

Make sure there is EPOS studio installed in your system. The initialization of the controllers and motors system will be held inside the EPOS studio.

The controller used in the project is EPOS4 24/1.5 motion controller. The user should create a project using the EPOS4 setting provided in the EPOS studio. If you connect the controller correctly, there should be 2 controllers show in the Workspace. There is possibility that your OS can't figure out these controllers, you can add them by using device catalog.

The next step is to start up the system by putting in the correct values for controller and motor. Followings are the link for finding the specific values for the motor:

- Motor (118730)
 - [Compact Drives, Motors, Gears, Sensors | maxon group](#)
- Spindle (424798)
 - [Compact Drives, Motors, Gears, Sensors | maxon group](#)
- Encoder (201937)
 - [Compact Drives, Motors, Gears, Sensors | maxon group](#)

Make sure you configure 2 controllers.

Next step is to Regulation tuning, there is auto tuning in the pop up window. Make sure you tuned motor on each controller.

After this, you can close the EPOS studio and head to python. Inside the python code, you can find a commented line:

```
epos.VCS_OpenDeviceDlg(byref(pErrorCode))
```

This line will bring a window to show which COM port the controllers are using, obtaining those port numbers and change them in the next 2 lines by changing the “USB#” argument. Then you are ready to run the written functions by running the main.