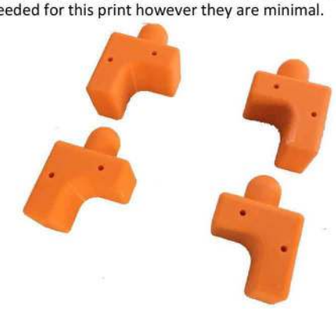
LulzBot Mini Enclosure

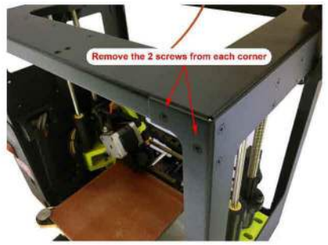
Step 1:

Print out 2 left brackets and 2 right brackets located at http://www.printedsolid.com/enclosures for a total of 4 pieces. PLA filament with a layer height of at least .2 with 4 or more shells and at least 20% infill is recommended. Supports are needed for this print however they are minimal.



Step 2:

Install the brackets on the front and rear of the printer. Using a 2mm hex driver to remove the existing screws and install the brackets using the included M3-40mm bolts and a 2.5mm hex driver. While there is still support for the top of the printer with the screws removed it is recommended to do one bracket at a time.



Step 3:

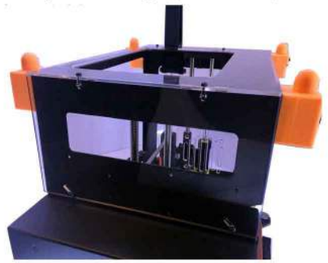
Note the letters on the individual acrylic pieces and then remove the protective covering from both sides of the pieces. While the front and back covers share similar pieces there are some differences. The sides, top and bottom are thicker for the front than for the back. This is to accommodate the build plate while keeping the enclosure total size at the tightest dimensions. It may be easier to remove the protective coverings as you do each part if you feel more comfortable working that way but it is important that the protective covering be removed before assembly of each part since they interlock into one another preventing you from removing it later. Use either your finger nail or a flat razor to pull up on the the edge of the protective covering. Take your time and pull slowly to get any additional stray pieces.

Step 4:

Set the top cover (Part K) on the top of the printer with the cutout for the spool arm aligned. It is a good idea to have the spool holder in the upright position for assembly.

Step 5:

Set the short side cover (Part I) on the left side of the printer by inserting the tabs into the slot on the top cover. Make sure that the vent holes are towards the front of the printer. The square nut sits in the slot and the 2 M3-10mm bolt goes through the top cover into the square nut. If you find it difficult to keep the nut in place while you insert the bolt you can use some painters tape to hold the nut in place for assembly. **DO NOT OVER TIGHTEN THE BOLTS.** Tighten them by hand and slightly more than 1/8th of a turn with a hex driver is enough to hold everything together.

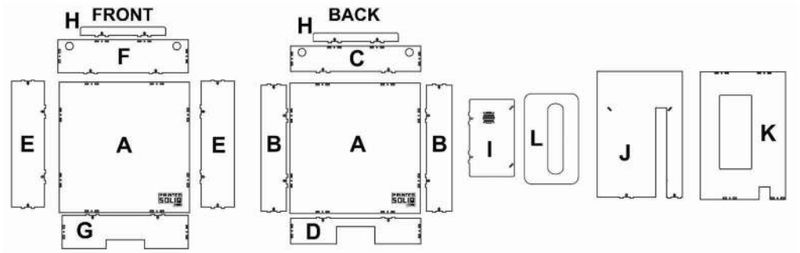


Step 6:

Using 2 M3-10mm bolts and square nuts you will inset the bolts from the inside of the machine into the existing holes that align with the 45 degree slots on the acrylic and hold them in place with 2 square nuts. Inserting the bolts from the inside helps to prevent possible snags with the gantry of the printer during a print. Since the gantry comes so close to the short side of the printer we opted to cover the entire side rather than an insert that can snag wires or filament and ruin a print.

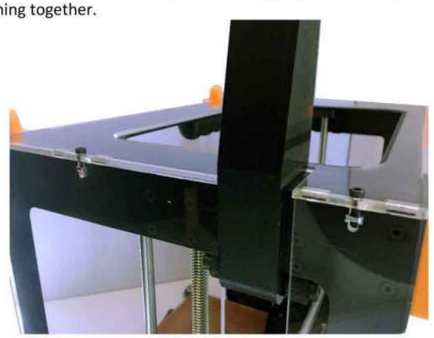
What's Included?

2	Part A: Front and rear panel with logo	1	Part I: Short side cover
2	Part B: Rear cover sides	1	Part J: Long side cover
1	Part C: Rear cover top	1	Part K: Top cover
1	Part D: Rear cover bottom	1	Part L: Optional top insert
2	Part E: Front cover sides	36	M3-10mm bolts
1	Part F: Front cover top	8	M3-40mm bolts
1	Part G: Front cover bottom	36	M3 square nuts
2	Part H: Front and rear cover stiffener	2	M3 washers



Step 7:

Set the long side cover (Part J) on the right side of the printer by inserting the tabs into the slot on the top cover. Make sure that the spool holder slot is in line with the spool holder. The square nut sits in the slot and the 2 M3-10mm bolt goes through the top cover into the square nut. If you find it difficult to keep the nut in place while you insert the bolt you can use some painters tape to hold the nut in place for assembly. **DO NOT OVER TIGHTEN THE BOLTS.** Tighten them by hand and slightly more than 1/8th of a turn with a hex driver is enough to hold everything together.



Step 8:

Using 2 M3-10mm bolts, square nuts and washer you can insert these from the outside with the nut and washer on the inside of the 2 diagonal slots at the bottom of the long side cover (Part J). The washer and nut help to hold the lower portion on the frame of the printer.

Tools Needed

2mm hex driver
2.5mm hex driver
Optional: Painters tape
Optional: Flat razor

Time Required

1-2 hours based on skill level

WARNINGS

Do not over tighten the screws in the hood. Tighten them just enough to hold without moving around.
You can crack the Acrylic very easily by over tightening.
If you do crack a panel please contact printedsolid.com for replacements at a discounted rate.

The enclosure is made from extruded acrylic for optical clarity that helps reduce visual distortions. Do not use Windex or household cleaners to clean the Acrylic.
Use dish soap or hand wash and do not scrub or use any abrasives.

LulzBot Mini Enclosure

Step 9:

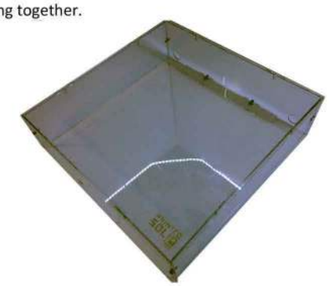
Install the stiffener (Part H) on to the top plate (Part C) The 2 square nut sits in the slot on the stiffener and the 2 M3-10mm bolt goes through the top into the 2 square nut. If you find it difficult to keep the nut in place while you insert the bolt you can use some painters tape to hold the nut in place for assembly. **DO NOT OVER TIGHTEN THE BOLTS.** Tighten them by hand and slightly more than 1/8th of a turn with a hex driver is enough to hold everything together.

Step 10:

Attach the pieces assembled in step 9 to the 2 sides (2x Part B) and bottom (Part D) to create the frame. The tabs and slots should all be facing up to receive the face panel (Part A) in step 11. The 4 square nut sits in the slot on the sides and the 4 M3-10mm bolt goes through the top and bottom into the 4 square nut. If you find it difficult to keep the nut in place while you insert the bolt you can use some painters tape to hold the nut in place for assembly. **DO NOT OVER TIGHTEN THE BOLTS.** Tighten them by hand and slightly more than 1/8th of a turn with a hex driver is enough to hold everything together.

Step 11:

Set the rear panel on top with the PrintedSolid logo in the bottom right corner. You should be able to see the logo from outside the printer in the correct orientation. The 8 square nut sits in the slot on the sides/top/bottom and the 8 M3-10mm bolt goes through the top panel into the 8 square nut. If you find it difficult to keep the nut in place while you insert the bolt you can use some painters tape to hold the nut in place for assembly. **DO NOT OVER TIGHTEN THE BOLTS.** Tighten them by hand and slightly more than 1/8th of a turn with a hex driver is enough to hold everything together.



Step 12:

Repeat steps 9 through 12 for the front cover using parts A/E/F/G/H. Making sure to not over tighten the bolts.

Step 13:

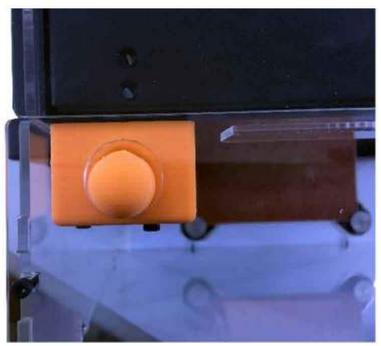
While not needed we have included the optional plate cover (Part L) that sets in place to help cover the top. During our testing we saw no significant air flow or temperature differences in the printer with the optional top on or off.

When using larger dimension spools of filament, removing the optional top cover can help prevent unnecessary drag.

On some Mini's you may notice a slight lift of the optional plate cover when at max Z travel. This is normal and will not cause any damage to the printer.

Proper Usage:

You can lift the front or back up and off the 3D printed post. The cutout on the bottom helps to clear the arms on the bed of the printer. It is normal for the cover to sit on the table and is part of the design to help reduce the risk of accidental breakage of the top plates. You will also notice the post holes are slightly enlarged and the front/back covers are slightly larger than the top and side covers. This is intentional to help prevent accidental snags or breakage after repeated use.



Congratulations on a job well done!