M200 V2 3D Printer

User's Manual

CONTENTS

Welcome

Thank you for purchasing M200 V2 3d printer from Malyan! Wish you can enjoy your time with your imagination! For technical support, please contact us via email at support@malyansys.com

SAFETY WARNINGS AND GUIDELINES

- Be careful not to damage the printing surface on the build plate.
- Do not remove the insulating tape on the extruder nozzle.
- Take care to avoid touching hot parts, including heat blocks, extruder nozzle, extruded filament, and the heated build plate.
- Keep the printer and all accessories out of reach of children.
- Do not remove or disconnect the USB cable when printing from a computer.
- Do not pull or twist the black cable at any time.
- Do not force or tear anything when during unpacking and setup. This may cause damage to the printer and/or its accessories.
- Do not reach inside the printer during operation.
- Always allow the printer and extruded filament to cool before reaching inside.
- Ensure that the printer is turned off and unplugged from its power source before making repairs or performing service.
- Do not install this device on an unstable surface where it could fall and cause either personal injury or damage to the device and/or other equipment.
- Do not subject the product to extreme force, shock, or fluctuations in temperature or humidity.
- This device is intended for indoor use only.

- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- Use only in a well-ventilated area. Do not use in close, confined spaces.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- Unplug this device from the power source when not in use.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body

FEATURES

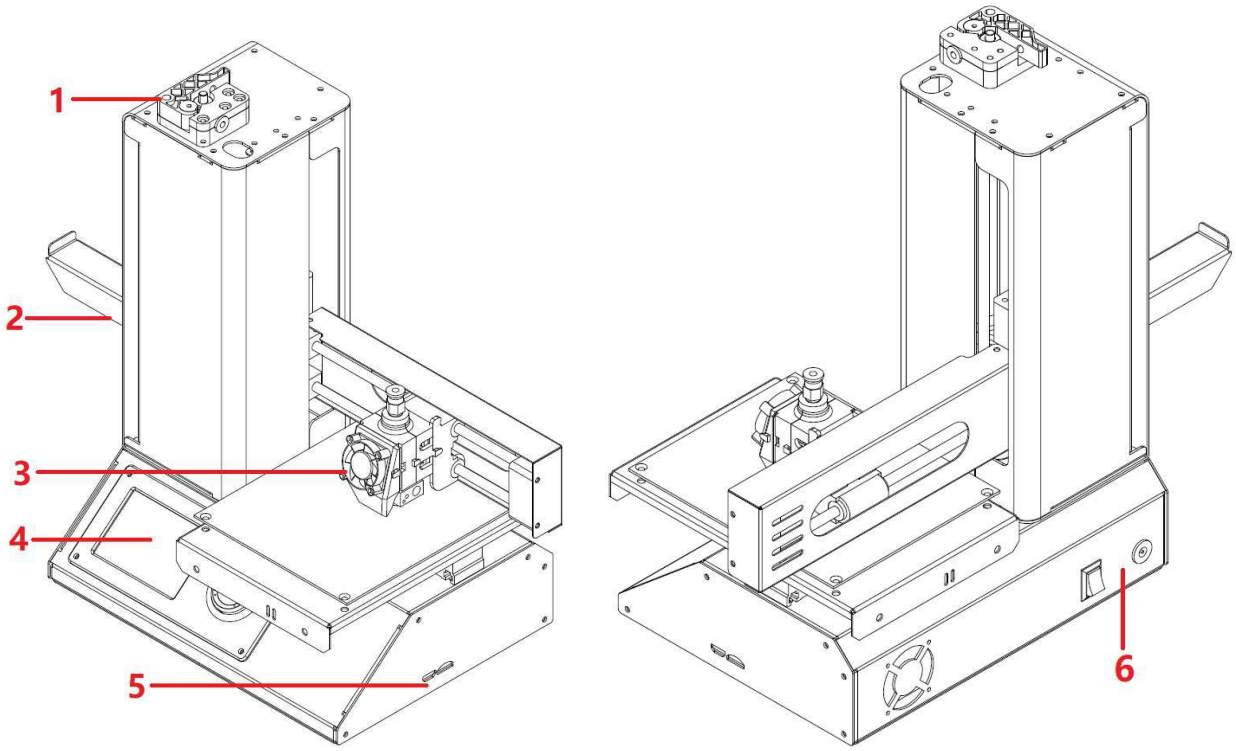
- Single Extruder Head
- Can print PLA, ABS, Wood, Copper Fill, Steel Fill, Bronze Fill, and other materials
- Open frame design for ease of use and maintenance
- Includes memory card with Cura, Repetier-Host, and a sample 3D model
- Can print using USB connection, Wi-Fi® connection, or memory card

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact us for a replacement.

- 1x 3D printer
- 1x Filament Rack
- 1x Plastic Scraper
- 1x USB Cable
- 1x Memory Card
- 1x Hex Wrench
- 1x Power Adapter
- 1x AC power cord

PRODUCT OVERVIEW

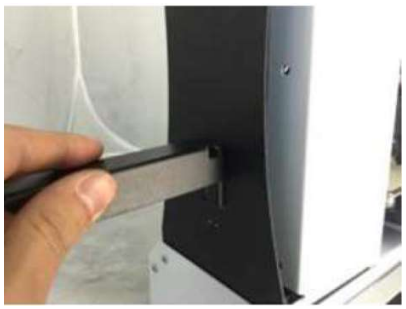


1. Feed Mechanism
2. Filament Rack
3. Extruder
4. LCD Screen
5. USB port and memory card slot
6. Input Power Jack and Power Switch

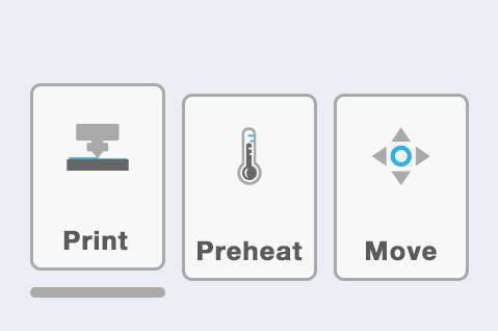
SETUP

Perform the following steps to prepare the printer for use.

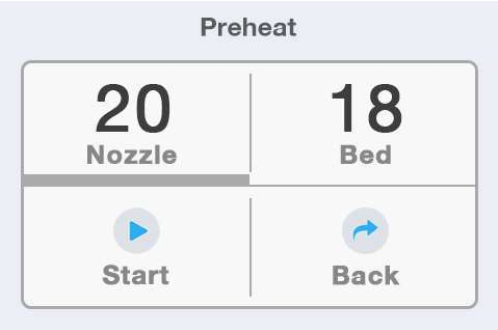
1. Remove the printer from its packaging and place it on a flat, stable surface with plenty of ventilation and a nearby AC power outlet.
2. Open the Accessories box and remove the Filament Rack. Slide the tab at the flat end into the slot on the left side of the printer frame.



3. Ensure that the power switch on the rear panel is in the OFF position (**O** side depressed). Plug the AC Power Adapter into the power input jack on the printer. Next, plug one end of AC Power Cable into the the AC power adapter, then plug the other end into a nearby AC power outlet.
4. Insert the included memory card into the slot on the right side of the printer.
5. Turn the printer on by depressing the **I** side of the power switch on the rear panel.
6. Once the printer has initialized and the home page is displayed, touch the **Preheat** button to enter the Preheat Menu.

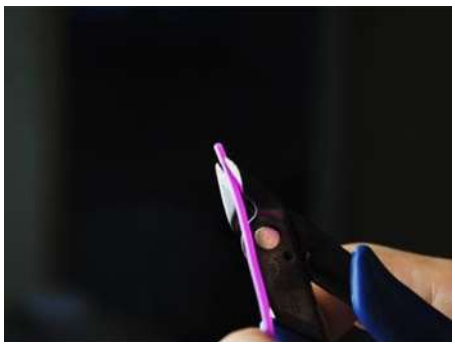
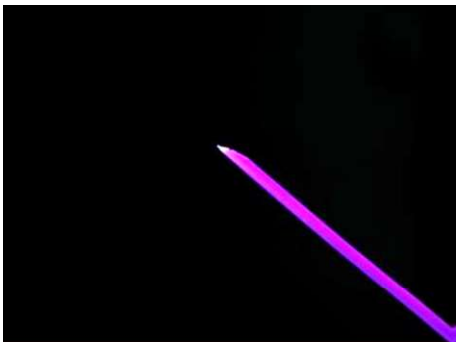


7. Touch the **Nozzle** button, then set the temperature of the nozzle to the value appropriate for the type of filament being printed.
8. Touch the **Bed** button, then set the temperature of the build plate to the value appropriate for the type of filament being printed.



9. Touch the **Start** button to start preheating the nozzle and build plate. Once the target temperatures are reached, the button will change to **Stop Preheat** and the displayed nozzle and bed temperatures should be at or near your target values.

10. While the printer is heating, open your filament. Using a pair of scissors or side cutters, diagonally snip the end of the filament to make a point, as shown in the images below.

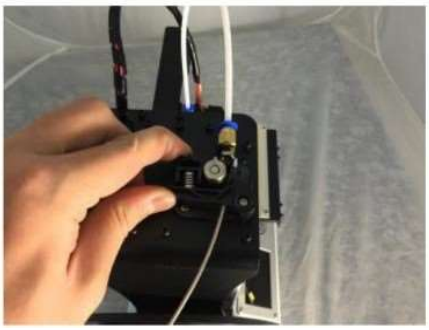



11. Using the control wheel, navigate to the **Move** menu, then select the **Z Axis** option and press the wheel. Turn the control wheel counterclockwise to raise the extruder off the build platform.

12. Place the filament reel on the filament rack on the left side of the printer.

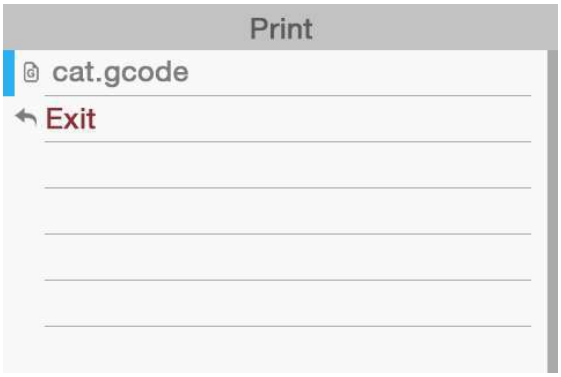
13. While squeezing the lever on the feed mechanism, insert the filament and push it into the opening. Keep pushing until you feel resistance as it hits the extruder, then release the lever.

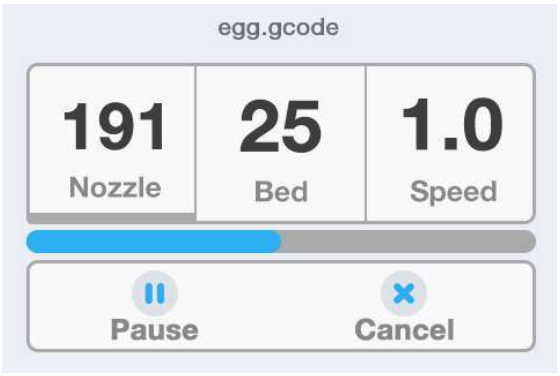
14. Using the control wheel, highlight the **Extruder** entry on the **Move** menu. Press the control wheel, then turn it counterclockwise to feed filament into the extruder. Continue until filament starts to extrude out of the nozzle. Wait until filament is no longer coming out of the nozzle.



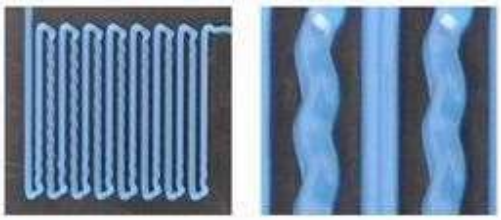
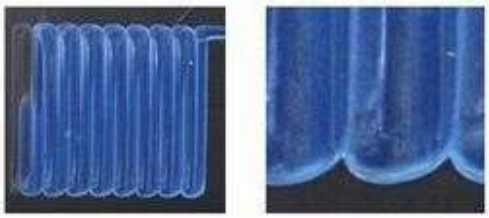
15. Using the included plastic scraper, clean the extruded filament from the nozzle and build platform.

16. Using the control wheel, select the **Print** option from the main menu. The printer will read the contents of the memory card and display them on screen. Highlight the cat.gcode file, then press the control wheel to start printing the model.





17. Compare the first layer with the images in the table below to determine whether the build platform needs to be leveled or not. If it does need adjustment, turn off the printer and re-adjust the platform height as indicated. Keep repeating this process until the result is correct.

Wrong		The nozzle is too far from the platform. This can result in the extruded material not sticking to the build platform.
Correct		The nozzle is at the correct height above the platform.
Wrong		The nozzle is too close to the platform. This can result in damage to the nozzle and build platform.

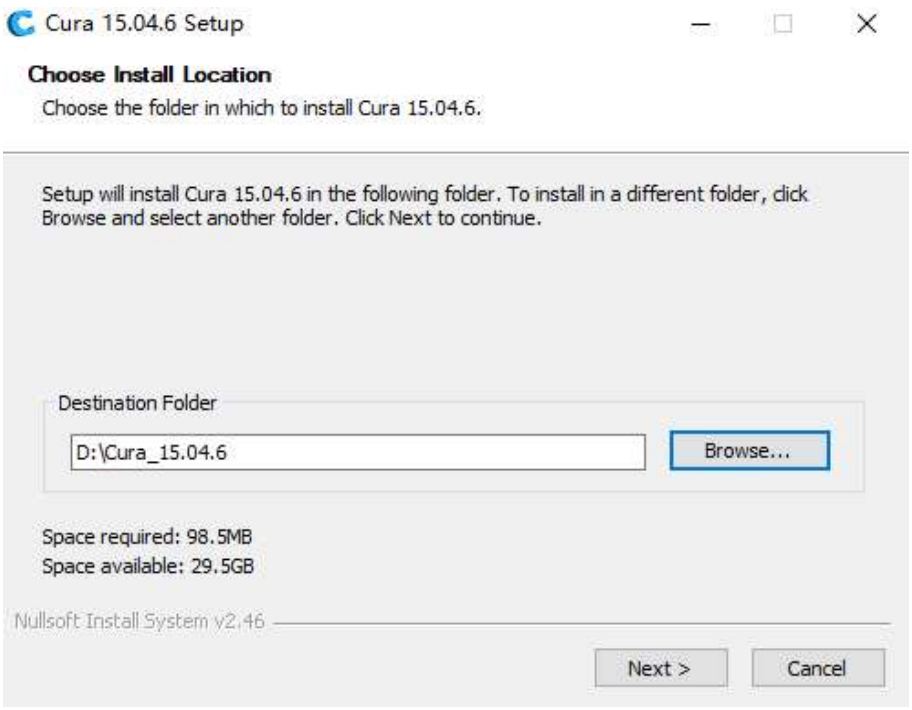
SOFTWARE INSTALLATION AND SETUP

As you've seen, you can print a model directly from a gcode file on the memory card, you can download the gcode files you like from the Internet and print them directly. However, some users would like to create their own model using an open source program, such as Cura or Repetier-Host, which are pre-installed on the memory card that comes with the printer.

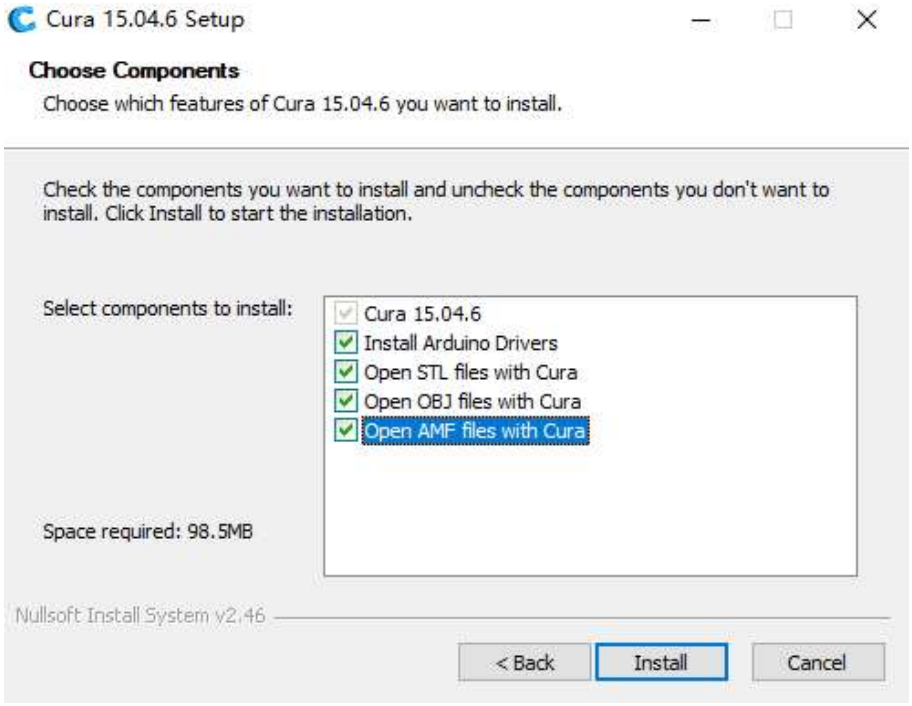
Installing Cura

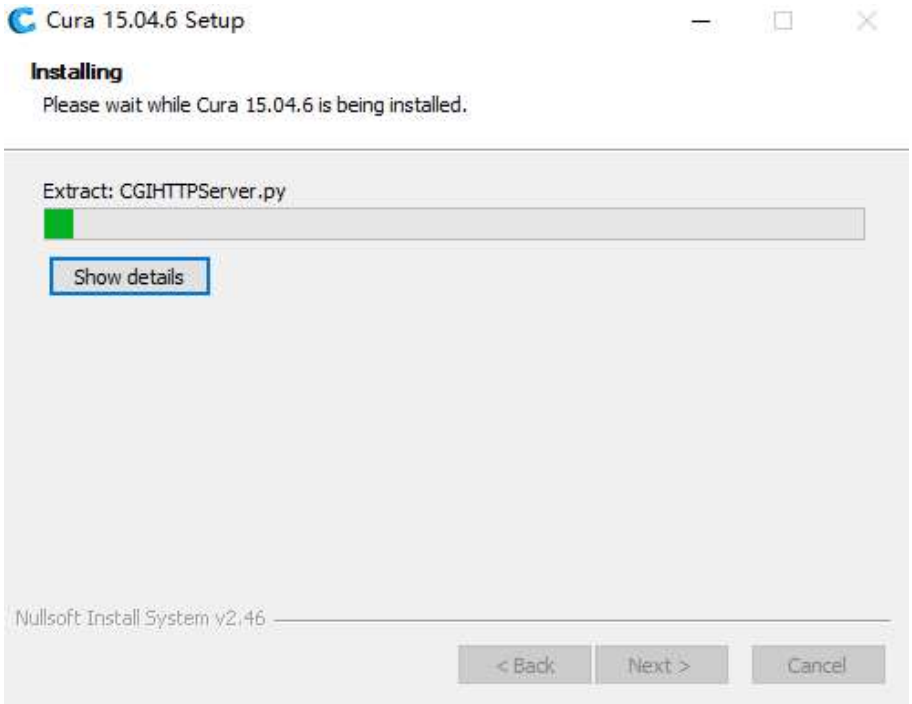
1. Use a card reader to read the contents in the included memory card. Locate and double-click the Cura_15.04.6.exe file to start the setup program.

2. Choose a new location for the program files or accept the default (recommended). Click **Next** button to continue.

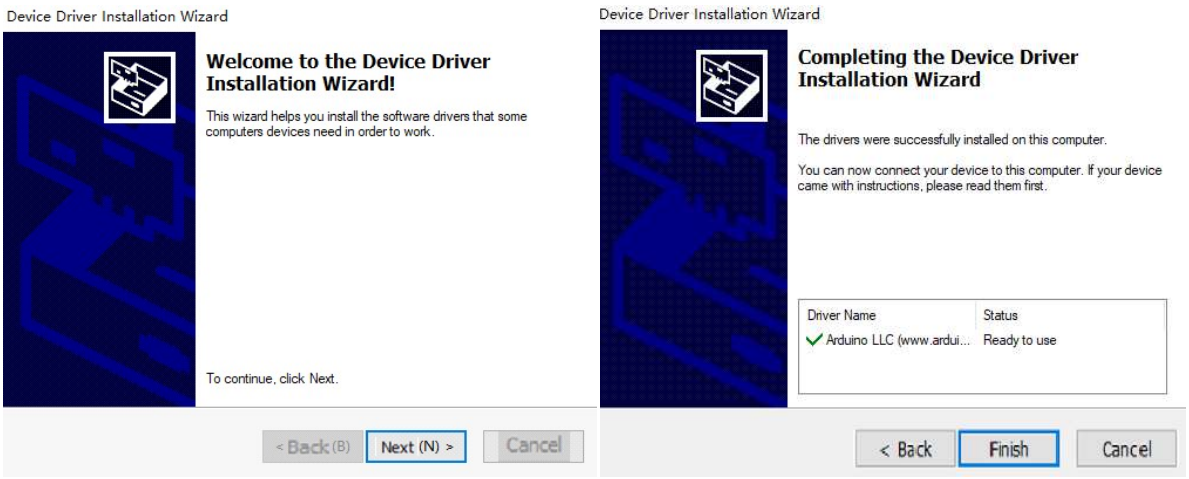


3. Ensure that all boxes are checked, and then click **Install** button to continue.

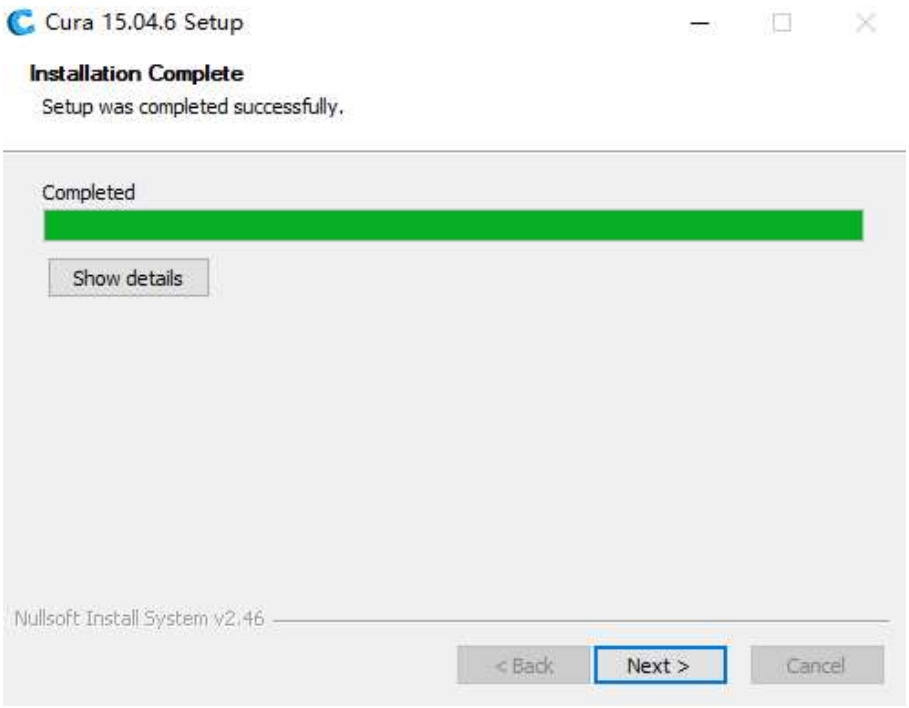




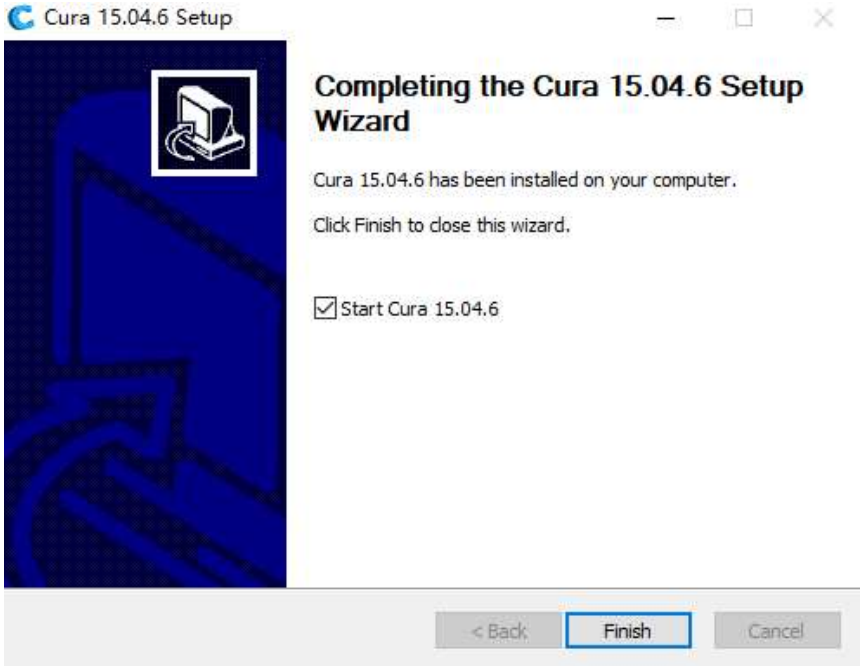
4. Once the files have been extracted and the Cura installation is complete, the driver installation wizard will launch. Click **Next** button to continue. Then click **Finish** button to complete the driver installation.



5. Click the **Next** button to complete the installation.

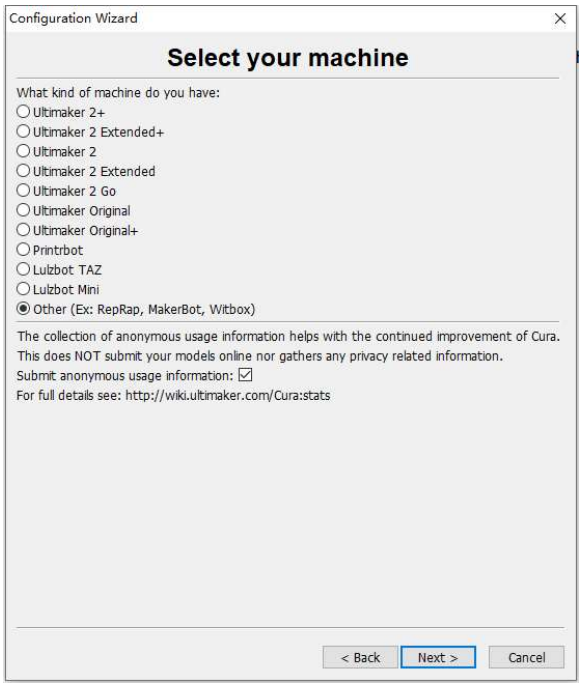


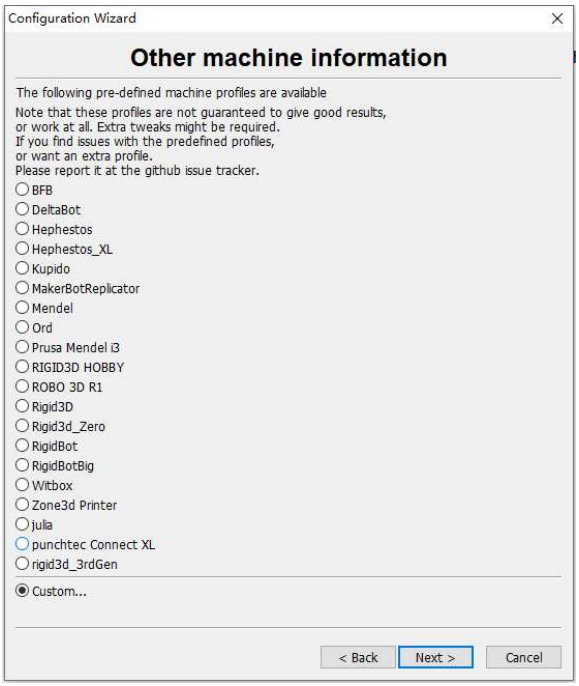
6. Ensure that the box next to the Start Cura 15.04.6 is checked, and then click the **Finish** button to launch the program.



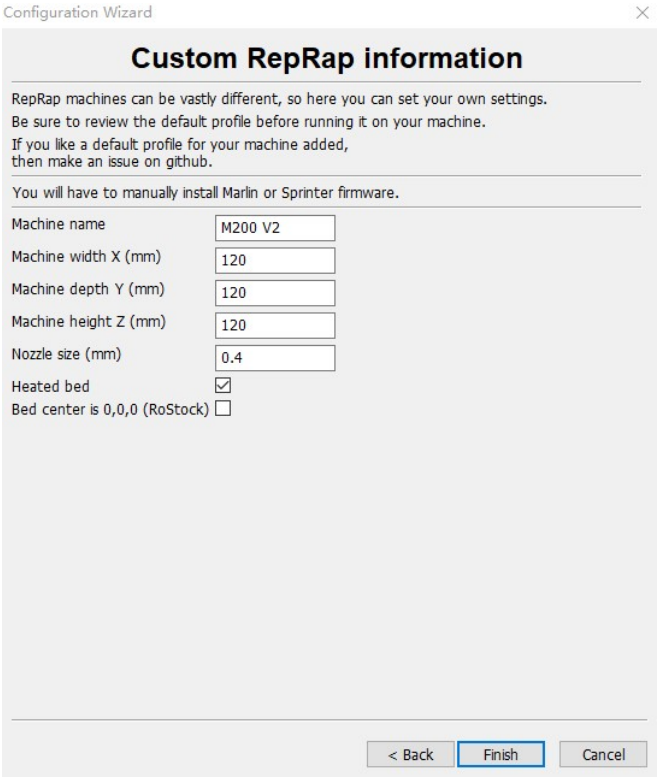
7. Select your language and click the **Next** button to continue.

8. Choose the **Other** option, and then click the **Next** button to continue. Select the **Custom...** option, then click the **Next** button to continue.

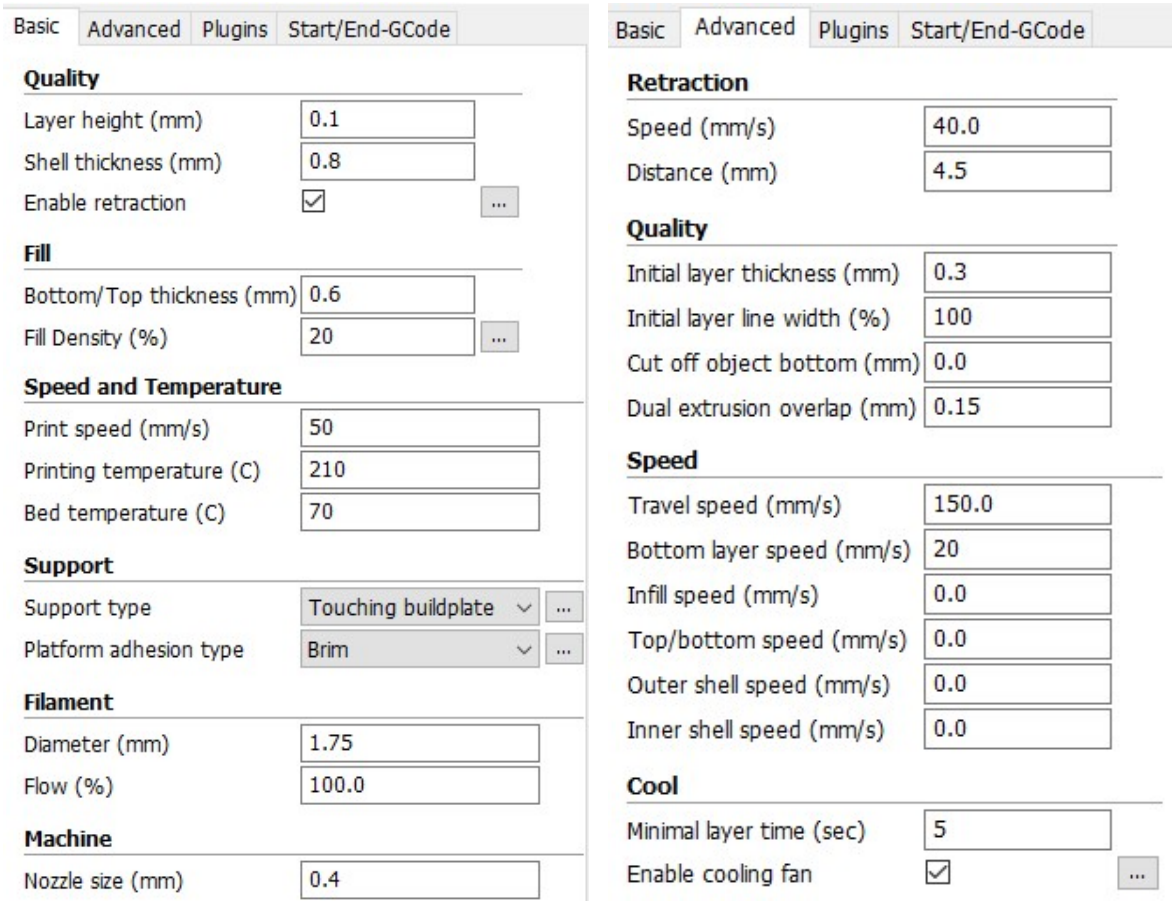




9. Change the settings to match those shown in the images below, then click **Finish** button to continue.



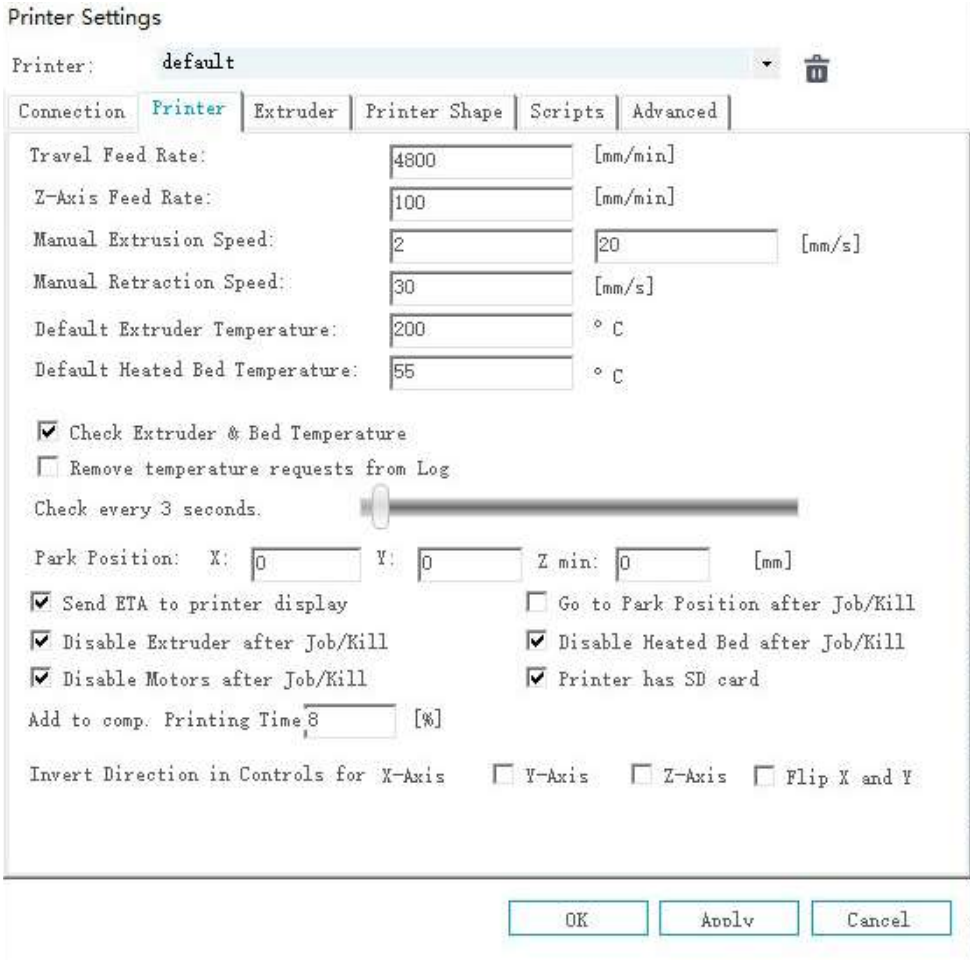
10. Then you might have to adjust the detail parameter to match your filament and the model you are going to printing.

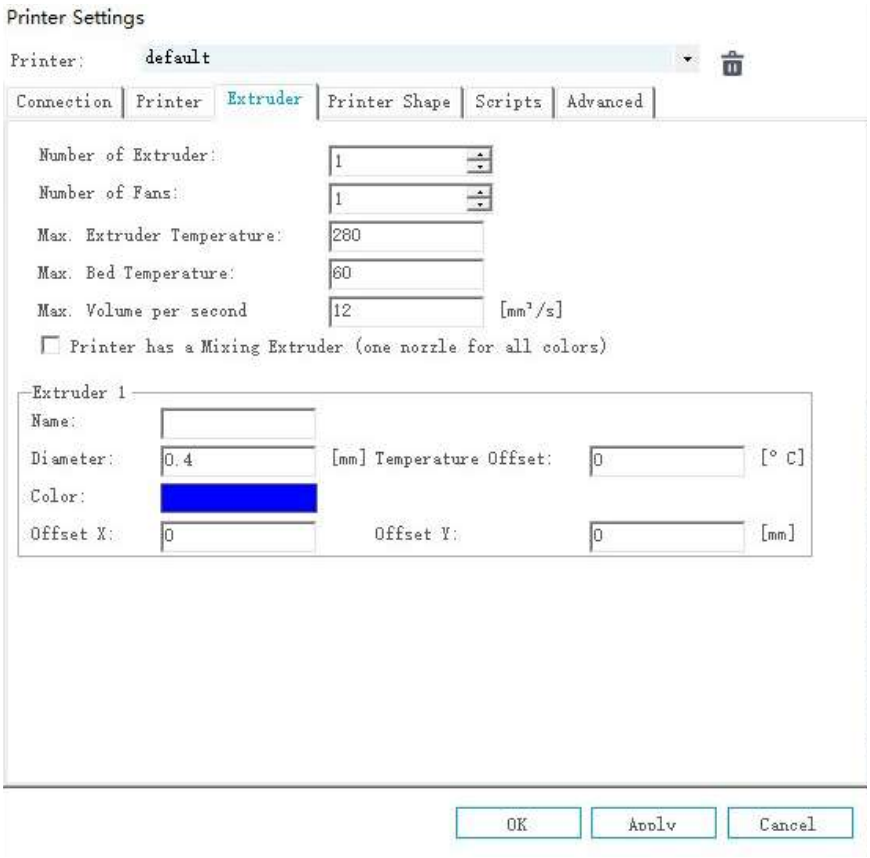


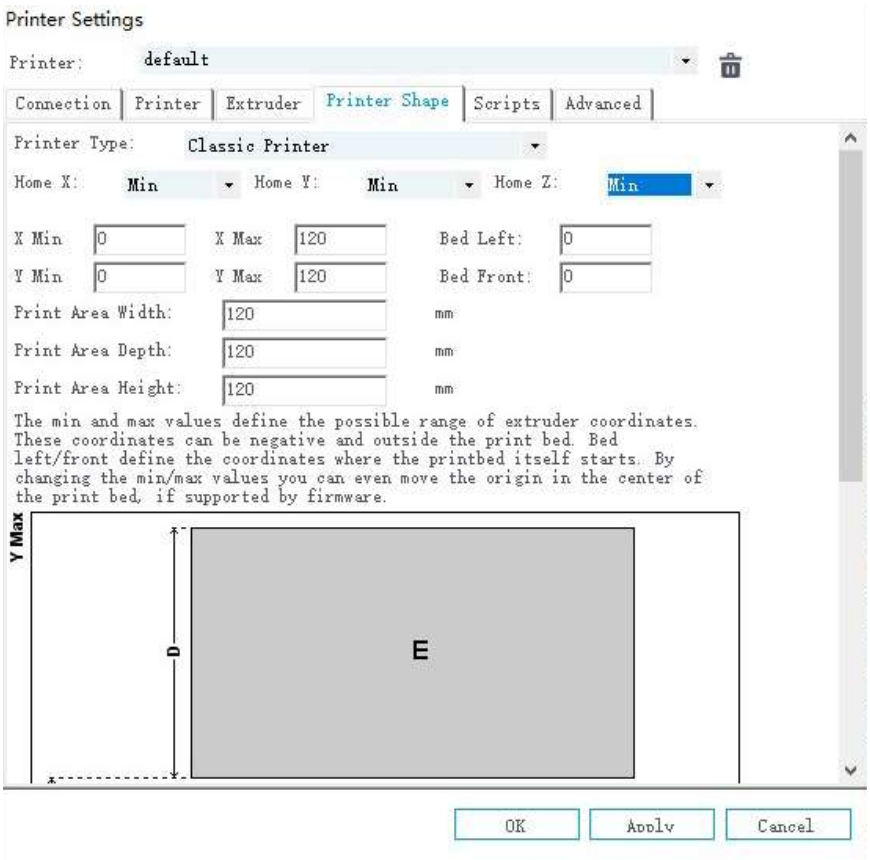
11. Finally, using the included USB cable, plug one end into the USB port on the printer, then plug the other end into an available USB port on your computer. Watch the right hand corner of the screen. A bubble will appear in the lower right corner of your desktop, which is telling you that Windows is installing the necessary printer drivers. Click the bubble and verify that the drivers have been properly installed.

Repetier-Host

The screenshots below show the proper Repetier-Host settings to use for this printer in Repetier-Host.




Printer Settings
Printer: default
Connection
Printer
Extruder
Printer Shape
Scripts
Advanced
Number of Extruder: 1
Number of Fans: 1
Max. Extruder Temperature: 280
Max. Bed Temperature: 60
Max. Volume per second 12 [mm³/s]
Printer has a Mixing Extruder (one nozzle for all colors)
Extruder 1
Name:
Diameter: 0.4 [mm] Temperature Offset: 0 [° C]
Color:
Offset X: 0 Offset Y: 0 [mm]
OK
Apply
Cancel


Printer Settings
Printer: default
Connection
Printer
Extruder
Printer Shape
Scripts
Advanced
Printer Type: Classic Printer
Home X: Min Home Y: Min Home Z: Min
X Min 0 X Max 120 Bed Left: 0
Y Min 0 Y Max 120 Bed Front: 0
Print Area Width: 120 mm
Print Area Depth: 120 mm
Print Area Height: 120 mm
The min and max values define the possible range of extruder coordinates. These coordinates can be negative and outside the print bed. Bed left/front define the coordinates where the printbed itself starts. By changing the min/max values you can even move the origin in the center of the print bed, if supported by firmware.
Y Max
D
E
OK
Apply
Cancel

SPECIFICATIONS

Model	M200 V2
Extruder System	Single
Maximum Extruder Temperature	260°C
Maximum Build Plate Temperature	60°C
Heated Plate	Yes
Display Type	Color LCD screen
Printing Area	4.7" x 4.7" x 4.7" (120 x 120 x 120 mm)
Supported Materials	ABS, PLA, PETG, wood, copper fill, steel fill, bronze fill, and othermaterials
Filament Diameter	1.75mm
Maximum Print Speed	75mm/sec
Layer Thickness	0.1 - 0.3 mm
Connectivity	Wi-Fi°, memory card,USB
Offline Printing	Yes
Supported Software	Cura, Repetier Host, etc.
Input Power	12 VDC
AC Adapter Input Power	100 ~ 240 VAC, 50/60 Hz
Weight	5.3 kg

REGULATORY COMPLIANCE

Notice for FCC

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Malyan's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.