



Welcome to LuckyBot

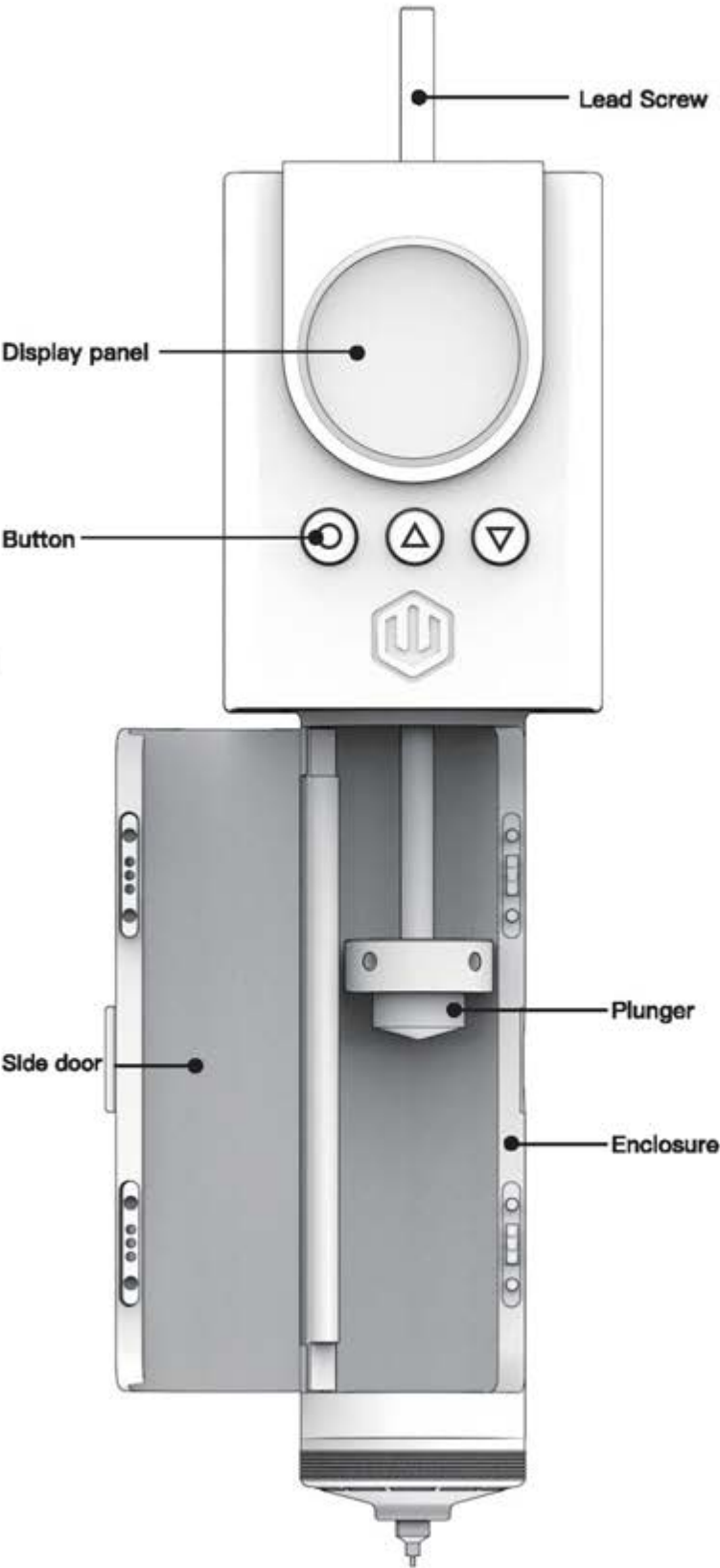
Operation video and 3D model file download,
welcome to visit the website:

user.LuckyBot.us



Product introduction

LuckyBot is a food 3D printer extruder developed for FDM 3D printers, make your 3D print process more fun, loving and tasty! LuckyBot, Be more for you!





Function operation control table

Operate	S	↑ (+)	↓ (-)
ON/OFF heat	Touch and hold		
Lead screw up		Touch and hold	
Lead screw down			Touch and hold
Adjust of Temp. 1		Short Press	
			Short Press
Adjust of Temp. 2	Short Press	Short Press	
			Short Press

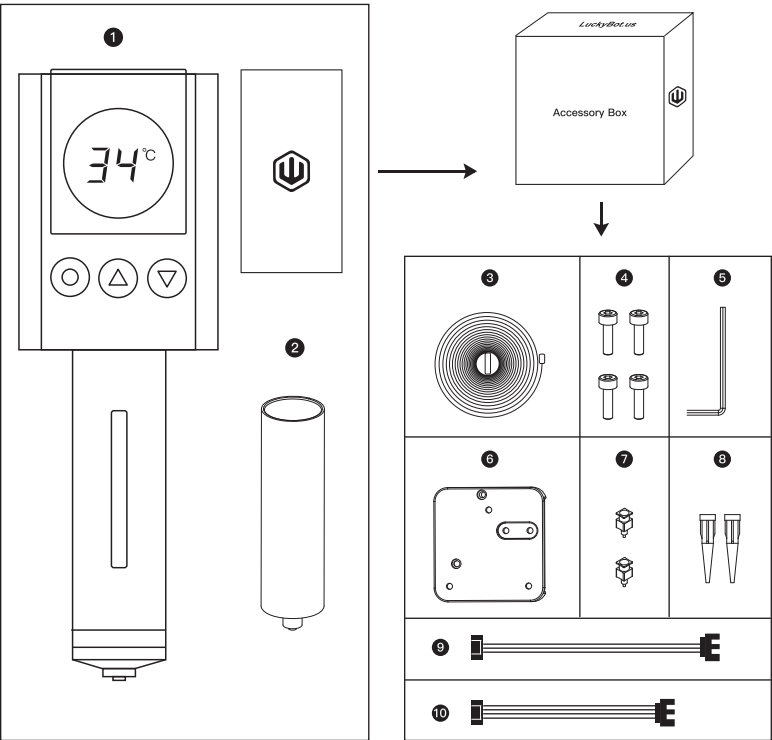
*This table does not provide system setting of origin 3D Printer.

Product parameter

Product dimensions	72*72*260mm
Weight of product	750g
Needle type	18#、20#
Tube	LuckyBot customized tube
Printing speed	Set by 3D printer itself system
Power supply mode	Extruder power supply/ 3D Printer itself power supply
Rated Voltage	DC12V-24V
Rated Power	72W
Control mode	Manual / Control
Control Temp range	0~40℃
Temp control accuracy	±0.5℃
Refresh rate	4times/sec
Connect power supply mode	LuckyBot Line-10

Installation guide

1. Packing list



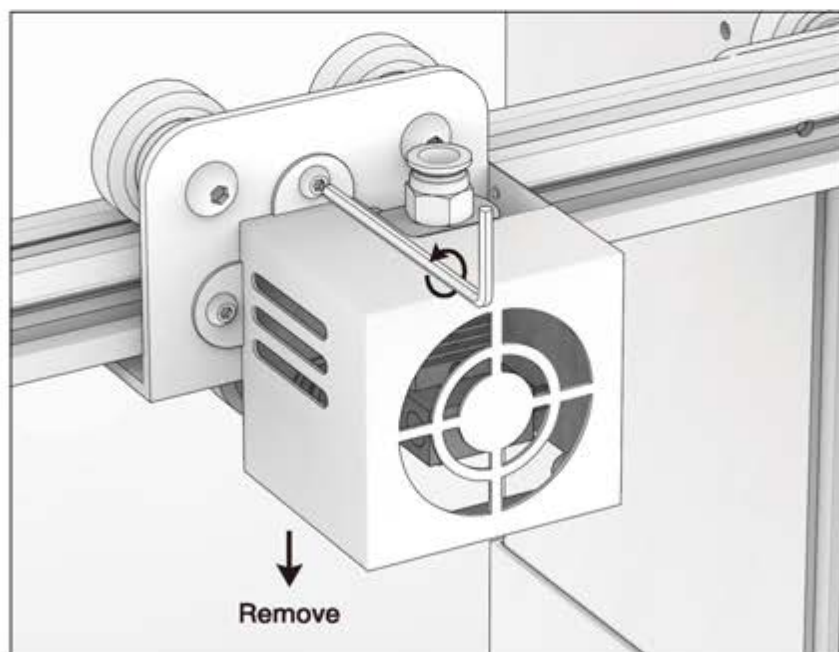
Packing list

No.	Product Name	Type	Quantity
1	LuckyBot	Standard	1set
2	Tube	Empty	1pc
3	Wire	Line-10	1pc
4	Soket head cap screw	M3*8	4pcs
5	Inner hexagon wrench	L type	1pc
6	Metal adapter plate	2in1 universal plate	1pc
7	Metal needle	18#	2pcs
8	Plastic needle	18G	2pcs
9	Limit wire	200L	1pc
10	E-axis line	—	1pc

2、Remove the FDM 3D printer's original nozzle assembly

Before installing the Luckybot extruder , Please remove the original heating nozzle assembly from the FDM 3D printer. Here are specific steps(take Creality Ender-3 as an example) :

- 1) Remove the cover of the nozzle assembly.

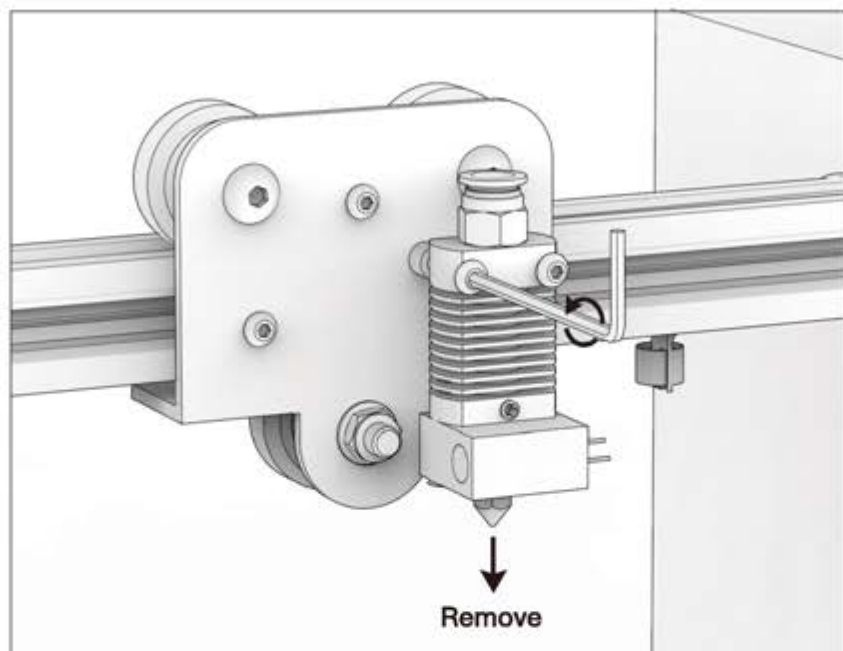


Tip: The inner hexagon wrench provided in the accessory box will help you a lot.

2) Remove the heating nozzle of the nozzle assembly.

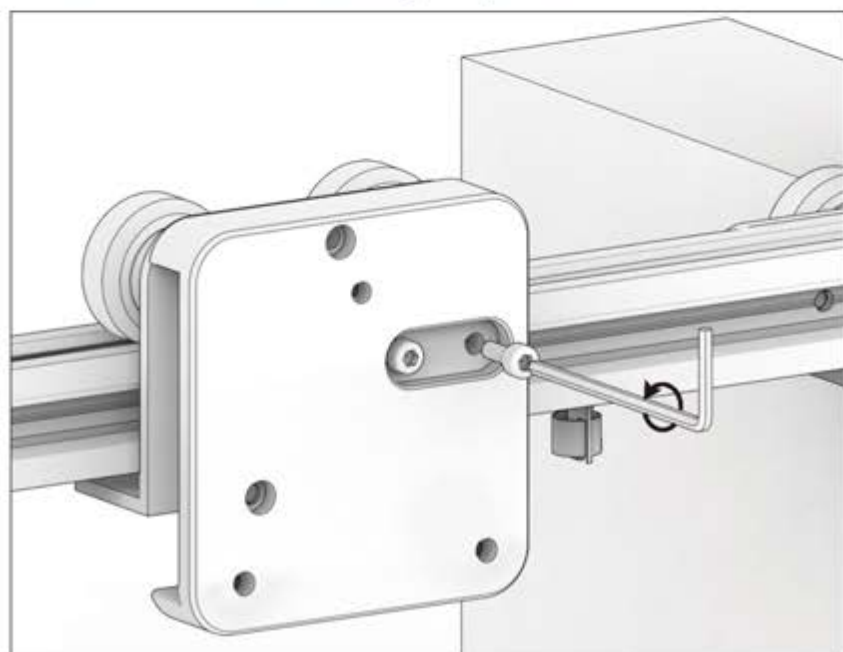
Important Notes:

- ① The circuit part of the original nozzle assembly can not be removed, otherwise, it will cause the original FDM 3D printer can not be used again .
- ② After the original nozzle component is removed, it can not be placed randomly, because the nozzle assembly is going to keep getting heated during the printing process.



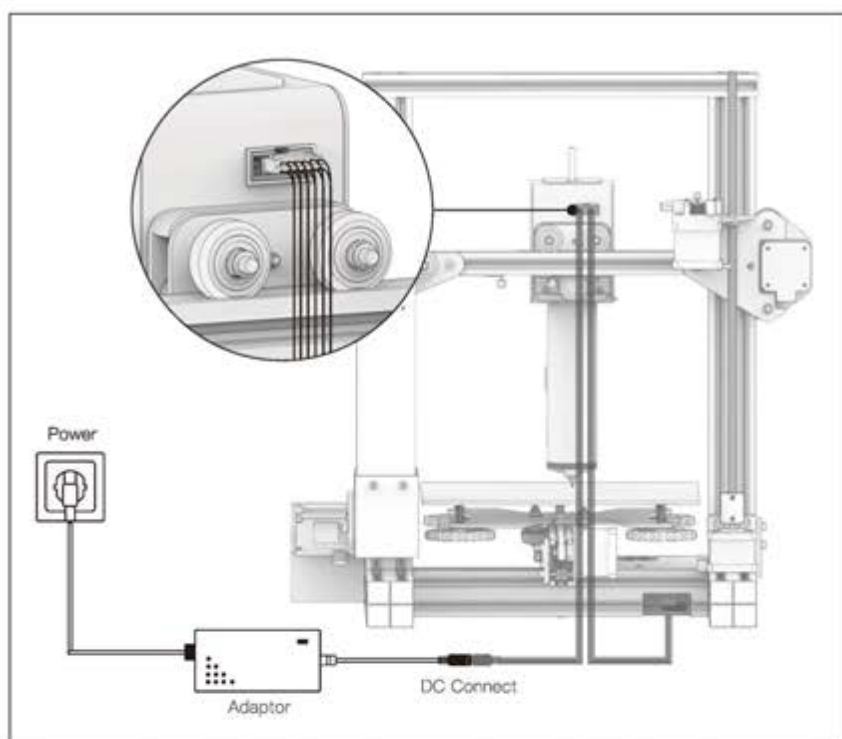
Tip: The inner hexagon wrench provided in the accessory box will help you a lot.

3、Install the metal adapter plate



Tip: The inner hexagon wrench provided in the accessory box will help you a lot.

2) Connect the plug wire at the other end of line-10P, then switch on the power supply.



*The power adaptor shown in the figure is optional, specific instructions are on the adaptor box.

6、Install a needle



Tip: chocolate printing uses metal needles. If you need to print other materials, please use plastic needles instead.

The filling chocolate step

1、Preparation

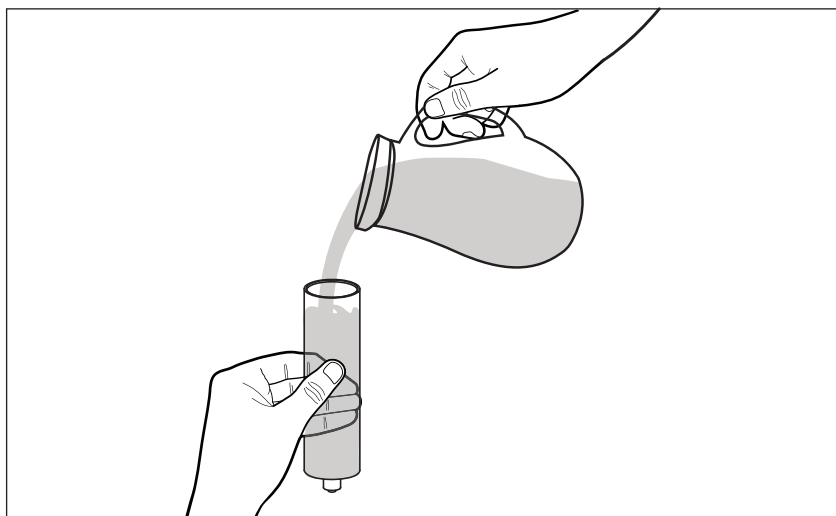
- ① Chocolate bar/beans ② LuckyBot customized tube
- ③ Chocolate melting equipment (User-supplied)

2、Melted chocolate

Tip: if there is no professional chocolate melting equipment, you can use water bath heating method, put the chocolate into glass or other containers that can be heated, and then put the container with chocolate pieces into the container with hot water, as long as the effect of melting chocolate can be achieved.

3、Filling chocolate

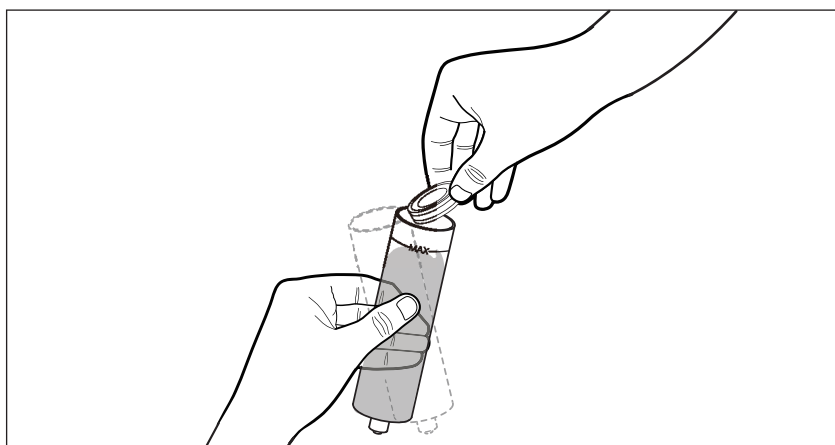
After the chocolate is completely melted, fix the tube and then pour the chocolate slowly.



Tip: it is recommended to fix the tube before filling, and you can choose the proper fixing method freely.

4、Insert the Plunger into tube

When the melted chocolate is poured into the marked line position of the tube, the pouring shall stop immediately, and the plunger shall be inserted into the tube, and the filling be completed.



Notes:

- ① Recommended to tilt the plunger, to insert easier, then turn it upside down.
- ② Manually shake the tube to squeeze the air out of the tube, so that there is no bubble in the middle of the chocolate.

5、Refrigerate the chocolate tube after filling

Printing process

1、Set 3D printer's parameters

Some parameters in the initial configuration file of the original FDM 3D printer do not conform to print food, so we need to set a new configuration file before printing.

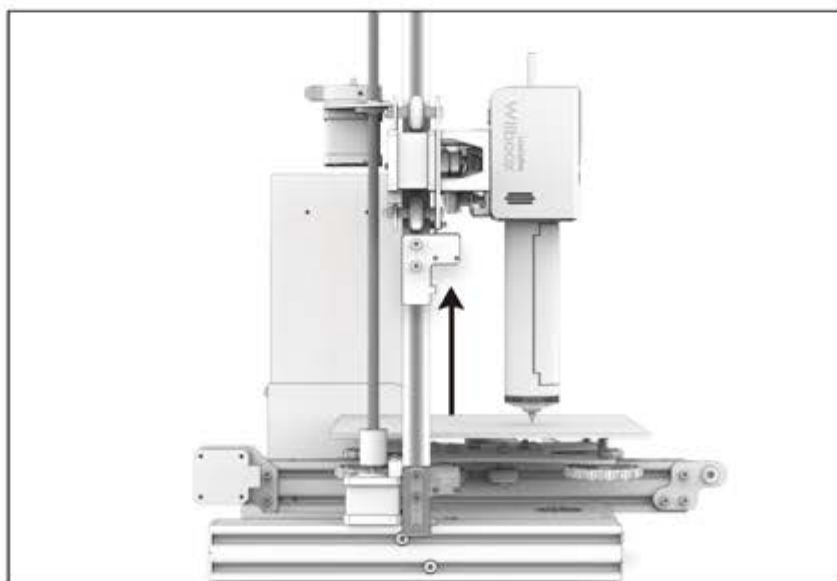
Advanced Settings	
Xsteps/mm :	80.0
Ysteps/mm :	80.0
Zsteps/mm :	400.0
Esteps/mm :	750.0

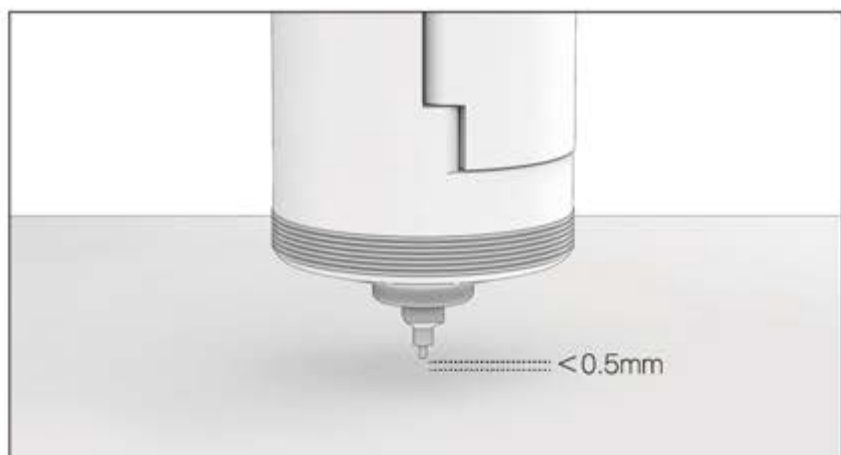
Notes: Changes of Creality Ender 3/3s configuration parameters: initial screen → Control→ Motion→ Step/mm → Esteps/mm (Change the original value to 750).

2、Print platform leveling

1) Some types of FDM 3D printers have automatic leveling function. If there is no automatic leveling function, the traditional 9 point leveling method can be used for leveling.

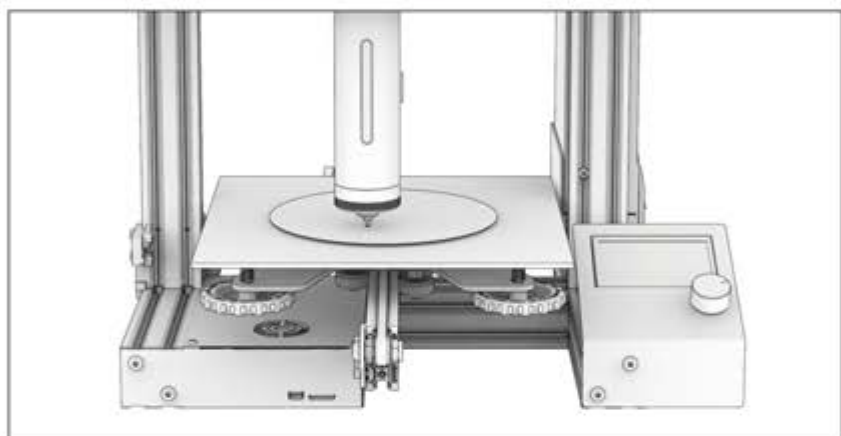
2) When the gap is too large or small, it is necessary to adjust the height of the Z-axis limit switch to ensure that the gap between the platform and the needle is within 0.5mm. If the length of the Z-axis Limit switch line is not enough when moving, you can use the Limit extension line Luckybot provided.



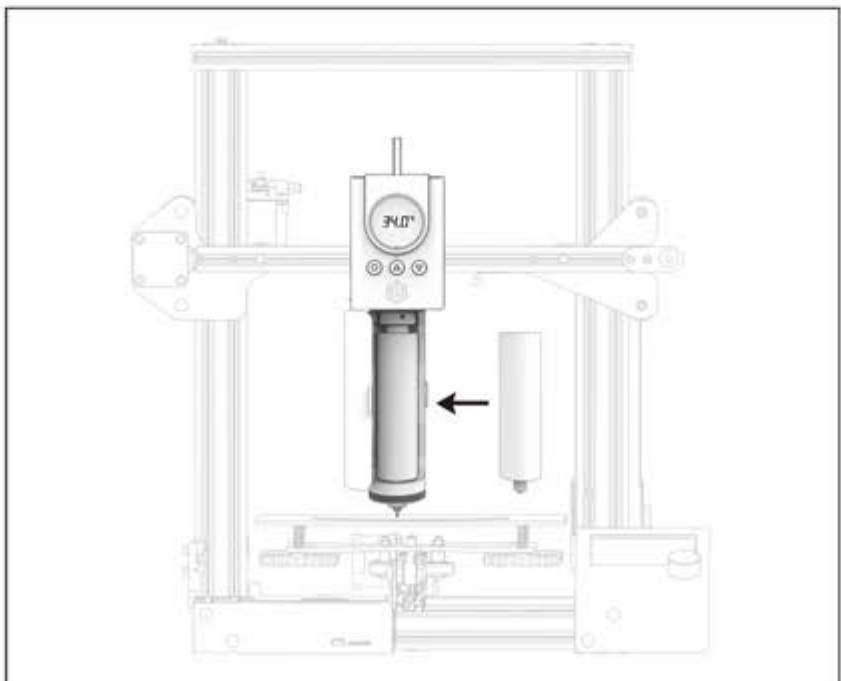


3、Fixed baking paper

Put the baking paper flat on the printing platform.



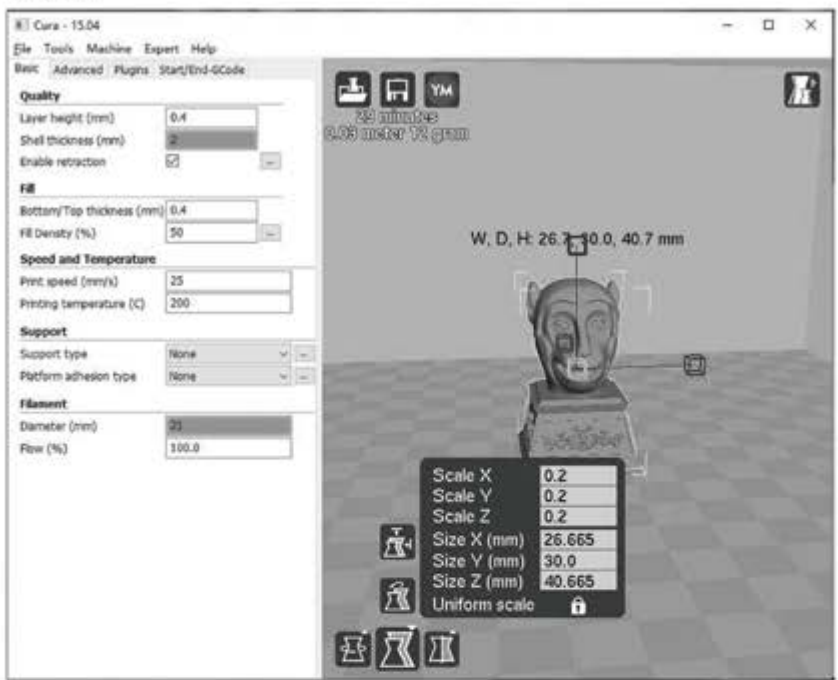
4、Place the tube and operate to preheat



Tip: The preheating time is 25–35min, and the preheating temperature can be adjusted according to the nature of chocolate. Please refer to 《Chocolate Temperature Adjustment Parameter Table》 in this manual (see P13).

5、Prepare 3D file to slice

This manual provides 《LuckyBot Chocolate Printing Slicing Parameter Table》 (see P13 in this manual), refer to the table for slicing different models.



Tip: We recommend you to visit www.luckybot.us to search the model files you interest. The slicing software used is also provided by original FDM 3D printer itself. You only need to open the original FDM 3D printer software, no need to learn additional software knowledge.

6、Pre-extrusion

In order to better perform the printing process, the air in the tube should be exhausted by pre-extrusion before printing.



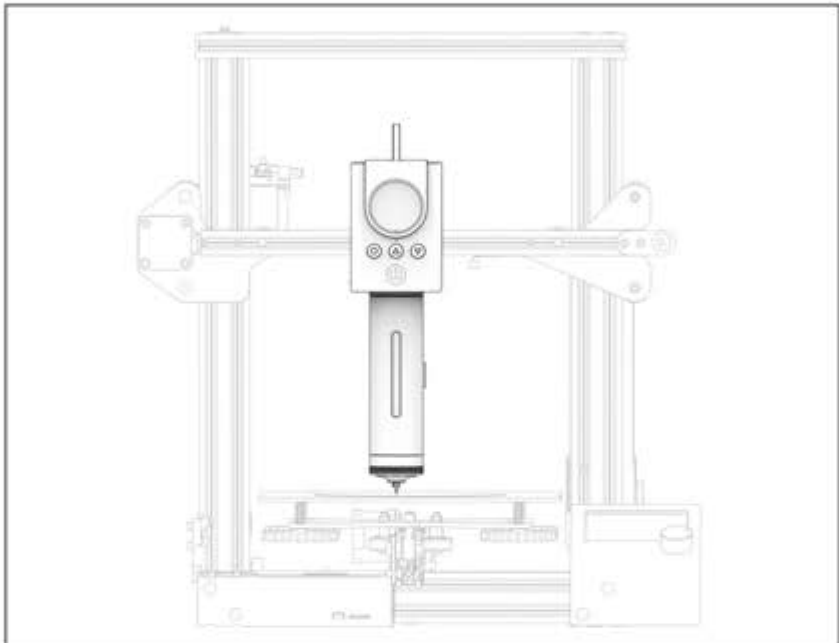
7、Start printing work

The process of chocolate printing is the same to PLA printing. The sliced G-code file is copied into TF card and then inserted into FDM 3D printer. Select the file to be printed on the printer's interface.

Important Notes:

① Due to the characteristics of pure fat chocolate, the chocolate solidification is relatively slow in the printing process. In general, the printing of pure fat chocolate requires a low temperature environment, and air conditioning can be used to reduce the room temperature. Ice crystal boxes can also be purchased separately, after being frozen, they can be placed around the printed model to cool down during printing.

② Due to the different types of pure fat chocolate, the temperature needs to be adjusted in the printing process. Please refer to the 《Chocolate Temperature Adjustment Parameter Table》 described in P13.



Tip:

- ① The illustrations of products and accessories in the manual are schematic diagrams for reference only;
- ② Due to the update and upgrade of the product, the actual product may be slightly different from the schematic diagram. Please refer to the actual product.

Care and maintenance

Warning: Power must be cut off before cleaning and maintenance products.

1. In order to prolong the service life of the product, it is recommended to use LuckyBot customized material tube.
2. After each use, use dry cloth and cotton swabs to clean the inside and outside of the base of the extruder to prevent mildew and agglomeration of residual food.
3. After each use, remove the needle and conduct it with a thin needle to ensure that the chocolate can be extruded normally when used next time.
4. Before the Luckybot is installed or disassembled, the lead screw must be moved downward to the inside of the equipment to prevent lead screw thread damage.

Compatible printer models

- ⊙Cre****: Ender-3/3s-3 Pro/ V2/3max, Ender-5 Pro/Plus, Ender-6
- ⊙Anyc***: Mega Zero/Mega Zero 2.0
- ⊙Flash ** *: Aquila/Aquila C2
- *Adaptation models continue to update...

Chocolate Temperature Adjustment Parameter Table

Chocolate’s brand	Preheating temperature	Printing temperature	Sales area
NUOFAN	34℃	32℃	Mainland China
RULIAN	35℃	34℃	Mainland
Dove	34℃	33℃	China Worldwide

*The above chocolate brands are for reference only, users can make adjustments according to the actual situation.

Chocolate printing slices software parameter table

Model slices	Frame	Solid (fat replacement model)	Solid (pure fat model)
Layer	0.5mm	0.4mm	0.4mm
Thickness	2mm	2mm	2mm
Bottom/top thickness	0.5mm	0.4mm	0.4mm
Filling density	0	30%	50%
Diameter	21/22mm	21mm	21mm
Nozzle aperture	0.84mm	0.84mm	0.84mm

*The above parameters are for reference only and can be adjusted according to actual use.

Other food print parameter table

Ingredient	Layer	Thickness	Bottom/top thickness	Height of model
Salad	0.6mm	1.68mm	0.6mm	1.2mm
Ketchup	0.7mm	1.68mm	0.6mm	1.4mm
Ingredient	Filling density	Diameter	Extrusion output	Nozzle aperture
Salad	0	20mm	130	0.84mm
Ketchup	0	20mm	130	0.84mm

*For other ingredients of non-solidified fluid food, such as blueberry sauce, peanut butter, mashed potatoes and others, the print slices parameters are roughly set in the table above.

Cautions

- ⊘ When an exception or fault occurs, such as overheating, smoking, peculiar smell, abnormal sound, abnormal temperature display, etc., please stop using the printer immediately and cut off the power supply, and please contact the after-sales service personnel as soon as possible.
- ⊘ Avoid dropping the product or subjecting the product to strong impact, otherwise it may cause electric shock or fire due to short circuit.
- ⊘ Do not bend, pull, or block the lead screw forcibly, otherwise the product will not work normally.
- ⊘ Do not repair, disassemble or modify this product by yourself at random, otherwise it may cause injury due to short circuit, fire or abnormal operation. When repairs are needed, please contact the after-sales service personnel.
- ⊘ Do not damage, modify, forcefully bend, pull, twist the power cord, or place heavy objects on the power cord, or squeeze the power cord. Otherwise, it may cause electric shock or a fire due to a short circuit.

Troubleshooting

Fault phenomenon	Possible cause	Solution
No ingredients can be printed normally	Needle is not clean and blocked	Dredge with a thin needle /replace the needle
	The base's temperature is slightly lower	ncrease base's temperature by 1℃
The side door cannot be closed properly during printing	There is residual material gathering due to the inner of the base is not clean	Clean the accumulated debris of the base with a sharp instrument

After-sales maintenance

Warranty card

Product information	
Purchase date	
Product serial number	
User contact information	
Name	
Tel	
Address	

The warranty policy

1. Please keep this warranty card properly as a proof of repair.
2. Warranty period is 12 months from the date of purchase.
3. Product under warranty which under the normal use and maintenance has quality problems, the company will provide free repair or replace component after inspection is true.
4. The Company reserves the right to modify and interpret all contents.

Performance Breakdown Table

Name	Performance Breakdown
LuckyBot	1.Powered on but cannot be turned on. 2.Function button failure. 3.Powered on but not heating. 4.Powered on but the lead screw can't work normally.

The following are not covered by the warranty.

- 1.The product is damaged due to incorrect installation and operation.
2. Repair, modification and modification by non-company technicians, users replaced any component by themselves.
- 3.The product label is altered to be inconsistent with that listed in this certificate.
4. Damage caused by inadvertent use or infiltration of water or other substances into the product.
5. Accidents caused by natural disasters failure or damage.

Notes:

You are advised to keep the packing case for at least 30 days after you sign for it to ensure safe transportation.

Legal Declaration:

1. This manual is limited to the introduction of the actual compatible 3D printer of the Luckybot;
2. Luckybot and the brands corresponding to the compatible 3D printer in this manual are independently managed by the main body;
3. The Luckybot brand has no business relationship with any of the brands mentioned in the manual.

Manual version: V1.3

After-sales mailbox: service@wiiboxx.com

Website: www.luckybot.us

Manufacturer: Yancheng Wiiboxx 3D Technology Co., LTD

Address: Floor 2, Building 9, Zone A, Big Data Industrial Park, Yandu District, Yancheng City, Jiangsu Province

Please read this manual carefully before using the product and keep it properly.

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.