

This firmware and motor parameter update will increase the max motor RPM limit from 1200RPM to 1260RPM for more thrust/speed.

#### Caution

This will also increase the max power consumption, so plan accordingly.

It is unlikely you will operate at continuous max thrust for extended periods, but operating at continuous high thrust levels (over 900Watts) on the Genesis 3.1 may result in battery cell overheating after approximately 30-40 minutes, depending on battery starting temperature.

Overheat will result in DPV shutdown to protect the cells.

The Genesis 3.2 will not overheat the battery cells, due to its larger capacity.

#### Genesis Firmware and Motor Parameter loading instructions.

Read through instructions completely before starting the procedure!

1. Unzip the downloaded file to a single folder on you desktop.
2. Connect a USB cable between your computer and the tail. The GenesisConfig app will no open if not connected to tail.
3. Connect your battery to the tail. You will need a way to prop the battery up so the wires reach.
4. Plug in the nose plug to power the motor controller.
5. Double click the GenesisConfig 1.0.2.exe file. You will likely get a windows unknown program warning screen. Allow program permission to run. Program must be opened from the same folder that contains the LibFT260.dll driver.
6. Click on the FIRMWARE UPDATE tab.
7. Click LOAD FIRMWARE FROM FILE, select the .bin file from the downloaded folder and click UPDATE SCOOTER FIRMWARE.
8. Remove the nose plug to depower the motor controller, click OK in the pop-up box and immediately reinstall the nose plug. The firmware has a small time window during power ON to load. It will take about 45 seconds to finish installing.
9. Remove the nose plug after firmware successfully installs, wait a few seconds and reinstall the nose plug.
10. Click on the MOTCON UPDATE tab, click LOAD PARAMS FROM FILE and select the .ldf file from the download.
11. Click UPDATE PARAMS TO SCOOTER and the file will load in about 5 seconds.

12. After Parameters finish loading, remove the nose plug for a few seconds and reinstall to reboot the motor controller.

13. Click on the USER CONFIG tab and adjust the SPEED MAX RPM to 1260 (or whatever RPM you want as the max) and click SAVE CHANGES.

14. Click on the PERIODIC UPDATE box to view real-time motor feedback.

#### CAUTION

Motor will spin up in next steps, ensure the propeller is clear of anything that may become entangled, like the USB cable or tow cord.

15. With the speed lever set to the bottom stop position, lock the trigger ON.

16. Rotate the speed lever up to the position that you want it to come on at. If it comes on at or near enough to that position, skip to step 18.

17. With the speed lever set at the desired start position, read the ANALOG INPUT COUNTS from the Scooter Feedback window on the right and type that number into the ANALOG RANGE MIN COUNTS box.

18. Rotate the speed lever to the maximum speed position and ensure the TARGET SPEED and PROP SPEED are both at the SPEED MAX RPM set in step 13.

#### NOTE

Motor RPM may not reach MAX RPM if the battery voltage is low. Recharge battery to complete this procedure.

19. If those RPMs do not reach the SPEED MAX RPM set in step 13, read the ANALOG INPUT COUNTS from the Scooter Feedback window and enter a value 20-30 counts less in the ANALOG RANGE MAX COUNTS widow.

20. Release the trigger lock and allow motor to stop spinning.

21. Click SAVE CHANGES button and then test the speed lever again for operation at the desired speeds. You will need to re-check the PERIODIC UPDATE box after saving changes.