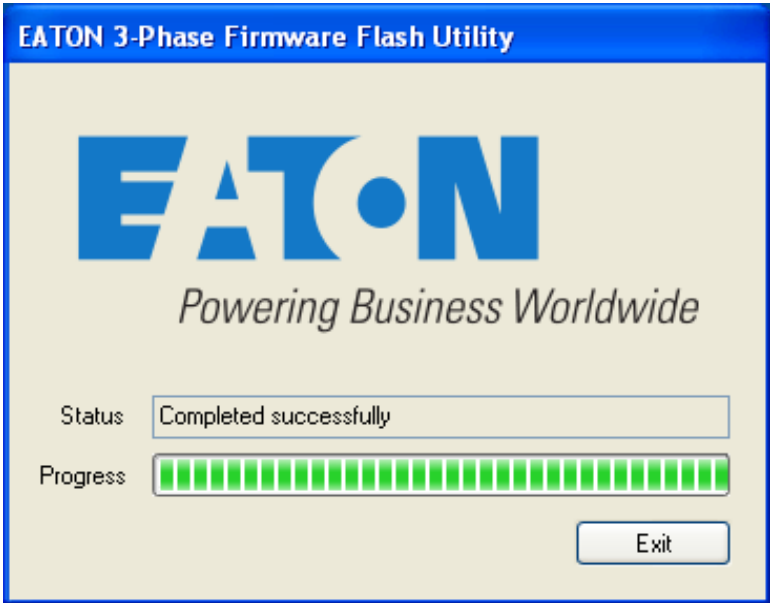
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6. Press flash and the upgrade will begin.



7. Once the Upgrade is complete you will see the following screen. If upgrading to the most recent version of firmware you will hear a beep tone that comes from the unit when completed, this is normal.



8. At this time it is safe to remove the power modules you just flashed and install any remaining power modules. Repeat steps 4 thru 7 for flashing those power modules or the interface board.

4. Verifying the Firmware Flash

1. Verify that all of the power modules and interface board have been updated.
2. Press the Menu button on the front display.
3. Press the down arrow button until the display reads SYSTEM ID.



4. Press the Enter button.
5. Press the down arrow button until the display reads SOFTWARE VERSION. This menu item will indicate the current firmware version of the interface board. The interface board is identified by the system setting in the menu and the number 0 in the upper right hand corner of the display.



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- 6. To verify the power module and charger module firmware versions press the slot button in the bottom left hand corner of the display. Then press the down arrow button until it reads a slot with a power/ charger module in it. The slots are identified by a number in the upper right hand corner of the display.



- 7. After looking at each slot it is recommended to change the display back so that the firmware version for the interface board is shown on the display



- 8. When finished press the escape button until the main menu is displayed and proceed with the startup sequence in the user manual.



5. Troubleshooting

1. The Eaton Flash tool will not allow you to select a com port:

- a) Verify that the communications ports on your computer are free and are able to be opened.
- b) Check to make sure the communication cable is connected to the UPS 9 pin communication port.

2. An “unknown error” displays on the flash tool after starting the flash program:

- a) Verify that the UPS is in the off mode prior to launching the flash tool.
- b) Verify that the display is reading the correct number of power modules in the unit.