ME CREATOR 2

Desktop 3D Printer ——USER MANUAL——



(Version 2 Sep, 28, 2016)

TERMS

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Content

SAFETY INSTRUCTION

Do read all the instructions and cautionary markings in this manual before operating your Me Creator.

Me Creator2 printers contain heated moving parts. Never reach inside the printer while it is in operation or before it has cooled down.

Never leave your Me Creator2 printer unattended while powered on or printing.

Disconnect your Me Creator2 printer from the power supply and computer when not in use.

MDo not print using materials that have not been approved by GEEETECH for use with the MeCreator2.

Only operate your Me Creator 2printer in a well-ventilated space away from moisture and heat sources with a working smoke/fire alarm.



ABOUT MECREATOR2

MeCreator2 makes solid, three-dimensional objects out of melted Filament such as PLA or ABS. First, use software to translate 3D design files into instructions for the MeCreator2. Then transfer those instructions to the MeCreator2 via USB drive, USB cable. The MeCreator2 will melt filament such as PLA or ABS and squeeze it out onto the build plate in thin lines to build your object layer by layer. This method of 3D printing is called fused deposition modeling (FDM).

McCreator 2 is our new desktop 3D printer with half-opened and box-type design and 160x160x160mm building volume. It is optimized and improved based on the previous McCreator, bringing McCreator 2 with more exciting features.

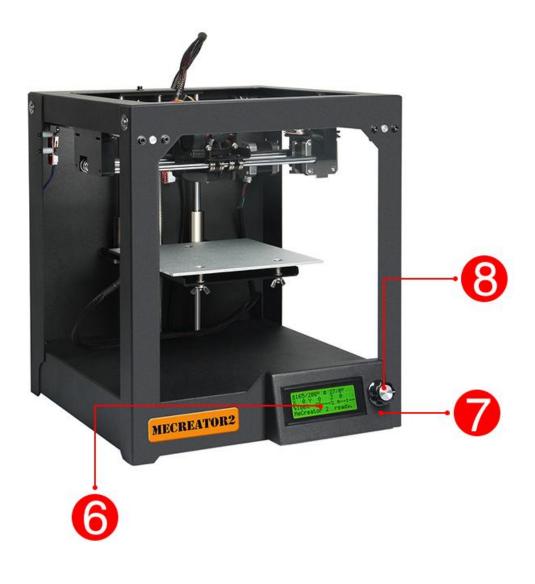
Like McCreator, McCreator 2 will be delivered after assembly as well, which saves you from the trouble of assembling. Get a McCreator 2 now, and welcome to the wonderful world of 3D printing!





1 Extruder 2 Y Axis Motor 3 X Axis Motor 4 building platform 5 heat bed





6. LCD 2004 screen

7. Reset button

8. Knob





9. USB port

10.power input port

11.power switch



PREPARING WORK

1. Opening

Step1. Open the box, taking out the foam box containing your MeCreator 2.





Step 2 Remove the Me Creator 2 from foam box and set it down on a stable surface.

Step3 Remove the zip tie that prevent the extruder from moving during shipping.



Note:

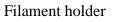
1. Do not move the building platform up and down with force or it will not be leveled. If you want to raise it, please use manual control on Repetier Host to move the Z axis.

2. You will see a printed object on the printing platform, which indicates your Mecreator2 has already get pass the 24 hours aging test, you can feel free to use.

2. Checking accessories



0



Filament spool



Tape









Power cord

USB A-B cable

Starter filament

3. Assemble the filament holder

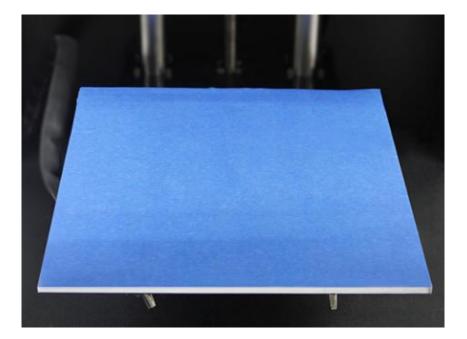
Assemble the filament holder together with the M3 bolt and nut.





4. Paste the tape

Peel off the back of the tape and paste it on the building platform smoothly. Make sure the platform is completely covered.



1. Check Power Supply

The power supply unit and control board of Me Creator 2 are installed in the bottom of the printer, saving space, as well as lowering the gravity center of the printer to provide stable support for printing. The printer uses DC24V, 15A power supply.

2. Software Resources

2.1 Repetier-Host

The Repetier-Host is a simple to use host software, which is be compatible with most firmware. You can add and position your STL files on the simulated print bed and slice them all together. For slicing you can use the built-in Slic3r slicer. Just call "Slice & Load" and the job gets delegated to the current slicer, showing its output in the log window.

Download the <u>Repetier host V 1.6.0 here</u>.



For detailed information of Repetier Host please refer to our wiki.

For detailed using methods of the slicing software, slic3r, which comes with Repetier Host, please also refer to our <u>wiki</u>.

2.2 Arduino IDE

The open-source Arduino Software (IDE) makes it easy to write code and upload it to the board. It runs on Windows, Mac OS X, and Linux. The environment is written in Java and based on Processing and other open-source software.

This software can be used with any Arduino board.

Download Arduino-1.0.1- here.

2.3 Firmware

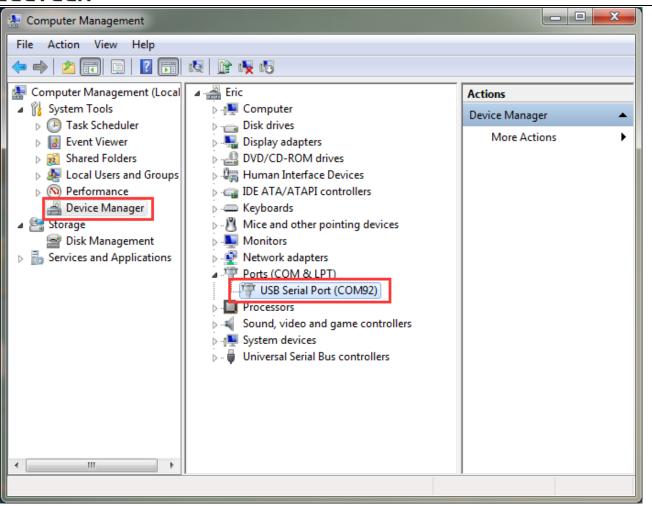
MeCreator 2 uses GT2560 RevB control board; you can download the corresponding firmware <u>here</u>. To know how to upload the firmware, please refer to FAQ.

3 USB Driver Installation

3.1 USB Driver Installation for Win7 OS

Power the MeCreator 2 up and connect it to computer with the USB cable, the driver will be installed automatically. After installation, please enter Device manager and find the USB Serial Port which is the communication port for the printer and computer.





If the driver can not be automatically installed, please download the USB driver here and manually install it.

3.2 USB Driver Installation for Mac OS

For installing the driver and uploading the firmware in Mac OS, please refer to FAQ.

4. Set up Repetier Host

The next step should be, to configure your printer so you can connect your computer with the host. Open Repetier Host.



CCICCA	
File View Config Printer Tools Help	
Connect Load Toggle Log Show Filament Hide Travel	Printer Settings Easy Mode Emergency Stop
	Object Placement Slicer Print Preview Manual Control SD Card
3D View Temperature Curve C <th>Object Placement Slicer Print Preview Manual Control SD Card Image: Disconnected G-Code: Send X Y Z Extruder 1 Image: Disconnected Image: Disconnected G-Code: Send X Y Z Extruder 1 Image: Disconnected Image: Disconnected Image: Disconnected Image: Disconne</th>	Object Placement Slicer Print Preview Manual Control SD Card Image: Disconnected G-Code: Send X Y Z Extruder 1 Image: Disconnected Image: Disconnected G-Code: Send X Y Z Extruder 1 Image: Disconnected Image: Disconnected Image: Disconnected Image: Disconne
	Debug Options
Show in Log: Commands OInfos OWarnings OErrors OACK OAuto 14:54:31.783 OpenGL extensions:GL_EXT_blend_minmax GL_EXT_blend 14:54:31.785 OpenGL renderer:Intel(R) HD Graphics 14:54:31.785 Using fast VBOs for rendering is possible 14:54:31.788 分析完成。	Scroll Clear Log Copy
	无任务 :::

When you start Repetier Host for the first time, you need to set up parameters for MeCreator 2. Click the Printer Settings on the top right corner, you will be presented with the following window.



Printer Settings	502mol			
Printer: default	-			
Connection Printer Ex	truder Printer Shape Scripts Advanced			
Connector: Serial	Connection • Help			
Port: Baud Rate: Transfer Protocol:	250000 V Autodetect V			
	Autodetect			
Reset on Emergency	Send emergency command and reconnect -			
Receive Cache Size:	eceive Cache Size: 127			
Communication Timeout:) [s]				
Use Fing-Pong Communication (Send only after ok) The printer settings always correspond to the selected printer at the top. They are stored with every OK or apply. To create a new printer, just enter a new printer name and press apply. The new printer starts with the last settings selected.				
	OK Apply Cancel			

4.1 Create New Printer

At the top you see a drop down box, with the currently selected printer. At the start you have only the default printer. To create a new printer you only need to change the printer name and press "Apply". The new printer will start with the same settings as the last selected printer.



rinter Settin	gs			0		9.0.4
?rinter:	Me creat	or 2				i
Connection	Printer H	xtruder	Printer Shape	Scripts	Advanced	
Connector:	Serial	. Connect	ion	•		Help
Port:		COM1	•			
Baud Rate	.:	250000	•			
Transfer	Protocol:	Autode	tect 🔻			
Reset on	Emergency	Send e	mergency comman	d and rec	onnect	•
Receive C	ache Size:	127				
Communica	tion Timeo	ut:)		[s]		
🔲 Vse Pi	.ng-Pong Co	mmunicat	ion (Send only	after ok)		
The printer settings always correspond to the selected printer at the top. They are stored with every OK or apply. To create a new printer, just enter a new printer name and press apply. The new printer starts with the last settings selected.						
				01	Apply	Cancel

There are six tags in Printer settings in total. Detailed configurations of the 4 relevant tags are as follow.

4.2 Connection

In this first tab, you set how to connect with your printer. In "Port" you select the port, where your printer is connected. At the opening of the window, all available ports were scanned and added to the list. If you connect your printer when this menu is already open, click "Refresh Ports" to detect the new port. Select the right one. Then select the baud rate entered into the firmware

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.

Pr	inter Settings	
P	rinter: Me creato	r 2 🔹 💼
G	onnection Printer Ex	truder Printer Shape Scripts Advanced
	Connector: Serial	Connection - Help
	Port:	COM92 -
	Baud Rate:	250000 -
	Transfer Protocol:	Autodetect 👻
	Reset on Emergency	Send emergency command and reconnect -
	Receive Cache Size:	127
	Communication Timeou	t:) [s]
	📃 Use Ping-Pong Com	munication (Send only after ok)
	are stored with ever	s always correspond to the selected printer at the top. They y OK or apply. To create a new printer, just enter a new ess apply. The new printer starts with the last settings
		OK Apply Cancel

Note: If the operating system is Mac OS, please set the baud rate of the firmware and Repetier Host as 115200.

Open the firmware in Arduino, and modify the baud rate to 115200 in *Configuration.h.* Shown as following picture.

After modification, re-upload the firmware:





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

About how to upload the firmware, please refer to FAQ.

Note: After re-uploading the firmware, you may need readjust the motor direction of the printer. For detailed methods please refer to following <u>motor testing part</u>.



4.3 Printer

The second tab defines important behavior you want. The Travel feed rate and Z-axis feed rate are used, when you move the extruder with the manual controls. The temperatures are set in the manual controls as start values. You can change them there any time.

Set the parameters as shown in the picture

Travel Feed Rate: 3000 mm/min

Z-axis Feed	Rate:	100mm/min	

rinter:	Me cre	ator 2					▼
Connection	Printer	Extruder	Prin	ter Shape	Scripts	Advanced	
Travel Feed Rate: 3000						[mm/min]	
Z-Axis Fe	ed Rate:			100		[mm/min]	
Manual Extrusion Speed:			2		20	[mm/s]	
Manual Retraction Speed:		30		[mm/s]			
Default E	xtruder T	emperature	:	200		°c	
Default Heated Bed Temperature:		55		°c			
	ry 3 seco						
Park Posi	tion: X:	0	Y	: 0	Z mi	n: 0	[mm]
📝 Send E	TA to prim	ter displa	y		🔲 Go	to Park Po	sition after Job/Kill
📝 Disable Extruder after Job/Kill			/Kill		📝 Di:	sable Heate	d Bed after Job/Kill
- DISGDI	📝 Disable Motors after Job/Kill				📝 Pr:	inter has S	D card
_	e Motors a	arter Job/1					
_				[%]			
₩ Disable	np. Printi		f <u>or</u> X		🔲 Y-Ахіз	s 🔲 Z-A	xis 🔲 Flip X and Y

We suggest you to cancel the option of Go to Park Position after Job/Kill, or it may cause that the print head impacts the printed model when it moves to starting position after finishing printing.



4.4 Extruder

In the "Extruder" tab you can define the numbers of extruder, the max temperatures, that are shown in the manual control. The max volume per second defines the maximum amount of filament in mm³, the extruder can melt per second.

Number of the extruder: 1

Number of the extruder: 0.4mm

inter Settings	5	New York		Reading London		
Printer: Me creator 2 🗸						
onnection P	rinter Extruder P	rinter Shape Scripts Adva	nced			
Number of H	Extruder:	1				
Max. Extru	der Temperature:	280				
Max. Bed Temperature: 120						
Max. Volume	e per second	12 [mm³/s]				
📃 Printer	has a Mixing Extru	der (one nozzle for all colo	ors)			
Extruder 1— Name: Diameter:	0. 4	[mm] Temperature Offset:	0	[° C]		
Color:						
Offset X:	0	Offset Y:	0	[mm]		
		ОК	Apply	Cancel		



4.5 Printer shape

The "Printer Shape" tab defines your printer shape, or to be more exact the shape of your build area. The host will use this to limit your moves and to check, if your models fit onto the print bed. You can also define the position of the x and y end stop.

Recommended settings:

Printer type: Classical printer

Home X: Max	Home Y: Max	Home Z: Min	
X Min : 0	X Max : 160	Bed Left: 0	
Y Min : 0	Y Max: 160	Bed Front: 0	
Printing Area : 160 x 160 x 160 (length/width/height)			



Printer Settings	Barret Ras	ner Hon Stat Same And Inc. 1				
Printer: Me creator 2 🔹 💼						
Connection Printer Extruder Printer Shape Scripts Advanced						
Printer Type: Classic Printer 🔹						
Home X: Max	➡ Home Y: Ma	x 🗣 Home Z: Min 👻				
X Min O	X Max 160	Bed Left: 0				
Y Min O	Y Max 160	Bed Front: O				
Print Area Width:	160	mm	=			
Print Area Depth:	160	mm				
Print Area Height:	160	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		E	Ŧ			
		OK Apply Cancel				

So far the setting of Me creator 2 is finished.



4.6 Connect the Printer

After setting, click the connect button on the top left corner of main interface. When the button turns green, the connection is successful.

Repetier-Host V1.6.0	
File View Config Printer Tools Help	ilament Show Travel Printer Settings Easy Mode Emergency Stop
3D View Temperature Curve	Object Placement Slicer Print Preview Manual Control SD Card Idle G-Code: Send X 0.00 Y 0.00 Z Y
Show in Log: Commands OInfos OWarnings OErrors 16:17:15.332 End file list 16:17:15.351 echo:Active Extruder: 0	ACK Auto Scroll 💼 Clear Log 🖓 Copy
Connected: Me creator 2 Extruder: 23.6°C/Off Be	ed: 24.0°C/Off Idle

Watch the video here.



5. Function Testing

The firmware of Me Creator 2 is already uploaded based on Windows 7 operating system, and we have done debugging to make sure that every part of it can work normally. However, there may be unpredictable factors during transportation . Please do the following simple test before using it.

5.1 Repetier-Host Test

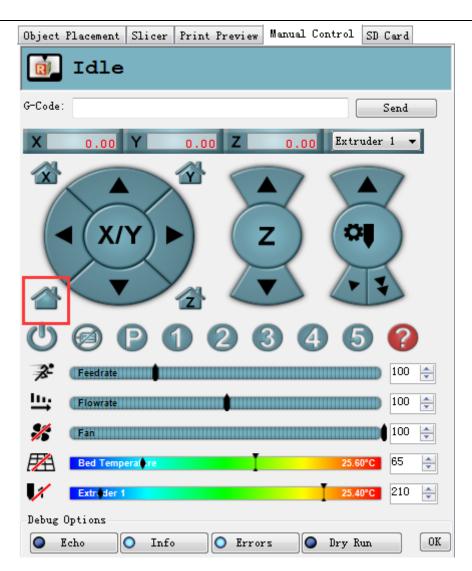
5.1.1 Motor Test

Before the test, manually set the motors of X / Y / Z axis at the intermediate position of each axis to avoid accidental collision occurring during the test. There is emergency stop button on the top right corner, or you can cut off the power directly if anything went wrong. Be prepared for emergency stop.

Open Repetier host and connect the printer. Turn on the power supply. Connect the printer.

Click Home button *(i)*, then the three axes will move towards the endstop in turn . After they touch the endstop they will move back for a short distance and then stop the movement.

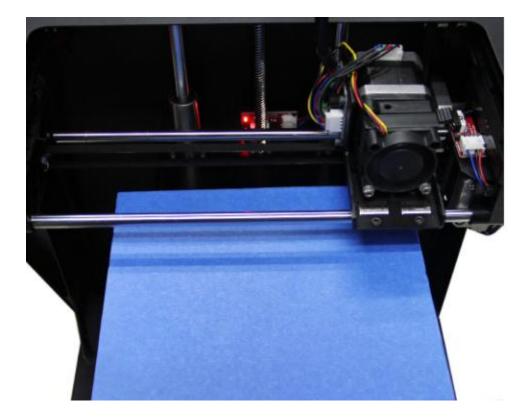




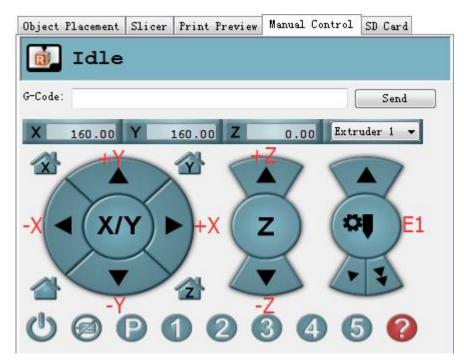
Home position is in the right back corner of the printing platform.

Check the video <u>here</u>.





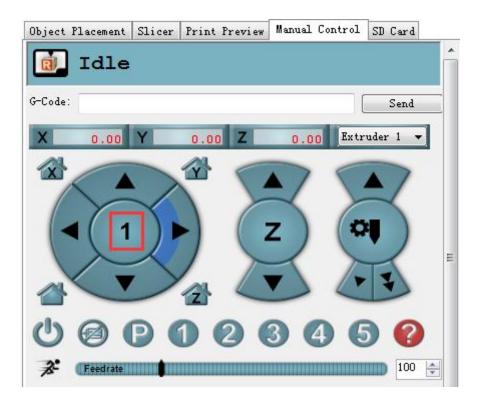
Note: the origin point is the left front corner of the platform when printing. So when the printer is at home position, the coordinates of X/Y axis are: X=160mm, Y=160mm, Z=0mm. As a result:





If the moving direction is reverse, you can alter the direction in the firmware. Please refer to FAQ.

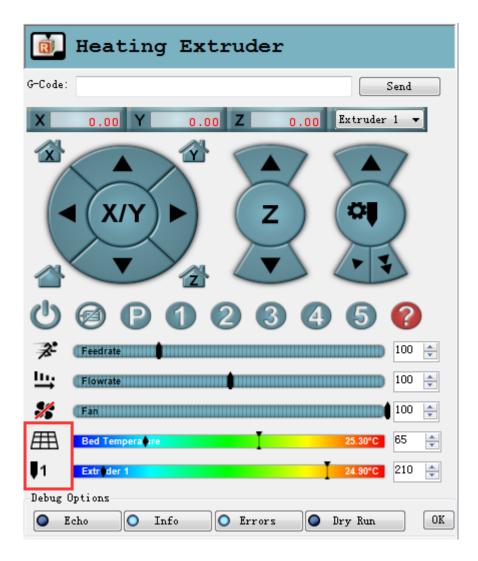
Tips: In manual control, the high-light part of the panel stands for the current selected direction, and it moves 1mm every click. You can also choose to move 10mm or 50mm every click, but here we choose 1mm in order to avoid possible incorrect operation.



5.1.2 Heating Test

Click the heating button of the hot bed and the extruder . When the slash disappeared as shown below, it indicates the heating is ongoing and you can see the value rise up.





Meanwhile you can see the temperature at the bottom status bar of Repetier Host.

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° C. Therefore, please heat the extruder above 200° C before testing the extruder. Otherwise motor will not have any response.

Watch the video here.

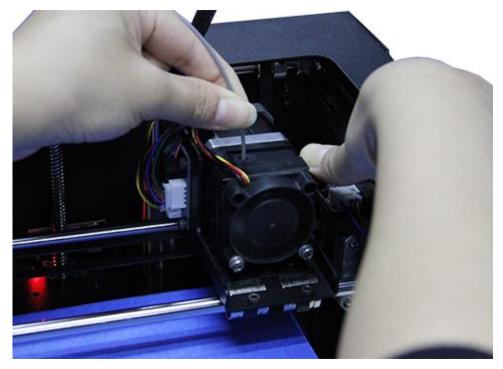
- 1. Heat up the extruder.
- 2. While wait for the extruder to heat, cut the end of your filament to create a clean edge.
- 3. When the extruder is fully heated, grasp the top of the extruder assembly and push the free end of

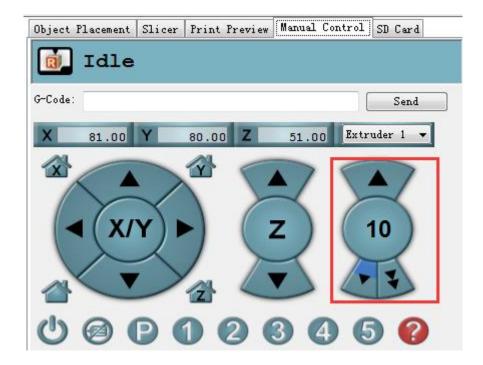


filament into the loading tube. Keep pushing on the filament and click the loading filament arrow on manual control until you feel the extruder pulling it in.

4. Wait until you begin to see plastic emerging from the extruder nozzle.then you can stop.

5. Wait a moment for the extruded plastic to cool, and then pull it away from the extruder. Do not touch the nozzle; it may still be hot.







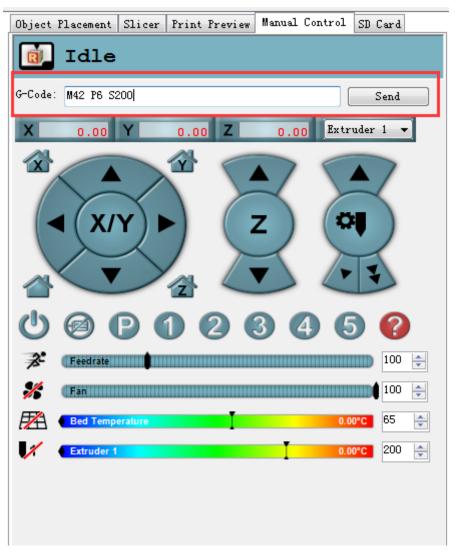
If the extruder cannot work normally or the extrusion is not fluent, please refer to FAQ.

5.1.4 LED Light Test

There is an LED strip in the MeCreator2; you can control the light by sending corresponding command.

Turn on: M42 P6 S255 (any number between 1-255, the greater the number is, the lighter it will be)

Turn off: M42 P6 S0





5.2 LCD Controller Test

5.2.1 LCD Menu Introduction

Functions of LCD rotary knob:

- 1. Press the knob: confirm or enter sub-menu
- 2. Rotate the knob: roll to choose options or change parameters

LCD homepage:

- 1. Extruder temperature: current temperature/target temperature
- 2. Hotbed temperature: current temperature/target temperature
- 3. Current coordinates of X/Y/Z
- 4. Feed rate: current printing rate
- 5. Current rate of printing process

Note: Rotate the knob during printing will change the feedrate in real time.



Press the knob to enter the next level menu:

- 1. Prepare: Preparing work before printing
- 2. Control: Setting of temperature and motion parameters of the printer
- 3. Status display of SD card





Main functions of Prepare menu:

- 1. Disable steppers: unlock the motor so that you can move them freely.
- 2. Auto home: automatically homing of each axis
- 3. Preheat PLA: manually preheat the hotbed and the extruder before printing PLA
- 4. Preheat ABS: manually preheat the hotbed and the extruder before printing ABS
- 5. Move axis: manually move each axis and each extruder







Main functions of Control menu:

1. Temperature: You can change the temperature of the hotbed and the extruder in real time in printing process. Meanwhile you can set the temperature of Preheat PLA and Preheat ABS.

2. Motion: setting of the motion parameters in the firmware. You need choose store memory to save after altering the setting.

3. Store memory: to save the altered parameters.





For other detailed functions please read the following introduction of function tests.

5.2.2 Use LCD for Motor Test

After understanding the functions of LCD, press the knob on LCD to enter the sub-menu, and choose **Prepare**:



Choose **Auto home** in menu to do home operation:





If you want to move the motor, choose **Move axis**:



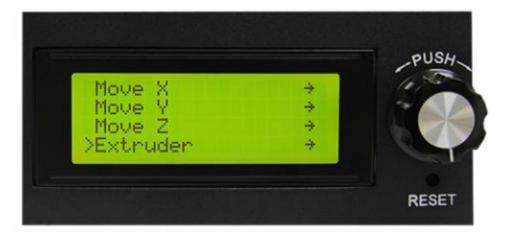
Choose Move 1mm:

Note: only 10mm and 1mm are available for the printer, and 0.1mm invalid. We recommend you to use move 1mm to test each axis.





Choose the axis you need to move: Move X/Y/Z/E. Rotating the knob can make each axis move.



After testing each axis, if you want to unlock the motors, choose **Prepare>Disable steppers**:

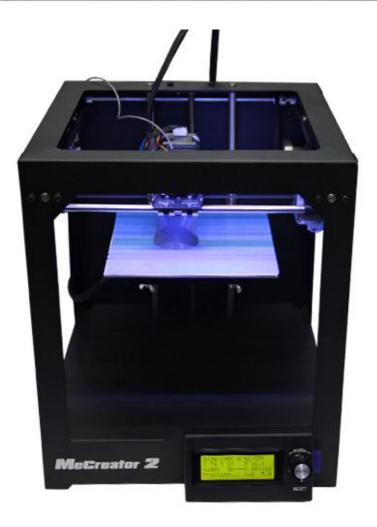




5.3.3 LED Light Test

You can control the LED light on the LCD controller. But you cannot control the light strength here.









6. Build platform leveling

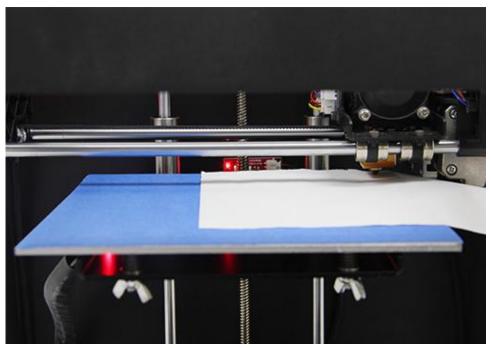
Before printing, please check whether the moving path of the extruder is parallel with the heatbed or not, which is called leveling. We need make sure the distances from the nozzle of the extruder to the four cornered of the heatbed are the same, and only in this way can we get good printing quality.

You can check the level of the heated platform by using a piece of paper to check the gap under the nozzle. It's best to do this with the platform heated to account for any change due to expansion.

Put the paper under the nozzle near one of the front screws and raise the bed .1mm at a time using the manual controls in the software interface while sliding the paper back and forth. Stop when you feel the nozzle start to grab a little bit.

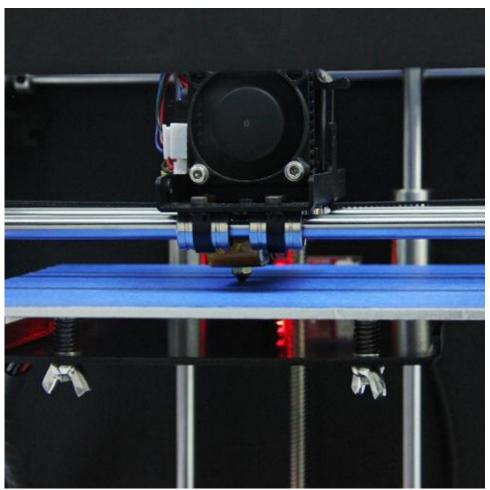
Watch the video here.





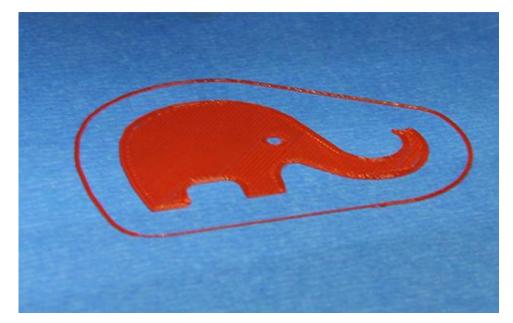
Move the nozzle to the other front screw and adjust the screw until you get the same amount of friction as you felt with the first one. Then adjust the back screw the same way.





Once you have adjusted each of the three screws, go back and check each one again, since adjusting one screw can affect another. You shouldn't need to go around the bed more than twice.

The proper printing effect of the first layer is like following picture:





7 Slic3r Setting

So far we can begin printing. But in order to achieve better effect, we need set the slicing parameters such as the diameter of the filament, speed, layer height. Open the slicing software, slic3r, which comes with Repetier host. Shown as below:

	Q ⁰	EASY 😥
		Easy Mode Emergency Stop
Object Placement	licer Print Preview Man	ual Control SD Card
	with Slic3r	Kill Slicing
Slicer: Slic3r		▼ (© [©] Manager
		🎂 Configuration 🕺 📩
Print Setting:	Me creator2	•
Printer Settings:	Me creator2	•
Filament settings:		
Extruder 1:	Me creator2	-

The following interface will appear:



💋 Slic3r				
File Window Help				
Print Settings Filament Settings	Printer Settings			
Me creator2	Layer height			
Infill	Layer height: First layer height:	0.2 0.35	mm mm or %	
 Support material Speed Multiple Extruders Advanced Output options Notes 	Vertical shells Perimeters: Spiral vase:	3	(minimum)	
	Horizontal shells Solid layers:	Top: 3	▲Bottom: 3	<u>^</u>
	Quality (slower slicing) Extra perimeters if needed: Avoid crossing perimeters: Detect thin walls: Detect bridging perimeters:	> > >		
	Advanced Seam position: External perimeters first:	Aligned 🔻		
Version 1.2.9 - Remember to check f	or updates at http://slic3r.org/			



7.1 Printing Setting

Set the layer height and height of the first layer in the option of Print settings. The layer height of Me creator 2 can be between 0.05-0.3mm. Considering of precision and speed, 0.2mm is the most appropriate. Set the first layer height as 0.35mm by default.

💋 Slic3r			
File Window Help			
Print Settings Filament Settings Pri	nter Settings		
Me creator2	Layer height		
Me creator2	Layer height: First layer height: Vertical shells Perimeters: Spiral vase: Horizontal shells Solid layers: Quality (slower slicing) Extra perimeters if needed: Avoid crossing perimeters: Detect thin walls: Detect bridging perimeters: Advanced	0.2 0.35	mm mm or %
	Seam position: External perimeters first:	Aligned v	
Version 1.2.9 - Remember to check for	updates at http://slic3r.org/		



You can set the printing speed here:

💋 Slic3r			
File Window Help			
Print Settings Filament Settings Pr	inter Settings		
Me creator2 🔹 🗎 🥥	Speed for print moves		
 Layers and perimeters Infill Skirt and brim Support material Speed Multiple Extruders Advanced Output options Notes 	Perimeters: Small perimeters: External perimeters: Infill: Solid infill: Top solid infill: Support material: Support material interface: Bridges:	45 15 45 50 45 45 45 100% 40	mm/s mm/s or % mm/s
	Gap fill: Speed for non-print moves	20	mm/s
	Travel: Modifiers First layer speed:	30	mm/s mm/s or %
	Acceleration control (advanced) Perimeters: Infill: Bridge:	0 0 0	mm/s ² mm/s ² mm/s ²
Version 1.2.9 - Remember to check for updates at http://slic3r.org/			

7.2 Filament Setting

Set the filament diameter and printing temperature in the tab of Filament settings. Here we use 1.75mm PLA. Usually the temperature of the print head is 195-210°C, the hot bed is 60-70°C. Here we set them as 200°C and 65°C. If you use ABS filament, the recommended temperature of the print head is 230-240°C (for the actual temperature please refer to the data from manufacture of filament) and 90-110°C for the hot bed.

You need to use glue on the hot bed when printing with ABS, which can effectively help the first layer stick to the platform and avoid warping.



💋 Slic3r		- SEL - SE	
File Window Help			
Print Settings Filament Settings	Printer Settings		
Me creator2	Filament		
Soling	Color:		
	Diameter:		nm
	Extrusion multiplier:	1	
	Temperature (°C)		
	Extruder:	First layer: 200	Other layers: 200 ✓ Other layers: 65 ✓
	Bed:	First layer: 65	Other layers: 65
	4		
Version 1.2.9 - Remember to check			

7.3 Printer Setting

Set the shape and size of the hot bed and the number of extruder in the option of *Printer settings> General*. Hot bed shape:



💋 Slic3r		
File Window Help		
Print Settings Filament Settings Pri	nter Settings	
Me creator2	Size and coordinates	
General Genera	Bed shape: 2	زیکSet
	Z offset:	0 mm
Bed Shape		
Shape		
Rectangular		
Settings		E
Size: x: 16	0 y: 160	3
Origin: x: 0	y: 0	est
		(0.0) OK Cancel
	Firmware	
	G-code flavor:	RepRap (Marlin/Sprinter/Repetier) 🔻
	Advanced	
	Use relative E distances:	
	Use firmware retraction:	
	Use volumetric E:	
Version 1.2.9 - Remember to check for	updates at http://slic3r.org/	



Number of extruder: 1

💋 Slic3r		
File Window Help		
Print Settings Filament Settings P	rinter Settings	
Me creator2 👻 💾 🥥	Size and coordinates	
General Custom G-code Extruder 1	Bed shape:	₿Set
	Z offset:	0 mm
	Capabilities	
	Extruders:	
	OctoPrint upload	
	Host or IP:	GBrowse
	API Key:	
	Firmware	
	G-code flavor:	RepRap (Marlin/Sprinter/Repetier) 🔹
	Advanced	
	Use relative E distances:	
	Use firmware retraction:	
	Use volumetric E:	-
Version 1.2.9 - Remember to check fo	r updates at http://slic3r.org/	



At the same time, set the diameter of the print head as 0.4mm. (input the actual diameter of your printer)

💋 Slic3r			
File Window Help			
Print Settings Filament Settings Pri	nter Settings		
Me creator2 🔹 🚽	Size		
General	Nozzle diameter:	0.4	mm
Fxtruder 1	Position (for multi-extruder printers)		
	Extruder offset:	x: 0 y: 0	mm
	Retraction		
	Length:	3	mm (zero to disable)
	Lift Z:	0	mm
	Speed:	40	mm/s
	Extra length on restart:	0	mm
	Minimum travel after retraction:	2	mm
	Retract on layer change:	V	
	Wipe while retracting:		
	Retraction when tool is disabled (adv	vanced settings for mu	lti-extruder setups)
	Length:	10	mm (zero to disable)
	Extra length on restart:	0	mm
Version 1.2.9 - Remember to check for	updates at http://slic3r.org/		

7.4 Other parameters

Except for above settings, parameters like speed are also important to the printing effect, which requires your long time using experience of 3D printing. Here we give you a reference setting, please download the attachment <u>config.ini.</u> You can import it into slic3r according to the following steps.

Note: the configuration uses 1.75mm PLA filament and 0.4mm nozzle diameter, and it slices with slic3r engine which is built-in in Repetier host 1.6.0.

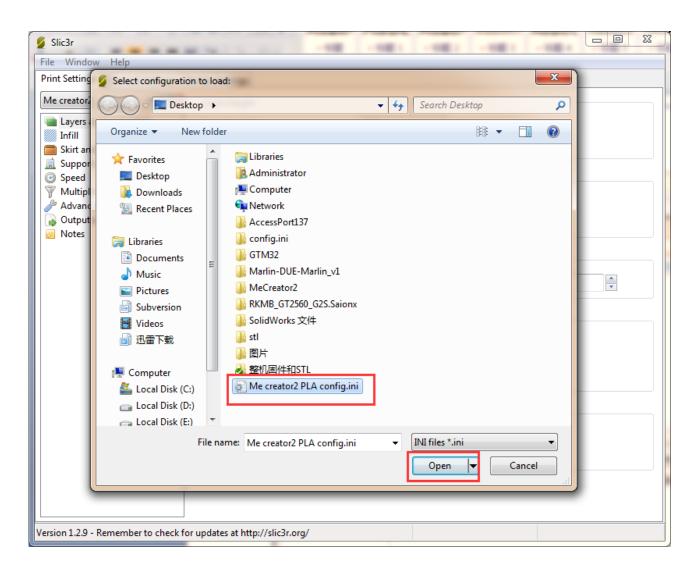
Open slic3r>File>Load Config:



💋 Slic3r		
File Window Help		
Load Config	Ctrl+L	
Export Config	Ctrl+E	
Load Config Bundle		
Export Config Bundle		0.2 mm
Quick Slice	Ctrl+U t:	0.35 mm or %
Quick Slice and Save As	Ctrl+Alt+U	
Repeat Last Quick Slice	Ctrl+Shift+U	
Slice to SVG	Ctrl+G	3 (minimum)
Repair STL file		
Preferences	Ctrl+,	
Quit		
	Solid layers:	Top: 3 Bottom: 3
	Quality (slower slicing) Extra perimeters if needed:	
	Avoid crossing perimeters:	
	Detect thin walls:	
	Detect bridging perimeters:	
	Advanced	
	Seam position:	Aligned 👻
	External perimeters first:	

Direct to the file Me creator2 PLA config.ini and open it.





After you imported the config.ini file . Click the save button to rename and save.

Click to save in the tab of **Print Settings:**

Note: all the three settings need to be saved in turn!



👂 Slic3r			
File Window Help			
Print Settings Filament Settings Printer Settings]
Me creator2 PLA config.	0.3	mm or % (leave 0 for auto)	
Infill Save preset	0.5	mm or % (leave 0 for default)	
Save print settings as:	0.3		
Support ma Speed Me creator2 PLA config	0.3	mm or % (leave 0 for default)	
Multiple Ext OK Cancel	-	mm or % (leave 0 for default)	
Advanced	0.6	mm or % (leave 0 for default)	
Output options	0.6	mm or % (leave 0 for default)	
Notes Top solid infill:	0.45	mm or % (leave 0 for default)	
Support material:	0.6	mm or % (leave 0 for default)	
Overlap Infill/perimeters overlap:	15%	mm or %	
Flow Bridge flow ratio:	1.1		
Other XY Size Compensation: Threads:	0	mm	
Resolution:	0	mm	
Version 1.2.9 - Remember to check for updates at http://slic3r.org/			

Click to save in the tab of **Filament Settings**:



💈 Slic3r				
File Window Help				
Print Settings Filament Settings Printe	er Settings			
Me creator2 PLA config. 🔻 📙 🔍 🕞	Filament			
Filament (Color:			
	X	1.75	mm	
Save preset	iplier:	1		
Save filament settings as:				
Me creator2 PLA config	• C)			
ОК Са	ancel	First layer: 200	Other layers: 200	
	Deu:	First layer: 65	Other layers: 65	×
•				•
/ersion 1.2.9 - Remember to check for updates at http://slic3r.org/				



Click to save in the tab of **Printer Settings:**

💈 Slic3r		
File Window Help		
Print Settings Filament Settings P	rinter Settings	
Me creator2 PLA config. 👻 🗒 🕼	Size and coordinates	
General Gustom G-code Extrude Save preset Save printer settings a Me creator2 PLA con OK	Bed shape:	0 mm
	Extruders:	1 ×
	Host or IP: API Key:	Browse
	Firmware G-code flavor:	RepRap (Marlin/Sprinter/Repetier) 💌
	Advanced	
	Use relative E distances:	
	Use firmware retraction:	
	Use volumetric E:	
Version 1.2.9 - Remember to check fo	r updates at http://slic3r.org/	

Watch the video <u>here.</u>



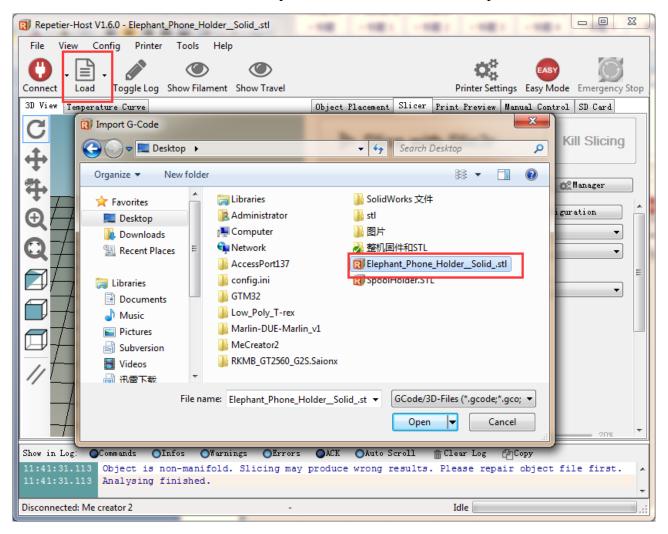
8 Start Printing

So far the preparation work is finished. Next step is to load model, slicing and printing.

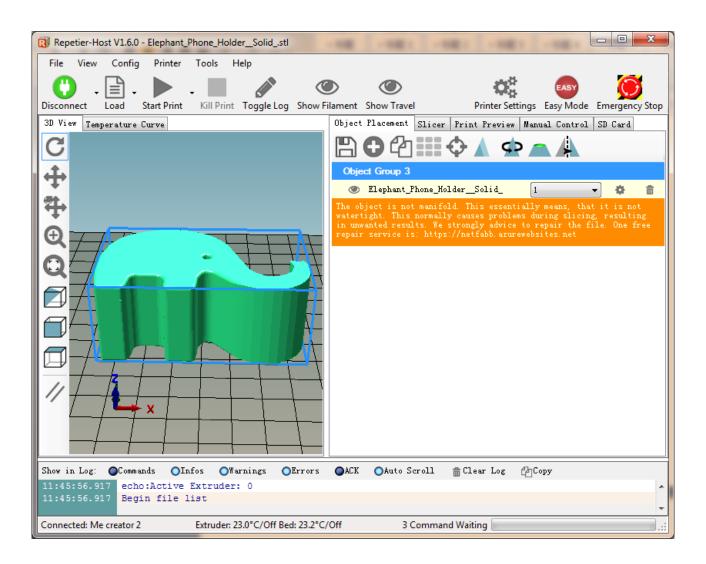
The file format of the model file for 3D printer is usually .stl. Me creator2 supports following file format: **STL**, **3ds**, **obj**, **mf**, **dae**, **G-code**. You can download models on the internet for printing. Of course you can also design your own creative models for printing. Here we print a small elephant phone holder. You can find the .stl file in the folder you download before: Elephant_Phone_Holder_Solid.stl

8.1 Load the Printing Model

Click Load button in the main interface of Repetier host, choose the file and open it.







8.2 Slicing

You can use the following button to enlarge, shrink or rotate it.



Printer Settings Easy Mode Emergency Stop
Object Placement Slicer Print Preview Manual Control SD Card
🖹 🔁 🖆 📰 💠 🔺 🤹 📥
Scale Object X
X: 1 Scale to Maximum
Y: 1
Z: 1 Reset
Object Group 1
👁 plate 🚺 💌 🏟 💼

After setting the size, choose the slicing parameters which were imported before in **slicer** window, and click slicing.



Repetier-Host V1.6.0 - Elephant_Phone_Holder_Solidstl File View Config Printer Tools Help	
Disconnect Load Start Print Kill Print Toggle Log Show	Filament Show Travel Printer Settings Easy Mode Emergency Stop
3D View Temperature Curve	Object Placement Slicer Print Preview Manual Control SD Card
C + * ⊕	Slice with Slic3r 2 Kill Slicing
4	Slicer: Slic3r 🗸 🐨 Slicar
()	Configuration
	Print Setting: Me creator2 PLA config 🔹
	Printer Settings: Me creator2 PLA config 🔹
	Filament settings:
	Extruder 1: Me creator2 PLA config -
	1
	🔲 Override Slic3r Settings
	Copy Print Settings to Override
	Enable Support
	✓ Enable Cooling
	Layer Height: 0.2 mm
	Thfill Bonsity 20%
Show in Log: OCommands OInfos OWarnings OErrors	●ACK ●Auto Scroll 🏦 Clear Log 🖉 Copy
16:03:33.603 Starting object analyser	A
16:03:33.608 Loop Edges:1 16:03:33.608 Highly Connected Edges:3	
	produce wrong results. Please repair object file first.
Connected: Me creator 2 Extruder: 22.7°C/Off Bec	d: 22.6°C/Off Idle

Now the .gcode file which can be recognized by the printer is generated.



Repetier-Host V1.6.0 - Elephant_Phone_Holder_Solid_			
File View Config Printer Tools Help Disconnect Load Start Print Kill Print Toggle Log Show File			
3D View Temperature Curve	Object Placement Slicer Print Preview Manual Control SD Card Print Edit G-Code		
 	Save to File Save for SD Print		
	Printing Statistics Estimated Printing Time: 1h:49m:59s Layer Count: 149 Total Lines: 71842 Filament needed: 10193 mm		
	Visualization Show Travel Moves Show complete Code Show Single Layer Show Layer Range First Layer: Last Layer:		
Show in Log: Commands Infos OWarnings Errors ACK Auto Scroll Clear Log Copy 11:50:31.857 <slic3r> Done. Process took 0 minutes and 4.114 seconds 11:50:31.858 <slic3r> Filament required: 10192.9mm (24.5cm3)</slic3r></slic3r>			
Connected: Me creator 2 Extruder: 22.2°C/Off Bed:	22.5°C/Off Idle		

click printing button to start printing.



Repetier-Host V1.6.0 - Elephant_Phone_Holder_Solid_			
File View Config Printer Tools Help Disconnect Load Start Print Kill Print Toggle Log Show Fi	ilament Show Travel Printer Settings Easy Mode Emergency Stop		
3D View Temperature Curve	Object Placement Slicer Print Preview Manual Control SD Card		
C	Print Edit G-Code		
	Save to File Save for SD Print		
	Printing Statistics		
	Estimated Printing Time: 1h:49m:59s Layer Count: 149 Total Lines: 71842 Filament needed: 10193 mm		
	Visualization		
	Show Travel Moves		
	Show complete Code		
	 Show Single Layer Show Layer Range 		
	First Layer:		
	Last Layer:		
Show in Log: Commands OInfos OWarnings OErrors OACK OAuto Scroll Clear Log Copy 11:50:31.857 <slic3r> Done. Process took 0 minutes and 4.114 seconds 11:50:31.858 <slic3r> Filament required: 10192.9mm (24.5cm3)</slic3r></slic3r>			
Connected: Me creator 2 Extruder: 22.2°C/Off Bed	· · · · · · · · · · · · · · · · · · ·		

8.3 Stand-alone Printing with SD card

If you want to use SD card to print, we can save g.code file into SD card for printing.

Note: the printer can only recognize .gcode file, and it can not be put in any folder!

8.3.1 Save

Click **Save to File**, and choose save button in the dialog. Choose the saving path, and produce g.code file which can be used for printing with SD card.



Repetier-Host V1	.6.0 - Elephant_Phone_Holder			
0.2	. 🕨 . 🔳		Ø\$	EASY
Disconnect Load Start Print Kill Print Toggle Log Show Filament Show Travel Printer Settings Easy Mode Emergency Stop				
3D View Temperature Curve Object Placement Slicer Print Preview Manual Control SD Card			,	
G		Pri		dit G-Code
1		B Save t	o File 🛛 🖪 Sav	e for SD Print
÷.	R Save G-Code	and the party of the local division of the l		x
╊╋		istrator 🕨 Desktop 🕨 🚽	Search Desktop	
		istrator ▶ Desktop ▶ •		
૨ +++	Organize 🔻 New fo	lder	Refresh "Desktop"	• 0
	Documents	Name ^	Date modified	Туре 🔺
	🁌 Music	AccessPort137	2016-02-20 16:09	File fol
	Pictures	config.ini	2016-03-18 9:19	File fol
	Subversion	GTM32	2016-03-14 14:17	File fol
	Videos	Low_Poly_T-rex	2016-03-25 11:39	File fol
	□ 迅雷下载 :	Marlin-DUE-Marlin_v1	2016-03-23 9:23	File fol
	🖳 Computer	MeCreator2	2016-03-23 15:09	File fol
	Local Disk (C:)	RKMB_GT2560_G2S.Saionx	2015-10-21 16:27	File fol
	🕞 Local Disk (D:)	▲ SolidWorks 文件	2016-03-24 13:24	File fol 👻
	1 1 1 1 1 1 1	▼		•
	File name: Ele	phant_Phone_HolderSolidgcode 2		
	Save as type: GC	ode (*.gcode)		
how in Log: OC 1:50:31.857 < 1:50:31.858 <) Hide Folders		3 Save C	ancel
onnected: Me creat	6	ruder: 22.2°C/Off Bed: 22.5°C/Off	Idle	

8.3.3 Printing

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

Press the knob on LCD, enter the main menu, and choose the **Print from SD**.

Info screen	÷
Prepare	÷
Control	÷
Print from SD	÷

Choose corresponding g.code file to begin printing.





Heating





It will automatically print after heating is finished.



9.FAQ

If you have any problem when you use the printer, you can visit our forum <u>http://www.geeetech.com/forum/</u>There are detailed solutions on the forum. FAQ are as follows:

9.1 How to upload the firmware?

9.1.1 upload the firmware in Win7 OS

To upload the firmware, we need following tools: 1.Arduino IDE

Arduino1.0.1 is recommended, and you can download it here:

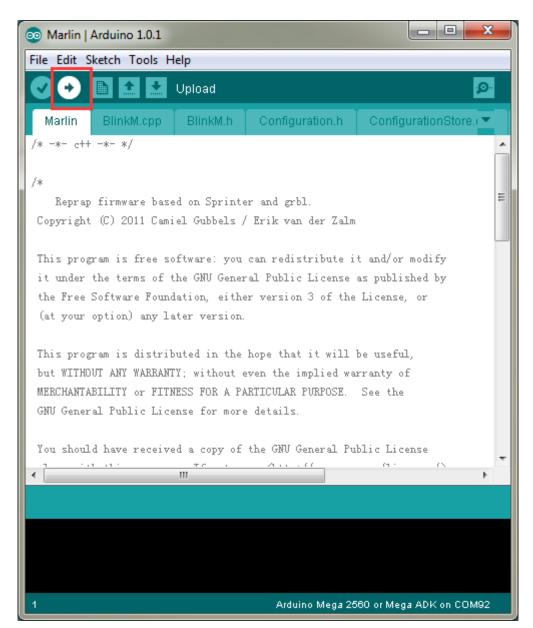
http://www.geeetech.com/wiki/images/a/a2/Arduino-1.0.1-windows.zip

2. the firmware for the printer

Me Creator uses GT2560 control board. Download the firmware of Me Creator2 here: http://www.geeetech.com/forum/viewtopic.php?f=20&t=17046

After Arduino and firmware are downloaded, you can upload the firmware. First please connect the printer and computer with USB cable, then open arduino1.0.1 software to upload the firmware. Choose corresponding control board and COM port, and click upload button to upload the firmware.





For detailed uploading process, please refer to:

http://www.geeetech.com/forum/viewtopic.php?f=13&t=17181

9.1.2 Upload the firmware in Mac OS

The way of installing driver and uploading firmware in Mac OS is similar with that in Win 7 OS. For detailed method please refer to this link:

http://www.geeetech.com/forum/viewtopic.php?f=21&p=27952#p27952



9.2 Change the motor direction

In the configuration.h tab of firmware, find the following codes. Change the true of corresponding axis into false or false into true, and save the firmware and upload it into the printer. (Because you don't know the firmware which has been uploaded by the control board is true or false, it may be necessary to upload both of the two parameters.)

#define INVERT_X_DIR true

#define INVERT_Y_DIR false

#define INVERT_Z_DIR true

#define INVERT_E0_DIR false



For detailed method, please refer to:

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



9.3 Motors can not work

When your are testing the motors, if the motor of an axis has no response or can not work normally (the extruder can work when it is above 170° C), you need check whether the motor, motor driven board or voltage of this axis can work normally or not. Meanwhile you need make sure whether the bearing is damaged or not, whether the smooth rod/screw rod is bent or not, whether the tension of belt is normal or not, whether each axis is installed correctly or not. For detailed solutions, please refer to:

http://www.geeetech.com/forum/viewtopic.php?f=17&t=17038

9.4 Extruder can not work/ extrusion not fluent

When you are testing the extruder, make sure the temperature is over 170°C. If you find that the extruder doesn't work or the extrusion is not fluent, or there is click noise, you need check the motor or clean the barrel and nozzle of the extruder. For detailed method please refer to : http://www.geeetech.com/forum/viewtopic.php?f=19&t=17097

9.5 Printing quality optimization

If there are problems such as stringing, warped edge, the first layer not sticking to the bed, and poor surface quality, you can refer to following link to do adjustment for parameters:

http://www.geeetech.com/forum/viewtopic.php?f=26&t=17183



Printing specifications:

Print technology: FDM

Build volume: 160x160x160mm

Printing precision: 0.05mm

Print Speed: 60-80mm/s

Positioning precision: X/Y: 0.05mm. Z: 0.02mm

Filament diameter: 1.75mm Nozzle diameter: 0.4mm

Filament type: ABS/PLA/flexible PLA/wood-polymer

Software:

Operating system: Windows/Mac/Linux

Control software: Repetier-Host, Printrun

Slicing software: Slic3r, Cura-engine

File format: .STL, 3ds, obj, amf, dae, G-code

Temperature:

Max heated bed temperature: About 110 $\,\,{}^\circ\!{}_{\rm C}$

Max extruder temperature: About 240 $^\circ C$

Electrical:

Power Input: 110V-220V 360W Power Output: DC24V/15A

Connectivity: USB, SD card (support stand-alone printing)

Mechanical:

Chasis: metal sheet



Build Platform: Aluminum alloy plate+ heat bed

XYZ Rods: Wear-resistant, stainless steel and lead screw (Z axis)

Stepper Motors: 1.8 [°]step angle with 1/16 micro-stepping

Physical Dimensions & Weight

Machine Dimension: 320x320x360 mm

Shipping box Dimension: 460x460x410mm

Machine Net weight: 9.05kg

Machine Shipping weight: 17.5kg



Contact us

	1. There are lots of documents and troubleshooting	
	for MeCreator 2 on our website. They are good	
	resources if you would like to quickly solve	
	problems by yourself.	
Technical support	2.If you still can not solve problems yourself even	
	with the help of above files, you can send e-mail to	
	technical@geeetech.com,we will reply to you within	
	24 hours.	
	For more products of Geeetech, please visit	
	www.geeetech.com or send e-mail to	
Sales	sales@geeetech.com	
	In order to improve our products to provide better	
	user experience, please send your comments and	
Feedback	suggestions to <u>Rita.xiang@geeetech.cn</u> . We will	
	appreciate to hear your valuable suggestions.	

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