# **T1 Delta 3D Printer Instruction**

## **No.1 Product Overview**

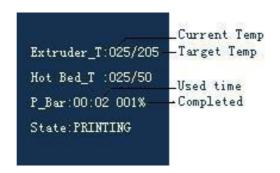


## **No.2 Specifications**

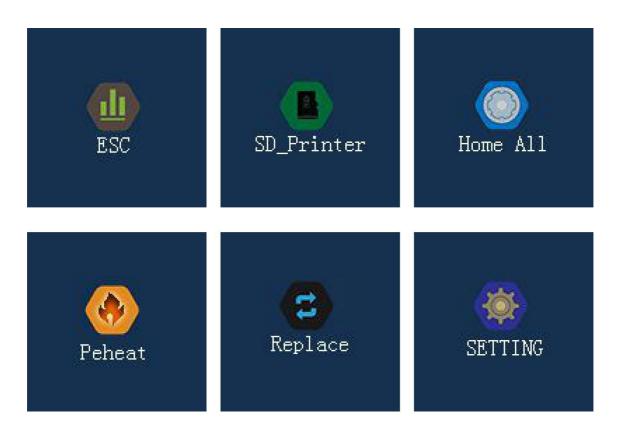
Model Number	T1
Finishing	Black
Product Dimensions	350*380*700mm
Printing Speed	20-150 MM/S
Available Filaments	PLA, ABS, Nylon, TPU, Etc.
Max Printing Size	Φ180*320mm
Printing Principle	FDM
Positioning Accuracy	0.01mm
Printing Accuracy	0.1-0.4mm
Hot Bed Temperature	<150°C
Nozzle Temperature	<275℃
Slicing Software	Cura
Software Input Format	STL, OBJ, DAE, AMF
Output Format	G-code
Connection	SD card
Power Requirements	100-240V ac ,50/60Hz
Machine Weight	5.5KGS
Nozzle Quantity	Single
Nozzle Diameter:	0.4MM
Layer Resolution	0.01-0.05MM
Gross Weight	6.5KGS

## **No.3 Product Instruction**

- 1. Power on—connect the power line and will display the start
- 2. The main interface—display the parameters of printing, such as the nozzle temperature, hot bed temperature, printing progress and printing status.



3. Press the knob and enter into the menu interface, turn the knob clockwise or anticlockwise to switch menu options.



#### 4. Menu Introduction

a. ESC: Return to the main interface.

**b. SD Printer:** Show you the list of STL files, to select STL files.

c. Home All: Let the nozzle return to its highest point.

d. Preheat: Preheat nozzle and hot bed.

e. Reload: Reload the filament

**f. Setting:** Set the printer parameters

### No.4 FAQ

#### 1. Q:How to use the filament auto-feeding function?

The auto-feeding operation can be executed before or during printing.

The first case, the printing file is not executed, the printer is in the idle state.

The second case, the printer is during the printing process, and you need turn it to pause first.

And then, please execute the reload operation, then the nozzle will be preheated, when the nozzle is preheated to the target temperature, the filament will turn back from the nozzle, then please insert the new filament to the extruder, press the knob so the printer will transmit the filament into the nozzle automatically, after the filament is out from the nozzle, you could press the knob to complete the reloading (or wait for the printer to complete the reloading).

#### 2. Q: How to reload the filament manually?

Similarly, to reload by hand, it could only be executed when the printer in the idle state or pause state.

Step 1: execute the preheating operation, when the nozzle has been heated up to the target temperature, and then you should push the filament into the extruder about 10mm first, and then, press the pinch-cock clamp of the extruder, and pull out the filament quickly.

Step 2: push the new filament manually to the extruder until the filament go out from the nozzle.

#### 3. Q: Why the printing quality is poor?

There are many factors that affect printing quality. You could check step by step.

First of all, please make sure the printer is in good condition, screws and other fasteners are not loose, wires connected well, the limit switch has been installed in the right position, and the hotbed has been leveled.

And then, please make sure the parameters in the Cura software for this T1 3d printer, have been set up properly. You could check all the parameters according to the 《Cura Installation and Instruction Manual》.

#### 4. Q: The problem on filament feeding?

There are two reasons why the extruder cannot feed filament.

First, the propulsive force of extruder is not enough, please adjust the extruder spring to increase the propulsive force.

Second, the throat tube or nozzle of the extruder head has been blocked or stuck by poor quality filament, please execute auto-feeding or reload the filament by hand, if still can not be resolved, you could use a needle or small copper wire to clean up the extruder head.

5. Q: How to level the hotbed?

Usually, we recommend to use the smart-leveling function, please take a look at the video to level the hotbed step by step.

If you want to level the hotbed by hand, please do as below:

a. Please find the center point of the hotbed and mark it.

b. Click the setting -> Z axis height, adjust the Z axis height till the nozzle near the hot bed, if the nozzle is not in the center of the hot bed, please adjust the position of three limit switch, till the nozzle could be located in the center of the hot bed.

- c. Click the setting -> Z axis height, adjust the Z axis height till the nozzle is above the hot bed about 0.1mm height (The thickness of A4 paper is about 0.1MM, you could put a A4 paper on the hotbed, and turn the height till the paper is not easy to move).
- d. Please adjust the three screws of the hot bed till the hotbed is leveled, and then, you could use the test.gode file to start a test printing, if the hotbed is not so leveled, you could still adjust the screws of the hot bed.

6. Q: Why the printed filament cannot stick to the hotbed?

It is very important whether the first layer is strongly caught the hotbed. If the first layer is not stuck to the hotbed, the printing would be failed finally.

- a. The hotbed is not leveled. And then, you need to redo the leveling.
- b. The nozzle is more than 0.1MM from the hotbed. And then, you need to adjust the distance between the nozzle and hotbed.
- c. You had removed the masking paper (PS. Masking paper is good for PLA and Kapton paper is good for ABS). And then, you need to paste the new masking paper on the hotbed. or maybe you could use the high quality Hairspray instead.
- d. You're printing the first layer too fast. And then, you need to re-slice the 3d file, and slow down the printing speed of first layer. (If you click on "Advanced" and go to the Speed tab, you will see a setting labeled "Bottom Layer Speed". For example, if you set a first layer speed of 20, it means that your first layer will print 20mm/s.)
- e. Wrong temperate setting on different filaments. For example, the hotbed temp of PLA filament should between  $40^{\circ}\text{C}$ - $60^{\circ}\text{C}$ , and ABS should between

 $70\,^{\circ}\text{C}$  -  $100\,^{\circ}\text{C}$  . So, please make sure you had set up the right temp when you slice the 3d files.

f. Your 3d object is too small. Sometimes you are printing a very small part that simply does not have enough surface area to stick to the hotbed surface. And then, you need to add the Brims and Rafts.

Cura includes several options that can help increase this surface area to provide a larger surface to stick to the hot bed.

One of these options is called as "brim". The brim adds extra rings around the exterior of your part. Please click the "Support" tab and click "Platform adhesion type" option.

Cura also allows users to add a Raft under their part, which can also be used to provide a larger surface for hotbed adhesion.

7. Q: Why the nozzle would scratch the hotbed surface?

The nozzle is too close to the hotbed, or the hotbed is not level. And then Click the setting -> Z axis height, adjust the Z axis height till the nozzle to be 0.1mm above the hot bed. Or redo the smart leveling.

8. Q: What you should do when the extruder head is blocked?

a. it is that the filament is stopped at the joint between the throat tube and nozzle, you could unload the filament and cut the filament to have a sharp end to give a try again.

b. It is that the throat tube or nozzle of the extruder head has been blocked or stuck, and then, you could try to execute auto-feeding to fix it.

If auto-feeding cannot fix this problem, you could set up the extruder temperature to be  $200^{\circ}$ C and reload the filament by hand.

If the problem still couldn't be resolved, you could use a needle or small copper wire to clean up the extruder head.

If all failed, you would have to exchange a new nozzle or a whole set of extruder head then.

PS. Please use the good quality filament, that is made of virgin material, as the poor quality filaments (especially the 3d printer pen filament), are very easy to block the extruder head!

## No. 5 Acknowledgement

Thanks for your time, and if you have any question else, please fell free to contact with your vendor, they would provide you the professional advice, or they would report your questions to us, and then, our after-sales engineer team would study your questions and provide you the exact solutions then.