Click the printer settings as follow picture shows.

Repetier-Host V0.95F		X
File View Config Temperature Printer Tools Help	ngs Emergenci	cy Stop
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138:10.057 OpenGL renderer:Intel(R) HD Graphics Family 138:10.058 Using fast VBDs for rendering is possible		
sound rate top for transmit a booter		

Then you'll see this new window, The parameters that be circled need to be changed. The port you need to choose your printer port, may you could refer to your driver installing.

Printer Settings				
Printer: default			•	â
Connection Printer Pri	nter Shape Advanced			
Connector: 串口连接	•			
Port:	COM7	Ref	resh Ports	
Baud Rate:	115200 🔹			
Transfer Protocol:	Autodetect 🔹			
Reset on Connect	Disabled			•
Reset on Emergency	Send emergency comma	nd and reconne	ct	•
Receive Cache Size:	127			
	From Arduino 1 on the receivir	ig cache was reduce	d from 127 to 63 by	/tes!
🔲 Use Ping-Pong Com	munication (Send only	after ok)		
They are stored with ever	always correspond to y OK or apply. To cre ss apply. The new pri	eate a new prin	- nter, just en	ter a new
	OK	Apply	Cancel	

Let set up the printer shape parameter as shown below. Please do not forget to save your operation.





Now we should start the Firmware EEPROM settings. Click the "config" option at the toolbar. You could see it in the drop-down list.

Repetier-Host	: V0.95F	_	Contraction of the	- Milerry				_ 0 _ x
<u>ሁ</u> .	Config Tomporature Brinter Toole Language Printer Settings Ctrl	I+P	۲	۲			\$\$°	Ó
Connect L	Firmware EEPROM Configuration All		Show Filament	Show Travel			Printer Settings	
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Please compare the parameters with below picture, it will ensure machine's steady running.(pay attention to the STEPS PER MM about z axis. It should be changed into 1600)

Marlin Firmware EEPROM Settings	Printer		a range				
Steps per mm: X:	100.00	Υ:	100.00	2 :	1600.00	E:	100.00
Maximum feedrates [mm/s]: X:	500.00	Υ:	500.00	Z:	2.00	E:	25.00
Maximum Acceleration [mm/s ² X:	800	Υ:	800	Z:	100	E:	2000
Acceleration:	1000.00						
Retract Acceleration:	1000.00						
PID settings: P:	22.20	Ι:	1.08	D:	114.00		
Homing Offset: X:	0.00	Υ:	0.00	Ζ:	0.00		
Advanced Variables:							
Min feedrate [mm/s]	0.00		Maxin	ւստ	X-Y jerk [m	m/s]	20.00
Min travel feedrate [mm/s]	0.00		Maxin	ռստ	Z jerk [mm/	s]	0.40
Minimum segment time [ms]	20000						
Reload Config Rest	ore factor	y se	ttings	Sa	ve to EEPROI	K	Cancel

At last, remember to click the "Save to EEPROM".

OK! Preparatory work has been completed. It's time to test the printer. You could find the "manual control" option at the right side of software interface. Test the "+Y""-Y""+X""-X""+Z""-Z" to make sure it can work well. Please tidy the wire up and be not keep out the limit switch. Click

the

in the bottom left. Then X,Y,Z will automatic zero resetting and knock into the



```
limit switch.
```

Pull the dexter scroll bar down, have a test with heating printbed and extruder. It can display the room temperature when we run the printer. If show as "0", you should pay attention to the sensor. May be there are some wrongs happen to it.

Katruder Heat Extruder	Printbed Heat Printbed
Extruder 1 V 200° C / 200 文	Temp. 200°C/ 55 🚖
Speed [mm/min] 100 🚊	Fan
Extrude [mm]	Fan Output 50
Retract [mm]	0
Debug Options	

	Printbe	d										
Ok, click the "		Heat Pr	intbed	1	", if you	touch th	ne heat	ing pri	ntbe	d and	d feel	the
rising of temp	perature	after a	little	while.	It shows	normal	work.	Next	we	can	click	the
Extruder												
Mea Hea	t Extrude	r		to heat	t the extru	der until	over 15	50 deg	ree c	entig	rade.	

Show as below picture, it time to test the extruder.()

Speed [mm/min]	100
Extrude [mm]	10 🚊 🗸
Retract [mm]	10 🚔 🔨

Click the "up and down arrow",

you could hear that rotation of the extruder. Wait for a while until the temperature reach to 200 and install the printing-supplies to have a test.

There is a Print figure internal structure, the blue one is printing-supplies line, it plug into the holes that up red arrow pointed. Then use the bearing to pressure on the gear. Then through the hole as down red arrow pointed.(please keep on pressing the M4x16). This operation should to be done at the 200 degree centigrade. It shows work well If you touch the printing-supplies and feel very soft when you plug into the printing-supplies. Else it was get stuck at the down red arrow pointed as below picture shows.



When these step done. Then click the up and down arrow again. The down arrow is "material extrusion". and up arrow is "retraction".

Now we need to adjust the balance of printer, you'd better to paste on the tape in advance. In order to avoid influence printing quality.

measure the height of four screws by eye, and keep them in level.
 let the z axis fall by software controlling as below picture shows.

	Turn	Motor	0f
Click the			

button when the nozzle and board at a distance of 1-2mm.

after that twist the motor of right side by hand and adjust the level of the horizontal axis. It will achieve a result that whatever the print head at right or left. The distance of print head and board keep the same. as below pictures show:







and the z axis will decline until touch the limit switch.



At the same time you should observe that if the nozzle touch the plate just right or not. Be not leave crack and press down the spring.

Please adjust the screw in picture above If not show as same as below picture. The aim to change the reset height of Z axis. Repeated to make it looks more good as below picture show.



3:debugging in the actual printing. found the leveling test at documentation(.gcode) and load it at repetier. Then choose the "G-Code Editor"



[,] now you can preview the trajectory of printer as below picture shows, you could adjust the view

angle by the left toolbar.





on the toolbar to start printing

First, heating the baseboard, when it meet our temperature requirement, the printer will back to initial point and then heating the extrusion head until it meet temperature requirement too. Ok. The machine start to printing:

If there are some problem as below situations:

1:in the wave shape

cause: the printer head is too high, the nozzle could not touch the plate after Z axis reset. You need to adjust the height of nozzle.



2:line width of the left and right are not consistent.

Cause: the plate is out of level, you need to adjust the screw of plate which one is at the direction of right arrow. for example, you could unscrew the screw to rose the right side of plate if appear below(small amplitude adjustment and half-turn is enough.)



Through several adjustments to achieve below effect.(the line is flattened) Debugging is done up to now.

