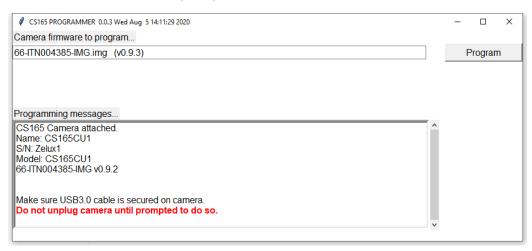


The CS165 Programmer Application provides a means of updating the firmware on all CS165 "Zelux" camera models to the latest release. The CS165 Programmer application requires the camera drivers, so programming can only be performed using a computer with the ThorCam or ThorImageCam software installation in which the USB drivers were selected. This document assumes the reader has the proper administrative rights to place the executable file on their computer and run the program.

- 1) Download the **CS165\_Programmer\_Vnnn.ZIP** file from the Thorlabs Web site. https://www.thorlabs.com/software\_pages/ViewSoftwarePage.cfm?Code=ThorCam
- UNZIP the file onto your computer. It is recommended that the application run from your Desktop, but it can be placed elsewhere.
- 3) Connect the CS165 camera to a USB 3.0 port on the computer.
- 4) Extract the contents of the CS165\_Programmer\_vnnn.zip file and double-click on the CS165\_Programmer\_vnnn.exe file. It may take up to five seconds for the application to open.
- 5) Follow the onscreen prompts:



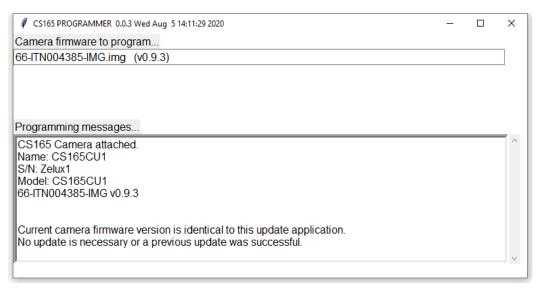
6) Press the "Program" Button at this time...



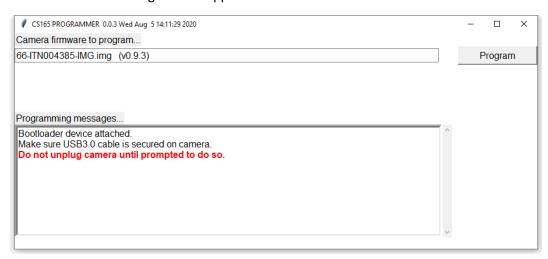
7) Close the application by clicking on the "X" in the upper right corner.



8) After disconnecting and reconnecting the camera USB 3.0 cable, reopen the application and confirm the following screen appears...



- 9) If the process was interrupted for whatever reason, you will see a message stating that the programming has failed. In the event of this, please do the following:
- Close the application by clicking on the "X".
- Disconnect and Reconnect the camera to the USB 3.0 port.
- Restart the Programmer application. The screen will look like this ...



- Press the "Program" button, wait for the process to complete, and then follow the prompts to complete the process and confirm a successful update as shown on the screen capture at the top of this page.