

# PPCH-G (or PPCH) Firmware Upgrade Tutorial

16 March 2018

This tutorial walks the user through the process of updating the embedded firmware of the PPCH-G. The firmware file has a “.bin” extension. It is written to the PPCH-G using the “WinFlash.exe” application. The PPCH-G’s RS232 COM1 port is the interface used to perform the update.

## Equipment required:

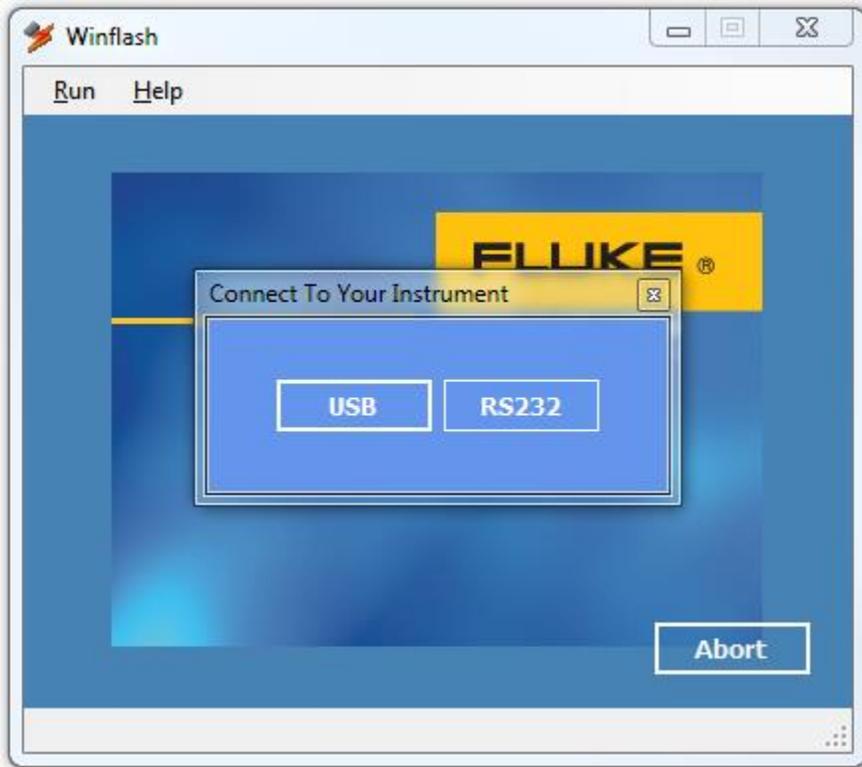
- RS232 cable, 9 pin, D-sub connectors, male – female pins, straight through wiring
- PPCH-G binary file (“PPCH-G.bin”). Currently released version available for download at this link (brief instructions here also),  
<https://us.flukecal.com/literature/software-downloads/firmware/ppch-g-v102f-embedded-software>
- Winflash.exe Available for download at flukecal.com:  
<http://us.flukecal.com/literature/software-downloads/free-utilities/winflash-free-utility>
- Computer with serial RS232 port that can be connected to the PPCH-G’s COM1 port

## Software:

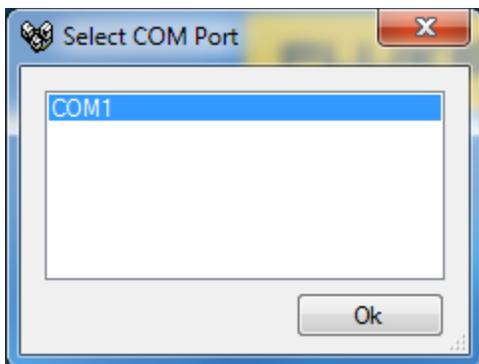
- Download and install the free WinFlash utility on the computer from the above link. Need to sign in, or register for access to the download
- Verify which COM port will be used on the computer. For example, if the computer has a hard-wired RS232 port, it is typically mapped by Windows® as “COM1”

Procedure:

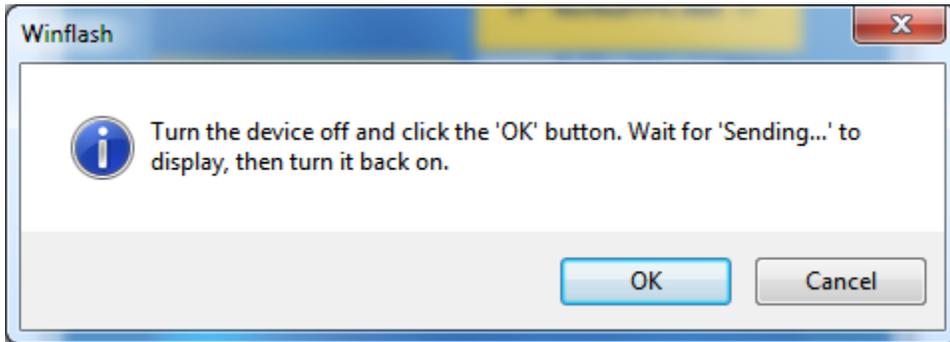
1. Power on the PPCH-G
2. Connect 9-pin RS232 cable between the computer's serial RS232 port and the PPCH-G's COM1 port
3. Verify and record the current version of the PPCH-G's firmware by pressing and holding the [ESC] key on the PPCH-G
4. Run Winflash.exe on the computer
5. Select the [RS232] option



6. From the [Run] menu, select "Write to Device Flash"
7. Select the COM port of the computer which has the RS232 cable connected to it. Press [Ok] to continue.

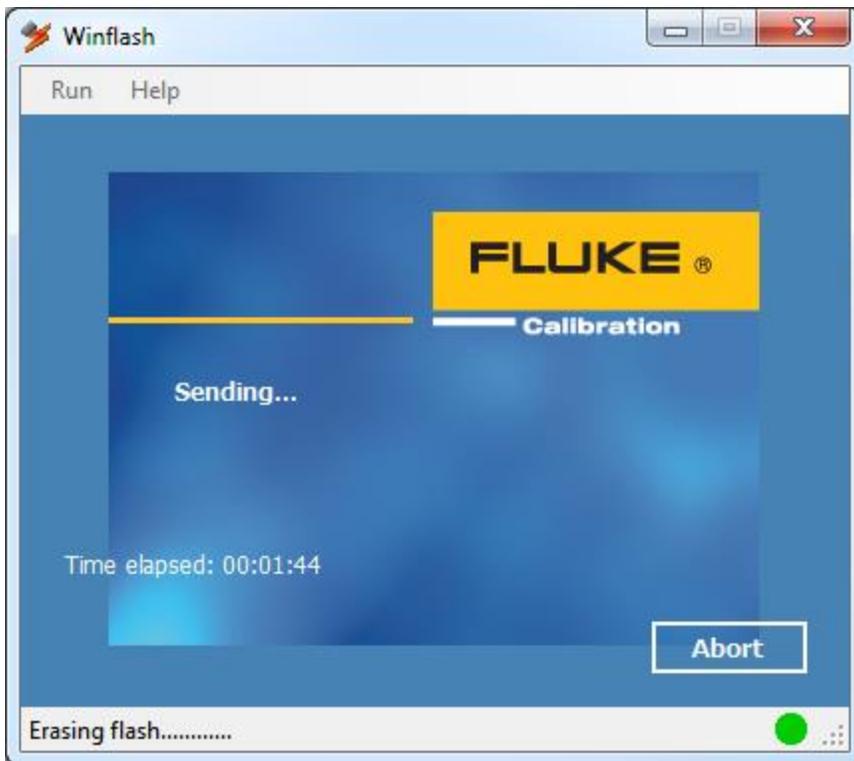


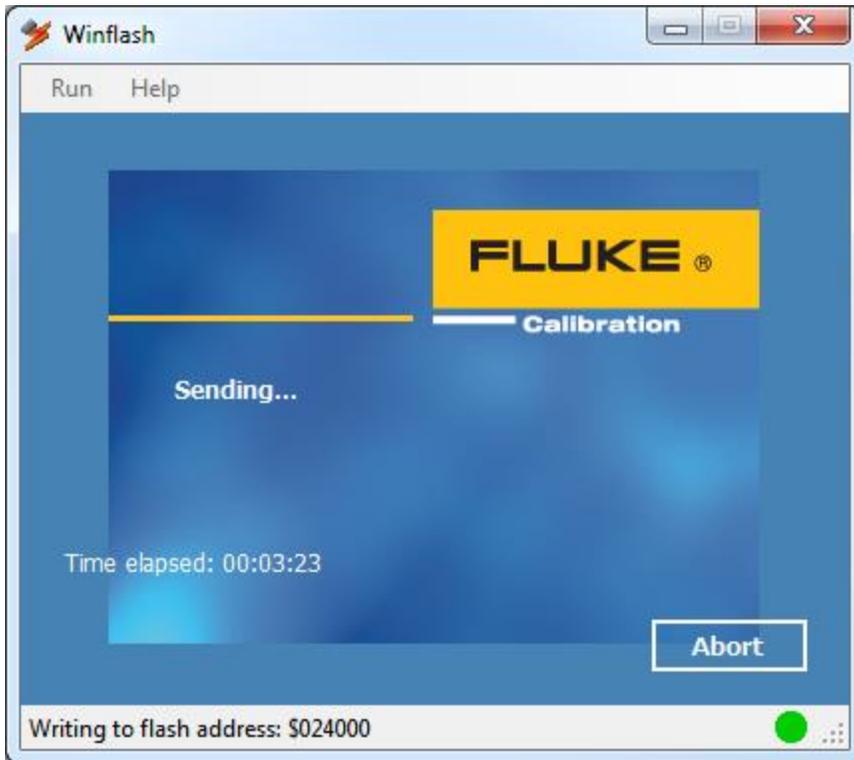
- Turn off the power to the PPCH-G, then click [OK] to continue. Turn the PPCH-G power back on after [OK] is clicked.



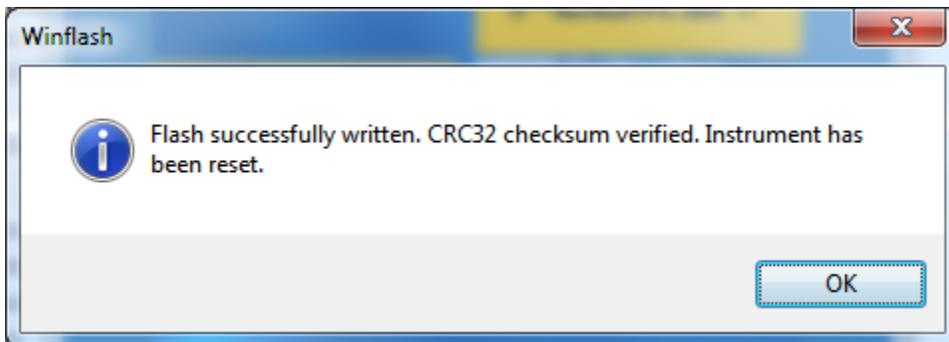
The PPCH-G display will change to the FLASH LOAD MODE message when the flash interface has been successfully initiated

- Next, WinFlash begins to erase the existing flash data in the PPCH-G in preparation to write the new firmware





10. When the process is complete, a verification window will appear. An upgrade confirmation screen appears on the PPCH-G with the default answer of "Yes" highlighted. Press the PPCH-G [ENTER] key to confirm.



11. Watch the PPCH-G reset and note that the firmware version is the new one. Or press and hold the [ESC] key to verify the firmware has been updated.

End of Procedure