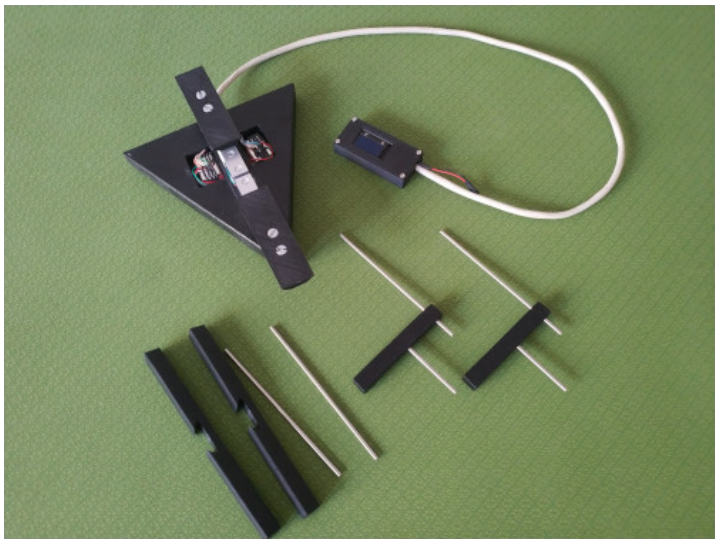
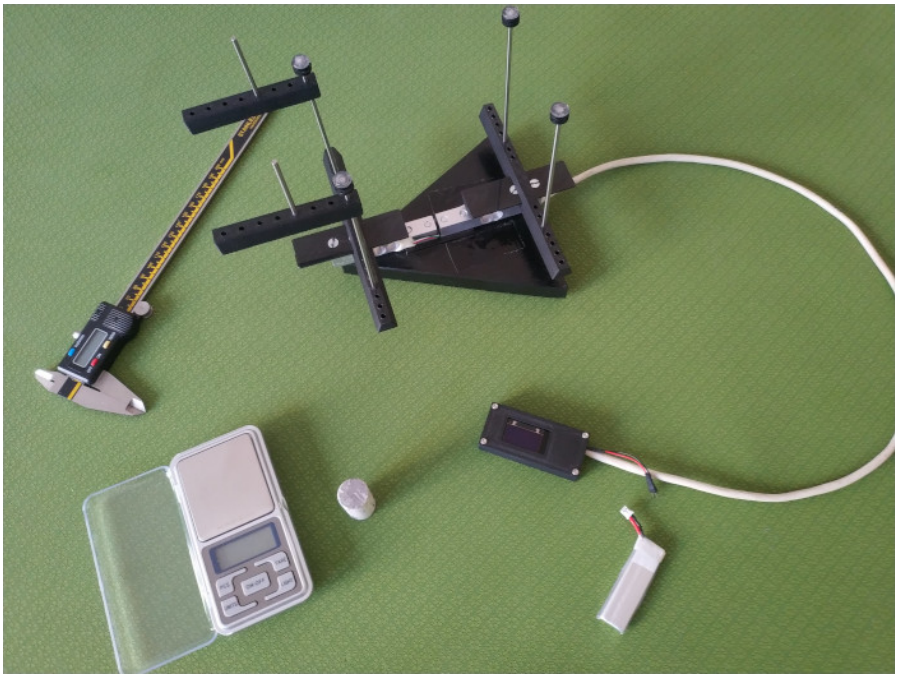
CG Scale configuration

https://github.com/guillaumef/cg-scale-wifi-oled

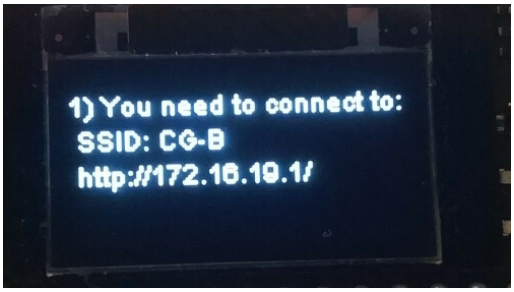


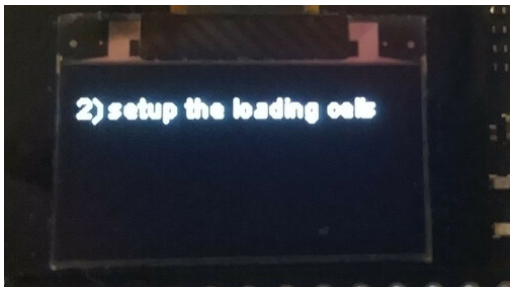


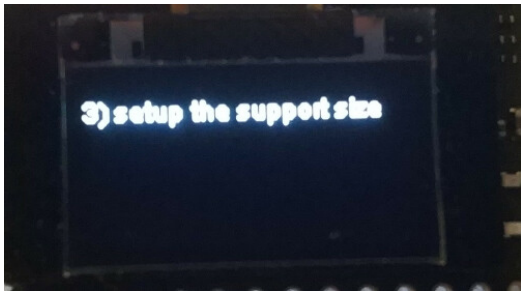
1 First run

Set the scale stable and connect the power of the ESP32.

The first run is displaying:







The ESP32 board opened a Wifi Hotspot named ‘CG-B’.

You can connect your phone/laptop on this SSID (no password).

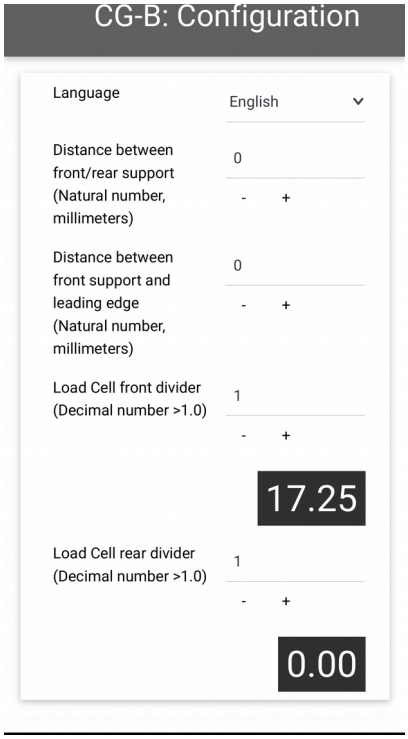
Your phone/laptop is not going to detect any internet connection, this is normal, stay connected and use your browser to go to the provided address:

http://172.16.19.1/

2 Configuration

Left-Top icon holds the menu. Select ‘Configuration’.

And this page is displayed:

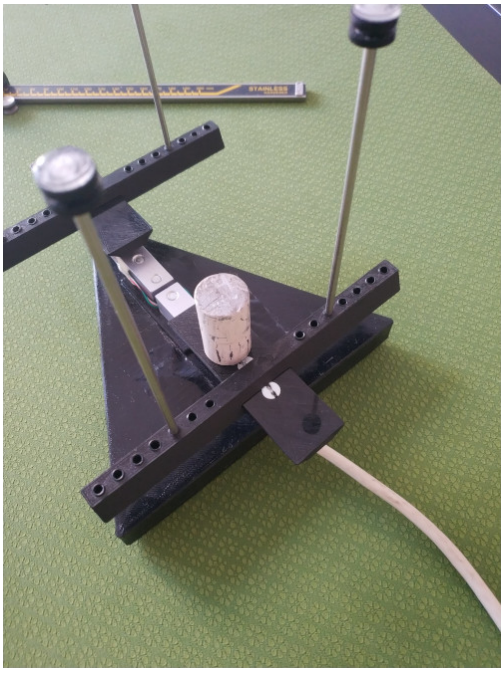


You have 4 items to configure.

The ~invariable~ ones are the Dividers. We are starting by those.

They are providing to each LoadingCell a common scale to work on. I am using the Gram metric system unit.

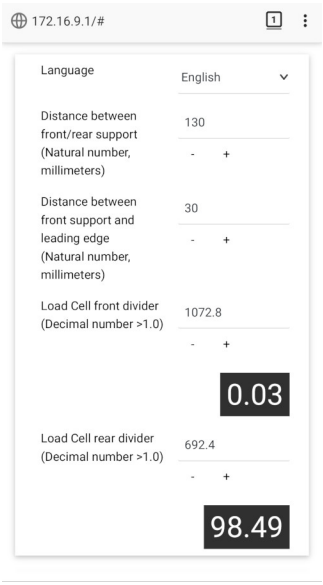
1. Take a working precision scale and measure a small heavy object (>200gr).



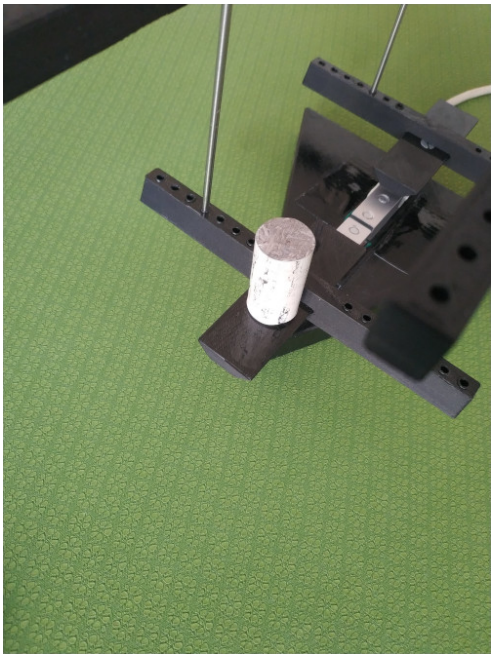
2. Put this object on a load cell.

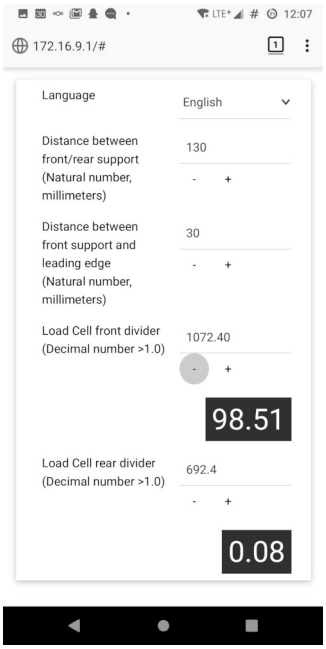
3. You should see a huge increment in the rear LoadingCell display.

   Change the divider to match the real object weight, typical values are between 500 and 1000.



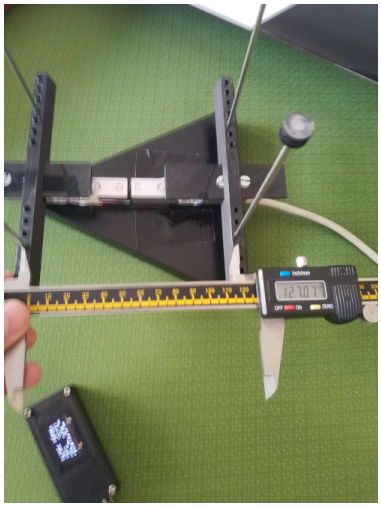
4. Make the same steps 2-3 for the front LoadingCell





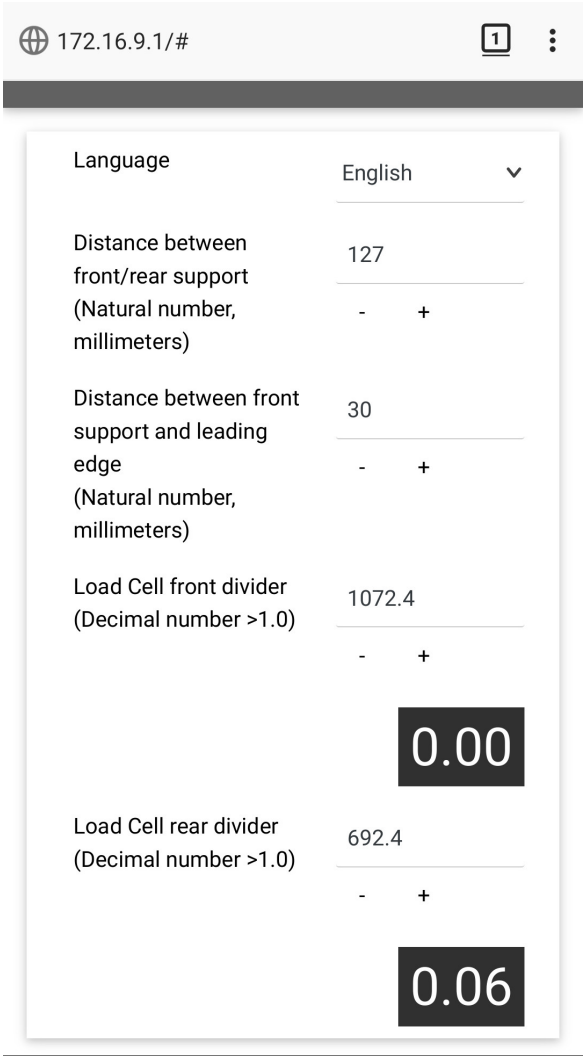
5. You can save the configuration now (Left-Top menu)

6. This step concerns the more frequent configuration items:
    1. front rod to rear rod distance:



    2. LeadingEdge rod to front rod distance, this one is easy because each hole is at 10mm from the next one.

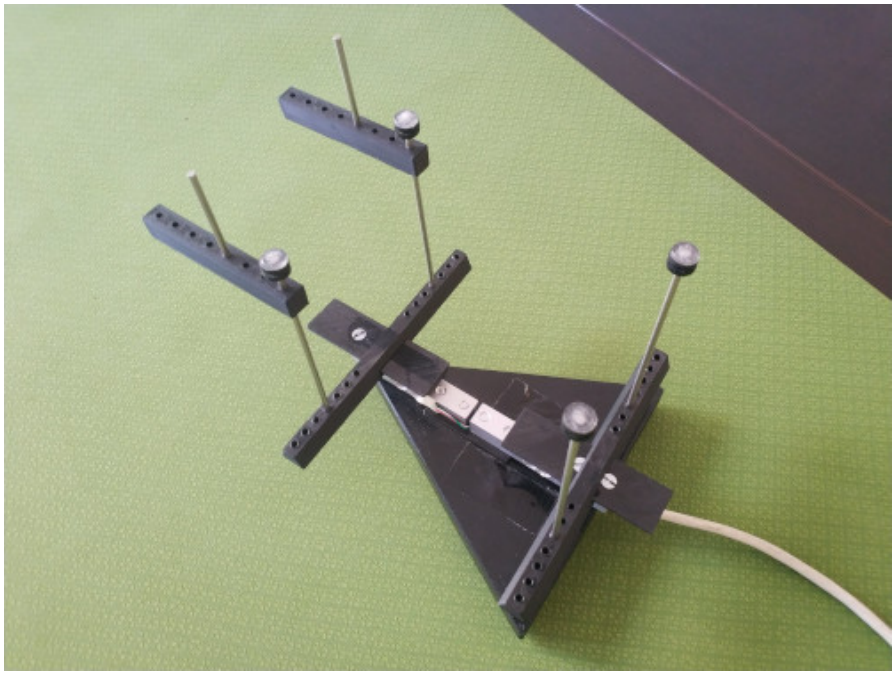
3. Report the values in the configuration and you are ready.



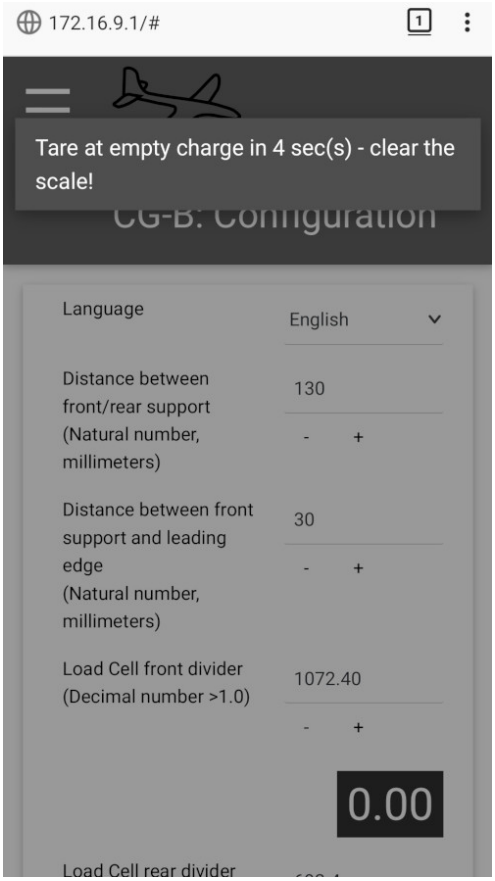
7. You can save the configuration if you want to keep those two distances or simply set them for the current runtime.

3 General: Tare

With the empty scale:



Click on the Top-Left menu and ‘Tare Empty’.



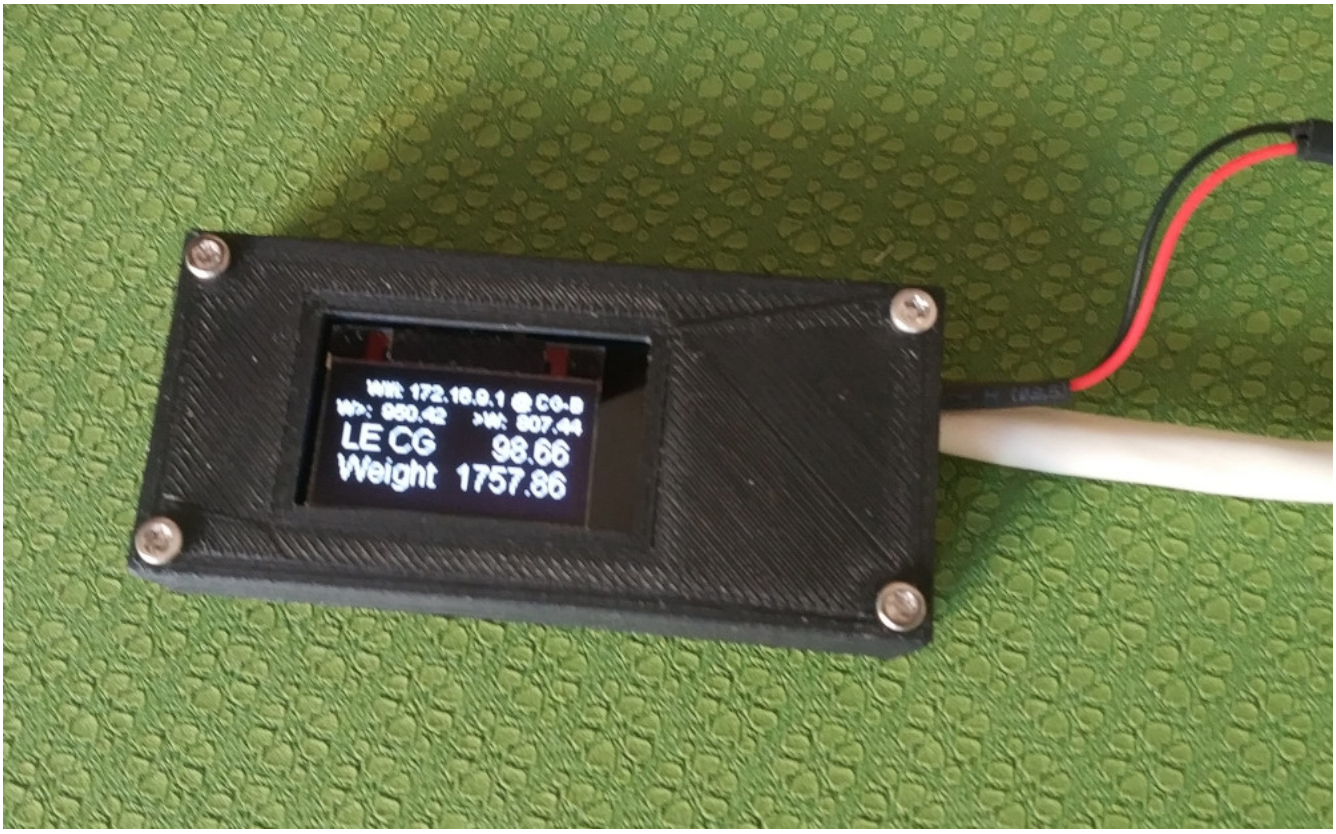
A countdown is triggered and you have 5 seconds to clear the scale.

The interface tells you when the tare is done (~ 10 seconds for the total procedure).

4 Usage

Your CG scale is now fully operationnal, you can put a model on the support rods with the LeadingEdge of the wing against the LE rod.

On the standalone OLED display of the ESP32, you will see a display like this one:



The ‘live scale’ menu item on your wifi client: