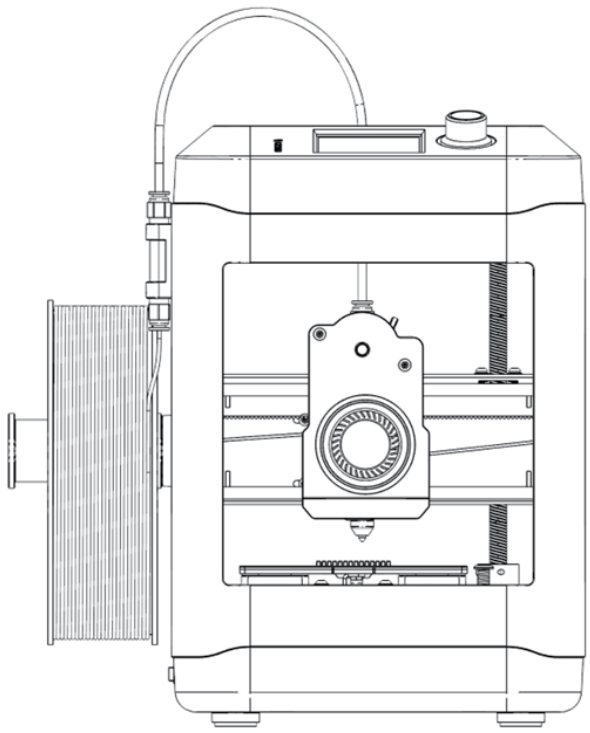
GEEETECH

M1 3D Printer

(Rev. 1.0)



USER MANUAL

ShenZhen Getech technology Co.,Ltd.

1. Kind Reminder

Thank you for choosing GEEETECH M1 3D printer.

For optimal use of this product, please read this manual carefully and follow the instructions strictly.

In the attached TF card, we provide electronic version user manual, model slicing software, test models, Instructional Video, etc. Please back up the files in the TF to your computer.

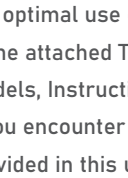
If you encounter any problems while using M1 , please contact us through the after-sales methods provided in this user manual. GEEEETECH technical support will provide you with high-quality after-sales service.

You can also log on to the Geeetech official website (www.geeetech.com) to Check the usage instructions for this product, the latest firmware and other information.

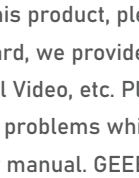
2. Instructions for Use

01. Please use this product in a spacious, flat and ventilated environment. Do not use this product in an environment with flammable or explosive materials.
02. Children and untrained persons are not allowed to use this product alone to avoid personal injury.
03. Do not touch the moving parts while the printer is running to avoid pinching your fingers.
04. Do not touch the stepper motor, nozzle and hot bed when the printer is working to avoid burns.
05. Please use this product in an environment of 10 ~ 40 ℃ , otherwise it may have an adverse effect on the printing quality.
06. Please use a 24V power adapter to power this product, otherwise it will cause damage to the product;All M1 printers are tested before shipment. Residual filament in the nozzle or slight scratches on the printing bed are normal and do not affect functionality.
07. Please level the hot bed when using this product for the first time, otherwise this product will refuse to print the model.
08. This product has been tested for printing before leaving the factory. If there is consumables residue in the nozzle of the device or slight scratches on the printing platform, it is normal and will not affect the use.
09. The actual product may be slightly different from this document, please refer to the actual product.

3. Packing List

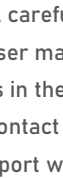


M1 3D Printer*1

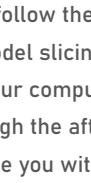


User Manual *1

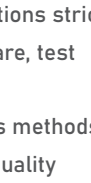
Filament *1



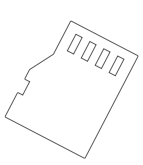
Nozzle*1



L-Shaped Hex Wrench*1



Wrench*1

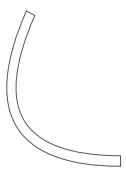


Micro SD*1

Spool holder*1

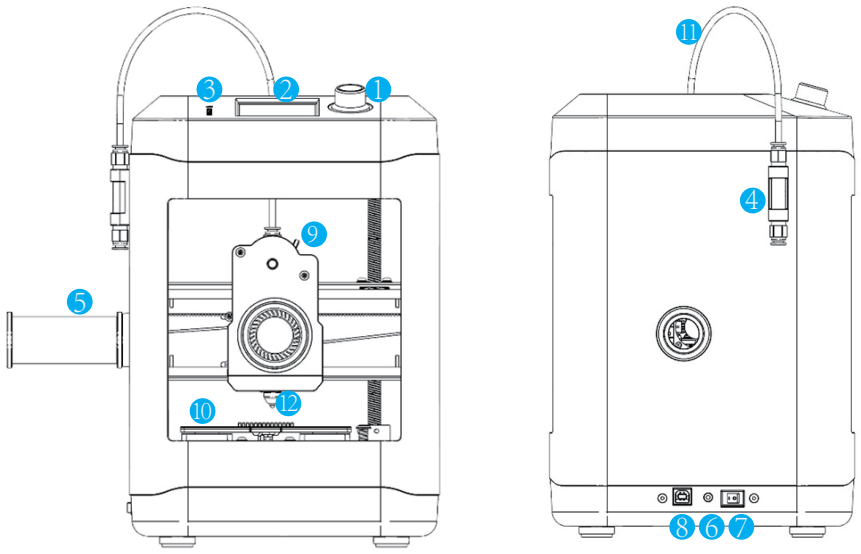
Needle*1

Tweezers*1



Teflon tube*1

4. Product Preview



01. Control Knob	04. Filament Sensor	07. Power Switch	10. Hot Bed
02. Display Screen	05. Filament Holder	08. USB Interface	11. Teflon Tube
03. Micro SD Slot	06. Power Interface	09. Extruder	12. Nozzle

5. Product Unpacking and Assembly

01. First, take the M1 out of the packaging box, remove the dust bag on the M1, and place the M1 on a flat workbench.
02. Check whether the M1 shell is cracked, whether the internal structure is damaged, and whether the accessories are missing. If the machine is damaged or accessories are missing, please contact GEEETECH after-sales service.
03. Cut the cable tie that secures the print head. Be careful not to cut the electronic wire by mistake! The position of the cable tie is shown in Figure 1 below.
04. Install the Teflon tube. Please note that the Teflon tube must be inserted to the bottom of the pneumatic joint, otherwise the filament will not be able to pass through the Teflon tube to reach the hot end smoothly. The specific operation is shown in Figures 2 and 3 below.

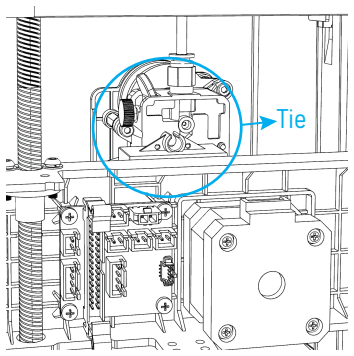


Figure 1

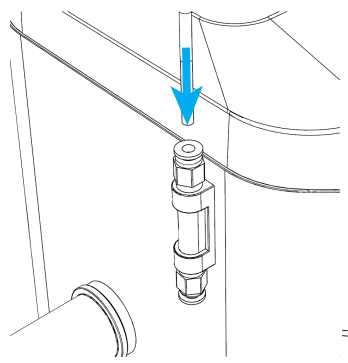


Figure 2

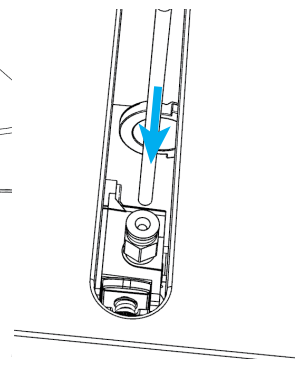


Figure 3

05. Install the Filament bracket. First, insert the filament bracket into the hole of the M1 shell, and then rotate it clockwise. When you hear the sound of the buckle locking, it means that the Filament bracket is installed successfully, as shown in Figure 4 below.

Notice:

The filament holder included with M1 can only hold 0.5 kg of GEEETECH filaments, not 1 kg.

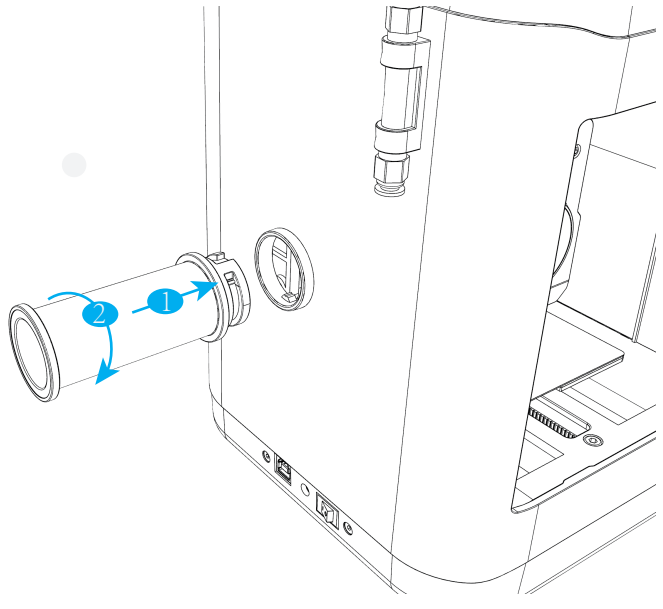


Figure 4

06. Check the belt. If the X-axis or Y-axis belt is too loose, you can adjust the belt tension by moving the X-axis motor or Y-axis motor. First loosen the screws that fix the motor, move the motor to tighten the belt, and then tighten the screws, as shown in Figures 5 and 6 below.

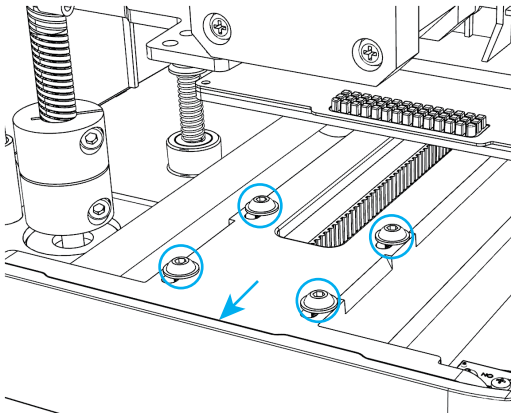


Figure 5

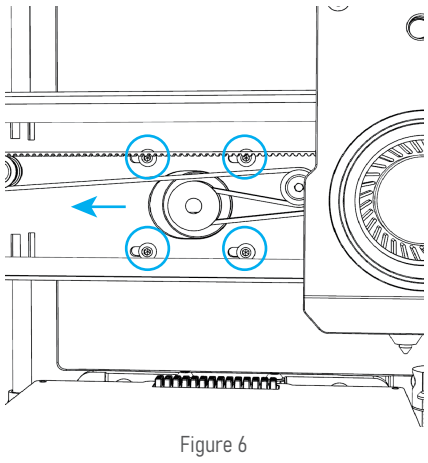


Figure 6

6. Power On

01. Insert the power adapter into the power input interface of M1 (as shown in Figure 7 below), then power on the power adapter and turn on the power switch of M1. Then the screen of M1 lights up.
02. At this point the user needs to check whether the content displayed on the screen is normal, whether the light inside the shell is on, and whether the knob can control the screen menu.
03. After the M1 is turned on, the three internal lights will light up. These three lights have three working modes: always on, automatically shut off after a 5-minute countdown, and always off. Users can control their working mode through the screen. The M1 defaults to the 5-minute automatic shut-off mode. In the default mode, if the LED goes out, the user only needs to rotate the knob to light the LED again.
04. M1 is powered by a DC 24V power adapter. Users cannot use power adapters with other voltages, otherwise M1 may not work properly or may be damaged.

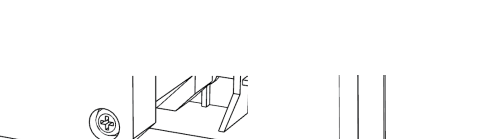


Figure 7

7. Hot Bed Leveling

When using M1 for the first time, the user must level the hot bed of M1. After leveling, there is no need to level the hot bed again unless the filament cannot stick to the PEI steel plate or the nozzle scratches the PEI steel plate in subsequent use.

M1 has two leveling modes: automatic leveling and manual leveling. We recommend the automatic leveling mode. The specific steps are as follows.

01. Power on the M1 and turn it on. Press the knob to enter the M1 screen menu. Then rotate the knob to select the "Prepare" menu and press the knob to enter the next level menu.

02. Rotate the knob, select the "Auto level " menu, press the knob, and the screen will jump to the home page. At this time, the X-axis, Y-axis, and Z-axis of M1 will perform the homing action, the nozzle will start to heat up, and the screen will display "Cleaning the nozzle" . Please wait patiently for the nozzle to heat up.
04. After the nozzle is heated, the M1 will clean the nozzle (if there is residual filament on the nozzle, you need to use tweezers to clean it off, otherwise it will affect the leveling accuracy).
05. After the nozzle is cleaned, M1 starts to heat the hot bed to 50℃. Please wait patiently.
06. After the hot bed is heated, M1 starts to automatically level. There are 16 leveling test points in total. Please wait patiently.
07. After leveling is completed, the screen will display "GEEETECH M1 Ready". If leveling fails, the screen will prompt "Probing Failed ".
08. After the M1 hot bed is leveled, users can start using the M1 to print models.

8. Loading Filament

Before starting printing, you must load the filament in advance. M1 only supports filaments with a diameter of 1.75mm. The steps for loading filaments are as follows.

01. Press the knob to enter the M1 screen menu, then select the "Prepare" menu, press the knob to enter the next menu.
02. Select the "Load" menu, press the knob, and then enter the next menu. In this menu, users can select "Preheat PLA" or "Preheat TPU" according to the type of filament used, or select "Preheat Custom" to customize the nozzle temperature.
03. Select "Preheat PLA", and the screen will display "Nozzle heating, Please Wait".
04. After heating is completed, the screen will prompt "Insert filament and Press Button to continue". At this time, you need to insert the filament into the inlet of the material break detection sensor and push the filament into the extruder (as shown in Figure 8 below) until the filament cannot be pushed, then press the knob again, the extruder gear starts to rotate, and make sure the extruder is gripping the filament.
05. When you see melted filament extruded from the nozzle, it means the filament is loaded successfully.

Note that when using M1, make sure to tighten the extruder handle screws, otherwise the extruder's extrusion force will be insufficient. The adjustment method is shown in Figure 9 below.

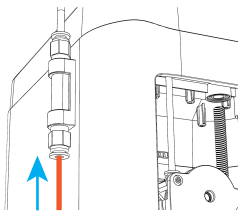


Figure 8

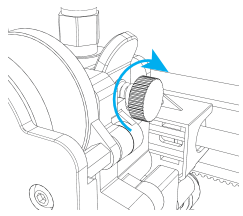


Figure 9

9. Model Slicing

Model slicing refers to the process of converting the 3D model of an object (usually in s tl format) into a G-code file that can be recognized by a 3D printer. This process is completed by slicing software.

Commonly used slicing software include Cura and OrcaSlicer. We have prepared installation packages for both in the included TF card. Of course, you can also download the latest versions from their Github homepages. You can search for the usage of Cura and OrcaSlicer on the Internet.

We have placed Cura and OrcaSlicer slicing profiles optimized for GEEETECH M1 in the included TF card, which can be imported into Cura and OrcaSlicer to obtain better printing quality than the default slicing parameters.

10. Start Printing

When the M1 is ready (the hot bed has been leveled and the filament has been pre-loaded), you can print the model by following the steps below.

01. Put the G-code into the Micro SD and then insert it into the card slot of the M1, as shown in Figure 10 below.
02. Press the knob to enter the main menu, then rotate the knob to select "Print from Media", press the knob again to enter the Micro SD root directory.
03. Rotate the knob to select the G-code file you want to print, press the knob again, and you will be prompted whether to start printing the selected file. At this time, select "Print" and then press the knob to start printing.

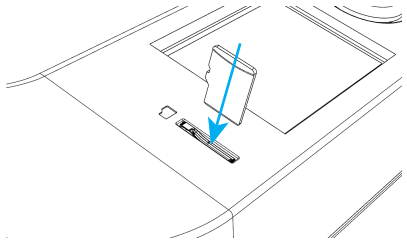


Figure 10

11. BabyStep

This function adjusts the distance between the nozzle and the heated bed during the printing of the first layer.

When printing starts, the nozzle may be too far away from the hot bed, causing the filament to not adhere to the hot bed, or the nozzle may be too close to the hot bed, causing the nozzle to scratch the hot bed. In this case, you can adjust BabyStep to get a suitable distance between the nozzle and the hot bed. There are two ways to enter BabyStep adjustment after printing starts.

01. Long press the knob on the home screen to automatically jump to the BabyStep settings page.

02. Press the button and turn the knob to enter the "Tune" menu and find the BabyStep settings page. On the BabyStep setting page, "+" represents nozzle raising and "-" represents nozzle lowering. It should be noted that the adjusted BabyStep value will not be saved and is only valid for the current printing task.

12. Daily Maintenance

01. Regularly adding lubricating oil to the X- axis , Y-axis, and Z-axis screws and bearings can reduce the friction between moving parts and reduce the wear of the screws.
02. Regularly check the tightness of the X-axis and Y-axis belts and adjust them according to the situation to prevent problems such as printing misalignment due to loose belts.
03. Check the nozzle wear regularly. If the nozzle is severely worn, replace it in time.
04. The printer should be placed in an environment with suitable temperature. Too high or too low temperature will affect the normal operation of the printer.

13. Product Parameters

Molding Technology	FDM	Power Input	DC 24V
Print Layer Height	0.1~0.2mm	Power adapter power	⩾96W
Print Size	100*110*100mm	Printing Material	1.75mm PLA/TPU
Printing Speed	⩽250mm/s	Connectivity	TF Card, USB
Printing Accuracy	±0.1mm	Nozzle Diameter	0.4mm
Slicing Software	Cura, OrcaSlicer	Nozzle Quantity	1
Maximum Nozzle Temperature	230℃	Supported File Format	.Gcode
Max Bed Temperature	60℃	Environmental Temperature	10~40℃
Machine Size	279(L)*200(W)*298(H)mm	Packing Size	257(L)*270(W)*405(H)mm
Machine Net Weight	3kg	Gross weight	4kg

14. Contact Us

After-sales E-mail: support@geeetech.com

Technical support: https://www.geeetech.com/contactus.html

Technical support

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