Hello

Please do not throw these instructions away. (We worked really hard to make sure they were as useful and readable as possible!)

the3Doodler.com

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SECTION 1: WARNINGS

- The Nozzle of the 3Doodler can become hot. DO NOT touch the Nozzle, or you may be burned!
- DO NOT allow the Nozzle near or in contact with flammable materials.
- Inform others in the area that the Pen is hot and should not be touched.

Unplug and set the Control Switch to OFF when not in use or before storing.

Allow the Nozzle to cool completely before storing.

The Unblocking Tool can become hot. DO NOT touch the metal part of the Unblocking Tool after using it to clean your 3Doodler, or you may burn yourself!

DO NOT use the 3Doodler near bathtubs, showers, basins or other vessels containing water. This could result in death due to electric shock.

ADULT USE ONLY.
KEEP OUT OF REACH OF CHILDREN.

Disposal of this product

At the end of your 3Doodler’s life, please do not dispose of it in your general household waste. In order to prevent possible harm to the environment or human health from uncontrolled waste disposal, please dispose of your 3Doodler separately in accordance with local laws and regulations. For more information on the separate collection systems for waste electrical and electronic equipment, please contact your local municipal authority. You can also contact the retailer from which you purchased your 3Doodler, who may have a recycling service, or be part of a specific recycling scheme that you can use.
SECTION 2: GETTING STARTED WITH 3DOODLER

We created this User Manual as a step-by-step guide to get you comfortable with your 3Doodler Pen and its features. Once you are familiar with these steps, you will be able to Doodle with confidence. Skipping steps may result in a less enjoyable time with your 3Doodler.

How it Works:
The 3Doodler melts Plastic and uses a motor and gears (Drive Gear) to push it through the Pen’s hot end (Nozzle) in a thin line. This process is called extruding or extrusion, and we will refer to it throughout this User Manual. Once extruded, Plastic cools and hardens instantly, allowing you to draw on surfaces and in the air. This User Manual will show you how!

SPEED BUTTON LEGEND:
- Click once to start
- Click once to stop
- Double click to reverse

LIGHT LEGEND:
- Solid RED: Heating up (Please wait)
- BLUE: HI - ABS/FLEXY
- GREEN: LO - PLA
- Flashing Light: Reversing Plastic

Legend:
- 1: Nozzle - Hot end where Plastic is extruded for Doodling
- 2: FAST Speed Button
- 3: SLOW Speed Button
- 4: Light - Tells you when your 3Doodler is ready for Doodling
- 5: Power Adapter
- 6: Maintenance Cover - Allows you to look inside your Pen to see what’s going on
- 7: Drive Gear - Pushes the Plastic through the Pen
- 8: Control Switch - For turning the 3Doodler ON and OFF, and selecting HI or LO extrusion temperature
- 9: Plastic Loading Port - Hole for inserting Plastic in the back of the 3Doodler
- 10: Plastic
- 11: Temperature Adjuster
- 12: Control Port

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Step 1: Turn on your 3Doodler and wait for it to heat up

1. Plug in 3Doodler Pen.
2. Slide Control Switch to HI.

Light will glow RED while the Pen is reaching the temperature required to melt your Plastic. Once Light has turned BLUE, your Pen is ready to extrude Plastic.

Step 2: Load and extrude Plastic

1. Select one strand of ABS (MATTE) Plastic (provided in your 3Doodler box).
2. Making sure the Light is still BLUE, push the Plastic through the Plastic Loading Port.

Click FAST button once and release. You will hear the Drive Gear start.

Using your thumb and forefinger, gently grip and turn Plastic clockwise while pushing into Plastic Loading Port until you feel the strand pulled through the Drive Gear on its own.

When loading Plastic, ensure it reaches the area towards the end of the Maintenance Cover in order to be gripped fully.

After 10-15 seconds, Plastic will begin extruding from the Nozzle. Extruded Plastic will harden after a few seconds.

Press the FAST button once to stop extruding.
Step 3: Doodle your name

Use box below to create your first Doodle - your name!

1. Write your name in the box provided using marker, pen, pencil, or any other writing utensil of your choice. We suggest cursive, or block with the letters connected.

2. Click FAST button once. When Plastic starts extruding, push Nozzle down into paper to get Plastic to stick to surface.

3. Doodle your name in a continuous unbroken Doodle by dragging the Plastic along the paper as if you were writing with a pencil, with all letters connected. Keep your movement slow and steady.

4. When you reach the end of your name, stop extruding by clicking the FAST button once again.

5. Bend the paper outwards to pop your Doodled name off.

Your Name:

#MyFirstDoodle
Step 4: Doodle in the air!

Please read all steps below before you begin this section, which will teach you how to Doodle vertically in the air.

1. Extrude Plastic onto a piece of paper until you have a blob about the size of a ladybug. Make sure it is anchored into the paper.

2. Lift Pen and Plastic up off the paper in a straight line for 1.5 in.

3. Click the FAST button to stop extruding, BUT DO NOT MOVE PEN YET.

4. Wait a few seconds with the Pen still connected to the top of your Plastic line.

5. Pull the Pen away. The line will remain vertical.

Well done! You just Doodled in the air! This is a crucial stepping stone to making all kinds of wonderful three dimensional objects with your 3Doodler.

Step 5: Doodle Even More!

For further guides, projects and inspiration, please refer to:

YouTube videos: Cube
https://www.youtube.com/3Doodler

YouTube videos: Squiggly
https://www.youtube.com/3Doodler

Stencils provided at the back of this manual:
Eiffel tower - P.13-15

Stencils provided at the back of this manual:
Glasses - P.16-17

Community projects for further inspiration and guidance:
http://the3Doodler.com/community
Now that you’ve Doodled with ABS Plastic, we want to show you everything you need to know about changing Plastic and introduce you to the different types of Plastic.

Step 6: Reverse and Remove Plastic

With Pen set to Hi, wait for BLUE Light to come on.

Double click either Speed Button. Light will start flashing to signal Plastic reversing.

Once Plastic stops reversing, it is safe to remove it from the Pen by gently pulling on the back of the strand.

NOTE:

Plastic that is shorter than 5.3 inches cannot be reversed. You should feed it all the way through your 3Doodler and use it up. (Alternatively, you can push Plastic out the back - see Section 3, Step 3B.)

TIP: SNIP THOSE ENDS!

After removing a Plastic strand from the 3Doodler, cut and remove any partially melted material at the end of your strand before re-feeding it into the 3Doodler. This will reduce blockages and clogging issues.

TIP: PLASTIC TYPES AND SETTINGS.

Before we continue, it’s time you learned about the different types of Plastic you can use with the 3Doodler (and which settings to use for each type).

ABS (MATTE):
Temp: Hi Temp
Light: BLUE
Feature: Great for drawing in the air.
How to tell: Plastic has white semi-circle ends.

PLA (GLOSSY / CLEAR / METALLIC / SPARKLE):
Temp: LO Temp
Light: GREEN
Feature: Eco-friendly and glossy, making it perfect for artistic creations.
How to tell: Very rigid, no white semi-circle ends.

FLEXY:
Temp: Hi Temp
Light: BLUE
Feature: Make flexible, bendable Doodles.
How to tell: Plastic is very flexible.
Step 7: Let’s Switch to PLA Plastic!

1. With Pen on HI, load a new strand of PLA Plastic into Plastic Loading Port. Use a different color to the ABS you were using before.

2. Push the Plastic through the back of Pen and click the SLOW button once. Push and turn the Plastic clockwise if needed, until Plastic starts to pull through on its own.

3. The color of the Plastic will change once the PLA starts extruding. It will appear mixed at first. STOP extrusion by pushing either button once.

4. Switch Pen to LO setting. Wait for Light to turn GREEN.

5. Click FAST or SLOW once to continue extruding the PLA Plastic and Doodle as you wish.

Step 8: Power Down

1. Remove all Plastic from the Pen using the Reverse feature (double click any Speed Button). Friendly reminder to snip those ends!

2. Move the Control Switch to OFF.

3. Allow your 3Doodler to cool completely before storing.

NOTE:
After 5 minutes of inactivity, the 3Doodler’s heating system will automatically power down. You will need to press one of the Speed Buttons OR toggle the Control Switch OFF and then ON again to continue use.

TAKE A BREAK:
We recommend powering down and giving your 3Doodler a 30 minutes break after every 2 hours of continuous use.
Tools (Provided in Box)

Before showing you how to troubleshoot issues with your 3Doodler, we want to introduce you to three handy tools provided in your box:

- **Mini Spanner**
  - Used for tightening and removing the Nozzle.
  - Do Not Remove Nozzle when Pen is cold.
  - Do not overtighten the Nozzle, as you may break it.

- **Unblocking Tool**
  - Used for pushing short pieces of Plastic down into the Drive Gear to help with extrusion from Pen.

- **Mini Screwdriver**
  - Keep this handy for removing the Maintenance Cover.

With those introductions over, it's time to look at the different issues that may arise with your 3Doodler and steps to get back to Doodling.
1. My Pen won’t turn on! (Light doesn’t turn on)

Let’s double check the following:
A. Is the Power Adapter plugged into a working power outlet?

NOTE:
If you have a spare power adapter around the house please use it to test your 3Doodler. This will help determine if the problem is with your 3Doodler or with the Power Adapter provided in the box.

B. Is the end of the Power Adapter connected to the correct part of the Pen?

C. Make sure the Control Switch on your 3Doodler is not set to OFF.

2. My Plastic is extruding but it won’t stick to the paper, or is curling up around the Nozzle.

Stop extruding and start again using the following instructions:

When the Plastic resumes extruding, push the Nozzle firmly down into the paper, allowing Plastic to stick to the surface.

Drag the Plastic along the paper or surface in a continuous unbroken line as if you were writing with a pencil.

Keep your movement slow and steady. The Plastic should hold to the paper and not curl up around the Nozzle.

3. My Plastic is not extruding from my 3Doodler.

3A. Plastic not engaging properly with the Drive Gear:

Gently push and turn the Plastic clockwise until you feel the strand pulled through the Drive Gear on its own.

If the above does not work, reverse the Plastic fully from the Pen. (See Section 2, Step 6) Snip ends, then reinsert and try again.

If Plastic is too short to be removed from the Pen, move to 3B.

3B. Plastic is too short to be removed from the Pen:

Try unscrewing the Nozzle and using the Unblocking Tool.

While Pen is hot (BLUE or GREEN Light on), use Mini Spanner to unscrew and remove Nozzle anti-clockwise.

Insert Unblocking Tool through open front end of Pen and gently push any excess Plastic out through the back of the Pen.
3. Plastic may be wrapped around the Drive Gear.

Remove Maintenance Cover using Mini Screwdriver provided in the box.

Use the Mini Screwdriver or Unblocking Tool to lift and release Plastic from the Drive Gear and out of the Pen through the open area beneath the Maintenance Cover or from the Plastic Loading Port.

4. My Plastic is leaking from around the Nozzle.

Nozzle may loosen with continued usage (or in transit). While Pen is hot (BLUE or GREEN Light on), gently turn Nozzle clockwise to tighten it using the Mini Spanner provided. Stop tightening once you first feel resistance so as to avoid over-tightening the Nozzle and breaking it.

A. Click either the FAST or SLOW button once.
B. If Step A does not solve this problem, please unplug your 3Doodler and then plug it in and try again.

5. My Plastic won’t stop extruding.

While the Pen is on and hot (BLUE or GREEN Light), double click either the FAST or SLOW button. Light will start flashing to signal the Plastic is reversing. Once the Plastic stops reversing, it is safe to remove it from the Pen by gently pulling on the back of the strand.

6. How do I reverse my unused Plastic?

While the Pen is on and hot (BLUE or GREEN Light), double click either the FAST or SLOW button. Light will start flashing to signal the Plastic is reversing. Once the Plastic stops reversing, it is safe to remove it from the Pen by gently pulling on the back of the strand.

7. I have reversed my Plastic but cannot get it out.

It is possible that the Plastic is either too short to reverse all the way out of your 3Doodler, or that the Plastic has moved past the Pen’s Drive Gear system.

You will be able to check for these issues by looking through the Maintenance Cover.

For both of these issues, you can try the following options:
• Insert a new strand of Plastic or Unblocking Tool to push the remaining Plastic through while Pen is ON and extruding.
• Remove Nozzle and use Unblocking Tool to push Plastic out the back of the Pen. (See Section 3, Step 3B).
8. My Pen won’t heat up! (light stays red).

It takes around 60-90 seconds for your Pen to heat up. If, after that time, the Pen still does not heat up and the Light remains RED, turn the Pen ON and OFF and try again. If that still does not work, please contact us at help@the3Doodler.com and we will assist further.

SECTION 4: TIPS AND BEST PRACTICES

Pay attention to Plastic types and settings

• For optimal Doodling, we suggest using the correct temperature settings for your Plastic.

• DO double check which type of Plastic you are using before you turn on the 3Doodler and insert a Plastic strand. If your Plastic strands get mixed up, here is a handy table for sorting and identifying what you're working with.

ABS (MATTE):
Temp: HI Temp
Light: BLUE
Feature: Great for drawing in the air.
How to tell: Plastic has white semi-circle ends.

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Temp: LO Temp
Light: GREEN
Feature: Eco-friendly and glossy, making it perfect for artistic creations.
How to tell: Very rigid, no white semi-circle ends.

FLEXY:
Temp: HI Temp
Light: BLUE
Feature: Make flexible, bendable Doodles.
How to tell: Plastic is very flexible.

Do not forget to snip your Plastic ends

• After removing a Plastic strand from the 3Doodler, cut and remove any partially melted material at the end of your strand before re-feeding it into the 3Doodler. This will reduce blockages or clogging issues.

• DO NOT pull Plastic from the back of the 3Doodler other than as directed.

Reverse and remove Plastic correctly

• DO NOT pull Plastic from the back of the 3Doodler other than as directed.

With the Pen set to HI, wait for the BLUE Light to come on.

Double click either Speed Button and the Light will start flashing to signal the Plastic is reversing.
Once the Plastic stops reversing, it is safe to remove it from the Pen by gently pulling on the back of the strand.

Take a break
• DO give your 3Doodler a rest after every 2 hours of continuous Doodling. 30 minutes of down time should be plenty.

Treat your Nozzle right
• If you ever remove your Nozzle, DO NOT remove it when your 3Doodler is cold. Light should be BLUE or GREEN.
• If you ever need to tighten your Nozzle, DO NOT force the Nozzle or overtighten it, as you could break the Nozzle and permanently damage your 3Doodler.

SPECIFICATIONS
Output Power: 6W
Output Voltage: 5V
Input Voltage: 5V

CARE & MAINTENANCE
For care and maintenance information, and more advice on how to use your 3Doodler, please refer to our website: the3Doodler.com
To troubleshoot, please visit: the3Doodler.com/troubleshooting

LIMITED WARRANTY
For more details on your limited warranty, please visit: the3Doodler.com/warranty
For 3Doodler’s Terms and Conditions and other notices please refer to our website: the3Doodler.com/terms-and-conditions

Warning: Changes or modifications to this unit 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.

This marking indicates that this product should not be disposed of with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.

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.

For 3Doodler’s Terms and Conditions and other notices please refer to our website: the3Doodler.com/terms-and-conditions

Specifications are subject to change and improvement without notice.
SECTION 5: STENCILS

Eiffel Tower

1. x4

2. x4

3. x4

4. x4

5. x4
Glasses

1

x1

2

x1