

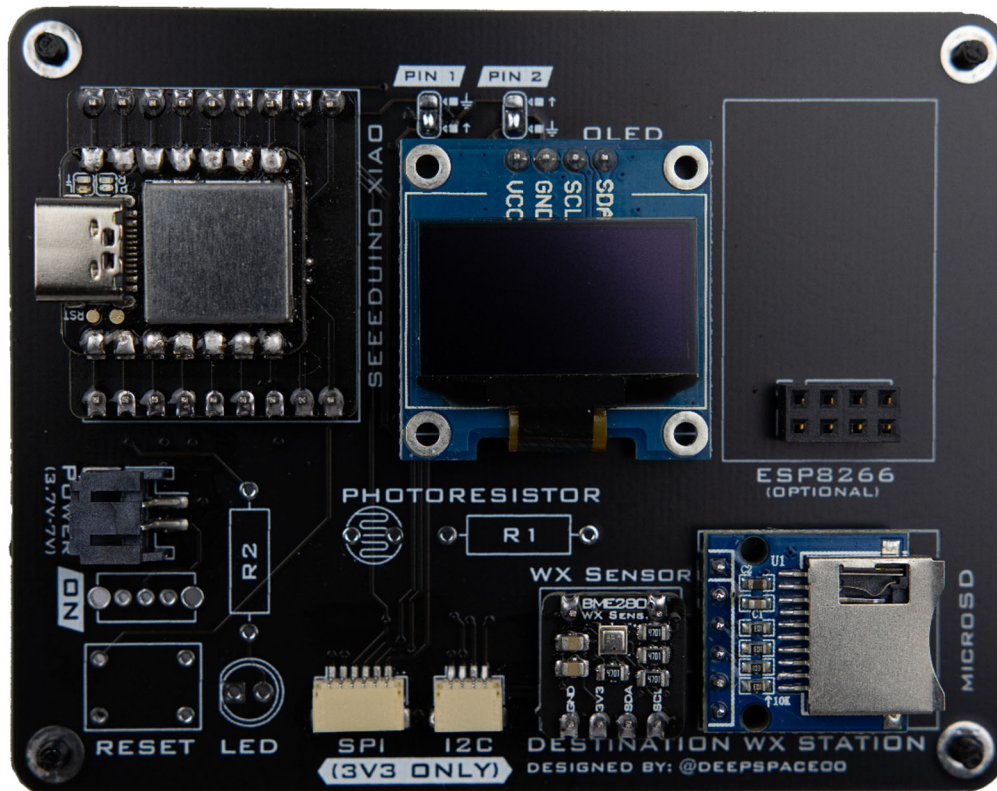
# DESTINATION WEATHER STATION R3

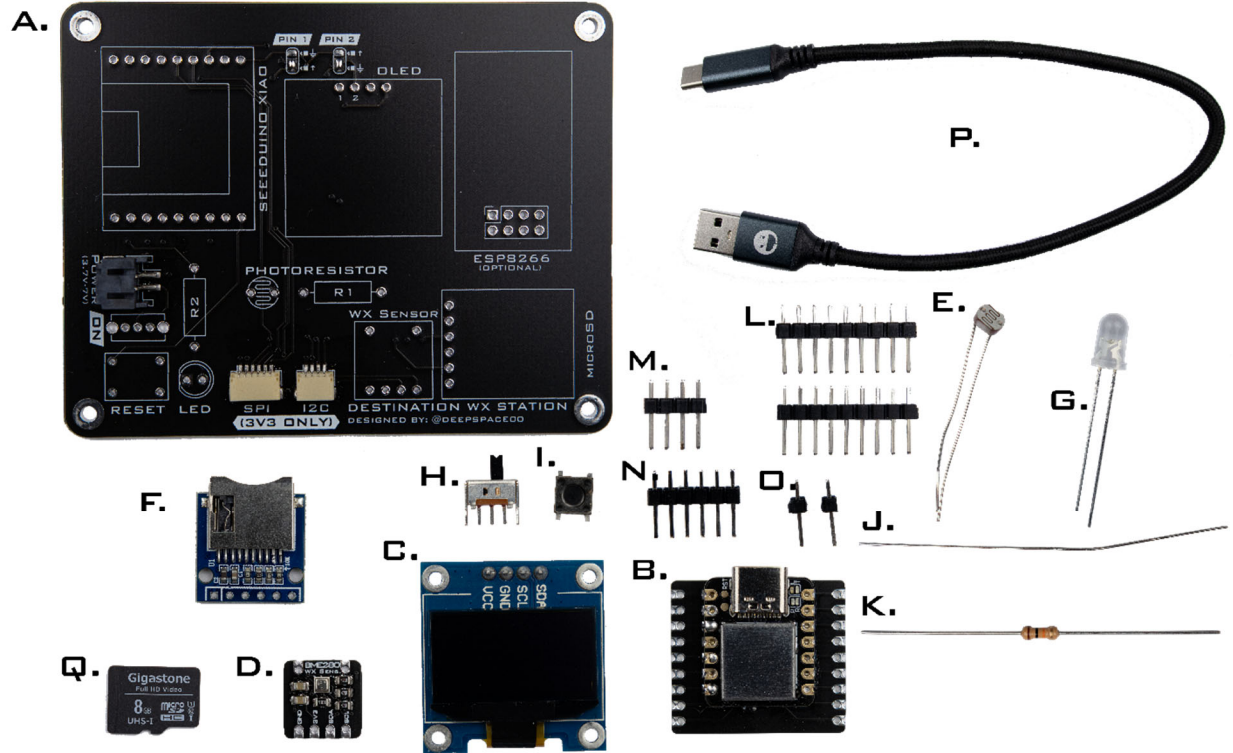
## ASSEMBLY INSTRUCTIONS

06/15/2022



MAGGIE VALLEY, NC





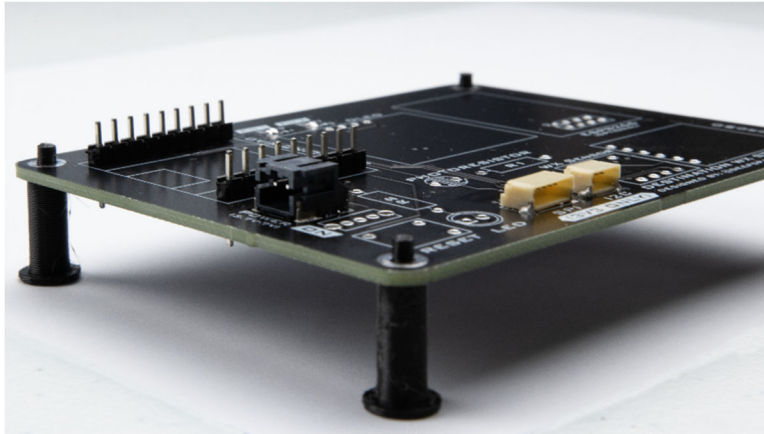
- A. WEATHER STATION PCB
- B. SEEDUINO XIAO
- C. OLED DISPLAY
- D. BME280 WX. SENSOR
- E. PHOTORESISTOR
- F. MICROSD CARD MODULE
- G. LED
- H. POWER SWITCH
- I. RESET BUTTON

- J. 0 OHM RESISTOR
- K. 10 KOHM RESISTOR
- L. 1X9 HEADERS
- M. 1X4 HEADERS
- N. 1X6 HEADER
- O. 1X1 HEADERS
- P. USB-C CABLE
- Q. MICROSD CARD

## ASSEMBLY

### HEADERS:

- PLACE THE LONG SIDE OF THE 1X9 HEADERS INTO THE PCB AS SHOWN
- SOLDER THE HEADERS TO THE PCB

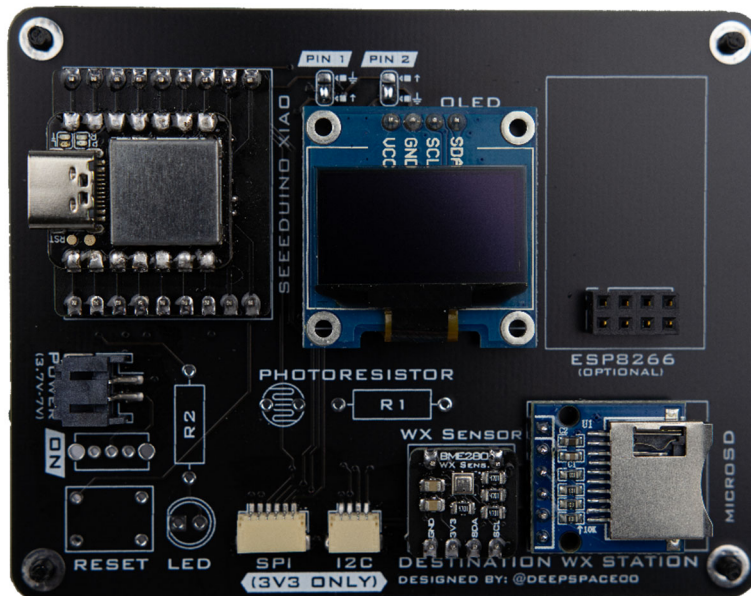


- SOLDER THE 1X4 HEADERS FOR THE OLED AND THE BME280
- SOLDER BOTH 1X1 HEADERS FOR THE BME280
- SOLDER THE 1X6 HEADER FOR THE MICROSD CARD MODULE

### MODULES:

- SOLDER THE SEEDUINO XIAO, OLED, BME280, AND MICROSD CARD MODULE TO THE HEADERS

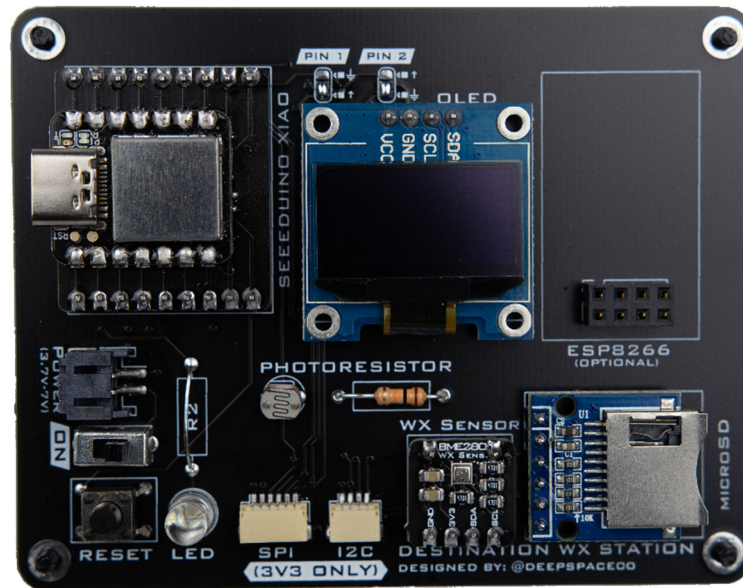
YOUR WEATHER STATION SHOULD LOOK LIKE THIS



**OTHER COMPONENTS:**

- SOLDER THE 10K RESISTOR IN R1
- SOLDER THE 0 OHM RESISTOR IN R2
- SOLDER THE PHOTORESISTOR NEXT TO R1
- SOLDER THE LED UNDER R2 (THE FLAT SIDE SHOULD FACE TOWARDS THE RESET BUTTON)
- SOLDER THE POWER SWITCH AND RESET BUTTON (YOU MAY NEED PLIERS TO BEND THE RESET BUTTON LEADS TO FIT IN THE HOLES)

**YOUR WEATHER STATION SHOULD LOOK LIKE THIS**



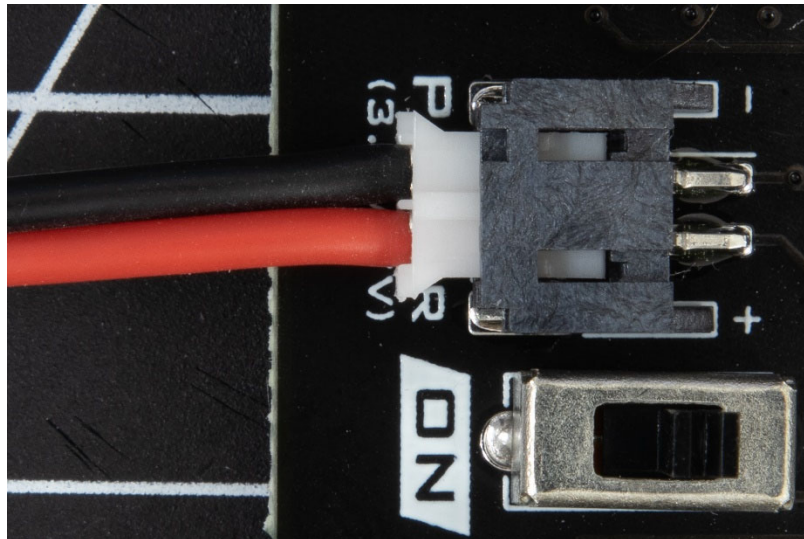


## TROUBLESHOOTING TIPS:

1. MAKE SURE THAT THE MICROSD CARD IS PLUGGED INTO THE WEATHER STATION BEFORE TRYING TO COLLECT DATA
2. WHEN INSERTING THE MICROSD CARD INTO THE MICROSD CARD ADAPTER IT WILL ONLY GO IN AS FAR AS THE IMAGE SHOWN BELOW. IF YOU ARE HAVING DIFFICULTIES INSERTING IT, TRY ROCKING IT SIDE TO SIDE AND INSERTING IT AGAIN.

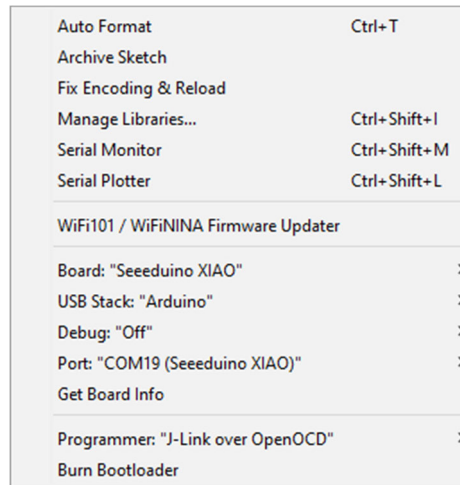




3. WHEN PLUGGING IN THE BATTERY PACK INTO THE WEATHER STATION, THE CONNECTOR SHOULD ONLY FIT ONE WAY. THE LITTLE BUMP IN THE MIDDLE SHOULD BE FACING UP. REFER TO THE IMAGE BELOW.



4. THE POWER SWITCH ONLY WORKS WHEN THE WEATHER STATION IS NOT PLUGGED INTO THE COMPUTER.

5. WHEN UPLOADING CODE TO THE WEATHER STATION MAKE SURE THAT THE FOLLOWING PARAMETERS ARE SIMILAR TO THE ONES BELOW (NOTE: YOUR COM PORT MAY BE DIFFERENT FROM THE ONE BELOW)



6. IF **SEEDUINO XIAO** IS NOT SHOWING UP, GO TO **FILE > PREFERENCES** AND ENSURE THE BOARD MANAGER URL IS ENTERED AND THE **VERIFY CODE AFTER UPLOAD** BUTTON IS UNCHECKED
7. TO UPLOAD CODE TO THE DESTINATION WEATHER STATION USING ARDUINO IDE BEGIN BY PLUGGING THE WEATHER STATION INTO THE COMPUTER. NEXT OPEN UP THE PROGRAM YOU WANT TO UPLOAD. CLICK THE BLUE CHECKMARK  TO VERIFY THE SKETCH. IF THE VERIFICATION FAILS CHECK THE CODE FOR ERRORS. NEXT GO TO **TOOLS** AND ENSURE THE **SEEDUINO XIAO** IS SELECTED UNDER **BOARD:** AND MAKE SURE THAT A COM PORT IS SELECTED. NEXT CLICK UPLOAD  TO UPLOAD THE CODE TO THE WEATHER STATION. THIS PROCESS CAN TAKE SOME TIME. THE FILE MANAGER MAY OPEN DURING THIS PROCESS. IT WILL AUTOMATICALLY CLOSE.