

# Flight Controller and ESC Setup and Calibration

Your flight controller should be flashed and configured correctly at this time. If not, refer to the previous instructions.

## Flashing ESCs

Repeat this procedure four times, one for each ESC.

1. Plug in the battery to your drone
2. Plug the ESC into the flashing tool

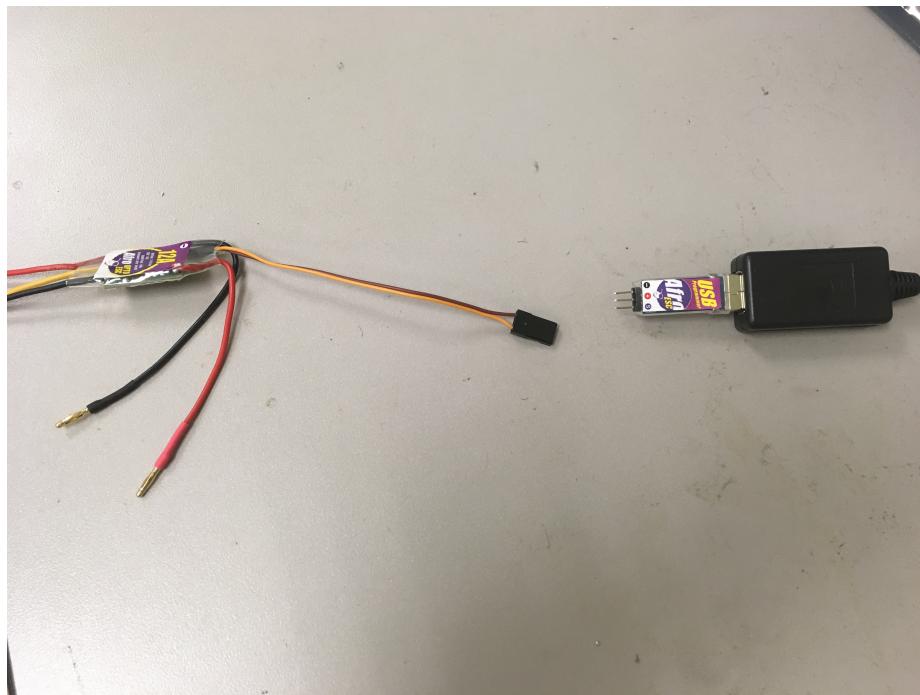


Figure 1: Not Plugged In

3. Click the “Connect” button in BLHeliSuite
4. Click the “Read Setup” button
5. When prompted to flash your ESC, click “Yes”
6. A window will appear, notifying you that you are flashing the ESC



Figure 2: Plugged In

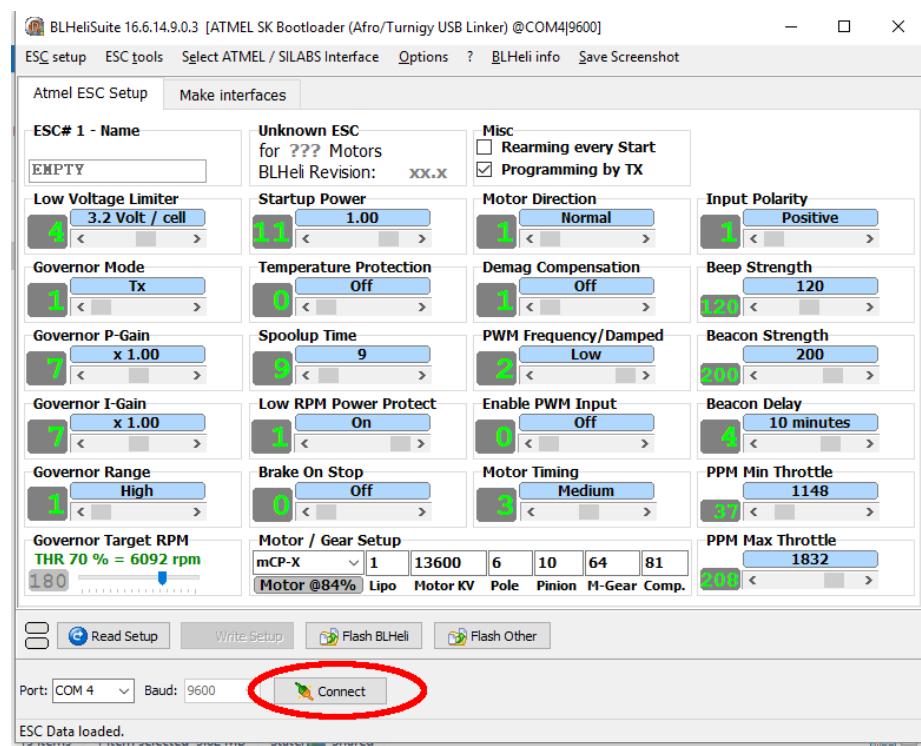


Figure 3: Click Connect

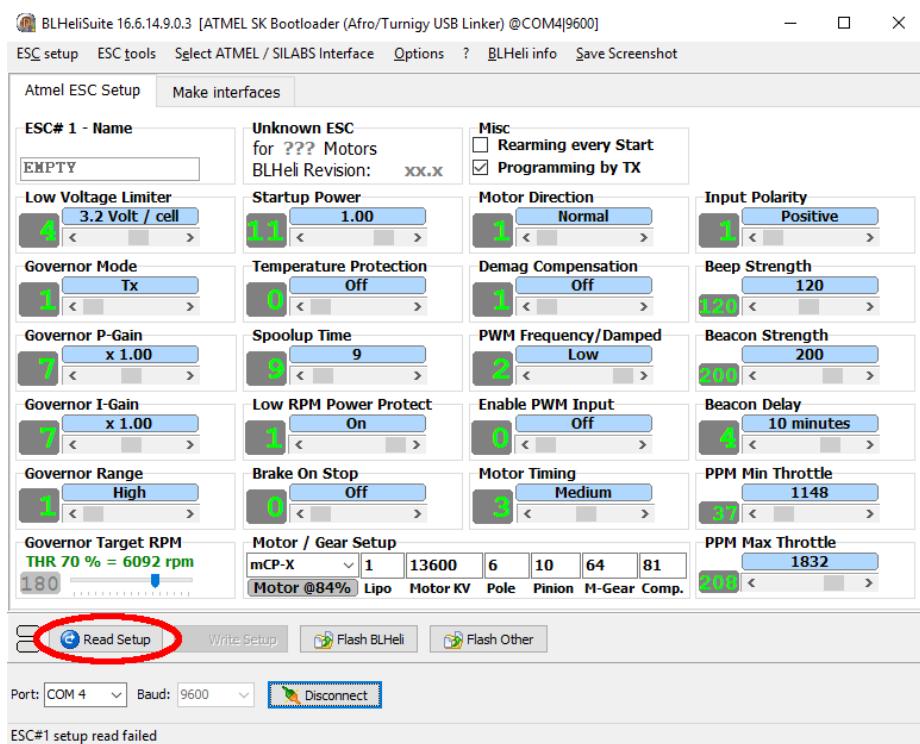


Figure 4: Read Setup

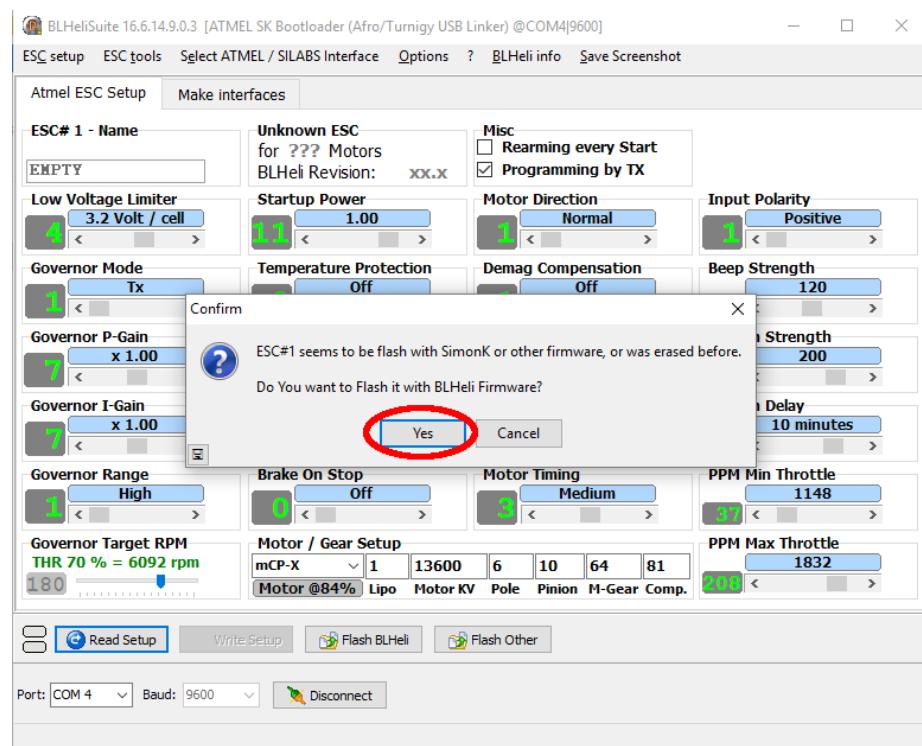


Figure 5: Flash ESC

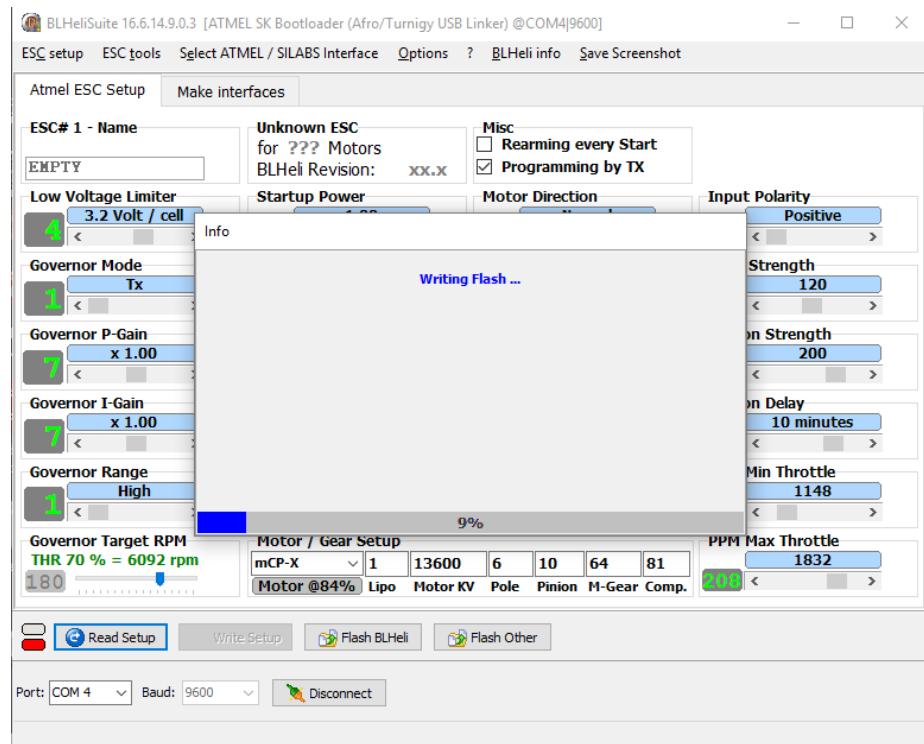


Figure 6: Flashing ESC

- When finished, a window will appear, notifying you that the ESC has properly been flashed. If there are any errors, call over a TA. Click “OK” to dismiss the window.

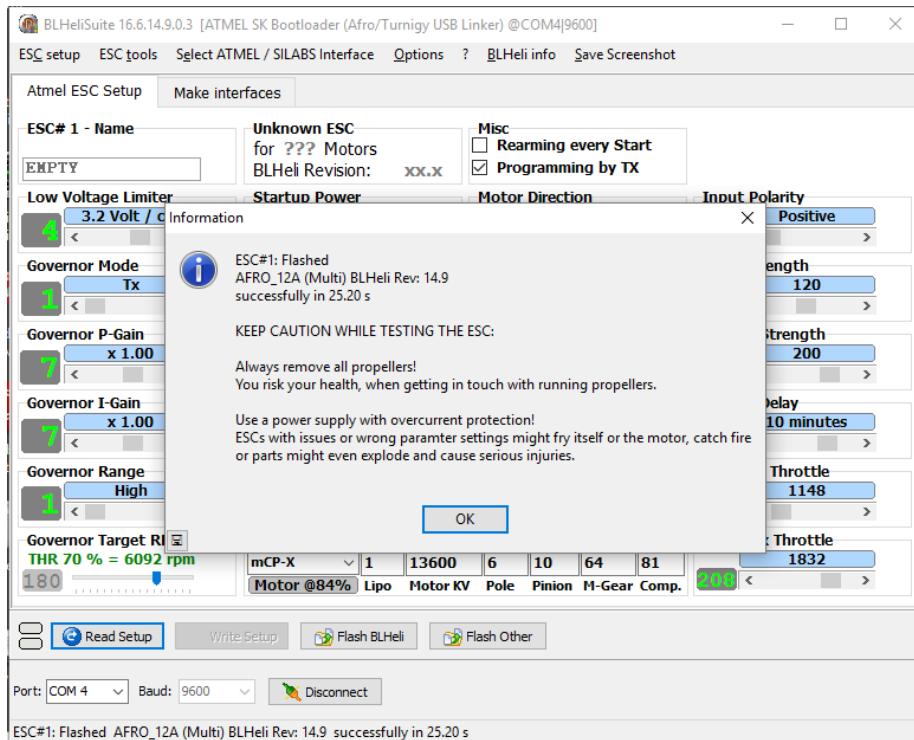


Figure 7: Successful Flash

- A window will appear notifying you that the ESC setup has been read successfully. Click “OK”.
- Change the “PPM Min Throttle” 1100 and the “PPM Max Throttle” to 1900

## Checking ESC Direction

With all ESCS plugged correctly into the Skyline, battery plugged in, and propellers not attached:

- Connect to the Skyline as you did earlier
- Go to the “Motors” tab
- Enable the motor control

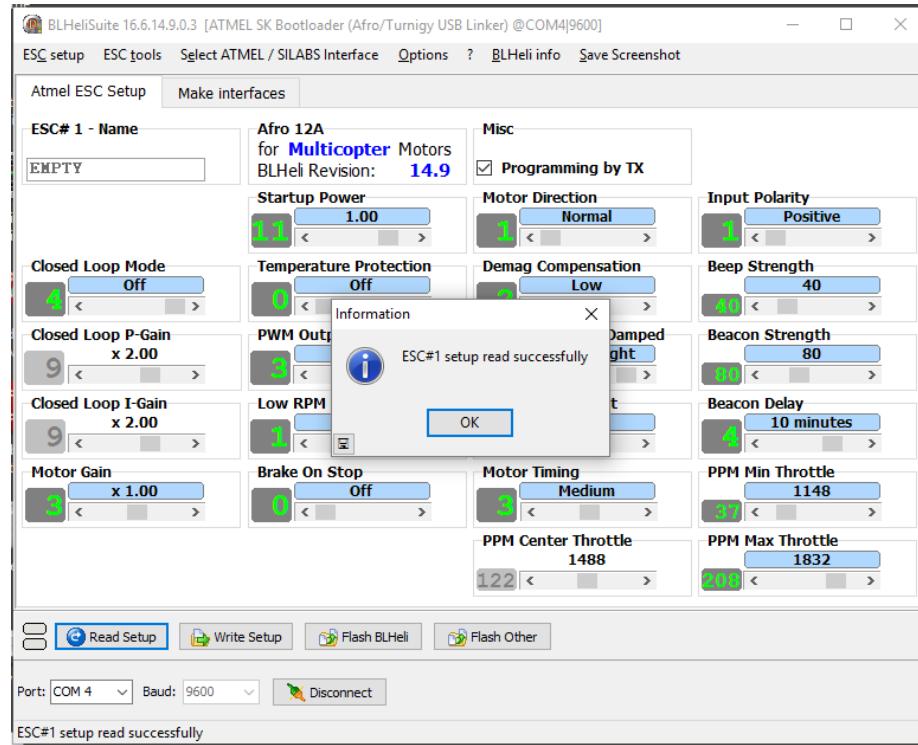


Figure 8: Successful Read

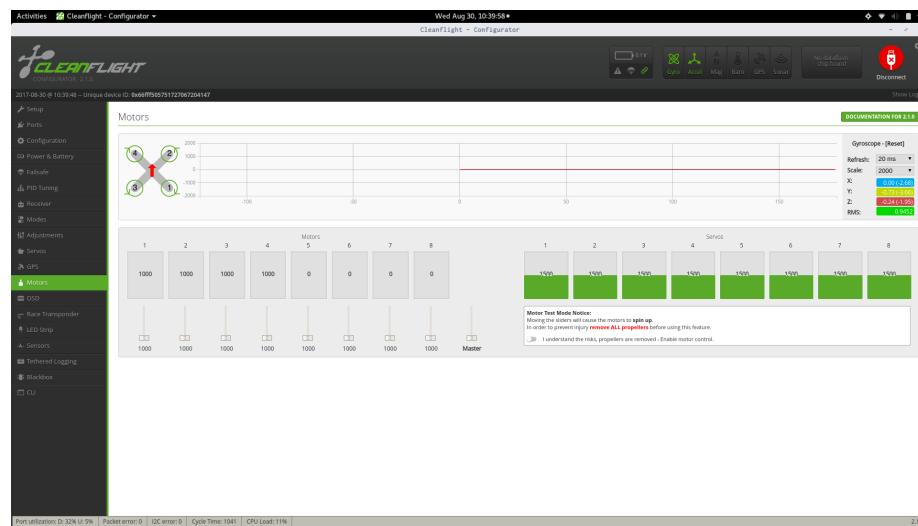


Figure 9: Motors Tab

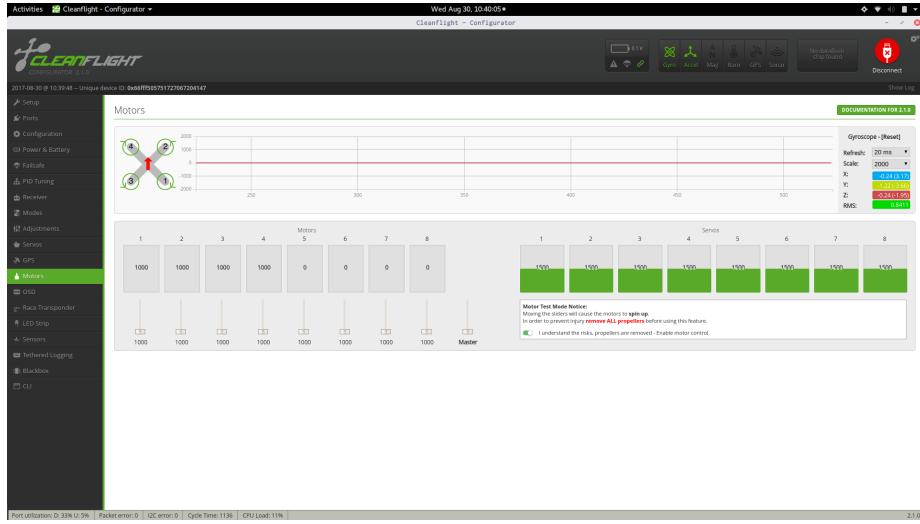


Figure 10: Enable Motor Control

4. Bring the “Master” slider slowly from 1000 to 2000.
5. The motors should be spinning. Check that they are all spinning in the correct directions.
6. Bring the “Master” slider slowly from 1000 to 2000.
7. For each motor
  - a. Raise the slider slowly from 1000 to 2000 and check that the number of the slider corresponds to the motor that spins, according to the diagram above.
  - b. Bring the slider slowly down from 2000 to 1000
8. Disable motor control

## Flipping ESC Direction

With the battery plugged in, follow the instructions below for each motor that is spinning the wrong way:

1. Plug the ESC into the flashing tool as you did before
2. Click the “Connect” button
3. Click the “Read Setup” button
4. Move the slider underneath the “Motor Direction” so that the “Motor Direction” is “Reversed”

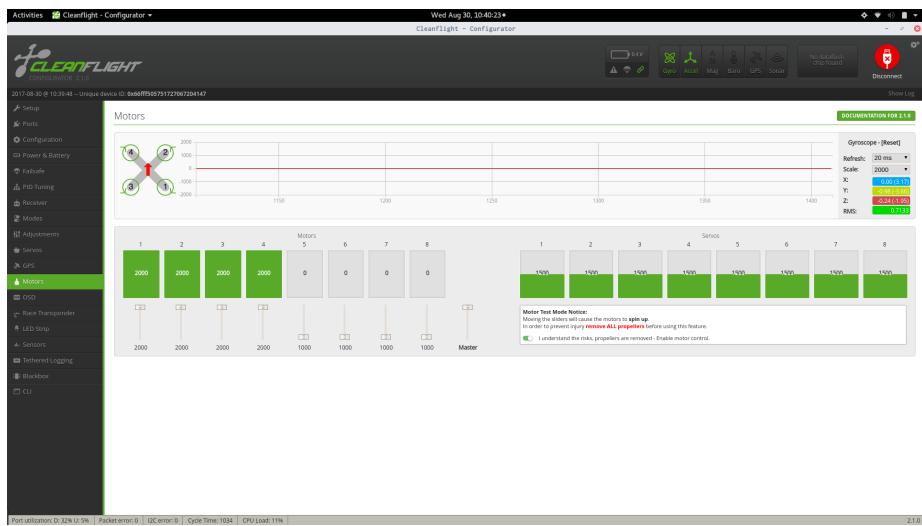


Figure 11: Master High

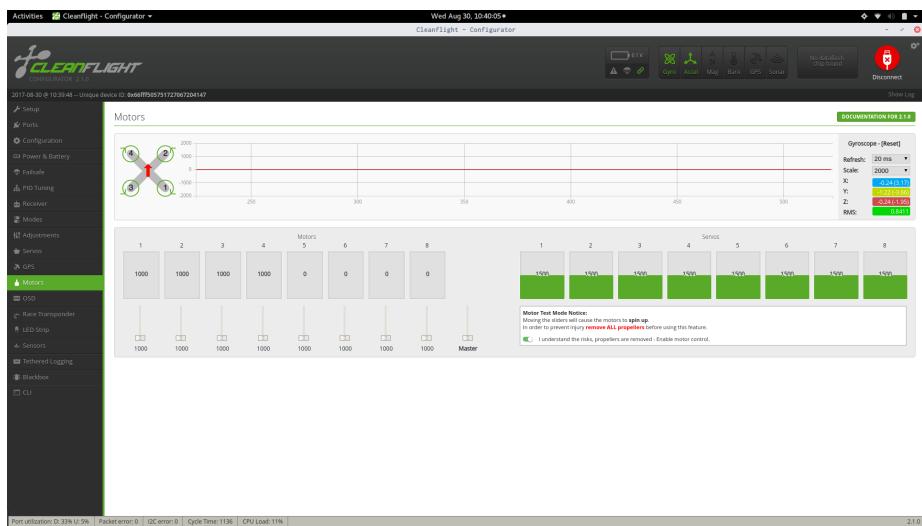


Figure 12: Master Low

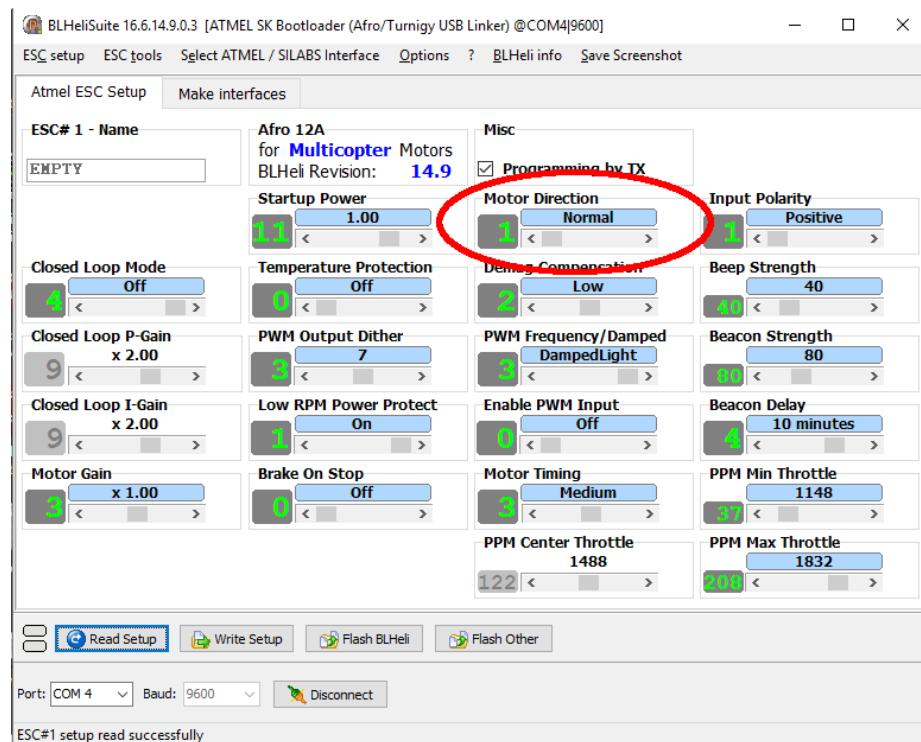


Figure 13: Normal Rotation

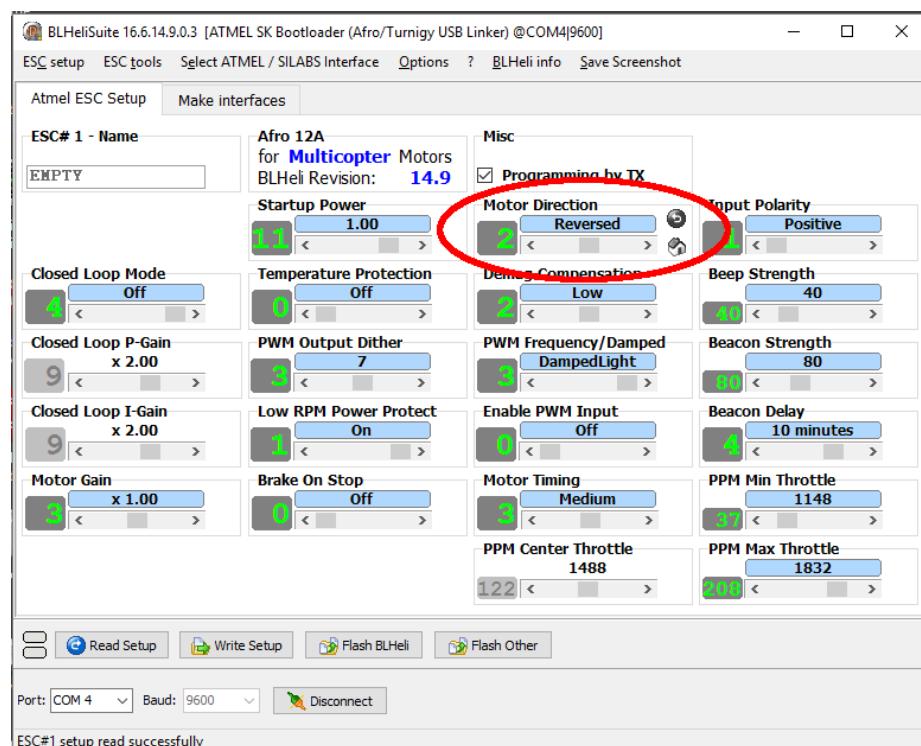


Figure 14: Reversed Rotation

5. Click “Disconnect”

Plug all ESCS back into your Skyline