USER MANUAL

BIQU

BIQU-BX
USER MANUAL

User Manual

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Shenzhen Bigtree Technology Co.,Ltd

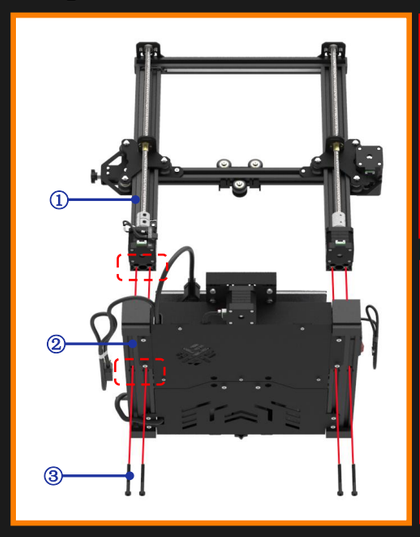
Packing List

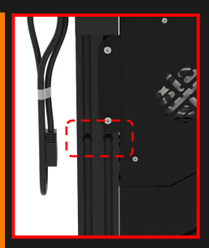
Base （1 pcs）	Frame （1 pcs）	Print head （1 pcs）
Screen&Adapter board （1 pcs）	Spool Holder （1 pcs）	Tools & Hardware （1set）
Data bag （1set）	PLA Filament （1 pcs）	Duck （1 pcs）
Micro USB data cable （2 pcs）	Nozzle （1 pcs）	Power cable （1 pcs）

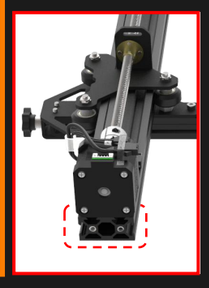
The Basic Parameters

Printer Name	**BIQU BX**
Printing Size	**250x250x250mm**
Molding Tech	**FDM**
Nozzle Quantity	**1 PCS**
Layer Thickness	**0.1 mm - 0.3 mm**
Nozzle Diameter	**0.4mm**
Printing Accuracy	**±0.1mm**
Filament	**PLA, PETG, TPU, TPE, ABS, Nylon**
Slicing Format	**STL, OBJ, AMF**
Connecting Method	**Via data cable, TF card, USB**
Slicing Compatible	**With Cura/ Repetier-Host/ Simplify 3D**
Rated Voltage	**100-120V/200-240V 60/50 HZ**
Output Voltage	**24V**
Rated Power	**350W**
Max Temp of Hot Bed	**100°C**
Max Temp of Nozzle	**260°C**
OS compatible	**Win 7/Win 10**
Max Printing Speed	**100mm/s**
Normal Printing Speed	**60mm/s**
Language Transform	**Supported**
Auto-bed leveling	**Supported**
Resume Printing	**with interface**
Filament Run Out Detection	**with interface**
Automatic Shutdown After Printing	**with interface**

Step 1 Assemble the Frame



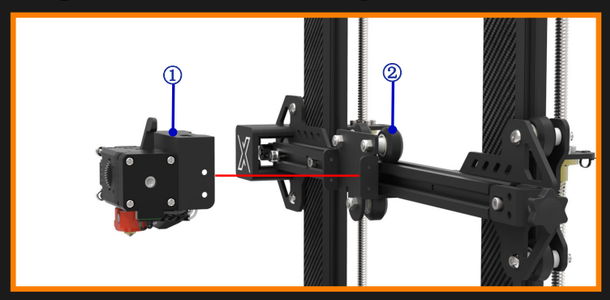


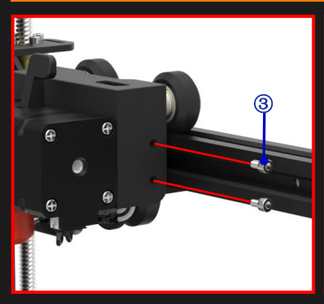


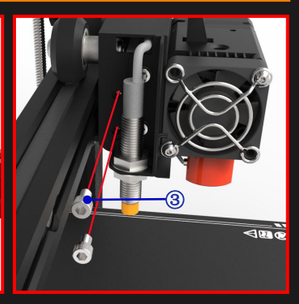
① Frame（1pcs）
② Base（1pcs）
③ M5×45 socket head cup screw（4pcs）

Align the 4 holes in the base and 4 holes in the upper frame, with stepper motors facing the back of the base. Attach the base and frame together with the four M5×45 socket head cup screws using the included allen wrench.

Step 2 Install the Printing Head



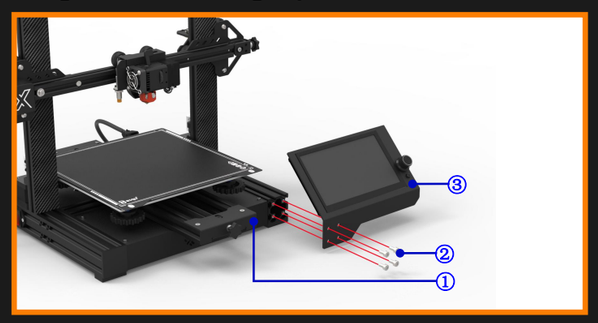




① Print head（1pcs）
② X-axis gantry（1pcs）
③ M3×5 socket head cup screw（4pcs）

Attach the print head on X-axis gantry with the four M3×5 socket head cup screws.

Step 3 Install Display

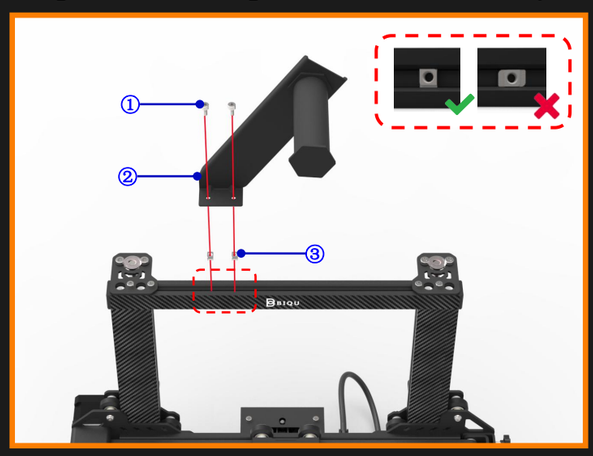


① Base（1pcs）
② M5×6 socket head cup screw（4pcs）
③ Screen（1pcs）

Align the 4 holes in the base with the 4 holes in the screen mount. Attach the display on the base with four M5×6 socket head cup screws.

Step 4-1 Install Spool Holder to Bracket

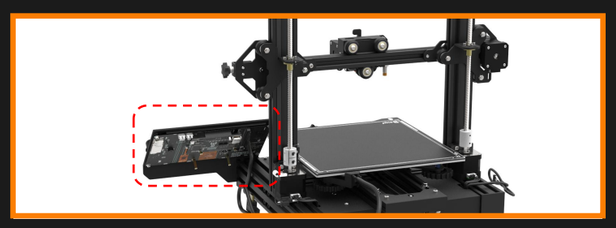
Step 4-2 Install Spool Holder Assembly

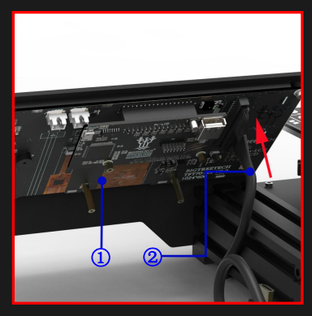


① Bracket（1pcs）
② M4×8 socket head cup screw（2pcs）
③ M4 boat-shape nuts（2pcs）

Attach the spool holder bracket to the top of the Z-axis cross bar using two M4×8 socket head cup screws and two M4 T-nuts. The T-nut will rotate during installation locking the filament bracket into place.

Step 5-1 Connect Display Cable





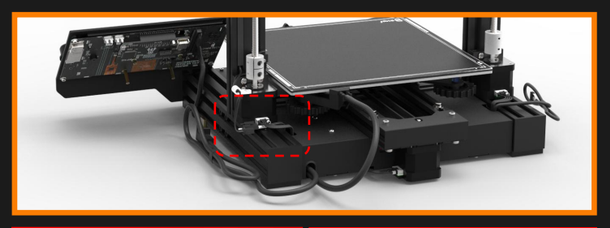
① Screen（1pcs）
② Screen wire（1pcs）
③ Positioning slot（1pcs）
④ White mark（1pcs）

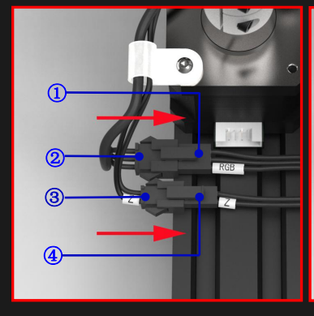
Insert the cable into the rear of the display.

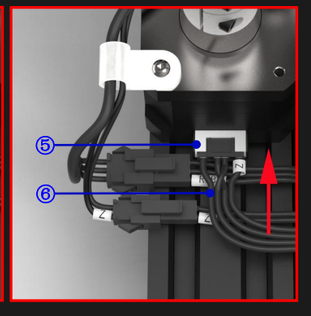
Note:

- The white mark at the plug of the screen terminal line faces the positioning slot of the screen socket.

Step 5-2 Connect Additional Wiring



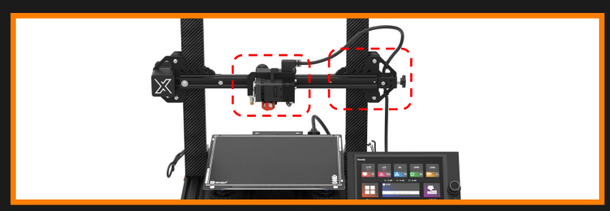


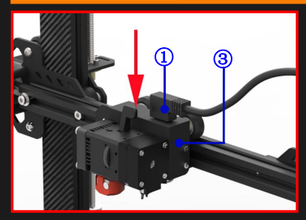


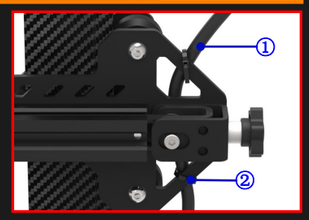
① RGB Socket（1pcs）
② RGB Wire（1pcs）
③ Z-axis limit switch wire（1pcs）
④ Z-axis limit switch socket（1pcs）
⑤ Z-axis motor socket（1pcs）
⑥ Z-axis motor wire（1pcs）

Connect the RGB(LED), Z-axis limit switch, and Z-axis motor cables to their labeled sockets as shown above.

Step 5-3 Connect Print Head Cable







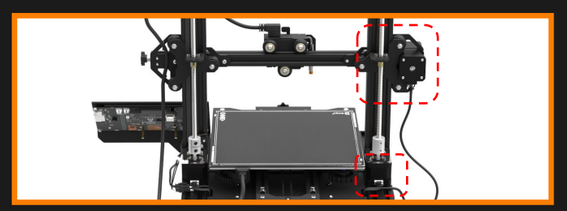
① Customized HDMI cable（1pcs）
② Cable tie（2pcs）
③ Print head（1pcs）

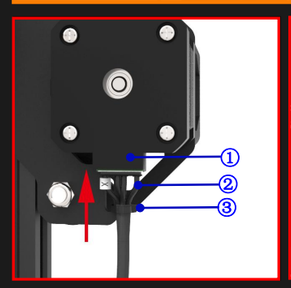
Connect the HDMI cable to the top of the print head and affix to the rear of the Z-axis as shown with included zip-tie. Be sure to allow enough slack for full X-axis movement.

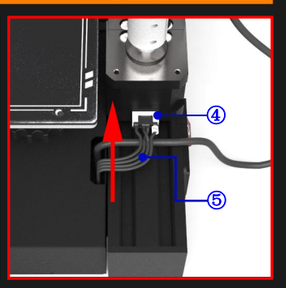
Note:

- Users should reserve an appropriate length HDMI cable when fixing it so that the nozzle can move freely.
- The specification of HDMI cable is specific. Please refer to HDMI Cable Specification.pdf in Github.

Step 5-4 Connect Stepper Motor Cables



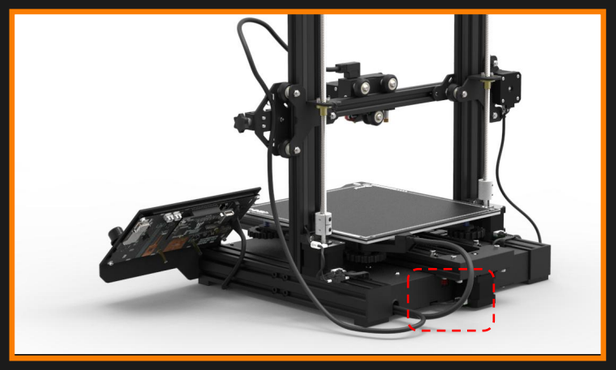


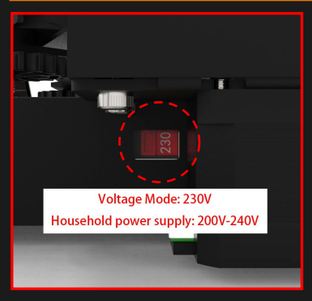


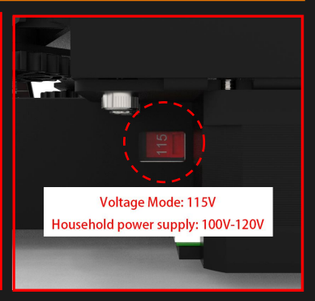
① X-axis motor socket（1pcs）
② X-axis motor wire（1pcs）
③ Cable tie（1pcs）
④ Z-axis motor socket（1pcs）
⑤ Z-axis motor wire（1pcs）

Connect the X-axis and Z-axis cables to their correct stepper motor as shown above. Secure the X-axis cable on to the mount as shown.

Step 6 Verify Correct Power Mode

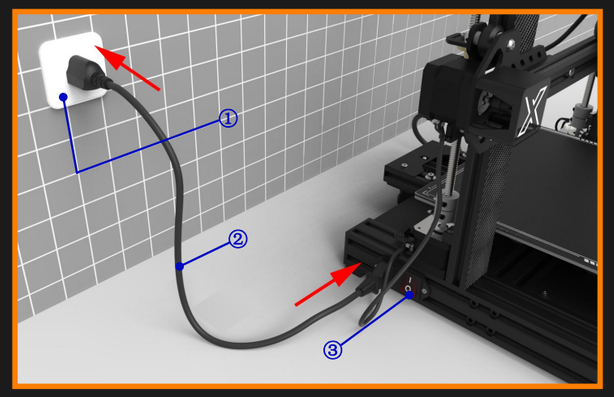






Before powering on printer, check whether the voltage mode matches your household power supply by viewing the voltage switch on the back of the printer.

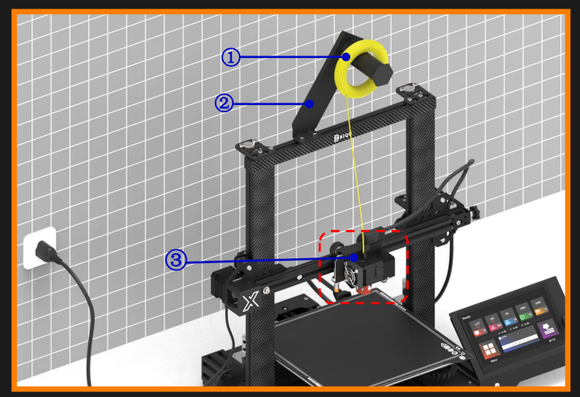
Step 7 Connect Power Cable

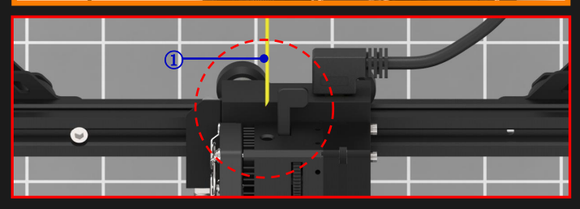


① Household Power Socket（1pcs）
② Power Cable（1pcs）
③ Power Switch（1pcs）

Connect the power cable to the printer, then plug into outlet. You can then turn on the printer using the power switch.

Step 8-1 Prepare Filament

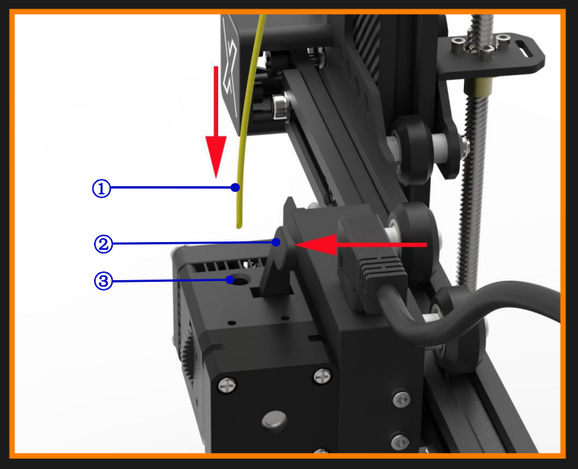




① Filament（1pcs）
② Bracket（1pcs）
③ Direct Drive Extruder（1pcs）

Place the filament on to the spool holder and pull the filament to the top of the extruder/printing head. It is recommended to cut an angle on the end of the filament to make feeding into the printing head easier.

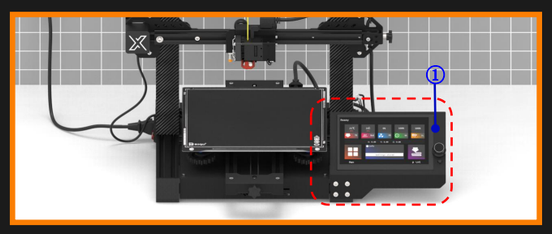
Step 8-2 Insert Filament to Print Head



① Filament（1pcs）
② Handle（1pcs）
③ Feed Port（1pcs）

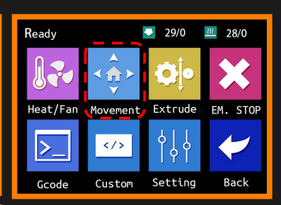
Pull and hold the extruder handle to the front to relieve pressure on the extruder and feed the filament into the top of the printing head as shown.

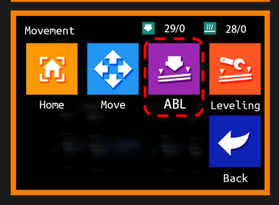
Step 9-1 Auto Bed Leveling (ABL)

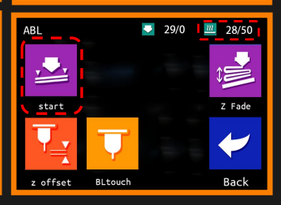


Run through the Auto Bed Leveling (ABL) process as shown below before starting your first print.

① Screen（1pcs）

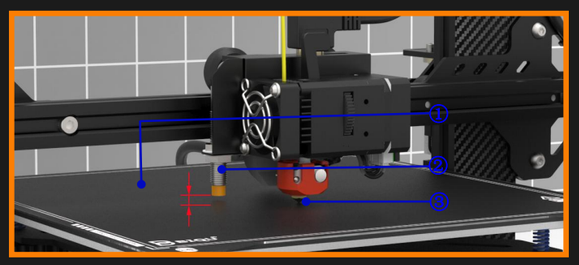






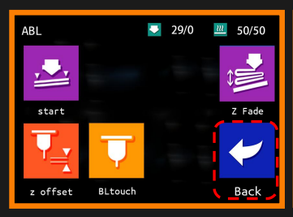
Click ”Menu”→”Movement”→”ABL”→”Start” The printer will start to preheat the hotbed, and then will prepare for auto bed levelling.

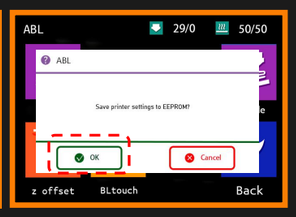
Step 9-2 Adjust Z-Offset



① BIQU SSS（1pcs）
② Proximity Sensor（1pcs）
③ Nozzle（1pcs）

Once the heated bed reaches 50 ℃ the nozzle will automatically approach the BIQU SSS. Verify the distance of the ABL sensor and adjust sensor and Z-offset as needed.



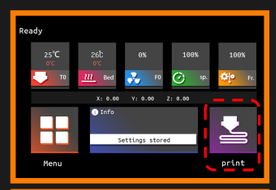


Once completed click “Back”→”OK” to save to the printer settings.

Step 10 Start Printing

① Slot（1pcs）
② SD Card（1pcs）

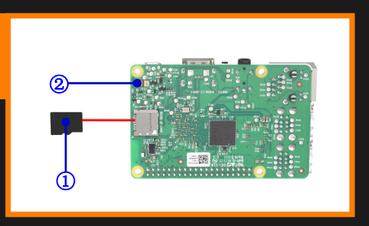
Insert the SD Card into the slot.



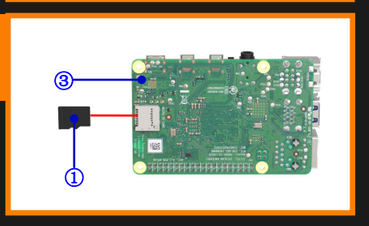
Click “print”→“TFT SD” to choose the model you want to print. The BIQU BX starts preheating based on the file parameters and will start printing when the proper temperatures are reached.

Step 11-1 Prepare Raspberry Pi

Raspberry Pi 3
SD Card



Raspberry Pi 4
SD Card

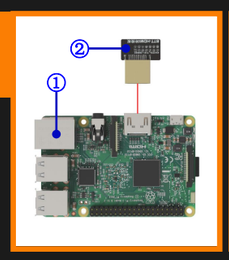


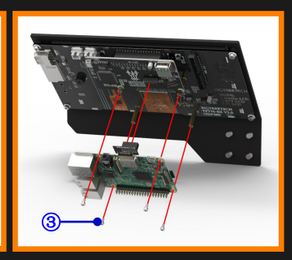
① TF memory card（1pcs）
② Raspberry Pi 3（1pcs）
③ Raspberry Pi 4（1pcs）

The BIQU BX has built-in compatibility with Raspberry Pi 3 or Raspberry Pi 4 devices allowing for the Raspberry Pi operating mode.
For more information, please visit:
“https://github.com/bigtreetech/OctoBTT”
for download and directions.

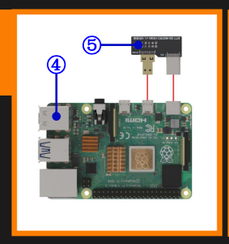
Step 11-2 Attach Raspberry Pi

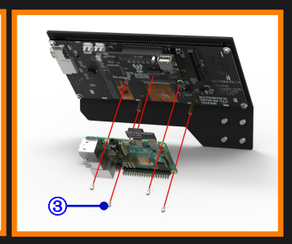
Raspberry Pi 3
Adapter





Raspberry Pi 4
Adapter



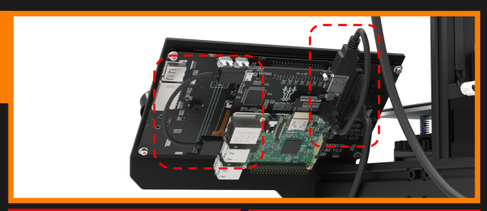


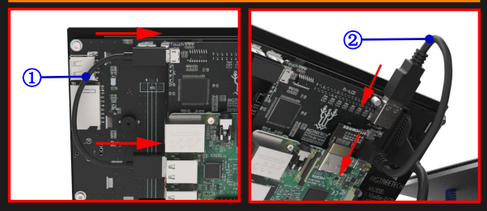
① Raspberry Pi 3（1pcs）
② BTT HDMI Adapter Plate（1pcs）
③ M2.5×4 Hexagon socket cup head screw（4pcs）
④ Raspberry Pi 4（1pcs）
⑤ BTT BX-MICRO HDMI Adapter Plate（1pcs）

Connect the Raspberry Pi with the screen adapter board using included BTT adapter plate, and then fix the Raspberry Pi on the screen with screws as shown.

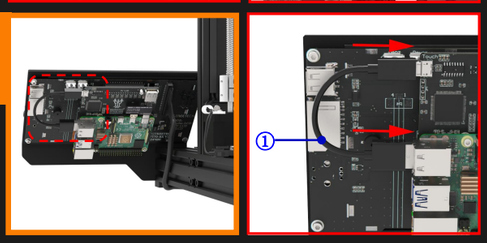
Step 11-3 Connect to Raspberry Pi

Raspberry Pi 3
Connection





Raspberry Pi 4
Connection



① Micro USB data cable（1pcs）
② L type Micro USB data cable （1pcs）

Connect Raspberry Pi and screen adapter board with Micro USB data cable as shown.

Step 11-4 Enter Raspberry Pi Mode

① Knob（1pcs）

Long press the knob on the screen, three operating systems appear on the screen, select Raspberry Pi system. BIQU-BX will enter Raspberry Pi operating system mode.

Note:

- Ensure your router is within 5m of the Raspberry Pi when connecting to the wireless network.

Cautions!

1. To prevent high temperature burns，do not touch the nozzle and the hot bed when the printer is working.
2. To prevent high temperature burns，do not touch the spring steel plate when the printer is working.
3. Do not place the printer in a vibrating environment that will affect the quality of printing model.
4. To avoid getting your hands pinched by the machine, do not put your hand into the machine when the printer is in motion.
5. Do not use the machine for more than one hundred hours for a long time, in case of damage caused by excessive hot parts.
6. For safety reasons, minors should be guided by adults when using this machine.
7. Do not place the printer near flammable materials, please place it in a ventilated, dust-free and cool place.
8. Please follow the instructions in the user manual to use the product. Unauthorized disassembly or modification is at the customer's own risk.