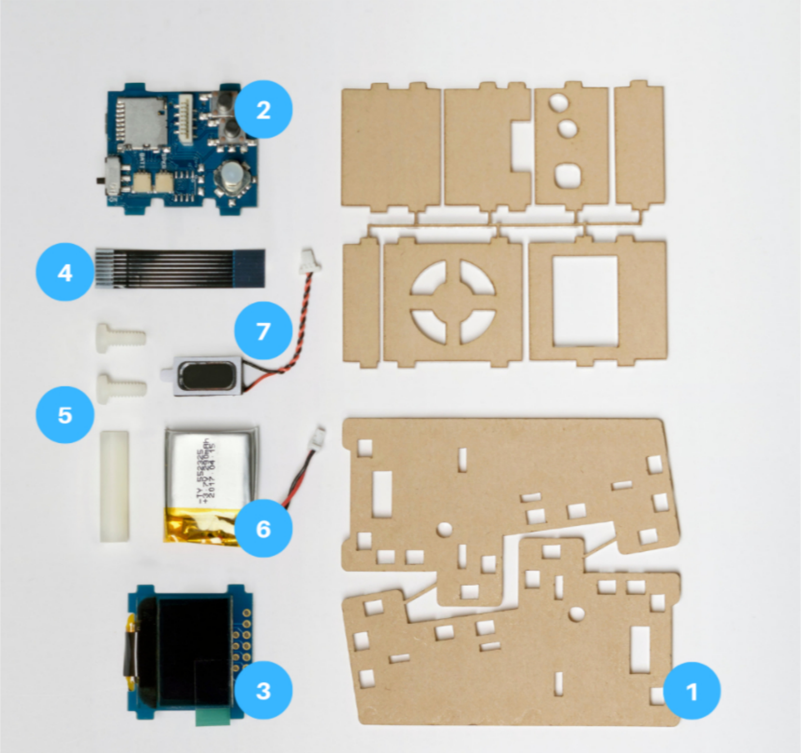
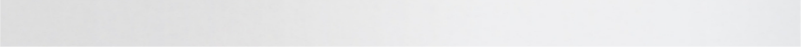
Upon opening your new Tiny Arcade, you'll want to make sure that you have the following:

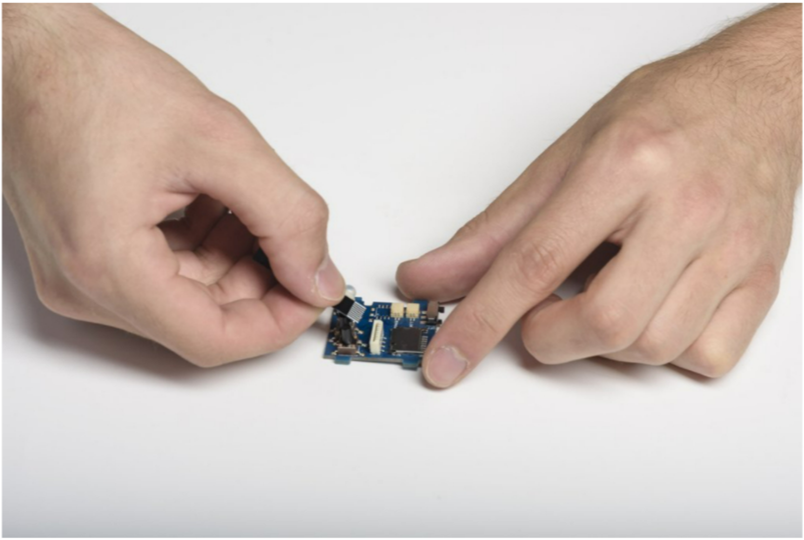
1. Two (2) Acrylic sheets (with protective paper covering)
2. The Processor Board (with joystick knob attached)
3. The Screen
4. A flat-flex ribbon connector
5. A hardware kit (containing two (2) screws, one (1) standoff post, and one (1) foam square)
6. Lithium-Polymer battery
7. Speaker



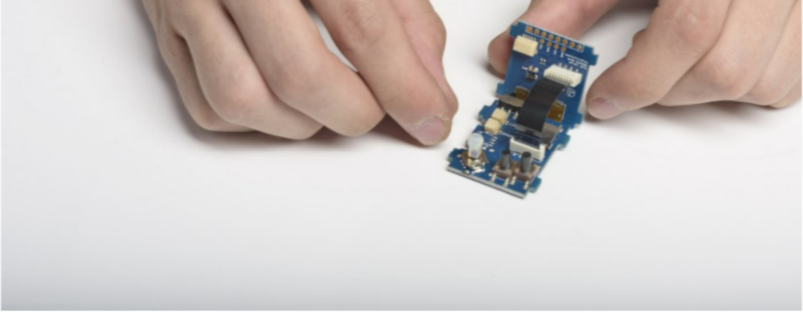


Electronics Setup

We'll start by assembling and testing the electronics. On the processor board, locate the power switch (next to the microSD holder) and turn it OFF. Locate the Audio switch (next to the micro USB port) and turn it ON. Next, GENTLY insert the flat-flex ribbon cable into the connector on the processor board with the metal tabs facing the proper direction. Then insert the other end into the connector on the screen.

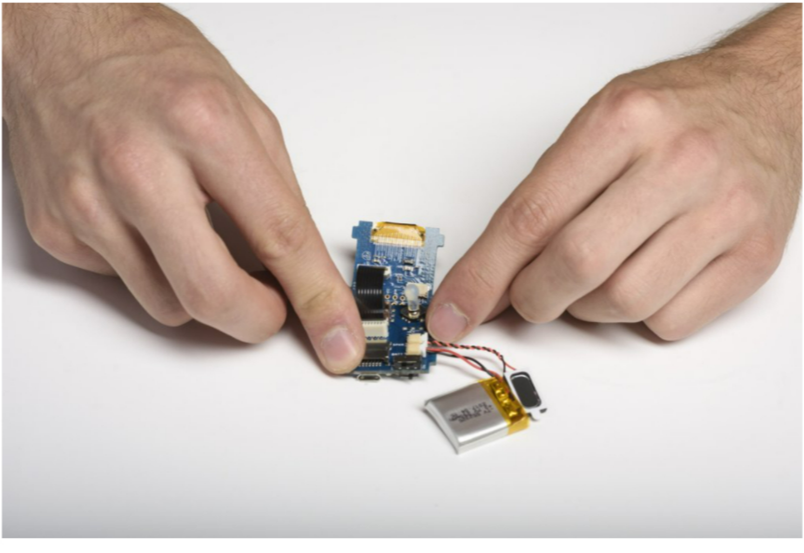


Then insert the other end into the connector on the screen. **Make sure the metal contacts are facing the proper direction. Also, be very careful not to bend the connector harshly; it is fragile.**



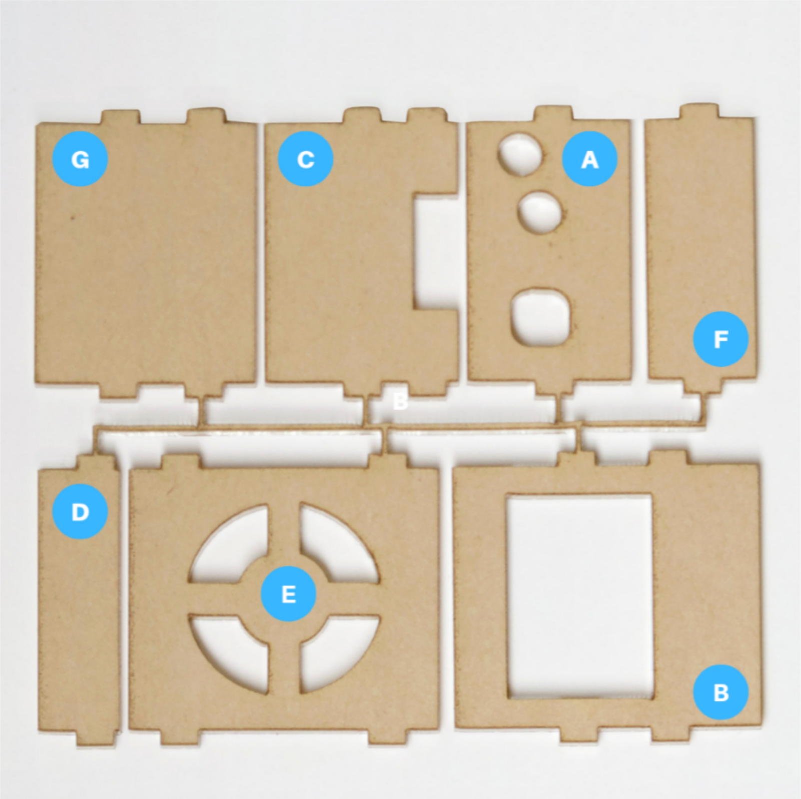
Connect the battery to the connector labeled **"BATT"** and the speaker to the connector labeled **"SPKR"**. Test the electronics by switching on the power. You'll see the screen light up with the TinyCircuits logo. Select the TinyShooter game with the left push button, then press the right push button to insert a coin. Push the joystick in each direction and watch the spacecraft to ensure that the up, down, left, and right controls function. Push the right push button to fire the lasers, and listen for the sound effects. If you don't hear anything, check that the audio switch is in the **ON** position and that the speaker connector is fully inserted.

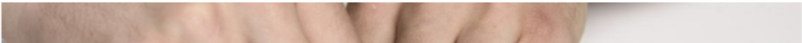
Remove the protective film from the screen.

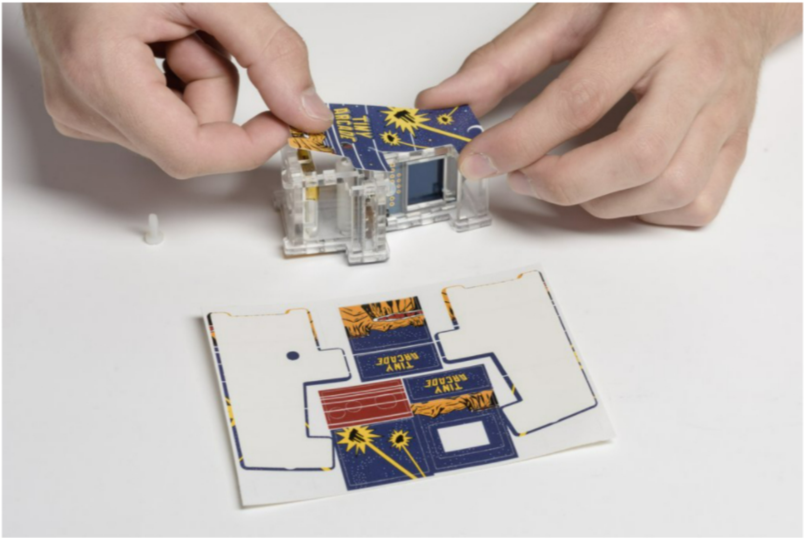


Acryllic Preparation

To prepare the acrylic cabinet, break the pieces away from each other, including the thin connecting stubs on the sides, then peel back the protective paper from both sides. If you would like to add the included stickers, this would be the most convenient time to do so.

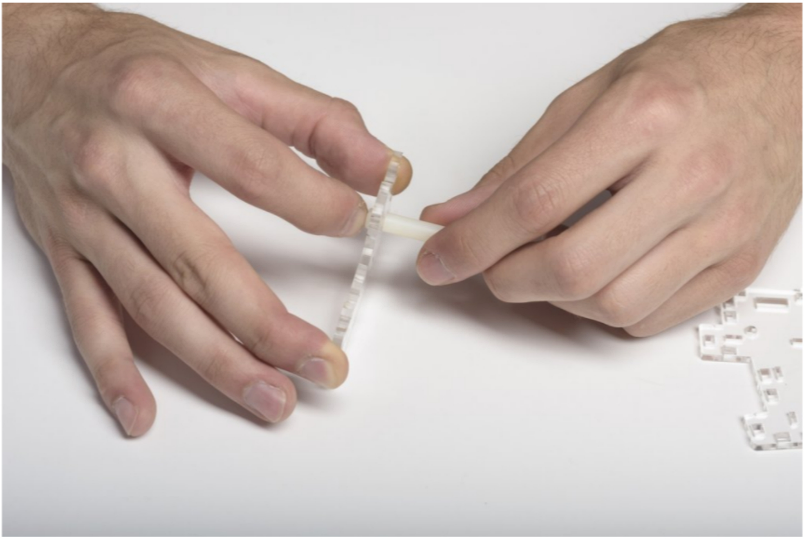




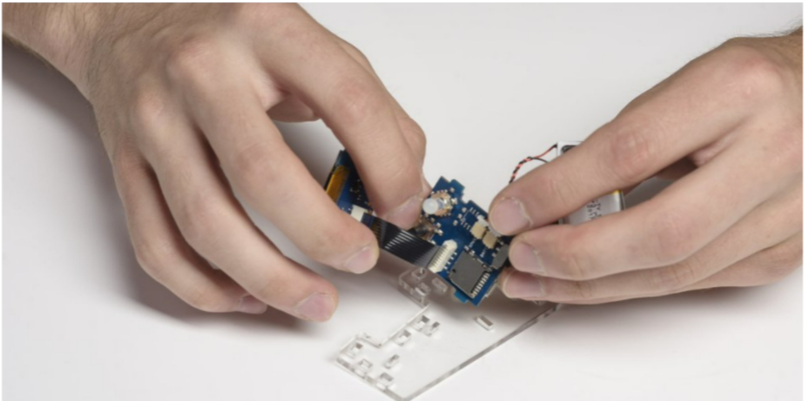


Assembly

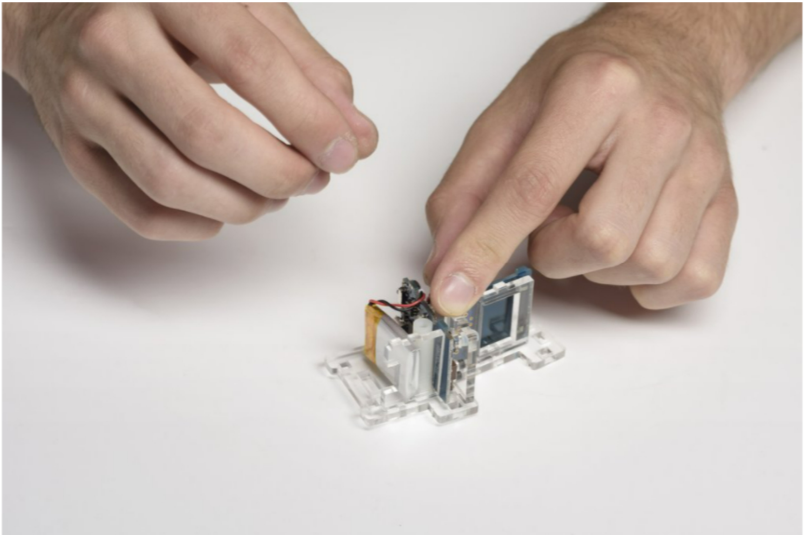
Wipe off the acrylic pieces as you proceed to avoid leaving fingerprint marks which will be hard to clean once the cabinet is fully assembled. Start by attaching the screw and standoff post to the right wall of the Tiny Arcade. Lay this flat on your table or work-surface.



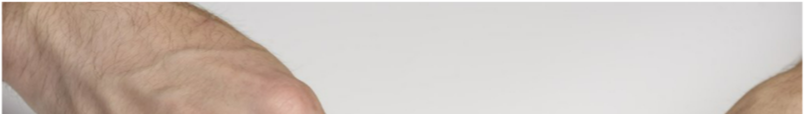
Place the next acrylic piece labeled **A.** over the joystick and push buttons on the processor board. Insert the electronics assembly into the side wall, aligning the tabs with their corresponding holes.

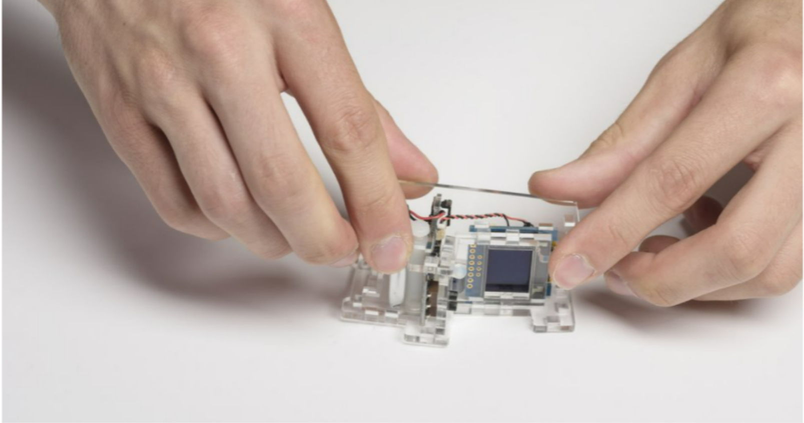


Hold these in place with a few fingers as you insert the next acrylic piece labeled **B.** which goes in front of the screen. Now place acrylic piece labeled **C.** at the bottom front of the **Tiny Arcade**. Route the battery wires through the gap on the circuit board to avoid pinching them between the board and the acrylic wall which we will now place.

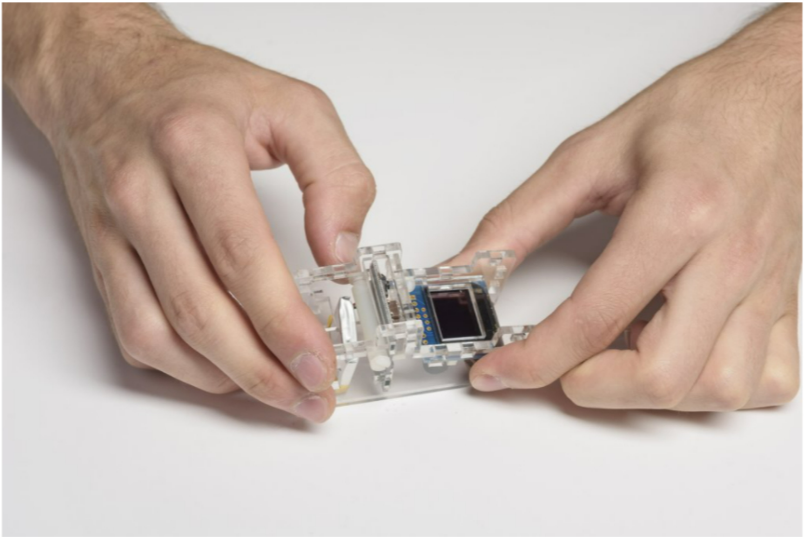


Thread the second screw through the sidewall and into the post and tighten it a few turns to hold the left wall loosely in place as you align it with the other tabs. Once all tabs are aligned and the side wall is flush, fully tighten the screw to hold everything together, being careful not to overtighten.

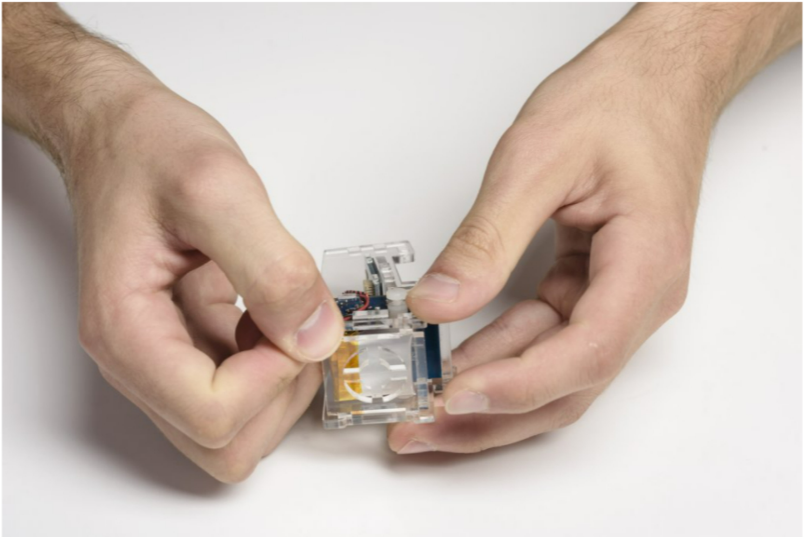




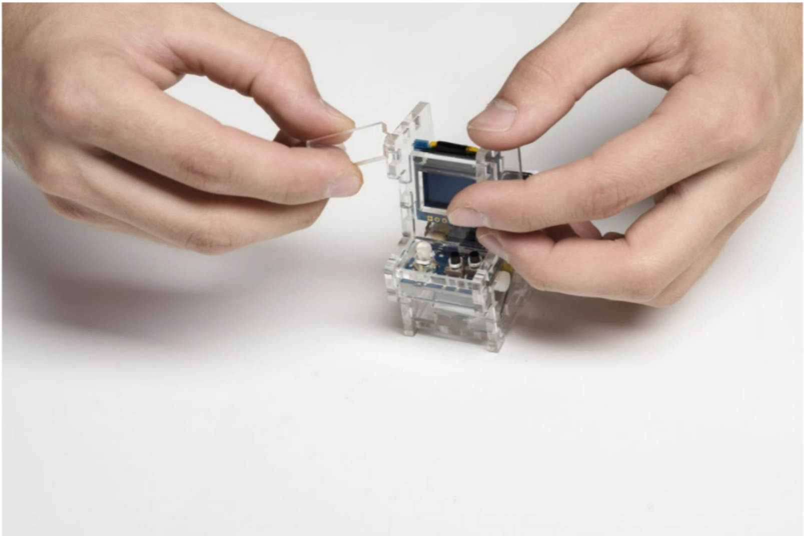
We'll now place the remaining acrylic pieces. The first one acrylic piece **D.** goes on the front of the arcade in front of the joystick and pushbuttons. (If you're having difficulty inserting this piece, you can loosen the left screw about one rotation, then re-tightened after piece **D.** has been inserted.)



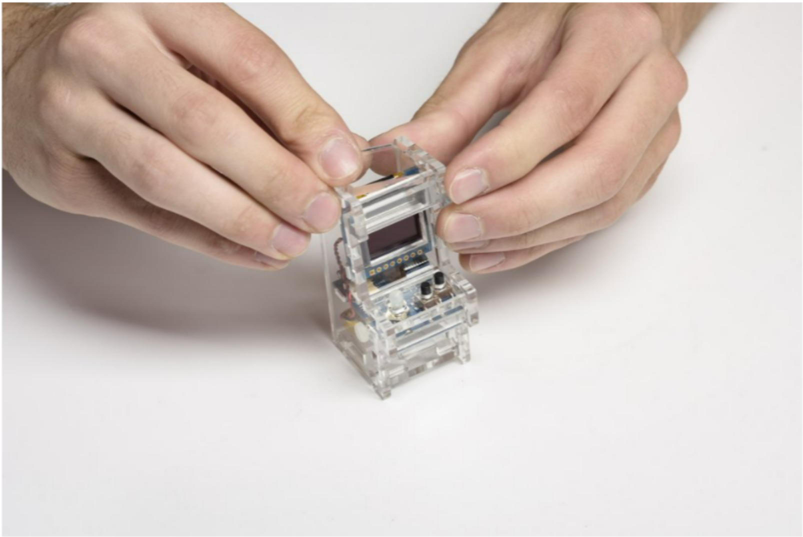
Next, insert acrylic piece **E.** the piece for the bottom of the cabinet.



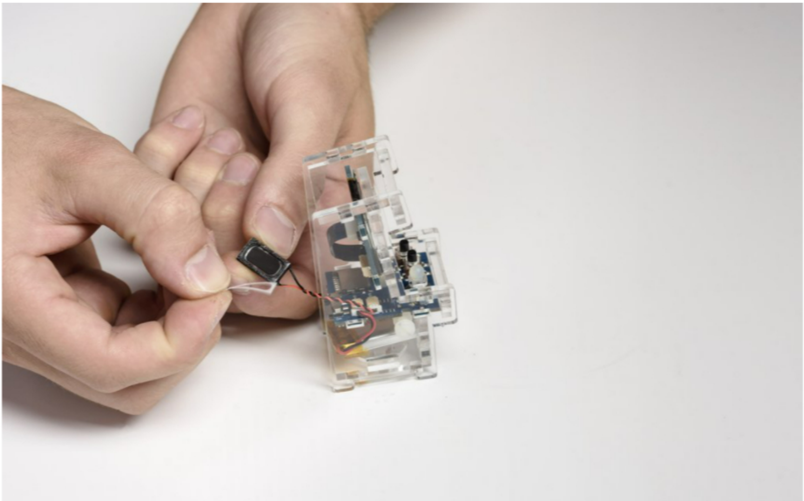
Insert acrylic piece **F**. for the top front of the cabinet.

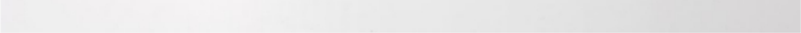


Then acrylic piece **G**. directly on the top of the cabinet.



Next, attach the speaker, peel off the protective paper and press it firmly to the inside of the inside wall of the cabinet.





If you care to, use the sticky backed foam piece to secure the battery to the bottom piece of the cabinet. Insert a Micro-USB cable into the back of the unit to charge the battery, indicated by the orange light.

USB Charging and Programming

The Tiny Arcade will recharge the Lithium Polymer battery when the USB is plugged in, this is a standard Micro USB B type connector. The Tiny Arcade can also be directly programmed as an Arduino type device, the processor board in the Tiny Arcade programs the same way as the TinyCircuits TinyScreen+, so if you are interested in programming this, follow these instructions.