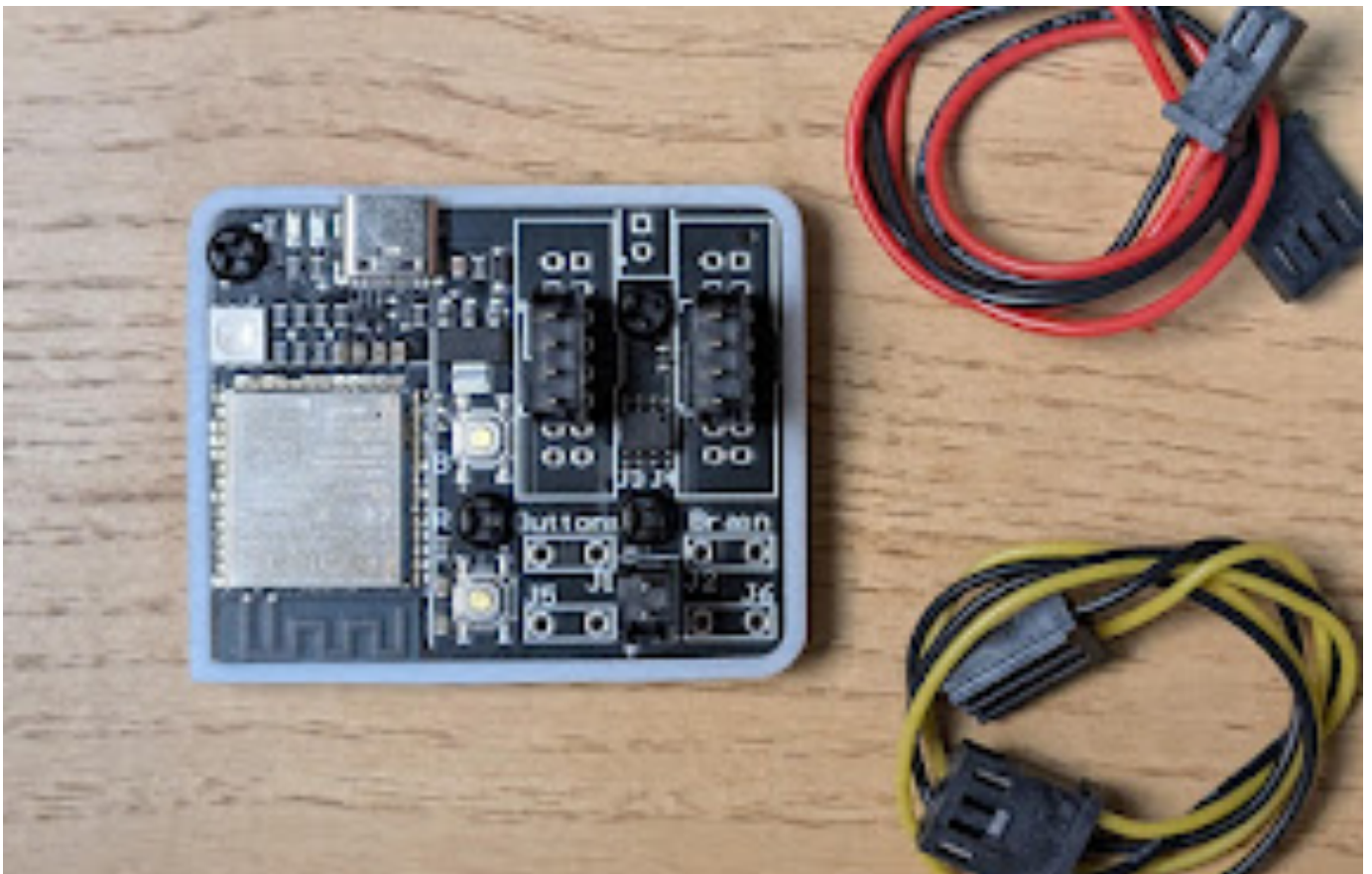


Micra

Installation

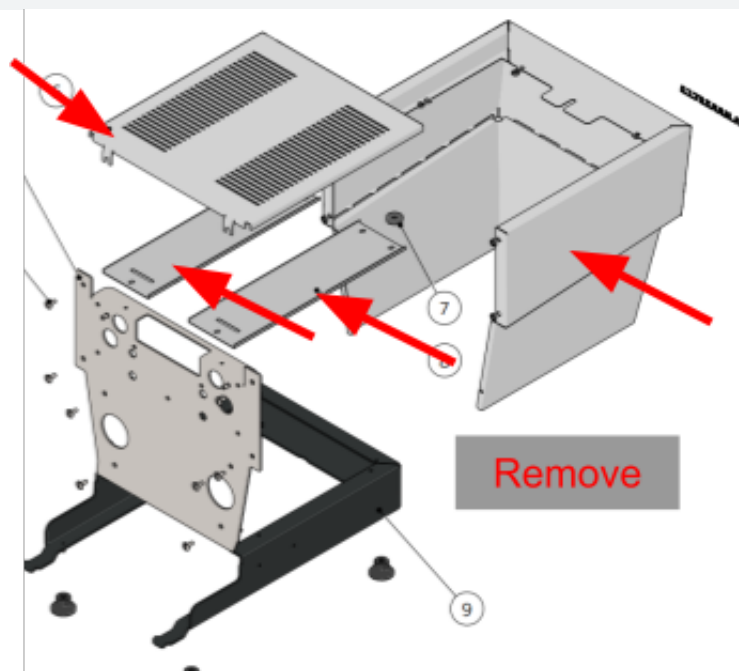


La Marzocco Micra

Set aside roughly 15 minutes to install your shotStopper. Also, by installing this device, you are acknowledging that your warranty may be voided and you run the risk of damaging your machine.

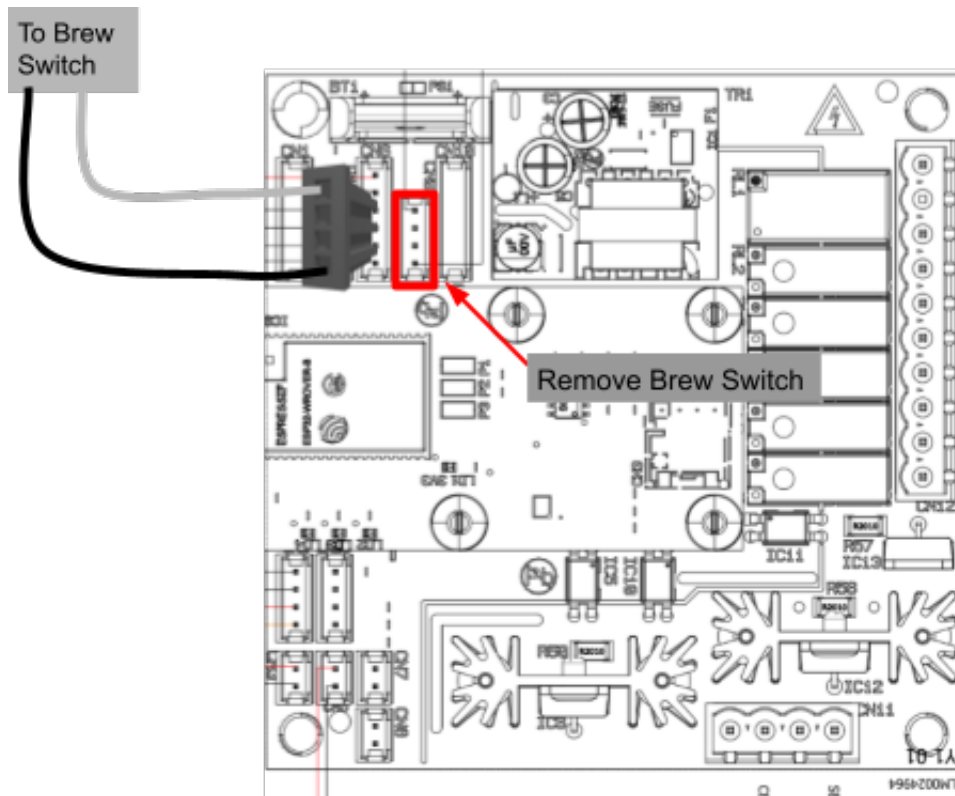
STEP 1

Remove the Top Cover, Cup Tray, and Body panels from the machine, in order to access the rear electrical panel: [Custom Linea Micra Kit Install Guide Part 1: Getting Started](#)



STEP 2

Identify the location of the 4-pin brew switch connection on the circuit board. Carefully unplug the connection.



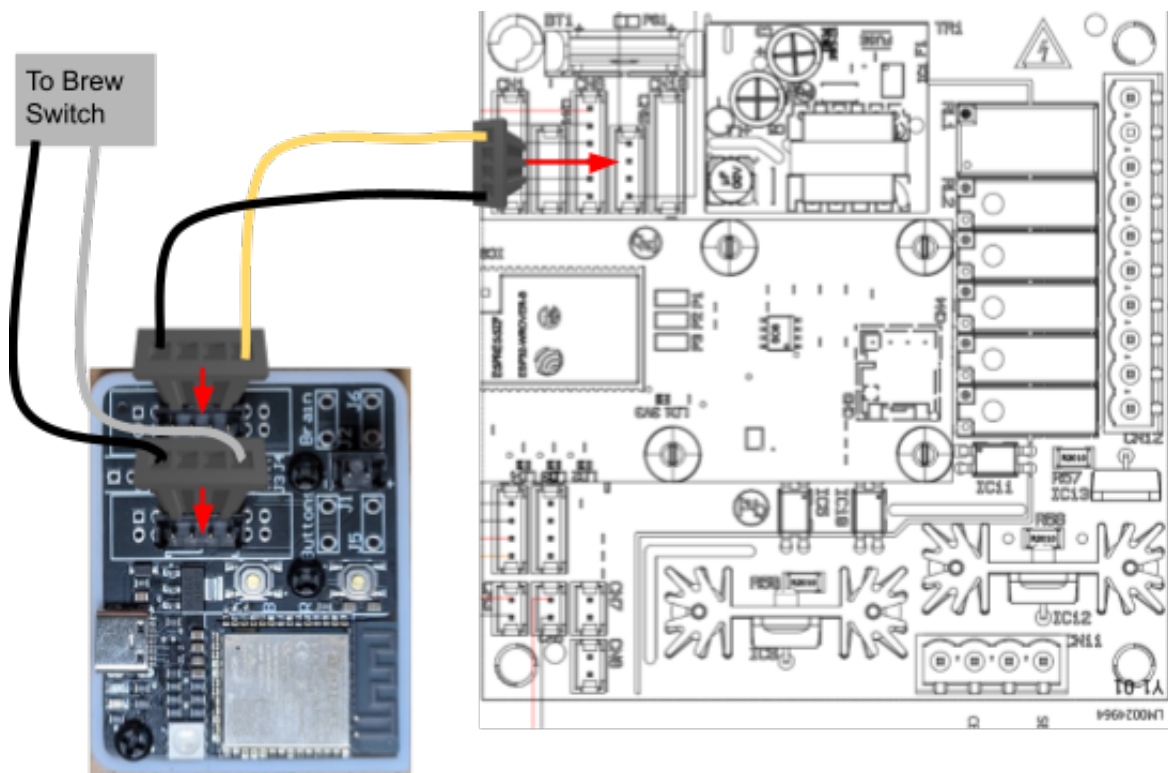
STEP 3

With the cable that was just unplugged, plug it into the 4 male pins labeled “Buttons” on the shotStopper.

You may need to remove a zip tie from the harness to give yourself enough slack.

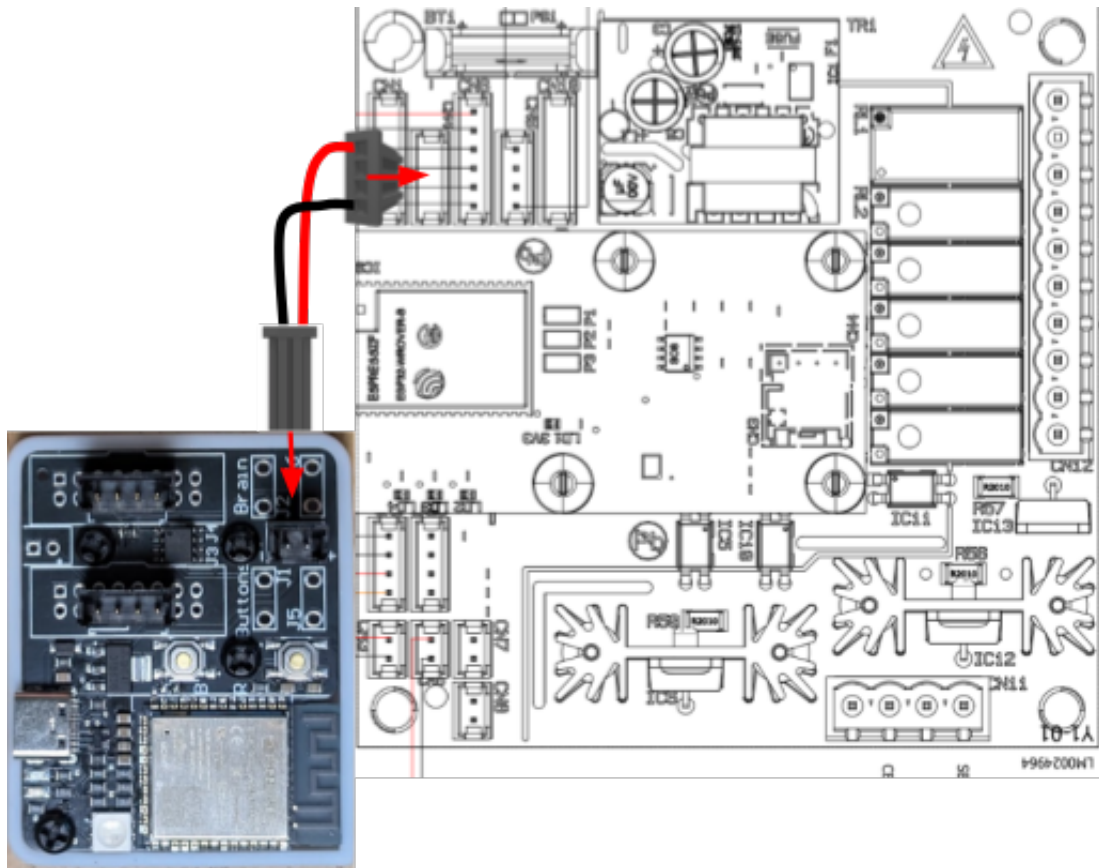
STEP 4

Plug the Yellow and black cable in the now-vacant brew switch connection on the micra’s board. Plug the other end into the 4 male pins labeled “Brain” on the shotStopper.



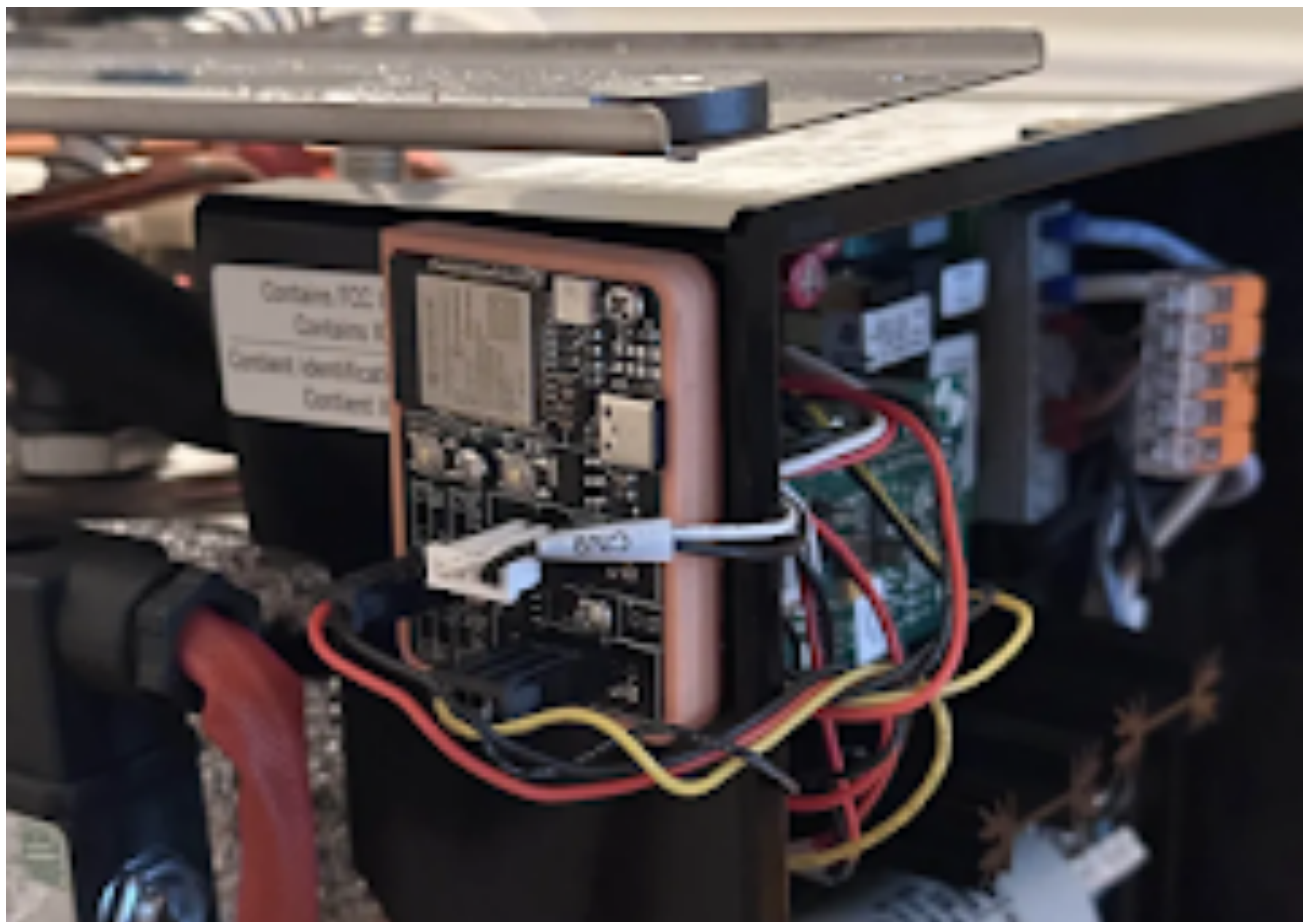
STEP 5

Plug the included power cable into the auxiliary power port (CN4) on the micra, and then into the power port of the shotStopper, located between the J1 and J2 labels.



STEP 6

Begin reassembling the machine until you get to the case. You want to mount the shotStopper to the outer case (as opposed to close to the circuit board) to avoid interference with the wireless chip on the circuit board. Confirm that your scale can connect to the board as you assemble, and adjust the location accordingly.



Reassembly the machine

Scale Setup

Bookoo

→ Ensure that your scale is in “Timer Mode”: two dots in the top left corner, as shown below.

→ To change your modes, hold the right tare button.



Brewing

Using the shotStopper



Brewing Workflow

Follow the steps closely for a seamless experience.

Tricks For All Machines

→ If you wish to **brew without brew-by-weight**, either
(1) brew with the scale off, or
(2) disable bluetooth on your scale (acaia only)

→ If you wish to **stop a shot** before the desired out-weight, simply **press down** on the scale to trick the shotStopper that the weight has been achieved.

Paddle-Style Machines (Micra)

Video Demo:



STEP 1: Prep your shot

→ With the espresso machine hot, **measure** out your ground dose with/without the scale, into the portafilter. Do not load the portafilter into the machine yet.

→ Once you are done measuring with the scale, **purge** your group as desired (not required), but for **less than 3 seconds**. Observe the scale reset when purge starts.

→ **Insert** the loaded portafilter into the group.

→ **Place your scale** and vessel under the loaded portafilter. Do not tare or reset the timer (this will be done automatically).

Note: the pyxis tare is very sensitive to movement. It is recommended to tare the pyxis by hand before starting your shot.

STEP 2: Start your shot

→ **Turn the paddle** to start the shot. Observe the scale's timer and weight both reset.

STEP 3: Let the shotStopper take over

→ **After 3 seconds** of brewing, observe the second “beep”. This is the shotStopper letting you know that the lever is no longer active, and the brew-by-weight is taking over. **Return the lever to the home position** for the rest of the duration of the shot.

STEP 4: Clean up

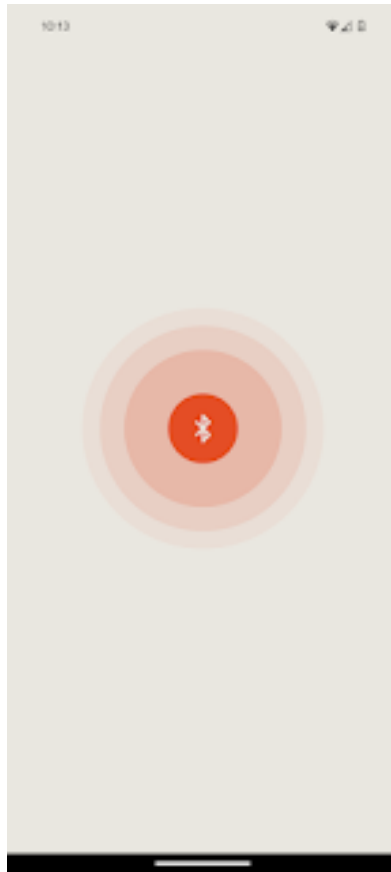
→ When the shotStopper has completed the shot, **note the final weight and time. Wait 3 seconds** for the scale to settle and the shotStopper to take note of any error in order to improve precision. Move the scale and vessel out of the way.

→ Move the scale and vessel out of the way.

→ Remove the portafilter and **purge** the group as desired. Note that this should be done for **less than 3 seconds**, lest the shotStopper will take over again. If you desire to purge the group for longer than that, turn off the scale first.

Changing the setpoint

**Changing the
setpoint**



→ The current setpoint will be shown. Drag to the left and right to automatically set a new setpoint.



LED Behavior



**No Scale
Detected**



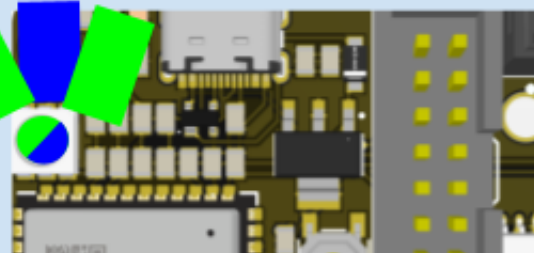
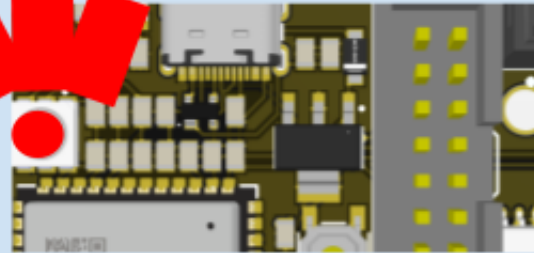
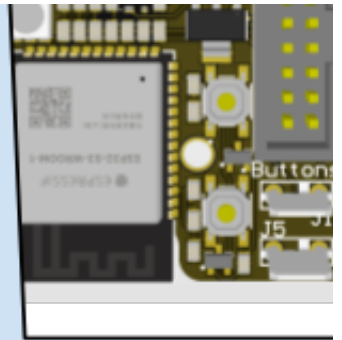
Scale Connected



**Weight Received
from Scale**



**Brewing State
Detected**



Updating the firmware

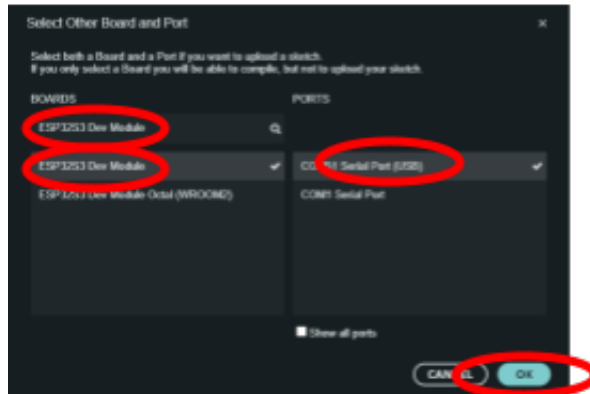
Setup Connection

1. Launch Arduino IDE on your computer.
2. Plug the shotStopper into your computer. Observe the top device in the drop down menu in the top left corner:



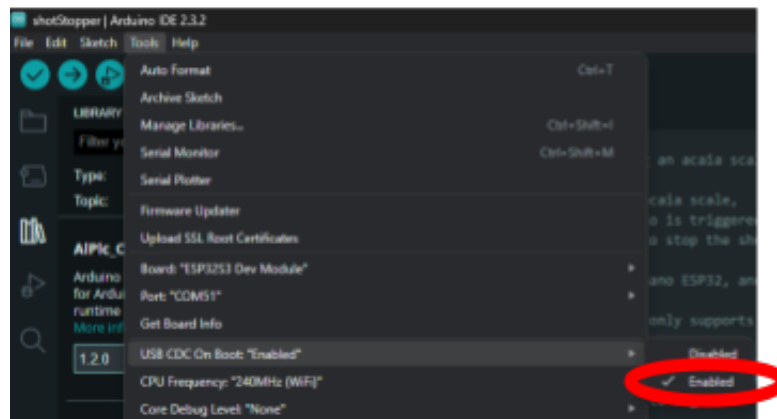
3. If this is the first time plugging in a V3 device into your computer, you will probably see something other than “ESP32S3 Dev Module”. Click the Edit button shown above. Otherwise, skip to Step 6.
4. Search for the aforementioned device name and Click OK.

V3 Only:



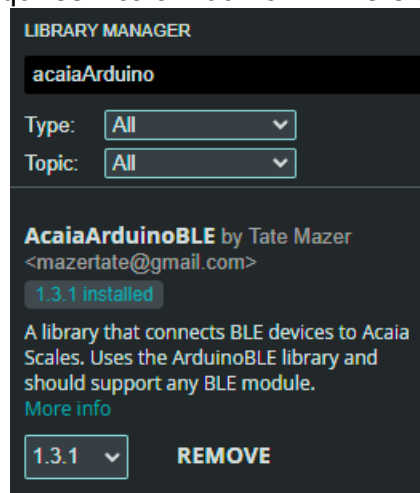
5. Under “Tools”, be sure to set “USB CDC on Boot” to “Enabled”

V3 Only:

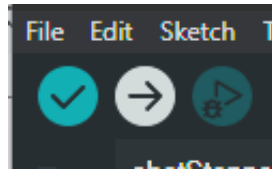


Setup Firmware

6. Click tools / manage libraries
7. Search for “AcaiaArduinoBLE” and install the latest version in the drop down menu. Note that V3 hardware requires AcaiaArduinoBLE version 3.0.0 or newer.



8. Now click File / Examples / AcaiaArduinoBLE / shotStopper.
9. In the code, ensure `#define MOMENTARY` is correct for your machine. If you have a momentary switch such as a GS3 or Silvia Pro, change `false` to `true`
10. Click the → icon on in the top left corner to flash the shotStopper with the new code

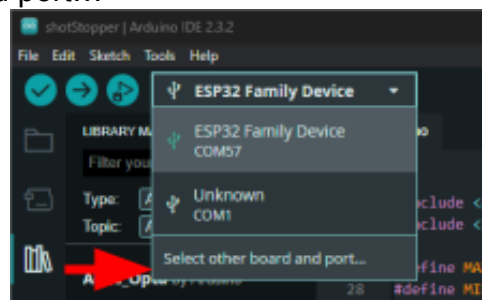


11. When the update is complete, you should observe the RGB status LED turn on (red if your scale is off).

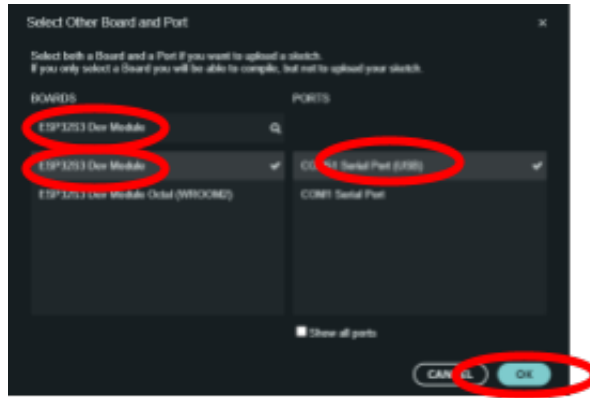
V3 Bootloader Setup:

If you are building a V3 from scratch, you must first install the bootloader to the device:

1. While holding the “B” Bootloader button, plug in the shotStopper into your computer. Then release the button.
2. You should see “ESP32 family device” in the top left corner of the Arduino IDE. Click “Select other board and port...”



3. Search for “ESP32S3 Dev Module” device name and Click OK.



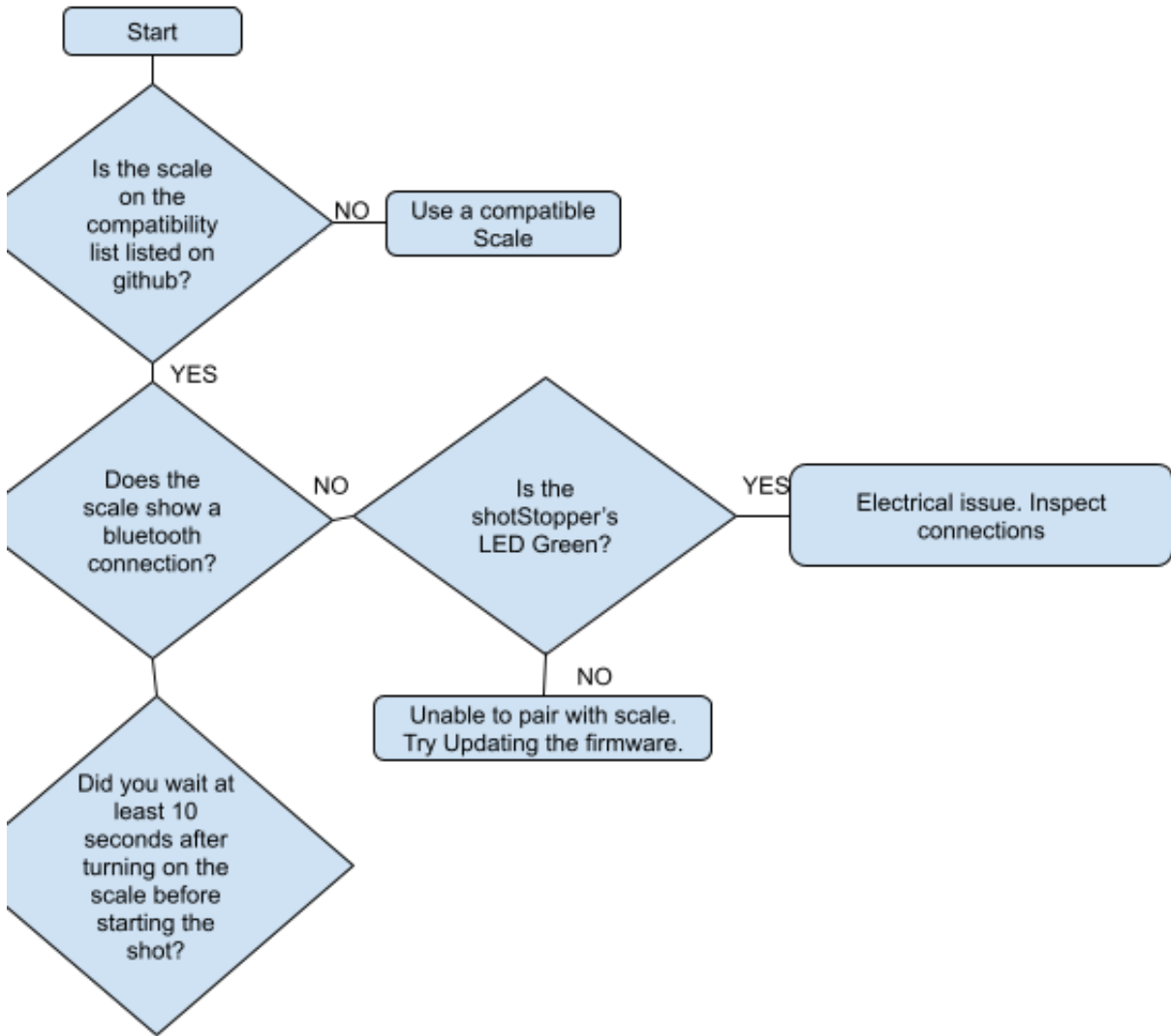
4. Under “Tools”, be sure to set “USB CDC on Boot” to “Enabled”



5. You are now ready to Flash firmware to the device.

Troubleshooting

Symptom: Scale won't tare/start timer



Electrical issue. Inspect connections