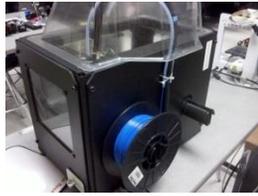


HOW TO USE THE MAKERBOT 2X PRINTER (P-TER)

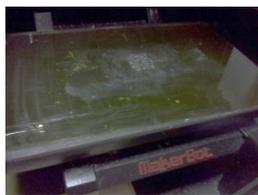
Change filament if necessary...

1. If there is no filament on right spool holder (as you are facing the printer) or you want a different color, do the following:
2. Choose "Utilities > Change Filament > Unload Filament" from printer panel.
3. Wait for extruder to heat up, then slowly pull out filament above the extruder head when prompted.
4. Press [M] on panel to stop unloading.
5. Remove spool from back, place another spool on holder (**ABS plastic only**).
6. Choose "Utilities > Load Filament" from printer panel.
7. Wait for extruder to heat-up, then insert filament when prompted. Apply slight pressure while filament loads to force-through possible hardened plastic inside nozzle.
8. After filament extrudes for 30 seconds, press [M] on panel to stop loading.



Replace Kapton tape if necessary...

1. If the tape surface is very bumpy or torn badly, do the following to avoid problems during printing:
2. Remove tape, then clean surface with acetone and/or rubbing alcohol.
3. Apply new Kapton tape by cutting a sheet, let fall onto build plate by touching the middle first (let ends fall), then pick-up each end and push smooth with scraper from middle to each side.

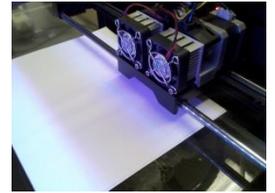
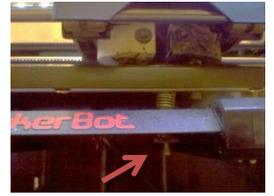


Apply glue stick

1. Apply thin layer of glue stick before every print. This ensures that your part will stick to the build plate. This is especially important when printing large parts.

Level build plate if necessary...

1. Do this every 3-4 prints to ensure part sticks to build plate and to prevent curling/warping of part edges while printing.
2. Choose "Utilities > Level Build Plate" from printer panel.
3. Press [M] to step-through instructions.
4. Place two sheets of paper under nozzle at each leveling point, adjusting knob under build plate to feel **slight** friction between nozzle & paper.
5. Press [M] to move to next leveling point, then repeat Step 4 above.
6. Do not turn knobs at **center** leveling point; it will always be too tight with the paper test.
7. If you adjusted the knobs a lot, level the plate again.



Load part in MakerWare...

1. Open MakerBot Desktop by clicking icon on desktop.
2. Click [Add File] button to locate your STL file.
3. Use buttons on left-side toolbar to move, rotate, and/or scale your part.
4. Click [Settings] button, choose the desired shells and infill, and whether to use a raft and/or supports. Click [OK] to save settings.
5. Click [Print] to generate a print preview, then click [Start Print] button to begin printing.



After printing...

1. Choose "Utilities > Monitor Mode" on panel to watch build plate cool to 50 degrees or less.
2. Use brown palette knives to remove part (**do not use large putty knife as it will scratch build plate**).

