



Ruian Qidi Technology Co., Ltd.

3D Printer Start-up Guide

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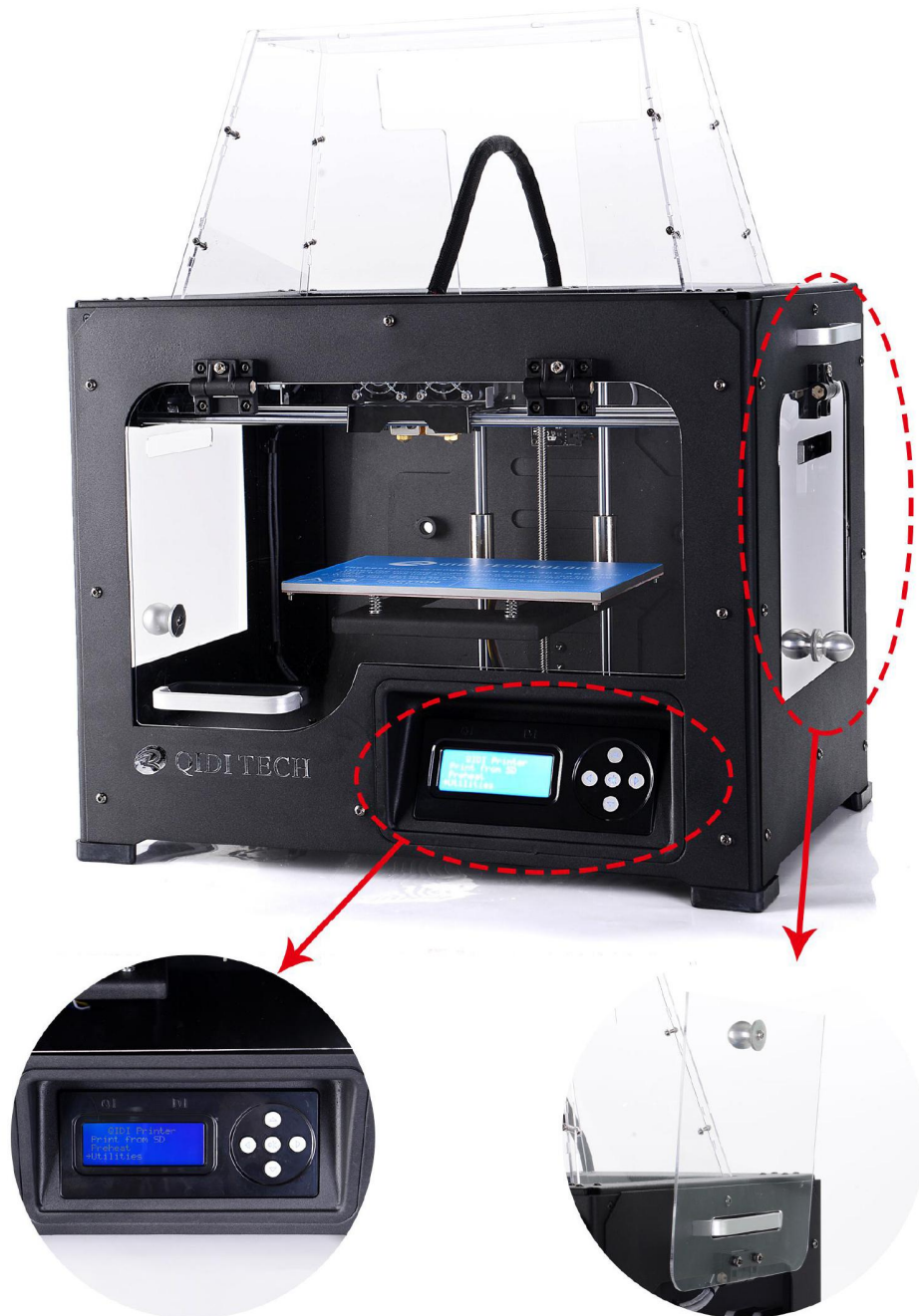
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This start-up guide is made by one of our Amazon customers Robert Gillen.
To show our thanks, we especially hereby state.

If you have any suggestions, please do not hesitate to send us an e-mail. Thank you!

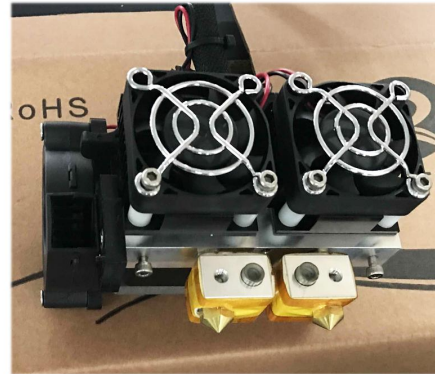
The Newest Appearance Upgrade



1. It's more convenient to observe the LCD screen.

2. The side door can be opened easily.

The turbofan has already installed
on the side of left extruder.



Each turbofan is test in advance.
Make sure the turbofan runs well
before delivery.

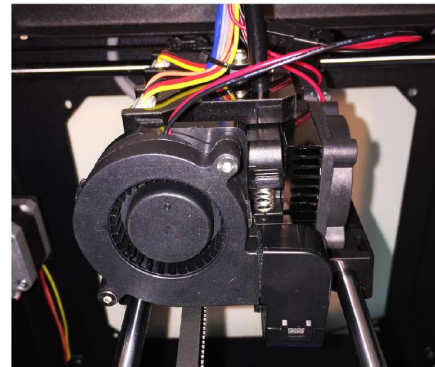


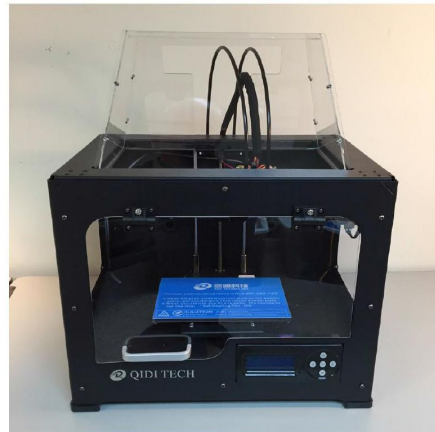
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1. WELCOME

A. QiDi Technology 3D Printer Features

- QiDi Technology 3D Printer is the most precise and most dependable 3D printer.
- Full metal cover and frame provide a stable structure
- Fused Deposition Modeling (FDM) technology; CE, FC and ROHS certified
- Dual Extruder - Works with ABS, PLA, PVA and HIPS filaments
- 8 GB SD Card provided with start-up guide, videos and test files
- Aviation strength aluminum build platform guarantees a completely flat surface that will not warp during heating process
- Compatible with easy to use software for simple customization of 3D models.




1. WELCOME







B. Safety Precautions

STOP - READ FIRST

Please make sure to read this page carefully prior to setting up and operating your 3D printer.

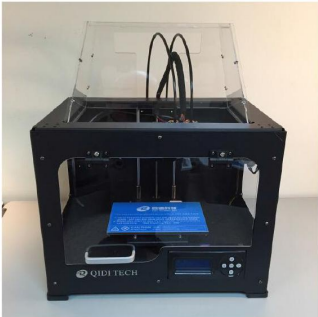
Throughout the manual, this symbol  indicates important SAFETY INFORMATION. Be sure to read these notes prior to taking further action.

Caution

-  The 3D printer is very sensitive to static electricity, so please make sure you contact a grounded object before operating the machine.
-  The 3D printer operates at very high temperatures; allow the nozzle, the extruded plastic and heating plate to cool before touching.
-  Some plastic filaments may give off a slight odor when heated. Because of this, the machine should always operate in a well-ventilated area.
-  Do not wear gloves when operating or repairing, as entanglement may occur and cause injury.
-  Do not leave the machine unattended when in operation.
-  Before repairing or making any alterations to the 3D printer, it is essential that the machine is turned off and the power cord is unplugged.

1. WELCOME

C Product Specifications

Product Model		Product Picture	
<div>QIDI TECHNOLOGY</div> <div>Dual Extruder 3D Printer</div>			
Product Specifications			
Print Technology	Fused Deposition Modeling (FDM)	Layer Thickness	0.1mm-0.5mm (Adjustable)
Extruder Quantity	Dual Extruder	Nozzle Temp.	0-230° C
Build Volume	230L X 150W X 150 H mm	Heating Plate Temp.	0-120° C
Printing Filament	ABS/PLA/PVA/HIPS	Supporting Software	ReplicatorG/MakerWare
Location Precision	Z axis:2.5 Microns, X Y axis:11 Microns	Connectivity	SD card or USB Cable
Layer Resolution	0.1 mm	Frame	Metal body with Acrylic
Nozzle Diameter	0.4 mm	XYZ Bearings	Wear-Resistant, Oil-Infused Bronze
Printing Speed	0-150 mm/s(Adjustable)	Stepper Motors	1.8° Step Angle with 1/16 Micro-Stepping
Nozzle Velocity	24cc/H	Printer Machine Size	465L X 320W X 375H mm
Input Voltage	110V/230V	Package Size	550L X 430W X 520H mm
Power	350W	Machine Weight	22KG
File Format	STL/X3G	Package Weight	25KG
Warranty	6 months	Env. Requirement	Temp -5-40°C, Humidity 20-70%

1. WELCOME

D. Customer Support

Thank you for purchasing our QiDi Technology 3D Printer.

Please find the user start-up guide on the SD card. The QiDi Technology 3D Printer is easy to use and set up.

Do not hesitate to contact us with questions about the use of your printer. We are happy to assist you.

Thank you and regards,

Qidi Technology Co., Ltd.

Contact:

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Whatsapp: 0086-13695815811

Skype: qidi3dsales003

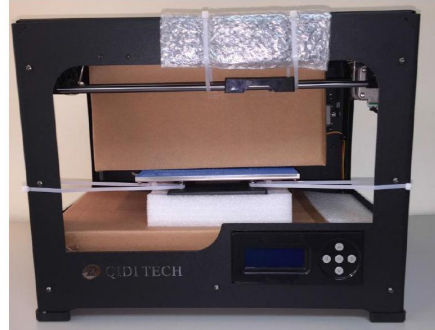
If you are experiencing any problems with the printer, please take photos in advance to share with the service and support team. Thank you!

2. UNPACKING THE BOX

A. What is in the box

The Printer

- The next sections of the guide will provide instructions for unpacking the QiDi Technology 3D printer.



The Acrylic Cover

- Remove the paper protective cover on the acrylic pieces before installation.
- Acrylic covers are provided for the front, sides and top of the QiDi Technology 3D printer.



The Filaments

Two different types of filaments are provided in the box for use with the QiDi Technology 3D printer.

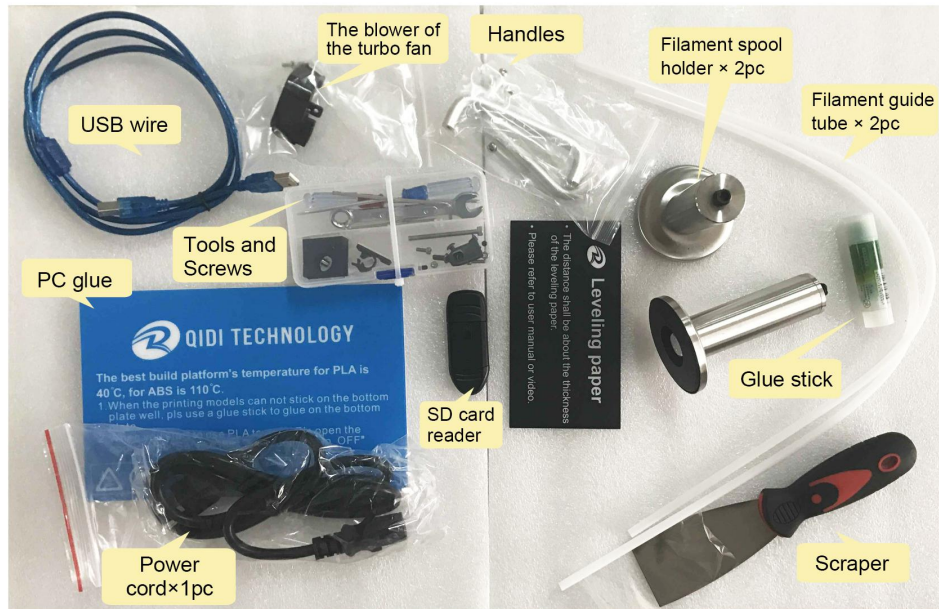
- ABS filament
- PLA filament



2. UNPACKING THE BOX

A. What is in the box

The Parts



Handles
Turbo fan
Filament guide tubes (2)
PC glue
SD card
USB wire
Power cord
SD card
USB wire
Power cord



Scraper
Glue stick
Filament spool holders (2)
Tools and extra screws (spare parts)
Limit switch wire (spare part)
Motor line (spare part)
Motor driver (spare part)
The blower of the turbo fan

2. UNPACKING THE BOX

B. Opening the box

STOP - READ FIRST

 Caution

-  Handle the pack and its contents with extra care; do not use any unnecessary force.
-  Do not remove the wrapping around the nozzle. It consists of a ceramic fiber fabric and heat resistant tape that helps to keep the nozzle at a constant temperature.

Step 1: Place the box on the floor with a clean flat surface.

Step 2: Take out the spare parts box and the filaments box and set aside.



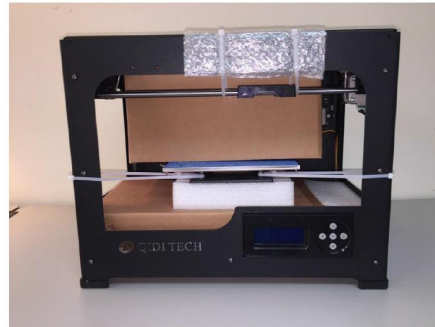
2. UNPACKING THE BOX

C. Remove the printer

Step 1: Remove the side packing material.

Step 2: Hold both sides of the printer and take it out carefully. Hold firmly by the frame only.

Step 3: Carefully remove bubble wrap and equipment ties.

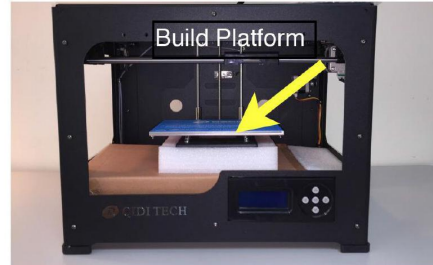


2. UNPACKING THE BOX

D. Remove boxes from the printer

Step 1: Carefully remove the spare parts box on the top of the printer with black cable attached to the extruder.

NOTE: Do not lift the box by the black cable - Doing so could cause damage to the extruder.



Step 2: Open spare parts box and remove extruder attached to the black cable.

Step 3: To remove the box with the acrylic cover(s) at the bottom of the printer you must first raise the build platform.

Turn the screw rod by hand which is at the back of the 3D printer, to raise the build platform




Then remove the box from below the platform at the bottom of the printer.

3. HARDWARE SET-UP

A. Power supply setting

STOP - READ FIRST

 **Caution**

-  For US customers: the power setting has been set for you to 115v.
-  For non-US customers: Determine the voltage in your location. Depending on the voltage in your area, you may have to switch the power setting from 115v to 230v before you plug in the 3D printer.
-  Failure to set the power supply setting correctly will damage the 3D printer electronics.

You can find the power converter and settings at the bottom of the 3D printer.

The power setting switch is located inside the bottom cover on the side of the power converter.



3. HARDWARE SET-UP

A. Power supply setting

Tools Needed: *Screwdriver*

If you need to check or reset the power supply setting, please follow the steps below:

Step 1: Carefully put the printer on its side so you can access the bottom of the printer.

NOTE: Make sure you carefully secure the extruder as you turn the printer over on its side.

Step 2: Locate the power converter (silver box).

On the side of the power converter, locate the red switch (access through the bottom cover).

Step 3: Using a screw driver, supplied in the tool kit, push the switch into the correct voltage position (230v or 115v).



3. HARDWARE SET-UP

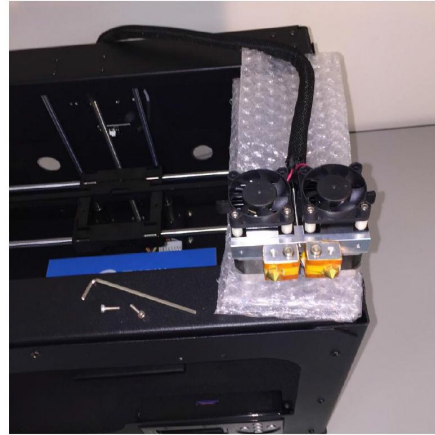
B. Installing the extruder

Tools Needed: Hex Wrench

Step 1: Open the protective packaging around the extruder and unscrew the two silver hex screws on the underside of the extruder.

⚠ Caution:

⚠ Do not remove the yellow wrapping around the nozzle. [It is heat resistant tape that improves the adhesion of the extruded plastic to the plate.]

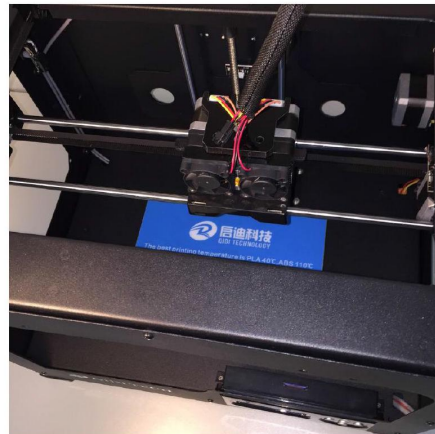


Step 2: Lower the build platform by turning the screw rod by hand which is behind the movable build platform at the back of the printer.

Step 3: Carefully move the horizontal extruder guide posts to the center of the printer.

Step 4: Place the extruder in the extruder seat on the guide posts with the fan facing forward.

Step 5: Align the hex screw holes and fasten with the two silver hex screws on the bottom of the extruder seat.



3. HARDWARE SET-UP

C. Filament spool holder

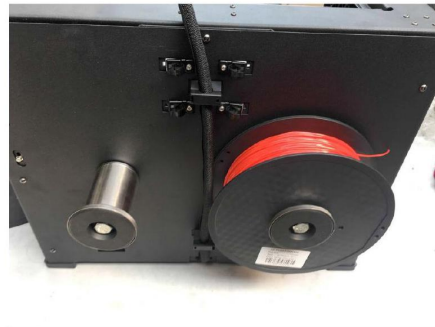
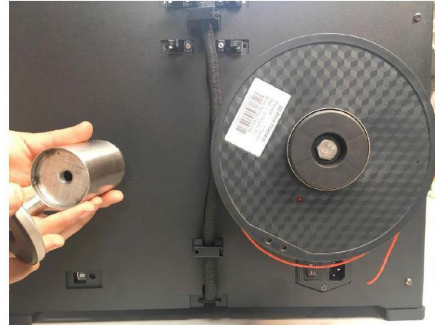
Tools Needed: None

The filament spool holders have two tightening nuts on one side and one on the other.

Step 1: Remove the outside tightening nut on the side with two tightening nuts.

Step 2: Insert spool holders into the circular opening at the back of the 3D printer.

Step 3: Tighten the nut on each of the spools on the inside of the 3D printer.



3. HARDWARE SET-UP

D. Filament guide tubes

Tools Needed: None

Step 1: Insert one end of filament guide tubes into top of the extruder.

Step 2: Then secure the second end on the back of the 3D printer.

Step 3: Filament guides should be secured in filament guide holders on the back of the 3D printer.

NOTE: Make sure you provide enough slack in the filament guides so they can move with the extruder.

Step 4: Place filament spool on the spool holder.



3. HARDWARE SET-UP

E. Acrylic cover assembly

Tools Needed: *Hex Wrench*

Step 1: Remove protective paper from acrylic panels.

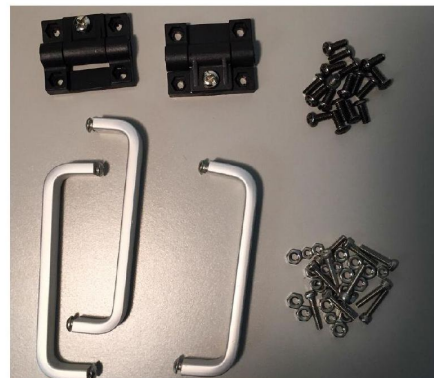
Step 2: Locate plastic bag containing hinges, handles and hex screws.

Step 3: Locate two square acrylic side panels and handles.

Attach side panels and handles to side of QiDi printer with the screws and nuts.

Step 4: Locate one acrylic front panel, hinges and handle.

Attach hinges and handle to front panel and then attach to the front of the QiDi printer with the screws and nuts.



3. HARDWARE SET-UP

E. Acrylic cover assembly

Step 5: Locate five top acrylic cover panels.

Attach one front and one side acrylic cover panel with hex screws and nuts.

Attach another side acrylic cover with the screws and nuts.

Attach the top of the acrylic cover by inserting into tabs.

Attach one back acrylic cover panel with hex screws and nuts.



4. SOFTWARE SET-UP

A. Check power and SD card contents

Step 1: Make sure you have completed all the steps in the following sections of this start-up guide:

- Unpacking the box
- Hardware set-up

Once you have checked if all of these items have been completed, you can plug in the 3D printer power supply. Then turn on the power switch at the back of the 3D printer.

Step 2: Locate the SD card provided and insert it into your computer.

Step 3: Open the SD card on your computer screen to find the following folders:

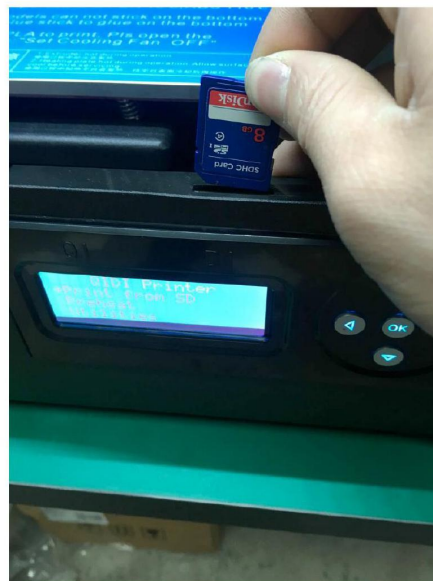
Folder 1: QiDi Technology 3D
Printer Start-Up Guide

Folder 2: QIDI Technology 3D
Printer Hardware Set-up
Videos

- Convert Voltage
- Install Turbo Fan
- Level Build Platform
- Add oil for smooth operation

Folder 3: Software for your
computer

Folder 4: 3D “test” print files



4. SOFTWARE SET-UP

B. QiDi Printer screen software menus

Main Menu	Level 1 Menu	Level 2 Menu	Level 3 Menu	Level 4 Menu
Print From SD	SD Card not present SD Card present	Lists files on SD card		
Preheat	Right Extruder (On) Left Extruder (On) Platform (Off)			
Utilities	Monitor Mode	R Extruder Temp (22°C) L Extruder Temp (22°C) Platform Temp (12°C)	Back to monitor Cancel Print Pause Pause at Z Pos Change Speed Change Temp. Set Cooling Fan (On) Se Lights (On) Print Statistics Cold Pause	Yes/No
	Filament Loading	Unload Right Load Right Unload Left Load Left	Heating: Extruder (230°C) Press Left to Cancel	Begin Loading or Unloading. Press the center button when finished.
	Preheat Settings	Right Extruder Temp (230°C) Left Extruder Temp (230°C) Platform Temp (100°C)		
	General Settings	Ditto Printing (Off) Override GcTemp (Off) Pause with Heat (Off) Sound (On) Acceleration (On) Extruder Count (2) HBP Installed (Yes) Extruder Hold (On) Check SD Reads (Off) P-Stop Control (Off) P-Stop Inverted (No) Serial I/O (USB) LED Color (Off)		

NOTE: Default settings are shown in (parentheses).

4. SOFTWARE SET-UP

C. 3D software for your computer

There are several 3D desktop software packages available for use with 3D printers, we recommend you choose from the following:

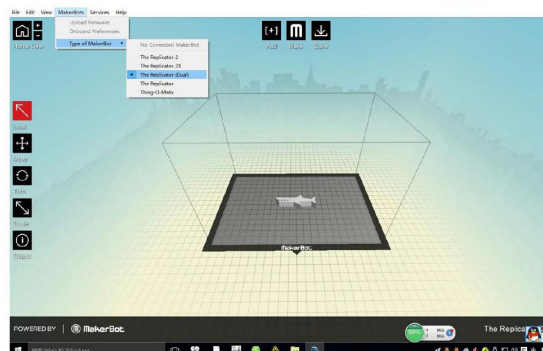
- ReplicatorG - is a simple, open source 3D printing program.
- MakerBot Desktop - is an easy-to-use 3D printing program from Makerbot. We recommend using Makerware .

NOTE: Both software packages are provided on the SD card.

MakerBot DeskTop software installation instructions

Step1: Copy the appropriate version of MakerBot to your computer from the SD card.

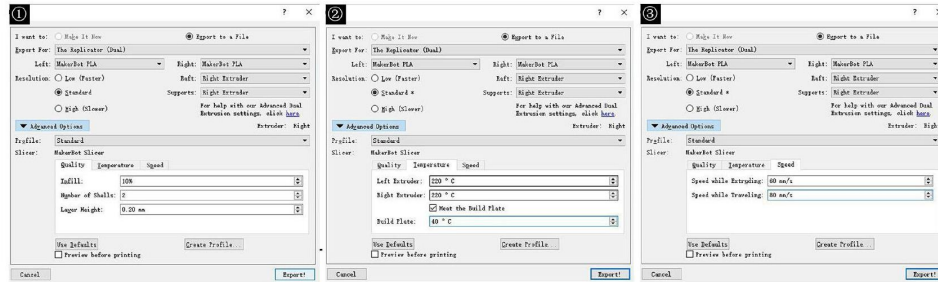
Step 2: With the printer offline, select the device type.



4. SOFTWARE SET-UP

C. 3D software for your computer

Step 3: Then set the parameters. The default setting is PLA, right extruder printing...



Step 4: Click “Export print file,”

Generate the file to your computer desktop then put the file on the SD card and insert the card to the printer

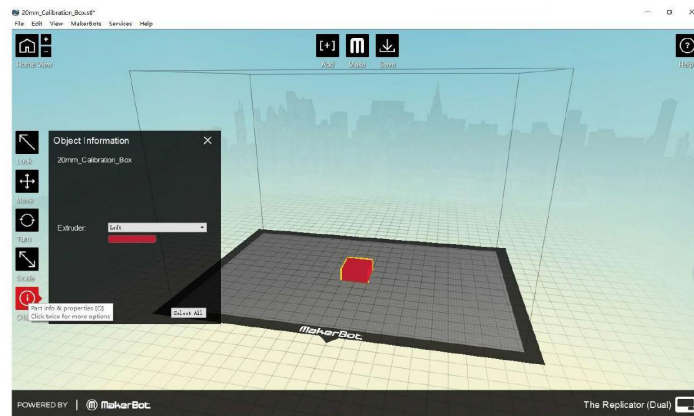
Then you can print directly from the SD card.

NOTE: The printing file format must be .X3G, not STL format. If necessary, convert STL files to .X3G format.

4. SOFTWARE SET-UP

C. 3D software for your computer

This option allows you to choose the left extruder printing:



4. SOFTWARE SET-UP

C. 3D software for your computer

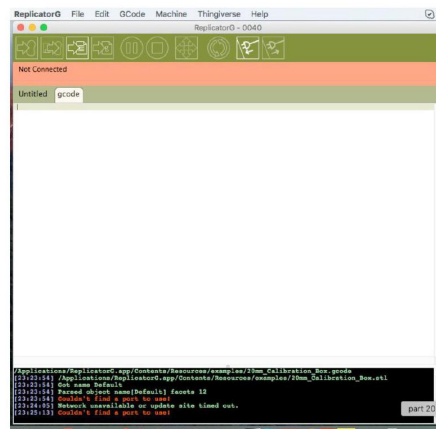
ReplicatorG 3D software installation instructions

Step1: Copy the appropriate version of ReplicatorG to your computer from the SD card.

Step 2: Browse to the “Software” folder and run the Python installation file and the Python acceleration components.

Step 3: After completing the Python component installation, click ‘Replicator-0040-Installer’ to install the ReplicatorG software.

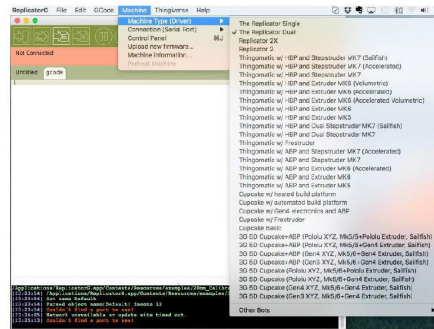
Step 4: To open the ReplicatorG software, double click the shortcut on the desktop or in the start menu.



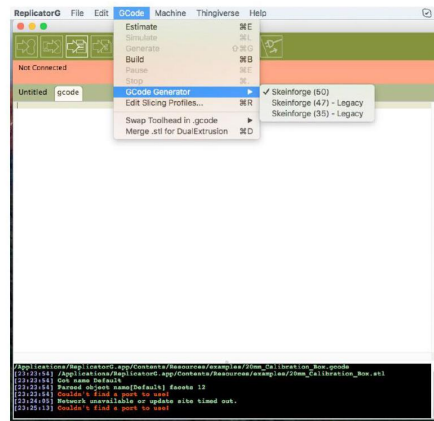
4. SOFTWARE SET-UP

C. 3D software for your computer

Step 5: After opening ReplicatorG software, click on 'Machine' to select your machine type. Choose 'The Replicator Dual' for dual extruder machine.



Step 6: After selecting the appropriate machine type, click on GCode on the top navigation bar, and under GCode Generator, select 'Skeinforge(50)'.



How to import 3D print files into ReplicatorG

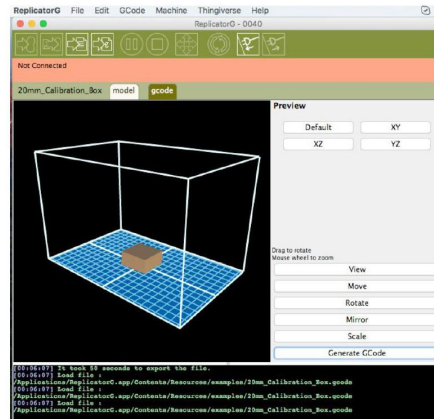
The following provides an overview on how to import 3D files with file extension .STL into the ReplicatorG software and then generate Gcode to print the 3D object.

NOTE: You can find 3D print files on the SD card or on the web.
Thingiverse is a popular web site where 3D print files can be found.
The link is:www.thingiverse.com

4. SOFTWARE SET-UP

C. 3D software for your computer

Step1: Click 'File', then click on 'Open', then browse and select the file (.STL) that you would like to print. Import the file into the ReplicatorG software by double-clicking on it. Then the 3D drawing will appear on the ReplicatorG interface.



Step2: When the object is imported you may find that it is not on the virtual build platform or even on the screen, using the function keys indicated you can reposition the object onto the center of the build platform.

Step3: The next step is to generate the Gcode. This is done by clicking on the button (Generate GCode) at the bottom of the panel. A Gcode file is required by the 3D printer to generate the 3D printed object.

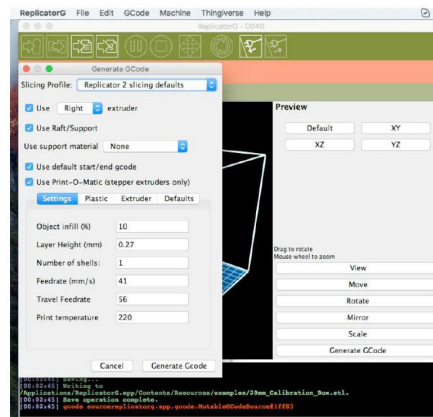
4. SOFTWARE SET-UP

C. 3D software for your computer

Explanation of GCODE settings in ReplicatorG

Before generating the Gcode a window will pop up, giving you several options on how the Gcode will be generated:

- A. Slicing Profile: select Replicator slicing defaults for ABS printing, then select Replicator 2 slicing defaults for PLA printing.
- B. Extruder profile: This tells the printer which extruder to use for a dual-extruder head printer, either the left or right head can be selected.
- C. Support profile: If the 3D print will have any hanging surfaces, it is recommended to have support structures printed. You can select from three options:
 - A. None - this indicates that there is no support.
 - B. Exterior - this means surface support only will be printed
 - C. Full support - means all support will be printed.
- D. Object infill: where 100% is a solid print, 0% is a hollow object. The recommended setting is 10%; this will save time and filament.
- E. Layer Height: this controls the vertical resolution of the print. The recommended thickness is 0.27 mm.
- F. Number of shells: this is the wall thickness; it is usually set at 1.
- G. Feedrate: this is the speed at which the filament is fed into the extruder, and this is usually set between 30 and 100. For ABS printing, 60 is recommended; for PLA printing, 100 is recommended.
- H. Travel feedrate: this is the speed at which the printer head moves over the base and is usually set between 30 and 120. For ABS printing, 80 is recommended; for PLA printing, 120 is recommended.
- I. Print Temperature: this is the temperature to which the nozzle is heated. This varies between filament types.

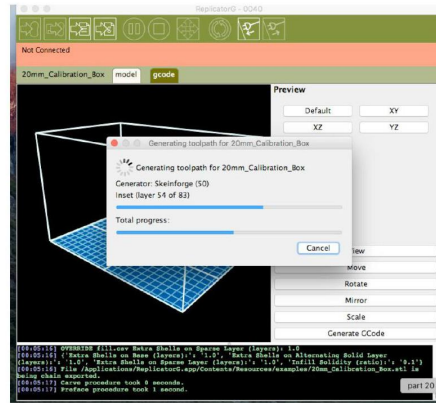


4. SOFTWARE SET-UP

C. 3D software for your computer

After you choose the settings, click Generate Gcode and the progress bar will appear.

NOTE: For users who did not choose the default installation path in the installation of Python, clicking the Generate Gcode button in ReplicatorG may result in a dialogue box popping up alerting you that the executable Python file cannot be found.



If a dialogue box does appear, click the No button to dismiss the dialogue box. Next, perform the following steps in ReplicatorG software:

Step1: Click 'File', then click on 'Preferences', then click 'Select Python' interpreter under the advanced tab. A window will pop up.

Step 2: Navigate to the Python installation directory and select 'PYTHON.exe' and click 'Open'.

Step 3: Click close on the Preferences menu.

The machine will now work as normal when generating Gcode and the Python error message will not pop up again.

4. SOFTWARE SET-UP

D: Using SD Card and USB Connection

There are two options to transfer your 3D print files to the QiDi printer:

Option 1: SD Card

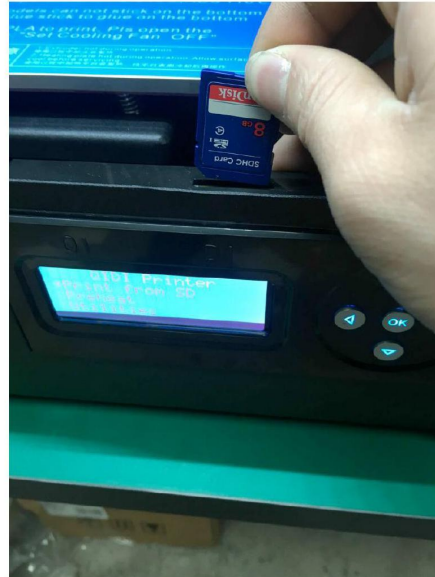
Insert SD card into your computer.

Transfer 3D print files using 3D software.

Eject SD card from your computer

Insert SD card into printer.

Print using printer screen software menus.



Option 2: USB Cable

Attach USB cable to back of 3D printer

Attach USB cable to your computer

Use 3D software to install USB connection

Print by sending 3D print files directly to the QiDi printer.

4. SOFTWARE SET-UP

D: Using SD Card and USB Connection

How to link the QiDi printer to your computer via a USB cable using ReplicatorG Software

Step 1: Connect the QiDi printer to your computer with the provided USB cable.

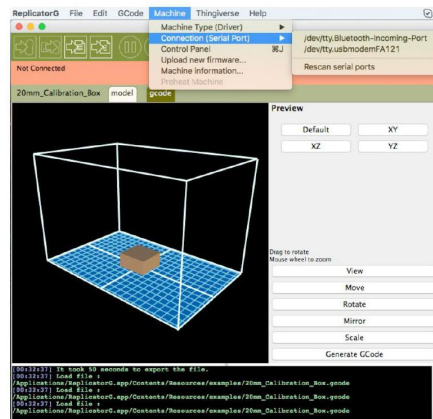
The USB port on the machine is located on the back of the QiDi printer. After connecting the cable, open the ReplicatorG software to link the computer and QiDi printer.

Step 2: From within the ReplicatorG software, click 'Machine,' then 'Connection' (serial port), then 'Rescan serial ports', if no new ports appear, then the software driver has not been installed.

To install the driver manually:

Go to 'My computer' and right click on 'Properties'. The basic system parameters appear. Next select 'Device Manager'.

Locate the software driver. Right click and select 'Update Driver Software'.



Click Browse my computer for driver software to find the location of 'ReplicatorG0040' on your system.

Click 'FTDI USB Drivers' in the driver folder before confirmation and click 'OK'. The drivers will then be installed.

4. SOFTWARE SET-UP

D: Using SD Card and USB Connection

Step 3: Rescan the serial ports and select the one that appears on your machine.

Step 4: Now we can create the link between the 3D printer and the computer. Click on the printer connect icon in ReplicatorG highlighted in the menu bar.

If the printer connect icon turns dim the printer has successfully connected to the computer.



NOTE: If you have chosen to connect to the 3D printer using a USB cable you can then directly control the 3D printer using the ReplicatorG software.

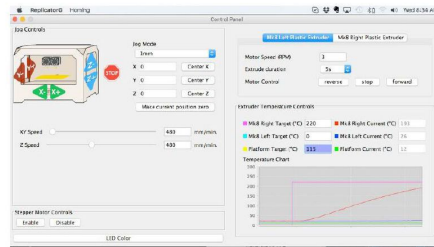
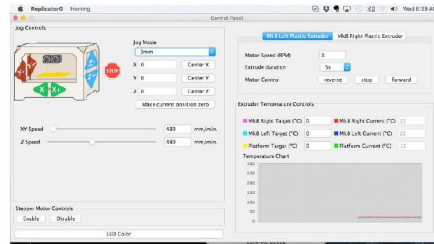
4. SOFTWARE SET-UP

D: SD Card and USB Connection

For example, in the ReplicatorG software you can click on the cross-shaped icon and a new screen will appear that will allow you to preheat the extruder and build platform.

Input the following target values: 220°C for the extruder and 115°C for the build platform. After entering the values, the platform will start to warm up.

When the extruder temperature reaches 50°C, the cooling fan will be activated and the current temperature value will be displayed on the screen.



5. TESTING THE PRINTER

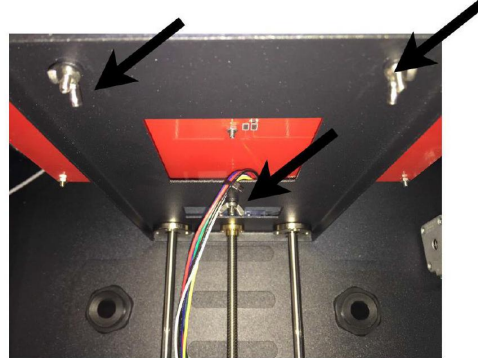
A. Adjust the build platform

Step 1: Move the extruder to front right corner of the printer.

Step 2: Raise the print platform up to the top of the printer until you see the RED light on the back of the printer turn on.

Step 3: Examine the bottom of the print platform and note there are three adjustment knobs:

- Right front corner
- Left front corner
- Middle back of platform.



These knobs will be used to set the print platform to the correct distance from the extruder to start printing. You can use a piece of paper to check if the distance is correct.

NOTE: Turning the adjustment knobs to the right will lower the print platform from the extruder.

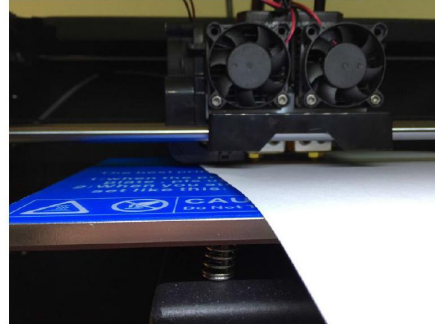
Turning the adjustment knobs to the left will raise the print platform closer to the extruder.

5. TESTING THE PRINTER

A. Adjust the build platform

Step 4: Check and make any necessary adjustments to the build platform:

Before you print, check the distance between the build platform and the extruder by using a piece of paper at the following locations:



First Location: Carefully move the extruder to the right front corner of the print platform and perform the check.

Second Location: Carefully move the extruder to the left front corner of the print platform and perform the check..

Third Location: Carefully move the extruder to the center back of the print platform and perform the check..

NOTE: The distance between the build platform and the extruder should be 0.5mm.

5. TESTING THE PRINTER

B. Load the filament

To make the process of feeding or withdrawing the filament easy, please follow the next few steps carefully.

There are two options for feeding or withdrawing the filament into or from the extruder. One is using the QiDi printer screen on the printer itself and the other is by using the control panel in the ReplicatorG software.

Option 1: Feeding the Filament Using the 3D printer Screen

Step 1: From the 3D printer screen:
Select Utilities
Select Filament
Select Load Right (or Left)

The 3D printer will begin to preheat the extruder and the screen will change to indicate the temperature.



Step 2: Then remove the guide tube from the top of the dual extruder and pull a small amount of the filament out of the guide tube.

NOTE: The filament should be straight and have a clean edge, if not cut the filament so it can feed properly into the extruder nozzle.

Step 3: When the temperature rises to 230°C feed the filament into the top of the selected nozzle of the dual extruder (left or right) and the nozzle will automatically begin loading the filament.

Step 4: After you see that some filament has been extruded, then press the left arrow next to the 3D printer screen to stop loading the filament.

Step 5: Repeat the process (if necessary) to load the filament into the other extruder.

5. TESTING THE PRINTER

B. Load the filament

Option 1 Withdrawing the Filament Using the 3D printer screen

Step 1: From the 3D printer screen:

- Select Utilities
- Select Filament
- Select Unload Right (or Left)
- The 3D printer will begin to preheat the extruder and the screen will change to indicate the temperature.

Step 2: When the temperature rises to 230°C first push in the filament until you see some come out of the extruder, then remove it quickly.

This will ensure you have completely withdrawn the filament successfully.

Option 2 Feeding or withdrawing the filament using the ReplicatorG software

The following can only be performed while the printer is connected to the computer with the ReplicatorG software.

Step 1: Open the ReplicatorG software, then click the icon in the red box, this is the control panel icon. A dialogue box will then appear.

Step 2: To heat the right or left extruder nozzle, select the right or left extruder on the upper right corner of the control panel and manually modify the temperature in the “Right Target” setting for the extruder to 220°C. A red line will be plotted in the temperature map.

5. TESTING THE PRINTER

B. Load the filament

Step 3: When the extruder is heated to 230°C, you can feed or withdraw the filament.

Guidelines for filament settings

Parameter	ABS	PLA
Diameter	1.75 mm	1.75 mm
Best printing temperature	230°C	210°C - 220°C
Heating build platform temperature	110°C	40°C

NOTE: When using PLA filament to print, please remove all covers including the front acrylic, top and side covers. Operate the printer in an environment that will provide ventilation and turn the turbo fan on. (See Using turbo fan section.)

NOTE: When using ABS filament to print, please close the covers and windows. Operate in a non-drafty area. Turn turbo fan off

5. TESTING THE PRINTER

C. Using the turbo fan

STOP - READ FIRST

⚠ Caution

⚠ Turbo fan must be used when printing with PLA filament.

⚠ **Do not** use turbo fan when printing with ABS filament.

Step 1: After the printer heats up completely to print, then press the left arrow button on the keypad.

A new screen will appear. You must then use the down arrow to find the “Set Cooling Fan” setting

Step 2: Tap the down arrow until you see “Set Cooling Fan ON”.

Select the “OK” button to start the fan.

The display will change to “Set Cooling FAN OFF” and the fan will start to run.



5. TESTING THE PRINTER

D. Your first QiDi print

First, make sure you have completed all the steps in the following sections of this start-up guide:

- Unpacking the box
- Hardware set-up
- Software set-up

If so, as a check the following should be completed:

- The dual extruder should be secured in place
- The filament guide tubes are secure and connected to the dual extruder
- The filament(s) are mounted on the spool holder

NOTE: Different types of filaments (PLA versus ABS) have different 3D print settings which may need to be adjusted via 3D desktop software or 3D printer screen software menus before printing.

- The turbo fan is installed
- The acrylic covers are in place
- The 3D printer is plugged in and turned on

5. TESTING THE PRINTER

D. Your first QiDi print

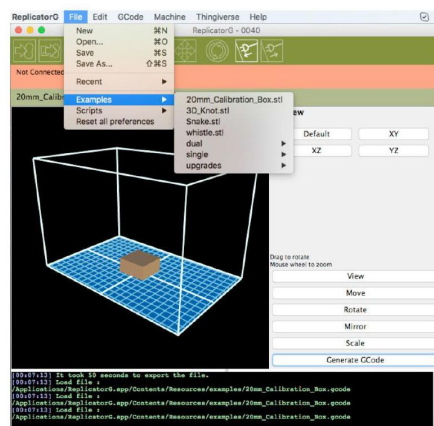
You have two options when printing with the QiDi printer:

- Single Extruder
- Dual Extruder

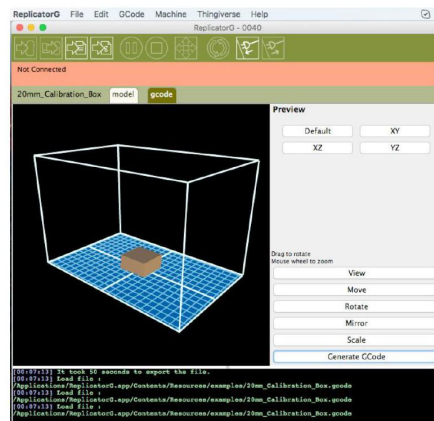
Option 1: Single Extruder Print

Step 1: Click 'File', then click 'Examples,' then select the '22mm_Calibration_Box.stl'.

The ReplicatorG preview interface will then appear along with a 3D object of the 20mm cube on the QiDi printer build platform.



Step 2: Click 'Move', then click 'Center' and then 'Put on platform' so that the 3D object will be printed on the center of the build platform.



5. TESTING THE PRINTER

D. Your first QiDi print

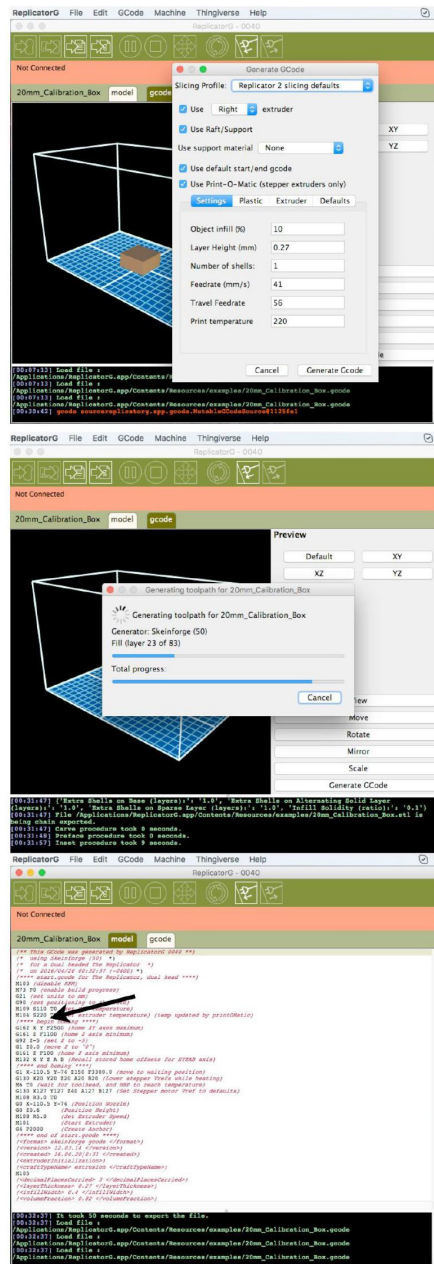
Step 3: Click 'Generate GCode', a dialogue box will pop up, after inputting your chosen parameters the Gcode file with the name 22mm_Calibration_Box will be generated.

A loading bar will then appear showing the progress of the Gcode generation.

Note: After the Gcode is generated, the temperature of the build plate may need to be changed:

If you print with PLA filament, select Gcode as shown highlighted in the illustration below and change M109 S110 to M109 S50 to set the HBP temperature at 50°C. Then click 'File', then click 'Save' to save this modification.

If you print ABS filament, then no HBP temperature modification are needed.



5. TESTING THE PRINTER

D. Your first QiDi print

Step 4: To transfer your 3D print file to the QiDi printer:

If you have connected your computer using the USB cable to the 3D printer:

Click the left most button on the green bar near the top of the ReplicatorG screen. The Gcode file has now been sent to the printer and the 3D object will start printing shortly.

NOTE: If you choose to direct connect your computer to the QiDi printer it must remain connected during the entire print process. Another option is to export the 3D print file to the SD card and insert it into the QiDi printer (see instructions below).

If you have NOT connected your computer using the USB cable to the 3D printer:

Insert the SD card into your computer. Use the ReplicatorG menu to export the Gcode .X3G file to the SD card, then select 'Eject device' from your computer device menu.

Insert SD card into 3D printer SD card slot.

Select "Print from SD Card" from the QiDi printer screen, then select the file with the name "22mm_Calibration_Box" and press ok.

5. TESTING THE PRINTER

D. Your first QiDi print

Option 2: Dual Extruder Print

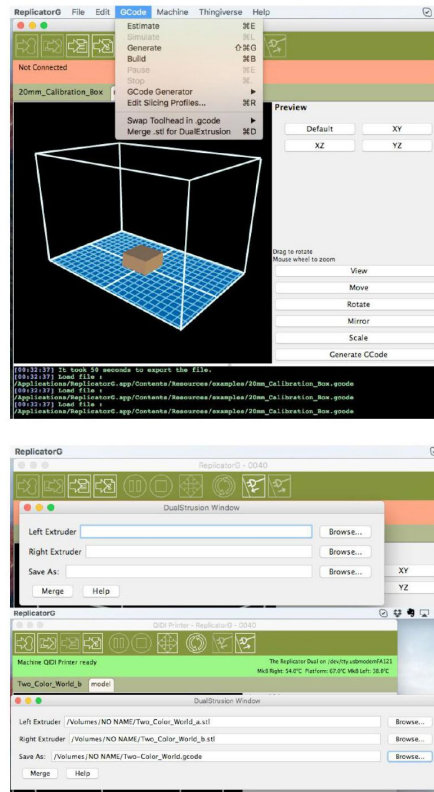
This option uses two extruders to create your 3D print.

Step 1: Open ReplicatorG and select 'Gcode', then 'Merge .stl for Dual Extrusion'

Step 2: Click on the first Browse button to locate and select the file for left extruder; and then click on the second Browse button for right extruder.

For example, you can find the 3D print examples folder in its installation path. Open the folder examples and select the 'Two_color_world_a.stl' 3D print file for left extruder - then repeat the process for the right extruder.

Step 3: Save the 3D print file to the desktop with the suffix format .gcode. Click 'Merge' and two dialogue boxes will pop up.



5. TESTING THE PRINTER

D. Your first QiDi print

Change the “FeedRate” and “Travel feedrate” settings as shown:

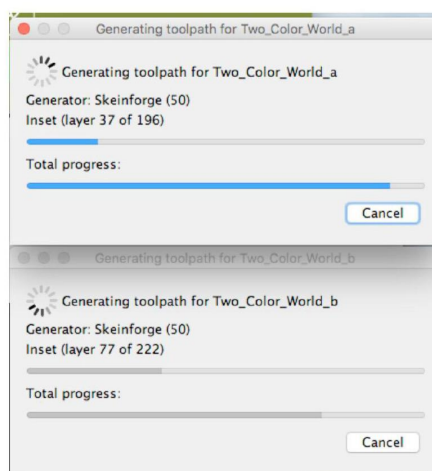
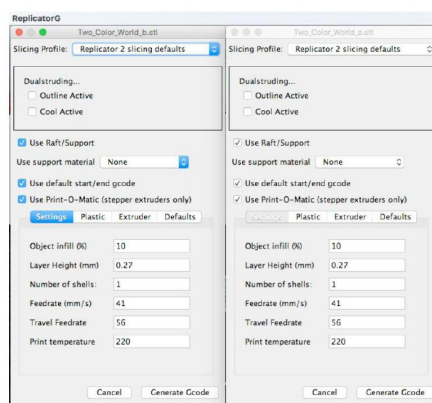
If you want to print dual colors with PLA filament, select ReplicatorG slicing defaults under the Slicing Profile column, and set the Feedrate to **80** and Travel Feedrate to **100**.

If you want to print dual colors with ABS filament, select ReplicatorG slicing defaults under the Slicing Profile column, and set the Feedrate to **60** and Travel Feedrate to **80**.

NOTE: Do not check the “use raft/support” option.

Step 4: Click the Generate Gcode option for both boxes.

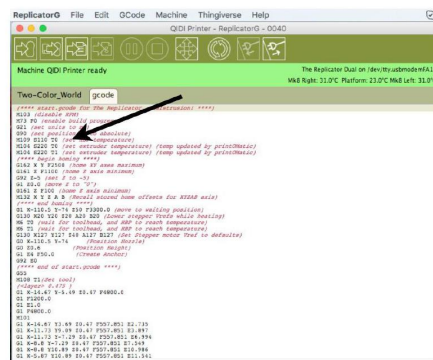
A loading bar will then appear showing the progress of the Gcode generation.



5. TESTING THE PRINTER

D. Your first QiDi print

After the Gcode file is generated, click on the 'Gcode' tab and change HBP temperature to **50** if you are printing with PLA and save this modification by going to 'File', then 'Save'.



Step 5: To transfer your 3D print file to the QiDi printer:

If you have connected your computer using the USB cable to the 3D printer:

Click the left most button on the green bar near the top of the ReplicatorG screen. The Gcode file has now been sent to the printer and the 3D object will start printing shortly.

NOTE: If you choose to direct connect your computer to the 3D printer it must remain connected during the entire print process. Another option is to export the 3D print file to the SD card and insert it into the QiDi printer (see instructions below).

If you have NOT connected your computer using the USB cable to the QiDi printer:

Insert the SD card into your computer and using ReplicatorG menu to export the Gcode .X3G file to the SD card, then select 'Eject device' from your computer device menu

Insert SD card into QiDi printer SD card slot.

Select "Print from SD Card" from the QiDi printer screen, then select the file with the name "Two_color_world" and press ok.

5. TESTING THE PRINTER

E. Removing the 3D prints

NOTE: The best build platform temperature for PLA filament is 40°C and for ABS filament is 110°C.

If 3D print models do not stick to the build platform, please try using the included glue stick on the build plate.

Below are two options to remove 3D prints from the build platform.

Option 1: Remove 3D prints with reasonable force - You can carefully use your hand to remove the 3D print.

NOTE: The build platform may still be heated - Always be aware of heated surfaces and extruder nozzles in the 3D printer.

Option 2: Use a sharp flat tool - You can use the included scraper to carefully slide between the printed object and the build platform.



6. APPENDIX

A. Quick Start Guide

- 1** Find the SD card located inside the QiDi printer in the box.
- 2** Insert the SD card into your computer.
- 3** Open Folder 1 on the SD card. . This folder contains the QiDi Technology 3D Printer Start-Up Guide. Review/Print this start-up guide to complete unpacking the 3D printer and hardware set-up. This start-up guide includes instructions to install the extruder, filament spool holders, guide tubes, turbo fan and acrylic cover.
- 4** Open Folder 2 on the SD card to view videos of the hardware set-up.
- 5** Open Folder 3 on the SD card. Select 3D software to install on your computer. Choose from (1) Replicator G or (2) MakerWare
- 6** Select a test .X3G file from the SD card or generate a new .X3G file and save it to the SD card. Insert the SD card into the printer, select "Print From SD," choose the correct print file and begin printing!

6. APPENDIX

B. International Certifications



CERTIFICATE OF CONFORMITY

Certificate No.: VIC140328-CRQ-C03

The Certification Body of

VIC TESTING AND CERTIFICATION LTD

Certifies that

Applicant: Ruian Qidi Technology Co.,Ltd
AD: Room 801, Unit 3, WanHao Building, LongShan Dong Road,
Ruian City, ZheJiang Province, China

Manufacturer: Ruian Qidi Technology Co.,Ltd
AD: Room 801, Unit 3, WanHao Building, LongShan Dong Road,
Ruian City, ZheJiang Province, China

Product: 3D Printer

Model No.: Avatar I , Avatar II , AvatarIII

Rating(s): AC110V-230V, 50/60Hz, 300W

Complies with the requirements of the **Machinery Directive 2006/42/EC (MD)**
and **Low Voltage Directive 2006/95/EC (LVD)**. The submitted products have been
tested by us and found in compliance with the following European Standards:

**ANNEX I Essential health and safety requirements relating to the design and
construction machinery (2006/42/EC)**

EN 60204-1:2006

This certificate of conformity is based on an evaluation of a sample of the above mentioned
products. It does not imply an assessment of the whole production. The CE markings as shown
below can be affixed on the product after preparation of necessary technical documentation.

Signature: Steven White
Steven White

Date of issue: 28th March, 2014







VIC TESTING AND CERTIFICATION LTD
CHASE BUSINESS CENTRE (CHD) 39-41 CHASE SIDE LONDON
Email: info@victest.co.uk Website: www.victest.co.uk



6. APPENDIX

B. International Certifications

	
Verification of Conformity	
Certificate No.	: VIC140331-CRQ-C05
Test Report	: DN20140326-ZQD33-FCC
Applicant	: Ruian Qidi Technology Co., Ltd
Address	: Room 801, Unit 3, WanHao Building, LongShan Dong Road, Ruian City, ZheJiang Province
Manufacturer	: Ruian Qidi Technology Co., Ltd
Address	: Room 801, Unit 3, WanHao Building, LongShan Dong Road, Ruian City, ZheJiang Province
Product	: 3D Printer
Model(s)	: Avatar I , Avatar II , Avatar III
Rating(s)	: AC 110-230V, 300W
Test Standard	: FCC PART 15 Subpart B Class B: 2012
 Remarks: This device is complies with the part 15 of FCC rules. It's confirmed and found to comply with the requirements setup by ANSI C63.4 & FCC part 15 regulation for the evaluation of electromagnetic compatibility.	
Signature: 	
Steven White	
Date of issue: Mar. 31, 2014	
	VIC TESTING AND CERTIFICATION LTD CHASE BUSINESS CERTRE (CHD) 39-41 CHASE SIDE LONDON Email: Info@victest.co.uk Website: www.victest.co.uk