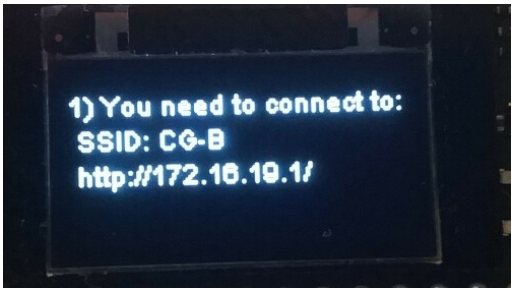
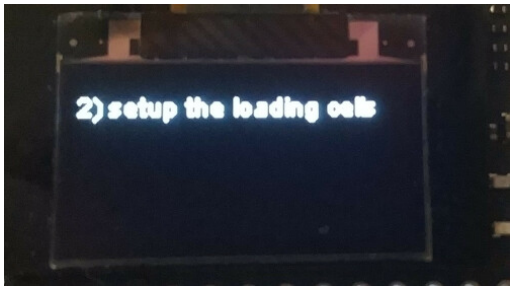
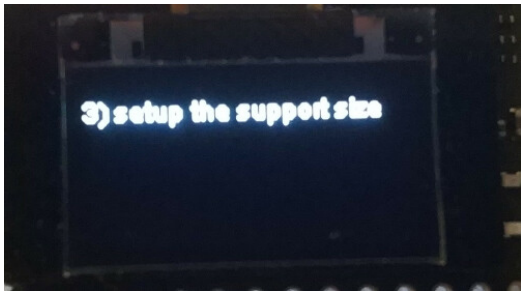
1 First run

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

The first run is displaying:







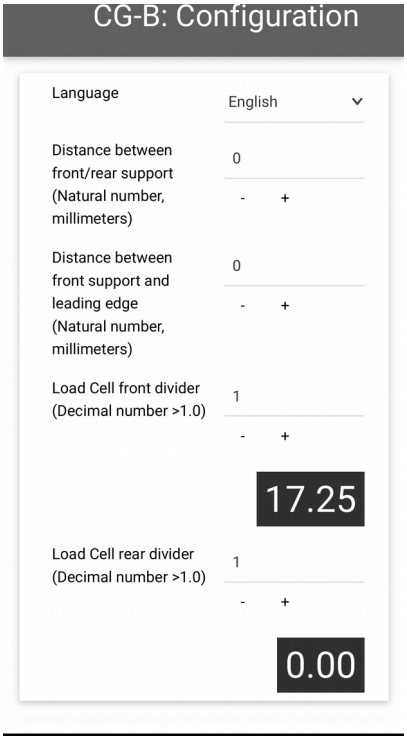
The ESP32 board opened a Wifi Hotspot named ‘CG-B’.

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



You are now in the configuration of the CG scale.

1. Apply some pressure with your hand on each load cell to verify the build. You should see the number moving in each front / rear display.
2. Take a working precision scale and measure a small heavy object (>200gr).
3. Put this object on a load cell. You should see a huge increment in the front or rear lc display
4. Increment the divider to match the real object weight, typical values are between 500 and 1000.
5. Do the step 3-4 for the other LoadCell
6. Position rod supports on the Scale and mesure precisely each distance (front/rear rods and front/leadingEdge rods)
7. Go to Top/Left menu and click ‘Save config’

Each time you change the position of the rod supports, you will need to do the step 6.

Step 7 is not mandatory but you will lose your new parameters upon reboot.

3 Tare

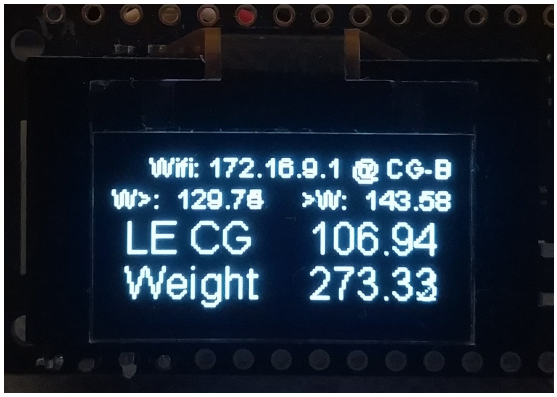
With the scale empty (but with rods and everything ready), go to the Top/Left menu and select “Tare empty”.

Tare procedure takes ~5 seconds.

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:



Or via the ‘live scale’ menu item on your phone: