Thank you for your trust in our 3D pen, for a better experience of this product, please read user manual carefully before you start to use.

Product function diagram

Warning!
1. This product is suitable for children over 8-years-old and adult. Children must use it under the guardianship of adults.
2. The nib and its near part is in high temperature, the highest temperature can reach 230℃, therefore no touching or touch other objects by the nib.
3. It is prohibited to use other material to insert into the loading hole.
4. Not use other power adapter which is not provided by our company.
5. Not pure water on it.
6. Keep it in a safe place after using, to prevent falling.

Main items

Operating instructions
1. Plug the AC adapter into the electrical outlet, the other end of the
DC plug into the "power input hole" at the end of this 3D pen. The Orange LED lights on, the equipment is power on and in standby mode.

2. The LCD screen will display words "ABS" or "PLA", choose the right material mode, "material selection, temperature adjusting" from the LCD screen. The selection must be the same with the material attribute.

3. Keep on pressing the Load filament button, the red LED lights on, shows that the equipment is preheating. About 0.5-2 minutes later, when the red LED turns to green, it shows preheating finished and the pen starts to work.

4. Insert the filament into the "Filament input hole", long pressing the "Load filament button." The filament is delivered by the inner motor. When there is material comes out from the nozzle, the filament loading works.

5. Start creating, speed controller can adjust the material amount when you are creating. No need to use both hands.

6. Different material filaments have different melting points.

7. Do not touch the nozzle and heating part during using.

8. The equipment will switch to standby mode automatically when not in use over 5 minutes. The working indicator LED will be off. If need to use it again, need to press the "Load filament button" again.

9. When you need to unload or replace the filament, long press the "wire back button" and then repeat step (2).

10. The heating time is affected by setting temperature and the environmental temperature.

11. Cut the filament ending flat before inserting it into the pen.

12. Unload the filament when not use.

**Change filament**

1. When you need to replace the same material in different colors, can choose to continue loading and unloading filament. It requires to ensure the loading filament ending flat.

2. When change the material from PLA to ABS, unload the PLA filament, restart your pen (unplugged), then switch to ABS by pressing the "material selection/temperature" button, and then load the ABS filament.
3. When change the filament from ABS to PLA, due to melting point of ABS is much higher than the PLA, if not use it properly, it may cause nozzle clogging or equipment damage. The correct way is that, when in the ABS mode, unload the filament, restart the pen, switch to PLA mode by the “selection of materials/temperature” button. Then load the PLA filament after heating quickly.

**Temperature adjustment**

1. Low speed working, if you hear the nozzle has “crackling” sound, it means the temperature is too high, use “material selection/temperature” button to turn the temperature down, the adjustment range is 8-15°C

2. When in use, it comes out lots of bubbles, it means that the temperature is high, use “material selection/temperature” button to turn the temperature down, the adjustment range is 3-8°C

3. Normally the filament output process should be smooth without bubbles. (occasionally

4. When the output filament color looks dim and dark, the motor sounds obviously in difficulty, it means that the temperature is slow, use “material selection/temperature” button to turn the temperature up, the adjustment range is 3-5°C

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**Specifications and parameters**

Discharging mode: hot melt extrusion molding
Molding: three-dimensional molding
Print range: Unlimited
Spinning speed: adjustable
Temperature: 60°C-230°C adjustable
Working power: 12V 3A
The nozzle diameter: 0.7mm