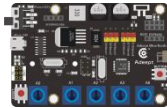




## Lesson 4 How to use the OLED

In this lesson, we will learn how to use the OLED.

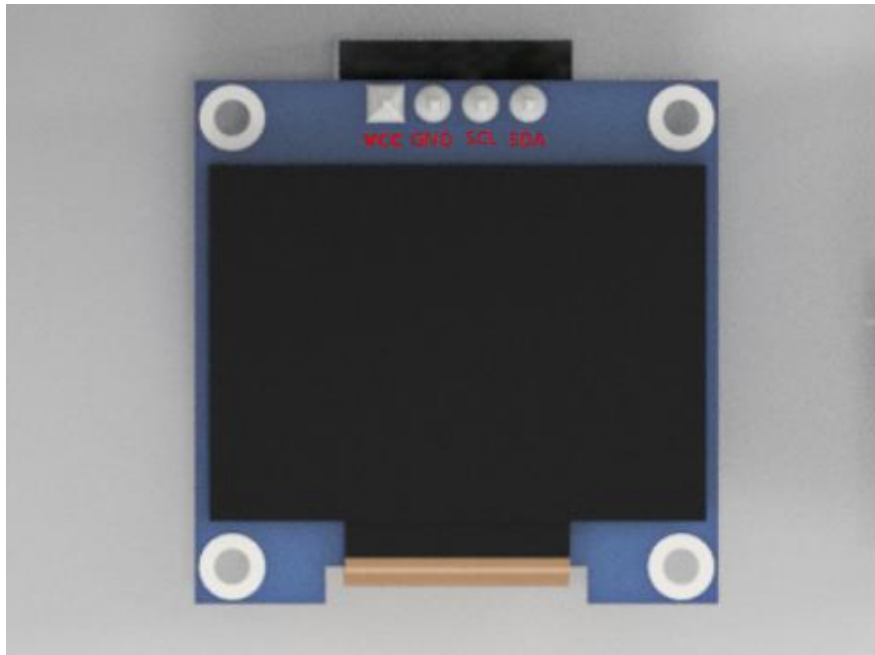
### 4.1 Components used in this course

Components	Quantity	Picture
Adept Arm Drive Board	1	
Micro USB Cable	1	
OLED screen	1	

### 4.2 Introduction of OLED Screen

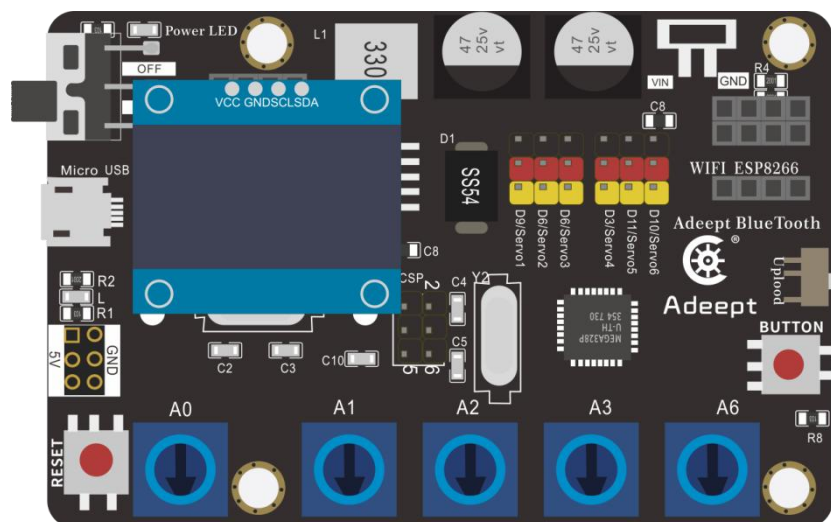
OLED (Organic Light-Emitting Diode), also known as organic electric laser display, organic light emitting semiconductor (Organic Electroluminescence Display, OLED). OLED is a kind of current-type organic light-emitting device, which produces light by the injection and recombination of carriers, and the luminous intensity is proportional to the injected current. The Alter robot uses an OLED screen to display the expressions or some parameters of the robot. OLED Screen is a commonly used module on robot products. Due to the black non-luminous feature of OLED Screen, this type of screen has extremely high contrast. Even if the ambient light is strong, you can see the information on the OLED Screen clearly, and the power consumption is relatively low.

When using the OLED Screen, you need to connect it to the OLED interface on the Adept Arm Drive Board.



### 4.3 Wiring diagram (Circuit diagram)

You need to connect it to the OLED interface on the Adept Arm Drive Board. As shown below:



### 4.4 How to use the OLED


1. Before performing the following steps, make sure that the "[block\\_py.ino](#)" program has been uploaded. (If not, please upload the "[block\\_py.ino](#)" program)

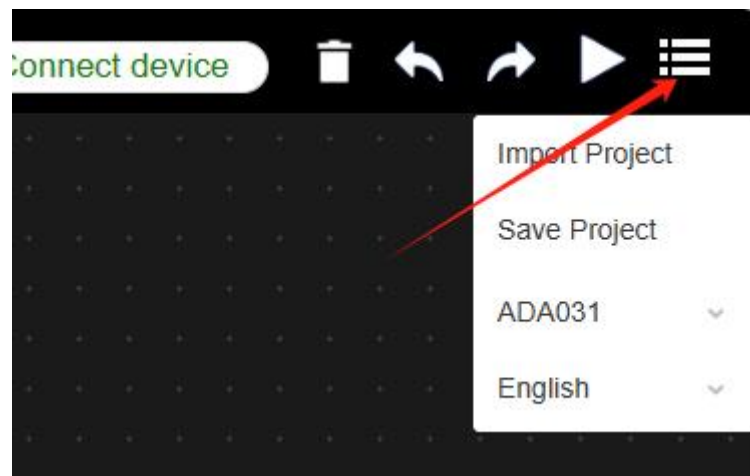
2. Connecting GwBlock graphical editor. (See” 1 Building the GwBlock Graphical Programming Development Environment”)

[http://www.adeept.com/gwblock/?hd\\_mo=ADA031](http://www.adeept.com/gwblock/?hd_mo=ADA031)

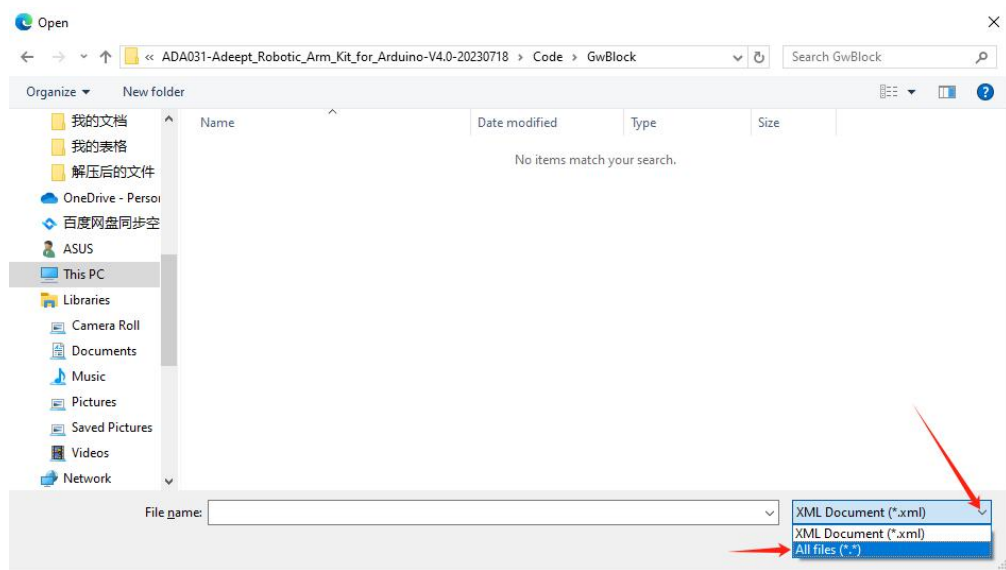
3. Import the program in GwBlock

3.1 After successfully connecting to the GwBlock graphical editor, you need to

click the drop-down button  in the upper right corner, as shown bellow:

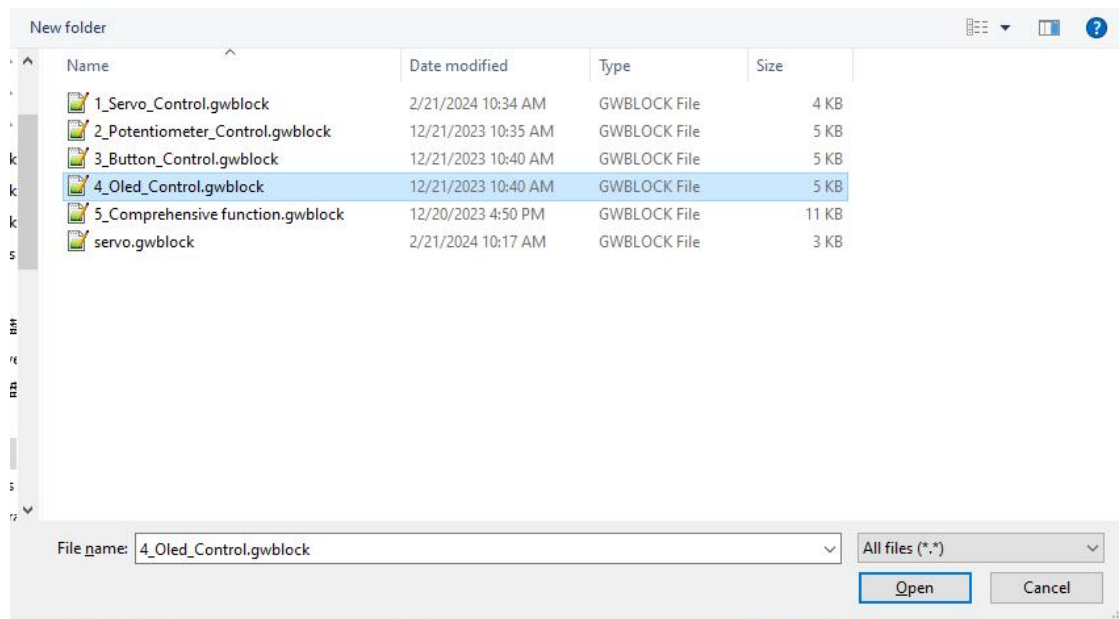


3.2 Then click **Import project** file to import the external project file. After opening it, a blank page will appear. You need to make a modification in the lower right corner and select All Files, as shown below:

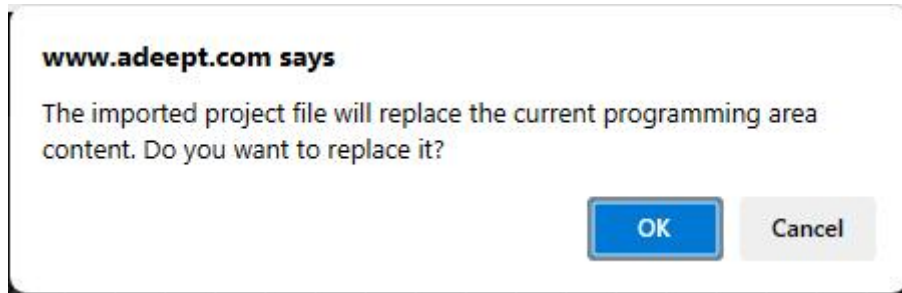


3.3 Then the folder will be displayed and find the user folder


"Adept\_Robotic\_Arm\_Kit\_for\_Arduino-V4.0\Code\GwBlock". Open the GwBlock folder and select the "[4\\_Oled\\_Control.gwblock](#)" file. This file is our graphical code program for this lesson. Click "Open" in the lower right corner.



3.4 Click OK.



## 4.5 Run

Click the button  in the upper right corner, after successfully running the program, you can see the OLED screen showing “Adeept”.