

Use Instruction

- The printer is a DIY series product, some parts need to be assembled by customers. Take good care of every connection parts. Fixing every connection by glues is recommended.
- Do NOT attempt to use the machine in any way not mentioned in the manual, misuse may cause serious injuries and property damages.
- Keep the printer away from flammable and explosive materials and heat sources. Place the printer in a ventilated, cool and dust free environment.
- Do NOT place the printer on unstable surfaces, the vibration of the machine will affect the printing quality.
- Use only the original power cord supplied with the printer. Check if the power supply matches the input requirements of the printer. Power must be connected to a three-hole socket with earth wire to avoid damages to components or accidents such as fire or electric shock.
- Do NOT touch the nozzle or the heated bed while the printer is operating. Or it may cause burns or injuries.
- Do NOT wear gloves or bracelets when operating the machine, to avoid being caught by the moving parts which may cause crushing and cutting injuries.
- Clean the residues in the nozzle in time after printing. Do not touch the nozzle while cleaning. Or it may cause burns.
- Maintain the machine regularly. Cut off the power before maintaining the machine. Clean the machine body, heated bed, guide rails, robs, etc. with a dry cloth. Apply lubricant to sliding parts, screws and bearing parts.
- Children under 14 or people over 60 should NOT use this printer without assistance and guidance. Or it may cause injuries.
- Disassembly or modification by yourself may cause damage to the machine or abnormal performance, which will prevent you from enjoying the right to warranty or after-sales service.
- Cut off the power supply after use.
- The recommended filament for this printer is 1.75mm PLA. We recommend to use TronHoo official filament.



BestGee T300S Pro User Manual

Thank you for choosing TronHoo 3D printer.
Read this User Manual carefully and thoroughly before operating the printer for the first time.
Take good care of this User Manual.

Get more information from the flash disk in the package. Visit our website: www.tronhoo3d.com regularly to learn more about the latest news and updates.



			 M5*25 X4 M5*14 X8 M3*6 X4 (Backup)	 15A, 1.5 meter	 8GB TF card + TF card reader	 8-10mm
 1.5mm, 2mm, 2.5mm, 3mm, 4mm		 10 meters *2	 0.4mm	 5A		 Warranty Card

Notice

- For continue product improvement, all the contents in this manual is subject to change without notice.
- All the contents in user manual are provided for reference only. Actual product features and specifications (including but not limited to appearance, color and size), as well as actual display contents (including but not limited to backgrounds, UI and screen snaps) may vary, and should be subject to actual product.
- All data in this manual are theoretical values obtained by TronHoo internal laboratories through tests carried out under laboratory conditions. Actual performance may vary owing to differences in individual products, software versions, application conditions and environmental factors. All data is subject to actual usage.
- If any misunderstanding occurs due to print failure or misunderstanding of the content, we reserve the right of final explanation.



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Specifications

Model	BestGee T300S Pro	Nozzle Travel Speed	up to 200 mm/s
Technology	FDM / FFF	Supported Materials	PLA, ABS, PETG, TPU, Flexible Materials
Build Volume	300 x 300 x 400 mm	Filament Diameter	1.75 mm
Dimensions	545 x 575 x 645 mm	Language	English / Chinese
Package Dimensions	630 x 605 x 230 mm	Nozzle Temp.	up to 260°C
Net Weight	13.5 kg	Heated Bed Temp.	up to 100°C
Shipping Weight	16.5 kg	Connectivity	USB, TF Card, USB Flash Disk
Layer Resolution	0.1 mm	Display	4.3" TFT Touch Screen
XYZ Precision	0.05 mm, 0.05 mm, 0.1 mm	Supported File Formats	Gcode, Gco
Print Speed	up to 150 mm/s	Rated Input	100-120 VAC / 220-240 VAC 350W

Setup Manual

1

(1) base and (2) gantry are fixed by four (3) M5*25 screws from the bottom, by four (4) M5*14 screws and (5) fixed plate from the left, and by four (4) M5*14 screws and (6) fixed plate with limit switch from the right.

2

Plug in (1) Z-axis FFC, (2) z-axis motor cable

3

Plug in (1) Z-axis limit switch
(2) z-axis motor cable
Please check if the (3) baffle is straight. If it is bent, the limit switch will get damaged.

4

Fig. 1
Fig. 2

(1) The spool hanging tube is fixed to the spool holder with two screw nuts (Fig. 1).
(2) The spool holder is fixed onto the frame by the T-shaped nut (Fig. 2).
(3) The spool of filament is hung on the spool holder.

5

Fig. 3
Fig. 4
Fig. 5

Some parts of the printer may be loose during shipment. When assembling the printer, please check whether the heated bed and nozzle module are fixed properly and will not shake, and whether the x-axis guide rail stable one the gantry and not easy to fall when power is off. If not, adjust the eccentric spacers of the heated bed, nozzle module and x-axis guide rail (fig. 3, fig. 4, fig. 5) until the heated bed or nozzle module just stop shaking, or the x-axis guide rail is just stable on the gantry and does not fall easily. Note that if the eccentric spacers are too tight, the movements will not be smooth and the pulleys are easy to wear.

DO NOT pull out the Teflon feeding tube from the nozzle module. If the Teflon feeding tube is not installed in place, it will cause nozzle jams.

Be careful not to let the power switch stand the weight of the printer when setting up, or it may damage the switch.

Menu Opreation

1. Main Menu

Extrude / Retract Preheat
Files Move
Leveling About
Setting Light Effect

2. Extrude / Retract

Retract Stop Extrude
Extruding or retracting is available only when nozzle temp. has risen to 190 °C. Different filaments require different nozzle temp.s for extrusion. Refer to filament specification for nozzle temp. setting.
Decrease/Increase nozzle temp.
Single extruding or retracting distance, select ∞ to extrude or retract continually
Extruding or retracting speed
Real-time / Preset nozzle temp.
Return to Main Menu

3. Preheat

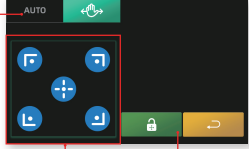
heated bed Nozzle Real-time temp. / Preset temp.
Single temp. setting value
Decrease temp. Increase temp.
Stop heating
Preheat PLA, ABS, PETG

4. Move

Zero X, Zero Y, Zero Z
Move X, Y, Z
Single moving distance
Manual Leveling Mode
Zero X, Y, Z at the same time
Unlock motors
Stop moving
Automatic Leveling Mode
Zero to print bed center

5. Manual Leveling

Switch to Automatic Leveling Mode



Move nozzle position Unlock X, Y motors

6. Automatic Leveling

Switch to Manual Leveling Mode

Move up / down nozzle and adjust offset value

Offset value

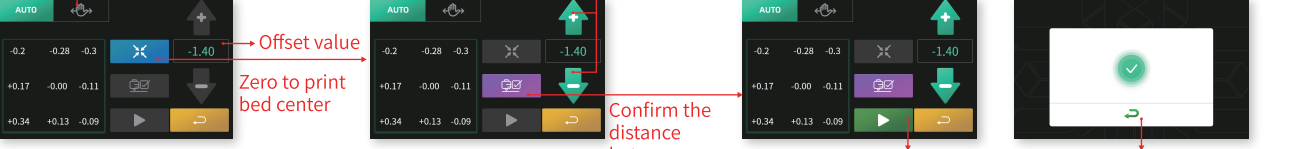
Zero to print bed center

Confirm the distance between nozzle and print bed

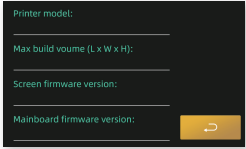
Start automatic leveling

Completed

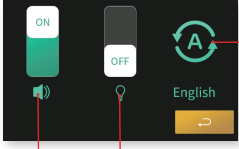
Click and return to Main Menu



7. About



8. About



Switch language

Sound Lighting

9. Printing Menu

Real-time temp. / Preset temp.

Nozzle temp.

Heated bed temp.

Relative printing speed

Relative fan speed

Pause

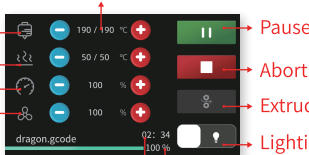
Abort

Extrude / Retract (available after pause)

Lighting

Printed time

Printed progress



10. Files

Click the printing file and a pop up window prompts you to confirm printing.

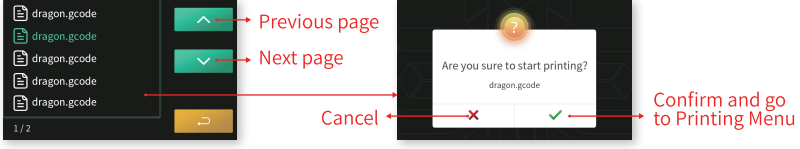
Previous page

Next page

Cancel

Confirm and go to Printing Menu

If you cannot find any files on the list after inserting the SD card, return to Main Menu and enter again or restart the printer. If there is still no file on it, check if the SD card is inserted in the correct direction and in place, and make sure the SD card is not damaged.
Note that printing files should be placed directly in the SD card, not in any folders, otherwise the files cannot be read.



11. Light Effect

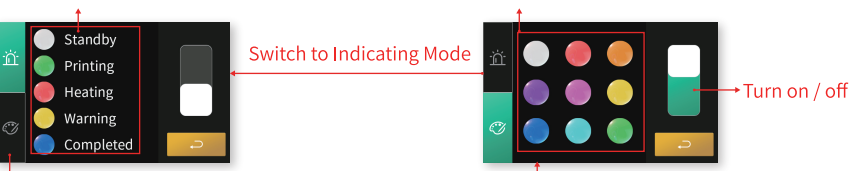
Indicating Status Description

Select Color

Switch to Indicating Mode

Turn on / off


Switch to Custom Color Mode

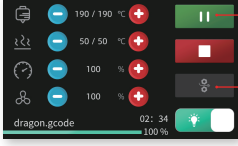


12. Pause

Resume

Extrude / Retract


After pause, you can change filament by clicking  to go to Extrude / Retract.



13. Abort

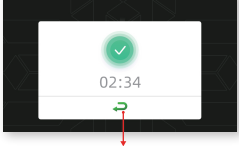
Cancel

Click and return to Main Menu



14. Finish

Click and return to Main Menu

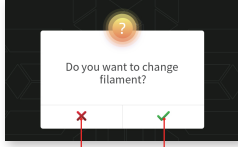


15. Filament Run-Out Error

Cancel and return to Printing Menu

Confirm and go to Extrude / Retract

If filament runs out while printing, the printer will pause and show this warning.

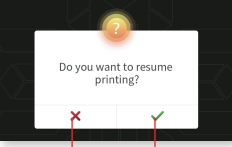


16. Power Outage Error

Cancel and return to Main Menu

Confirm and resume printing

If power is cut off while printing, the printer will show this warning after restart.

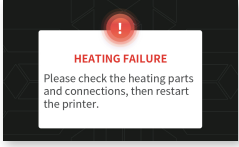


17. Heating Failure

HEATING FAILURE

Please check the heating parts and connections, then restart the printer.

If power is cut off while printing, the printer will show this warning. Please check the heating parts and connections, then restart the printer.



Printing Operation






Process for first print

- 1) Setup the printer.
- 2) Check power supply, connect the power cord and turn on the printer. (Fig. 1)
- 3) Leveling the print bed.
- 4) Loading filament. (Fig. 2 and 3)
- 5) Insert TF card with printing files. (Fig. 4, face up the pins)
- 6) Start printing and wait until it is finished.
- 7) Remove the print.
- 8) Turn off the printer.










General printing process

- 1) Connect power and turn on the printer. (Fig. 1)
- 2) Loading filament. (Fig. 2 and 3)
- 3) Insert TF card with printing files. (Fig. 4, face up the pins)
- 4) Start printing and wait until it is finished.
- 5) Remove the print.
- 6) Turn off the printer.







Manual Leveling

1. Spin the thumb nuts under the print bed until the springs are tight.
2. Click  on the Main Menu, then click  to switch to Manual Leveling Mode.
3. Click one point on one corner of the five leveling points, for example . Wait until the nozzle moves to that corner of the print bed.
4. Check if the distance between the nozzle and the print bed is 0.1 mm. A printing paper can help to check the distance. If the paper can be moved between the nozzle and the print bed but with slight resistance and the nozzle moves without scratching the print bed, then the distance is good.
5. If the distance is too large or too small, spin the thumb nuts to calibrate.
6. Similarly, clockwise or counterclockwise calibrate the distances between the nozzle and the rest three corners to 0.1 mm.
7. Besides, you can click  to unlock the motors and move the nozzle and print bed to any X, Y positions to check the leveling.
8. Click  to return to the Main Menu.






Automatic Leveling

1. Click  on the Main Menu, then click  to switch to Automatic Leveling Mode.
2. Click  to zero to print bed center, which means moving X, Y to the center of the print bed and zeroing Z.
3. Move up the nozzle by clicking  or move down the nozzle by clicking  to adjust the offset value, until the distance between the nozzle and the print bed is about 0.1 mm. A printing paper can help to check the distance. If the paper can be moved between the nozzle and the print bed but with slight resistance, then the distance is good.
4. Click  to save the offset value and zero to center again. Double check the distance between the nozzle and the print bed. If the distance is not good, adjust the offset value again, and then click  to double check again.
5. Click  and start automatic leveling. The nozzle will travel to multiple points of the print bed to get the distances between the nozzle and the print bed and calculate the leveling compensation. You can have a brief view on the leveling compensation status in the data matrix.
6. After the automatic leveling is completed, a prompt window will pop up. Click  to return to the Main Menu.







Loading filament

1. Hang a spool of filament with 1.75 mm diameter, PLA is recommended, onto the spool holder. (Fig. 2)
2. Press and loosen the clamber of the extruder and feed the filament through the filament run-out detection module, the extruder and the feeding tube to the nozzle module. Release the clamber and make sure the driving gear grabs on the filament. (Fig. 3)
3. Click  and go to Extrude / Retract Menu.
4. Click  to set the nozzle to a temperature that should be higher than 190°C and within the printing temperature range of the filament.
5. Wait until the nozzle temperature has risen to the target temperature. Select  to extrude continually, and click  to feed the filament to the nozzle.
6. Click  when the filament comes out from the nozzle. Then the filament is loaded and ready to print.
7. Click  to return to the Main Menu.

Printing

1. After leveling and loading filament, insert the TF card with the printing file. (Fig. 4)
2. Click  and then choose the file you are going to print. Click  when it pops up the confirming window and start printing.
3. Click  to pause while printing. Click  to resume. Click  to abort.

Changing filament in mid-print

1. Click  to pause while printing. The nozzle will return to zero of X, Y while Z is on the same height.
2. Click  to go to the Feeding Menu.
3. Click  to retract the filament.
4. Load new filament. Click  to feed and Click  when the filament comes out from the nozzle.
5. Return to Printing menu. Click  to resume printing.

Remove the print

1. Cool down the heated bed.
2. Detach the magnetic build plate with the print on it.
3. Remove the print from the magnetic build plate by bending the build plate.

