

## BladeUPS Firmware Upgrade Procedure & Installation Instructions

*New BladeUPS firmware version 2.02 boosts system efficiency to greater than 98%*

BladeUPS firmware version 2.02 is highly recommended for all 208V and 400V BladeUPS models and is required when adding new BladeUPS modules to expand existing parallel systems. This firmware update is completed through a simple procedure using a laptop and a serial (RS-232) communication cable.

Release notes for BladeUPS firmware version 2.02:

- Improves efficiency of BladeUPS units to over 98% in normal operation
- Supports the Request Bypass command for the BladeUPS Maintenance Bypass Module
- Increased input voltage start-up range
- Units allowed to start on inverter if bypass is not available
- Restrict multiple UPSs from performing Battery Tests at the same time
- Improved line cord removal detection
- No load metering improved by setting the meters to zero at very light loads
- Improved input disturbance response enables fast undervoltage detection sooner and provides a smoother transition for going to/from double conversion and battery operation
- When expanding/upgrading BladeUPS parallel systems, all modules within the system MUST be upgraded to firmware version 2.02.

### Upgrade Procedure

The firmware upgrade can be downloaded by going to [www.eaton.com/pg/downloads](http://www.eaton.com/pg/downloads) and selecting the following options:

- Select the heading "Firmware Upgrades," then select "Eaton BladeUPS Firmware Updates"
- Accept the Terms & Conditions on the User License Agreement page
- Click "Save & Continue" on the Software Downloads Registration page
- Click on the Download link under the "BladeUPS Firmware 2.02 Download" header
- Select the appropriate firmware language pack. Note that English is part of every language pack and Language Pack 1 ("BladeUPS\_v2\_02\_Lang1.exe") is the default.

It is recommended that you save the file to your laptop, then connect the laptop to the BladeUPS module via a serial cable and double-click the .exe upgrade file. Detailed installation instructions for performing this upgrade are provided on page 2.

### Firmware Version Verification

To verify that BladeUPS firmware version 2.02 was downloaded successfully:

- Enter the Main Menu from the front control panel by pressing any of the control buttons
- Use the two middle buttons (↓ and ↑) to scroll through the menu structure until the "Identification" menu is reached
- Then press the □ button to enter the Identification submenu and use the ↓ and ↑ buttons to locate the BladeUPS firmware
- The firmware number displayed should be 2.02

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## To receive a free USB-to-serial adapter

Customers may request a free USB-to-serial adapter cable at:

<http://powerquality.eaton.com/LG/Support/Software-Drivers/Downloads/BladeUPS/USBAdapter.aspx>.

Select the link for “USB Adapter” and follow the registration instructions.

## Complete Installation Instructions

**NOTE:** All BladeUPS modules in a parallel system must operate using the same firmware version. Upgrades to version 2.02 in parallel systems that use version 1.xx will require that the administrator secure the load on bypass until ALL BladeUPS modules in the system are have been updated.

### Installation procedure for executable upgrades:

1. The firmware upgrade can be found on the “Eaton BladeUPS Documents, Firmware, and Installation Video” CD shipped with the BladeUPS system, or downloaded from the Eaton website at [www.eaton.com/pq/downloads](http://www.eaton.com/pq/downloads).
2. The upgrade is provided in the form of an executable file that will attempt to connect to the UPS and upgrade the firmware. The file can also be unzipped into a directory if the default communications configuration does not work.
3. Ensure the UPS is powered and in one of the following states (bypass mode or UPS off mode).  
**Note: All modules in a parallel system must be upgraded to the same firmware version, v2.xx, in order to restart the system.** This is also a good time to upgrade the CAN Bridge Card if needed.
4. Ensure there is a serial communication cable connected between the computer COM1 and the BladeUPS service COM port. If your PC doesn't support COM1 then follow the instructions for batch file upgrades. Also, ensure that no other applications are using COM1.
5. Double click the executable file from Windows Explorer to start the upgrade. If the flash process fails, restart the program by double clicking the batch file again. Figure 1 represents the dialog box presented when the program is run. Select the OK button. Figure 2 represents the dialog that reminds you that parallel systems must all have the same firmware version. Select the Setup button.

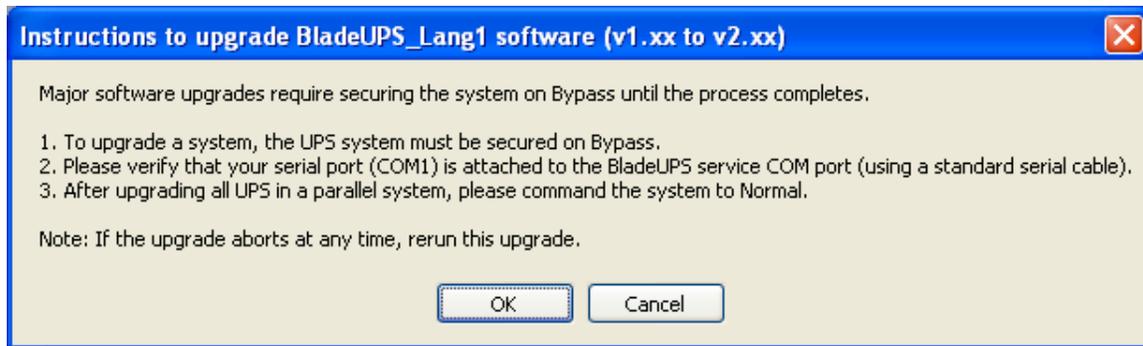


Figure 1: Instructions dialog box

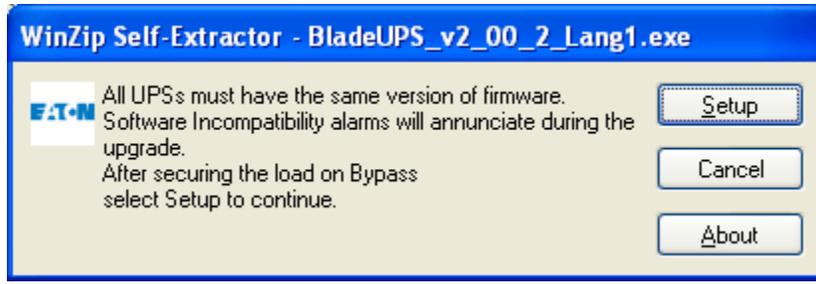


Figure 2: Start upgrade dialog box



Figure 3: "About" dialog box

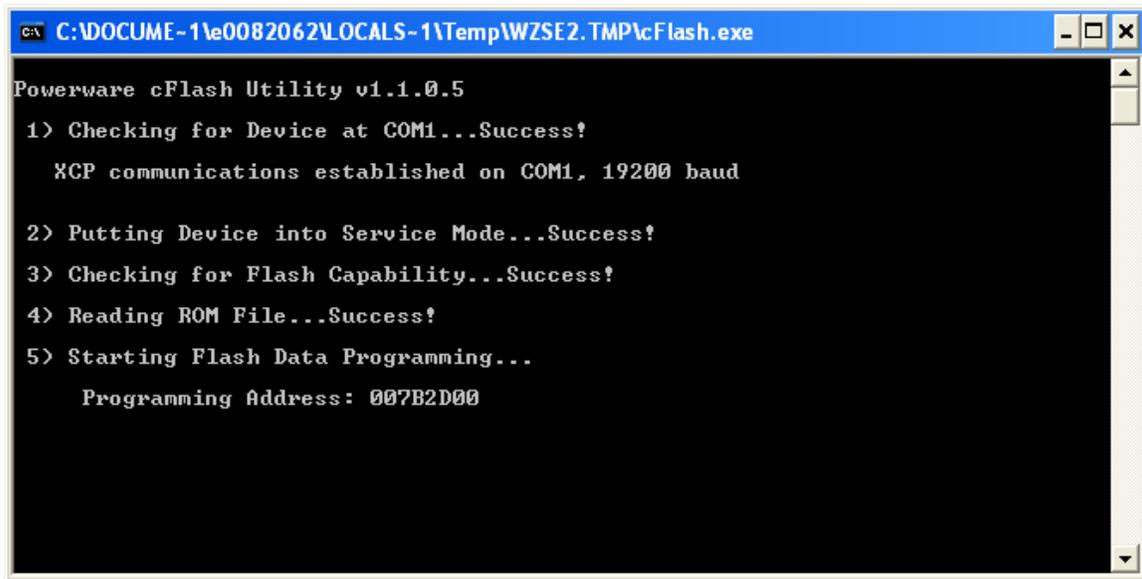
6. When the upgrade is complete, the UPS will return back to the UPS off state. Upgrade the remaining modules by repeating steps 4 through 6.

Note: After all modules have been completely upgraded, command the system back to normal.

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### Installation procedure for batch file upgrades:

1. Unzip the upgrade file into a temporary folder on the PC if it has not already been done.
2. Ensure there is a serial communication cable connected between the computer COM port and the UPS. If the PC doesn't support COM 1 then select the appropriate batch file. The batch file may also be edited to the appropriate COM port the PC will using. The COM setting in the last line of the batch.
3. Ensure the UPS is powered and in one of the following states (bypass mode or UPS off mode).  
Note: All modules in the system must be upgraded to the same firmware version, v2.xx in order to restart the system. This is also a good time to upgrade the CAN Bridge Card if needed.
4. Run the batch file from the windows/run dialog or a command line window to start the upgrade. If the flash process fails, restart the upgrade by running the batch file again. Figure 4 represents the command window during the upgrade; after the upgrade is complete the window will close.



```
C:\DOCUME~1\0082062\LOCALS~1\Temp\WZSE2.TMP\cFlash.exe
Powerware cFlash Utility v1.1.0.5
1) Checking for Device at COM1...Success!
   XCP communications established on COM1, 19200 baud
2) Putting Device into Service Mode...Success!
3) Checking for Flash Capability...Success!
4) Reading ROM File...Success!
5) Starting Flash Data Programming...
   Programming Address: 007B2D00
```

Figure 4: Batch file upgrade dialog box (closes automatically when complete)

5. When the upgrade is complete, the UPS will return back to the UPS off state. Upgrade the remaining modules by repeating step 4 through 5.

Note: After all modules have been completely upgraded, command the system back to normal.