MALYAN

MA10 3D Printer

User's Manual

CONTENTS

SAFETY WARNINGS AND GUIDELINES 3
INTRODUCTION 4
PACKAGE CONTENTS 4
PRODUCT OVERVIEW 5
USING THE MENU SYSTEM 5
Installation 6
SETUP 7
SOFTWARE INSTALLATION AND SETUP 10
Installing Cura for Windows 10
Repetier-Host 13
FCC Notice 15

SAFETY WARNINGS AND GUIDELINES

- Be careful not to damage the PC paper on the build plate.
- Take care to avoid touching hot parts, including heat blocks, extruder nozzle, extruded filament, and the heated build plate.
- Do not wear gloves when operating or repairing to avoid entanglement.
- 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.

INTRODUCTION

Thank you for purchasing this 3D printer from Malyan! This printer features a single extruder, which is capable of printing in PLA, ABS, and other materials. You can print from a Windows® or Mac® PC using a USB connection or can print from 3D model files stored on a memory card, without the need for a PC connection of any kind. This printer is easy to setup and easy to use following the instructions in this manual.

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below.

1x 3D printer

1x Filament rack

1x Plastic scraper

1x USB cable

1x Memory card

4x Hex wrench(2.0mm, 2.5mm, 3mm, 4.0mm)

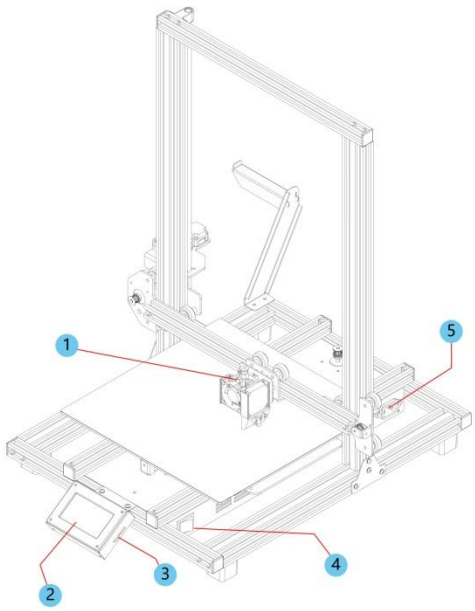
5x M5*20 Screw

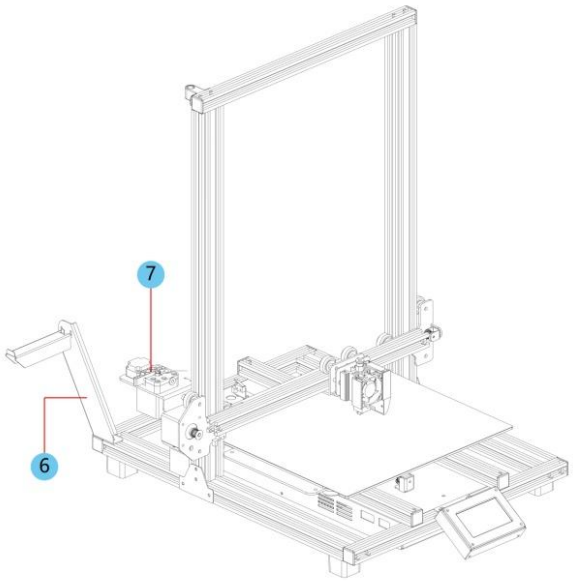
13 xM4*6 Screw

1x Open-end Wrench(8mm)

1x AC power cord

PRODUCT OVERVIEW



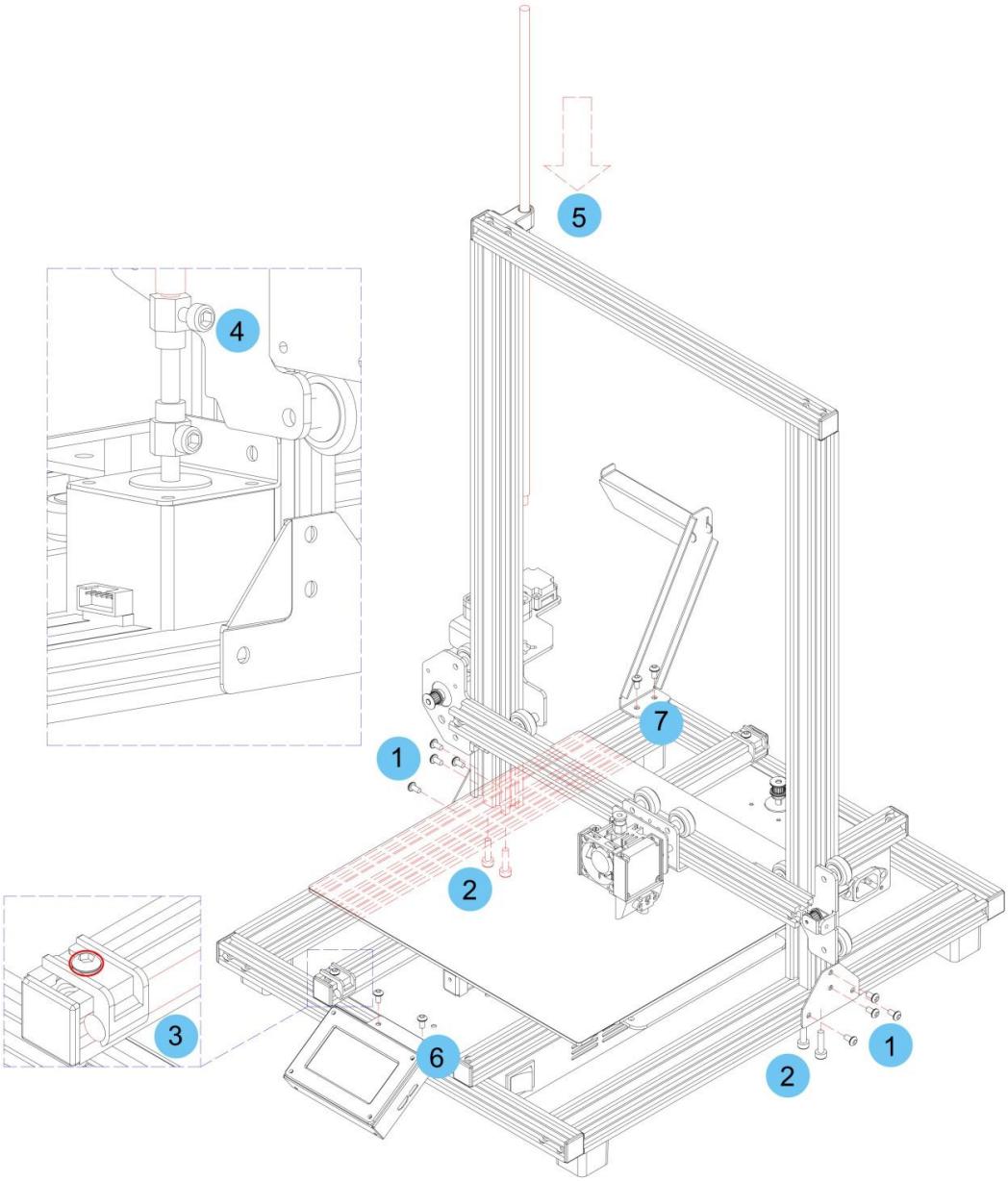


1. Extruder
2. LCD Screen
3. Micro USB and Micro SD Ports
4. Power Switch
5. Input Power Jack
6. Filament Rack
7. Feed Mechanism

USING THE MENU SYSTEM

- Rotating the control wheel counterclockwise moves the highlight/pointer to the up.
- Rotating the control wheel clockwise moves the highlight/pointer to the down.
- Rotating the control wheel counterclockwise while editing a value decreases that value.
- Rotating the control wheel clockwise while editing a value increases that value.
- Press the center of the control wheel to activate the selected menu item or to save an edited value.

Installation

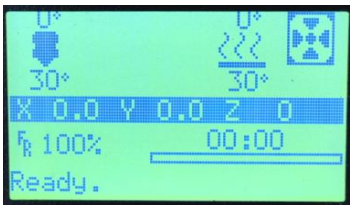


1. Use 4.0mm Hex Wrench and 8 pieces M4*6 screw to fix two metal frame on the each side of the printer.(4 pieces of each side)
2. Use the 2.5mm Hex wrench to lock the 4 pieces M5*20 screw on the bottom of the base.(2 pieces of each side)
3. Loosen the screw marked with red circle by a 2.5mm Hex wrench and remove the screw rod, then tighten the screw again.
4. Use the 3mm Hex wrench to loosen the screw on the top side.
5. Put the screw rod into the hole on the top of the printer, then tighten the screw on step 4.
6. Use the 2.5mm Hex Wrench and 2 pieces M4*6 screw to fix the LCD module on the printer, and insert the plug into the back of the LCD module.
7. Use the 2.5mm Hex Wrench to fix the filament rack by 2 pieces M4*6 screw.

SETUP

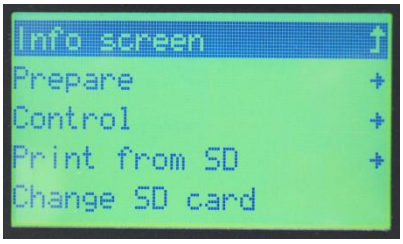
Perform the following steps to prepare the printer for use.

1. Put the printer on a flat, stable surface with plenty of ventilation and a nearby AC power outlet.
2. Ensure that the power switch is in the OFF position. Plug the included AC Power Cable into power jack on the right side of the printer, then plug the other end into a nearby AC power outlet.
3. Power on the printer and insert the included memory card into the slot on the right side of the LCD module, the main menu will display on the screen.



4. Press the center of control wheel and the contents as the following picture will display on the screen. Please rotating the control wheel clockwise to choose the **Change SD card** if **No SD card** show on the screen instead of **Print from SD**.

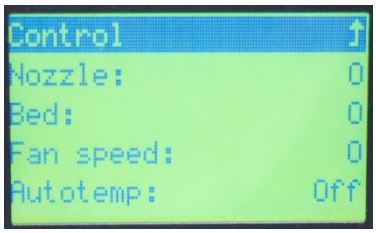
5. Rotating the control wheel clockwise to move the highlight to **Prepare**, press the center of control wheel to enter the menu.



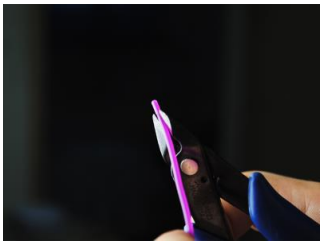
6. Rotating the control wheel clockwise to move the highlight to **Auto home**, the printer will move the extruder to the home position automatically. Check the distance between nozzle and platform, if it is incorrect, please rotating the screw on the bottom of four corners of the platform to adjust the height of platform.

7. Rotating the control wheel counterclockwise to move the highlight to Main, press the center of the control wheel to back to the previous menu. Rotating the control wheel clockwise to move the highlight to the Control and press the center of the control wheel to enter the menu.
8. Rotating the control wheel clockwise to move the highlight to Temperature, and press the center of the control wheel to enter the menu.

9. Rotating the control wheel clockwise to move the highlight to Nozzle and press the center of control wheel to enter the menu, Rotating the control wheel to set the temperature of the nozzle to your target value, it depends on the filament you plan to use. After you set up your target value, press the center of control wheel to save the data and exit.



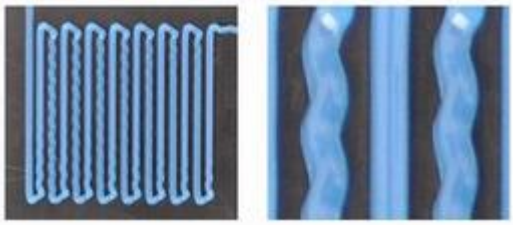
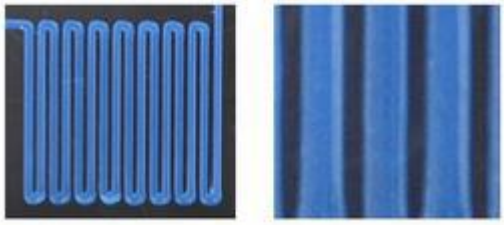
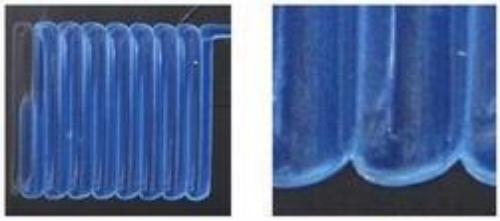
10. Using the same procedure, set the **Bed** temperature to the target temperature for your filament type.
11. Rotating the control wheel counterclockwise to move the highlight to Control, press the center of control wheel to back to the previous menu.
12. While the printer is heating, open your filament. 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.



13. Place the filament reel on the filament rack on the left side of the printer.
14. While squeezing the lever on the Feed Mechanism, insert the filament and push it into opening. Keep pushing until you feel resistance as it hits the extruder. Release the lever on the Feed Mechanism.

15. Rotating the control wheel clockwise to move the highlight to **Print from SD**. The printer will read the contents of the memory card and display them on screen. Rotating the control wheel to choose the file to start printing the model.

16. When the printing is in progress, 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, please rotating the screw on the bottom of four corners of the platform.

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.

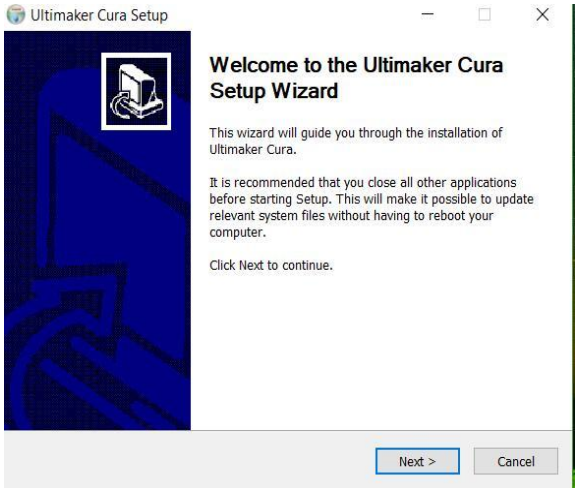
SOFTWARE INSTALLATION AND SETUP

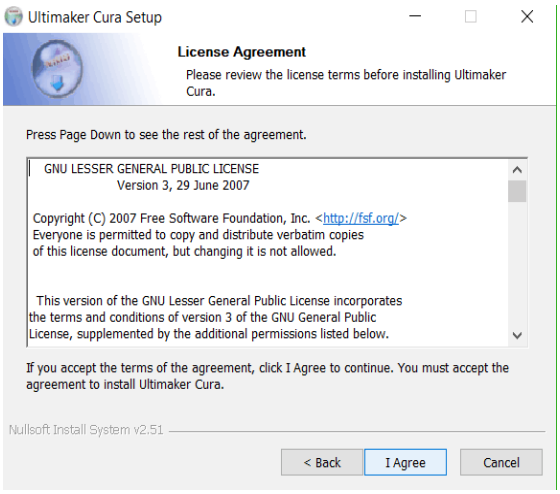
As you've seen, you can print a model directly from a gcode file on the included memory card and this is the preferred method, as it does not require a continuous connection to your computer. You can download gcode files to the memory card and print them without having to build any model files.

However, you can create your own gcode files using an open source program, such as Cura or Repetier-Host, which are pre-installed on the memory card that comes with the printer. We recommend you start with Cura, since it includes a Slicing Engine.

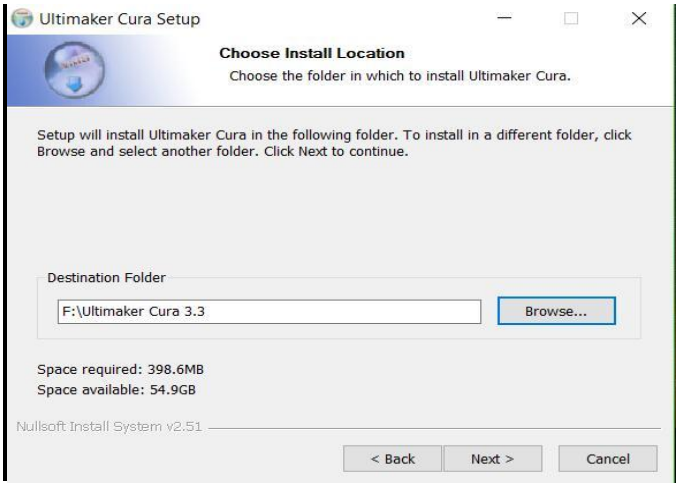
Installing Cura for Windows

1. Use a card reader to read the contents on the included memory card. Locate and double-click the **Cura_3.3.1.exe** file to start the setup program.
2. Click the Next on the widows as the picture below, then click the I Agree on the License Agreement windows.

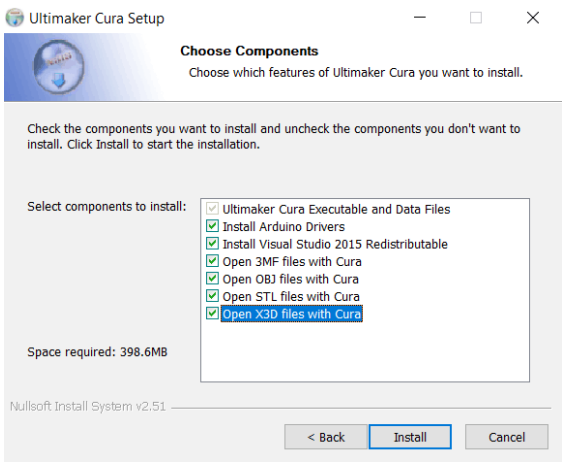


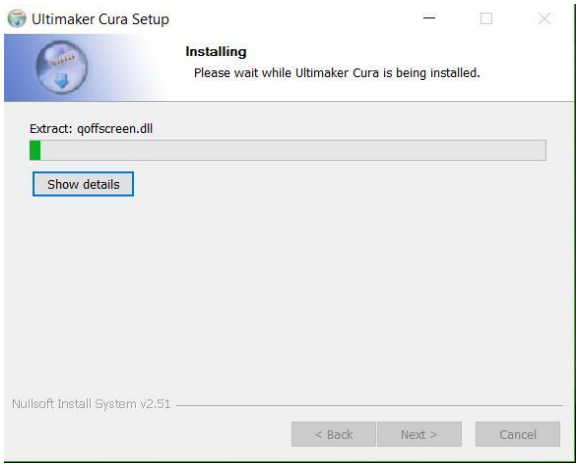


3. You need to choose a new location for the program files or accept the default (recommended). Click **Next** to continue.

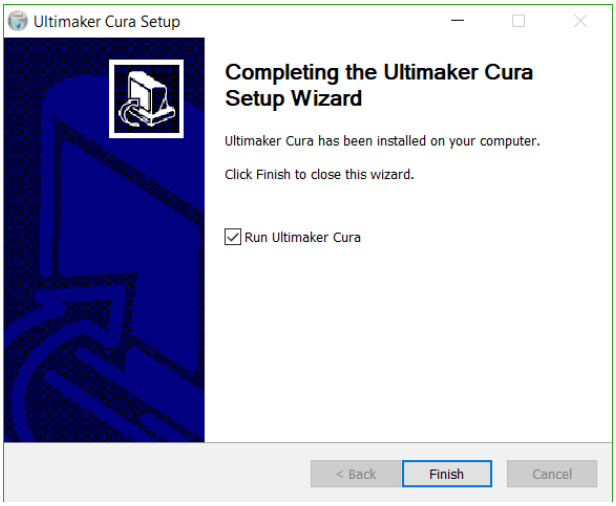


4. Ensure that all boxes are checked, then click **Install** to continue.

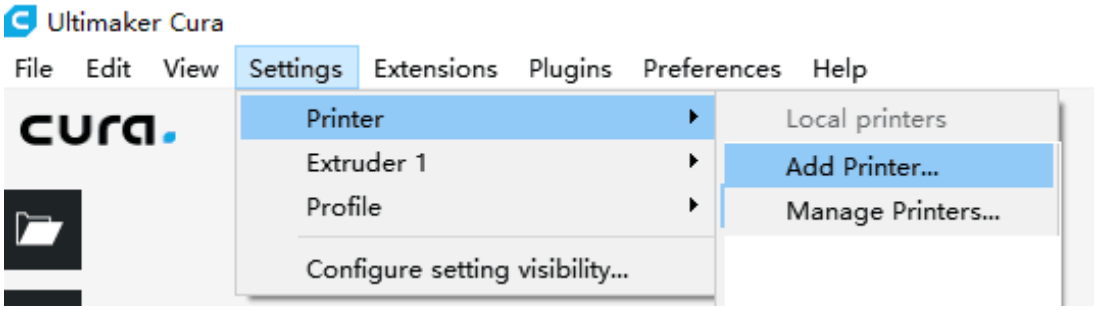




5. Click **Finish** to complete the installation and launch the program.

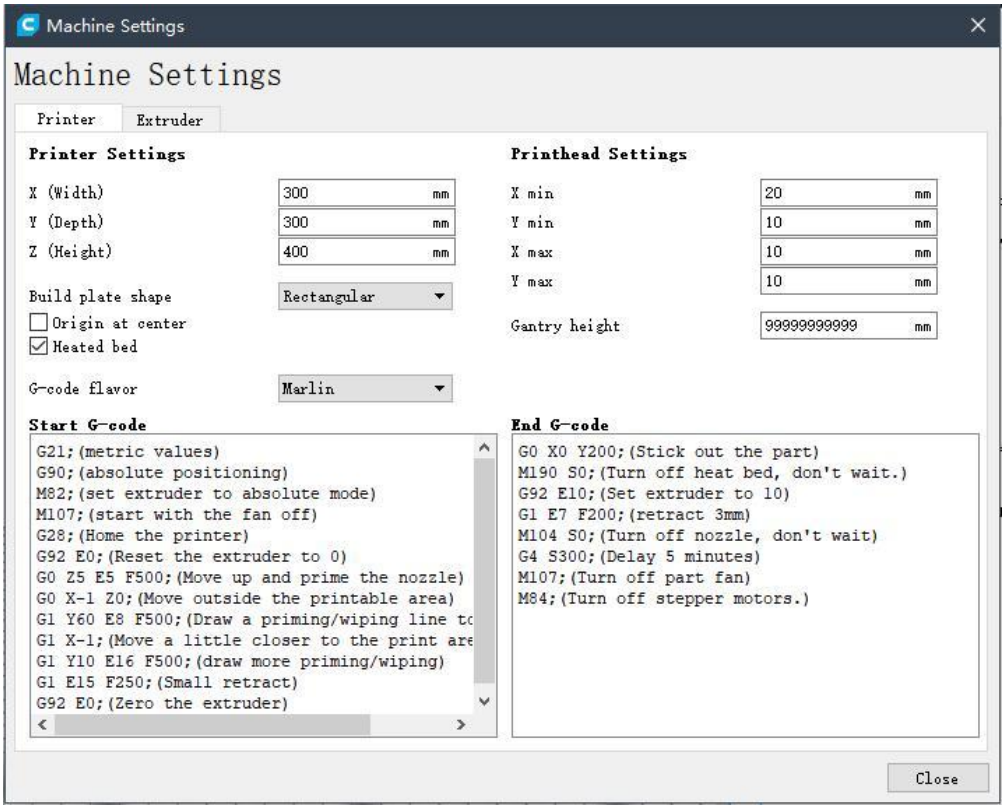


6. Run the Cura, click **Settings > Printer>Add Printer**.



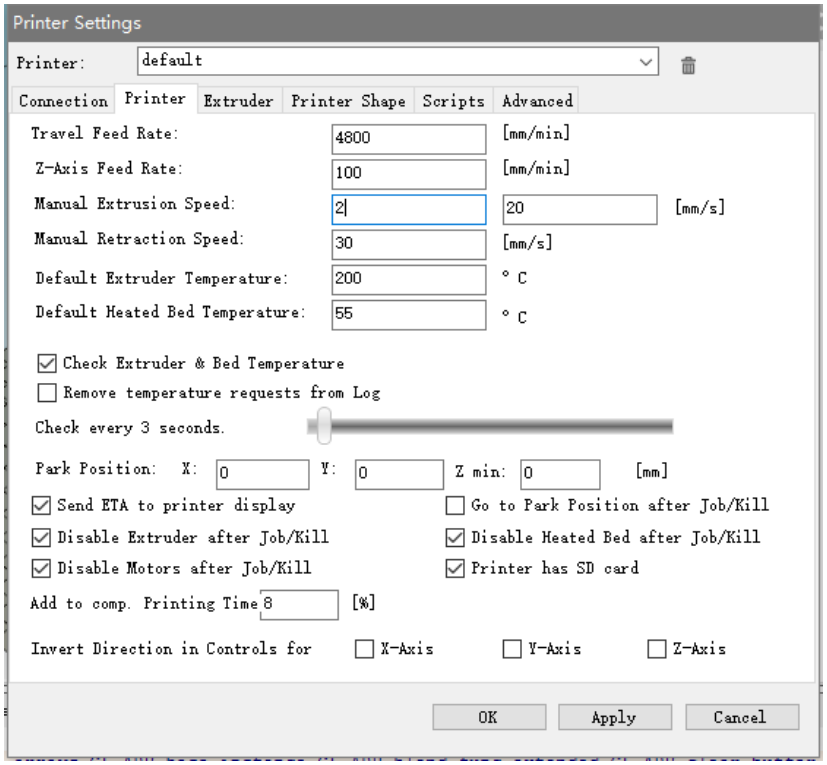
7. Click the **Other** option, then choose the Malyan MA10, then click the “Add Printer” button to continue.

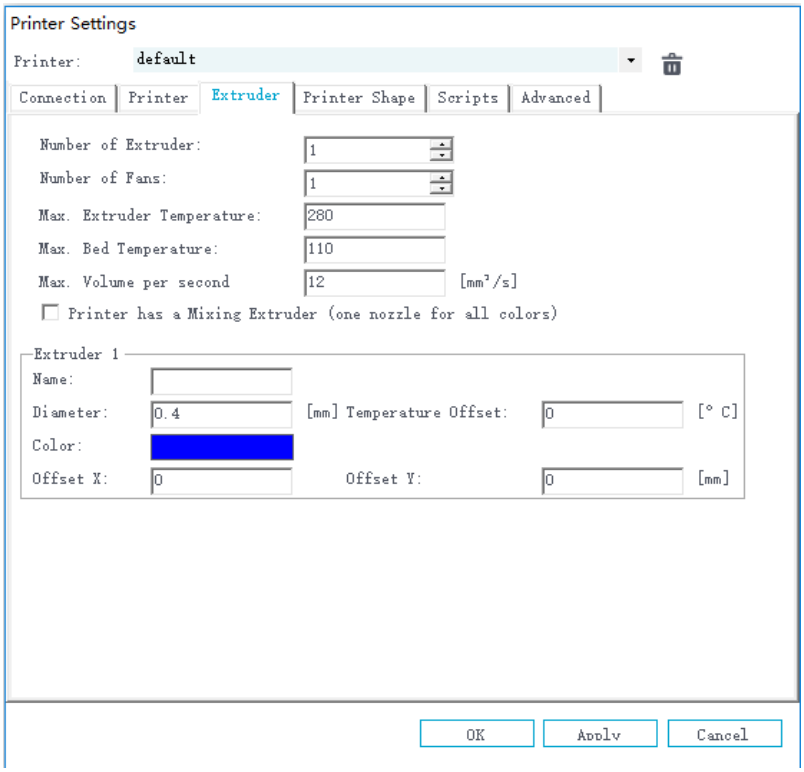
8. The detail of Machine Settings will show on the screen, click the Close. Then you can use the Cura to print the model.

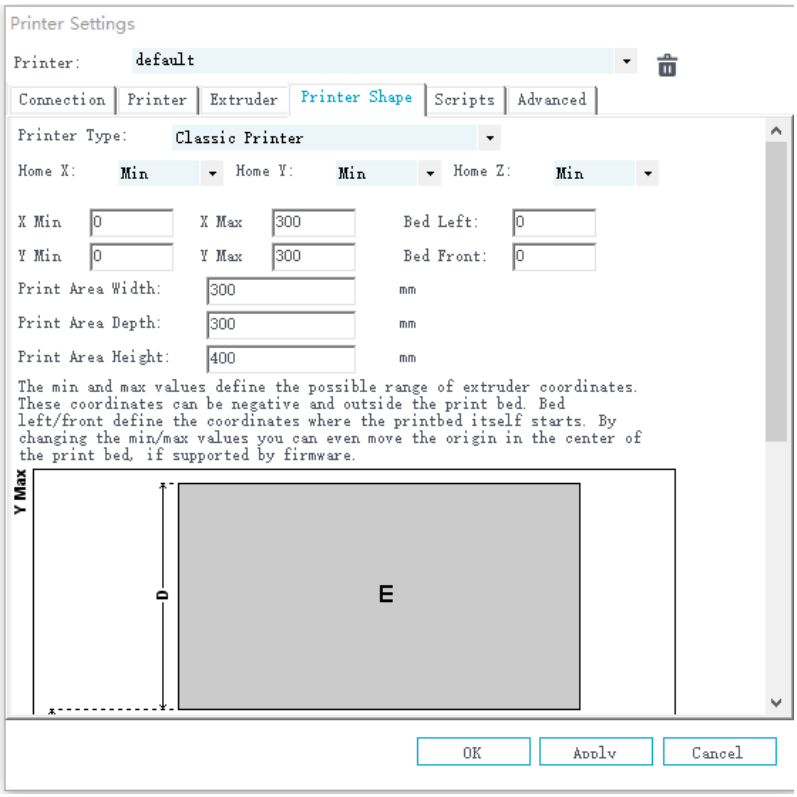


Repetier-Host

You can also install Repetier-Host from the file on the included memory card or download from the internet. The screenshots below show the proper settings to use for this printer in Repetier-Host.






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
300
Bed Left:
0
Y Min
0
Y Max
300
Bed Front:
0
Print Area Width:
300
mm
Print Area Depth:
300
mm
Print Area Height:
400
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

FCC Notice

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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 int erference will not occur in a particular installation. If this equipment does cause harmful interfere nce to radio or television reception, which can be determined by turning the equipment off and o n, the user is encouraged to try to correct the interference by one or more of the following measu res:
—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 conn ected.
—Consult the dealer or an experienced radio/TV technician for help.