

BIQU HURAKAN

BIQU HURAKAN 3D Printer User Manual

Model: HURAKAN

1. INTRODUCTION AND SAFETY GUIDELINES

Thank you for choosing the BIQU HURAKAN 3D Printer. This manual provides essential information for the safe and efficient operation of your device. Please read it thoroughly before use and keep it for future reference.

1.1 General Safety Warnings

- Always operate the printer in a well-ventilated area.
- Keep the printer away from flammable materials, heat sources, and water.
- Do not touch the nozzle or heated bed during operation, as they reach high temperatures.
- Ensure the power supply is correctly rated for your region and properly grounded.
- Keep children and pets away from the printer during operation.
- Do not attempt to modify the printer or use non-approved parts, as this may void your warranty and pose safety risks.
- Unplug the printer before performing any maintenance or cleaning.

2. SETUP AND ASSEMBLY

The BIQU HURAKAN 3D Printer is designed for straightforward assembly. Follow these general steps to get your printer ready for its first print.

2.1 Unboxing and Inspection

Carefully remove all components from the packaging. Inspect for any damage that may have occurred during shipping. Refer to the packing list to ensure all parts are present.



Image 2.1: The packing list for the BIQU HURAKAN 3D Printer, showing included components such as the BTT Duck, nozzle, screw accessories, cable ties, tools, Bowden tube connector, TF card with card reader, power cord, and 50g test filament.

2.2 Printer Assembly

The BIQU HURAKAN comes partially pre-assembled. Follow the detailed assembly instructions provided in the separate assembly guide or video tutorial. Key steps typically include:

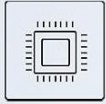
- Attaching the gantry to the base.
- Connecting the extruder assembly.
- Securing all cables.
- Installing the filament holder.

2.3 Initial Power On and Klipper Firmware

Connect the power cord and turn on the printer. The BIQU HURAKAN comes with Klipper firmware pre-installed on the BigTreeTech Manta Mainboard (M4P) and CB1/CM4. This advanced firmware offers enhanced speed, precision, and a web interface for management.

Klipper is Ready

Klipper, a huge leap in 3D printer firmware, has been pre-installed on Hurakan. So you don't have to deal with complicated installation procedures but enjoy speed, precision, and convenience.



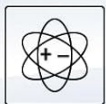
Support Multiple
Micro-Controllers



Manage Your Printer
via the Web Interface



Support Remote Monitoring
via WiFi and a USB Camera



Additional Computing
Power & Built-in Algorithms

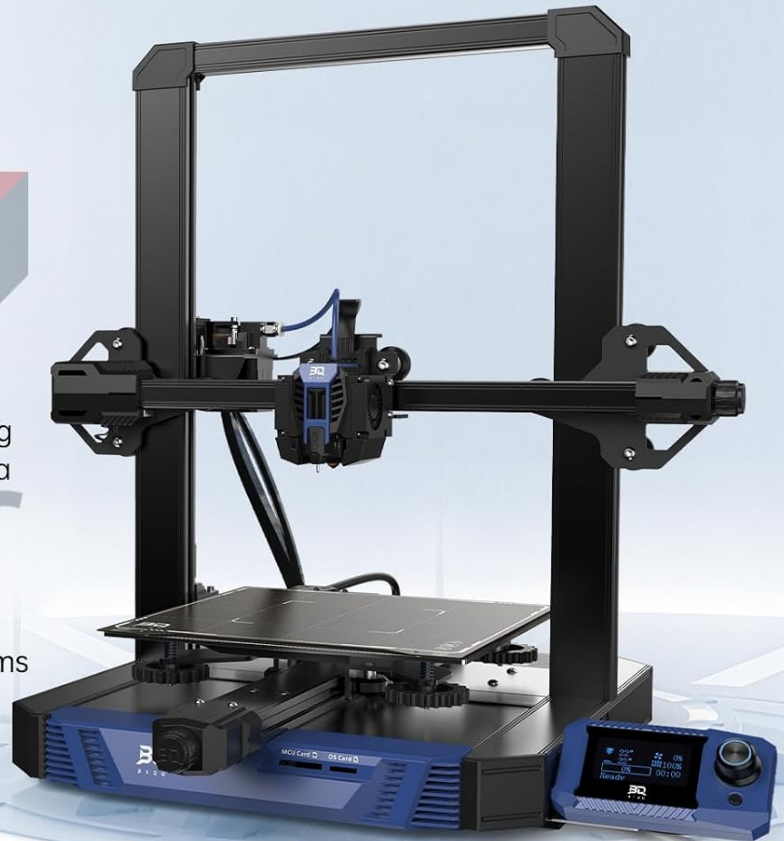


Image 2.2: The BIQU HURAKAN 3D Printer highlighting its pre-installed Klipper firmware, which supports multiple micro-controllers, web interface management, remote monitoring via WiFi and USB camera, and additional computing power with built-in algorithms.

2.4 BIQU MicroProbe Auto Leveling

The printer features a BIQU MicroProbe for automatic bed leveling. This lightweight, high-precision sensor simplifies the leveling process, ensuring optimal first layer adhesion.

BIQU MicroProbe

The self-developed auto leveling sensor, mini-sized, 6g super lightweight, will add almost no weight to the extruder but offers high precision leveling capability.



6g

Super Lightweight



10,000,000+

Longer Lifespan



Durable

Metal Probe

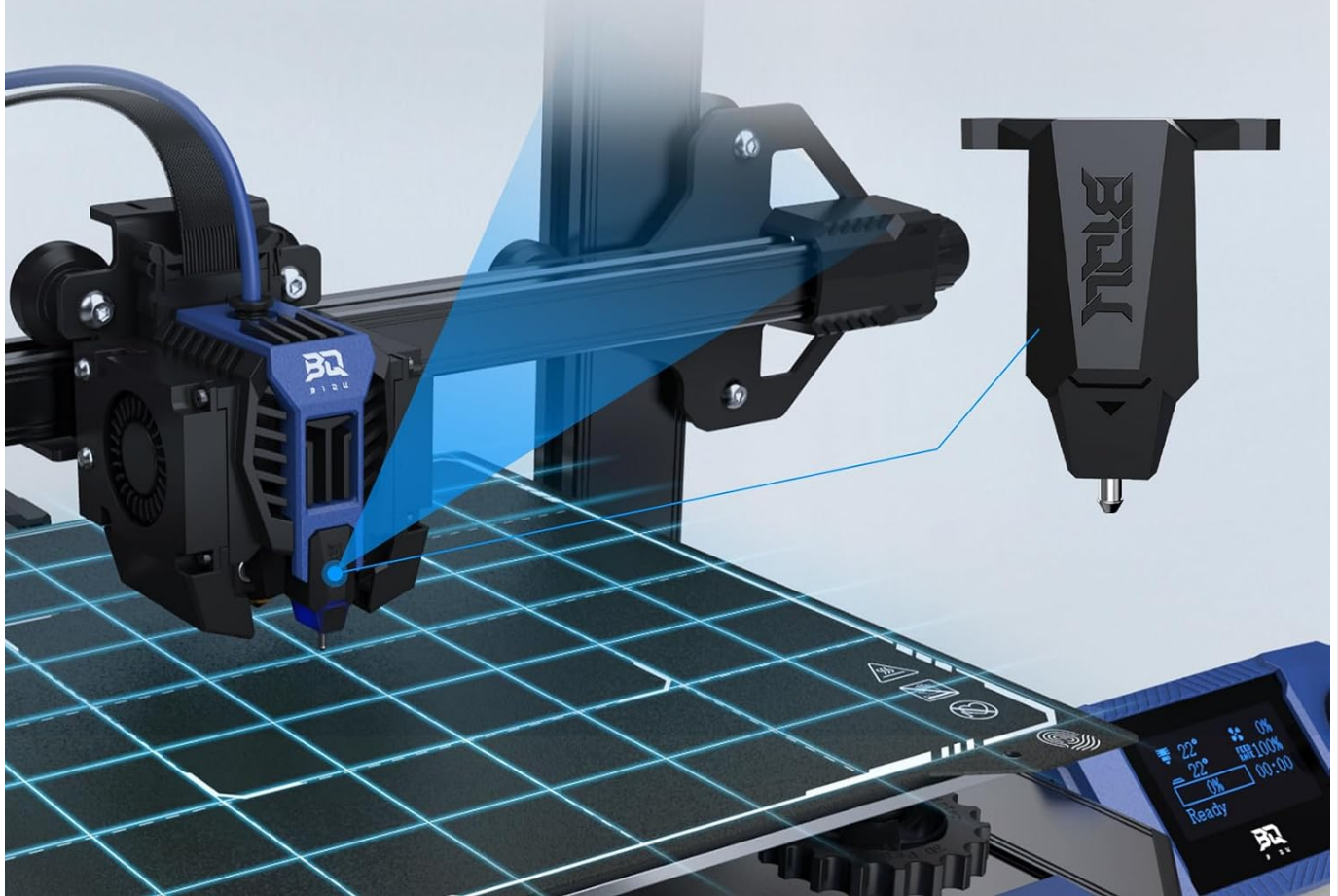


Image 2.3: A close-up view of the BIQU MicroProbe auto-leveling sensor on the extruder, demonstrating its compact size and how it interacts with the print bed for precise leveling. The image also highlights its 6g super lightweight design, 10,000,000+ longer lifespan, and durable metal probe construction.

2.5 WiFi Module Setup

The integrated WiFi module allows for wireless printing and remote monitoring. Refer to the Klipper documentation for detailed instructions on connecting your printer to your local network and accessing the web interface.

3. OPERATING INSTRUCTIONS

This section covers the basic steps for operating your BIQU HURAKAN 3D Printer.

3.1 Loading Filament

1. Place the filament spool onto the filament holder.
2. Feed the filament through the filament runout sensor.

3. Press the extruder lever and insert the filament into the hotend until it reaches the nozzle.
4. Preheat the nozzle to the appropriate temperature for your filament type.
5. Extrude a small amount of filament to ensure it flows smoothly.

3.2 Starting a Print

Prepare your 3D model using a slicing software (e.g., Cura, PrusaSlicer) and save it as a G-code file. Transfer the G-code file to the printer via the TF card or through the Klipper web interface (if configured).

- Select the desired G-code file from the printer's interface or the Klipper web interface.
- Initiate the print. The printer will automatically perform bed leveling before starting.

3.3 Filament Runout Sensor

The BIQU HURAKAN is equipped with a filament runout sensor. If the filament runs out or breaks during a print, the printer will automatically pause and alert you to add more filament, preventing failed prints and material waste.

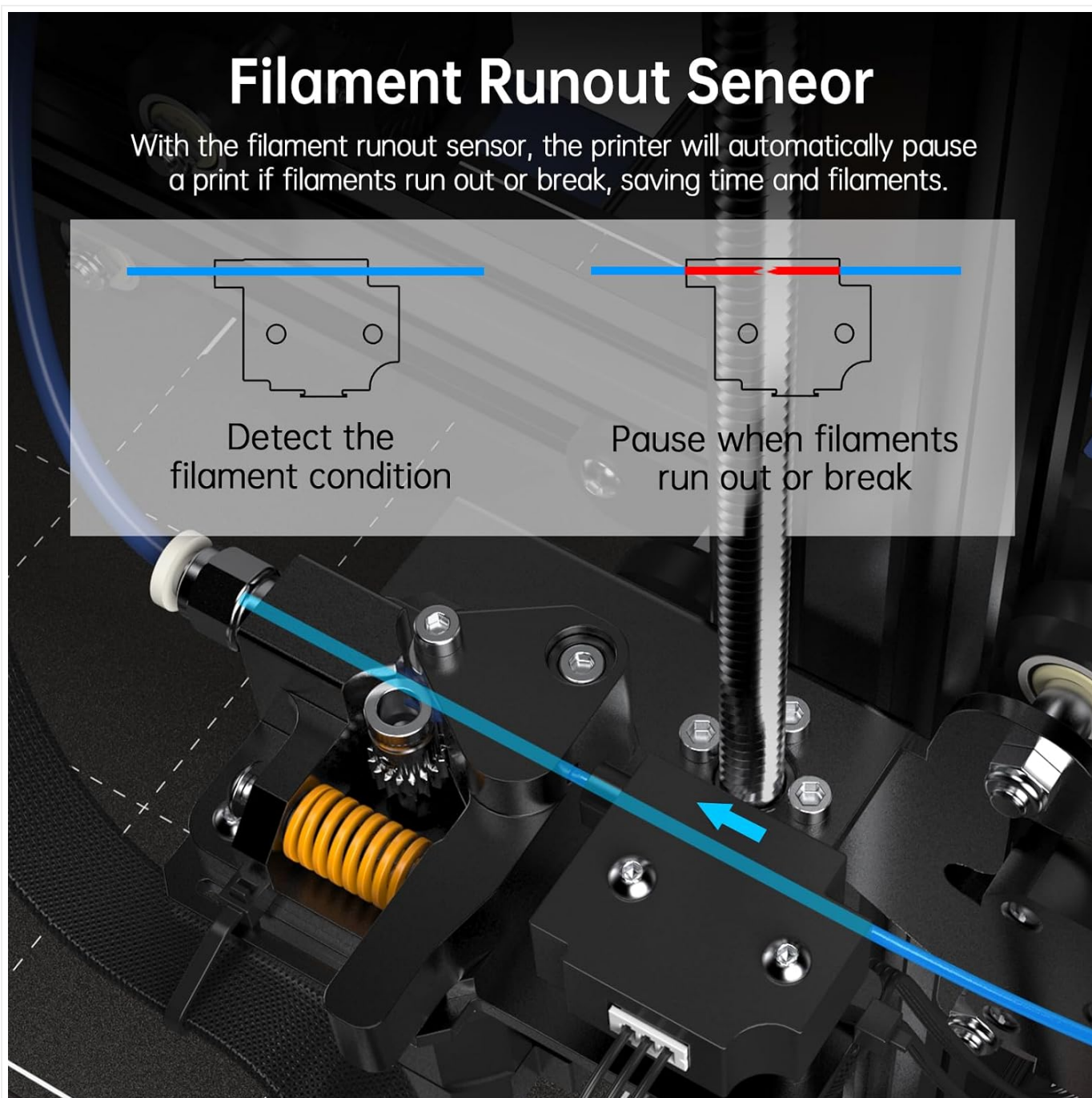


Image 3.1: Diagram illustrating the function of the filament runout sensor. It shows how the sensor detects the filament condition and automatically pauses the print when the filament runs out or breaks, indicated by a change from blue to red in the filament path.

3.4 Heated Bed Zones

The heated bed allows you to choose specific heating zones to save energy. You can select to heat only the central part of the bed (100W for smaller prints) or the entire bed (240W for larger prints).



Image 3.2: An illustration of the BIQU HURAKAN's heated bed, showing the option to heat either the central 100W area for smaller prints or the full 240W area for larger prints, promoting energy efficiency.

3.5 RGB Lighting

The extruder is equipped with customizable RGB lights to illuminate your print bed. The screen and control knob also feature RGB lighting, offering 16.8 million color adjustments for aesthetic customization.

Light up Your Prints

A beautifully designed, fully customizable RGB light illuminates, RGB 16.8 million color adjustment is available on the print head, screen and control knob to add aesthetics to the printer.

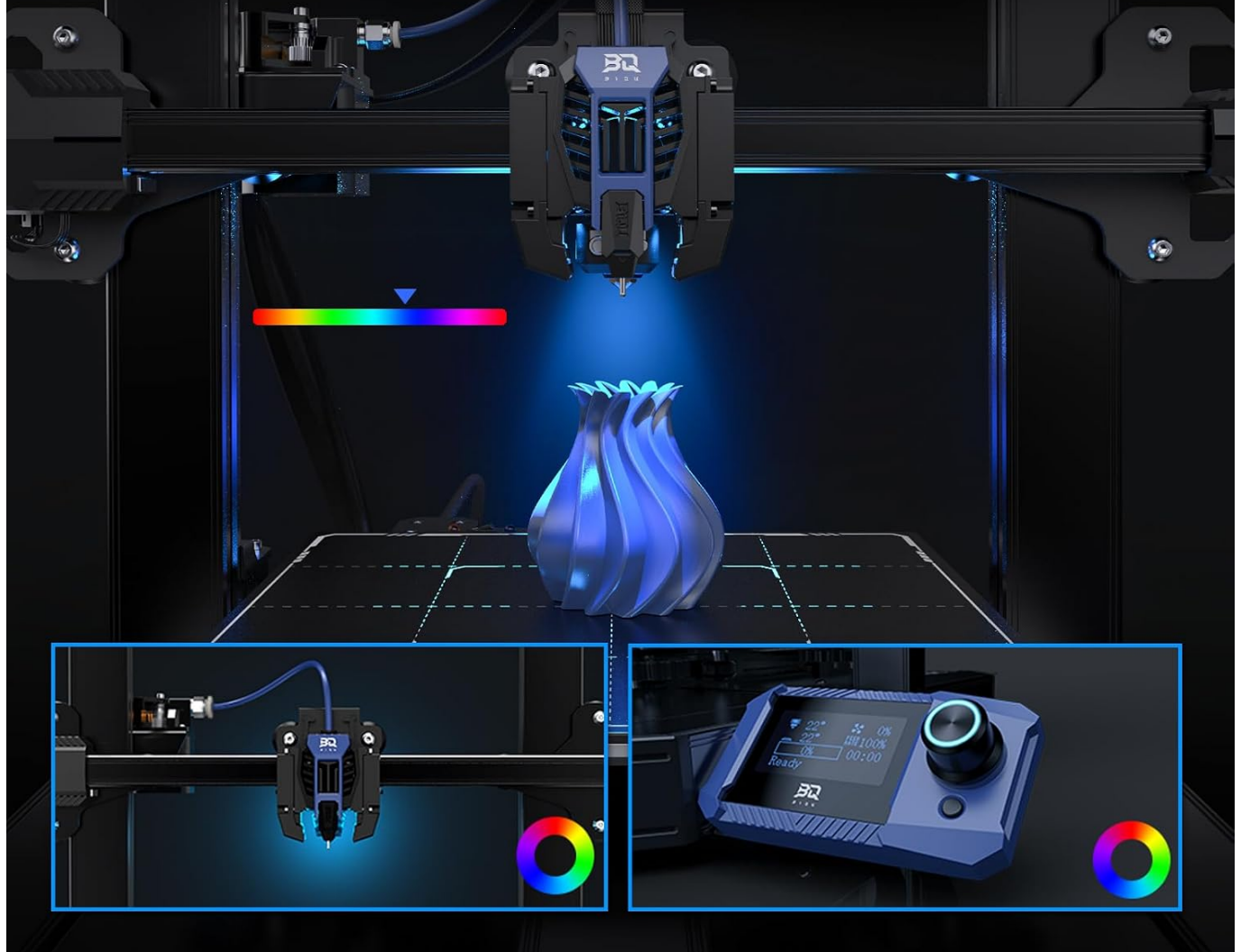


Image 3.3: The BIQU HURAKAN 3D Printer with its RGB lighting illuminating a print. The image shows the customizable RGB lights on the print head, screen, and control knob, enhancing the visual appeal during operation.

3.6 Continuing a Print

The printer supports a resume print function. In case of a power outage or accidental interruption, the BIQU HURAKAN can resume printing from the last recorded extruder position, saving time and reducing material waste.

4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your 3D printer.

4.1 Cleaning

- **Print Bed:** Clean the print bed with isopropyl alcohol before each print to ensure good adhesion.
- **Nozzle:** Periodically clean any filament residue from the nozzle using a brass brush or needle.
- **Printer Frame:** Wipe down the printer frame and rails with a soft, dry cloth to remove dust and debris.

4.2 Lubrication

Apply a small amount of lithium grease or similar lubricant to the Z-axis lead screws and smooth rods every few months, or as needed, to ensure smooth movement.

4.3 Nozzle Replacement

If print quality degrades or the nozzle becomes clogged beyond cleaning, it may need replacement. Ensure the hotend is heated to operating temperature before carefully unscrewing the old nozzle and screwing in a new one. Always use appropriate tools and exercise caution to avoid burns.

5. TROUBLESHOOTING

This section addresses common issues you might encounter with your BIQU HURAKAN 3D Printer.

5.1 Print Not Sticking to Bed

- **Bed Leveling:** Re-run the auto-leveling procedure using the BIQU MicroProbe.
- **Bed Cleanliness:** Ensure the print bed is clean and free of grease or dust. Use isopropyl alcohol.
- **Bed Temperature:** Verify the bed temperature is appropriate for your filament type.
- **First Layer Settings:** Adjust first layer height, speed, and extrusion multiplier in your slicer.

5.2 Filament Not Extruding

- **Clogged Nozzle:** Attempt to clear the nozzle using a cleaning needle or perform a cold pull. If unsuccessful, replace the nozzle.
- **Filament Path:** Check for any kinks or obstructions in the filament path from the spool to the hotend.
- **Extruder Gear:** Ensure the extruder gear is clean and gripping the filament properly.
- **Hotend Temperature:** Confirm the hotend is reaching the correct temperature for the filament.

5.3 Poor Print Quality

- **Loose Belts:** Check and tighten all belts (X, Y, Z axes) if they appear loose.
- **Vibrations:** Ensure the printer is on a stable surface to minimize vibrations.
- **Slicer Settings:** Review your slicing settings for appropriate print speed, layer height, and retraction.
- **Filament Quality:** Use high-quality filament and ensure it is stored in a dry environment.

5.4 Excessive Noise

The BIQU HURAKAN features TMC2209 motor drivers for silent printing (below 60 dB). If you experience unusual noise:

- **Loose Components:** Check for any loose screws or parts that might be vibrating.
- **Fan Noise:** Inspect cooling fans for obstructions or wear.
- **Movement System:** Lubricate lead screws and rods if they are dry or gritty.

For more advanced troubleshooting, refer to the official BIQU support resources or online Klipper communities.

6. SPECIFICATIONS

Below are the technical specifications for the BIQU HURAKAN 3D Printer.

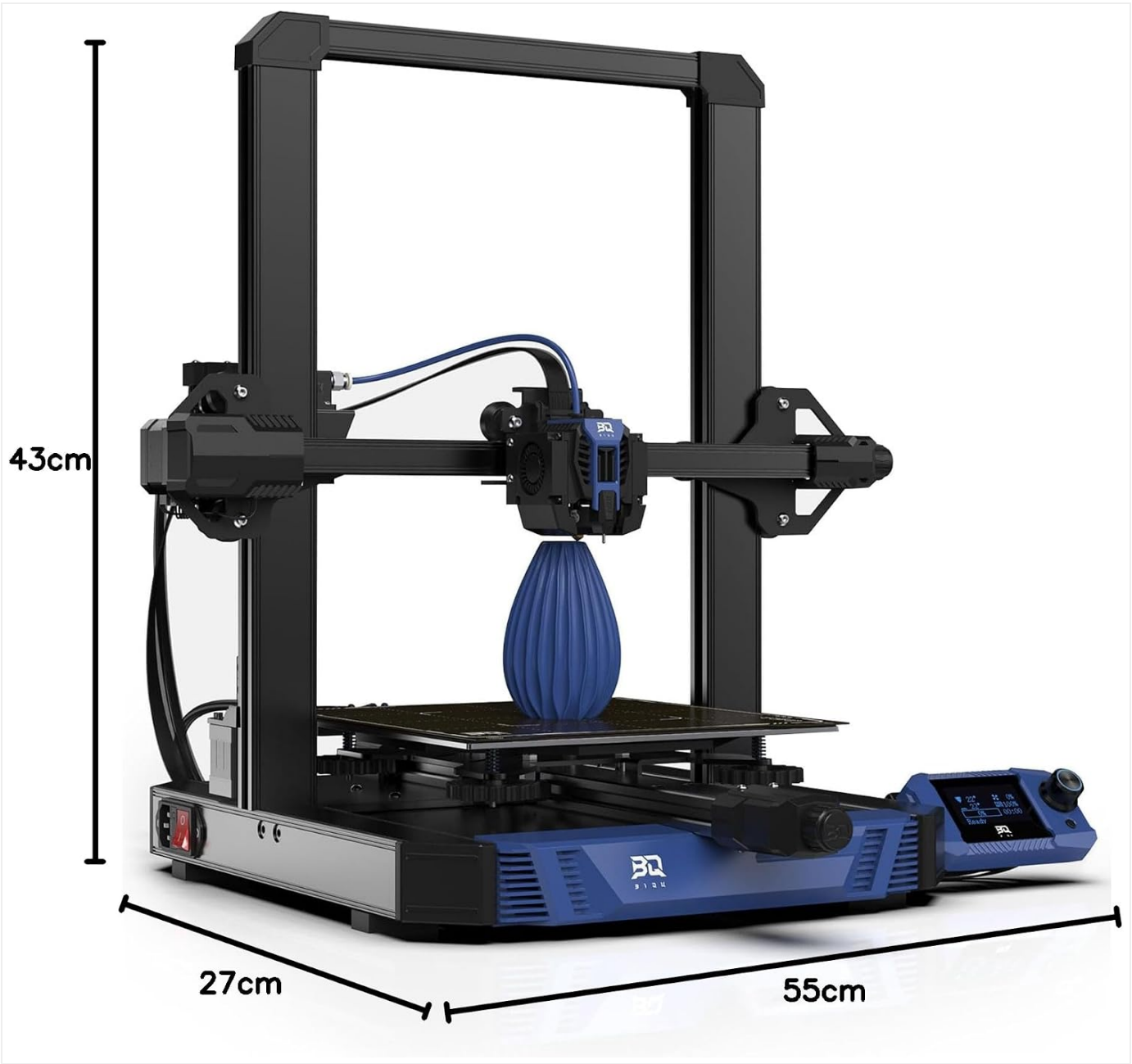


Image 6.1: The BIQU HURAKAN 3D Printer with its overall dimensions labeled: 55cm (length), 27cm (width), and 43cm (height).

Feature	Specification
Brand	BIQU
Model	HURAKAN
Build Volume	220 x 220 x 270 mm
Printing Technology	FDM (Fused Deposition Modeling)
Firmware	Klipper (pre-installed)
Mainboard	BigTreeTech Manta M4P + CB1/CM4
Motor Drivers	TMC2209 (Silent Printing)
Auto Leveling	BIQU MicroProbe

Feature	Specification
Connectivity	USB, WiFi
Filament Sensor	Yes (Runout Detection)
Resume Print Function	Yes
Heated Bed	Yes (Selectable 100W/240W zones)
Compatible Filaments	PLA, PLA+, PETG, TPU, TPE, ABS, Nylon
Operating System Compatibility	Windows, macOS, Linux
Product Dimensions	55D x 27B x 43H cm
Material	Aluminum

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official BIQU website or contact your retailer. Keep your purchase receipt as proof of purchase for warranty claims.

Online resources and community forums for Klipper firmware and BIQU printers can also provide valuable assistance and tips for optimizing your printing experience.

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