User Manual for Me Creator

1. Power Supply Wiring

1. Take out the power supply, there is a 110V/220V switch on it. Please make sure that the switch is at the correct position according to the residential electricity standard of your country.
2. Loosen the screws, and connect power lines to corresponding ports in turn under the instructions of the colors of power lines and the marks on DC power supply.
3. take note of the colors and their corresponding connection as a mistake can cause you harm or damage the printer. If you are unsure of your skills and abilities here, please consult a professional.

BROWN	Live (L)
BLUE	Neutral (N)
GREEN / YELLOW	Ground (GND)
RED	Positive (+)
BLACK	Common (COM)

Note: Both of the power supply and LCD of Me Creator are external, and there are no installation holes set on the body of machine. Please find a flat place for the placement of your printer, LCD and power supply.

2. Software Resources

2.1Repetier host V 1.6.0

http://www.repetier.com/download-now/

2.2Arduino IDE

http://www.geeetech.com/wiki/images/a/a2/Arduino-1.0.1-windows.zip

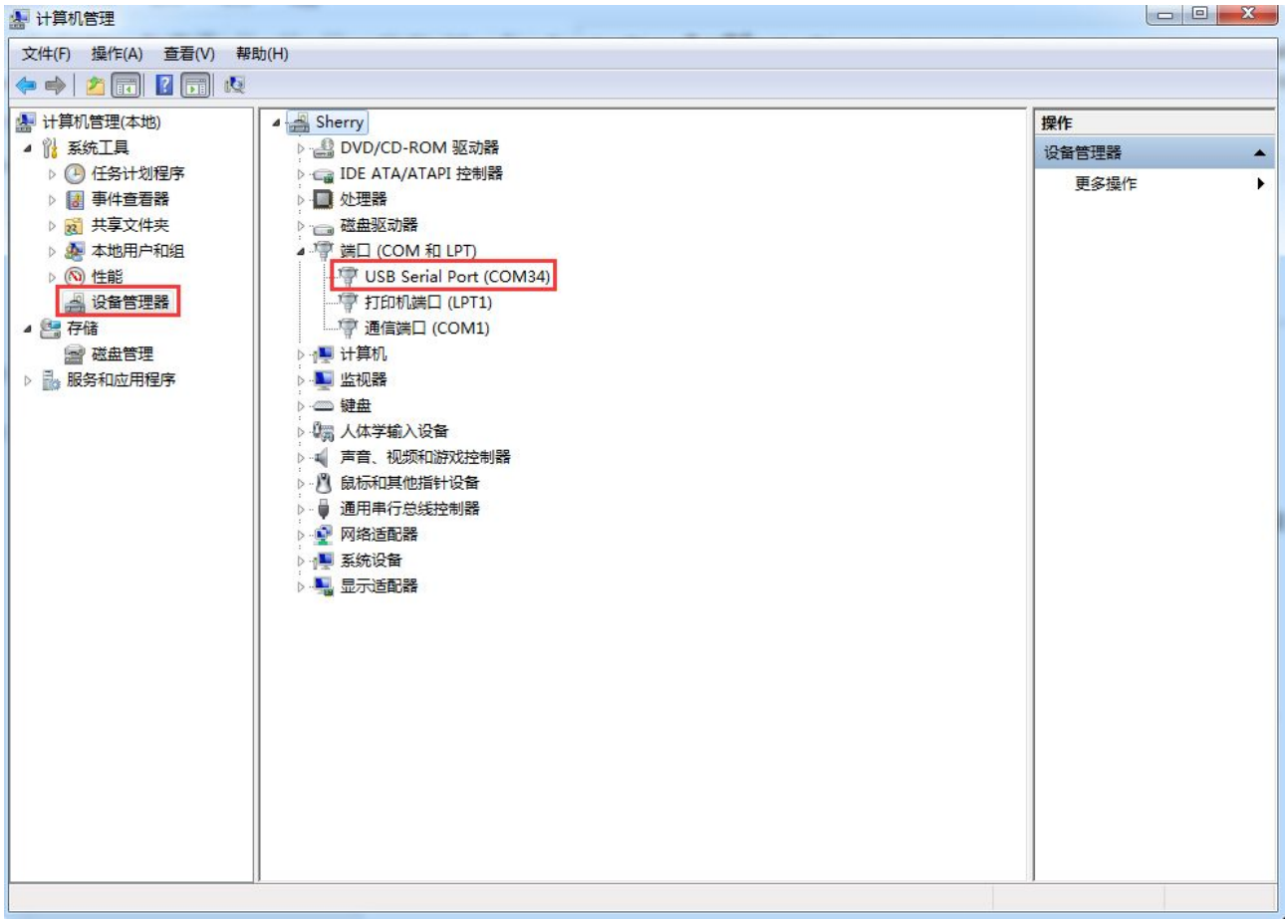
2.3Me Creator firmware（for Sanguinololu）

http://www.geeetech.com/forum/download/file.php?id=1563

3. Install USB Driver

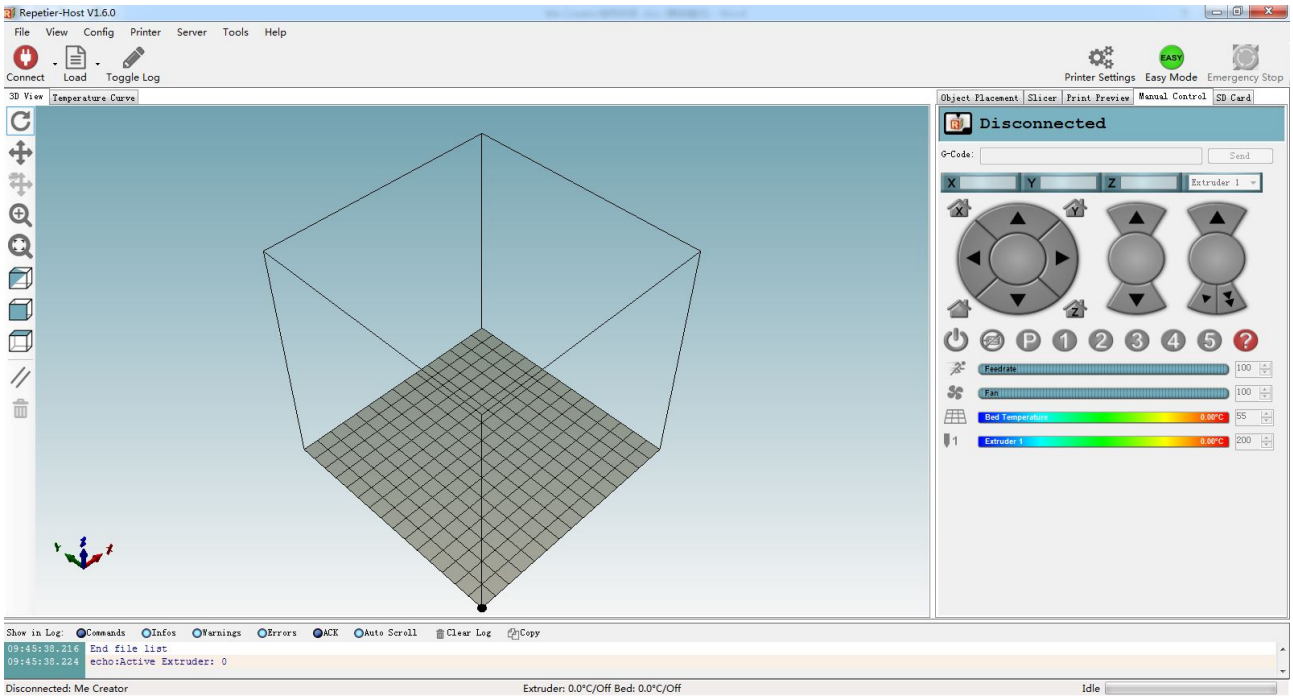
Connect the printer to computer with USB cable, and the computer will start installing the device driver software. After the successful installation of driver, please go to the Device manager to find the USB Serial Port. This port is the printer's communications port.

If the driver can not be automatically installed, please download the USB driver and manually install it.
http://www.ftdichip.com/Drivers/CDM/CDM%20v2.12.00%20WHQL%20Certified.exe


计算机管理
文件(F) 操作(A) 查看(V) 帮助(H)
计算机管理(本地)
系统工具
任务计划程序
事件查看器
共享文件夹
本地用户和组
性能
设备管理器
存储
磁盘管理
服务和应用程序
Sherry
DVD/CD-ROM 驱动器
IDE ATA/ATAPI 控制器
处理器
磁盘驱动器
端口 (COM 和 LPT)
USB Serial Port (COM34)
打印机端口 (LPT1)
通信端口 (COM1)
计算机
监视器
键盘
人体学输入设备
声音、视频和游戏控制器
鼠标和其他指针设备
通用串行总线控制器
网络适配器
系统设备
显示适配器
操作
设备管理器
更多操作

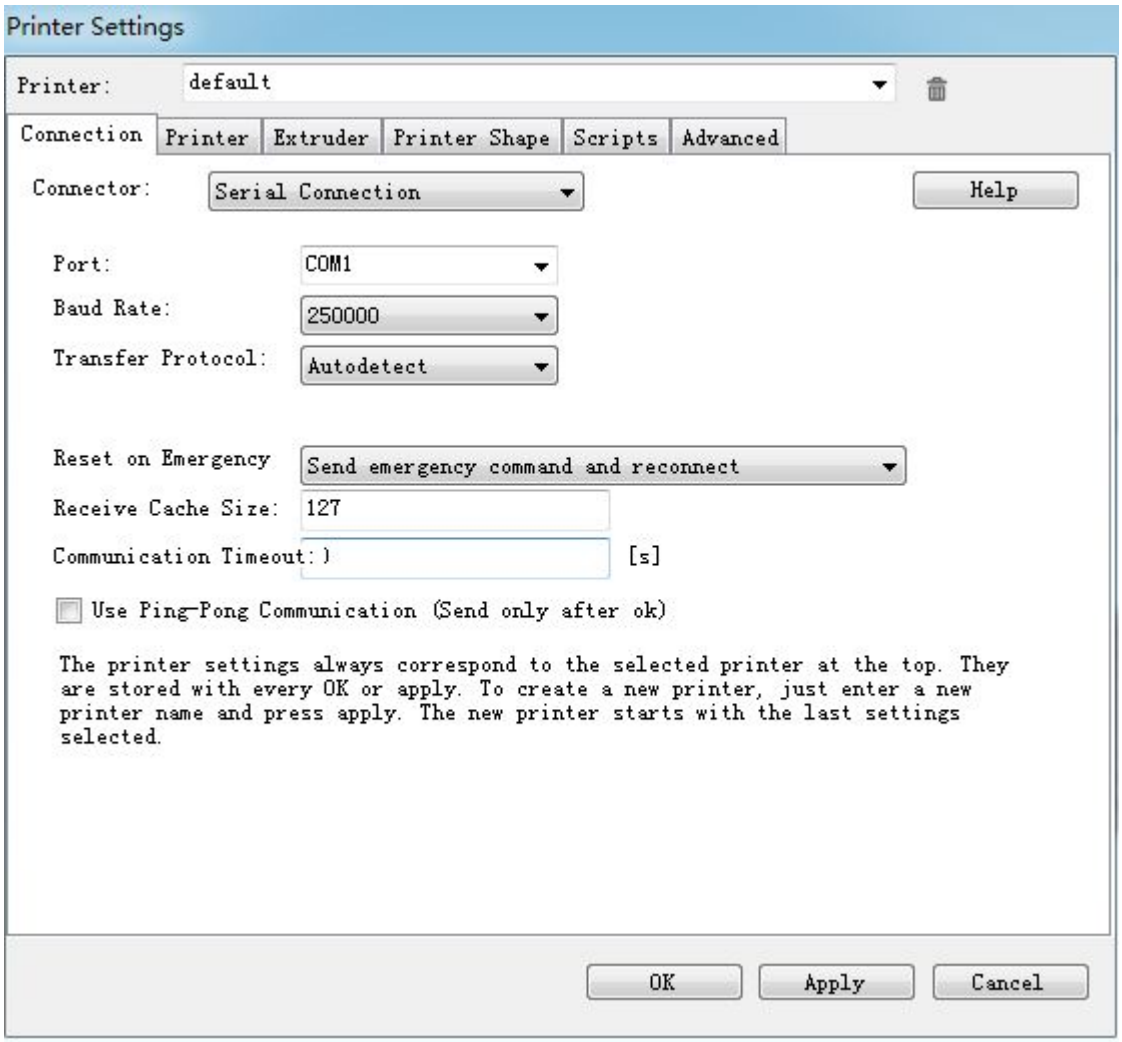
4. Connect the Printer to Repetier Host

After installing Repetier Host, plug USB cable into computer and open Repetier Host.



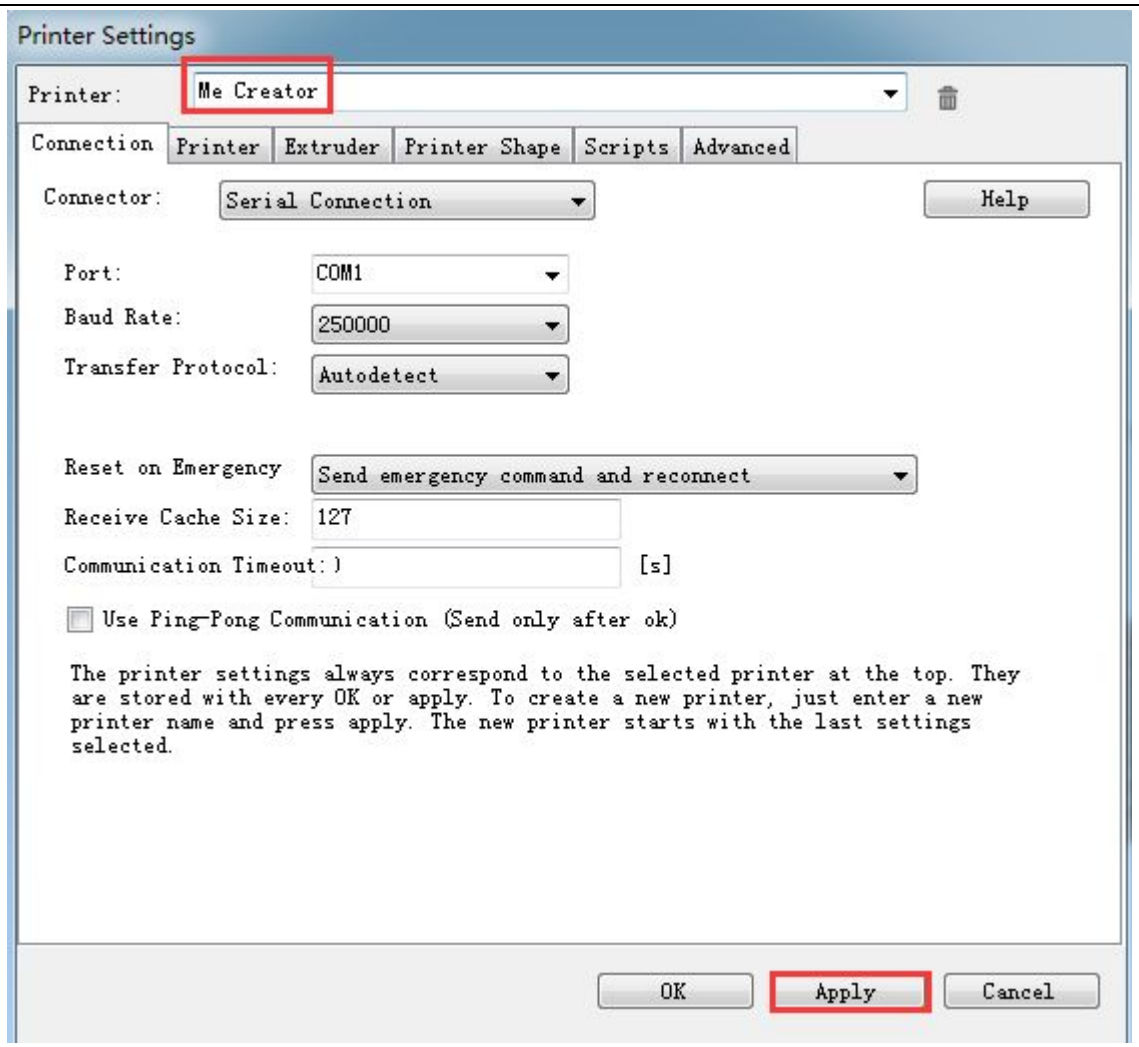
When you start Repetier Host for the first time, you need to configure the printer parameters, and then do the connection. Click the Printer Settings 

in the top right corner, following window will appear.



4.1 Create New Printer

In the pull-down menu at the top, it shows current selected printer. When it starts for the first time, it only has the default printer. Change the name of the printer and click Apply can create a new printer.



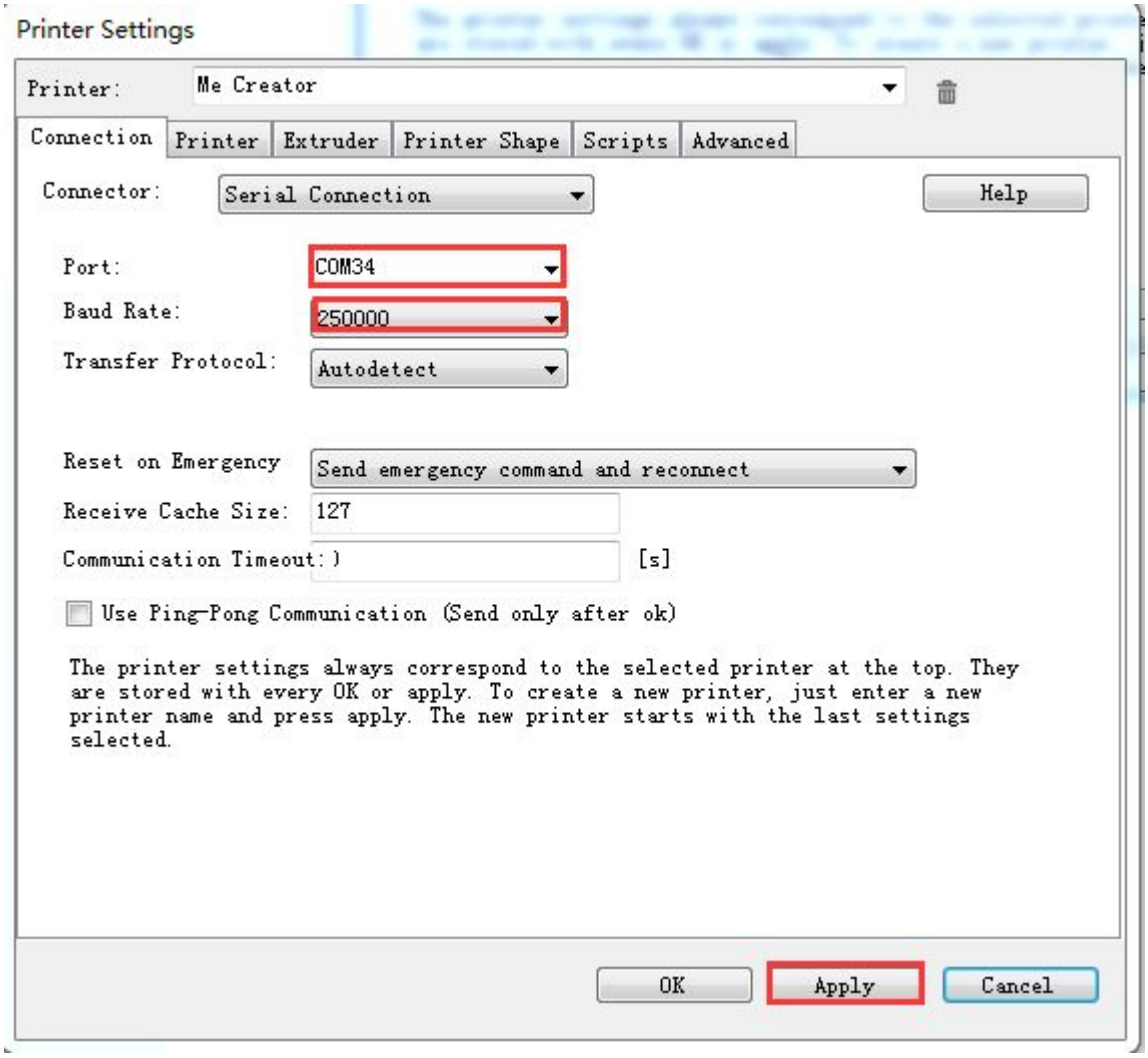
There are six tags in total here. Configure relevant parameters of the printer here.

4.2Connection

Choose right Port and *Baud* Rate. For other parameters please leave them as default, and click Apply.

Port： Get the printer connected to the port of computer, which is corresponding to the USB Serial Port in the Device manager.

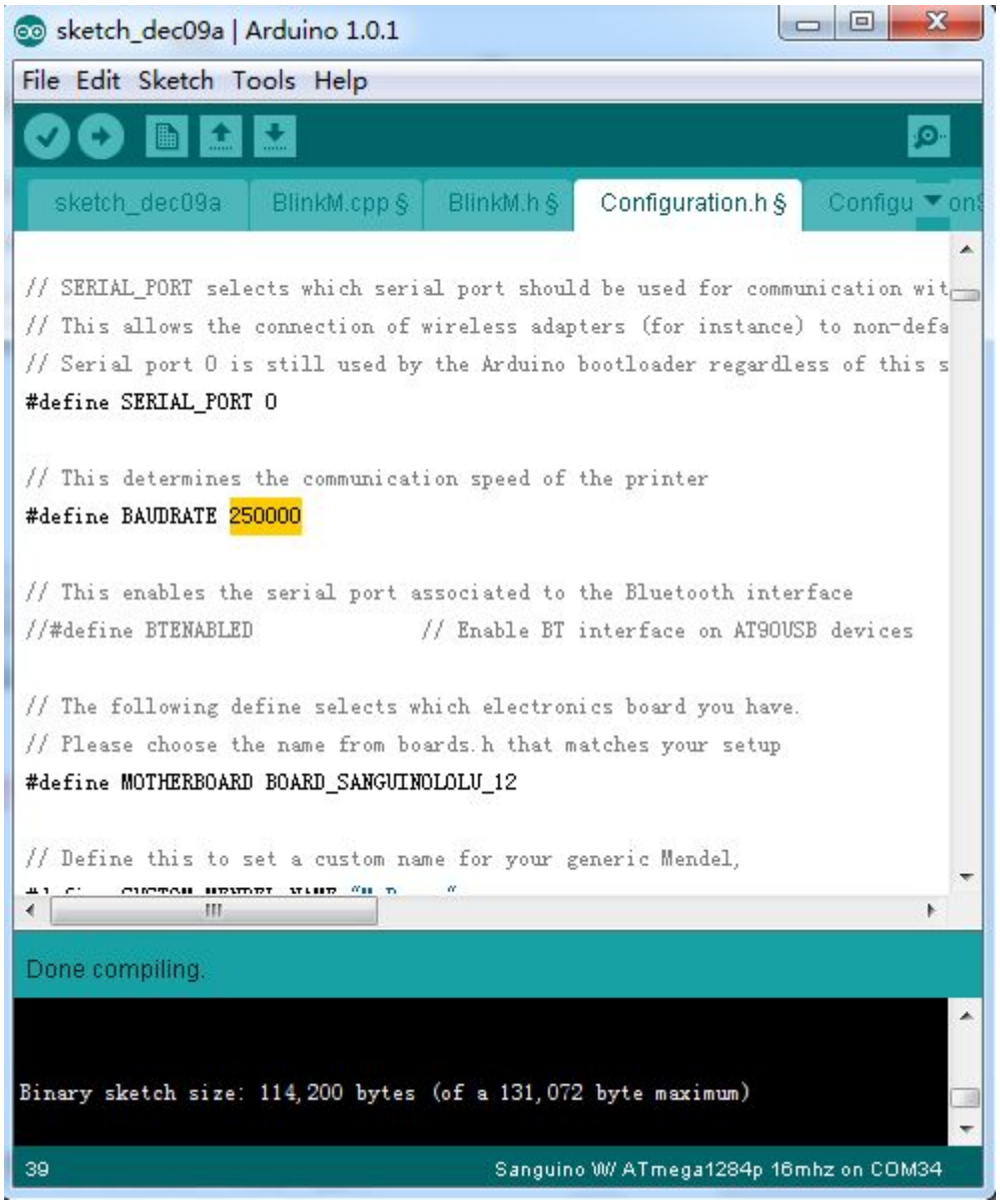
Baud Rate: Corresponding to the Baud Rate in firmware. Generally it is set as 250000.



Note: If the operating system is Mac OS, please set the baud rate as 115200. Meanwhile, you need to do debugging for the motor direction of the printer again after re-uploading the firmware.

Open the firmware in Arduino 1.0.1, change the baud rate of firmware to 115200 in Configuration.h file.

After modification, re-upload the firmware. About how to burn the firmware, please refer to the FAQ.



After successfully modifying the baud rate in firmware, modify the baud rate in Repetier-Host to 115200 as well.

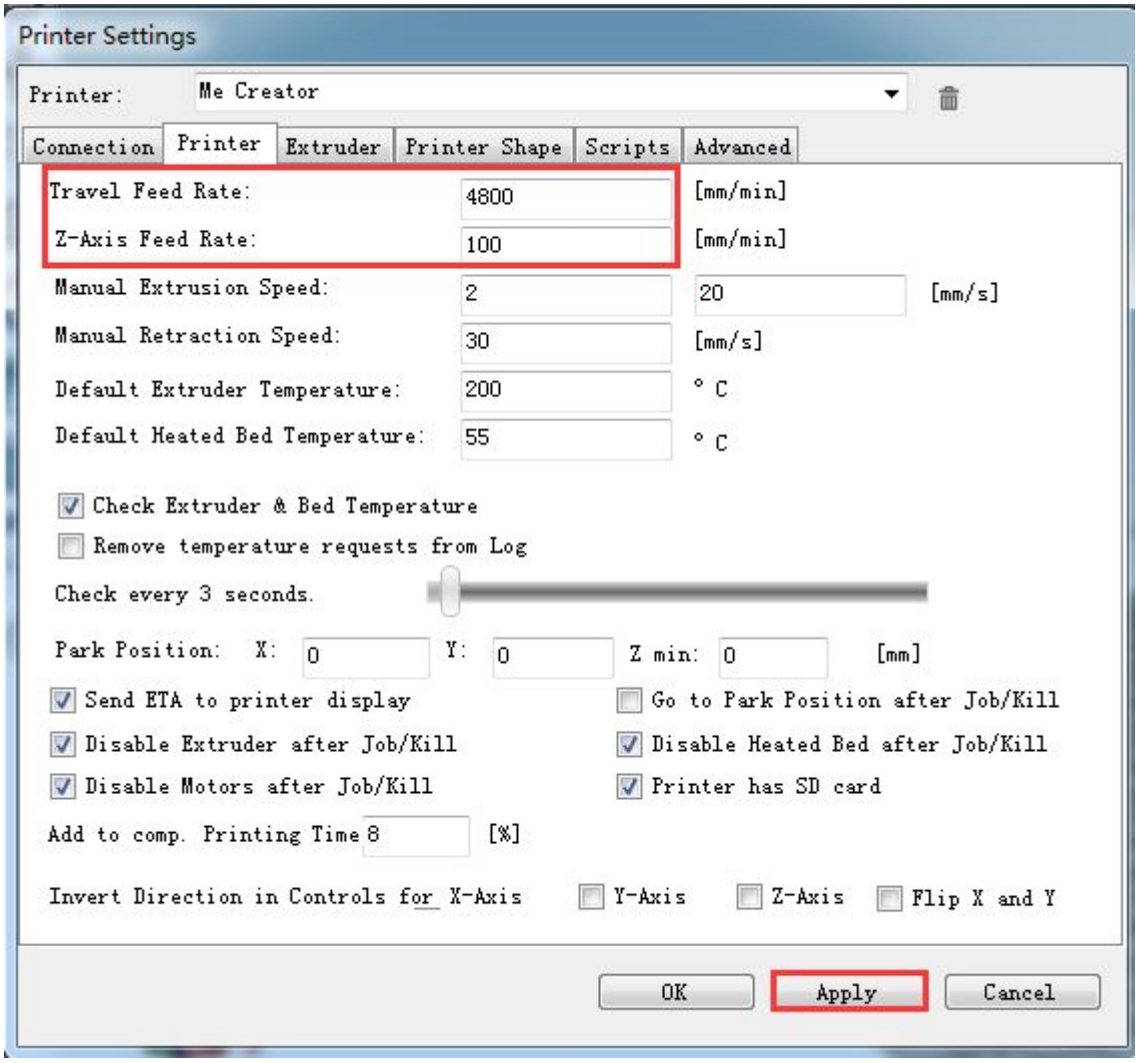
4.3Printer

Set the extruder's moving speed both in horizontal direction and Z-axis direction in the Printer tab, and click Apply.

Travel Feed Rate: 4800mm/min

Z-Axis Feed Rate: 100mm/min

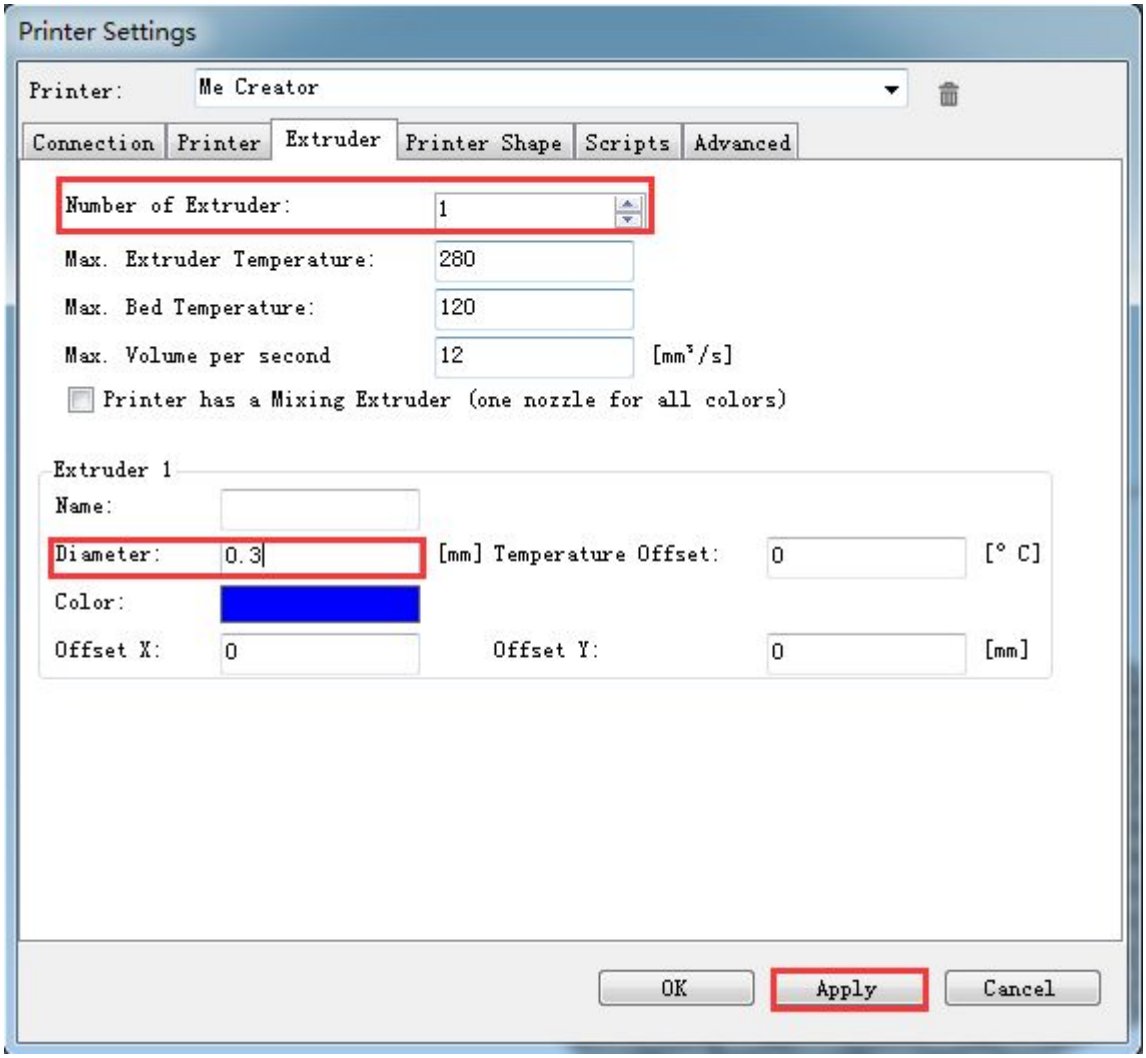
This is the default printing speed of Repetier-Host. You can adjust these two speeds if you need. But please note that too fast print speed will lower the print quality.



4.4Extruder

Number of the extruder: 1

Diameter of extruder 1: 0.3



4.5 Printer shape

Printer type: classical printer

Home X： Min

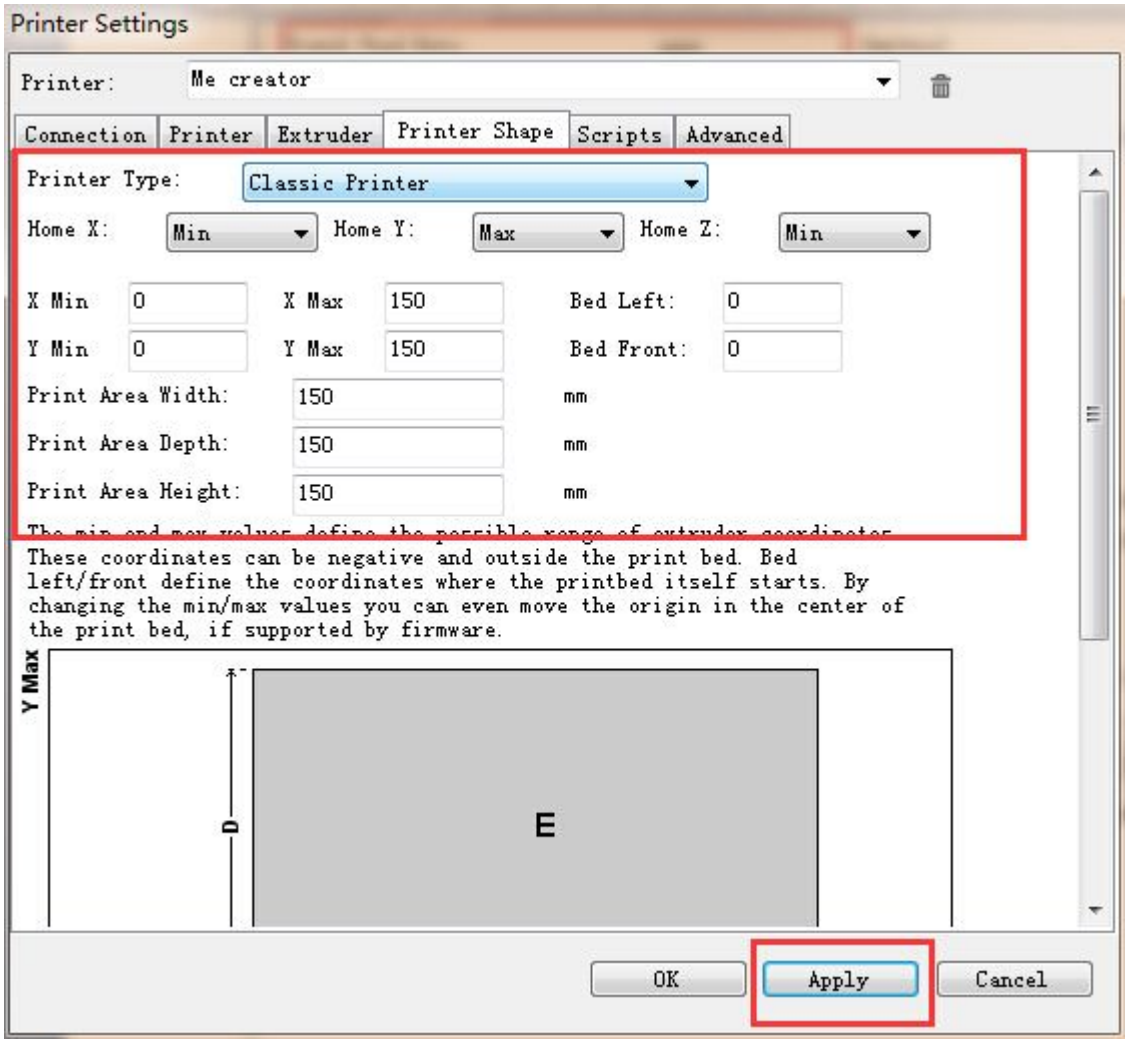
Home Y： Max

Home Z： Min

X Min： 0 X Max: 150 Bed Left: 0

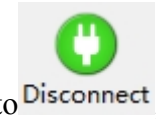
Y Min： 0 Y Max: 150 Bed Front: 0

Printing zone: 150 x 150 x 150 (length/width/height)



After setting, click the 

button in the top left corner of Home Page. When the button

turns green and changes into 

, the printer connection is successful.

5. Function Test

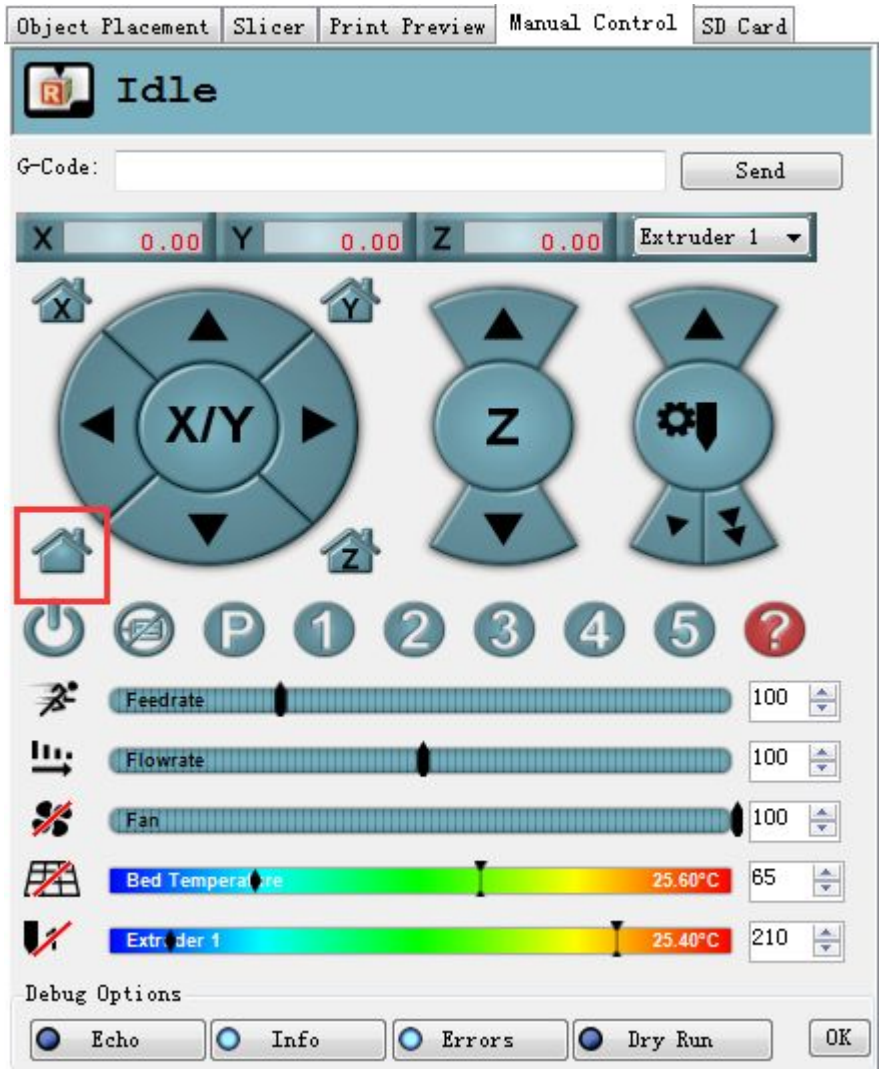
The uploaded firmware of Me Creator before delivery is based om Windows operating system, and we have done debugging on it to make sure that every part of it can work normally. However, there may be abnormal circumstances because of the process of transportation or other unpredictable factors. Please do simple test before using it.

5.1 Use Repetier-Host to Test

5.1.1 Motor's running direction test

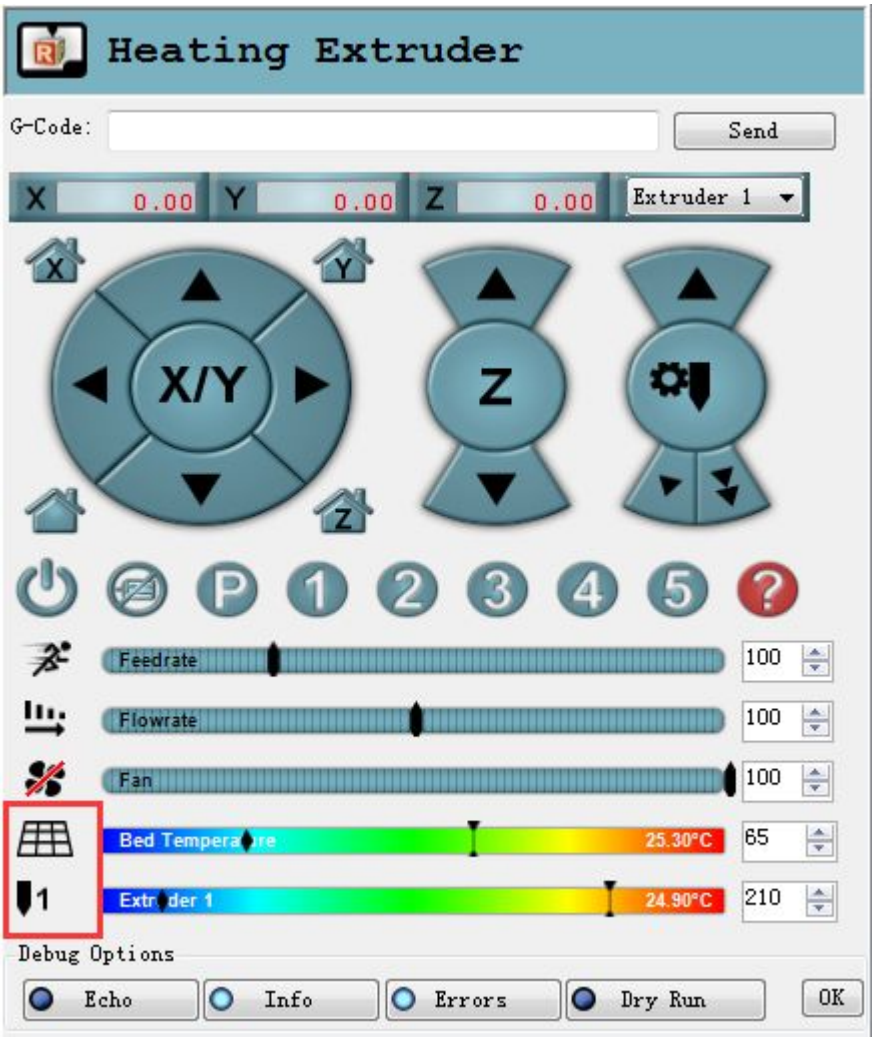
Before the test, manually set the motors of X / Y / Z axis at the intermediate position of each axis in order to avoid accidental collision occurring during the test. There is emergency stop button in the top right corner 

, or you can cut off the power. Be prepared for emergency stop. Open Repetier host and connect the printer. Click Home button 
, then three axes will move towards the endstop. After they touching the endstop they will move back for a short distance and then stop the movement. If the moving direction is reversed, you can change the direction in firmware.(please refer to FAQ)



5.1.2 Heating function test

Click the heating button of the hot bed  and the extruder  . When the icon changes into the state as shown below, it indicates the heating is ongoing.

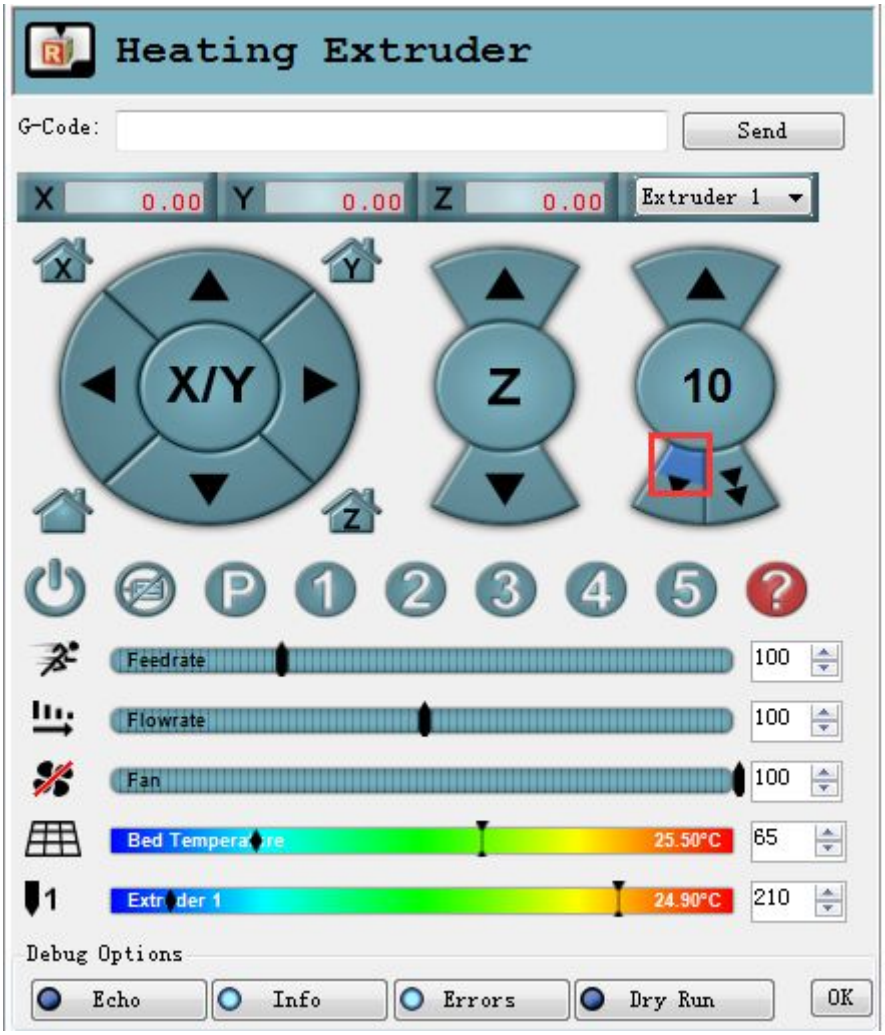


Meanwhile you can see the temperature at the bottom of Repetier. If the hot bed or extruder can not be heated, please refer to FAQ.

5.1.3 Extruder test

Please note: It is set in the firmware that the extruder will not work before the temperature reaches above 170℃. Therefore, please heat the hotend above 170℃ before testing any motor inserted in the extruder's port. Otherwise motor will not have any response.

First we raise the temperature to 200℃, then click the downward arrow and it begins extrusion. Click the downward arrow to test if the extrusion of filament 0 is fluent or not. In order to avoid blockage, please extrude filament at 1mm or 0.1 mm. You can use one hand to hold the filament so that you can easily know the situation of motor's rotation and filament's movement.



5.2 Use LCD for Test

5.2.1 Homing

LCD>Prepare>Auto Home

Turn on the printer, first please make a homing. If you don't make a homing, it will choose the current position as home position by default. Debugging has been done on Me Creator before its delivery, and the homing direction is toward the endstop under normal situation.

5.2.2 Heating

LCD>Prepare>Preheat PLA/Preheat ABS

Test the heating function of hotbed and extruder. Default settings are as follows:

Preheat PLA: Nozzle:180°，Bed:70°

Preheat ABS： Nozzle:230°，Bed:110°

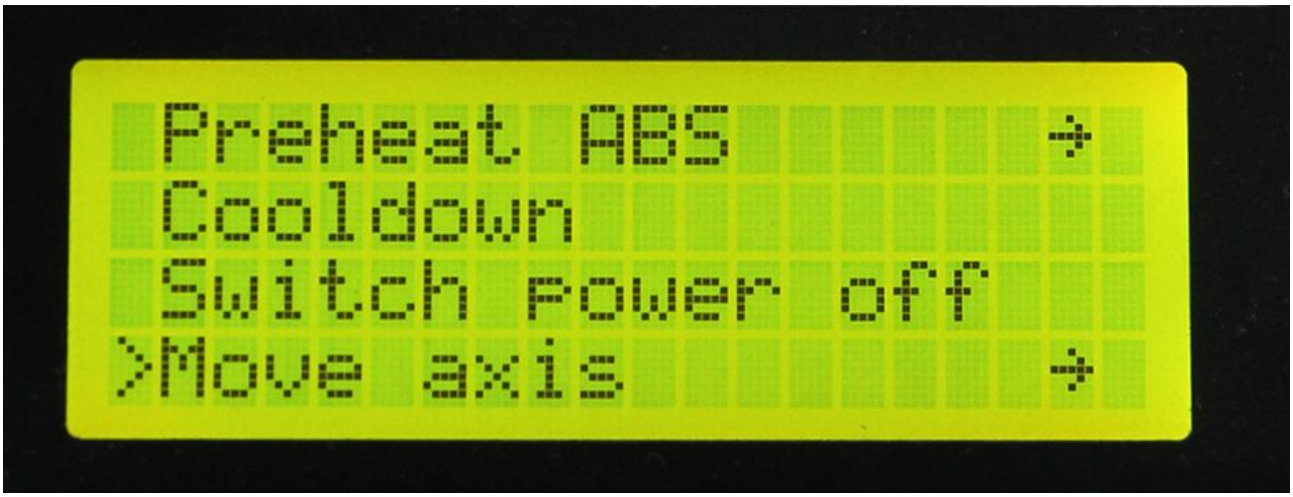
During heating process, please observe if the extruder and hotbed are heated to the preset temperatures or not. Also note that after heating to the preset temperature, the temperature will not rise and it maintains at the preset temperature.

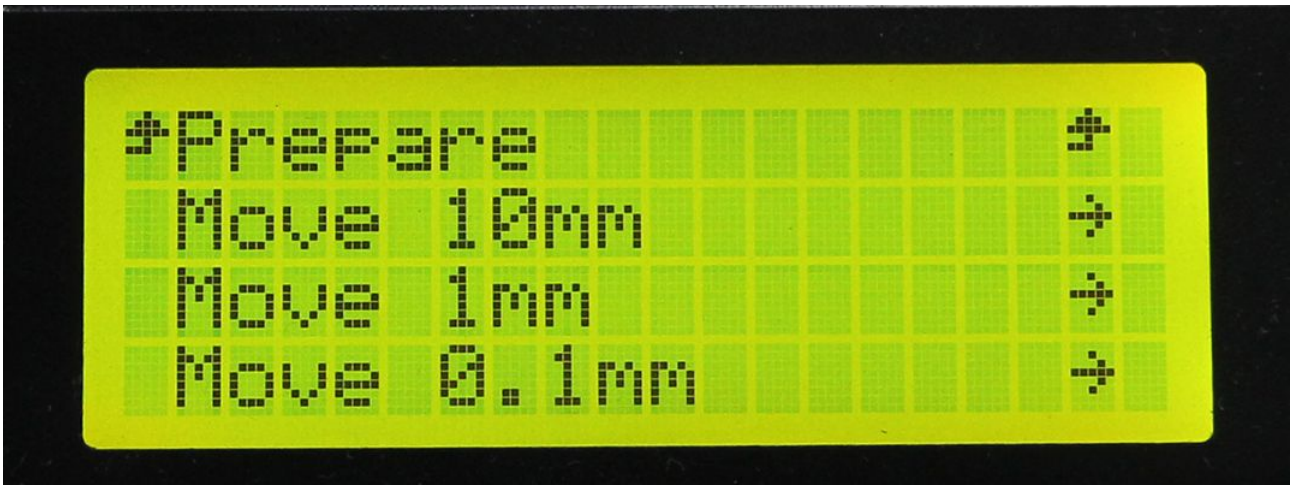
You can change the preset temperature by entering LCD>Control>Temperature> Preheat PLA Conf/Preheat ABS Conf. Choose Store Memory to save the current parameters in current directory.

5.2.3 Motor Direction

LCD>Prepare>Move Axis>Move Axis 10mm/ Move Axis 1mm/ Move Axis 0.1mm

If the homing and heating tests are normal, next you need to test the running of X, Y, Z axis and extruder motor in Move Axis option. At the same time you need to observe if the running direction of the motor is correct or not. For example, the extruder involves extrusion and withdrawing. If the motor direction is opposite, the extruder can not feed normally.





X，Y axis can move at 10mm,1mm or 0.1mm.

Z axis and Extruder can only move at 1mm or 0.1mm.

For the printer, you need to check whether the extrusion is normal or not. Please set a reasonable temperature depending on the melting point of filament, then test the feeding at 1mm or 0.1mm.

1） Choose CD>Control>Temperature>Nozzle to set extruder temperature.(generally it is the melting point of the filament)

2） When the temperature of extruder reaches the melting point of the filament, begin the extrusion at 1mm or 0.1mm. Check if the extrusion is fluent or not. If not, please refer to the FAQ.

2.2.4 Unlocking motor

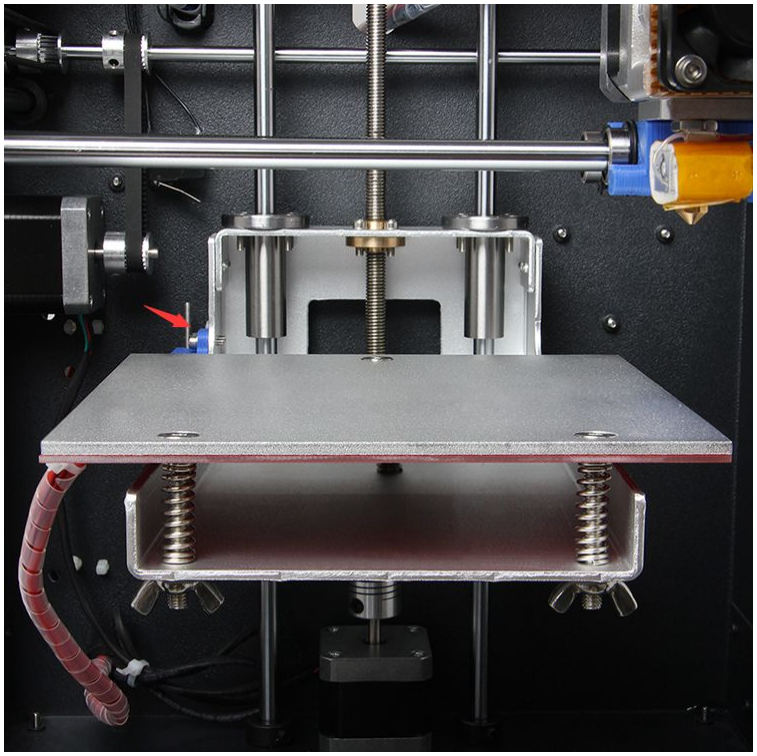
After unlocking motors, each axis can be moved by hand.

6. Hotbed Leveling

Before printing, please check whether the moving path of the extruder is parallel with the hotbed or not, which is called leveling.

Coarse tuning

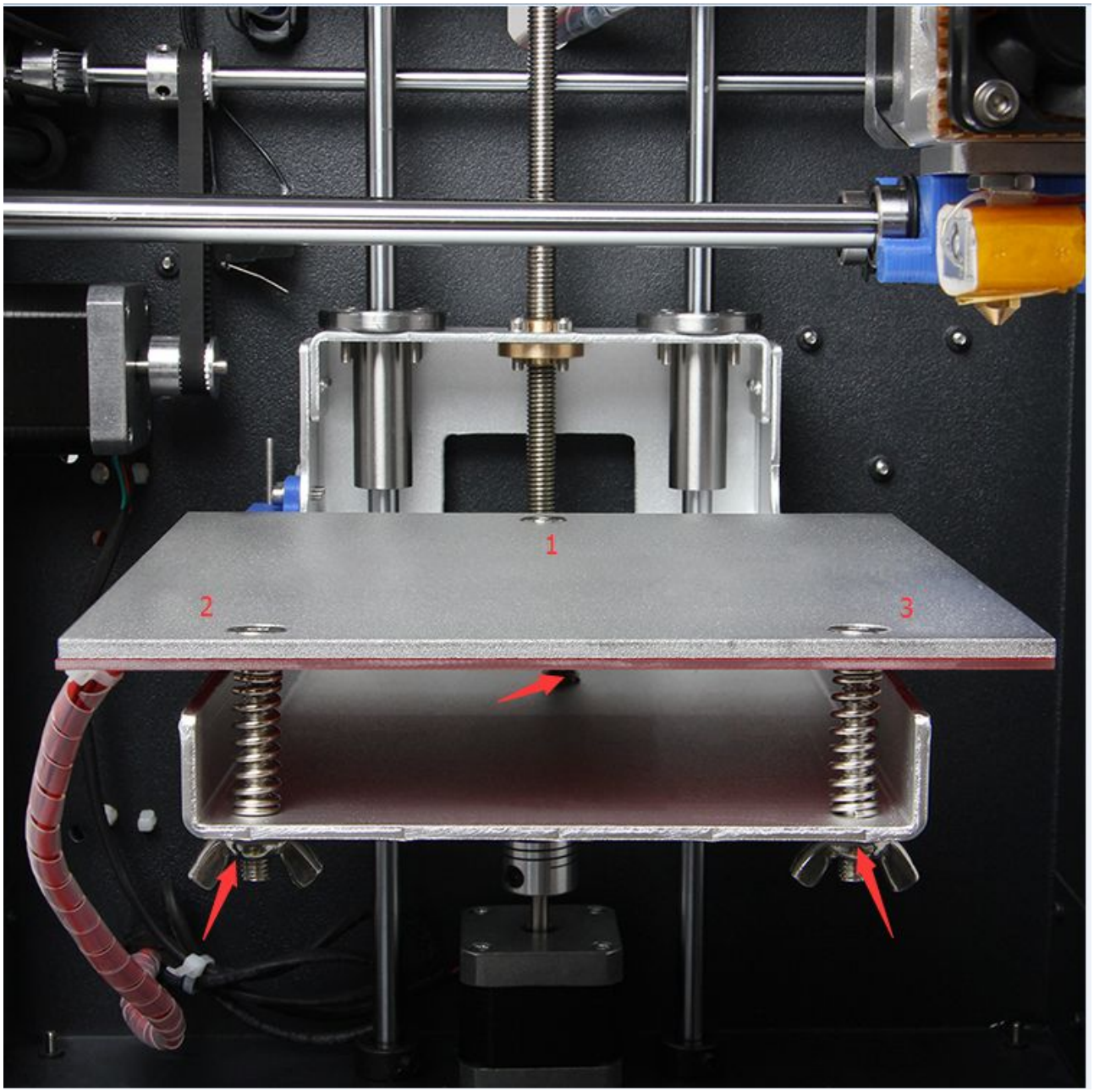
Adjust the trigger of the endstop of Z axis, and try your best to set the homing position of Z axis right on the hotbed.



Fine tuning

1）Make a homing for the printer.

2）Unlock the motor, manually move the extruder to the three positions of the hotbed shown in the picture. At this moment the nozzle tip is already very near to the hot bed because of previous coarse tuning.



4. Put a piece of A4 paper between the extruder and hotbed. If there is a little bit friction when you pull the paper back and forth, the distance is proper. Otherwise you need to adjust the screw in this corner of the hotbed to slightly lift or lower the hotbed.

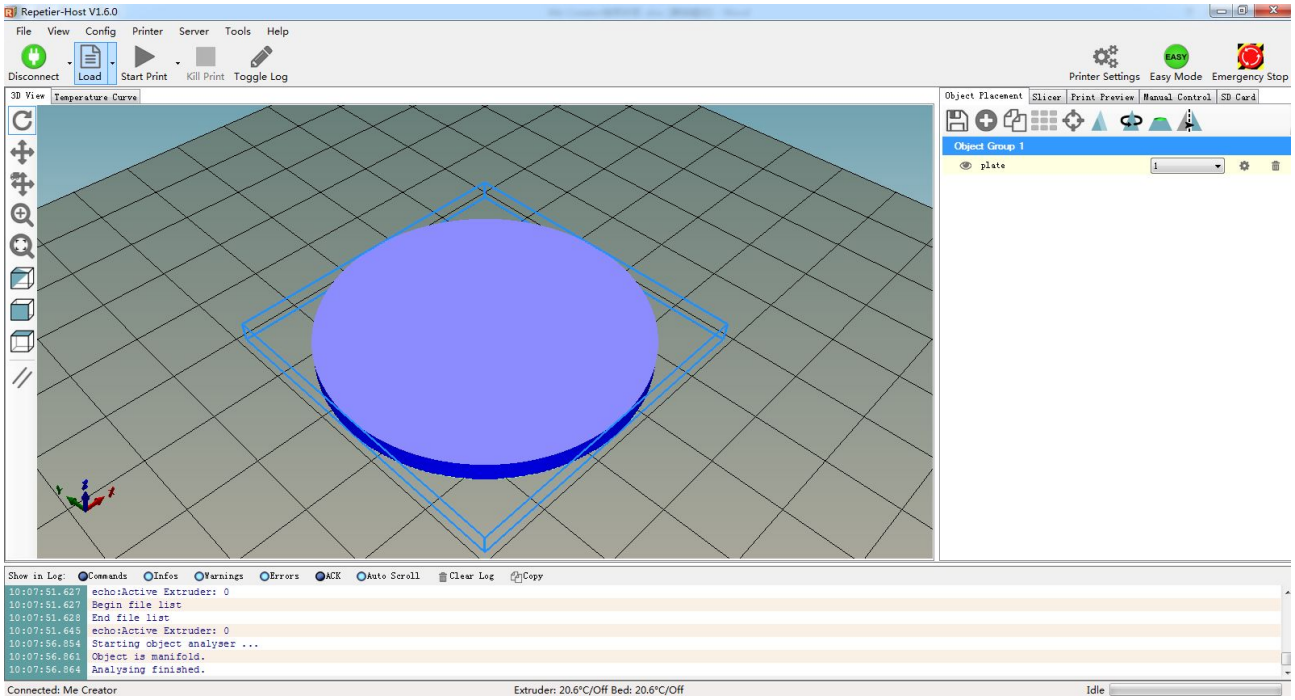
7. Printing

7.1 Online printing

7.1.1 Import STL file

Prepare the object you want to print, and open the Object Placement. Import STL file by clicking  .

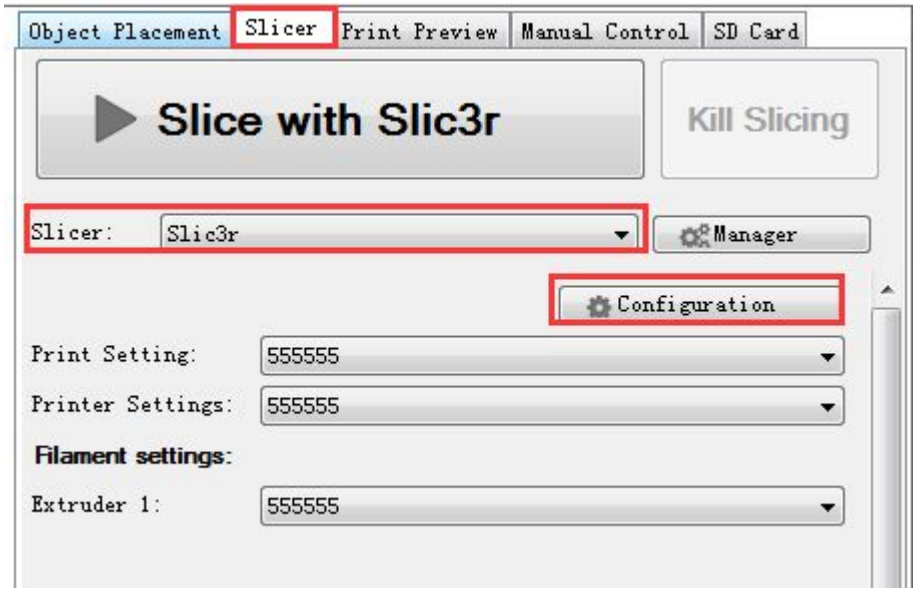
Please note that the print object can not exceed the printing zone.



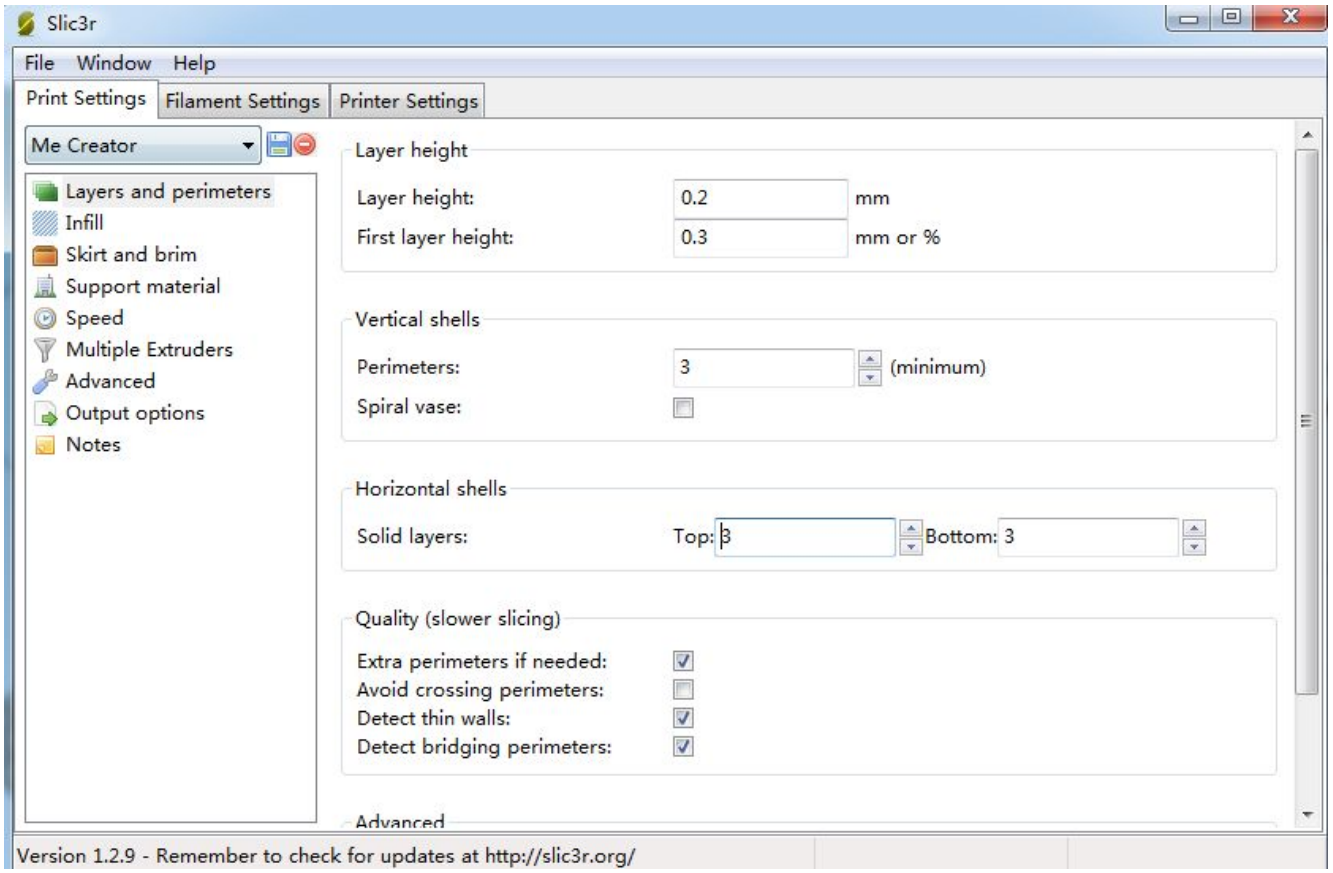
7.1.2 Slicing Parameters Setting

Repetier-Host is bundled with two slicers: Slic3r and CuraEngine. We use slice 3r as example to introduce how to set slicing parameters of Me Creator.

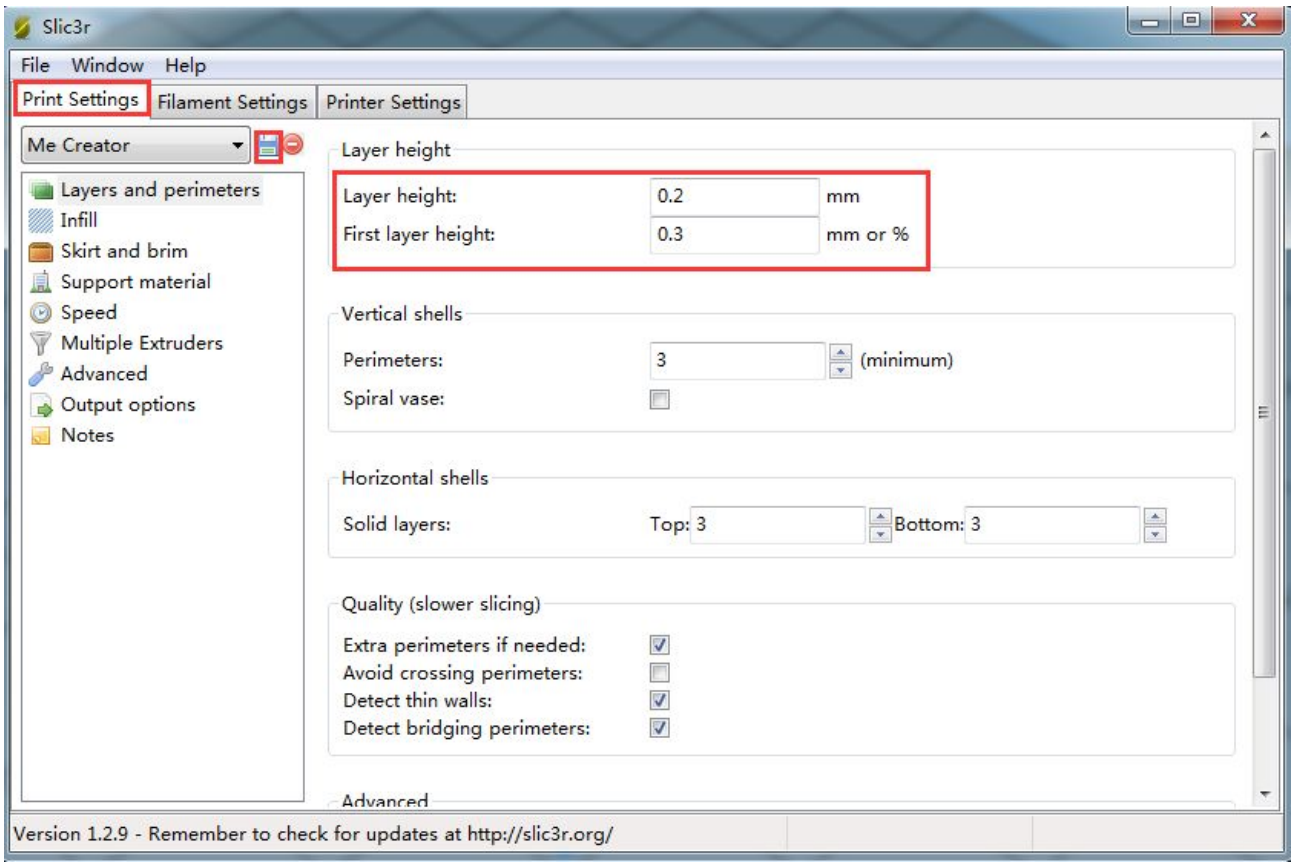
Click Slicer>Configuration



Following interface of Slic3r will appear:



Set the height of layer and the first layer in Print Settings, and save the setting.



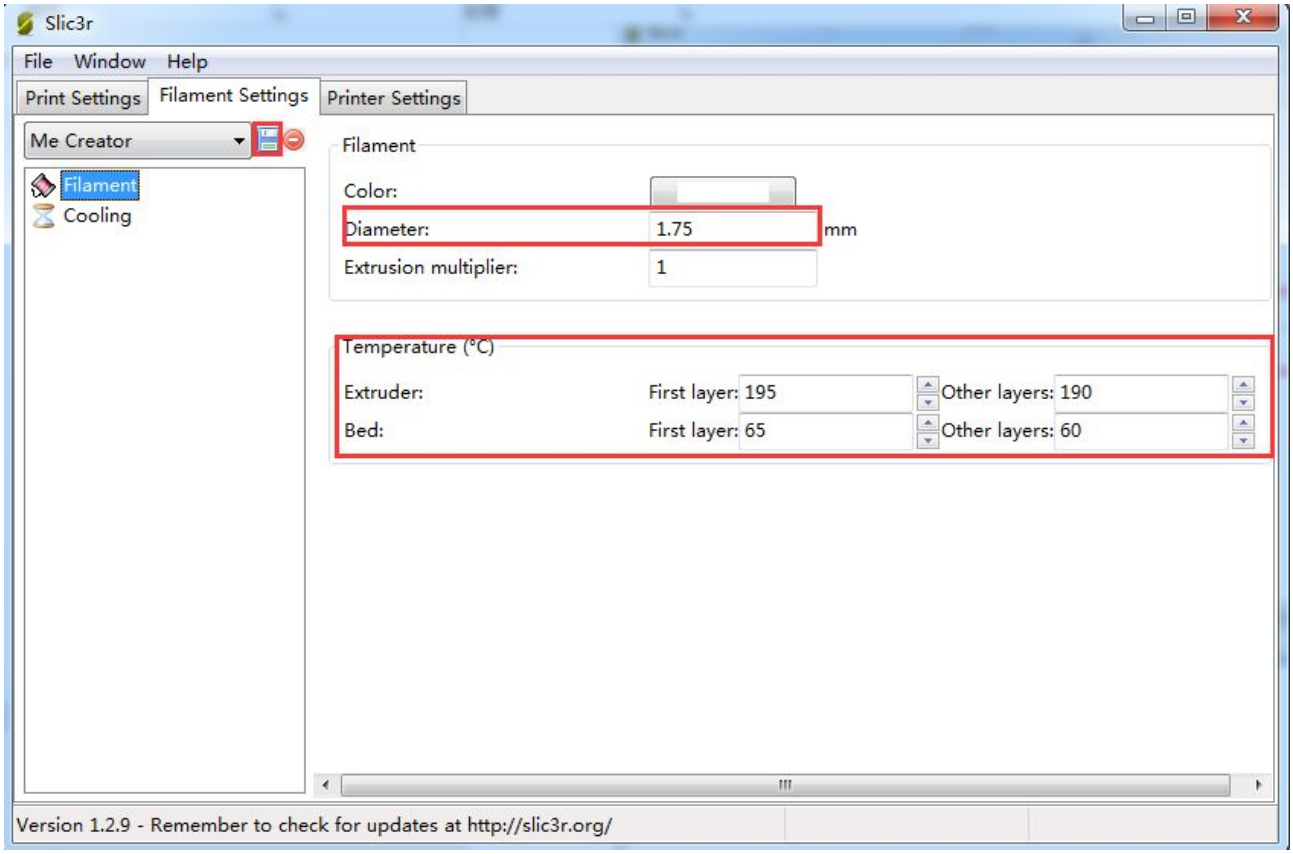
Set filament diameter as 1.75 in Filament Settings.

Temperature setting

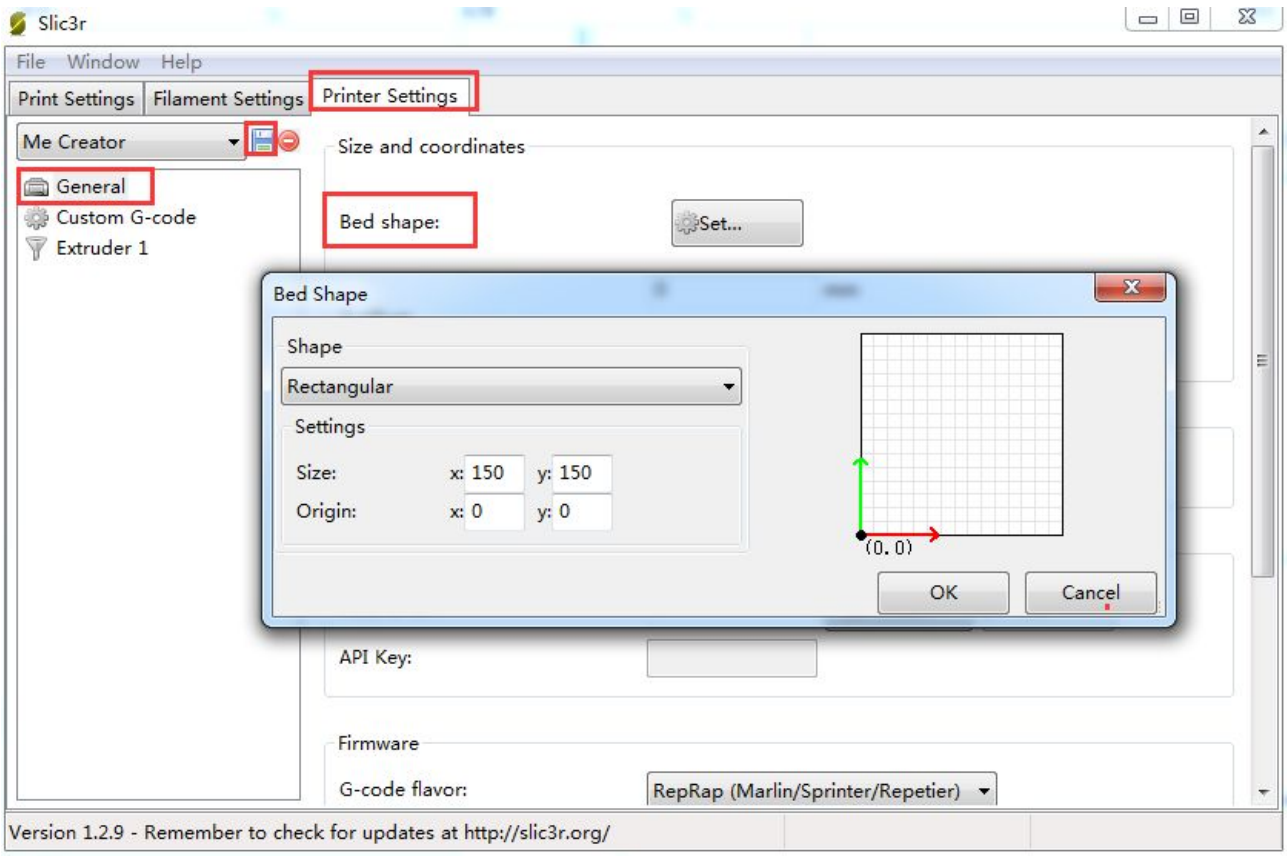
PLA: Extruder 190℃-210℃, hotbed 55℃-65℃

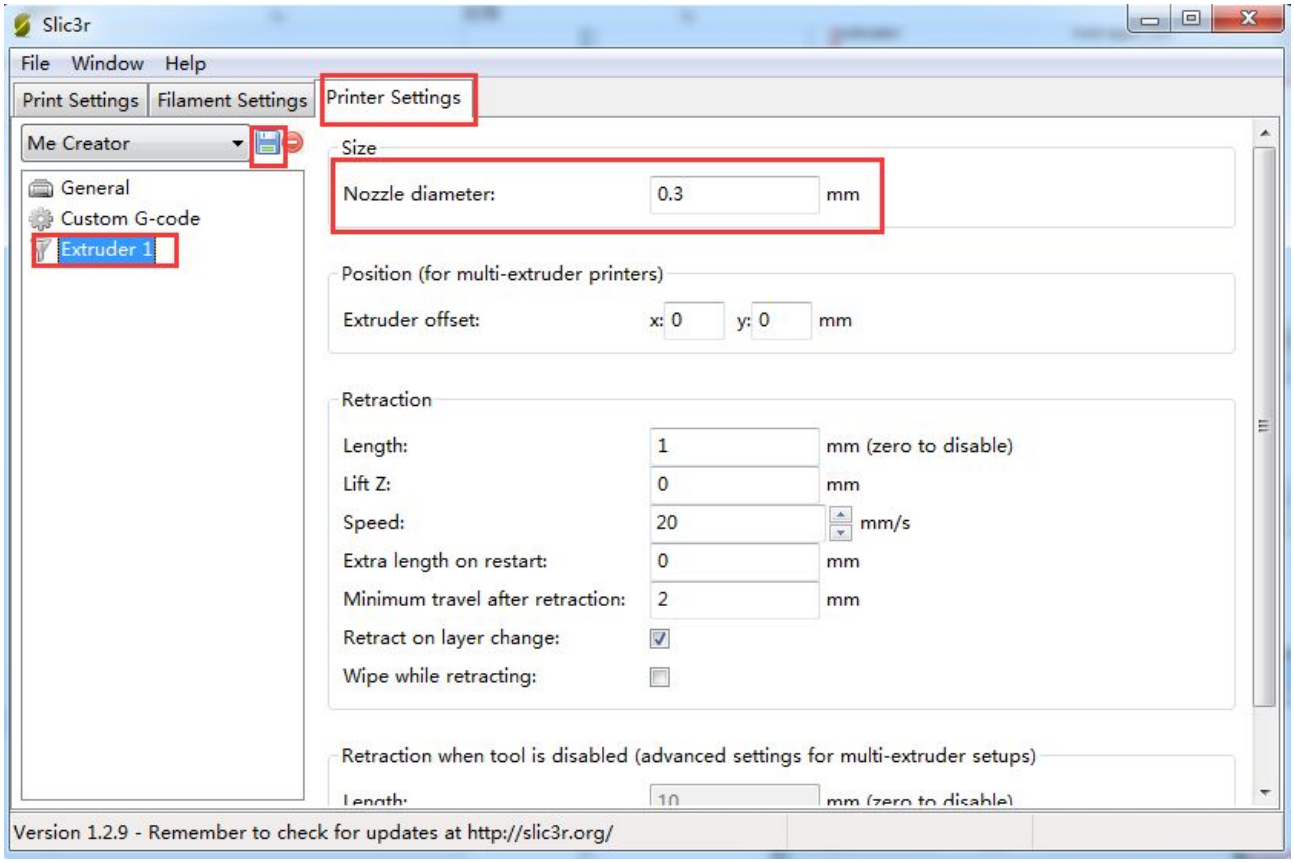
ABS: Extruder 240℃-250℃, hotbed 85℃-95℃

When you print with ABS, you are advised to use ABS glue.



Set hotbed size and nozzle diameter in Printer Settings, and save the setting.





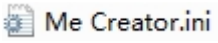
Except for above hardware parameters settings, you should also pay attention to parameters like printing speed etc. Because they are important to improving the printing quality. It needs your long-time practice and experience. Here we give you a setting for reference. Please download the ini.file

You can import it into slic3r to view it according to following steps.

Note: this slicing setting is corresponding to following parameters

Printer type: Me Creator(nozzle diameter:0.3)

Filament: PLA/1.75

Click File<Load Config to import the Me Creator.ini slicing setting 

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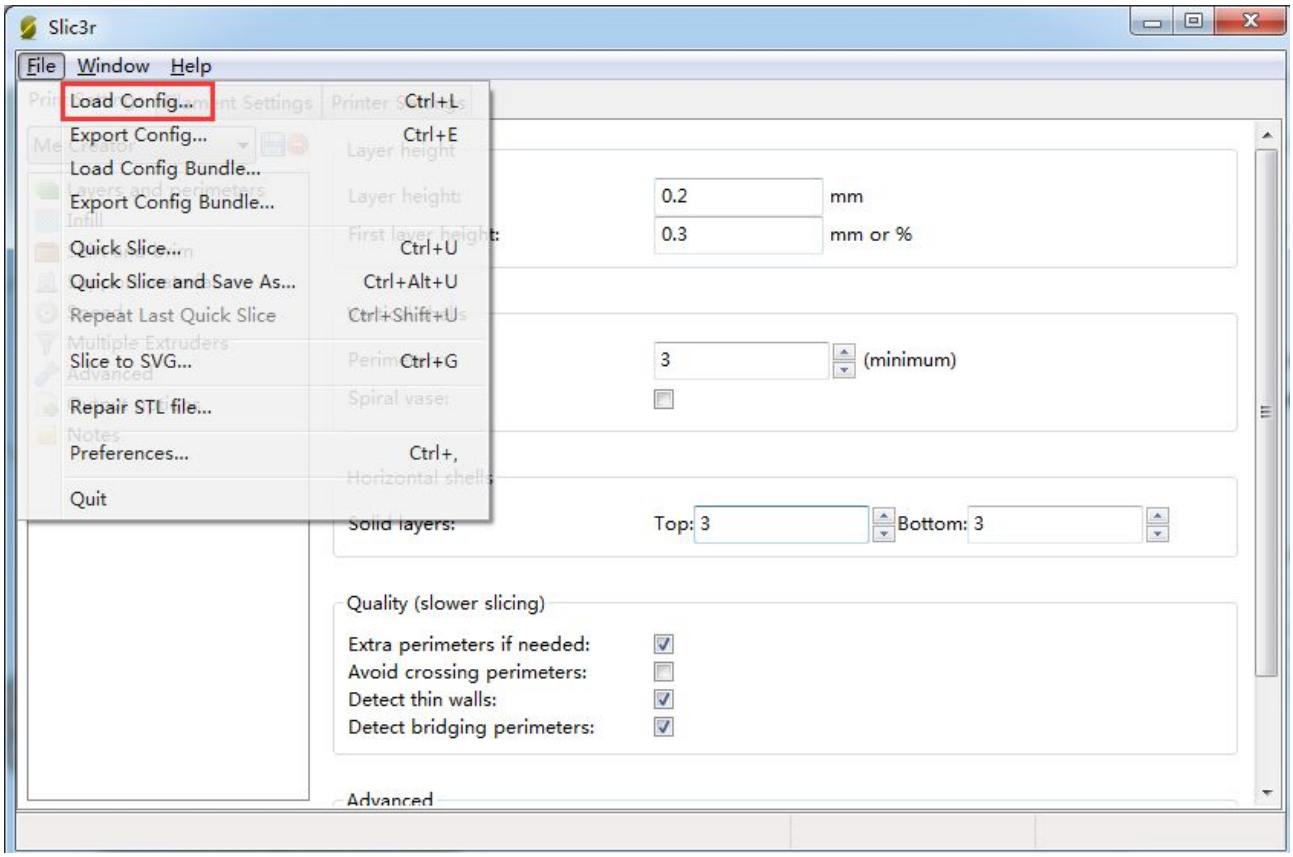
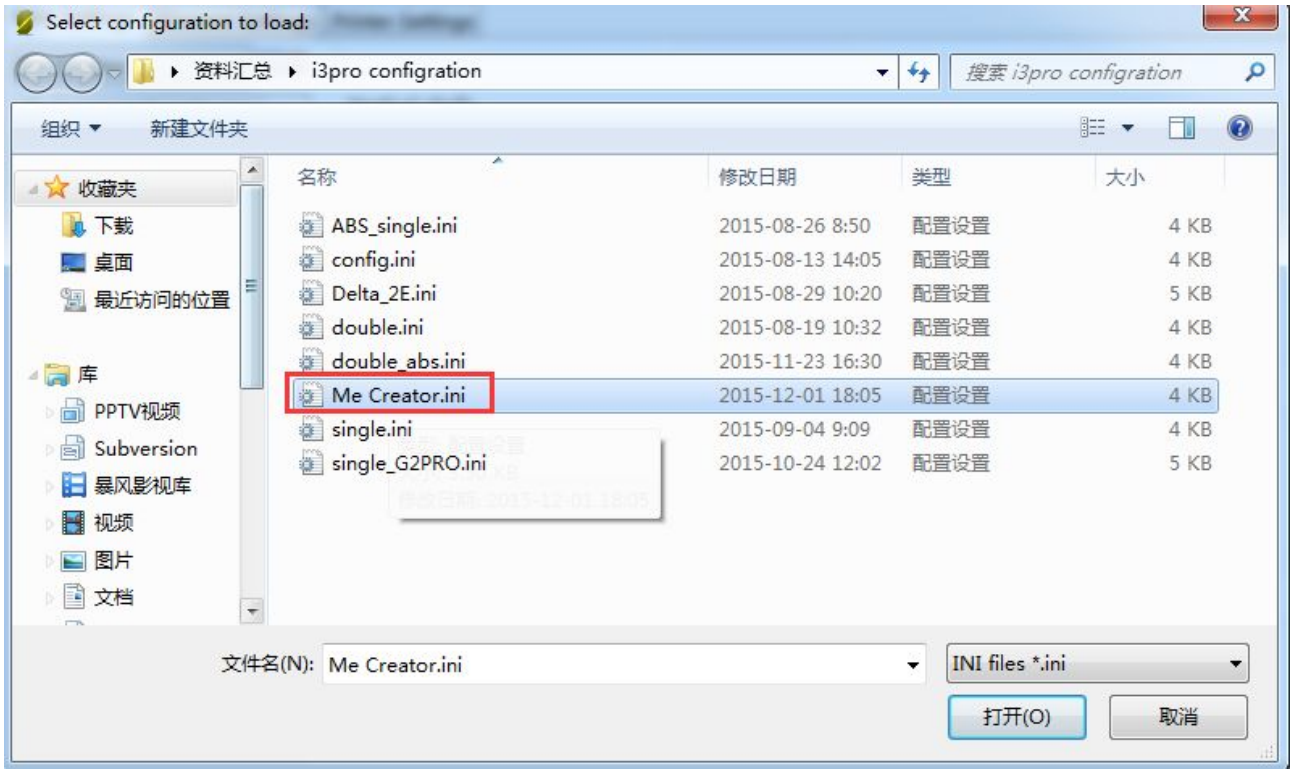
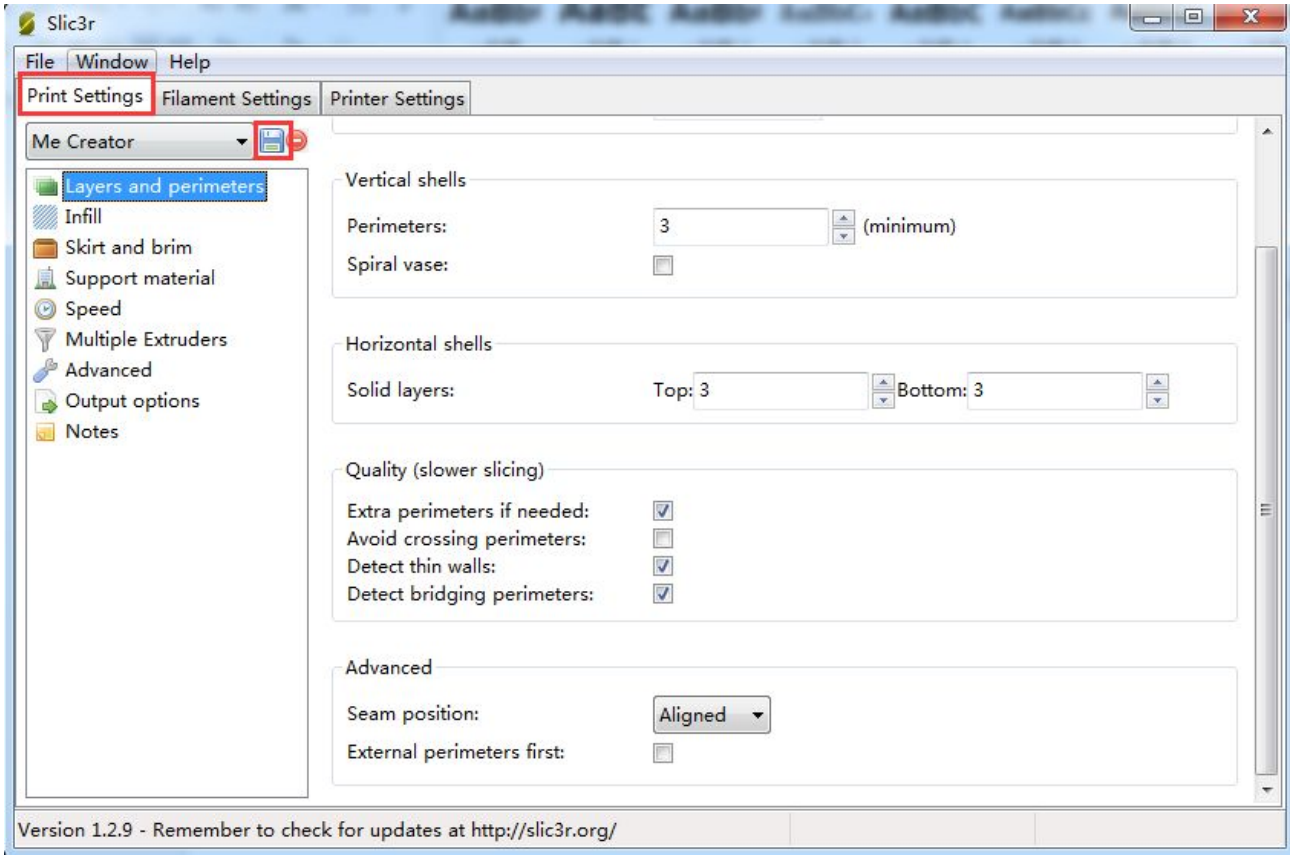
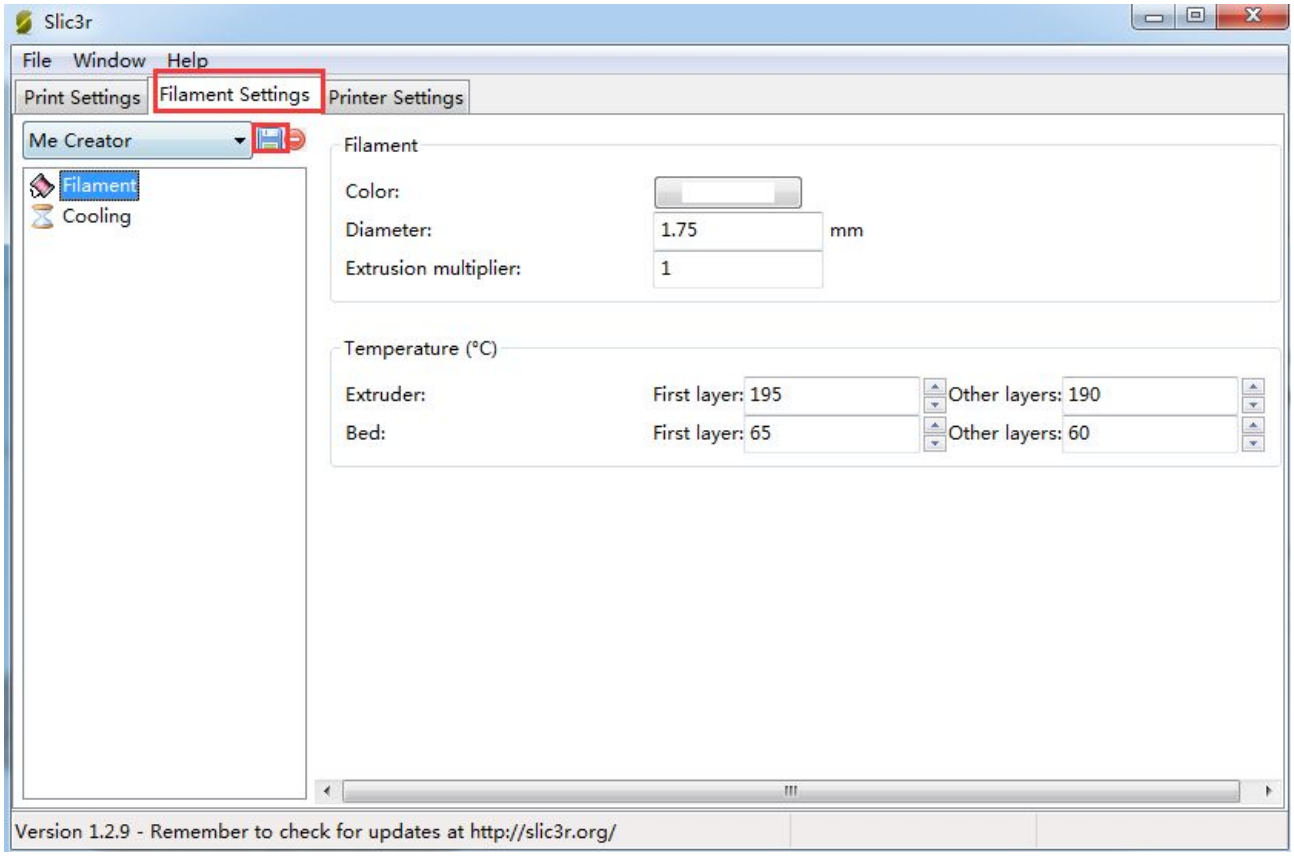




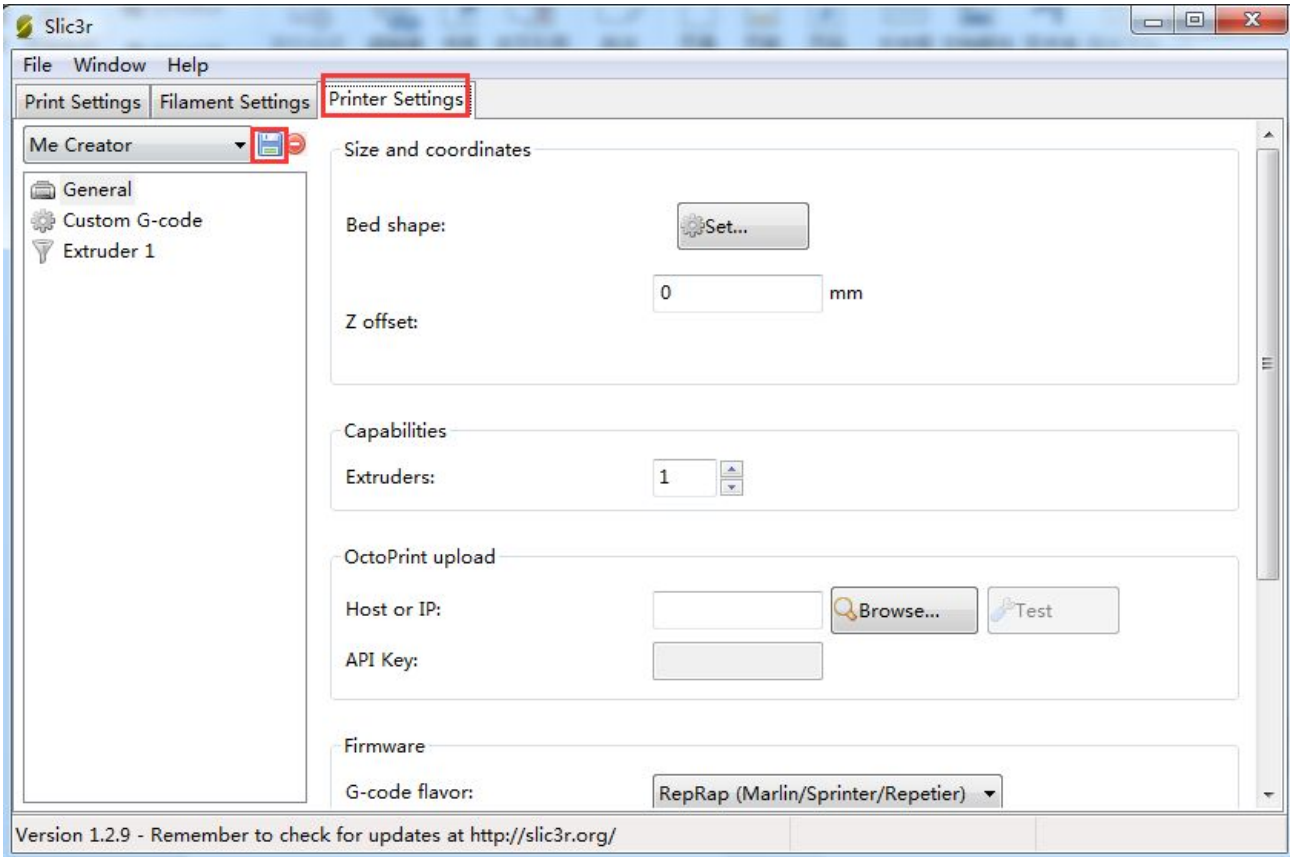
Click save in Printer Settings tab.



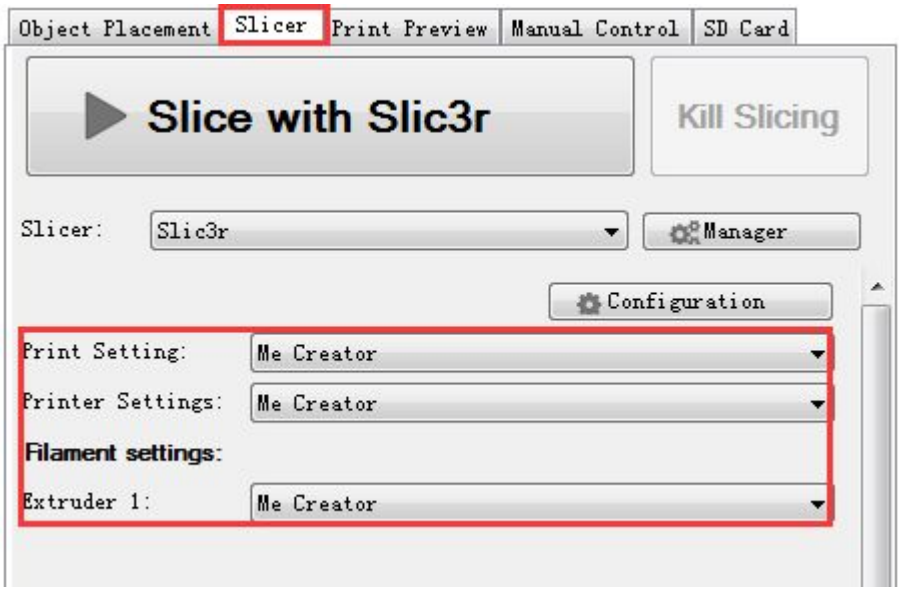
Click save in Filament Settings tab.



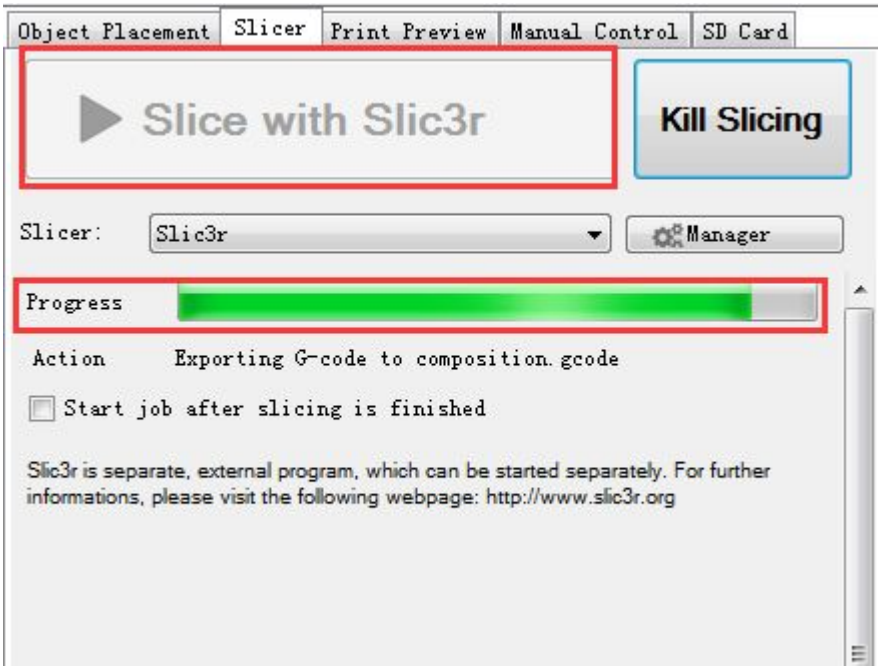
Click save in Printer Settings tab.



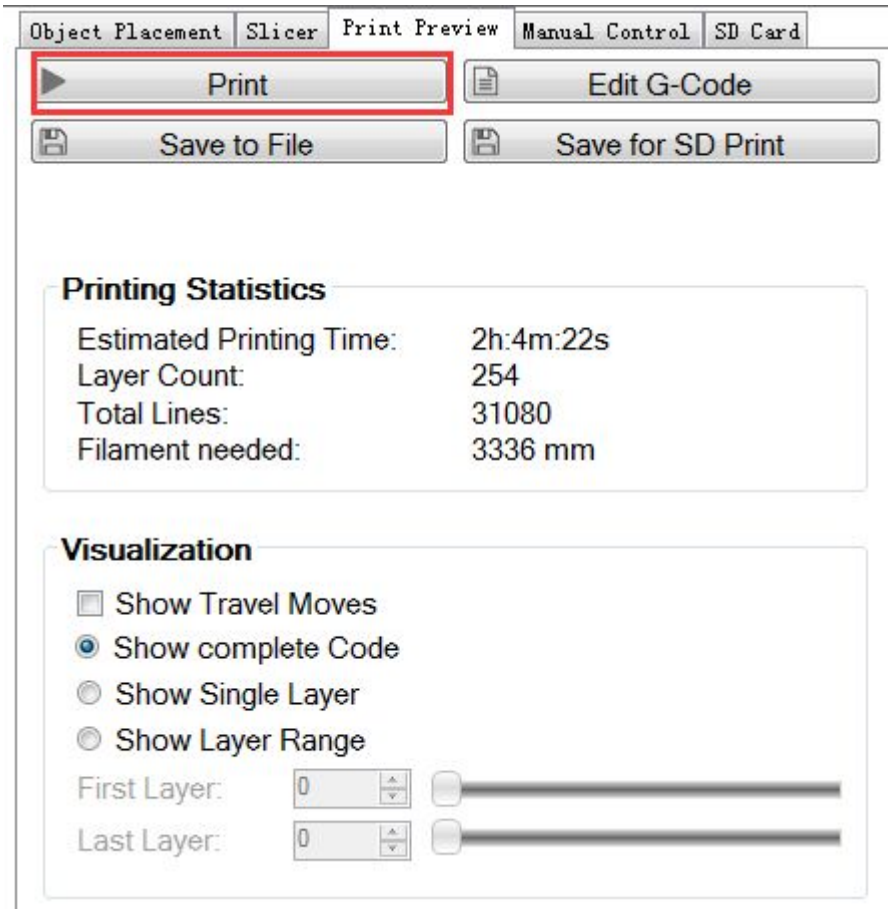
After saving, return back to Slicer tab. Choose Me Creator slicing setting in the pull-down menu of Print Settings/Printer Settings/Filament Settings.



Click Slice with Slic3r to start slicing.



Slicing is over, and click Print to begin printing.



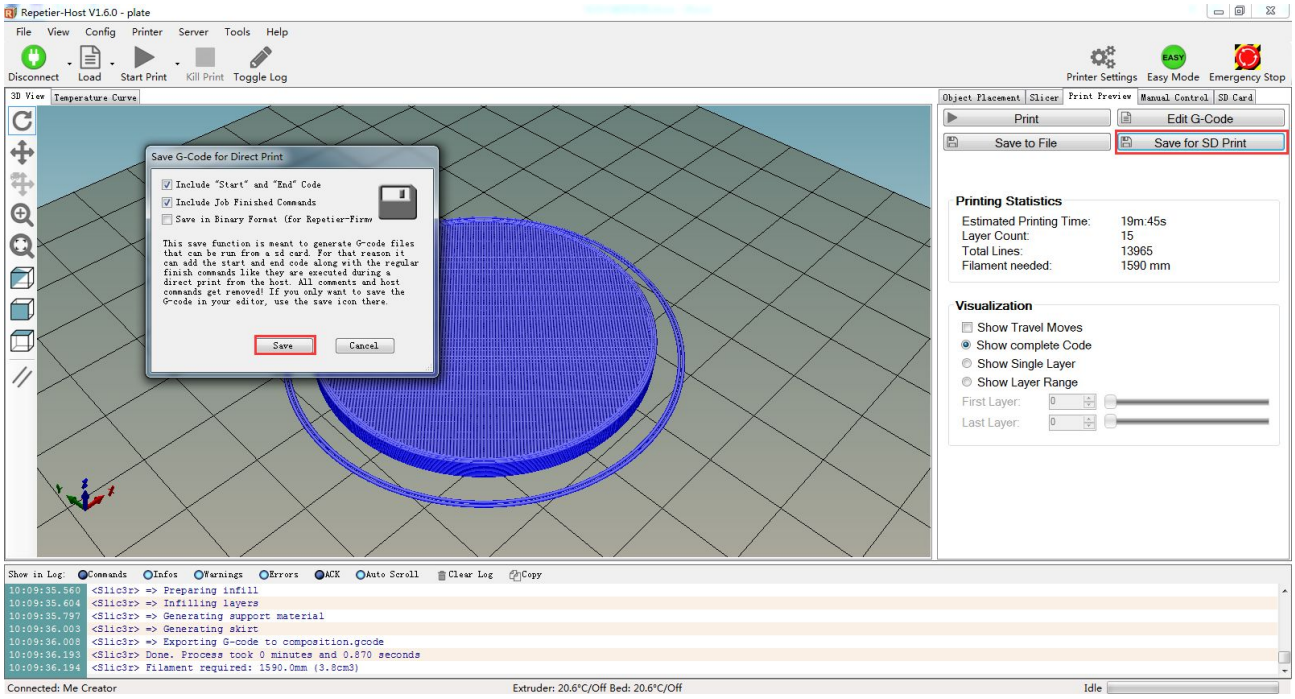
7.2 Stand-alone printing

If you want to print by using the SD card, you can save the .gcode file in SD card for printing.

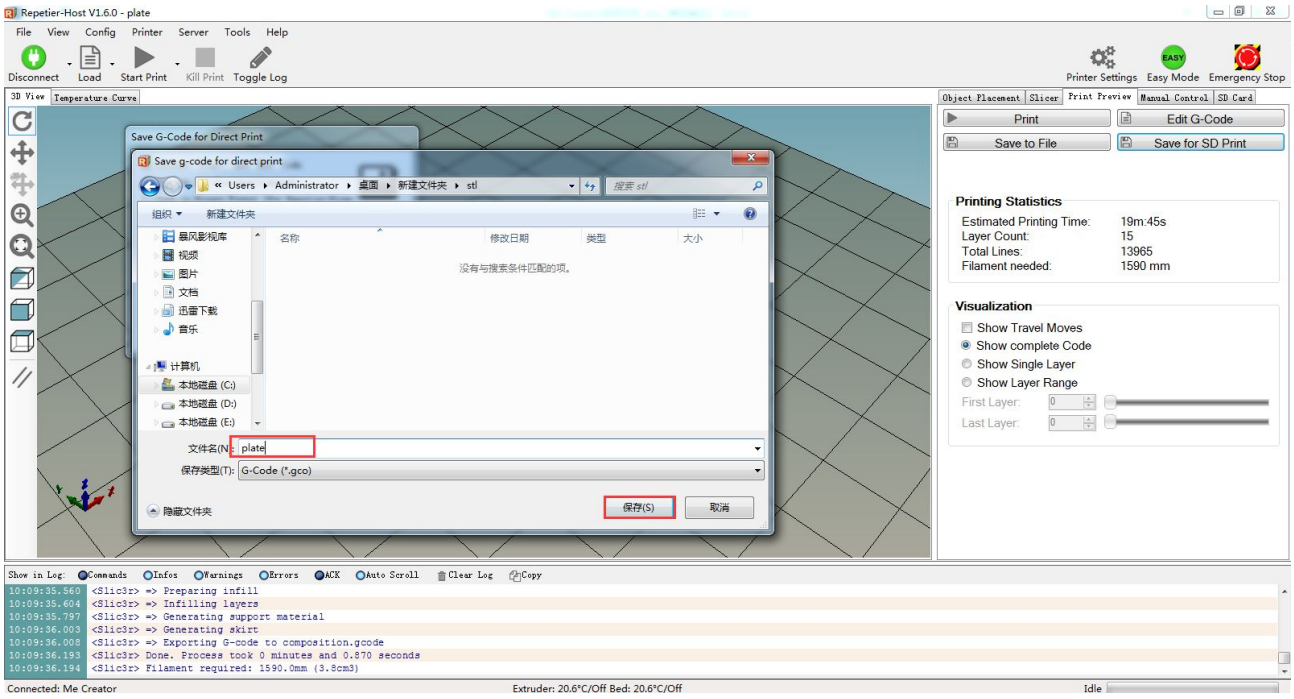
Note: The printer only recognizes .gcode file, and the file can not be placed in any folder!

Steps are as follows:

Click Save for SD Print, and choose the save button in the dialog box.



Choose a save path, and generate g.code file which can be used for SD card printing.



Insert the SD card into the printer, and choose the corresponding .gcode to print.

Press the knob on LCD, rotate the knob to enter the main menu and choose Print from SD option.

Choose corresponding .gcode file to begin printing.

Heating

When heating is completed, it begins printing automatically.

8.FAQ

8.1 How to burn firmware?

Me Creator uses Sanguinololu motherboard.

Download Me Creator firmware

http://www.geeetech.com/forum/download/file.php?id=1563

For burning process please refer to the following link

http://www.geeetech.com/forum/viewtopic.php?f=20&t=16433

8.2 The hotbed or extruder can not be heated.

http://www.geeetech.com/forum/viewtopic.php?f=13&t=17117

8.3 Modifying motor direction

http://www.geeetech.com/forum/viewtopic.php?f=13&t=17037