Installation Instructions

APSpec2148 driver python3 installation instructions.

APSpec interacts through USB through pyftdi package in Ubuntu/Linux. Please go through the installation section of pyftdi driver and install pyftdi package.

$pip3 install pyftdi

Please note, as outlined in the pyftdi installation section, On Linux, you also need to create a *udev* configuration file to allow user-space processes to access to the FTDI devices. After you have successfully installed pyftdi.

Download APSpec1910_latest.deb from www.aipplica.com/downloads.html

$pip3 install APSpec-0.1-py3-none-any.whl

Now you are ready to use the APSpectrometer. For plotting and viewing captured spectral data,these scripts use matplotlib. Please ensure it is is installed.

$pip3 install matplotlib

Invoke Python3 and follow the sequence of commands as provided in **DemoA.py** or if you use jupyter notebook, invoke jupyter notebook with **DemoA.ipynb** These files are provided in Download section on Aipplica website.

For DemoA.py executable file you may invoke the python3 executable as follows, but first read through the comments to understand that you need to block the optical input when collecting the dark signal and illuminate the slit/fiber when collecting the light spectra at the right steps. The scipt will open the plot and display the captured signal. It will proceed to the next step after you close the graphics plot. Once you understand the script, you may customize/modify as needed.

$./DemoA.py

For DemoA.ipynb you may execute in jupyter notebook, Please read through the comments to understand the flow.
$jupyter notebook DemoA.ipynb

By this point you have instantiated a spectrometer module and captured the dark signal data. You may turn on the light source you your choice (Colour LEDs,LED torch light,light bulb and capture its spectra a plot it and process the captured spectrum it as you please.