

# 3D-pen with display manual

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# 3D-pen with display

- One of the lightest 3D pens in the world: only 55g
- Intelligent control: get started right away
- 8 print speeds
- 2 print modes: continuous or interrupted
- Built-in, maintenance-free printhead
- Patented lower temperature tip for your safety

# In the box



# **Specifications**

Model: SL-300 Weight: 55g

Dimensions: 180 x 24 x 24 (LxHxB)

Recommended print temperature:

PLA: 160-180 C PETG: 180-210 C ABS: 180-210 C Supported material: 1.75mm PLA, PETG, ABS

Input voltage adapter: 100-250V 2A Output voltage: DC 5V 2A 10W

**Guarantee:** 

You will receive a one-year limited manufacturer's warranty on product operation. Misuse or use in

combination with unsupported materials will void the warranty.



# 3D-pen with display manual



Warning: The tip of the 3D pen gets very hot; this can lead to a burn hazard. Never touch the tip when the pen is in use or has just been used. Warn others not to touch the pen (tip) because of burn hazard. Remove the filament and unplug the adapter when you are not using the pen. Use the supplied pen holder with suction cup. If the nib comes in direct contact with painted surfaces, plastic, clothing, etc., it may cause damage. The 3D pen is suitable for children aged 8 years and above, under adult supervision.

Warning: Do not use the 3D Pen near bathtubs, showers, sinks and other places with water. This can result in life-threatening electric shock.





# **Getting Started with the 3D Pen**

### Step 1: Connect the power adapter

Connect the supplied power adapter to the wall socket and then plug the other end of the cable into the back of the 3D pen. A yellow LED will now illuminate, indicating that the pen is in standby.

#### Step 2: Choose material

After performing step 1, "PLA" or "ABS" will appear in the LCD display. You can change this option with the two buttons next to the display. With the option 'PLA' the pen has a lower print temperature (recommended for standard colours, colour change and metal filament). With the 'ABS' option, the pen has a higher print temperature (recommended for transparent colours).

#### Step 3: Heat up

Press the filament feed button once. The 3D pen will now heat up. A red light indicates that the pen is warming up. When the light turns green, the pen is hot enough for usage. Warming up takes about 30 seconds.

#### Step 4: Determine the print speed

Press the print speed buttons on the side of the pen to select the desired speed. Selecting. You can choose from 8 speed settings, with choice 5 being the default speed. Choice 1 provides the lowest speed and choice 8 the highest speed. Note: You can only change the speed when you are not printing and the LED is green. At other times, pressing the buttons has no effect.

#### Step 5: Insert Filament

Insert the chosen filament (plastic thread) into the opening on the back of the 3D pen. Then press the filament feed button. The mechanism in the pen will pull the filament in piece by piece. When the filament comes out of the nib in a molten state, you can start drawing.

## Step 6: Working with the 3D Printer Pen

The pen is equipped with 8 different speed settings. Have a suitable speed to work with. In addition to adjusting the speed, you can also make changes to the temperature. You do this with the two buttons next to the display. If the filament comes out too liquid, lower the temperature. If the filament is sticky or does not come out easily point flows, increase the temperature. The ideal temperature can differ per colour of filament.

#### **Step 7: Switching Between 2 Print Modes**

The 3D pen offers a choice of 2 print modes: continuous printing or intermittent printing. To print continuously, press the filament output button once. The filament is now flowing out until you press the button again. The pen will stop automatically after 8 minutes of continuous use. To print intermittently (for example for short use or a small detail) press the feed button twice briefly while holding it down the second time. The filament will now run out until you release the button.



## **Step 8: Remove or Change the Filament**

When the LED light is green, press and hold the filament output button for about 3 seconds and then release it. The built-in motor will now retract the filament and push it towards the back of the pen. You can gently pull the filament out of the pen at a slow pace. Do not use force; then the filament can break. When the filament is completely removed from the pen, press the eject button again to stop the motor. If you do nothing, the motor will stop automatically after 1 minute.

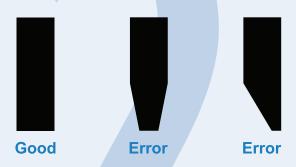
### Step 9: Finish

When you are finished drawing, you need to remove the filament from the 3D pen. This way, the device will continue to function optimally in the future. Please note: the device is of very good quality, but like other electrical devices, it should not be used continuously for more than one hour. This extends the life of the 3D pen.

## **Changing filament:**

- 1. When you switch to a different colour filament of the same material type (note: transparent colours count as a different material type) you have two options. It is possible to cut the old filament and insert the new filament directly behind it feed. It is also possible to export the old filament and then insert the new filament. In both cases, make sure that the tip of the filament is cut straight.
- 2. When you switch to a different filament type (note: transparent colours count as an other type) you must run out the old filament first. Then start the device reconnect (unplug the adapter) to revert to the media type selection screen. Here you choose the desired option: 'PLA' (low temperature, for standard colours, colour change and metal) or 'ABS' (for transparent colours). Then enter the new filament. Make sure the tip of the filament is cut straight.

# Check the tip of the filament:



The end of the filament should be cut straight and the beginning of the filament should not have any irregularities. If this is the case, you should cut the filament a little further.



## Adjust the temperature

To achieve the best print results, it is possible to manually adjust the print temperature to suit. This may be necessary because different colours of filament have different melting points to have. As a result, the default setting does not provide the ideal temperature for every colour. Follow tips below for tuning the temperature:

- 1.If you hear a sputtering sound coming from the 3D pen during use, this is indication of too high a temperature. Use the button next to the display to select the temperature 8 to 15°C.
- 2. If you see a large amount of air bubbles during normal use, this is an indication of too low a temperature. Use the button next to the display to increase the temperature from 8 to 15°C.
- 3. If the printed filament has a dull colour and the motor makes a coughing sound, this is an indication of too low a temperature. Use the button next to the display to select the temperature 5 to 10°C.
- 4. If the printed PLA filament (standard colours, metal or colour change) is too thin and liquid, this is an indication of too high a temperature. Use the button next to the display to lower the temperature 10 to 15°C.

#### **Troubleshooting**

If you encounter any problems while using the 3D Pen, please refer to the following use the table to solve this problem. Can't figure it out or is your problem not there among? Please contact us via www.123-3D.ie

Problem	Cause	Solution
The power indicator light does not light up	The adapter is defective The power cord is loose Electronics defective	Replace the adapter     Contact our customer service     Contact our customer service
No filament comes out of the print head/pen tip	Too little material executed         • Clogged print head         • Temperature too low         • The pen does not heat enough         • The material slips         • The filament cannot be reused             be entered         • The heated print head             does not make contact	<ul> <li>Increase the speed</li> <li>Change the print temperature</li> <li>Choose a higher temperature</li> <li>Contact our customer service</li> <li>Increase the temperature</li> <li>Run the filament and cut the point right off</li> <li>Remove the printhead and put it back</li> </ul>
The 3D pen does heat up, but not getting hot enough	A defect in the engine or the power cable Software error A defect in the heating of the print head A defect in the motherboard	Contact our customer service     Contact our customer service     Contact our customer service     Contact our customer service
Too high a temperature causes a burning smell in the print head or burnt filament	Electronics defective     The print head is defective	Contact our customer service     Contact our customer service