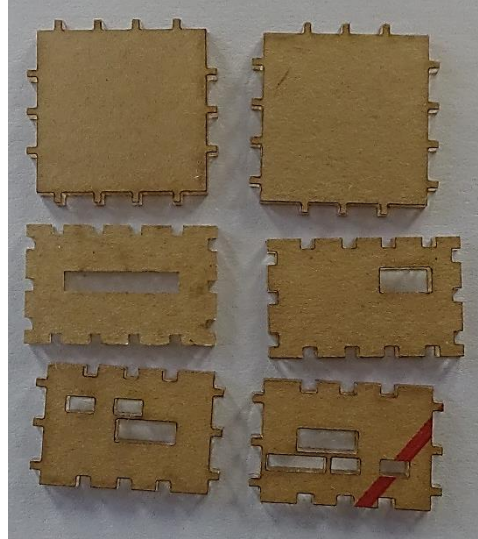


Plant Monitor Assembly Manual - Plastic Enclosure v1.00



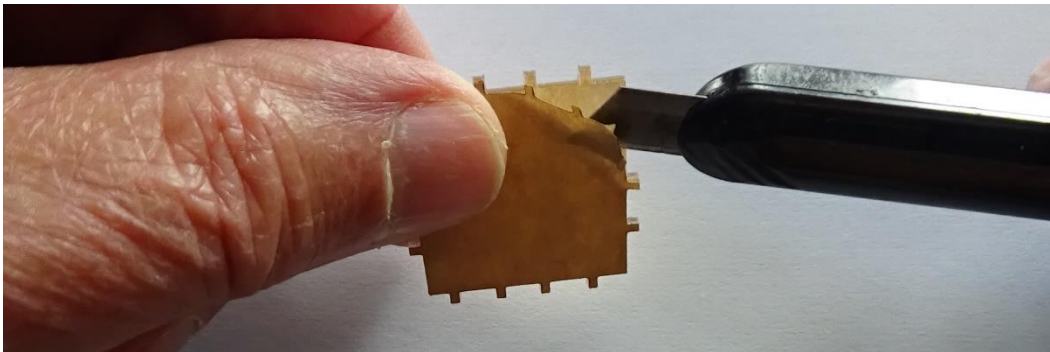
Step 1 - Covered Pieces

Identify the six (6) covered plastic pieces.

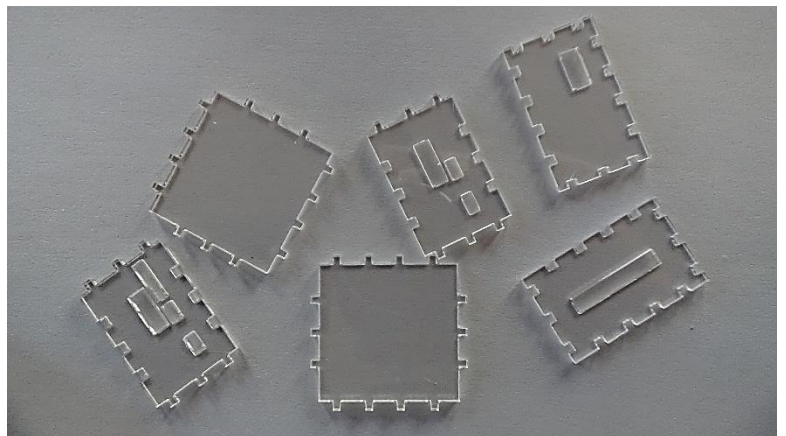


Step 2- Remove Paper

Using a sharp knife as pictured here, remove the paper covering from all the pieces. **BE CAREFUL!**

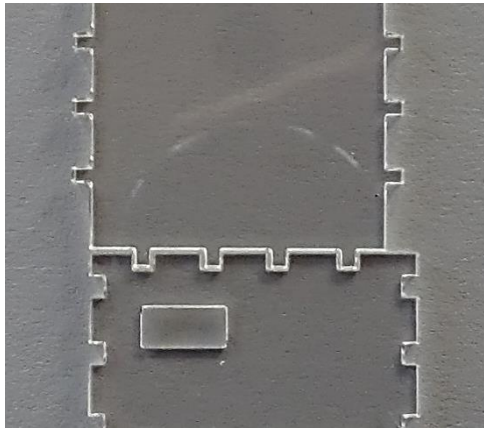


They should look like this when you're done.

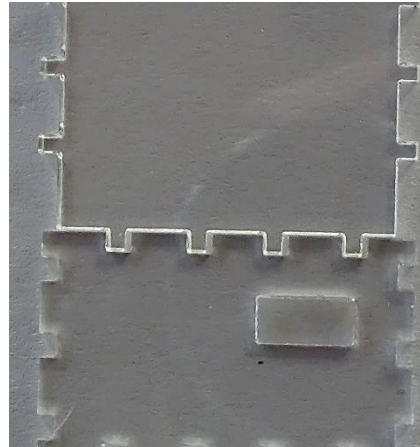


Step 3 - Tab Orientation

First, notice the two identical “nearly square” pieces. These are the top and bottom of the enclosure. Two sides have 3 tabs and the other two sides have 4 tabs. Also, notice that the other side rectangular piece shown here can align two ways; one way with a large portion of it sticking out and the other way with nearly equal portions hanging off both ends...this is the orientation that we want...the one with nearly equal portions sticking out from both ends.



Wrong Way

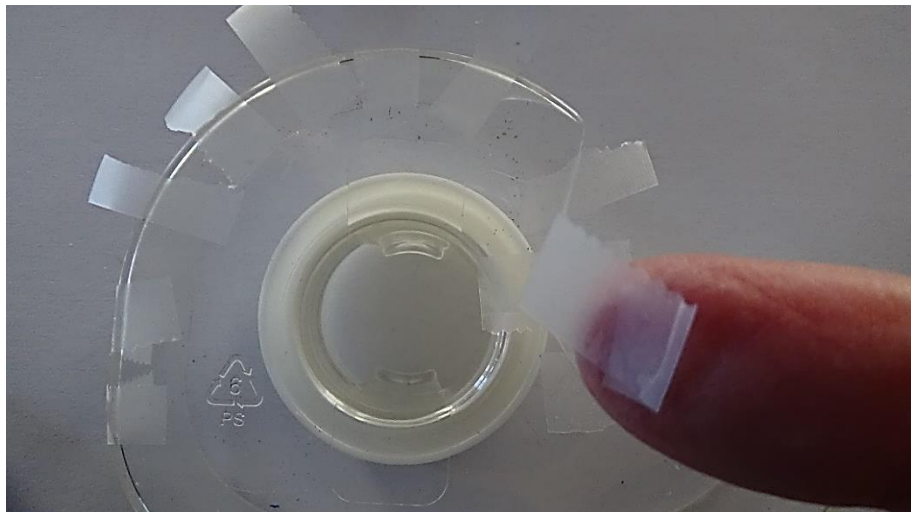


Right Way

The “nearly square” piece on the top is going to be the top of the enclosure as we assemble it (where the OLED will be) – even though it may look like it’s the bottom from the photos.

Step 4- Cut Tape

Before we glue anything together (we’ll get to that later), we first want to tape the plastic pieces together into a box. We’re doing this to be sure that we don’t make a mistake and to test things out. So, using scissors, cut some transparent tape into small strips as show here.

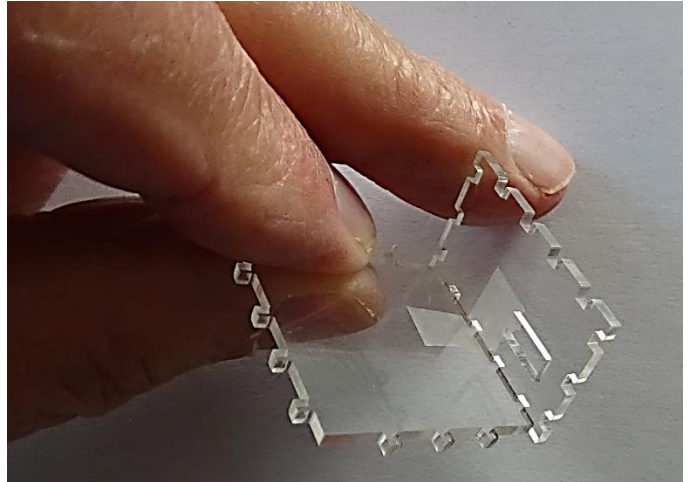


Step 5 –Topside & USB Backside

Even though it looks like it's on the bottom, this is the top of the enclosure where the OLED screen will be. The other piece is the USB backside.

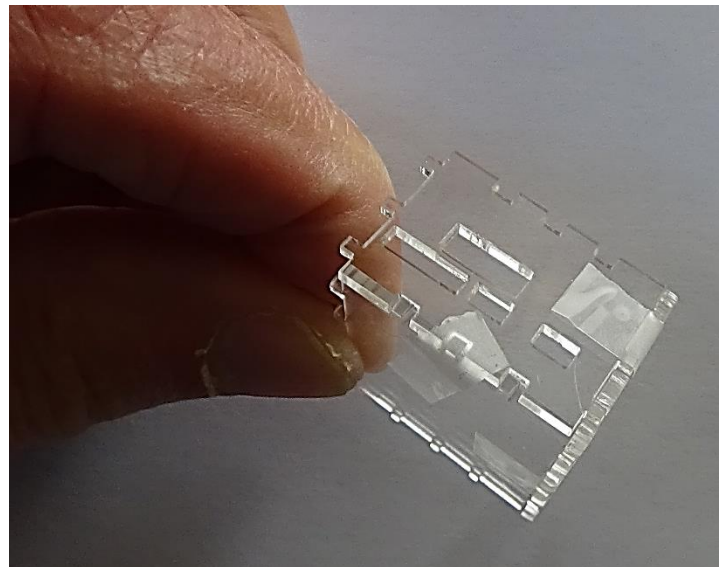
As described in **Step 3** making sure that the tabs are oriented the "right way" with equal portions on each side, tape the top piece and USB connector side piece together as shown here. Note that the rectangular slot is towards the right; and make sure NOT to cover it with the tape.

It may take a few tries to get it right (in this orientation) but don't give up.



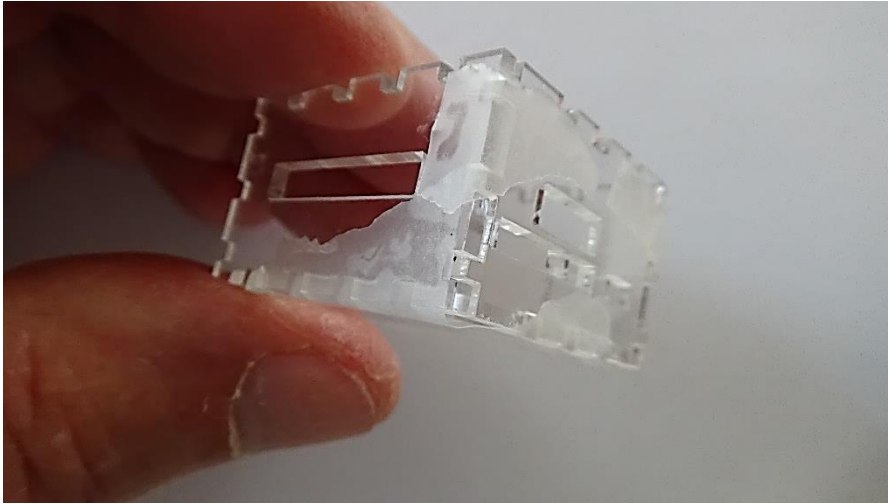
Step 6 – Push Button and Slide Switches Side

Rotate the piece 90 degrees and tape the next side piece as shown. This is the side with four (4) slots. Make sure that it is oriented as shown here with the three (3) smaller slots on the bottom and the longer of the three slots to the left where the fingers are shown. The longer of the three slots is for the TinyScreen+ ON/OFF slide switch.



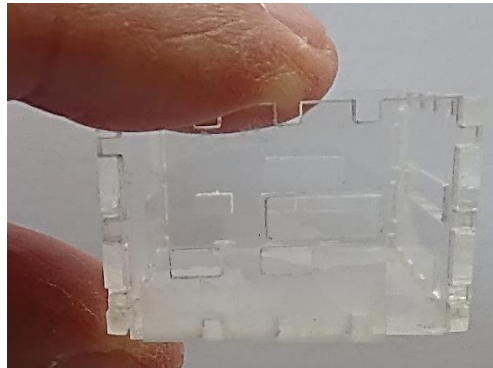
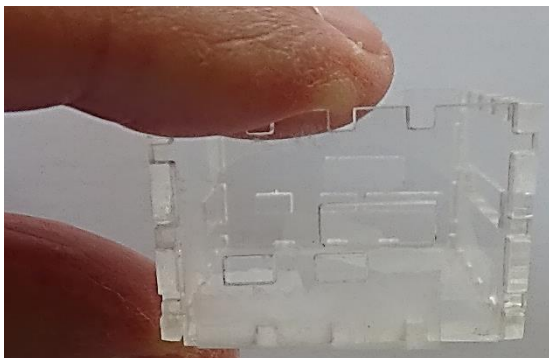
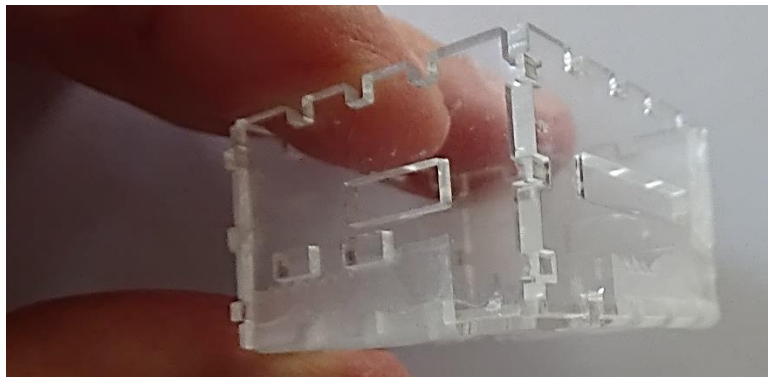
Step 7 -Front Side

Next, rotate again and find the side piece with the large slot in the middle and attach it as shown.



Step 8 - Opposite Push Button Switches Side

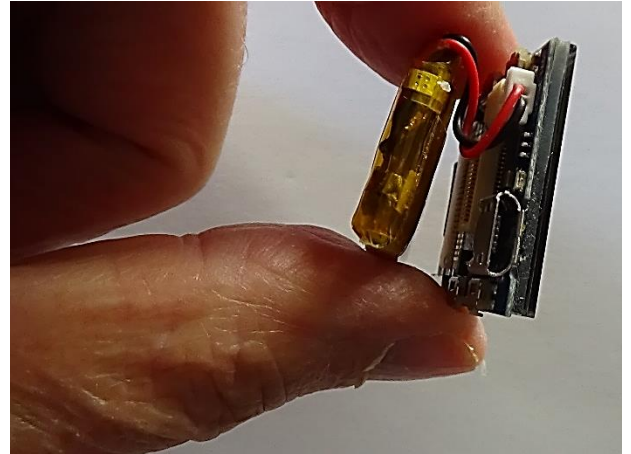
Finally, find the side piece with the three (3) slots – 2 small and one larger. Insert this piece as the side that is opposite the other side with the four (4) slots. **THIS IS IMPORTANT!** This piece can be installed “backwards” so make sure that the slots line up with the opposite slots on the far side. Just look through the plastic to see that the larger of the slots on this end lines up with the larger slot on the far end. These slots are for the Wiring cable connectors.



Step 9 – Prepare the Electronics

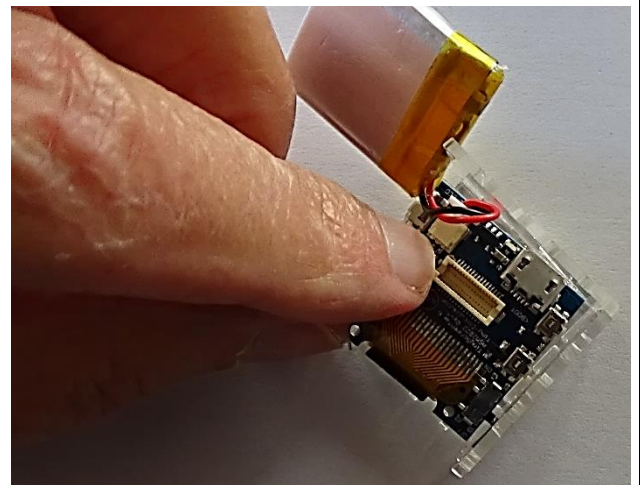
Plug the battery cable connector into the TinyScreen+ as shown here. Notice that the battery wire is twisted so that it does NOT interfere with the USB connector...this is important as you will see.

Also, notice that the Wireling Adapter is not connected to the TinyScreen+ yet...this comes later in Step 12.



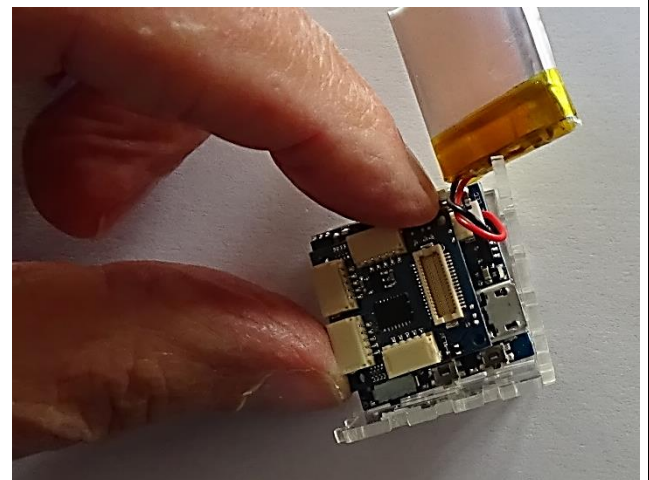
Step 10 – Insert the TinyScreen+

Next, place the TinyScreen+ “face down” with the OLED screen resting on the bottom plastic part. Notice that the battery is hanging outside the enclosure...this is what to do.



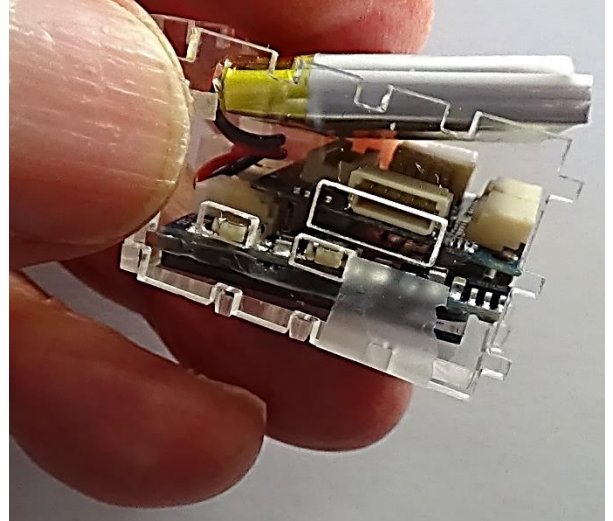
Step 11 – Snap in the Wireling Adapter

Now plug the Wireling Adapter into the connector on the TinyScreen+ as shown.



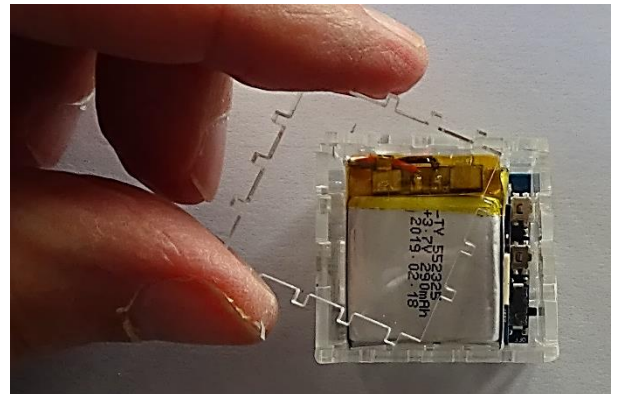
Step 12 – Place the Battery on Top

Move the battery into position on top of the Wiring Adapter.



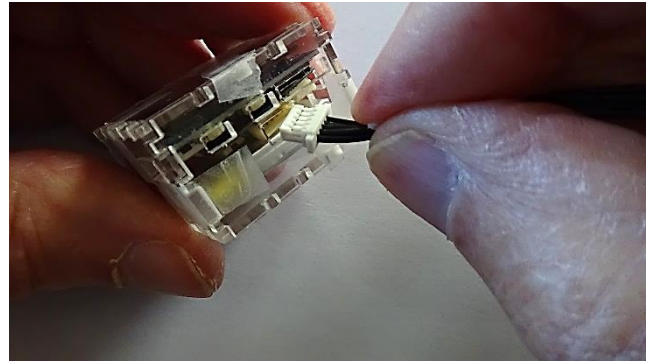
Step 13 -Assemble The Final Piece

With all the electronics inside the plastic enclosure, assemble the final piece (this will be the bottom). Tape the bottom to the sides.

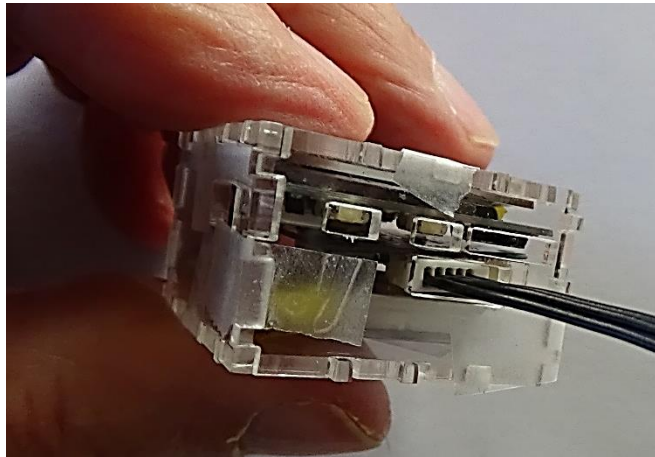


Step 14 - Insert Wiring Cables to Test

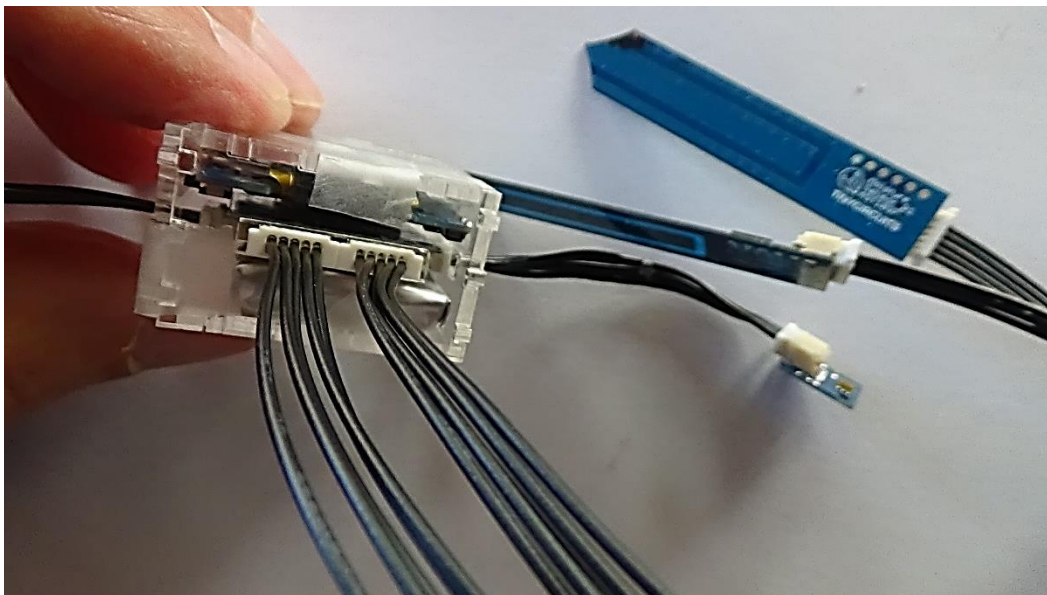
The next steps involve inserting the Wiring cables through the slots and into the Wiring Adapter shield. This is to test the fact that it can be done. In doing so make sure that the cable end has the pins showing (up), as the cable can only plug in this way.



The shorter Wiring cables plug into the sides as shown here. This image shows the cable going into the side with the two push button slots and the slot for the Power ON/OFF slide switch. Do the other side, as well.

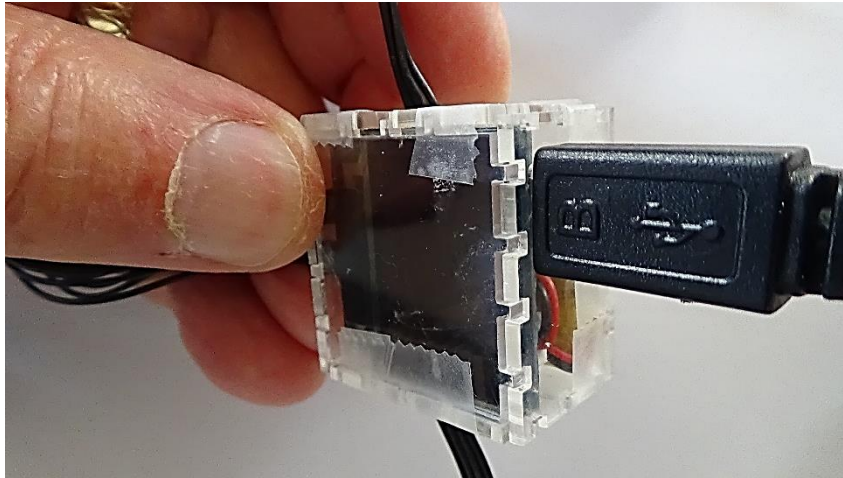


Note that the two longer Wiring cables for the Soil Monitors plug into the front slot side-by-side



Step 15 – Insert USB Cable

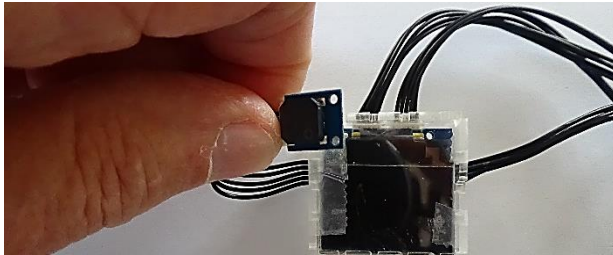
Insert the USB cable into the back of the enclosure and plug the other end into your computer. The amber LED should illuminate indicating that the battery is charging. Leave it plugged in to charge the battery completely (when the LED extinguishes).



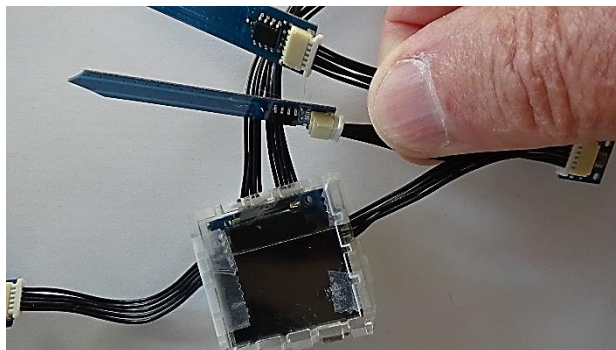
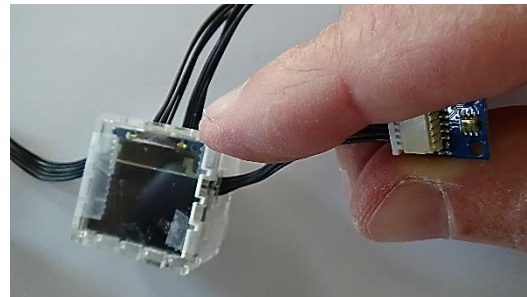
Step 16 – Attach the Wiring Sensors

Place the enclosure on the table with the longer, side-by-side cables facing up or away from you and attach the Wiring sensors as follows:

- Buzzer Wiring on the left



- Light sensor Wiring on the right



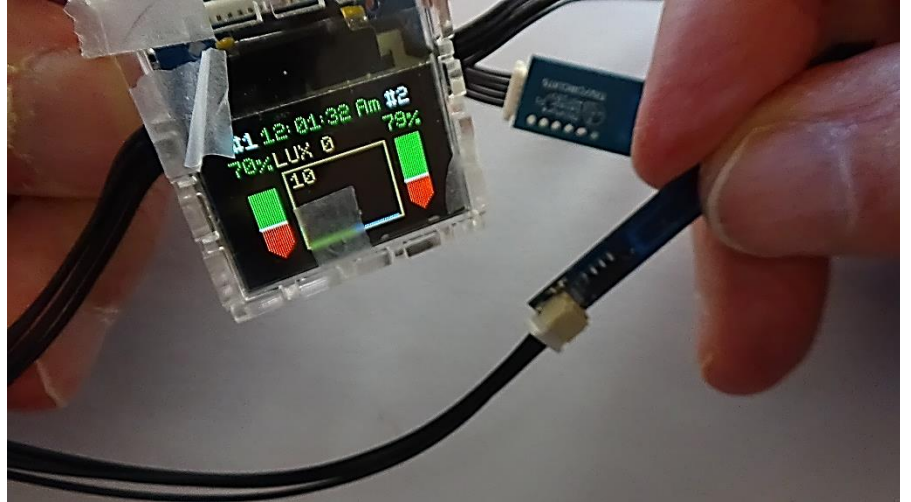
- Soil #1 and #2 sensors on the longer cables

Step 17 – Turn It ON

With a bent paper clip or small flat blade screwdriver, slide the Power ON/OFF switch DOWN to turn the unit ON. The OLED screen should look something like this with the clock display “ticking” at 12 am +.

Hold the arrow-type soil sensors in your fingertips and the left and right soil icons should illuminate as shown.

Also, move the light sensor around to see if the LUX value just above the middle rectangle changes.



Step 18 – Get Ready To Glue

After confirming that things are working, here comes the tough part -gluing things together. The reason that it's hard is that you don't want to “smear” the glue on the plastic that's against the OLED screen.

The next instructions are important, so please follow them carefully. You should pre-read these instructions so that you'll know what's coming up and what you'll need to do to make a pristine job.



Any Super Glue should work. Just make sure that it says it will bond “acrylic”.

But before going further, TURN THE UNIT OFF.

Step 19 - Remove The Tape & Glue It Together

We're going to start from the bottom – where you can see the battery.

Using a sharp knife tool, begin to remove the tape from the bottom. Then apply “dabs” of Super Glue to **the edges** where the bottom plastic meets the sides.

MAKE SURE THAT THE SUPER GLUE “STRINGS” DO NOT SPREAD OUT OVER THE PLASTIC – THIS TAKES SOME PRACTICE.

Now do the same to the sides and top making sure to just dab on some glue...**on the edges.**

THEN LET THE GLUE DRY – and sorry about your stuck fingers 😊

Now enjoy your Plant Monitor!

