

Equipment Instructions Sheet



RGB Torch

- Press on the white button.
- Press again in order to see a different light color.



Infrared (IR) Camera

- Please handle the IR camera with care, as it is fragile.
- Hold the button on top till you see the screen light up.



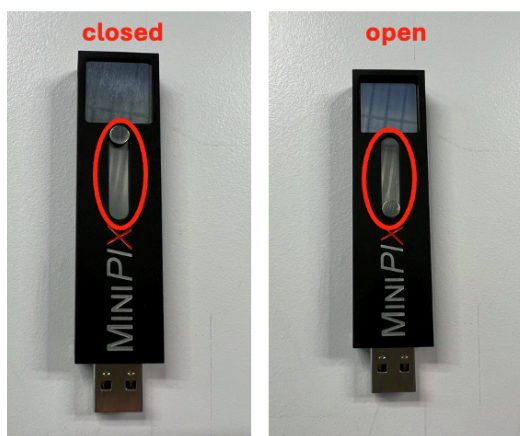
Ultraviolet (UV) Torch

- Always put on your safety goggles when you use the UV torch!
- Always shine the torch downwards, away from other participants.
- Press the button on the back of the torch.



Geiger Counter

- Please handle the Geiger counter with care as it is very fragile.
 - Do not touch the detector window at the top.
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- Press the power button once; the screen should light up.
 - Make sure the head of the detector is turned to the “ $\alpha+\beta+\gamma$ ” side, as shown in the photos.
 - **Counting mode:** Press the “CPM/CPS” button three times, until the “pulse” (\square) symbol lights up on the screen. Now, each time a particle is detected, the count will increase and you will hear a “beep”.
 - **Measurement:** Hold the counter in your hands and place the object you want to measure close to the detector window on the top.
 - **Reset measurement:** Please reset the counter every time you want to start a new measurement. To do so, press the pulse button a few times, until the count is zero again.
 - Press the upper left button twice to turn it off.



Pixel detector MiniPIX-EDU

- Never touch the sensor with your hands or with any other object!
- Plug the pixel detector in one of the laptop USB ports.
- Keep the detector window closed (left image) whenever you are not taking a measurement.
- Slide the detector window (right image) before starting a measurement.

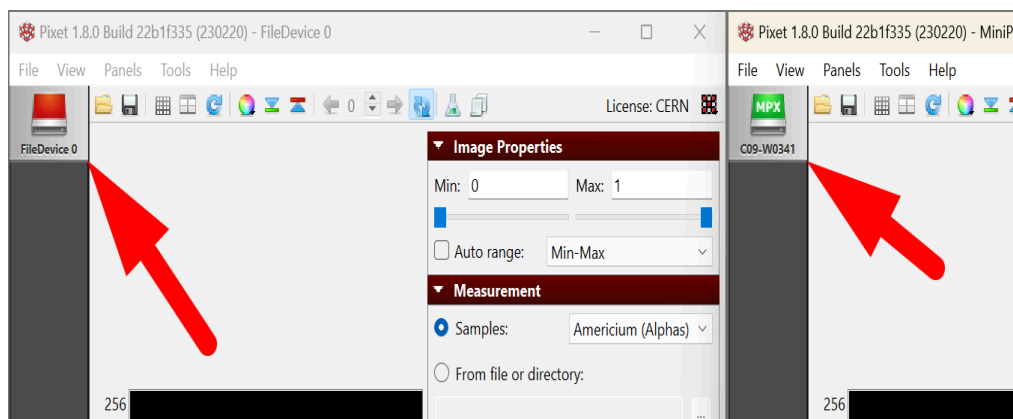
Software instructions

Start the laptop (LOGIN local user: user, password: Tsp@2023)

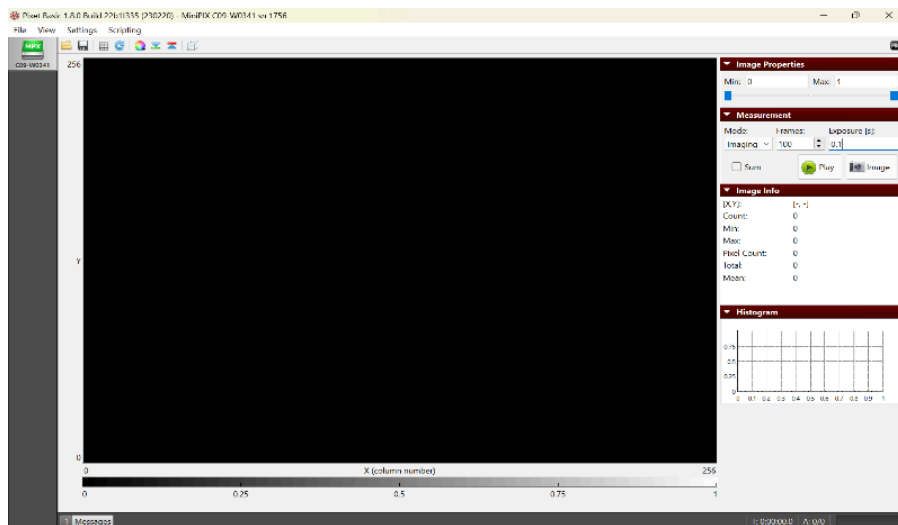
Plug in the detector in the USB port.

Open the PixetPro software.

Check the Detector Connection: In the top-left corner, ensure that the status indicator is green. If it appears red, it means the software doesn't recognise the detector. Try reloading the software or reconnecting the detector. It should be like the right screenshot below:



Go to Tools → Pixel Basic, and enter fullscreen. Your screen should look like this:



Open the lid of the detector. **Please keep it open only when you are actually measuring and make sure that you do not touch the surface.**

In the Measurement tab on the right, set:

- Mode to "Tracking".
- Frames to 100.
- Exposure to 1 s.

Click on "Sum".

Press "Play" to take a new measurement.

Wait until the number of frames is completed (shown at the bottom right corner).

Then press "Stop" to end your measurements.

