



INSTALLING THE SMARTDPV CONTROLLER



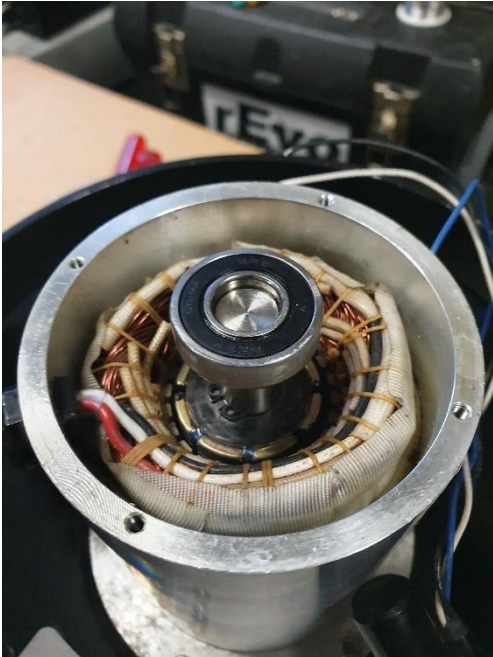
UNIT COMES SUPPLIED WITH

- Position sensor
- VESC
- USB cable (not in the picture)
- 2 mounting screw
- 3 pieces of heat-shrink tube for motor wires (big)
- 3 pieces of heat-shrink tube for trigger wires (small)
- 2 Translucid spacers
- 1 Position template
- 1 Hose clamp
- 1 Temperature sensor cable
- 1 Magnet

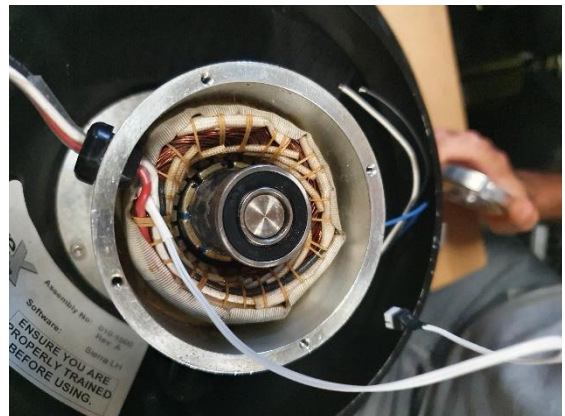
TOOLS NEEDED

- ALLEN KEYS
- SOLDERING IRON
- HOT AIR GUN
- GLUE
- WIRE STRIPPER

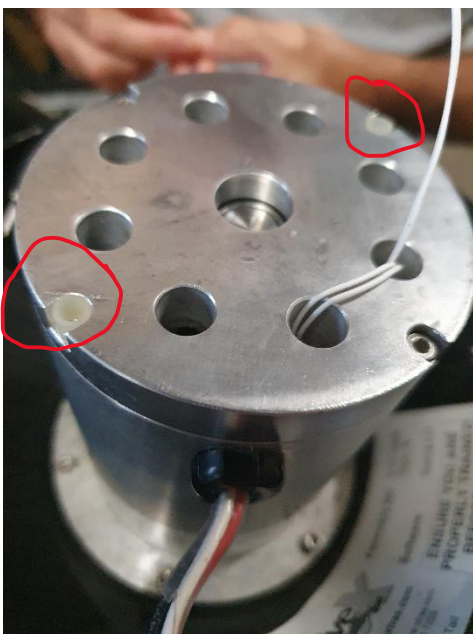
1) INSTALL THE SENSOR



YOU HAVE TO REMOVE THE TOP OF THE MOTOR

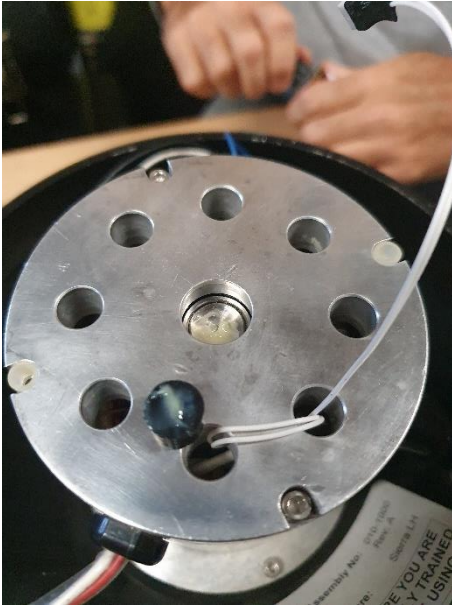


INSTALL THE TEMPERATURE SENSOR IN THE MOTOR (NOT IN THE CENTER TO AVOID A RIPPLE EFFECT AND THE ROLLING UP OF THE CABLE)



PUT BACK THE TOP , LET THE CONNECTION PLUG OF THE TEMPERATURE SENSOR OUTSIDE THE MOTOR

INSTALL THE 2 TRANSLUCID SPACER FACE TO FACE



GLUE THE BACK OF THE MAGNET TO THE MOTOR AXIS



USE THE TEMPLATE TO CENTER THE MAGNET



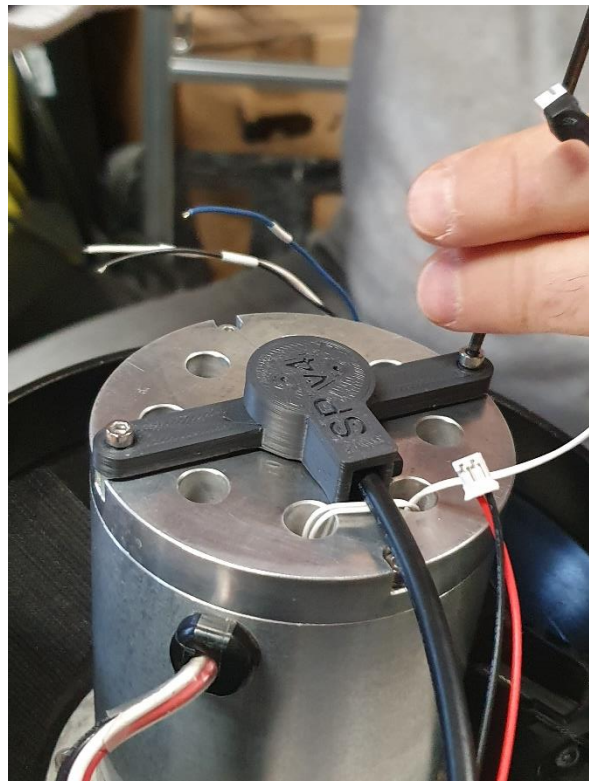
AND REMOVE THE TEMPLATE, MAKE SURE THE MAGNET FASTEN THE AXIS



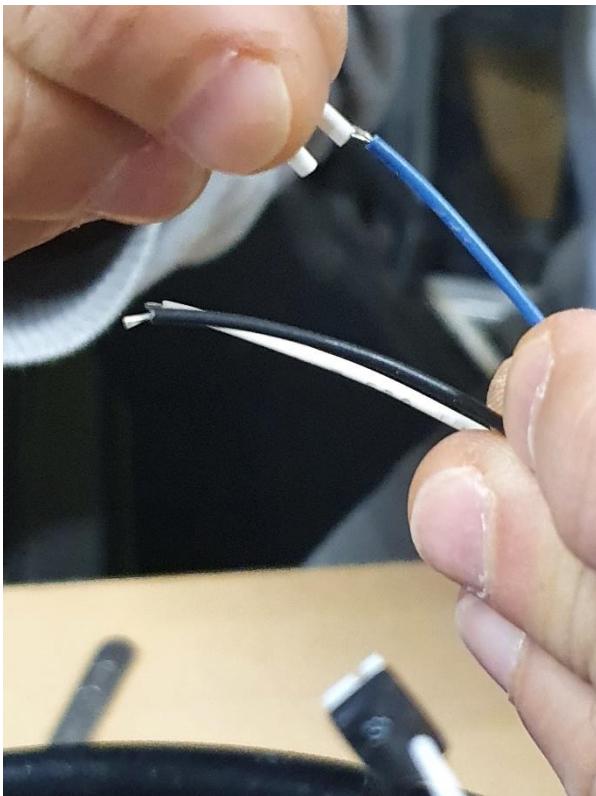
SCREW THE POSITION SENSOR TO THE MOTOR



POSITION SENSOR IN PLACE

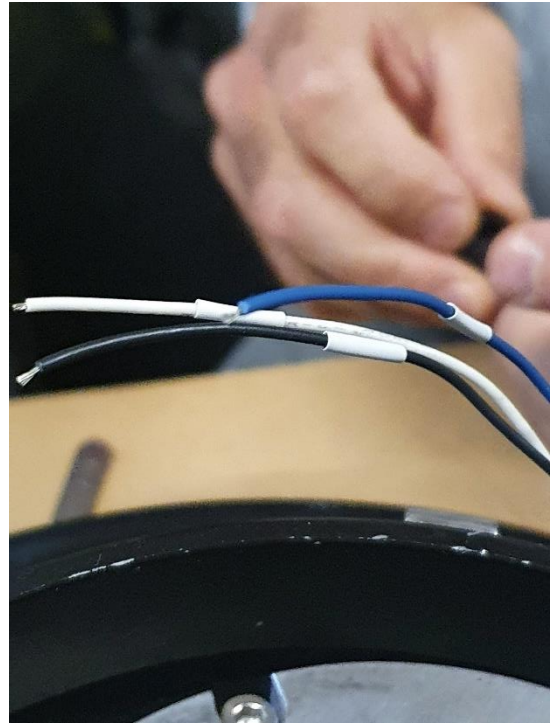


2) SOLDERING THE TRIGGER

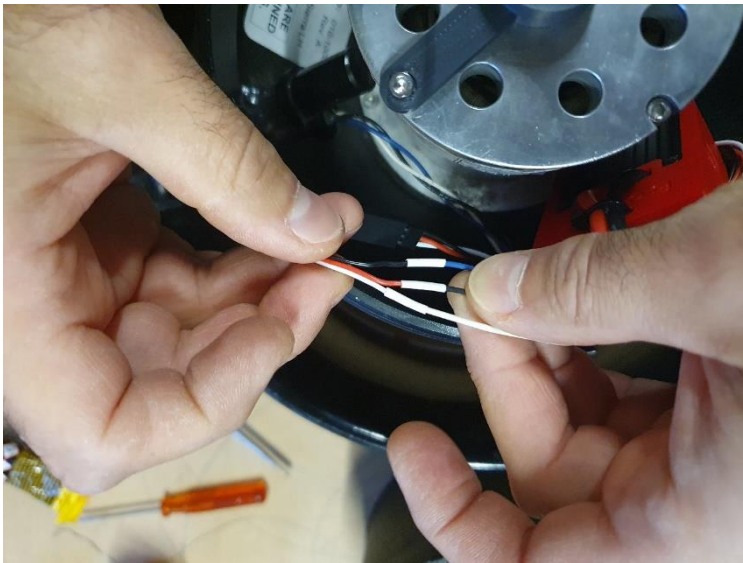


IT IS NOW TIME TO SOLDER THE WIRE OF THE TRIGGER TO THE VESC

INSTALL THE SMALL HEAT-SHRINKABLE SLEEVE

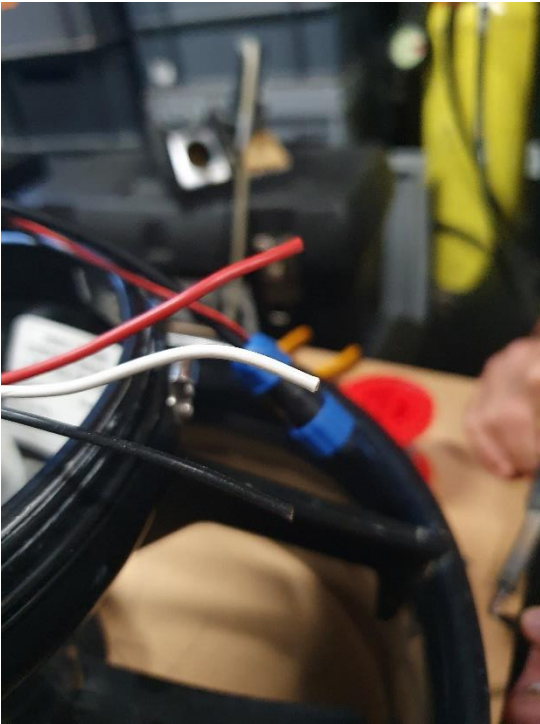


BE CAREFUL, WIRES TO SOLDER MAY BE DIFFERENT
ACCORDING TO THE SCOOTER YOU HAVE
(DIVE XTRA SIERRA ON THE PICTURE)



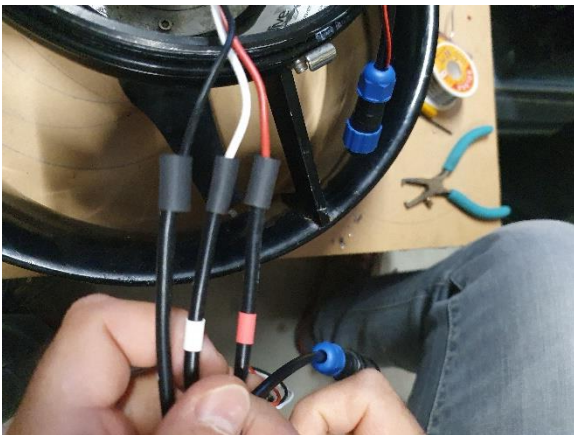
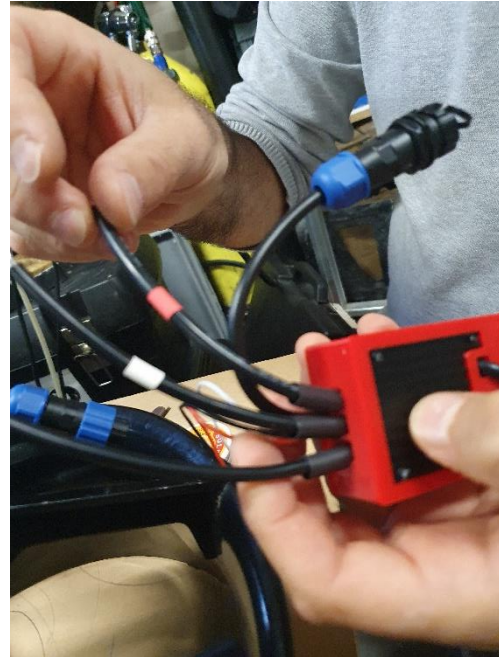
WHITE - WHITE
BLUE – BLACK
BLACK - RED

3) SOLDERING THE MOTOR

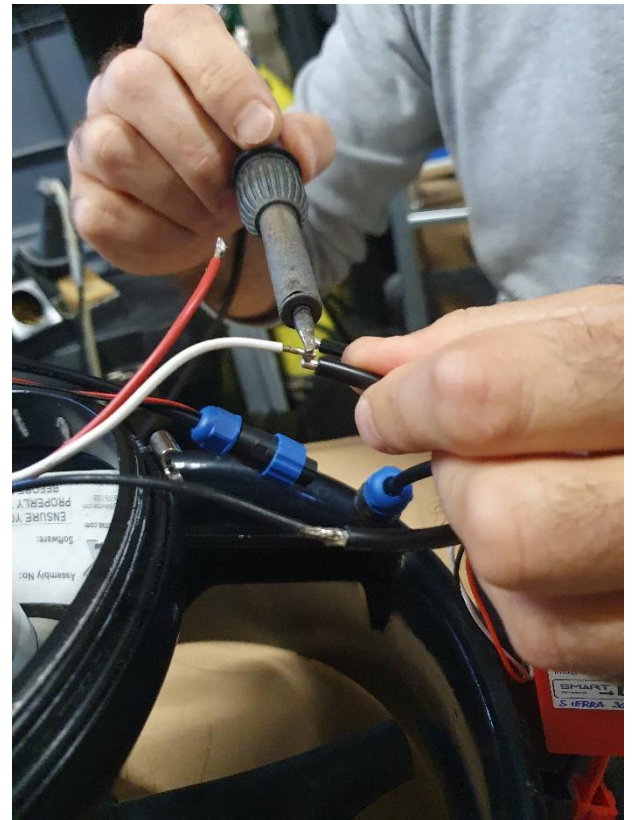
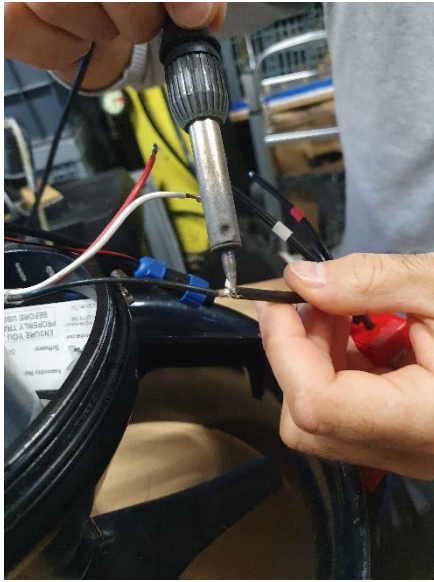


IT IS NOW TIME TO SOLDER THE MOTOR WIRES TO THE VESC

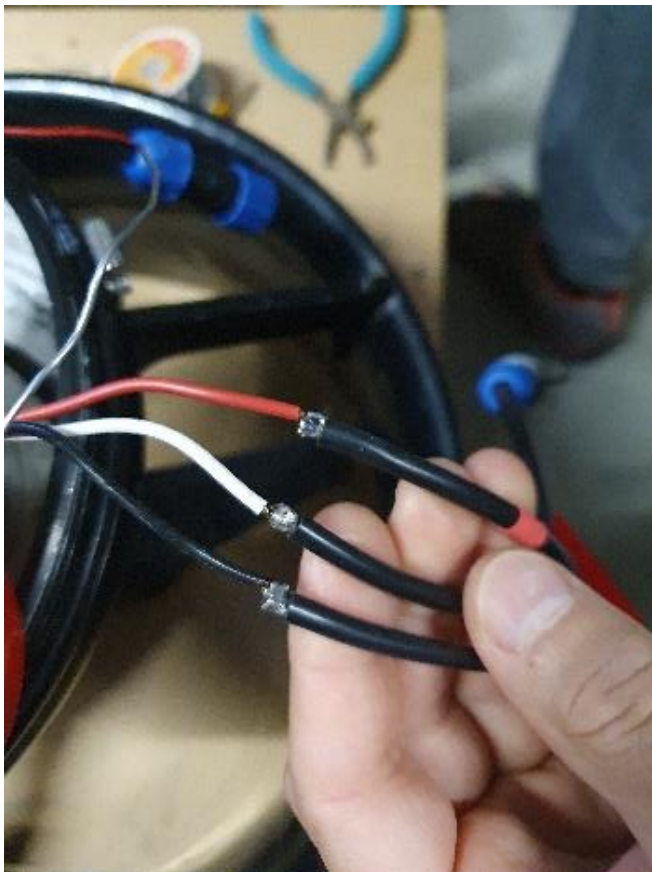
FOLLOW THE COLOR, TO ENSURE THE GOOD WORKING OF YOUR DPV



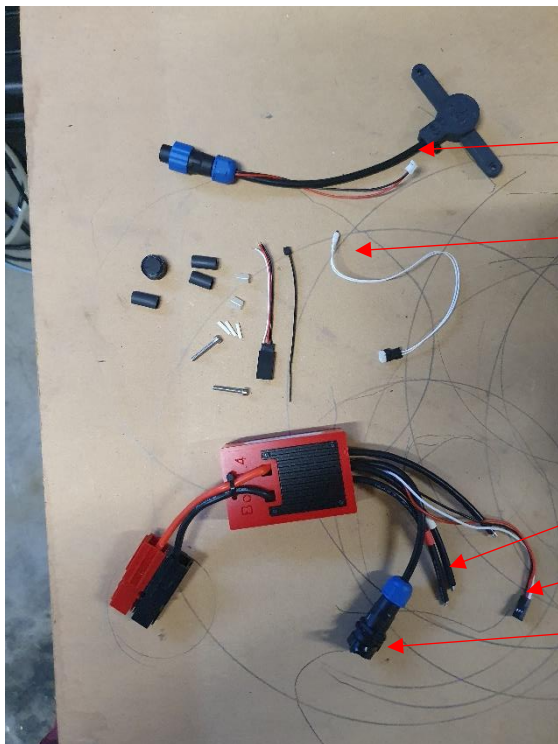
INSTALL THE BIG HEAT-SHRINKABLE SLEEVE
AND SOLDER THE 3 WIRES



MAKE SURE ALL WIRES ARE CORRECTLY SOLDERED. YOU CAN USE ELECTRICAL TAPE TO ISOLATE THE WIRES AND TEST IF EVERYTHING IS GOOD BEFORE APPLYING THE HEAT-SHRINK TUBES.



4) CONNECT ALL WIRES



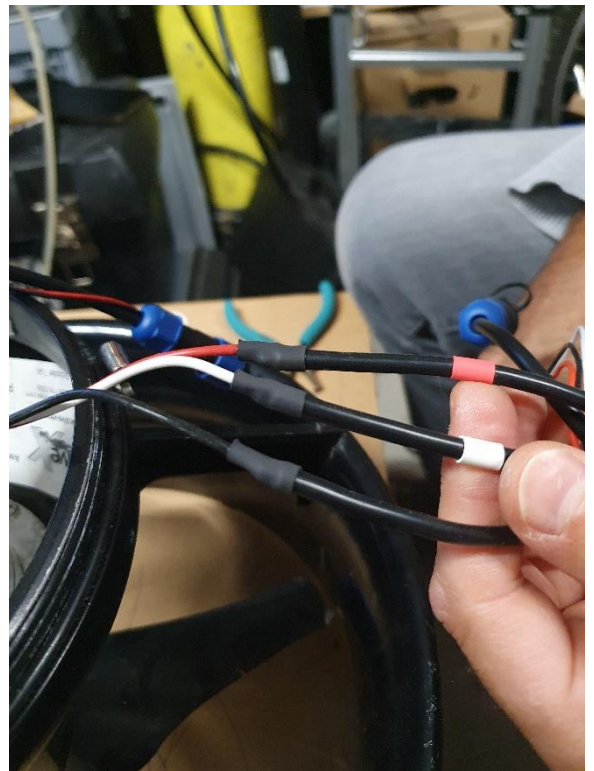
Position
sensor

Temperature
sensor

Motor

Trigger

Position Sensor



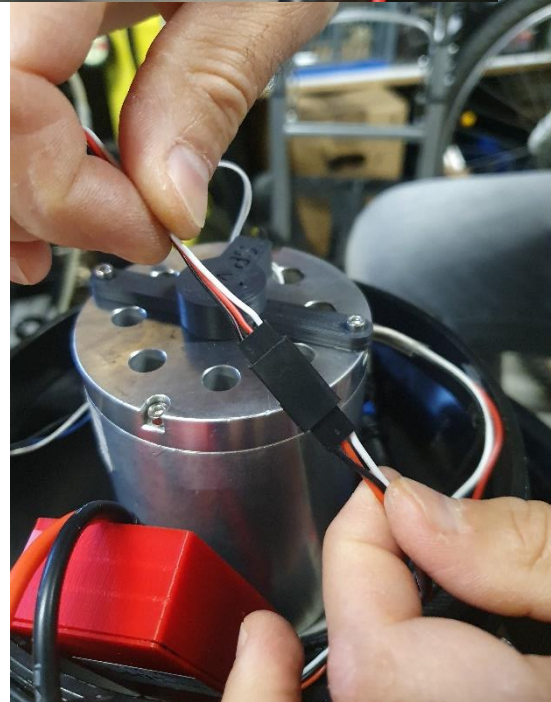
WHEN ALL WELDS ARE DONE, YOU CAN CONNECT
TEMPERATURE SENSOR TO THE VESC

THE

CONNECT THE TRIGGER



AND THE POSITION SENSOR



HERE IS THE RESULT



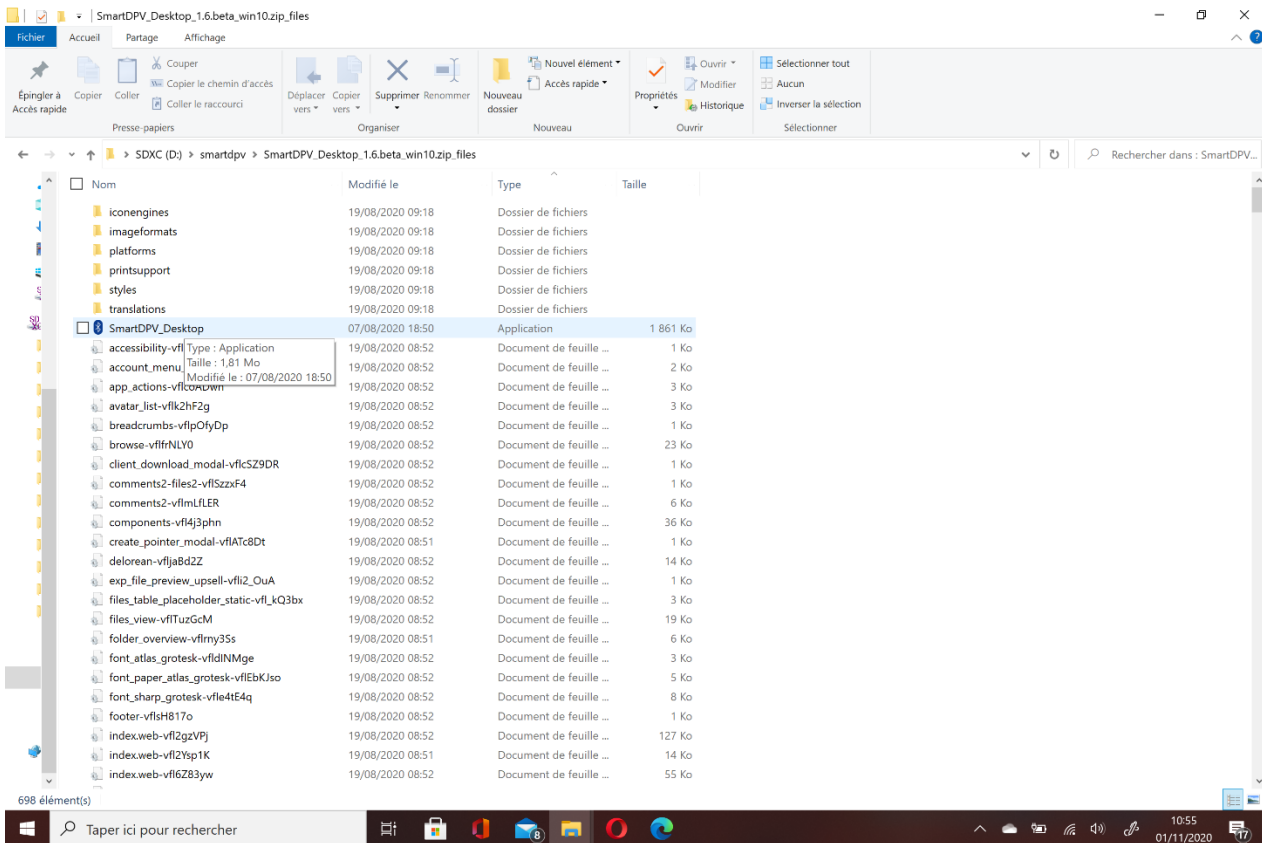
CONNECT TO THE BATTERY AND TEST

DON'T FORGET TO CONNECT YOUR VESC TO THE DESKTOP

CALIBRATE THE POSITION SENSOR

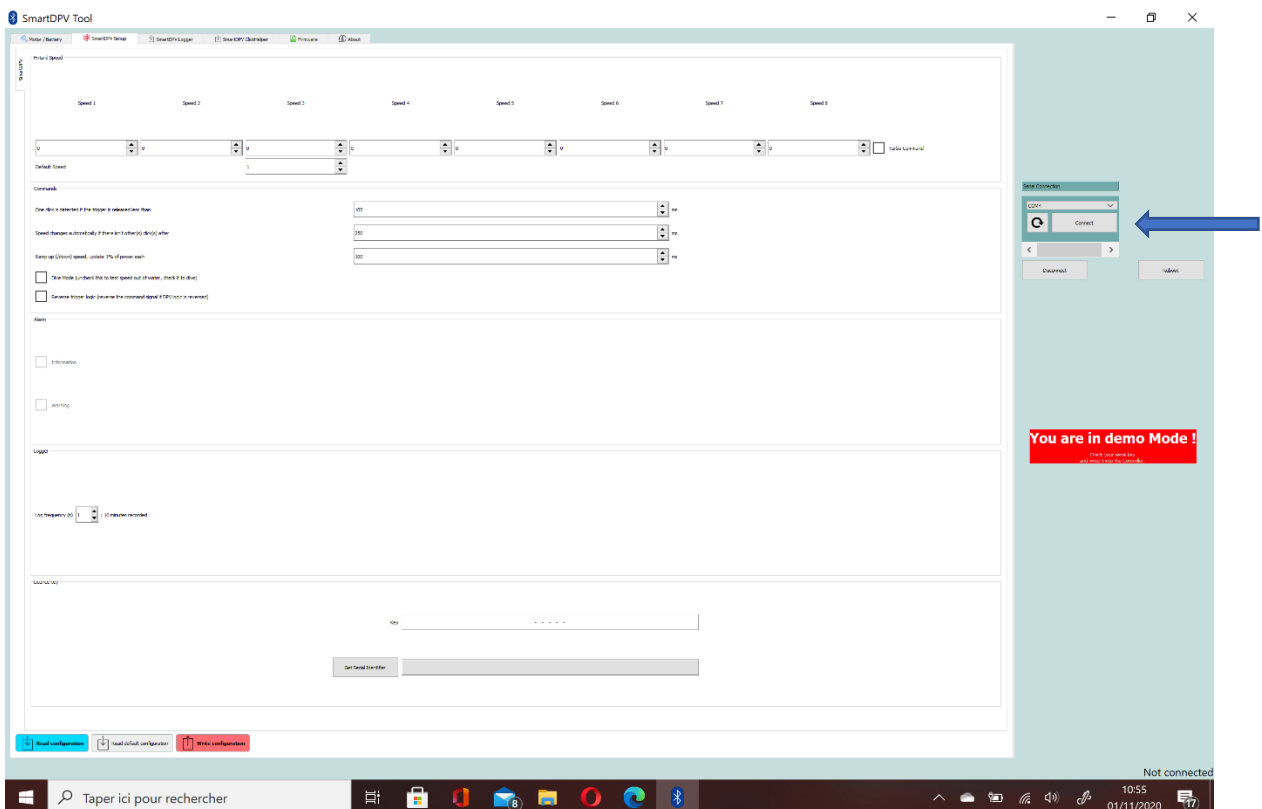


5) CONNECT TO THE DESKTOP

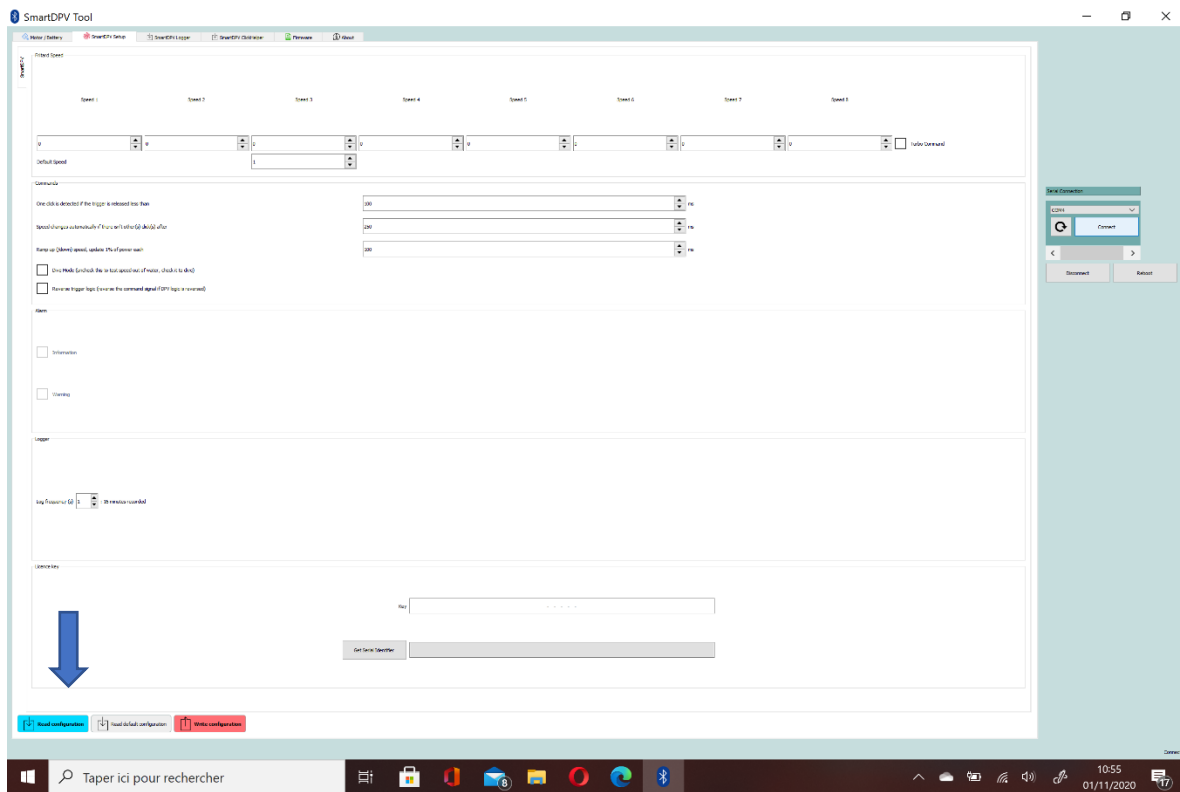


Install and open the SmartDPV desktop

Plug in the battery to the ESC and connect the controller to USB.

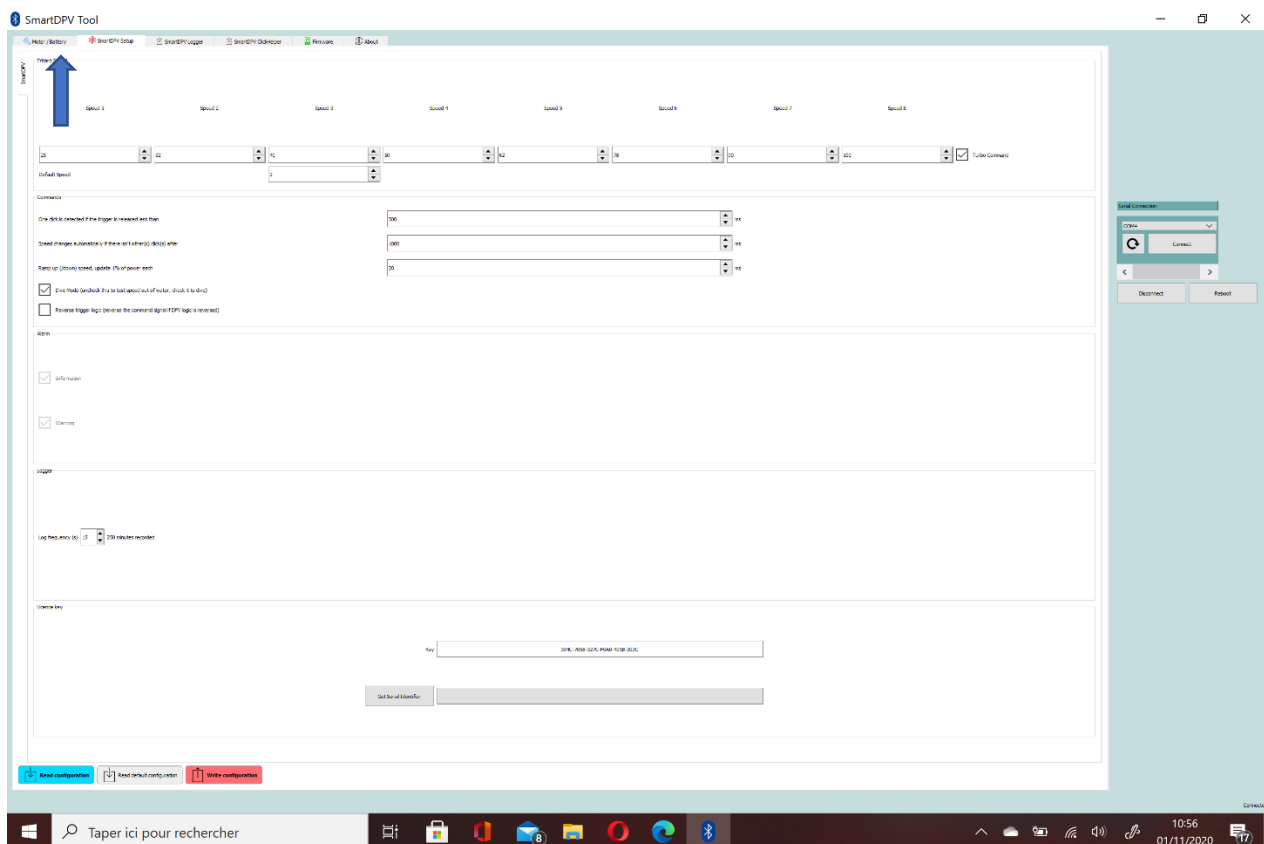


Click on the **Connect** button

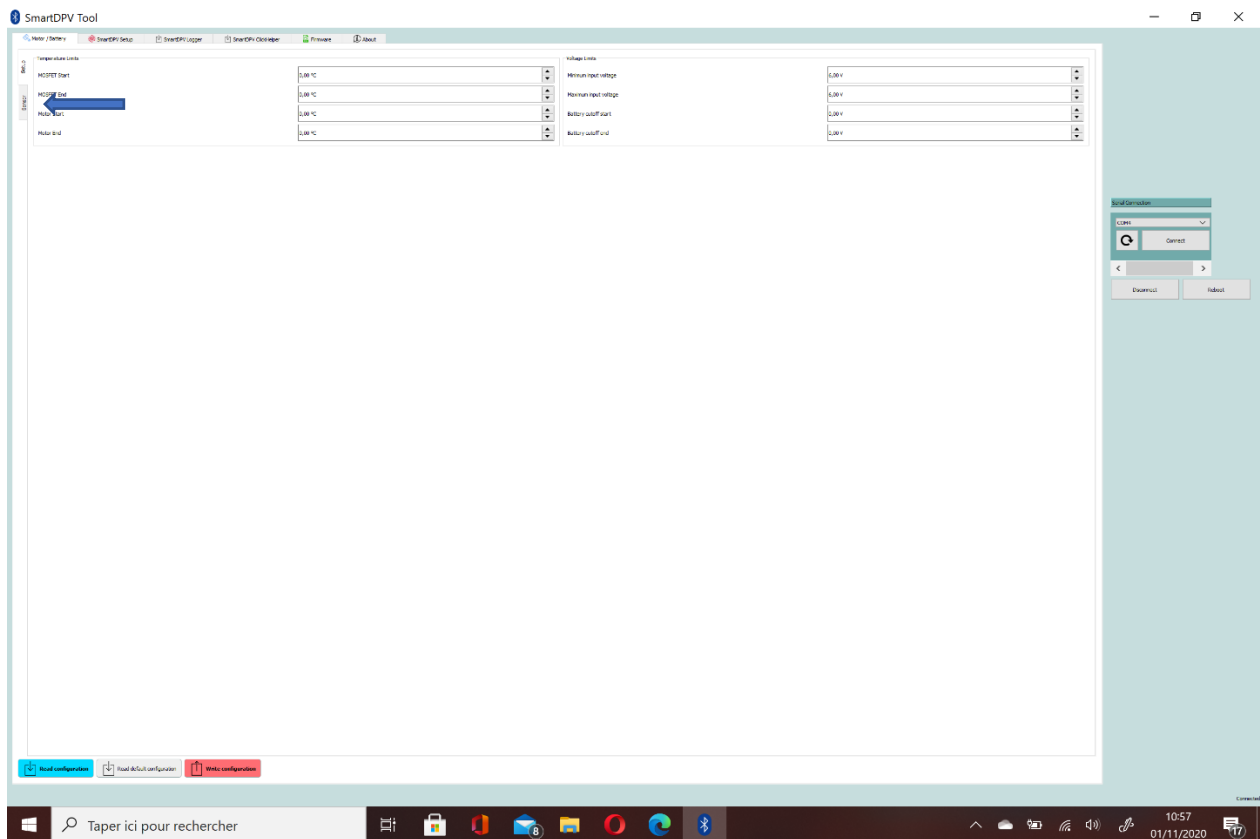


Here is the main screen that allow you to choose speed and ramp up.

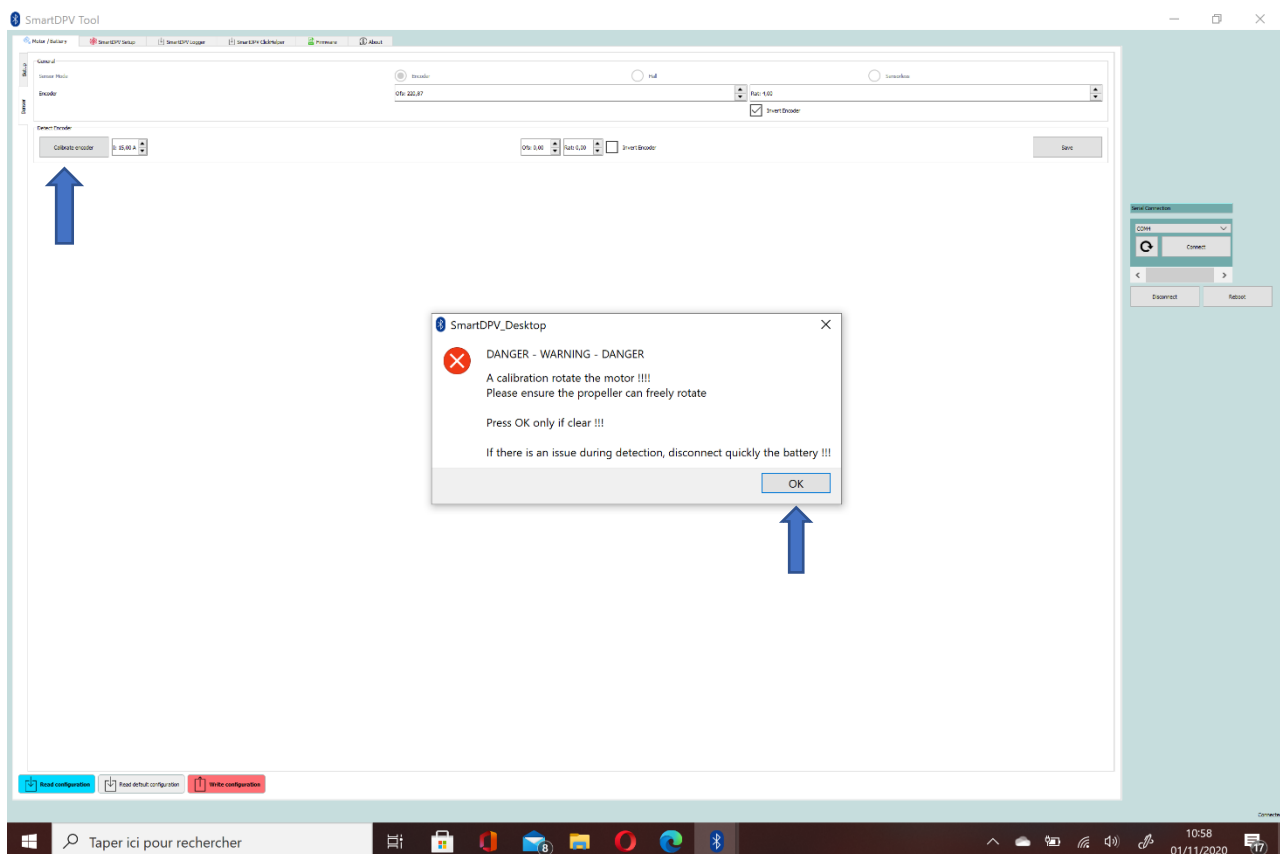
Click on the button **Read Configuration**



You have to calibrate the sensor, click on **Motor** tab



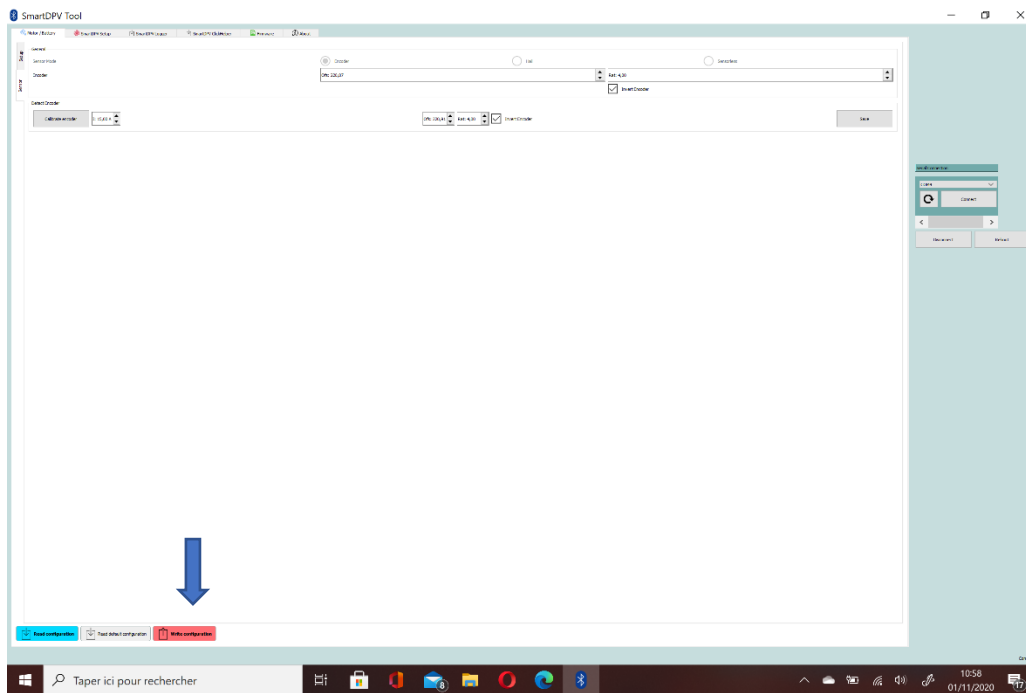
Then, click on the **Sensor Tab**



Please, be careful, that nothing obstruct the propeller during this step to avoid any damage.

You have to calibrate the sensor, click on the button to **Calibrate** and valid

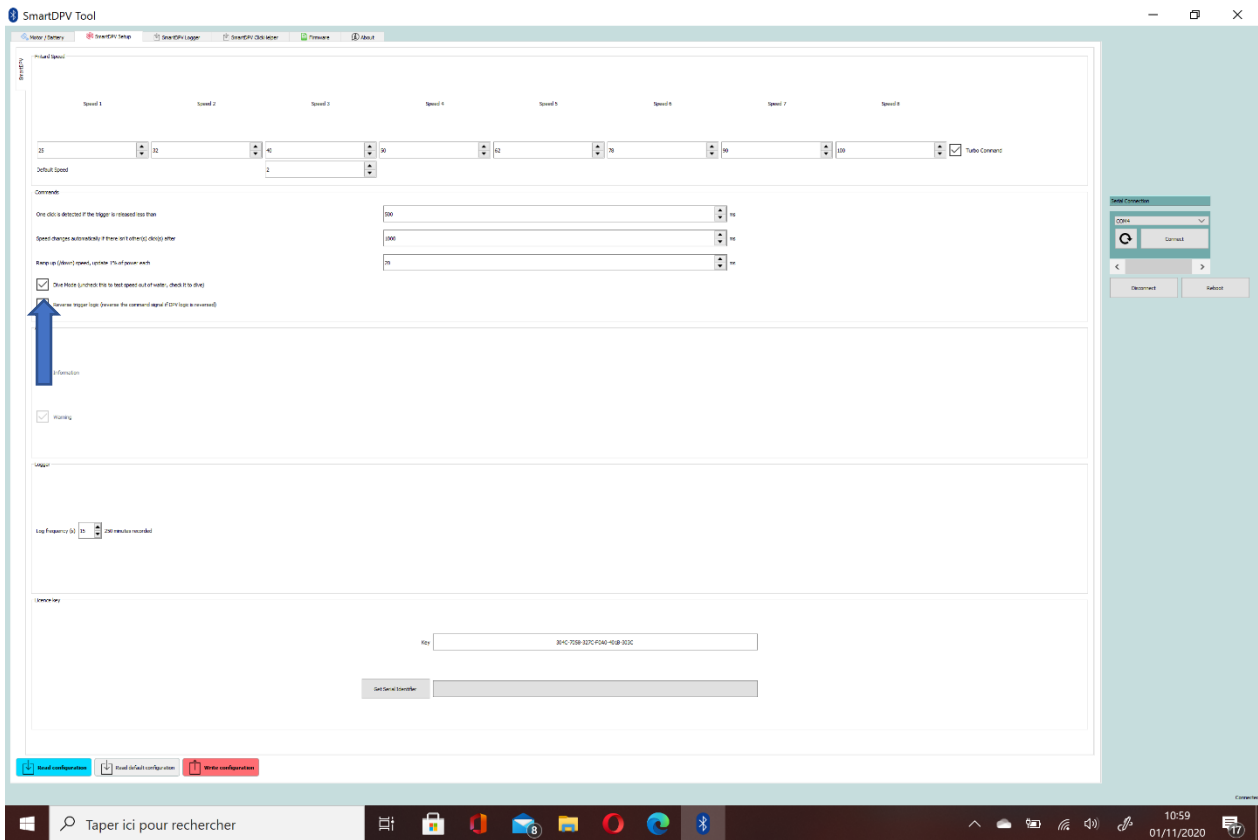
It is compulsory to read configuration at this step, before calibrating.



Once the propeller stop moving, you can **Write Configuration**

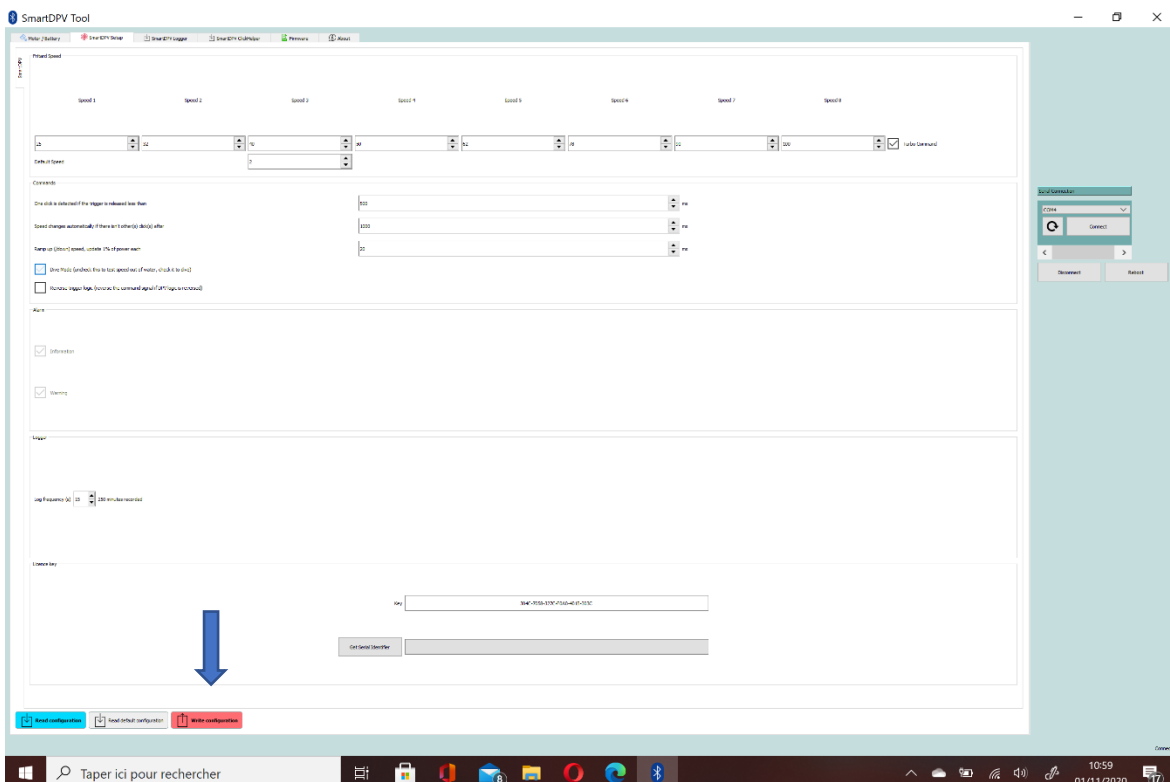
6) CHANGE SETTINGS

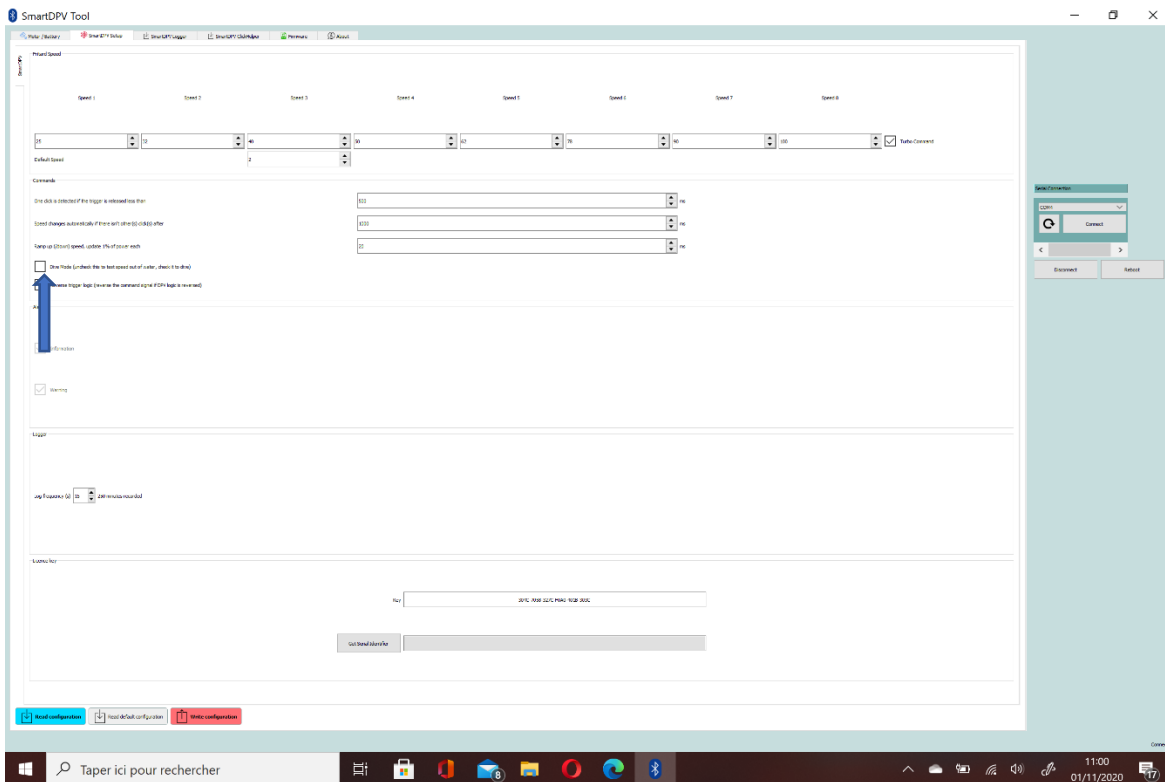
On the main screen,



Change your setting, speed, ramp up

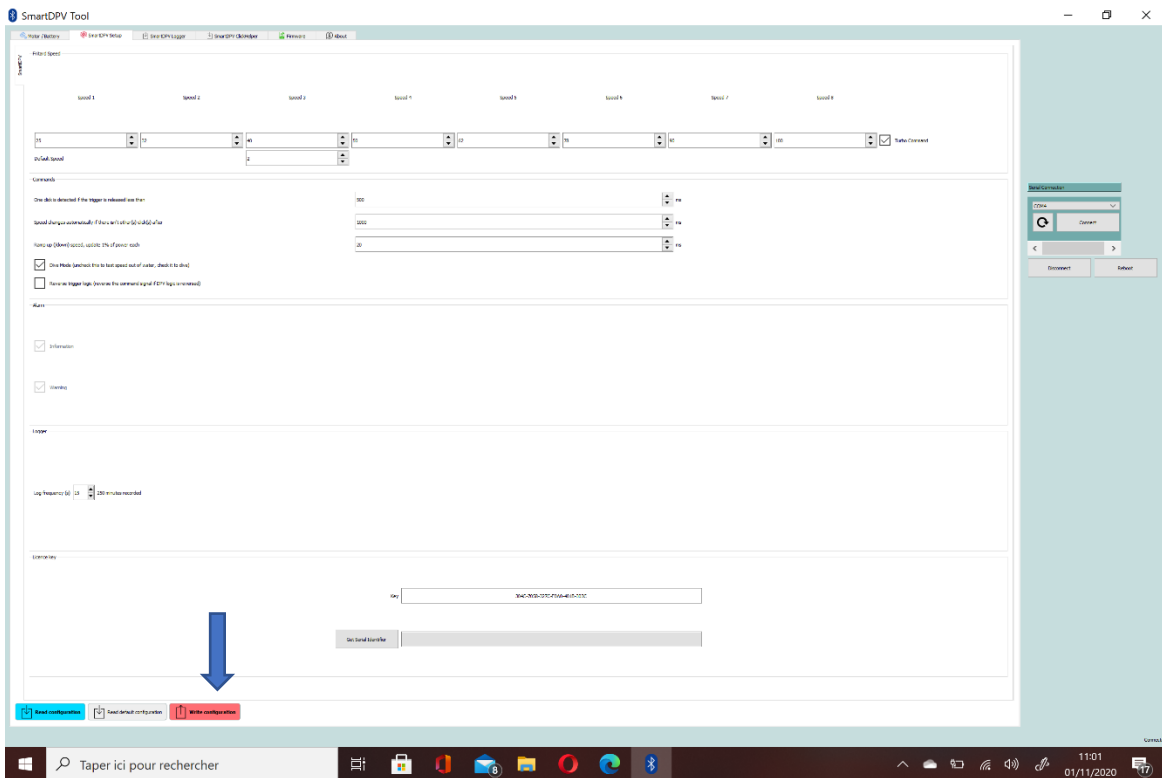
Uncheck the **Dive Mode**, that will allow you to test all speed out of the water. And then **write configuration**

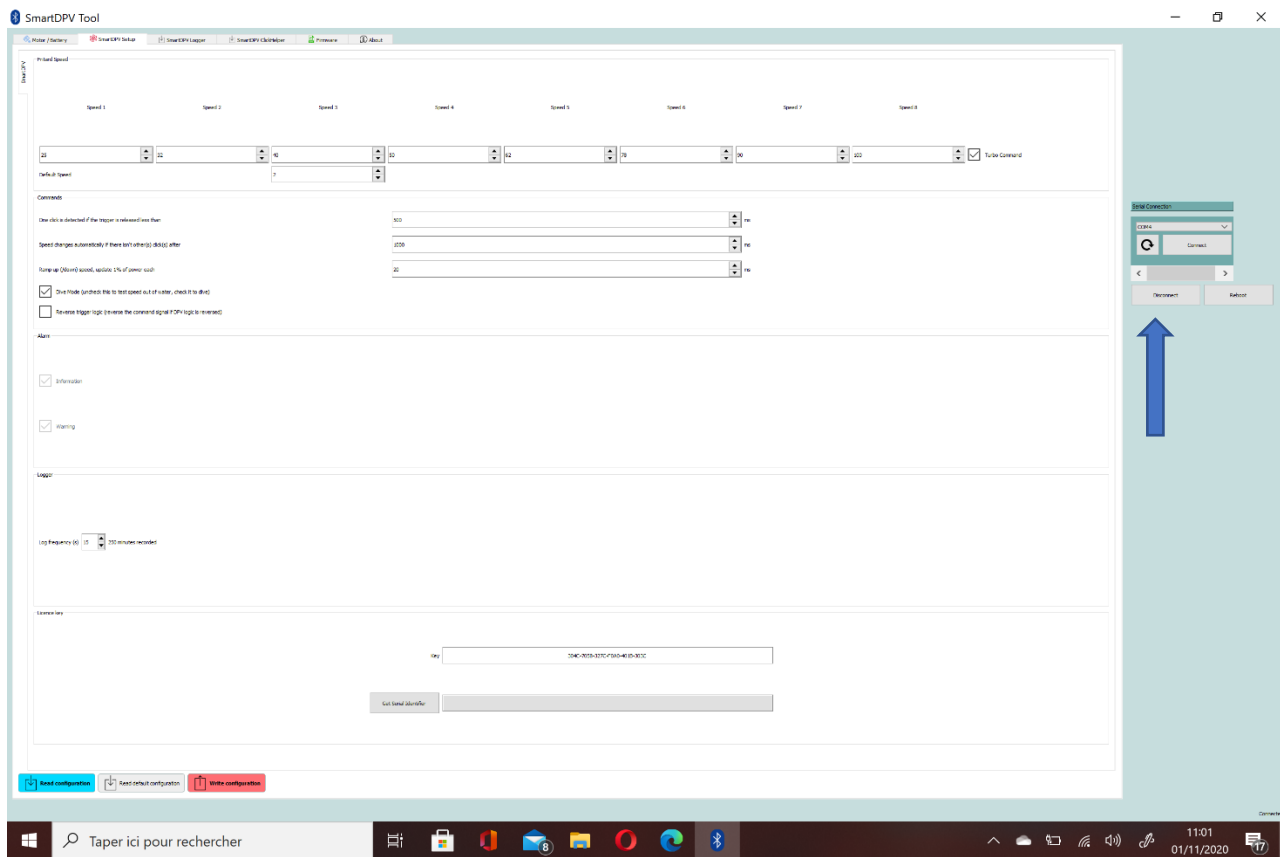




Test your speed. **Each time you modify any settings, you have to Write Configuration**

Once you have ending changing your setting, you have to check the **Dive mode** and click on **Write configuration**.





Disconnect the Controller, and unplug all wires.

Now, you can enjoy your Smart DPV

Have a nice Dive.