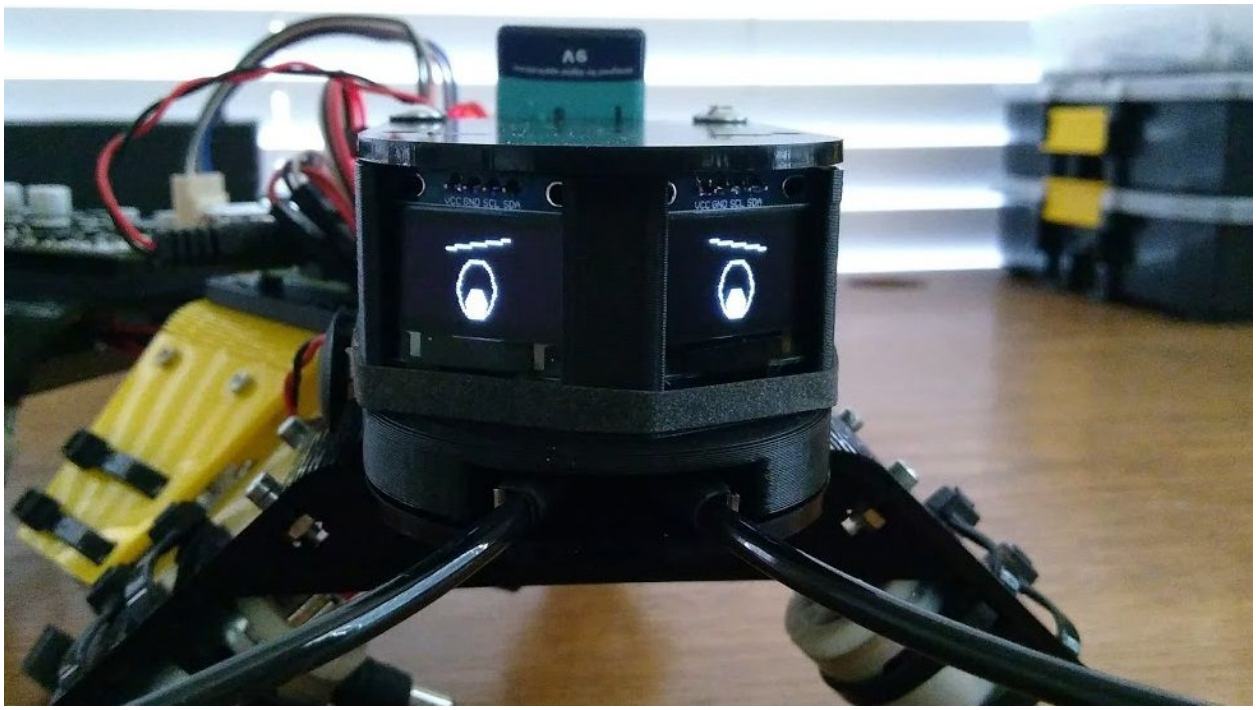
Installing the OLED Eye Kit

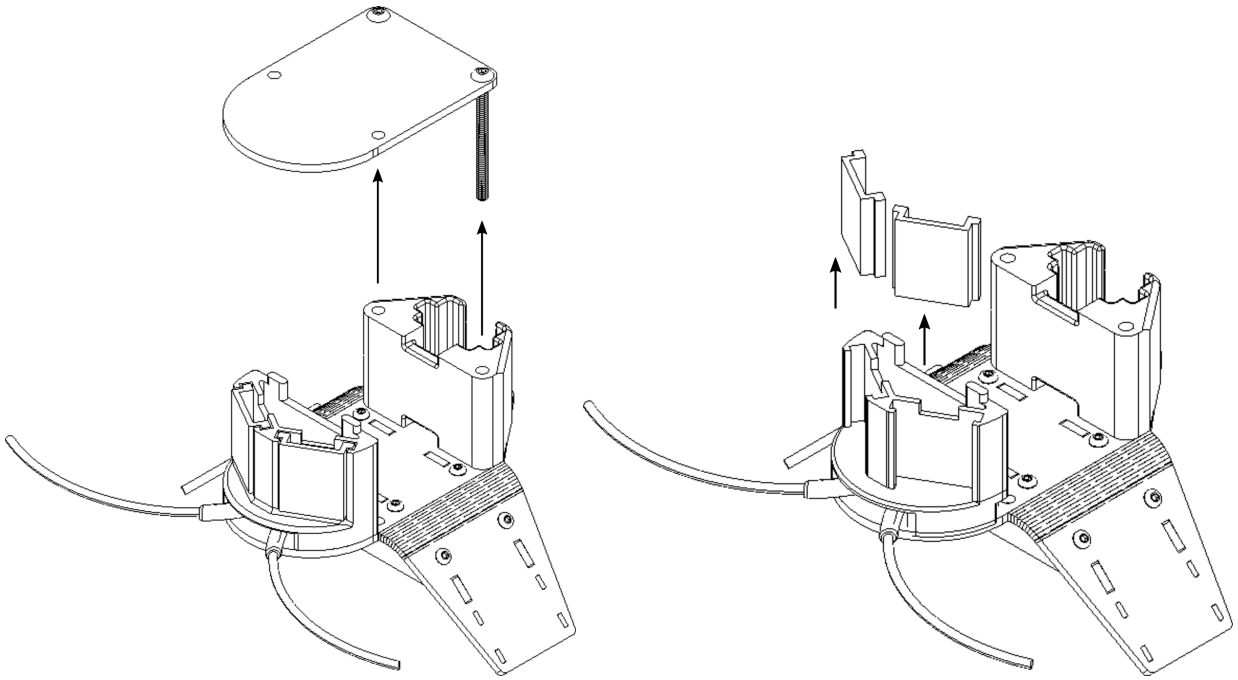


Parts Required:

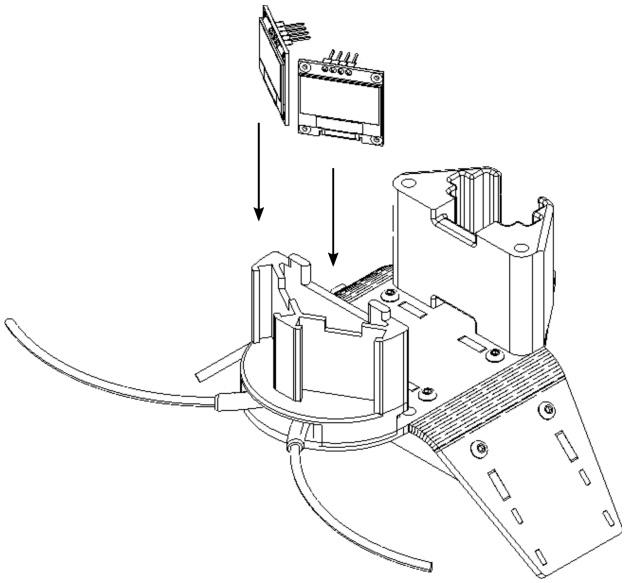
1 - Assembled Make-A-Pede
1 - OLED eye kit including:
    2 - 0.96" OLED Screens
    8 - 30cm F-F Jumper Wires

Installation and Wiring

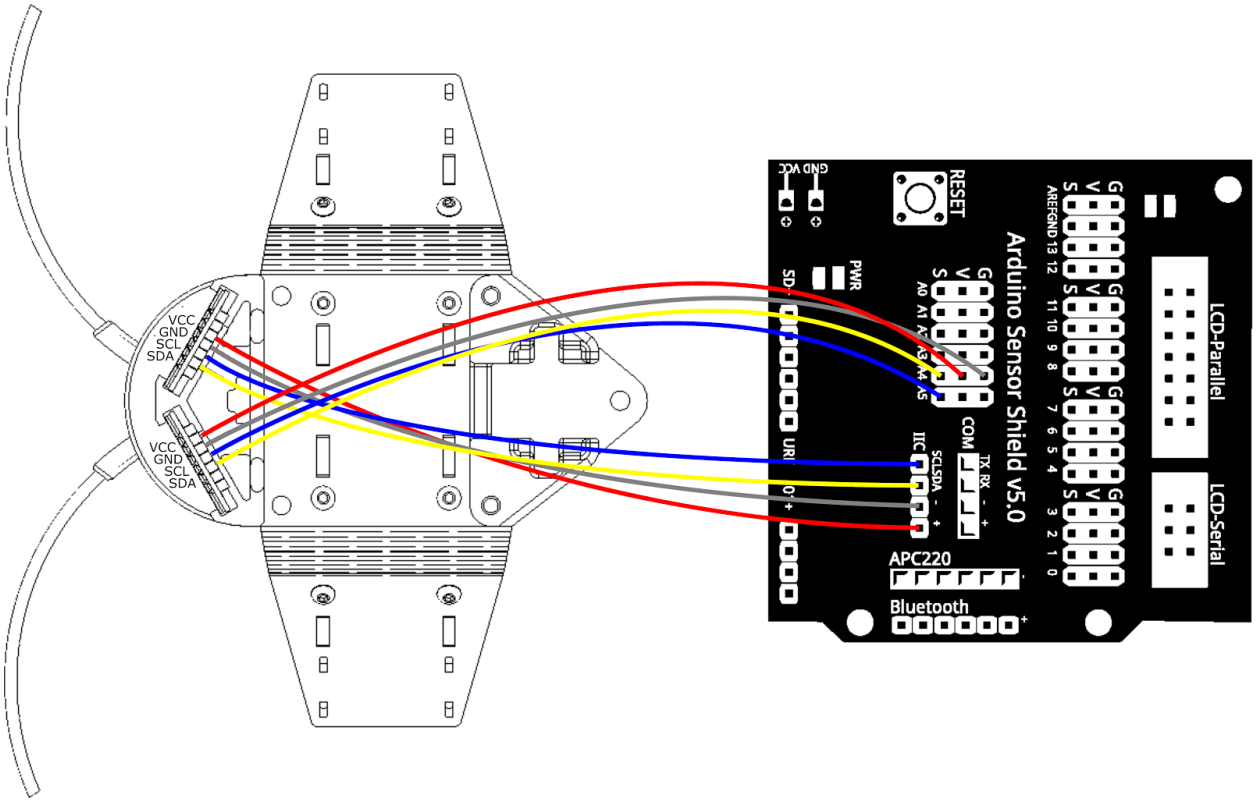
Start by removing the top cover of the head segment and sliding the sensor blanks out of the front sensor holder.



Slide the two OLED displays into the front sensor holder.



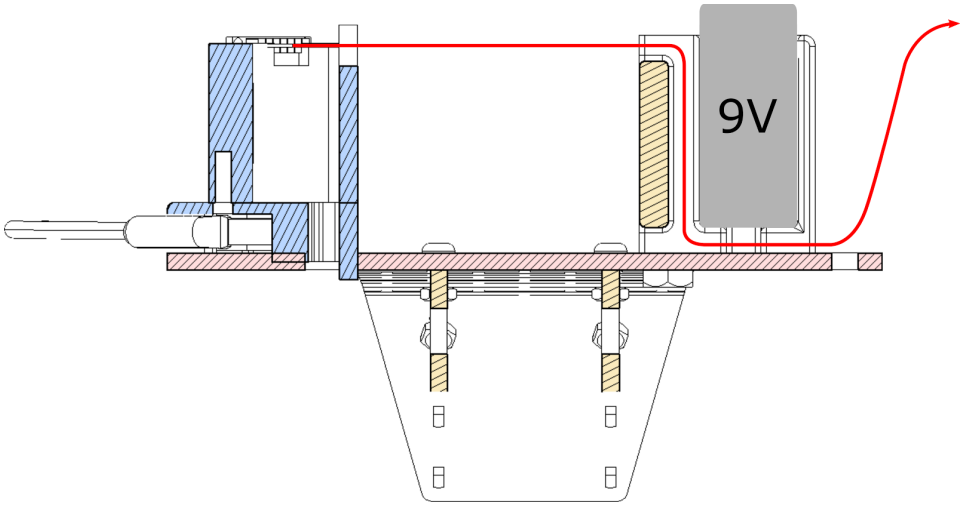
Connect the displays to your Make-A-Pede as shown below. The pins on the displays will be labeled on the backs of the PCBs.



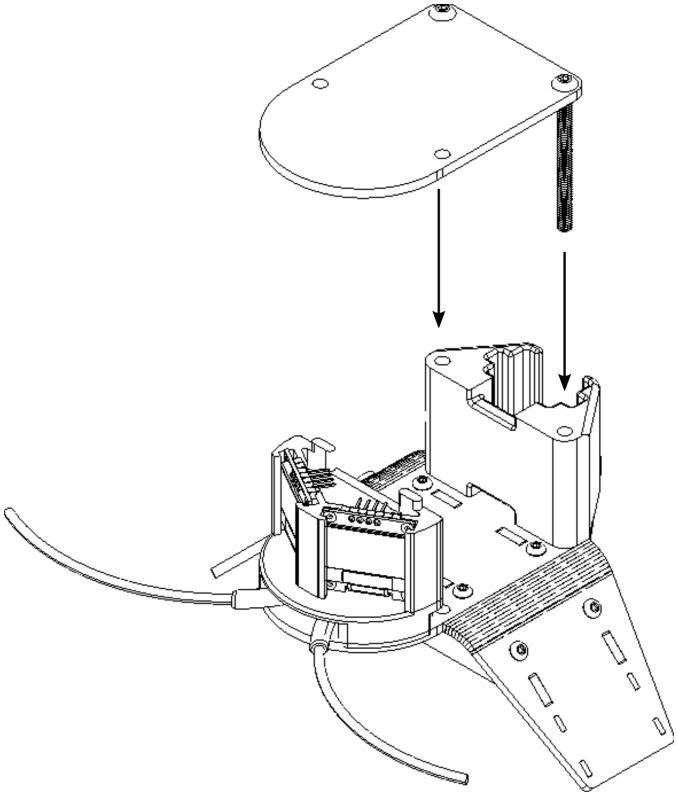
Connections are as follows:

OLED 1	OLED 2
VCC → IIC +	VCC → A4-V
GND → IIC -	GND → A4-G
SCL → IIC SCL	SCL → A5-S
SDA → IIC SDA	SDA → A4-S

Route the wires under the 9V battery following the path shown below.



Reinstall the head segment top cover.



Testing

Open File Explorer and find the MakeAPede.h file. It is usually found at Documents > Arduino > libraries > makeapede > src > MakeAPede.h. Open this file in Notepad or another text/code editor. Uncomment "//#define USE_DISPLAY" (line 25) by removing the two slashes. Save and close the file.

Plug your Arduino into your computer. Open the RemoteControlOLED.ino program by opening the Arduino IDE and going to File → Examples → Make-A-Pede → RemoteControlOLED. Load the program onto your Arduino.

Turn on the Make-A-Pede and connect to it with the Make-A-Pede app. As you drive the Make-A-Pede, the eyes will blink periodically and will close if one of the antennae is pressed.

Programming

The sensor shield connects the two displays into the same I2C port on the controller, so they will always display the same image. There are two commands available in the Make-A-Pede library to control the displays:

```
showEyes();
```

showEyes updates the displays to show open eyes.

```
showClosedEyes();
```

showClosedEyes updates the displays to show closed eyes.

The displays are controlled using the Adafruit GFX library, so any commands from that can also be used. Note that the displays are monochrome, so changing the color of displayed objects is not supported. For more information, see:
https://learn.adafruit.com/adafruit-gfx-graphics-library.