

Q1 Pro

Quick Start Guide



(All images are for illustrative purposes only, actual product may vary due to product optimization)

Usage Notice

- Do not place the machine in flammable and explosive materials or near high heat sources, please place the machine in a ventilated, cool and dust-free environment.
- Ensure the machine is powered off (unplug power cord) before performing maintenance or modifications.
- Before connecting the power, please follow the power setup instructions to ensure that the voltage is correct.
- Never reach inside QIDI printer while they are in operation.
- Children should be under constant supervision when using QIDI products.
- The printer contains high-speed moving parts, so be careful of hands pinching.
- There is a potential risk of burns: the print head of the QIDI printers can reach temperatures above 300 °C, while the hot bed can reach temperatures above 100 °C. Do not touch either of these parts with your bare hands.
- Do not place the printer in a vibrating or other unstable environment. Otherwise the shaking of the machine will affect the printing quality.
- After printing, use the residual temperature of the print head to clean the filament around the nozzle with the dedicated tools in time. Do not touch either of these parts with your bare hands.
- Perform routine maintenance for your product by using a dry cloth to clean the printer body when it is turned off. Additionally, remove any dust, bonded printing materials, or foreign objects that may accumulate on the optical axis. Regular lubrication is necessary for the linear shaft and Z axis screws.
- If the machine is in standby mode for a long time, please unplug the power of it.
- If the machine is not used for a long time, please pay attention to protect the printer from dust and damp.
- There are manuals, slicer software and other related information in the USB flash drive. (The information in the USB flash drive may not be the latest. You can obtain the latest information by contacting the After-sales Service marked at the end.)
- Modifying system files and installing unofficial plugins means that the customer is waiving their expectations of official support. They will be solely responsible for the security and safety of their printer. Any firmware issues arising from these modifications will not be covered under warranty. If you need to recovery the factory system files, you need to purchase the EMMC-Adapter additionally.

There is QIDISlicer slicing software in the USB flash drive. After installing and operating it, you can learn how to use the software in the Guide.

*Untitled - QIDISlicer-1.1.2 File Edit Window View Configuration Help Calibration 🕭 Plater 🐵 Print Settings 📮 Filament Settings 🚺 Printer Settings 🕓 Device 👖 Guide Advanced Experies Expe \bigcirc A DATE THE COLUMN TOP STREET OF THE ACCOUNTS Barting & Section Barton State Bart --ng fangel oon ook a some in die geste van die die soon ook in die soon ook die soon ook die soon ook die soon o water ook die die soon op die soon op die soon ook die soon Toge Wanter beine under eine stellte Antenan eine "eine under die eine Anten werden in der der anderen aller Frankrikenen gelten " beine Antenen under Anten Stellte Terle gelten eine Antenen der Antenen ander anderen die Antenen ander Antenen Stellte antenen antenen der Antenen anten anten anten anten anten antenen stellte antenen antenen der Antenen anten anten anten anten anten antenen stellte antenen antenen der Antenen anten anten anten anten anten antenen an Introduce Calibration • 3D Printers First Print Add Support Wifi Send **Connect Device** Contact with us -----Adaptive Meshing ----tes in the site has been Add Text Cut Model Adaptive Meshing **Exclude Objects** an the induced one billion for the induced one of the second one second one of the second one of the s -----**Download Model Download Model** Flow Rate Calibration Pressure Advance Max Volumetric Speed











Filament Spool Holder Holder Cover

Filament Extension Bracket

Power Cord











Cleaning Tool

USB 2.0 Flash Drive

Printer Introduction



Starting Up

Remove the upper foam and take out the printer.





Remove the power cord from the top cover foam and connect it to the printer. Switch on the printer and proceed with the on-screen instructions to complete the unpacking and loading the filament.



Language

Please select your preferred language and click on the next step.





Unboxing

Follow the on-screen instructions to remove the ties fastening the extruder and X-axis, discard the cardboard, and proceed to the next step.







Follow the on-screen instructions to remove the four screws securing the printing platform in place.

Click Next. Make sure the print bed is unlocked and clear of any debris before proceeding.

sure the print bed is

Remove four screws that fixed hot bed.

5 Jnboxing (2/3)



6 Jnboxing (2/3)

About to moving platform, please make sure the platform is clean and unlocked.



Load Filament

Take out the corresponding accessories from the top cover foam and install them according to the sticker instructions on the back of the machine.

Install the filament extension bracket onto the extension bracket fixing block.





You can refer to the sticker tips on the back of the machine to install the filament holder on the filament extension bracket.



Place the filament on the filament holder and click Next.

Note: It is recommended to install the filament holder cover to prevent filament from falling off of it.

5





Install the filament spool holder.



According to the on-screen prompts, insert the filament from the filament tube to the nozzle. Make sure the filament enters the nozzle,

then click Next.





Continue pushing the filament into the filament guide until it reaches the extruder.





Press the "+""-"button to set the print temperature. Waiting the temperature to reach the preset value and then click Next.



Click the +- button above to start heating and set the nozzle temperature, Waiting the temperature reach the setting value.

Click the downwards button and allow the filament to extrude from the nozzle. Notice: If no filament are extruding on multiple attempts, please check that the filament is entering the print head correctly.





Click Next and finish the start guide. Note: Before printing for the first time, please perform Auto Bed Leveling and Input Shaping.



Ensure the filament into the extruder, click above button for loading filament untill filament come out from nozzle.



Congrats! Guide tutorial finished. Please perform auto bed leveling and input shaping before printing.

Guide tutorial finished

First Printing

Please perform automatic bed leveling and input shaping before the first print to make the printing better. Note: Please do not use the platform calibration function before consulting with after-sales support or logging into the official Wiki to learn how to use it.





Click the button to start printing. Note: Built-in models use PLA Rapido filament by default.

When printing filaments such as PLA/ TPU, it is recommended to open the top cover and front door of the printer to prevent the machine chamber temperature from being too high, causing the filaments to soften and clog the nozzle.

After turning on chamber heating, please close the printer cover and front door to keep the chamber airtight.



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Removing The Scrap Box For The First Time



For transportation safety, transparent tape is used around the scrap box. When removing it for the first time, please remove the transparent tape first, then lift up the scrap box and take it out.

How To Remove The Print Head Front Cover



There is a buckle structure on the top of the front cover of the nozzle, please do not take it out directly. Please lift it from the bottom upward and remove the front cover of the nozzle.

Introduction To Machine UI

Note: There might be a delay in executing screen commands, and it's necessary to wait for the printer to finish the current action before proceeding. Avoid tapping the screen repeatedly.



Files List



Local Files: Click to display the print files in the machine PS: You can open the "Machine IP +:10088" web page or connect to the printer through QIDISlicer for management

Start Printing

Bed Leveling: Before printing, the machine automatically adjusts to keep the printing platform and the nozzle relatively level PS: Automatic leveling is integrated, it is recommended to turn it on





Settings-Calibration Settings

Auto Bed Leveling: The machine automatically picks up points on the platform and sets the compensation value to keep the printing platform and the nozzle relatively level

PS: It has been integrated into the hot bed leveling in the file details interface and is enabled when the hot bed leveling is not turned on



Input Shaping: The machine automatically adjusts and measures to reduce vibration and jitter when printing and improve stability PS: After belt adjustment and other similar operations, input shaper needs to be re-compensated

Platform Calibration: Manually adjust the nut under the printing platform to keep the printing platform and the nozzle relatively level PS: When the printing platform is too tilted, causing automatic leveling compensation to be invalid, the platform needs to be recalibrated



Control-Manual Movement

Click to set the distance of a single click

Click to move the extruder (Y-axis direction) PS: After unlocking the motor, it needs to be reset to home position before it can be used normally



Display the current coordinates of the extruder and printing platform PS: After unlocking the motor, it needs to be reset to home position before it can be used normally

Unlock The Motor: After clicking, the motors of the extruder and printing platform are unlocked and can be moved directly by hand PS: Resetting to zero will lock the motor and no longer supports direct movement by hand

Click to move the extruder (X-axis direction) PS: After unlocking the motor, it needs to be reset to home position before it can be used normally

Zeroing the coordinates of the extruder and printing platform

Click to move the printing platform (Z-axis direction) PS:After unlocking the motor, it needs to be reset to home position before it can be used normally

Control-Load Filament



1. Extruder Temperature: Click to turn ON/OFF the extruder heater.

2. Extruder Temperature Preset Value: Click to set the preset value. (the left side show the current temperature, the right side show the preset value)

3. Hot Bed Temperature: Click to turn ON/OFF the hot bed.

4. Hot Bed Temperature Preset Value: Click to set the preset value. (the left side show the current temperature, the right side show the preset value)

5. Chamber Temperature: Click to turn ON/OFF the chamber heater.

6. Chamber Temperature Preset Value: Click to set the preset value. (the left side show the current temperature, the right side show the preset value)

- 7. Fan: Click to jump to the fan setting menu.
- 8. Load: Click to enter the filament loading process.
- 9. Replace Filament: Click to enter the process of replacing filament.
- Click to set the extrusion/retraction distance of a single filament.
- Click to control the filament to retract.

PS: Before use, the extruder needs to be heated to the required print temperature of the filament.

12. Click to control the filament to extrude downwards.

PS: Before use, the extruder needs to be heated to the required print temperature of the filament.

13. Manual Unload: Cut off the filament and wait for the machine to automatically squeeze out the remaining filament in the extruder.

14. Automatic Unload: Wait for the machine to automatically extrude the filament downward for a period, and then pull out the filament.

PS: This method has a certain probability of extruder clogging.

Settings-General Settings







- 1. Language: Set Ul language.
- 2. System Message: export system logs, system error restart, etc.
- 3. After-Sales: description of after-sales.
- 4. Screen Off Settings: Setting up printer sleep time.
- 5. Check For Updates: update firmware.
- 6. Ethernet Cable Connection: Turn on when connecting the printer with an Ethernet cable.
- 7. WIFI : search for WIFI and connect.
- 8. Connection Settings: Set up server, set up only LAN connection.
- 9. QR Code: Cooperate with QIDI Link APP to connect to the printer on your mobile phone.
- 10. LAN Connection Only: Printer information is uploaded to the server via LAN only, not through the Internet. Once turned on, printer details are transmitted solely via LAN.
- 11. Amazon: It is recommended to use this server when the location is not in China.
- 12. Ali Cloud: It is recommended to use this server when the location is in China.
- 13. Online Update: update firmware through the network PS: Internet connection is required.
- 14. Offline Update: Firmware update through the update file in the USB flash drive.

Filament Guide For Beginners •

QIDI Filament 1		ABS Rapido	PLA Rapido	PETG-Tough	UltraPA
	Necessity Of Drying	×	×	×	
	How To Dry	/	/	/	60℃ 4-6h
	Nozzle Material	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle
Preparation	Nozzle Size	All Size	All Size	All Size	0.4/0.6/0.8 mm
	Dry Box	×	X	×	Need to maintain humidity ≤ 15%
	Print With Enclosure		×	×	
	Print Speed	260 mm/s	260 mm/s	180 mm/s	80 mm/s
	Chamber Temperature	50 ℃	/	/	/
Slicer Parameter	Nozzle Temperature	250-280 ℃	200-230 ℃	240-270 ℃	280-300 ℃
	Build Plate Temperature	100 °C	60 ℃	80 ℃	80 ℃
	Cooling Fan	30%	100%	60%	20%
Post- processing	Annealing Needs	80-90 ℃ 6-8 hours	×	×	70-90℃ 6-8 hours

QIDI Filament 2		ABS-GF25	PA12-CF	PAHT-CF	PET-CF
	Necessity Of Drying				
	How To Dry	70℃ 4-6h	100-120℃ 4-6h	100−120℃ 4−6h	100℃ 4-6h
Droporation	Nozzle Material	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle
Preparation	Nozzle Size	0.4/0.6/0.8 mm	0.4/0.6/0.8 mm	0.4/0.6/0.8 mm	0.4/0.6/0.8 mm
	Dry Box	Need to maintain humidity ≤ 15%	Need to maintain humidity ≤ 15%		Need to maintain humidity ≤ 15%
	Print With Enclosure				
Slicer Parameter	Print Speed	200 mm/s	200 mm/s	200 mm/s	200 mm/s
	Chamber Temperature	45 ℃	/	/	/
	Nozzle Temperature	250-270 ℃	280-300 °C	280-320 °C	280-320 °C
	Build Plate Temperature	100 °C	80 ℃	80 ℃	80 ℃
	Cooling Fan	20%	15%	15%	10%
Post- processing	Annealing Needs	80-90 ℃ 6-8 hours	80-100 °C 6-8 hours	90-130 ℃ 6-8 hours	90-130℃ 6-8 hours

Generic Filament		ABS	PETG	PLA	TPU 95A
Preparation	Necessity Of Drying	X	×	X	X
	How To Dry	/	/	/	/
	Nozzle Material	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle	Bimetal Nozzle
	Nozzle Size	All Size	All Size	All Size	0.4/0.6/0.8 mm
	Dry Box	X	X	X	X
	Print With Enclosure		×	X	X
Slicer Parameter	Print Speed	220 mm/s	120 mm/s	200 mm/s	60 mm/s
	Chamber Temperature	45 ℃	/	/	/
	Nozzle Temperature	240-280 °C	240-270 ℃	200-230 °C	220-260 °C
	Build Plate Temperature	100 °C	80 ℃	60 ℃	60 ℃
	Cooling Fan	30%	60%	100%	100%
Post- processing	Annealing Needs	80-90 °C 6-8 hours	X	X	X

Tips

1. Some other brands of ABS filaments are less heat resistant and it is recommended to set the chamber temperature no more than 55 degrees Celsius. Otherwise the filaments may be soften in advance and cause clogging.

2. If the filaments do not stick to the print platform:

- Please check if the nozzle is far away from the print plate, you can adjust the platform upward by Zoffset adjusting function.
- 2) Because of the different ambient temperatures in different regions, the temperature of the heat bed can be increased appropriately to increase the adhesion of the filaments.
- 3) If above all can not work , please contact the after-sales service for assistance.

Specifications •

Machine Name		Q1 Pro	
	Print Size (W*D*H)	245*245*240 mm	
	Dimensions	477*467*489 mm	
	XY Structure	CoreXY	
	X Axis	10mm High hardness linear hollow steel shafts	
Body	Z Axis	Dual Independent Lead Screw Motors	
	Shell	Plastic	
	Chassis	Steel	
	Motor	42-48 High-Speed Motor	
	Print Head Temperature	≤ 350°C	
	Extruder Gear	Hardened Steel Gears	
	Transmission Ratio	8.9:1	
Drint Llood	Hot End	Ceramic Plate Heating Hot End Only Need 52s Heating From 20°C To 220°C	
Print Head	Temperature Measurement Unit	Thermocouple	
	Nozzle	Bimetal Nozzle	
	Nozzle Diameter	0.4mm	
	Filament Diameter	1.75mm	
	Printing Platform	Aluminum Substrate Heating Bed	
Hot Bed	Printing Plate	PEI Magnetic Build Plate	
	Hot Bed Temperature	≤ 120°C	
	Printing Speed	250-600mm/s	
Speed	Maximum Printing Acceleration	20000mm/s^2	
Cool Down	Hot End Cooling Fan	Closed-Loop Control	
	Model Cooling Fan	Closed-Loop Control	
	Auxiliary Part Cooling Fan	Closed-Loop Control	
	Motherboard Fan	Closed-Loop Control	
	Chamber Circulation Fan	Closed-Loop Control	
	Chamber Temperature	60° C Independent Chamber Heating	
	Recommended Filament	PLA, ABS, ASA, PETG	
Filament	Compatible Filament	TPU,PA, PC, Carbon/ Glass Fiber Reinforced Polymer	
	Seal Print	Compatible	

	Filament Tangle Detection	Support
Sensor	Filament Run Out Sensor	Support
	Automatic Leveling	Support
	Resonance Compensation	Support
	Voltage	100-240 VAC, 50/60Hz
Power Supply	Rated Power	350W+300W(Chamber Heating)
	Display Screen	4.3 Inch 272*480 Touch Screen
	Storage	32G EMMC and USB2.0 Flash Drive
	Camera	Camera (Up to 1080P) Timelapse Supported
Electronics	Motion Controller	Dual-Core Cortex-M4
	Application Processor	Quad-Core 1.5GHz Cortex-A53
	Extruder Independent Processor	Dual-Core Cortex-M0+
	Wifi Frequency Bands	2.4 GHz
WIFI	Transmitter Power (EIRP)	18 dBm(MAX)
	Protocol	IEEE 802.11b/g/n
Software	Slicer	QIDI Slicer and other third-party software, such as Ultimaker Cura, Simplify3D, PrusaSlicer, Orca etc.
	Operating System	Windows、MacOS、Linux



Scan QR to receive our latest product updates and latest news.

Official Website: www.qidi3d.com

If you need support, please feel free to contact us:

E-mail address: Q1Ams@qidi3d.com Q1support@qidi3d.com

Skype ID: Q1support@qidi3d.com



Please visit the QIDI Tech official Wiki for more machine usage and maintenance tutorials.

https://wiki.qidi3d.com/en/home

If you have any suggestions or complaints,

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