

Aus3D Prusa Mendel i3 Kit

(HC-101 Acrylic Frame 3D Printer)

Note: Copies of this documentation, along with other relevant files, can be found at:

<http://github.com/Aus3D/Prusai3>

Tips:

- Use an included spring-washer on every bolt (where possible). This reduces the likelihood of damaging the acrylic.
- Take care not to over tighten any of the screws or bolts, as acrylic is not flexible and will snap suddenly if it experiences too much force. Generally, all screws and bolts should tighten until they feel fairly secure, do not tighten them further.
- Take care in aligning the acrylic supports for the y-axis – while they will fit in both ways, both the front and back must line up.
- Remember to put the y-axis printer bed support (large sheet with printed bearing holders) onto the 8mm smooth rods before fixing the smooth rods in place.
- Assemble the x-axis before placing it onto the z-rods.
- When wiring, take care to position all cables so that they will not get caught in moving parts. Cable ties, cable tie sticky mounts and cable loom is provided to help keep things tidy. Move each axis by hand to ensure cables will not get caught.
- Calibration is generally the hardest part of any printer build. Repetition is unfortunately the key, but a few things to check are:
 - X/Y/Z axis are all as square as possible.
 - Endstops are correctly positioned
 - Hot-end nozzle is 1 layer height (0.2-0.4mm, use a sheet of paper to check) above printing surface.
 - Bed is level (check each corner and centre)
- Some printed parts may vary slightly from kit to kit. Do not be alarmed if the parts you receive are not identical to those pictured in the assembly guide, as parts are revised and updated regularly.
- Screw sizes listed in the assembly manual are a guide only. The thickness of some parts varies from kit to kit, and different sized screws may need to be used. The included screws should be sufficient. Make sure screws used are long enough to thread into the nut, but not long enough to press into the acrylic frame (for T-slot joins).
- Finally, superglue works wonders on acrylic. Obviously it is better that none of the frame is damaged, but if something is over tightened, it can be fixed.

Warning: 3D Printers are complicated machines, and can be dangerous if mishandled. Parts of the printer reach high temperatures during use, and become dangerous to touch. Keep flammable items away from the printer during operation, and do not leave the printer unattended during operation. Running the printer in an enclosed environment (heating chamber, etc.) where heat is allowed to build up may damage the machine, and is not recommended.

If you are stuck and need assistance, please contact Chris via chris@aus3d.com.au.