UPDATING CLASSIC FIRMWARE SCRIPT

Requirements: PC with Windows XP, Vista or 7 One available USB port Internet Connection

- 1. To retrieve the firmware, go to <u>www.midnitesolar.com</u>, then click on the link labeled "Firmware" in the top menu bar of the web site.
- 2. Click the link to start the download.
- 3. Select "Save" to save the file on your computer. If your antivirus sees the MidNite Update.exe as a threat, temporarily disable your antivirus. When the install is complete enable your antivirus.
- 4. After saving the MidNite Solar Setup .exe file double click on it to start the installation.
- 5. The Software License Agreement dialog box will appear. Click "Yes" to except the terms.
- 6. In the "Select Program Folder" dialog box make sure that MidNiteSolar is in the Program Folder field, and then click "Next".
- 7. The "Start Copying Files" dialog box will appear, click "Next". Files will begin to install on your computer.
- 8. In the Setup Complete dialog box click "Finished". A new MidNite Solar folder will be placed in your C:\ drive. We will refer to this folder in step 20. By default the "View Readme" check box is checked. If you don't want to read the Readme file, uncheck this box before clicking the "Finish" button.

Prepare Classic charge controller for update.

- **9.** Now go to your electrical panel and identify the input and output breakers for the Classic. Turn them off. Wait 3 minutes for the Classic to de-energize.
- **10.** Remove the four screws holding the front cover of the Classic charge controller. **Do not let the front cover hang by the cable.**
- **11.** Holding the front cover with one hand, place a screw in the top left hole of the front cover and screw it into the top right hole of the back casting.
- **12.** Use the provided USB cable to connect the Classic to the PC. The smaller terminal connects to the USB port on the Classic. The USB port is located on the right side of the Ethernet Jack in the lower part of the Classic.
- **13.** Connect the other end of the USB cable to an available port of the PC.

Install USB Classic driver

- 14. Go back to the electrical panel and turn on the battery breaker to the Classic.
- **15.** The LED above the USB port on the Classic will light up and stay on.
- **16.** The computer will prompt with a "Found New Hardware" pop-up. Select "Not at this time" and press "Next".
- **17.** A "New Found Hardware Wizard" dialog box will appear. Select "Install from a list or specific location (Advanced)" and click "Next".
- **18.** Select "Search for the best driver in this location". Check the "Include this location in the search" checkbox and then click "Browse".
- **19.** Browse to the MidNite Solar folder located on the C:\\ drive and click OK.

20. Click "Next".

21. In the Hardware Installation dialogue box click on "Continue Anyway".

22. Click Finish to finish driver installation.

Changing Classics' COM port

The Classic charge controller can only be recognized if it is set up for COM 8 on the PC; most likely you'll need to change the default COM number of the classic. Here is how:

- 23. On your computer go to the Control Panel and click on System.
- 24. Select the tab labeled "Hardware" and click on "Device Manager".
- **25.** In the Device Manager, expand the tree branch labeled "Ports (COM & LPT1)". Right click on "USB CDC serial port emulation (COMxx)" and select "Properties".
- 26. Select the tab labeled "Port Settings" and click on "Advanced".
- **27.** In the "COM Port" number drop down selection box, select "COM8" and press "OK" to exit that window.
- **28.** Click "OK" on the "USB CDC serial port emulation (COM8) Properties" to save changes. Now close the "Device Manager", click "OK" on "System Properties" and then close the "Control Panel".

Uploading Classic Firmware

- **29.** Turn OFF the battery breaker to the Classic on the electrical panel and open the "MidNite Update GUI". The "MidNite Update GUI" can be found by clicking on the Start menu in the lower left portion of the monitor screen and then selecting "MidNite Update GUI".
- **30.** Click on the model (150, 200, and 250) of the Classic to be updated. A black window will appear and close automatically upon completion of the update.
- **31.** Now turn ON the battery breaker to the Classic. The update should start automatically. Wait until the "update" goes to 100% then turn the battery breaker to the Classic OFF and then ON. **Turning the breaker on and off resets the Classic so the new settings take effect.**
- **32.** If MNGP (MidNite Graphics Panel) needs to be updated as well, turn OFF the battery breaker to the Classic. Click on the "MNGP" button on the "MidNite Update GUI" then turn ON the breaker.
- **33.** Wait until the uploading percentage reaches 100% and then turn the battery breaker to the classic OFF and then ON. **Turning the breaker on and off resets the Classic so the new settings to take effect.** This now completes the firmware installation. The battery settings, saved graphs and LCD settings on the Classic will remain the same.

Beware: If the Classic has been updated with a different model of Classic firmware than the factory default, the charge controller will display a "WRONG CODE" message on the bottom right corner of the Status screen and it will not turn ON.