

Display Case



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Build Manual

Section 1 | Components.

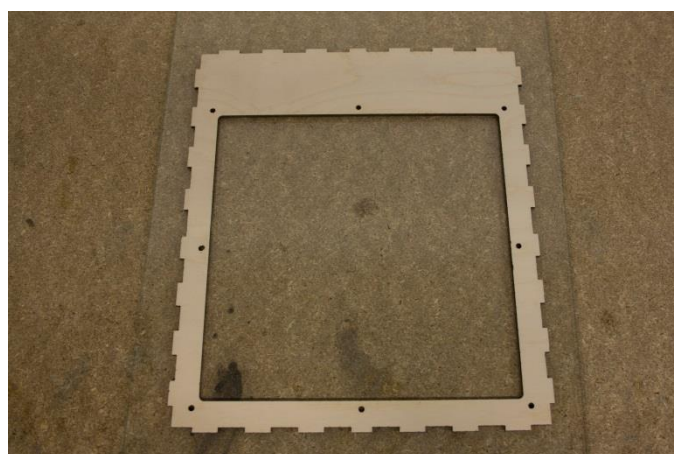
- ☐ 1 x 12v Fan.
- ☐ 1 x Roll of Green Filter.
- ☐ 60 x M3 Microbarbs Brass Insert Bolt Anchors.
- ☐ 55 x M3 8mm Screws.
- ☐ 4 x M3 14mm Screws.
- ☐ 17 x Laser-Cut Parts.
- ☐ 1 x Length of 2-Way Cable.
- ☐ 2 x 2.54mm Female DuPont Pins.
- ☐ 4 x 2.54mm Male DuPont Pins.
- ☐ 2 x 2-Pin DuPont Plastic Housings.

Section 2 | Assembly.

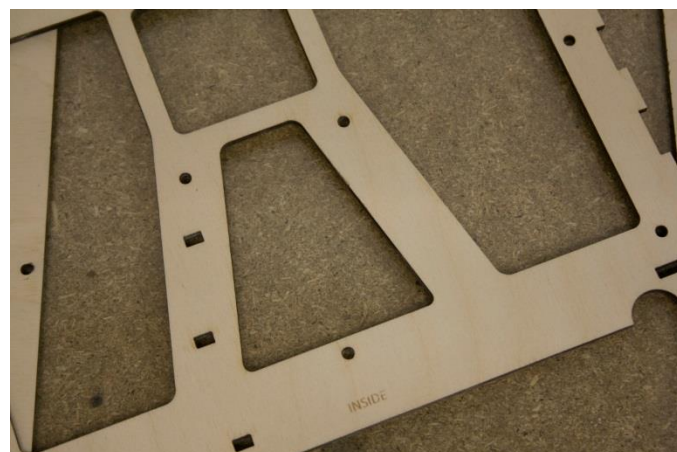
Part 1 – The Frame.

For best results lightly sand the plywood Laser-Cut parts to remove any scorch marks. If you have the acrylic case you'll need to remove the protective film from each side of the Laser-Cut Parts.

Begin by placing the case top face down on your work surface.

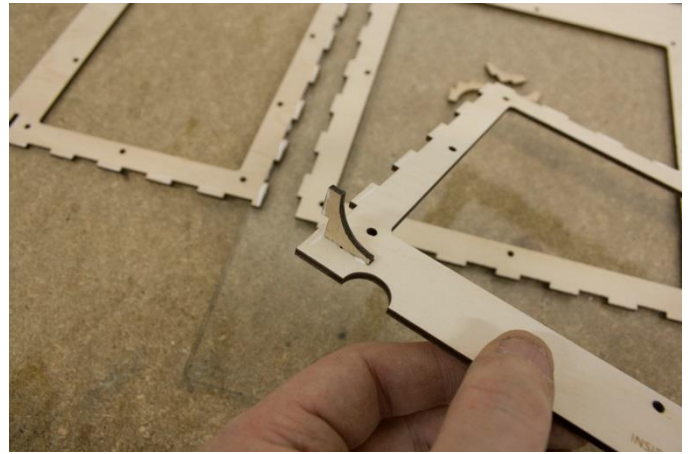
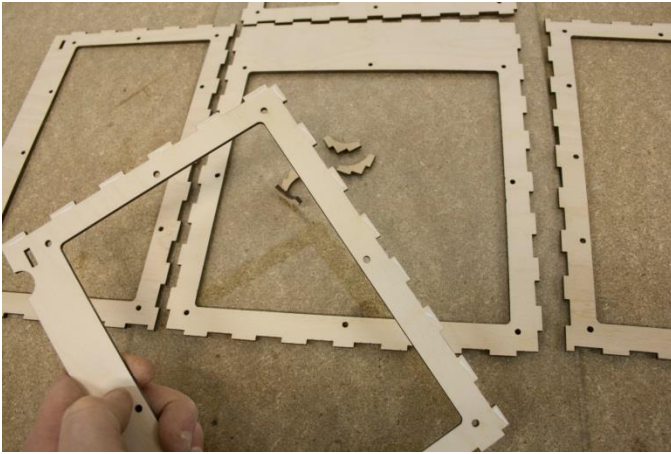


The front and rear panels are marked with INSIDE, make sure that these are not facing outwards. Layout the sides you know where everything goes.



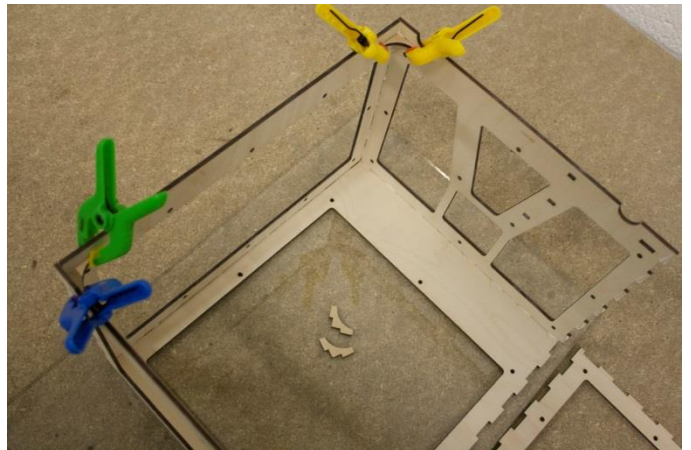
With the front panel apply glue to the edges; repeat this with one of the side panels.

Glue a corner piece into the panel. Make sure it is glued to the correct side.

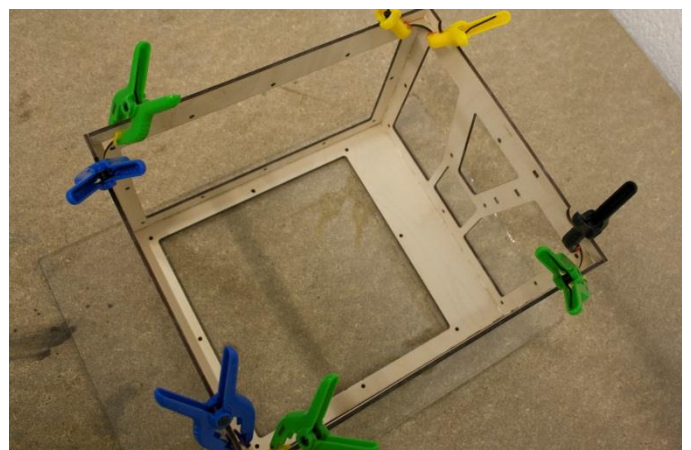
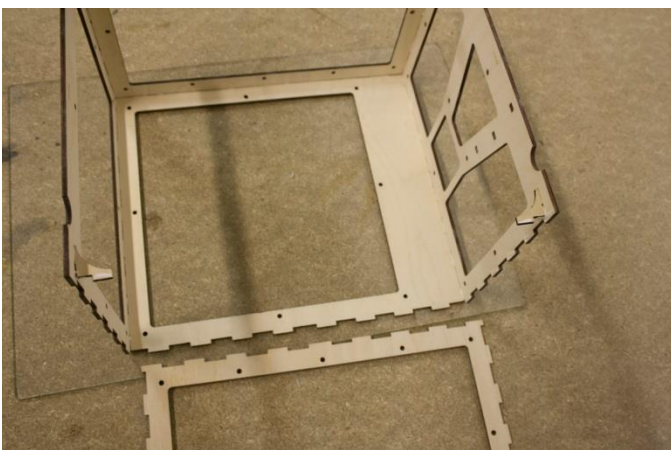


Clamp the corners while the glue sets.

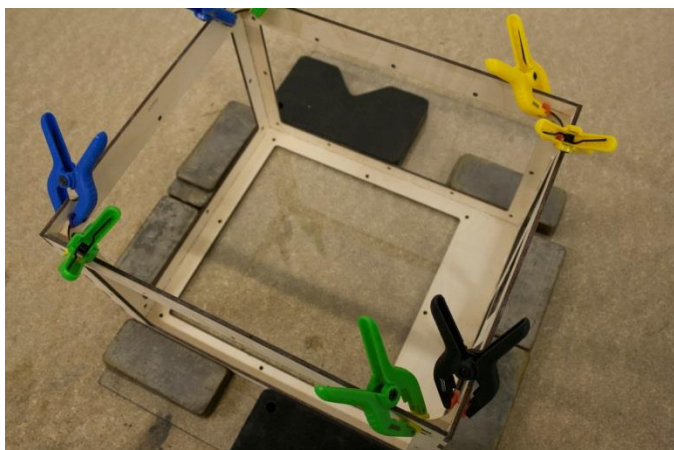
Work your way around the frame gluing the sides in sequence. Remember to include the corner pieces.



On the laser side panel make sure you have corner pieces in each panel. Clamp the corners when done.

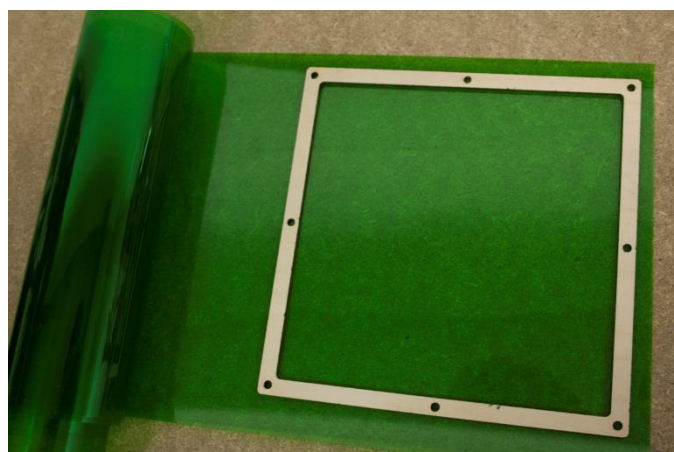


Leave the frame while the glue cures. I have placed weights around the edges to keep the sides together at the bottom.

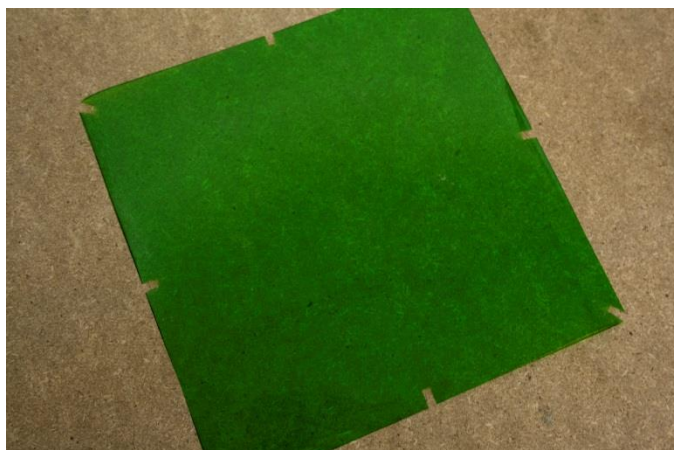
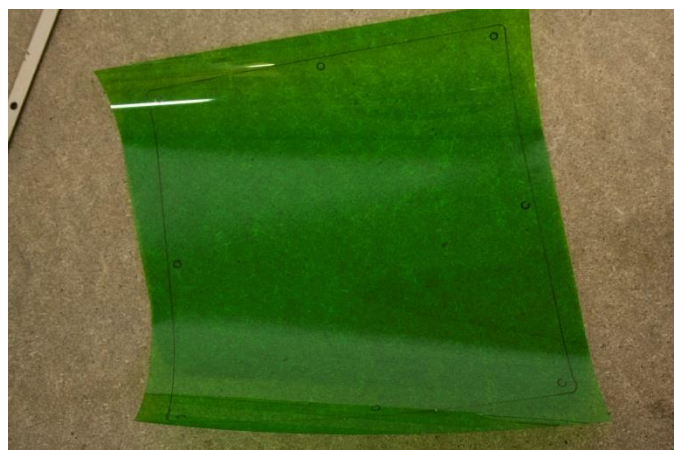


Part 2 – The Filters.

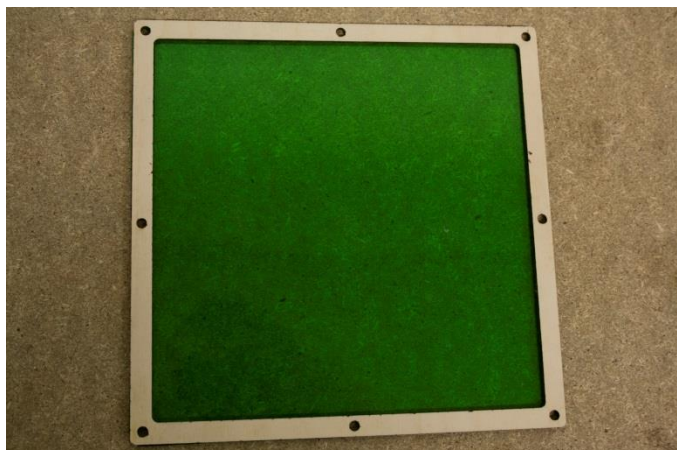
Unroll the green filter gel. Roll out a small length and place one of the inner panels over the filter, cut the sheet to length



Draw around the outside of the panel and the inside of the screw holes with a permanent marker pen. Cut out the panel with scissors and a sharp knife.

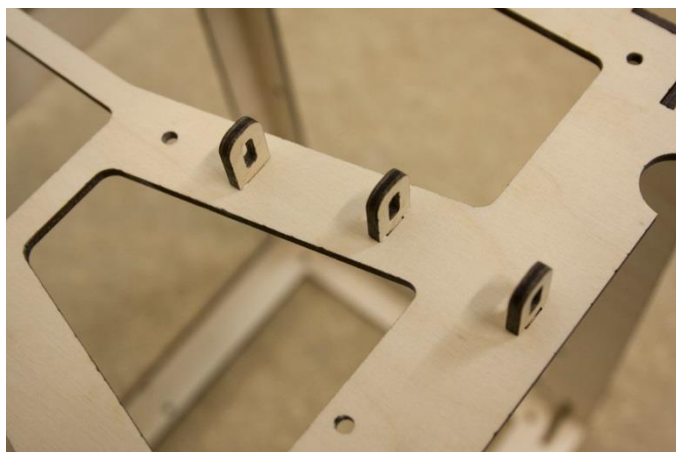


Check the holes line up and that the panel is the correct size. Repeat this for each inner panel.



Part 3 – Cable Conduits.

Once the frame has fully cured remove the clamps and glue the three Cable Conduits to the rear of the case.



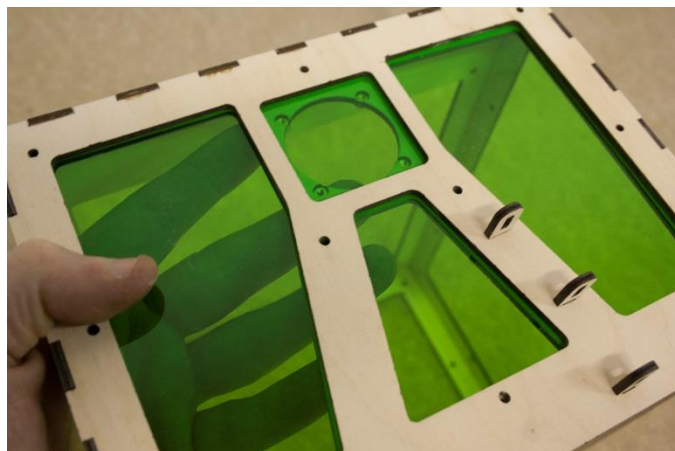
Part 4 – Microbarb Brass Inserts.

Into the holes in each of the five inner panels fit M3 Microbarbs.

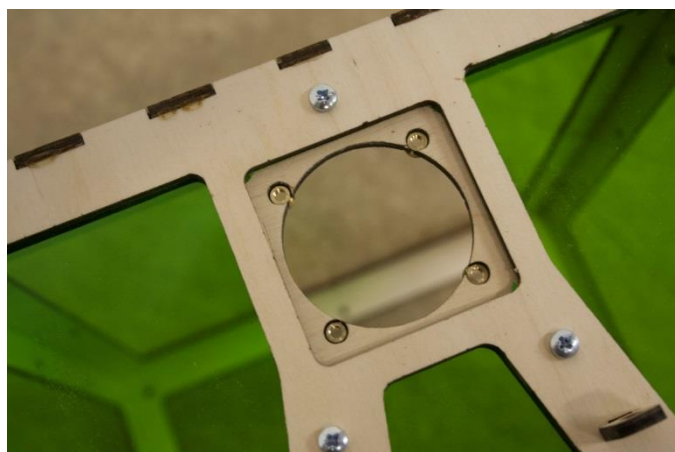
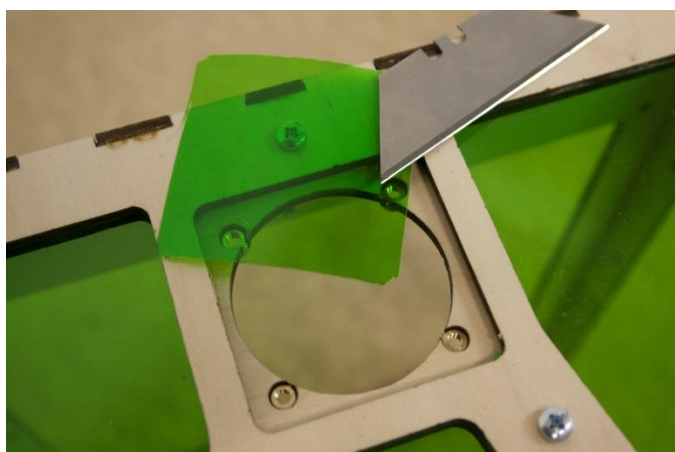


Part 5 – Fitting the inner panels and filters.

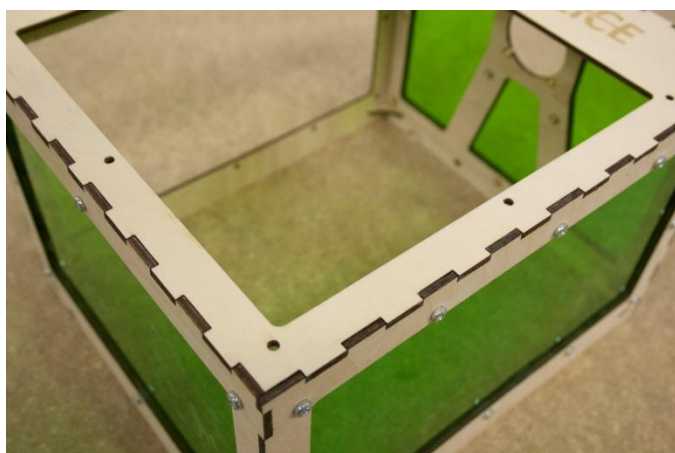
Line up the matching filter on the rear inner panel. Line up the panel on the inside of the frame and secure with M3 8mm Screws.



Once all the securing screws have been fitted and using a sharp knife; remove the filter from the fan vent.



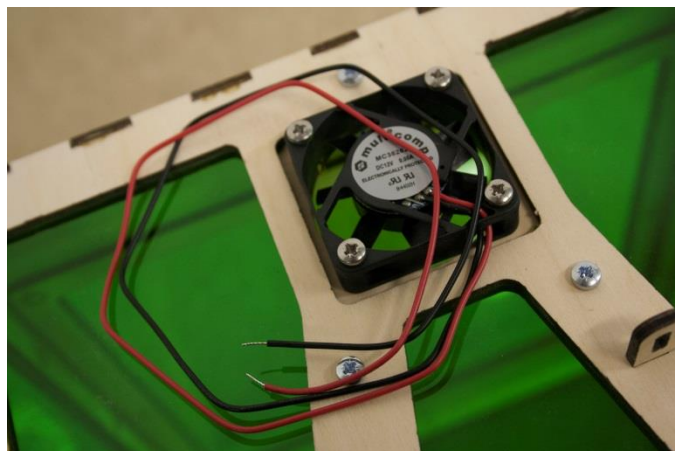
Go around the frame fitting each inner panel and filter until all have been fitted.



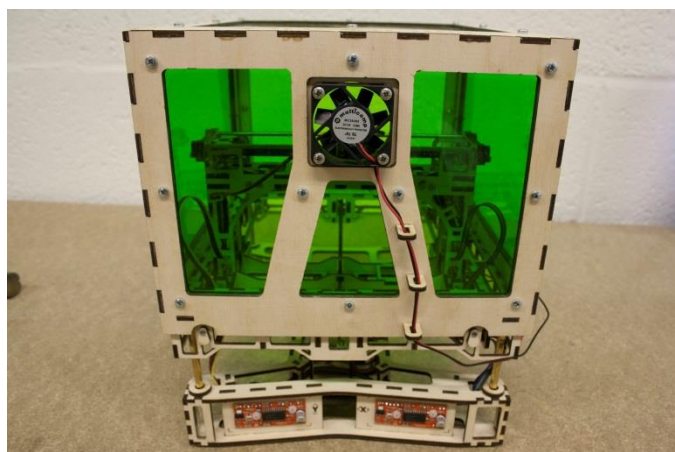
You may find it easiest to fit the back inner panel first, then do the top, front and finally the two sides.

Part 6 – Fitting and wiring the fan.

The fan has flow and rotation arrows on the side. Make sure the fan is positioned with the arrow pointing away from the case, this will suck air out. Secure the fan to the case with four M3 14mm Screws.

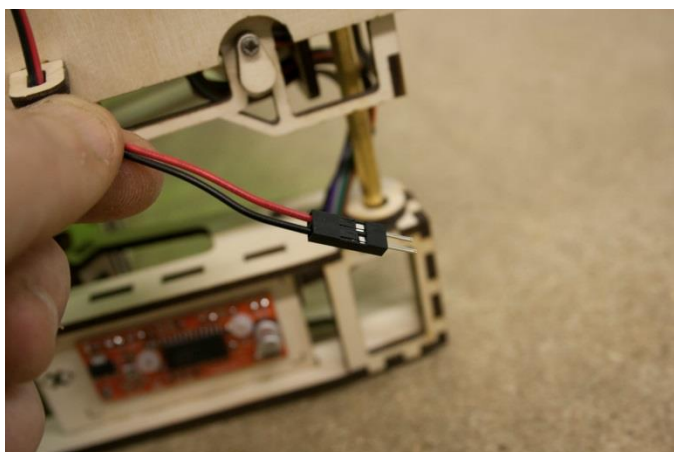


Feed the fan's wires through the Cable Conduits. Place the case onto your MicroSlice.

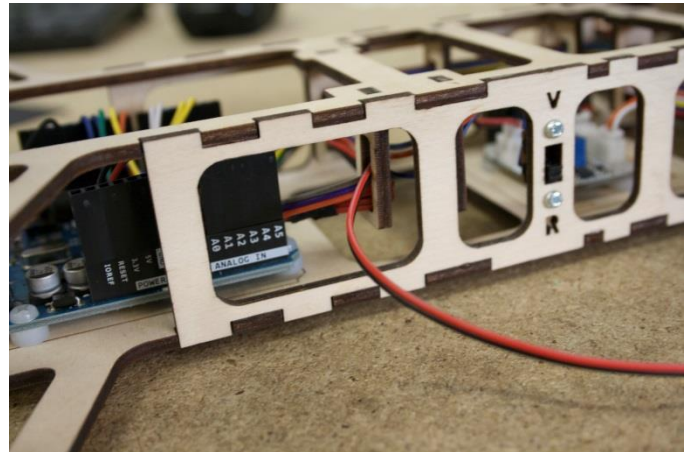
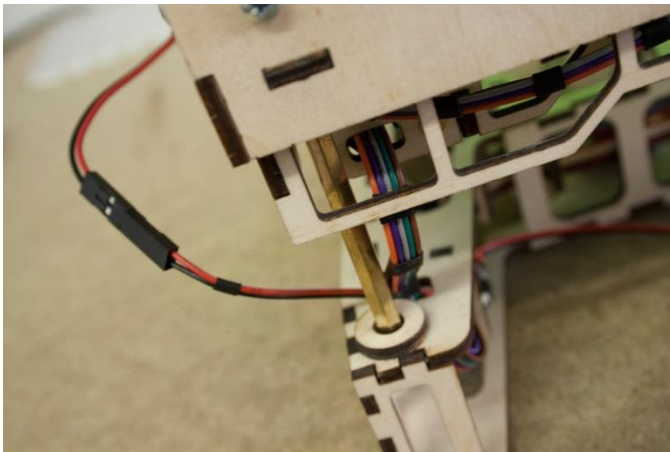


Cut the cable so that 5cm (2") protrudes from the bottom of the case. Crimp two male DuPont pins to the wires and cover with a 2-Way housing.

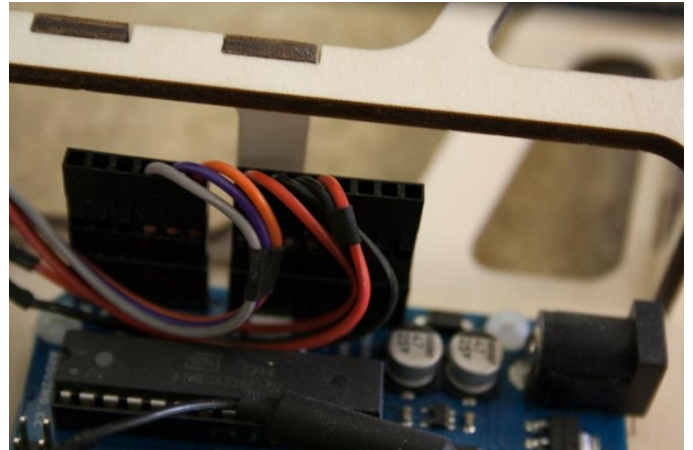
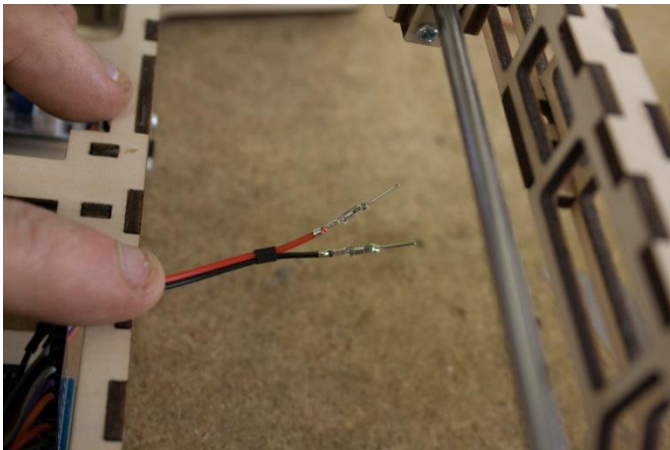
Prepare a length of cable with two female DuPont pins and a housing at one end.



Feed the cable through the Cable Conduits in the Lower-Deck towards the Arduino.



Cut the wire to length and crimp two male DuPont pins to the end of the wires. Plug the Red wire into 5v and the black into GND on the Arduino.



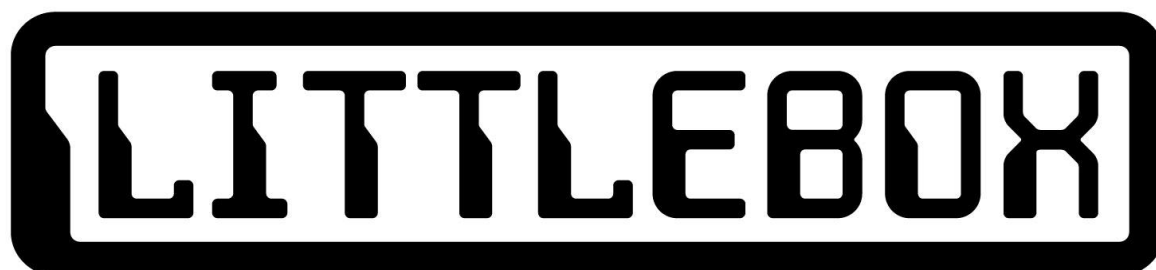
Whenever the fan is connected and power is applied to the MicroSlice the fan will spin.



The MicroSlice v2 & Display Case

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