FLSUN-QQ

Instruction Manual

(QQ-S)

**VK-3D
принтер Flsun**

**Facebook-Flsun
3D Printer**

Pre–Face

Dear Customer：

    Thank you for choosing the FLSUN 3D Printer.For your convenience, please read this manual carefully before using and follow the instructions.

    Our team always be ready to provide you with quality service. In the process of installation and use, no matter what kind of problems you encounter, you can contact us according to the contact information provided at the end of the manual.

    You can find detailed instructions , videos, and FAQs in the SD card.
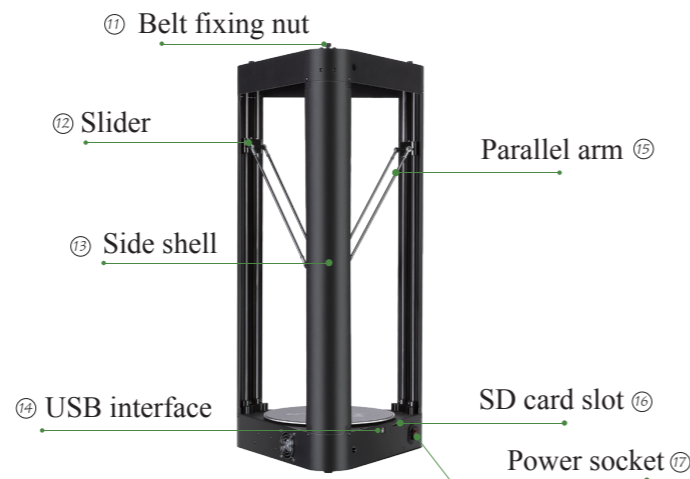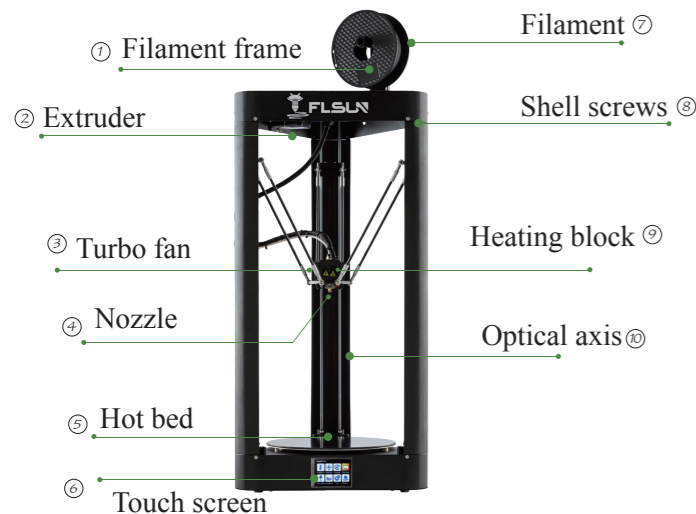
Contents

Basic part A

Use part B

① Filament frame
② Extruder
③ Turbo fan
④ Nozzle
⑤ Hot bed
⑥ Touch screen

Filament ⑦
Shell screews ⑧
Heating block ⑨
Optical axis ⑩

⑪ Belt fixing nut
⑫ Slider
⑬ Side shell
⑭ USB interface

Parallel arm ⑮
SD card slot ⑯
Power socket ⑰

Printing parameters	Molding technology	FDM	Temperature parameter	ENV TEMP	5-40 ℃
	Print size	φ255×360mm		Nozzle TEMP	0-260 ℃
	Print accuracy	0.05-0.3mm		Hot bed TEMP	0-110 ℃
	Positional accuracy	XYZ 0.01mm	Software parameters	Slicing software	Cura
	Nozzle type	Single nozzle		Input format	STL/OBJ/AMF/3DS
	Nozzle diameter	0.4mm		Output format	Gcode
	Print speed	10-300mm/s		Connection type	SD card，USB
	Material support	1.75mm PLA/ABS/ NYLON/PVA/TPU/ PETG/WOOD	Power parameters	Input	110 / 220v
	Touch screen	3.2 inches		Output	24V

Cautions

Packing List

1. The printer default selection voltage is **220V**,if you need to use **110V**,please change it before using.

2. The assemble and user manual,software and other files are in the **SD card** with printer.

3. The nozzle part and heated bed can produce high temperature when the printer is working ,so **do not touch** them by hand to avoid being scalded.

4. Before the automatic leveling, prepare the leveling sensor and an A4 paper and clean the nozzle, insert the leveling line; **After the Autoleveling , remove the leveling sensor, then adjust Z0.**

5. In the event of an emergency, please turn off the power immediately and contact our technical support.

Bottom shell	Upper shell	Side shell	Optical axis

N0.	Photo	Name	Qty	N0.	Photo	Name	Qty	N0.	Photo	Name	Qty
1		Wrench	1	7		SD card	1	13		Spare Screws	1
2		Screwdriver	1	8		Temp Sensor	1	14		Assemble Screws	1
3		Limit switch	1	9		Nozzle	2	15		USB wire	1
4		Scissors	1	10		Clean Needle	1	16		Power cable	1
5		Shovel	1	11		Level sensor	1	17		Filament	1
6		Nozzle wrench	1	12		Conductive cloth	1	18		Gloves	1

B B-1
Use Part Assembly instructions

1.Preparation

Open package

All screws and wrenches for assembly
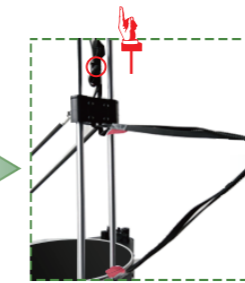
All the components for assembly

2.Install optical axis

Place the Bottom shell

Insert optical axis through slider to shaft seat bottom

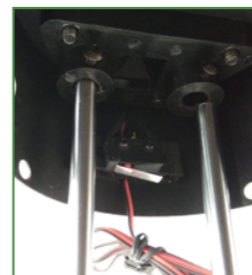Belt must be in the middle of two axis

Optical axis completed

3.Install top shell

Logo and touch screen are at the same direction

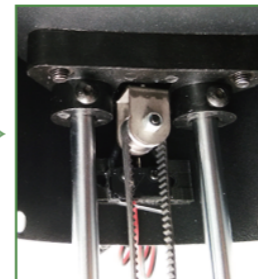Align all axis with seat holes then press to bottom

Upper shell completed

4.Assembly belt

Untie the belt and straighten it to make sure they are parallel.

Insert the metal pulley into the slot
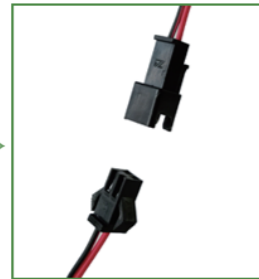
Make screw head and nut are at the same height

The same method installs other belts

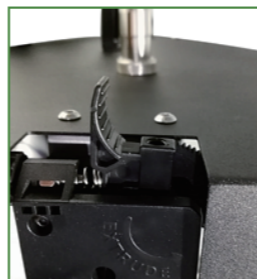## 5.Connection limit switch and Titan extruder

Untie the wire

Connect the set of connectors

Connect others in the same way

Install the Titan extruder
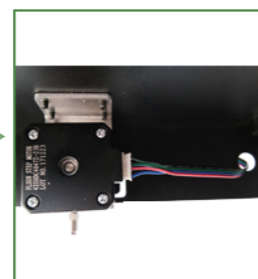
6.Connection bus section

Connect airline

Tighten the nut

Connecting extruder motor line

Connect feed tube

7.Install the side shell and bracket

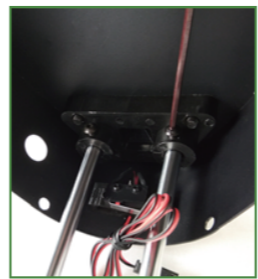Put side shell from top then insert to bottom shell

Tighten fixing screw of the side shell

Filament holder mounted on the upper shell

8.Tighten the screws

Tighten axis fixing screws of upper shell

Tighten axis fixing screws of bottom shell

Complete the assembly

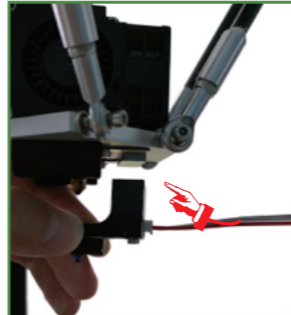# B B-2-1
Use Part **Auto Leveling**

1.Install leveling Sensor

Ready autolevel sensor

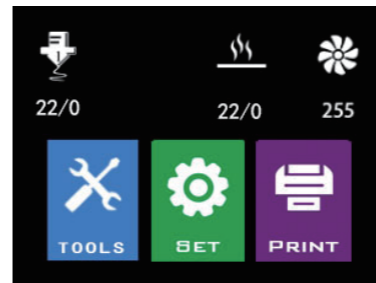

Connecting the autolevel
sensor

Connecting magnet

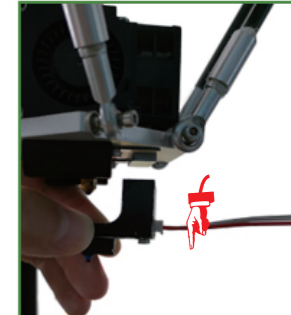## 2.Leveling

Click TOOLS→Autolevel

Click LEVEL →Autolevel
（When autoleveling, In order to ensure
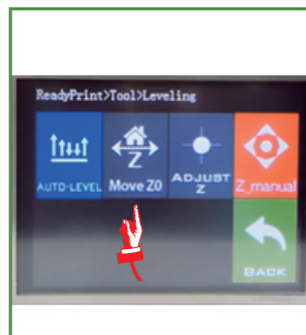the accuracy of data， the nozzle
moves very slowly）

After autoleveling, remove
the leveling sensor

Adjust Z0 before printing

★ **Make sure the leveling sensor has been removed before adjusting Z0**
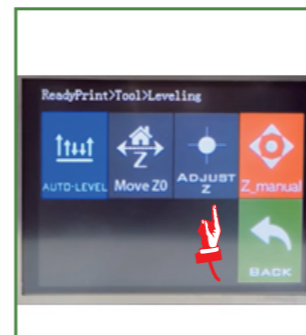

After auto leveling, put an A4 paper and adjust the position of Z0

Click 'Move Z0'

Move the A4 paper to test the distance of nozzle from the platform

11

Click 'Adjust Z'

'+' nozzle move up
'-' nozzle move down
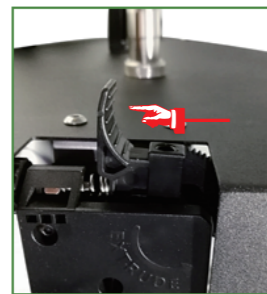'0.01mm' adjust move range

Click 'Save'

(The distance between the nozzle and the platform is an A4 paper.)

12

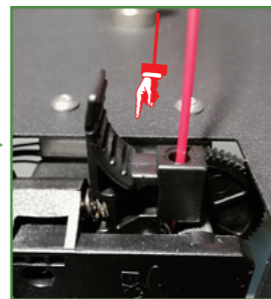# B B–2–3
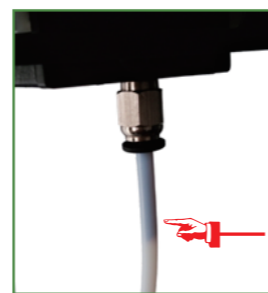**Use Part** **Filaments Installation**

1.Install filaments

Install the filament and cut a triangle

Press hard in the direction of the arrow

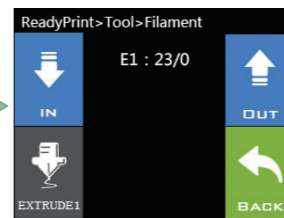Insert the filament through the small hole
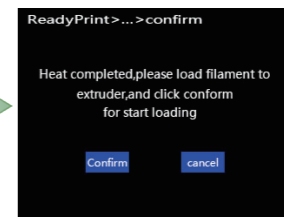
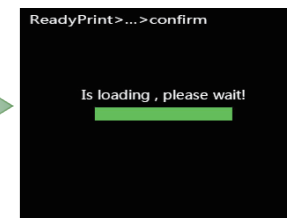The filament pass through the quick connector will be ok

2.Automatic feeding

Click TOOLS→CHANGE

Choose EXTRUDER 1 Click IN

Click Confirm to automatic feeding

After completed Click Confirm

Software Installation

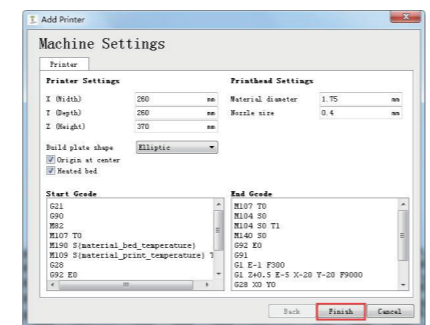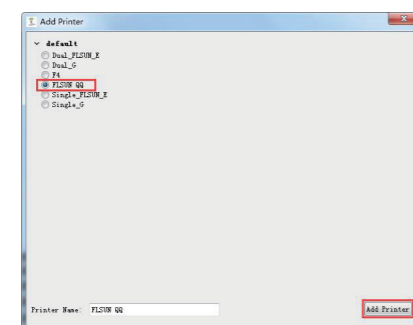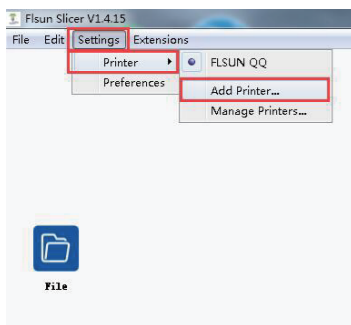**1.Dual click to install Cura**

Cura.msi

2.Open Cura

cura

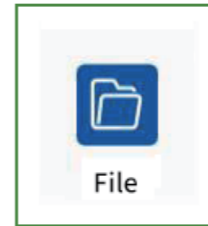**3.Click Settings→Printer→Add Printer→FLSUN QQ→Add Printer→Finish**
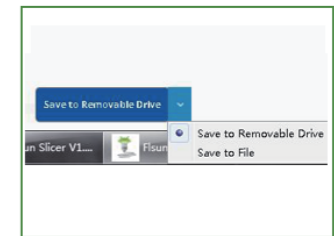

15

First Printing

1.Slice

cura

Open Cura

File
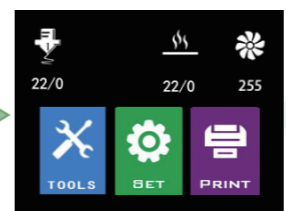
Click Load to load STL file

Software auto-slice, save Gcode to anywhere

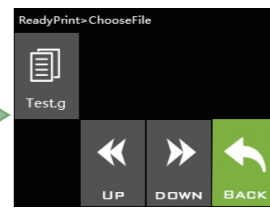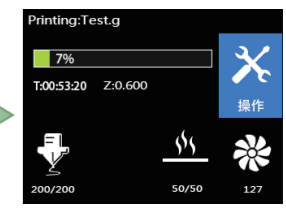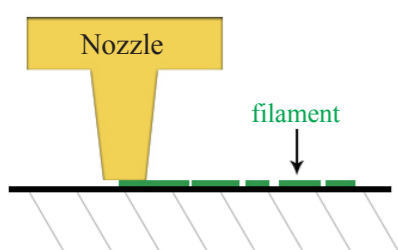**2.Machine Operation**

USB

Insert SD card

Click PRINT

Choose file

Automatic printing

16

B–3
Precise Leveling

1.After automatic leveling, maybe the nozzle is too close or too far from the platform.

2.You can adjust the Z-offset while printing .The value can save Automatically, There is no need to repeat the operation.

①The nozzle is too low from the platform

Nozzle

filament

Click Z+0.1
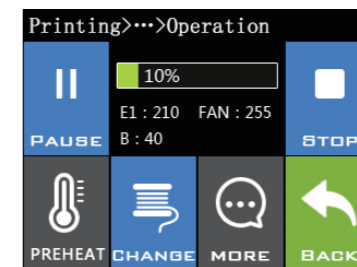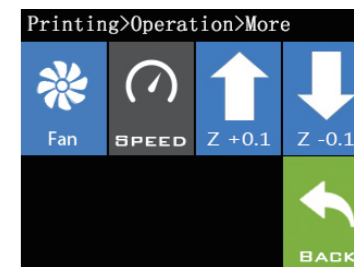nozzle moves up 0.1

③The nozzle is middle from the platform

Nozzle

filament

✔
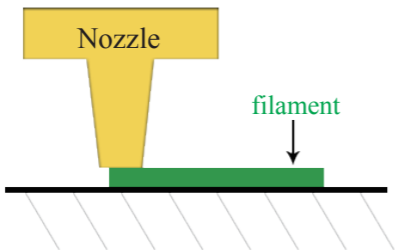
③The nozzle is too far from the platform

Nozzle

filament
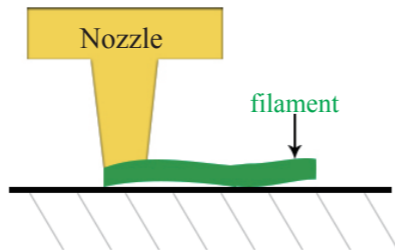
Click Z-0.1
nozzle moves down 0.1

Pringting:test. g
7%
T:00:53:20
Option
200/200   60/60   Fan

Click Option

Printing>···>Operation
10%
E1 : 210   FAN : 255
B : 40
PAUSE   STOP
PREHEAT CHANGE MORE BACK

Click More

Printing>Operation>More
Fan SPEED Z +0.1 Z -0.1
BACK

Z+0 .1 nozzle moves up 0.1
Z-0.1 moves down 0.1

17

18

B-4
Use Part B
Touch Screen Introductions

1.Print

Pause print

Stop print

Resume print

Adjust speed

PRINT

Adjust fan speed

Pause for change filament

Adjust temp

2.More Operations

MORE

X/Y direction increase in size 0.1

X/Y direction decrease in size 0.1

Curvature down

Curvature up

3.Preheat

Preheat bed nozzle

Heat nozzle1

Heat bed

Close heat

Add 1℃

Add 10℃

4.Extrusion

Extrude Filament

Nozzle1 extrude

Adjust speed

Filament move10mm

Extrude

Back

5.Change Filament

Change Filament

E1 change filament

Feeding

Take out filament

6.Other Buttons

Home

Move

Close all motors

Auto level

Moves down 0.1

Moves up 0.1

Common Problems

1. What to do after automatic leveling?

✳ Remove the leveling sensor, then adjust Z0,install the filament, then preheat the nozzle to 210 ° C, preheat the hot bed to 60 ° C, feed filament and start printing.

2.When the nozzle is too close or too far away from the hot bed after leveling?

Click during the printing process: Operate → More → Z+0.1 or Z-0.1

Click once to move the nozzle 0.1, Z+ nozzle moves up, Z-head moves downwards, the software automatically saves the value after clicking, and the value is saved until it is leveled again.

3. What is the printing temperature of the common materials?

Number	Material	Nozzle	Hot bed	Number	Material	Nozzle	Hot bed
1	PLA	195-210	50-60	5	PVA	190-210	50-60
2	ABS	220-250	80-100	6	TPU	210-230	40-60
3	Nylon	200-220	50-60	7	WOOD	190-220	50-60
4	PETG	240-260	70-80	8	HIPS	230-250	60-80

4. The first layer can not normally stick to the platform.

①. The nozzle is too far away from the hot bed，please refer to the nozzle is too close or too far away from the hot bed

②. Select the Brim when attaching platform to slice，increasing the value of the line according to your neded,Set hot bed temperature to 65°

5. The nozzle block

①. Heating the sprinkler to 240 degrees, click fast extrusion.

②. Heating the sprinkler to 200 degrees, clean it with a sprinkler cleaning needle (hot, pay attention).

③. Replace a new sprinkler

Troubleshooting

Steps	Troubleshooting	Reasons	Solutions

Start

SD card can print — NO → Can identify files — YES → Other Gcode is normal

- NO → SD card → 1.Is there Gcode 2.Format SD card 3.Change SD card
- NO → SD card → 1.Format SD card   2.Change SD card
- YES → Silce → Slice again

SD card can print — YES → HOME

HOME — NO → Run — NO →
- Motor → Check the connection of motor
- Limit switch → Check the connection

HOME — YES → Heated bed heat

Heated bed heat — NO → Room temp
- YES → Connection → Heated bed and board connection
- NO → Temp sensor → 1.Check connection 2.Change temp sensor

Heated bed heat — YES → Nozzle heat

Nozzle heat — NO → Room temp
- YES → Heat bar → Check connection
- NO → Temp sensor → 1.Check board and heat bar connection2.Change heat bar

Nozzle heat — YES → Print

Print — NO → Extruder run — YES → Filament is normal
- YES → Nozzle block → Clean nozzle
- NO → Filament → Change filament

Extruder run — NO → Extruder motor → Check connection

Print — YES → Finish

After–sales Service

1.Customers who purchase FLSUN 3D printers **have a shelf life of 12 months**.

2.The warranty period for all products is from the date of purchase.

3. You can find a solution from the user's manual, or contact the customer service of the website where you bought the printer.

4. You can also send mail to **our enterprise email: Service@flsund3d.com** please attach the purchase website and order number, and we will also solve the problem for you at the first time.

5. After-sales and pre-sale support time: Monday to Saturday: 9.00-18.00 (Beijing time).

B Use Part

B–7
Warranty Card

Type: _____

Name: _____

Address: _____

_____

Phone: _____

Purchase date: _____

Damage date: _____

Damage details: _____

_____

Amazon/AliExpress/Ebay/Others: _____

If you have any questions, please contact us at the first time and we will solve it for you.

Email: Service@flsund3d.com

james@flsund3d.com

Facebook group: FLSUN QQ 3D Printer Owners