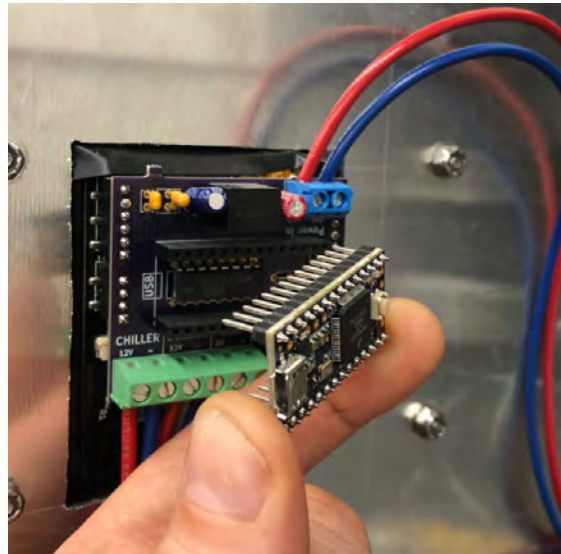


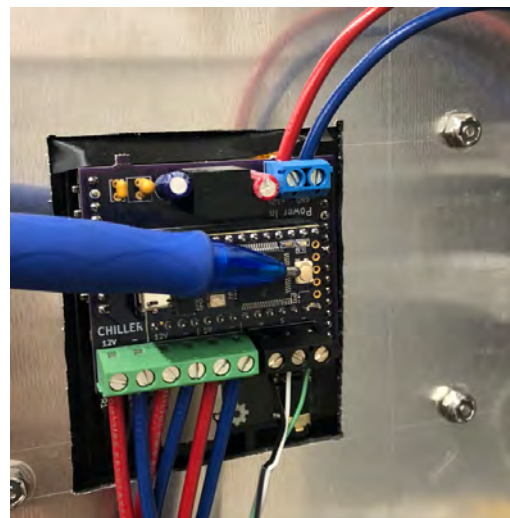
## How to update the BREWHA touchscreen controller

Note: It is safest, before doing any work inside the BREWHA Power Controller, to unplug it (single element box) or turn the main breaker off. Ensure the Box is off when programming the controller.

1. If you don't already have it, download the Teensy Loader Program from this link: [https://www.pjrc.com/teensy/loader\\_vista.html](https://www.pjrc.com/teensy/loader_vista.html)
2. Run the Teensy.exe program (the program you downloaded in step 1)
3. Save the updated .hex program from the BREWHA Power Controller product page on the website to your desktop. It will be called something like "Brewha\_controller\_20MAY19.hex"
4. Connect the touchscreen controller to your computer using a USB to USB 2.0 micro-B cable (if your cable is too short to reach the controller inside the BREWHA control panel, you can unplug the controller from the BREWHA Control Panel by just pulling it straight off.)



5. In the Teensy program, select File/Open Hex File – and select the BREWHA program from your desktop
6. Press the button on the BREWHA controller



7. In the Teensy program, select 'Operation/Program'. You should see a small window pop up saying that programming is occurring

8. In the Teensy program, select 'Operation/Reboot'. The program should now say 'Reboot OK'

9. Unplug the cable and if necessary (if you unplugged it) plug the BREWHA controller back into the main panel; pay attention to the orientation—there is a USB watermark on the interface board which should be matched (and make sure no pins are bent over in the process).



10. Turn the BREWHA Power Controller back on and confirm that the program version in the BREWHA Controller 'Settings/System info' menu has the same date as the program file name.

11. And you're finished!