

R QIDI TECHNOLOGY Q2

R QIDI TECHNOLOGY Q2 3D Printer Instruction Manual

Model: Q2

1. SETUP

This section guides you through the initial setup of your QIDI Q2 3D Printer, from unboxing to the first power-on and self-test.

1.1 Unboxing and Initial Assembly

Carefully unpack your QIDI Q2 printer and its components. Follow the steps below for initial setup.

Video Description: This video demonstrates the unboxing process of the QIDI Q2 3D Printer, showing how to remove the printer from its packaging, install the display screen, and attach the filament holder. It also covers connecting the power cord and turning on the machine for the first time.

- **Remove Packaging:** Carefully remove the outer packaging and protective foam.
- **Install Display:** Connect and install the 4.3-inch HD touchscreen display into its designated slot.
- **Attach Filament Holder:** Secure the filament holder to the rear of the printer.
- **Connect Power:** Plug in the power cord and turn on the main power switch.

1.2 Platform and Printhead Preparation

Before your first print, ensure the build platform and printhead are properly prepared.

- **Remove Platform Screws:** Unscrew and remove the four platform mounting screws that secure the build plate during transport.
- **Remove Platform Support:** After the platform rises, remove the foam support material located underneath.
- **Unpack Printhead:** Remove any packaging or protective cotton from the printhead assembly.

1.3 Initial Self-Test and Adjustment

The printer will perform a self-inspection and input shaping adjustment upon first startup or after certain maintenance procedures.

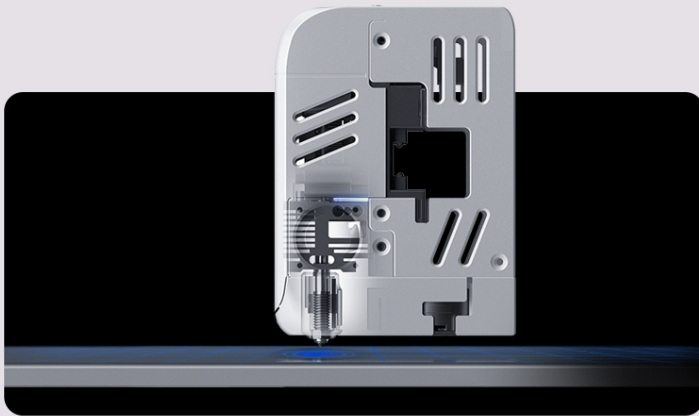
- **Confirm Self-Test:** Follow the on-screen prompts to confirm the self-test. The machine will check components like the extruder, heater bed, chamber, and various fans.
- **Input Shaping:** The printer will perform input shaping to optimize print quality and speed. Wait for this process to complete.
- **Guidance Complete:** Once the guidance is complete, your printer is ready for operation.

2. OPERATING INSTRUCTIONS

The QIDI Q2 is designed for ease of use and high-performance printing. This section details its key operational features.

2.1 Advanced Leveling System

The Q2 features a new generation leveling sensor where the nozzle itself acts as the sensor, ensuring unmatched first-layer accuracy.



New Leveling Sensor

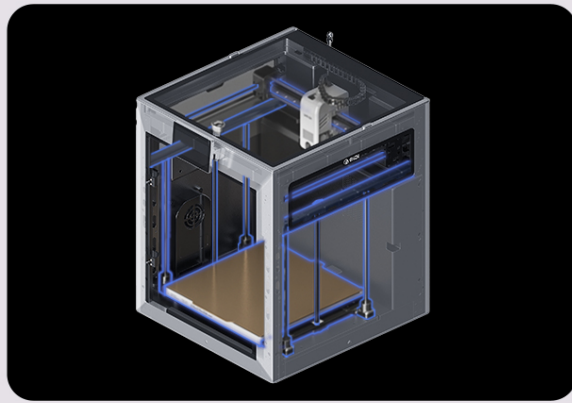
The nozzle acts as the sensor, ensuring truly zero deviation. Unaffected by bed surface or environmental vibrations, it delivers unmatched first-layer accuracy, zero offset, and true plug-and-play leveling.

Image Description: A detailed diagram illustrating the QIDI Q2's nozzle functioning as a direct leveling sensor, highlighting its role in achieving unmatched first-layer accuracy.

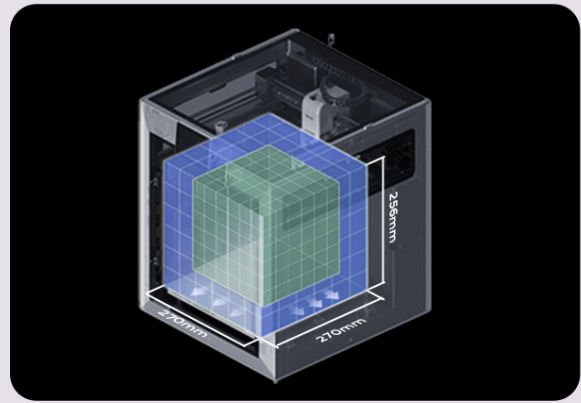
- **Full Auto-Leveling:** The system provides true plug-and-play operation, unaffected by bed surface or environmental vibrations.
- **Zero Offset:** Dynamic adjustments before each print ensure perfect first layers without manual Z-offset calibration.

2.2 High-Speed and Precision Printing

Experience ultra-stable, high-speed printing up to 600mm/s with consistent precision.



CoreXY full metal frame



Build Volume 270*270*256mm

Image Description: An exploded view diagram showcasing the robust CoreXY full metal frame of the QIDI Q2, emphasizing its structural integrity for stable printing.

- **CoreXY Structure:** Built with a full-metal CoreXY structure for enhanced stability.
- **Precision Linear Rails:** Ensures smooth performance and accuracy over long-term use.
- **1.5GT Synchronous Belt:** Reduces vibration artifacts (VFA) for ultra-smooth surfaces.

2.3 Multi-Color and Multi-Material Capabilities

Unlock advanced printing possibilities with multi-color and multi-material support, especially with the QIDI BOX.

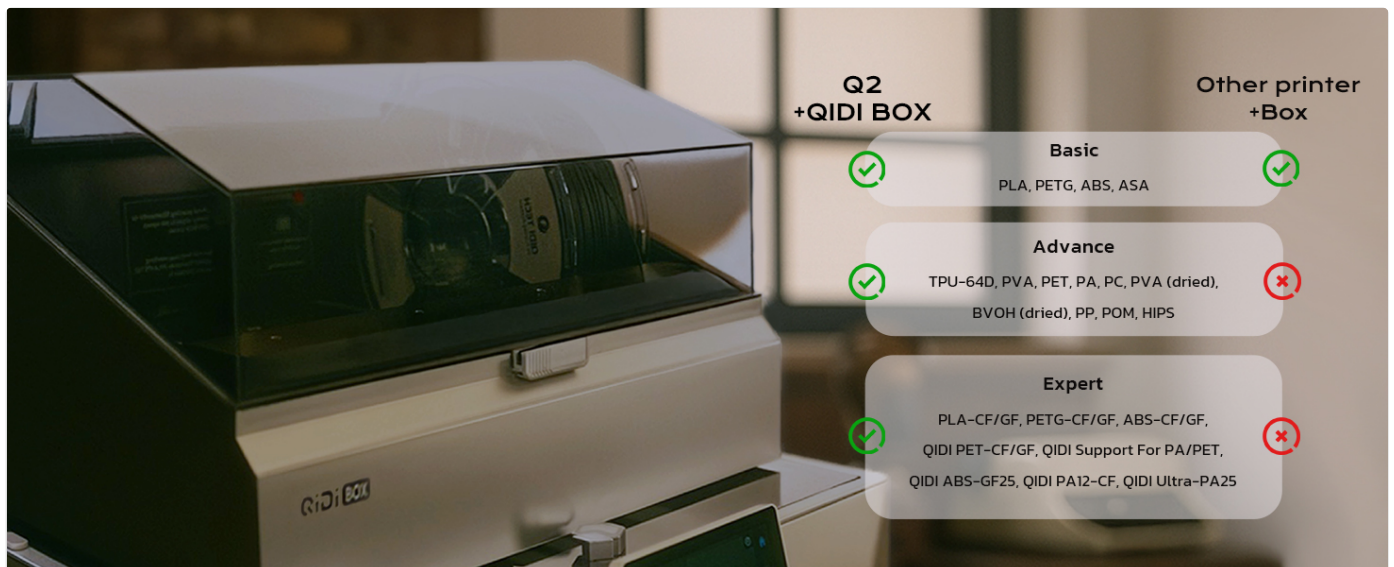
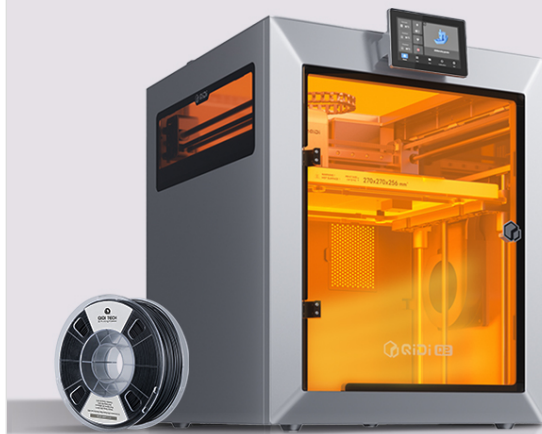


Image Description: An infographic comparing the QIDI Q2 with QIDI BOX against other printers, detailing its superior support for basic (PLA, PETG, ABS, ASA), advanced (TPU-64D, PVA, PET, PA, PC, BVOH, POM, HIPS), and expert (PLA-CF/GF, PETG-CF/GF, ABS-CF/GF, QIDI PET-CF/GF, QIDI Support For PA/PET, QIDI ABS-GF25, QIDI PA12-CF, QIDI Ultra-PA25) filaments.

- **QIDI BOX Integration:** Enables up to 16-color multi-material 3D printing.
- **Dry-While-Print Technology:** Keeps filaments dry for stable extrusion and smooth surfaces.
- **Wide Filament Compatibility:** Supports PLA, ABS, PETG, TPU, PA, PC, and carbon/glass-fiber composites.
- **High-Temp Nozzle:** Max 370°C hotend for effortless handling of high-performance filaments like PPS-CF.

2.4 Heated Chamber

The 2nd-generation PTC heated chamber minimizes warping and ensures strong layer adhesion.



65°C chamber Heating

Second-Gen active chamber heating reaches up to 65°C

Increasing interlayer adhesion for ABS, PC, ABS-GF, and more.



Layer chapping



Perfect surface

Image Description: A visual representation of the QIDI Q2's 65°C heated chamber, demonstrating how active chamber heating prevents layer chapping and ensures perfect surface quality for prints.

- **65°C Chamber:** Actively heats the print chamber to 65°C, increasing interlayer adhesion for materials like ABS, PC, and ABS-GF.

2.5 Smart Monitoring and Control

The QIDI Q2 integrates smart features for monitoring and control, enhancing reliability and user experience.

Print Spaghetti detection

AI camera

Our AI camera can detect printing malfunctions, such as Spaghetti, to ensure the safety of your printer.

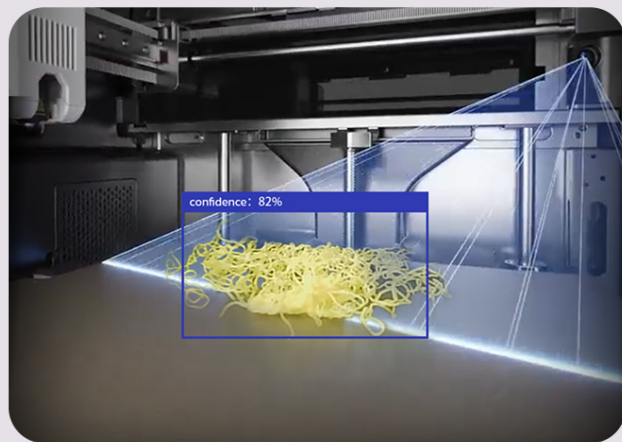


Image Description: A visual demonstrating the AI camera's capability to detect printing malfunctions, specifically 'print spaghetti', ensuring the safety and integrity of your print.

- **AI Camera Monitoring:** Detects printing malfunctions, such as 'spaghetti' errors, to ensure print safety.
- **Filament Detection:** Features filament run-out and tangle detection (with QIDI BOX).
- **Power-Loss Recovery:** Ensures prints can resume after an unexpected power interruption.
- **Remote Slicing/Printing:** Control and monitor your printer via QIDI Studio or the QIDI Mobile Application.

Video Description: This video provides an overview of the QIDI Q2 3D Printer's features, including its CoreXY system, heated chamber, bi-metal nozzle, and the QIDI Box for multi-color printing and filament drying. It highlights the auto-leveling and AI camera for remote monitoring.

3. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your QIDI Q2 3D Printer.

3.1 Air Filtration System

The Q2 is equipped with a robust air filtration system for a safe and clean printing environment.

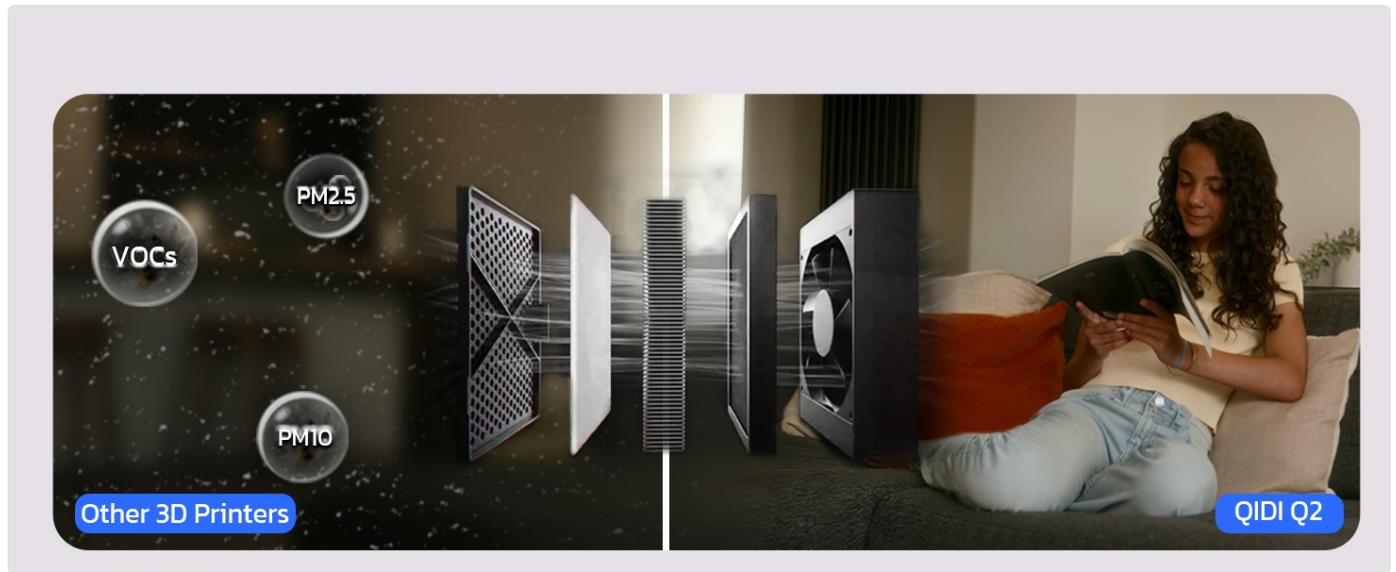


Image Description: A diagram showcasing the QIDI Q2's triple filtration system (G3 pre-filter + H12 HEPA + activated carbon) designed to effectively reduce odors and harmful particles, ensuring cleaner air during operation.

- **Triple Filtration:** Features a G3 pre-filter, H12 HEPA filter, and activated carbon to effectively reduce odors and harmful particles.
- **Filter Replacement:** Regularly check and replace filters as needed to maintain air quality.

3.2 Safety Features

The printer includes multiple safety features for worry-free operation.



Image Description: A visual highlighting the QIDI Q2's safety features, including multi-sensor closed-loop temperature control for continuous monitoring and a flame-retardant chamber for enhanced fire safety.

- **Closed-Loop Temperature Control:** Multiple sensors continuously monitor the printer to ensure safe operation.
- **Flame-Retardant Chamber:** Designed with flame-retardant materials for enhanced fire safety protection.

4. TROUBLESHOOTING

This section provides guidance for common issues you might encounter during operation.

- **Print Failures (Spaghetti Detection):** The integrated AI camera can detect common print failures like 'spaghetti' and alert you, allowing for timely intervention.

- **First Layer Issues:** The Q2's automatic leveling system significantly reduces first-layer issues. Ensure the build plate is clean and free of debris.
- **Filament Run-Out/Tangle:** The printer's detection system will pause the print if filament runs out or becomes tangled (QIDI BOX required for tangle detection), allowing you to replace or untangle the filament and resume printing.
- **Warping:** Utilize the 65°C heated chamber to minimize warping, especially when printing with materials prone to shrinkage.

5. SPECIFICATIONS

Detailed technical specifications for the QIDI Q2 3D Printer.

Printer Dimensions	402*438*494 mm	Z Axis	Dual Independent Lead Screw Motors
Net Weight	18.1kg	Nozzle	Bimetal Nozzle
Print Head Temperature	≤ 370°C	Camera	1080P,Timeapse,AI Detection
Hot Bed Temperature	≤ 120°C	Supported Filament	PLA, ABS, ASA, PETG, TPU, PA, PC, Carbon/ Glass Fiber Reinforced Polymer,etc.
Travel Speed and Acceleration	600mm/s and ≤20000mm/s^2	Automatic Leveling	Yes
Printing Accuracy	±0.1mm/100mm	Power Loss Recovery	Yes
Chamber Temperature	2nd Gen Up to 65°C	Input Shaping	Yes
Multi-Color Printing	Compatible with QIDI Box	Connectivity	2.4 GHz Wi-Fi, Ethernet, USB
Extruder Gear	Direct Extruder Hardened Steel Gears	Filament Detection	Run Out Sensor Tangle Detection (QIDI BOX required)
File Formats for Slicing	STL, OBJ, 3MF,STEP,STP	Slicer	QIDI Studio,Orca,Prusa Slicer etc.

**QIDI Q2
Parameter**



Image Description: A comprehensive table outlining the QIDI Q2's machine parameters, including printer dimensions, net weight, print head temperature, hot bed temperature, travel speed, build volume, chamber temperature, multi-color printing, extruder gear, file formats, Z-axis, nozzle type, camera, supported filament, automatic leveling, power loss recovery, input shaping, connectivity, filament detection, and slicer software.

Feature	Specification
Product Dimensions	15.83 x 17.24 x 19.45 inches (402 x 438 x 494 mm)
Item Weight	39.8 pounds (18.1 Kilograms)
Build Volume (W*D*H)	270 x 270 x 256 mm³
Print Head Temperature	≤ 370°C
Hot Bed Temperature	≤ 120°C
Chamber Temperature	2nd Gen Up to 65°C
Travel Speed and Acceleration	600mm/s and 20000mm/s²
Printing Accuracy	±0.1mm/100mm
Nozzle	Bimetal Nozzle
Supported Filament	PLA, ABS, ASA, PETG, TPU, PA, PC, Carbon/Glass Fiber Reinforced Polymer, etc.

Feature	Specification
Automatic Leveling	Yes
AI Camera	1080P, Timelapse, AI Detection
Connectivity	2.4 GHz Wi-Fi, Ethernet, USB
Filament Detection	Run Out Sensor, Tangle Detection (QIDI BOX required)
Slicer	QIDI Studio, Orca, Prusa Slicer, etc.

6. WARRANTY AND SUPPORT

R QIDI TECHNOLOGY is committed to providing excellent customer service and support.

- **Lifetime Technical Support:** Enjoy responsive customer service and lifetime technical support for your QIDI Q2 3D Printer.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

