

## **GUIDE TO SUCCESSFUL USE OF INVENT3D PRINTER**

- **Read printer instructions before operating the printer!** Complete operating instructions in TeamUp Moodle or <http://www.inventorcloud.net/invent3d-instructions/>
- The INVENT3D printer has been designed to operate correctly only with the INVENT3D Slic3r slicer program settings; software installation download can be found at <http://www.inventorcloud.net/invent3d-instructions/>. When properly installed, the LCD display screen will show a version number of the slicer program used at the bottom of the info screen during print operations. **Use of any other slicer program can significantly damage the printer.**
- Proper leveling of the print board is essential for good quality prints. The print bed level needs to be checked if the printer is failing to print a good first layer. Leveling instructions can be found in the operating instructions.
- **Never print directly onto the acrylic print bed.** The bed must be covered with either BuildTak material (available from INVENTORcloud), or other appropriate covering such as painter tape. Quality of the build, lifting of printed parts around edges, and difficulty in removing printed parts are all related to the material used for covering the print bed.
- If the printer quits printing, the cause is most likely due to one of the following:
  - The print head hot end is plugged; this happens occasionally due to bad filament, improper shut down of the printer, or failure of the extruder cooling fan.
  - Malfunction of the extruder motor.
  - Improper feeding of the filament material due the material not coming off of the filament roll properly or the material stuck in the filament tube or other location.
  - **The problem must be corrected to restore normal print operations.**
- If the printer quits printing due to a plugged hot end, see operating instructions for procedure to clear the hot end.
- Good print quality is largely a function of the quality of the design. If unsatisfactory printing is isolated to a specific print job, check to assure it has been designed properly.
- The cooling fans must be operating properly and in the correct position to avoid printer plugging and/or printer damage. **Do not operate the printer if the cooling fans quit functioning or become obstructed.** Additionally, do not shut down the printer while the fans are operating to avoid hot end plugging and equipment damage.
- **Never attempt to fix the printer without first reading the complete operating instructions** and/or requesting help from INVENTORcloud. Significant damage can occur to the printer through improper disassembly.
- The LCD display is susceptible at times to interference from static electricity. It can be corrected by removing and reinserting the SD card. If this occurs during printing, it is best to wait until the print is finished to avoid having to scrap the print.

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