



## Quick Start Guide

# INSTABOT

A Product of iNSTA3D TECHNOLOGIES



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[www.myinsta3d.com](http://www.myinsta3d.com)

# About iNSTA3D TECHNOLOGIES

*iNSTA3D TECHNOLOGIES* is shaping ideas by helping researchers, engineers and health experts expand human knowledge with the aid of advanced technology - 3D Printing. We are fuelling the next generation projects of innovation through our work in Automotive, Medical, Industrial, Architectural, Engineering and Education sectors. We're trusted by leading manufacturers and groundbreaking designers, makers, thinkers and doers.

3D Printing has caught the attention of educators who are looking into ways to incorporate it into the classroom. Our vision acts as a tool to empower realistic illustration in classrooms. We focus on productive and creative learning process.

As a part of this, we provide professional level 3D Printing courses and workshops. We also help setting up innovation laboratory in educational institutions for a better learning environment.

We provide the most innovative & advanced 3D printers (FDM, SLA, DLP, SLS), 3D Pens in India. As an initiative to Make In India programme, we launch our own new 3d Printers, *iNSTABOT* series with higher specification.

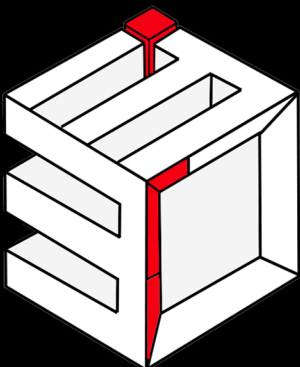
Welcome.

Let's Get Started.

Welcome to the User Manual for the  
**iNSTABOT®** Desktop 3D Printer.

The **iNSTABOT**  
is super easy to use, but it's also packed  
with brand-new features,  
so even if you've used a  
Desktop 3D Printer before, be sure to  
read this manual all the way through.

**MANUFACTURER**  
*iNSTA3D TECHNOLOGIES*  
[www.myinsta3d.com](http://www.myinsta3d.com)



**iNSTA3D**

**Dream Design Deliver**

# Safety Instructions

**Please read the safety instructions carefully before get started.**



iNSTABOT 3D printer generates high temperature. Do not reach inside of the printer during operation. Allow time for the printer to cool down after printing. Contact with the extruded material may cause burns. Wait for printed objects to cool before removing them from the build platform.



iNSTABOT 3D printer includes moving parts that can cause injury.



Vapours or fumes may be irritating at operating temperature. Always use the iNSTABOT 3D printer in an open, well ventilated area.



Be cautious when using the scraper. Never direct the scraper towards your hand.



The iNSTABOT 3D printer **MUST NOT** be exposed to water or rain.



The iNSTABOT 3D Printer is designed to be used within ambient temperature ranging 8°C-40°C, and humidity ranging 20%-50%. Working outside those limits may result in low quality printing.



In case of emergency, immediately turn off the iNSTABOT 3D printer.



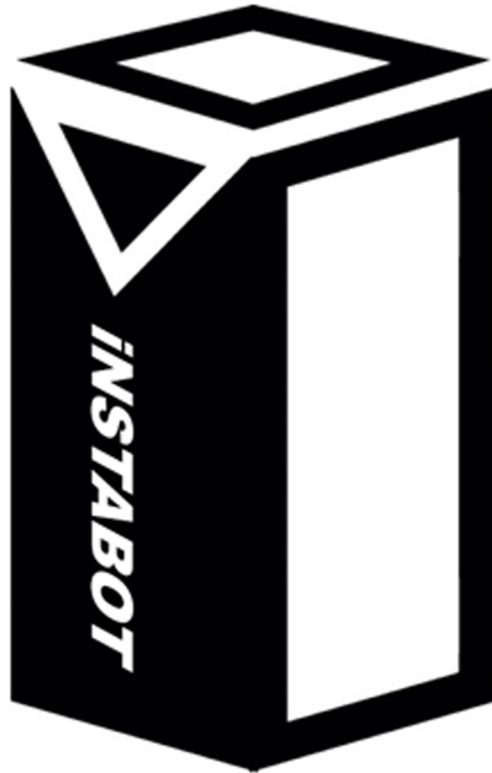
It is recommended to use protection glasses when cleaning/sanding printed models to avoid small particles contacting eyes.



Never leave the iNSTABOT 3D printer unattended during operation.



## A. Unpacking iNSTABOT



Package type: Carton Box

### Accessory checklist



**USER  
MANUAL**



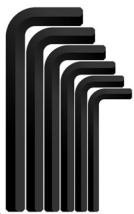
**WARRANTY**



**USB  
CABLE**



**CARD  
READER**



**ALLEN  
KEYS**



**MEMORY  
CARD**



**SCRAPPER**



**MASKING  
TAPE**



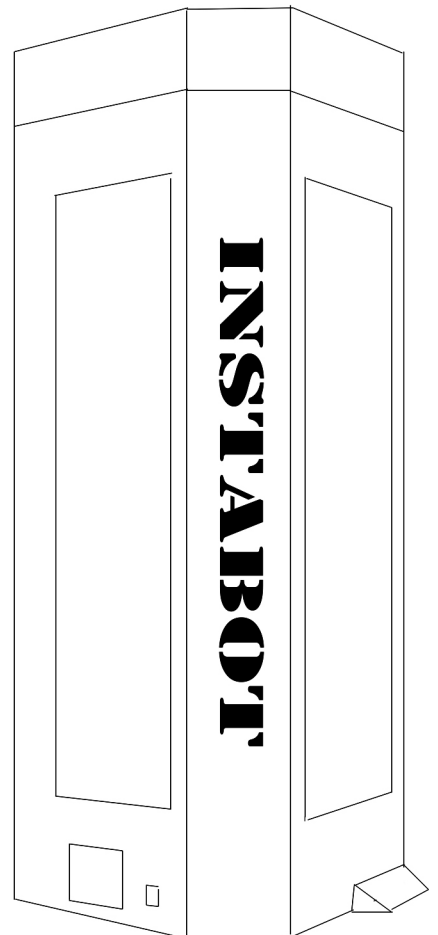
**PLA FILAMENT**



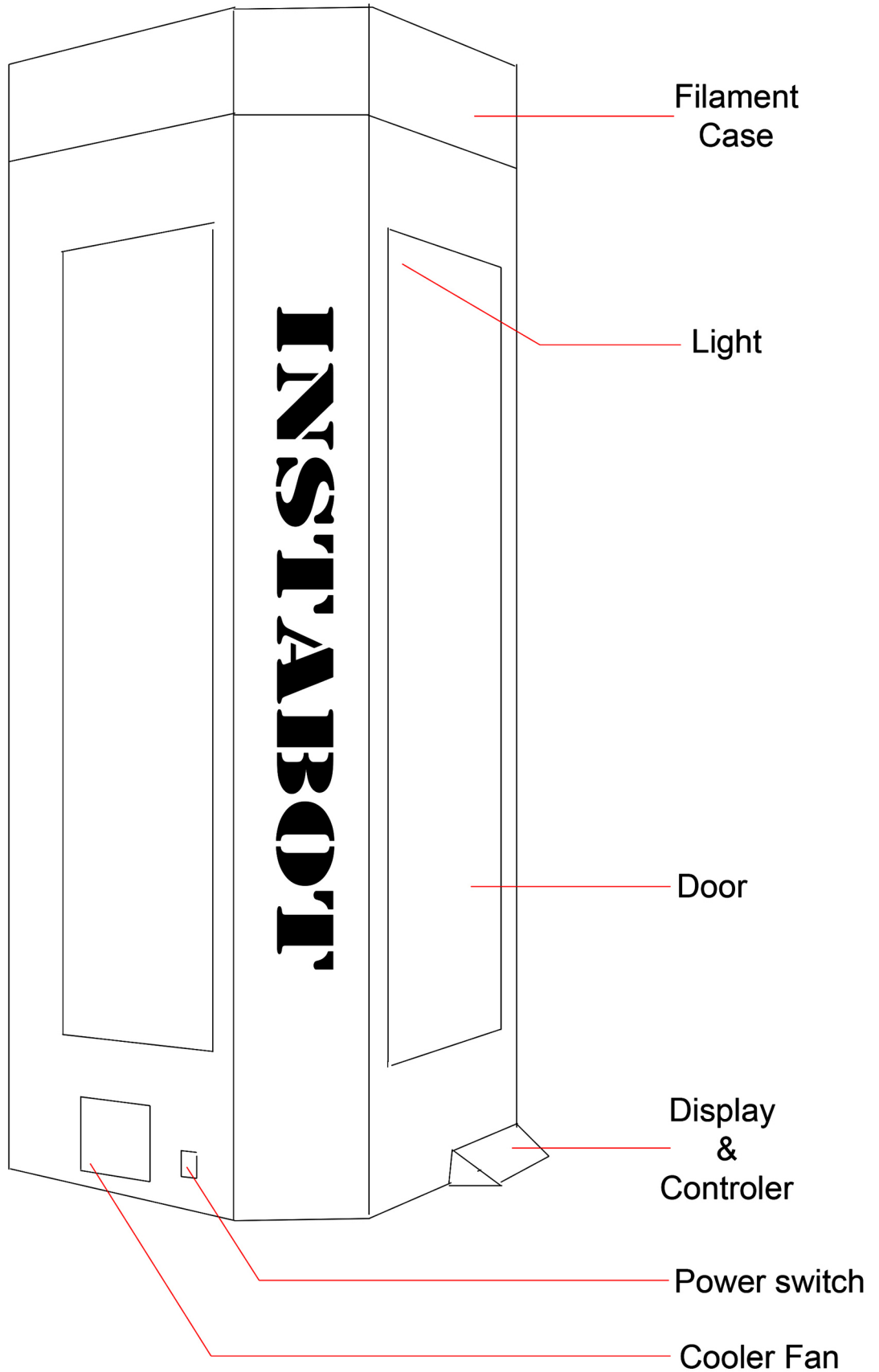
**NOZZLES**



**SCREW  
DRIVER**



## **B. About the iNSTABOT S2**



## **C. List of Parts**



### **High hardness metals**

Metal Rail Slider Block  
Firm structure Strong stability



### **Anti-clog Mechanism**

Filament Free Roll System with Bearing System

### **All metal parts**

All metal parts,High- precision,More durable  
Structural strength than ordinary mechanical

### **High Precision Printing**

Cooling fan Combined with imported ball screw,  
make Filament extruding,then instant cooling  
High speed printing better,and more accurate



Using the professional metallic mold making,to ensure that exactly the same length.Our Fish-Eye effecor and carbon rod is precision compareto the other ordinary one.



### **Aluminium Heated**

Uniform Heat distribution  
over the build surface



Ordinary Fish-Eye Effecor Cabon Rod



### **LCD Monitoring**

Easy user interface Display  
with Rotating encoder for  
Machine operation / control



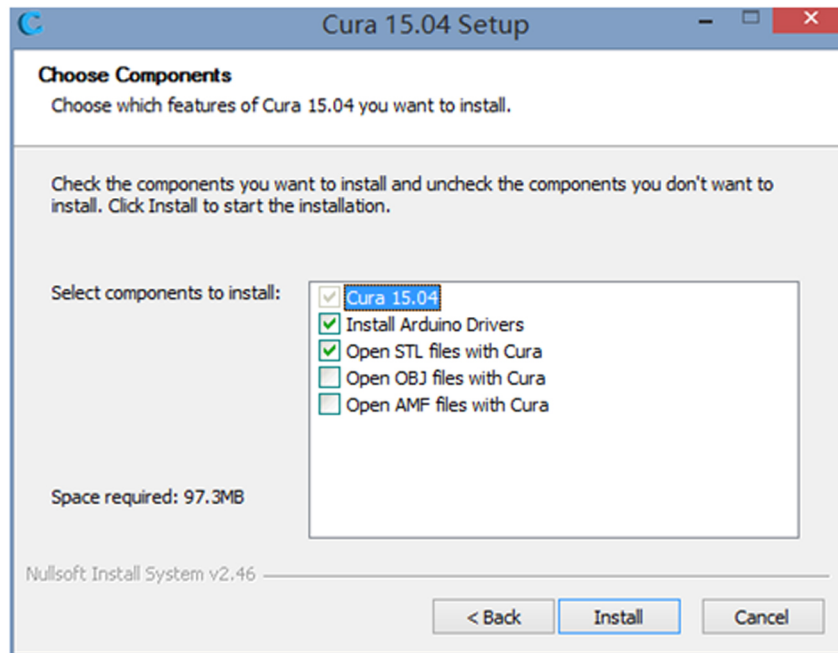
### **E3D Nozzles**

For Different resolution  
engineered nozzles of variable  
sizes

## D. Installation of CURA

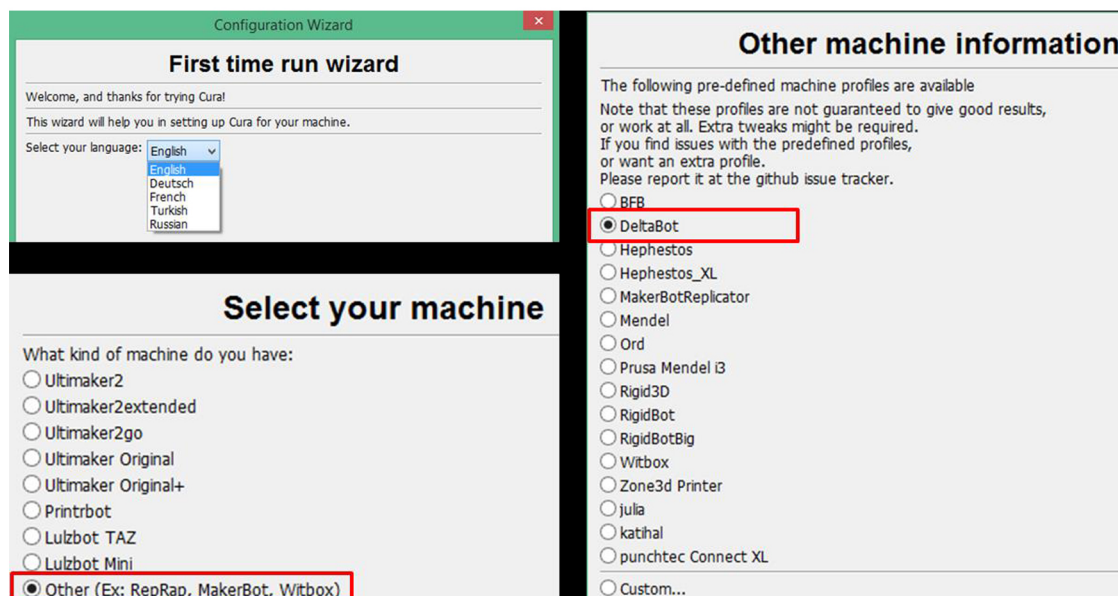
Step 1. Installation of the slicing software.

Cura is used for example. Double click 'Cura\_15.04' to proceed with the installation. When the dialogue appears you may tick all the boxes as shown in Fig.



Step 2. Configuration.

When finishing the installation and opening 'Cura' for the first time, a configuration dialogue would appear. Choose the 'language' that suits you and click 'Next' if necessary. When come across 'Select your machine', please choose 'Other' and hit 'Next' and choose 'DeltaBot' in the following dialogue, which is shown step by step in Fig. Lastly, click 'Finish' to complete the configuration and enter the home interface of Cura.





## D. Installation of CURA (Continued...)

Step 3. Printing parameter settings.

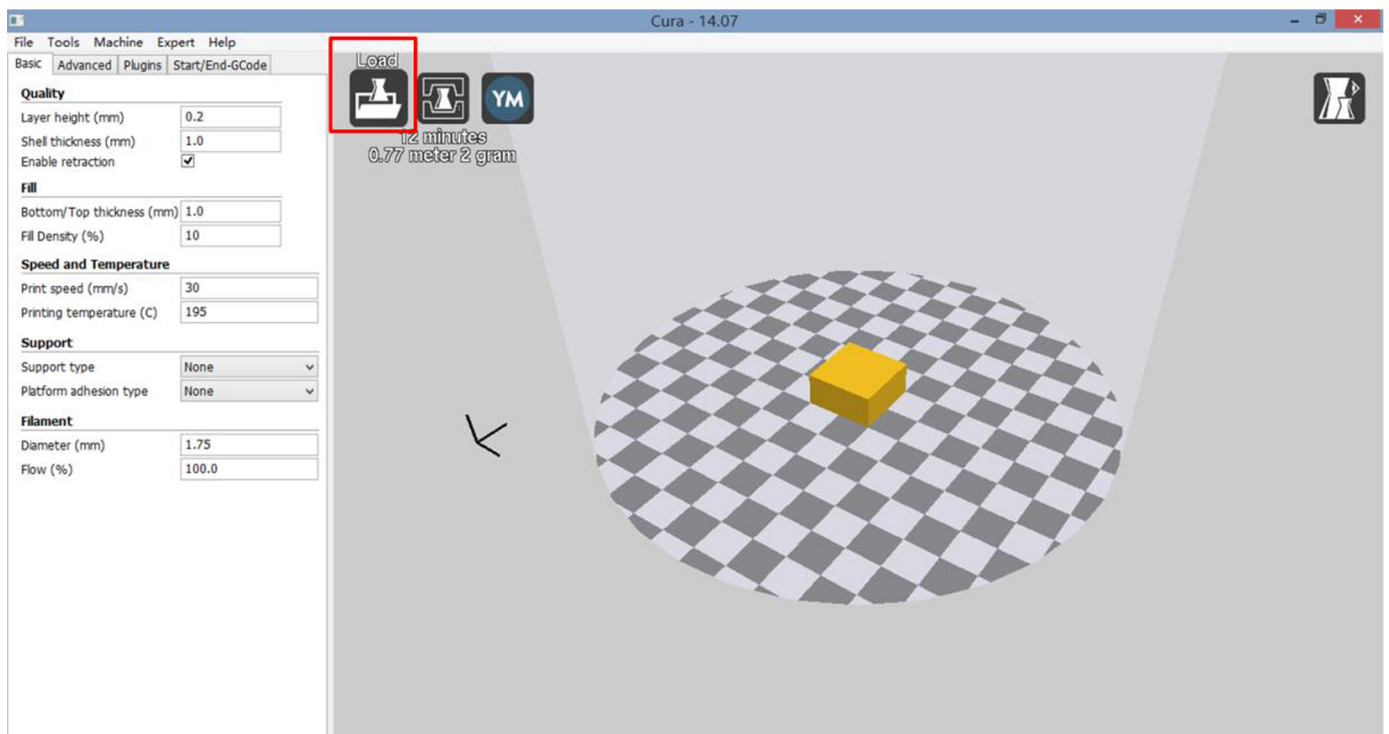
At the home interface of Cura, click 'Machine' and in the drop-down menu choose 'Machine settings' to open the setting interface as Fig. shows. Change the maximum width, maximum depth and maximum height into 240, 240 and 300 respectively. The serial port can be AUTO, or choose the right port when you have several devices connected. The baud rate is suggested to be 250000. Then click 'OK' at the bottom left, to return to home interface.

Next, as shown in Fig. below, click 'Basic' and 'Advanced' respectively on the top left in home interface of Cura to change the parameters to suitable values one by one. Note: the suggested parameters in Fig. may be varying depend on different models of iNSTABOT.

## D. Installation of CURA (Continued...)

Step 4. Print.

To experience the very first print, please load the test model '20×20×10' and then click the 'Print with USB' icon on top, as shown in Fig. below. In order to minimize the instability from the PC and USB port, it is strongly suggested to save the model in Cura as Gcode file into SD card and insert the SD card to 3D printer to print offline.



### Printing Parameters:

- Layer Height
- Shell Thickness
- Fill Density
- Printing Speed
- Print Temperature
- Support Type
- Platform adhesion
- Filament Dia
- Filament Flowrate
- Retraction Speed and Distance
- Travel Speed
- Infill / Top & Bottom layer speed / Shell speed
- Cooling Fan
- Plug - ins

## **E. PRODUCT WARRANTY**

### **WARRANTY TERMS AND CONDITIONS OF INSTA3D TECHNOLOGIES**

#### *Warranty Exclusions*

- a) Out of the scope of the present Warranty will be any damages and malfunctions of the INSTABOT (3D Printer) which have their origin in:
- 1) Accidents.
  - 2) Negligence, improper or inadequate use.
  - 3) Not following the Operation, Installation and Maintenance instructions given in the current End User Manual and in the Installation Manual of the respective model of 3D Printer when they were purchased.
  - 4) Modifications or repairing attempts that were not been held by authorised personnel by the After Sales Service of INSTA3D TECHNOLOGIES.
  - 5) Damages due to surge, floods, plagues, earthquakes, third parties actions, or any other reasons different to the standard use conditions of the 3D Printer and that are out of the control of INSTA3D TECHNOLOGIES.
  - 6) Damages due to over voltages coming from the AC side of the public utility grid.
  - 7) Insufficient working condition of the equipment.
  - 8) Inadequate / improper transport conditions.
  - 9) Not compliance of the current mandatory installation standards.
- b) It will be also out of the scope of Warranty of any 3D Printer with a serial number that has been manipulated or it is unreadable.
- c) All complaints concerning aesthetics will not be considered unless they mean a malfunction or a difference in performance compared to the one announced on the technical and commercial brochures of INSTA3D TECHNOLOGIES.
- d) The Warranty rights established on this document do not cover the shipping costs of the damaged 3D Printer or parts when sending them to the factory to be repaired, neither when receiving them back. Neither more, are labour costs due to dismantling of the damaged 3D Printer and reinstallation of the repaired ones not covered by INSTA3D TECHNOLOGIES.
- e) Any malfunction or damage should be reported to INSTA3D TECHNOLOGIES immediately within a period of 2 weeks along with a visible representation of the problem. If not, warranty cannot be claimed.
- f) Dismantling of INSTA3D TECHNOLOGIES products voids the warranty.
- g) Any other Warranty right not mentioned specifically on this document is out of the scope of this Warranty.

Customer

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#### *Claiming of the Warranty Rights*

Warranty rights can be claimed during 1st year, the present Warranty is in force and immediately after the failure detection, except for visible defects, in which case the claim shall be lodged within no more than 2 weeks after the ExWorks delivery date and always prior to its installation.

Any customer or end user, that considers himself with enough good reasons to claim for the Warranty rights declared in this document, must proceed as follows:

a) Inform immediately by written document to the supplier/ Distributor/ Manufacturer of the 3D Printer, or to the after-sales maintenance department of INSTA3D TECHNOLOGIES

For that purpose, INSTA3D TECHNOLOGIES «Complaint Form» must be fulfilled and attached with a copy of the purchase invoice and the delivery note of the 3D Printer, showing the date of acquisition and the serial number of the 3D Printer.

b) Once the compliant form is received by INSTA3D TECHNOLOGIES, the Technical Department will analyse it in accordance with the Warranty scope, and will inform the customer about the steps to be followed.

c) INSTA3D TECHNOLOGIES will try to repair its products within very short period (two weeks). Should this be not possible, INSTA3D TECHNOLOGIES will contact the customer in order to explain the reason of the delay and to communicate the estimated time to fix the 3D Printer and its accessories.

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## **E. PRODUCT WARRANTY**

### **WARRANTY TERMS AND CONDITIONS OF INSTA3D TECHNOLOGIES**

#### *Manufacturer responsibility limitations*

- a) INSTA3D TECHNOLOGIES will not be responsible to the customer, neither directly nor indirectly, by the non-observance or delay in its Warranty commitments, due to any unforeseeable event such as cases of Force Majeure.
- b) The responsibility of INSTA3D TECHNOLOGIES derived from the present Warranty will be limited to the commitments detailed here above and to the amount paid in the purchase order by the customer. There exists no liability of any kind of INSTA3D TECHNOLOGIES for indirect, special or consequential damage or loss, including but not limited to loss of profits or revenues, loss of use of the Equipment, loss of production, cost of substitute equipment, facilities or services, downtime costs, third parties claims, cost of capital, or any other kind of financial loss.
- c) The Warranty limitations mentioned here above will be applicable unless they are against legal prescriptions currently running on the country in reference with product responsibility.

This agreement shall be construed in accordance with the Indian laws and will govern any disputes regarding the interpretation and or validity of these Terms and Conditions hereof. Any dispute relating to the products sold from INSTA3D TECHNOLOGIES hereunder shall be subjected to the jurisdiction of the courts within India. The provisions of this agreement are divisible and the invalidity or unenforceability of any provision or provisions contained herein shall not in any way affect the validity of this agreement without the invalid or unenforceable provision or provisions.

- d) The entire contract is embodied in this writing. There are no understandings, agreements, representations, or warranties, either oral or written, relative to the products, including statements made in or conduct implied from past dealings that are not fully expressed herein. No oral or any other form of statement subsequent to the acceptance of the purchase order purporting to modify the said terms and conditions shall be binding unless consented to in writing by a duly authorized officer of INSTA3D TECHNOLOGIES in a document making specific reference to this transaction or after a transaction has been made.

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- d) The entire contract is embodied in this writing. There are no understandings, agreements, representations, or warranties, either oral or written, relative to the products, including statements made in or conduct implied from past dealings that are not fully expressed herein. No oral or any other form of statement subsequent to the acceptance of the purchase order purporting to modify the said terms and conditions shall be binding unless consented to in writing by a duly authorized officer of INSTA3D TECHNOLOGIES in a document making specific reference to this transaction or after a transaction has been made.

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Manufacturer

## **E. PRODUCT WARRANTY**

### **WARRANTY TERMS AND CONDITIONS OF INSTA3D TECHNOLOGIES**

#### *Safety Precautions*

- a) Buyer shall require employees to use all safety devices, guards and proper safe operating procedures as set forth in manuals and instruction sheets furnished by INSTA3D TECHNOLOGIES.
- b) Buyer shall not remove or modify any such device, guard or sign.
- c) It is Buyer's responsibility to provide all the means that may be necessary to effectively protect him/herself, all people around the machine and employees from serious bodily injury which otherwise may result from the method of particular use, operation, set-up or service of the equipment. If Buyer fails to comply with such provisions of this paragraph or the applicable standards or regulations aforementioned, Buyer shall indemnify and save INSTA3D TECHNOLOGIES harmless from and against any and all claims, losses or damages arising there from.
- d) Non-Genuine Items: INSTA3D TECHNOLOGIES advises that if you use non-Genuine Consumables, software, replacement parts or accessories, you may damage your Product and void your warranty.

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## **F. Delivery Note**

*The Product ( INSTABOT S2) and its Accessories delivered successfully.  
The delivery note also acknowledge the customer for its instalation and validation.*

*Delivery Details:*

*Customer*

*Manufacturer*

*Office Use:*