

# Kelly Controllers Reflashing Guide



*The purpose of this guide is to provide instructions for “reflashing” the Kelly controllers. The 2021 team completed this operation, and it is not expected that future teams should need to perform the reflashing operation.*

The Instructions below were provided from Fany at Kelly Controls via Email. For further questions, he can be reached at: [sales@kelly-controls.com](mailto:sales@kelly-controls.com)

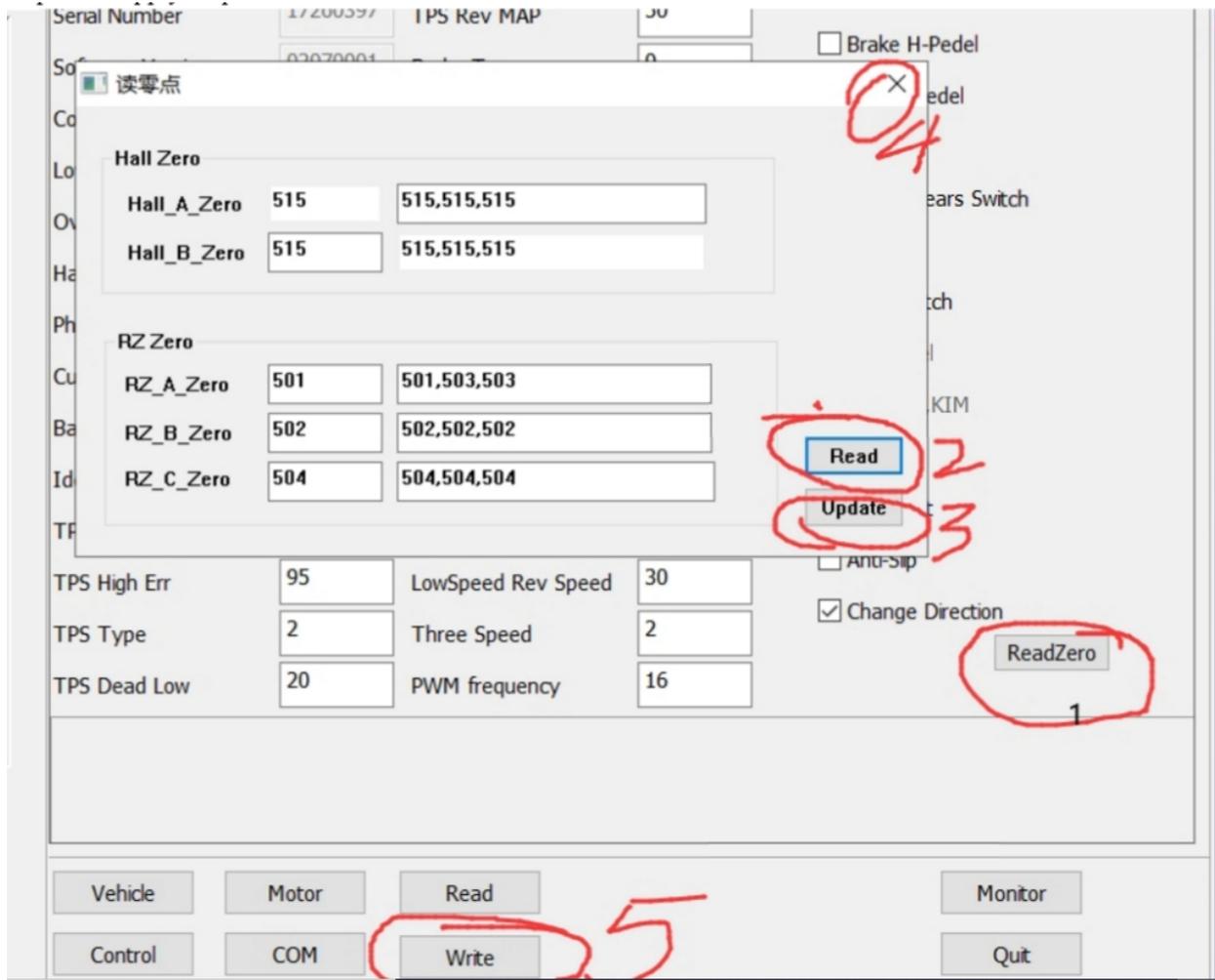
Please download the burst flash program from the link below.

<https://kellyev.com/wp-content/uploads/flash/MPC.zip>

## NOTES:

- Before starting the process make that the power supply and the communication cable are functioning properly and have stable connections. Do not rotate the motor shaft by hand during reflashing.
  - **Do not reset the power supply if there is a “CAL ERROR” or “reflashing ERROR”. Please try to reflash again without resetting the power supply for the controller (the 12V power supply). Do not quit from reflashing software.**
  - The .mot firmware is a separate file than can be found on the website. These .mot files are specific for the Kelly controller, meaning that you need to match the serial number with the numbers in the .mot filename. The .mot file should be downloaded before starting the reflashing process.
1. Open the reflash program which is called MotorETS.exe
  2. After opening the program choose the Bootloader option.
  3. Click the Open Files button and select the .mot firmware
  4. Choose Updata\_Cal and Update\_Code items
  5. Press the Bootloader button.
  6. When the progress is at 100%, the reflashing is finished.
  7. Please reset the power supply at this time. That is to say, please turn off and turn on the power supply to activate the reflashing.
  8. Try to perform the “ReadZero” operation after reflashing is finished successfully according to the instruction below.
  9. Quit the burst flash program.
  10. Open the Kelly Controller User program.

11. You will find a “ReadZero” button on the Vehicle page of the user program. Based on the picture below, click through the “ReadZero” operation sequentially, starting with step 1 and ending with step 5.



12. You can try to use throttle to run the motor. If the motor runs abnormally, you may still need to do the identification angle operation before running the motor after reflashing successfully. (See kelly controller manual for identification angle steps)