User Manual

magigoo

Coater

Disclaimer

This user manual describes the intended workflow for the Magigoo Coater.

Please carefully read and understand the contents of this user manual. Failure to follow instructions set out in the manual may lead to personal injury, poor results or damage to the Magigoo Coater, 3D Printer or its peripherals.

To make the most out of the Magigoo Coater, study the manual carefully and make sure that anyone using Magigoo Coater understands instructions laid out in this user manual.

Thought3D believes that the information in this user manual was obtained from reliable sources, however, the information is provided without any warranty, express or implied, regarding its correctness.

Thought3D does not assume any responsibility and expressly disclaims liability for injury, loss, expense or damage arising out of or in any way connected with the assembly, handling, use, maintenance, storage or disposal of the product.

Any illustrative images showcasing 3D printers and other products that are not produced by Thought3D are used for illustration only. There is no affiliation between Thought3D and showcased brands.

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Safety

1.1 Important Notices

This user manual contains safety notices and helpful information.

Warns against situation that may cause injury or damage if the instructions are not followed.

Provides helpful information to solve problems or perform a task easily.

1.2 Intended Use

Magigoo Coater is designed and built for use in FDM/FFF 3D printing to cover the build plate of a 3D printer with a thin layer of Magigoo or Magigoo Pro bed adhesive to increase the reliability of 3D print, reduce warping and provide easy release. Best results are achieved on glass build plates.

1.3 General Safety

- Magigoo Coater is intended to help apply a build plate adhesive on a build plate of a 3D printer. Generally 3D printers may generate high temperatures and have hot moving parts that can cause injury. Use Magigoo Coater with caution.
- The Magigoo Coater is intended for professional use. Use only with adhesives produced by Thought3D Ltd.
- Use Magigoo Coater indoors only.
- Do not use Magigoo Coater on dusty, dirty or damaged surfaces.
- Store the product in a safe designated place to avoid injury.
- Change or adjust only approved parts of the product in accordance with this manual.
- This product is not intended for children.
- If the Magigoo Coater and Magigoo products are used by persons with reduced mental and/or physical capabilities, or lack of the knowledge and/or experience, they must be supervised or have been given instructions about the use of the product by a person responsible for their safety.

1.4 Health and Safety

- Do not point The Coater at a person and/or animal.
- The Coater components may have sharp edges – handle with caution to avoid cuts.
- Magigoo Coater is a tool to apply Magigoo Adhesives. Before using Magigoo Adhesives follow the safety data sheets of adhesives for instructions including but not limited to personal protective equipment and follow safety instructions.
- Use only on a 3D printer that is in idle mode.
- Use only on build plate that is at room temperature.
- Store Magigoo Coater away so it will not fall, or risk to injure someone.

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Introduction

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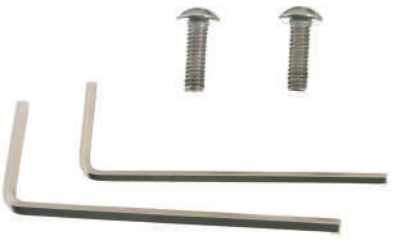

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2.1 Contents of the Starter Kit

Parts

1. Magigoo Original Adhesive x1
2. Bottle – empty bottle for water x1
3. Cleaning cloth
4. Spray Head x1
5. Pump Head x1
6. Thin Film Applicator x1
7. Manifold Cover x1
8. Valves x20
9. Manifold Frame
10. Bolts (M4) x2 for Thin Film Applicator
11. Square Nuts (M3) x6, Bolts (M3) x6 and Allen/Hex Key for Manifold Cover
12. Straw for Spray Head (short) x1
13. Straw for Spray Head (long) x1
14. Scraper x1, Plastic Blades x5

2.2 Specifications

Physical dimensions	**The Case** **30,5*35*11,5 cm** Approximately **2kg** **The Coater** **240mm** wide thin film applicator 15cm high
Bottle	**250ml**
Compatible with	**Suitable to use with:** Magigoo Original Magigoo Pro PP Magigoo Pro PA Magigoo Pro PC
Warranty	**12 months**

Instructions for Use

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3.1 Unboxing and Assembly

3.1.1 Unboxing

Open the case and inspect that all components are included and are in good condition.

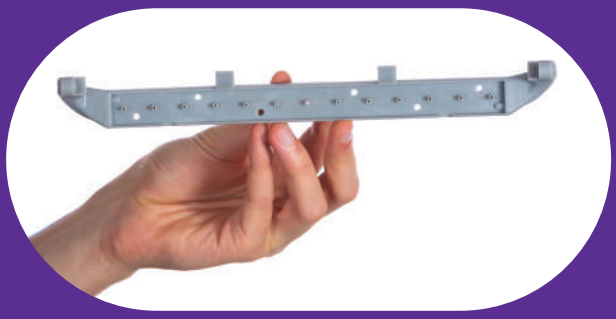
For reference see table below and point 2.1.

Item	Quantity
Case	1
Spray Head (nozzle with cap)	1
Pump Head (nozzle without cap)	1
Applicator - Manifold - Manifold Cover - Thin Film Applicator - Valves	1 1 1 1 20 (13 for applicator, 7 spare)
Bottle with adhesive	1
Bottle for cleaning	1
Straw for Pump Head (short)	1
Straw for Spray Head (long)	1
Cleaning Cloth	1
Scraper Handle	1
Plastic Blades for Scraper	5
Square Nuts for Manifold assembly, size M3	6
Bolts for Manifold assembly, **size M3**	6
Bolts for Thin Film Applicator, **size M4**	2
Allen/Hex Keys for tightening bolts	2

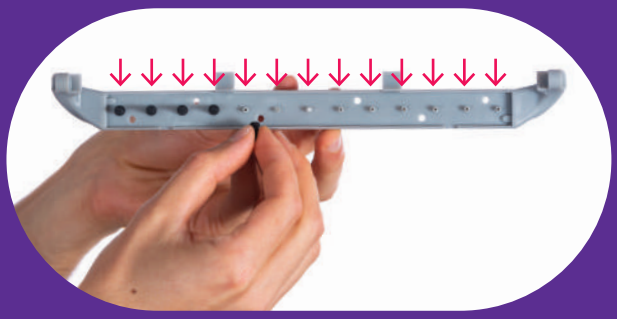
3.1.2 Assembling the manifold

Read through all the steps before following step-by-step instructions. Assemble the manifold by attaching the valves and installing the thin film applicator.

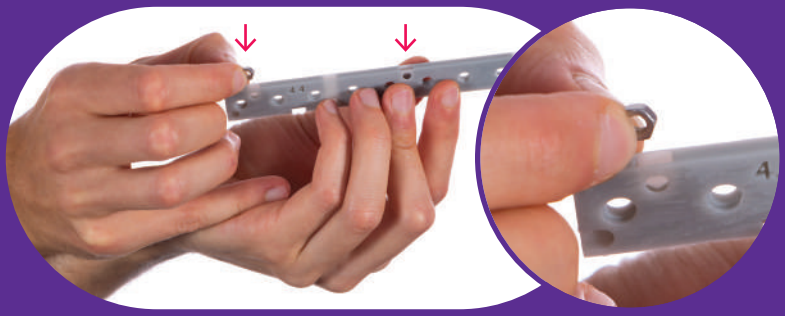
1. Take the manifold.



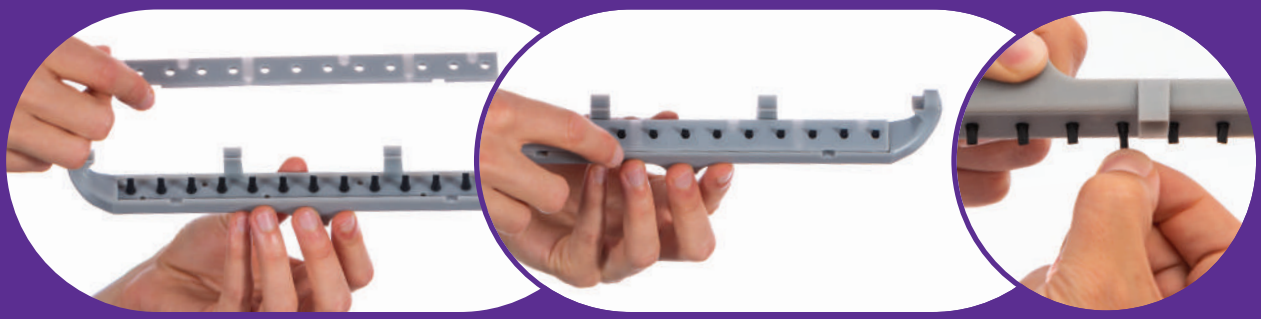
2. Place one valve over each of the 13 nozzles present on the manifold frame.



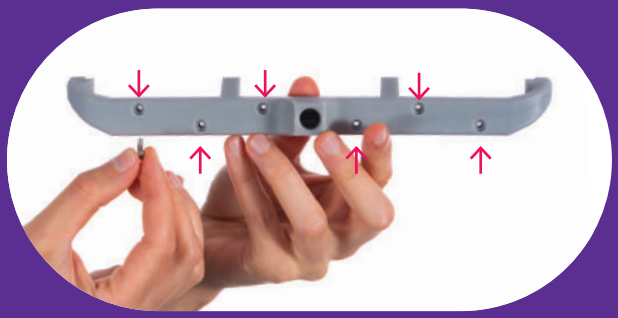
3. Insert 6 square nuts (size M3) into manifold cover. There are designated nests for square nuts.

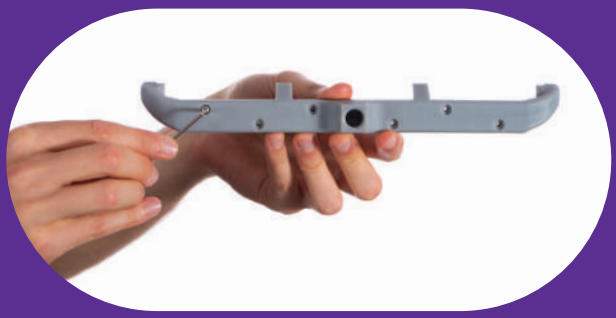


4. Place the cover with nuts into its designated place. Use the notches to make sure it is in the correct orientation. Pull on the valves.

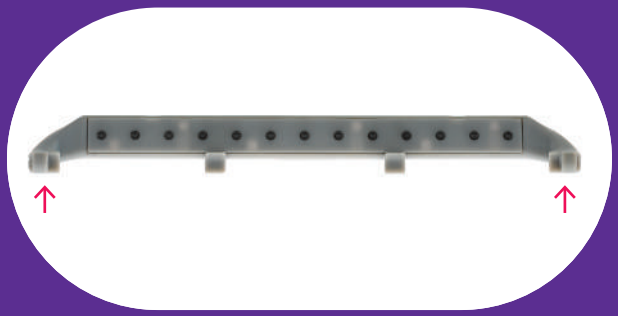


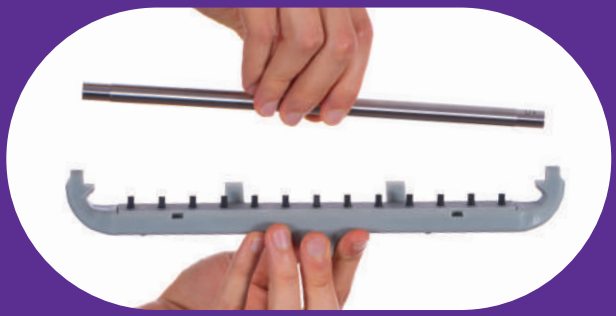
5. Screw in the M3 size bolts until they tighten slightly. Do not over tighten to prevent rupture of the manifold structure.



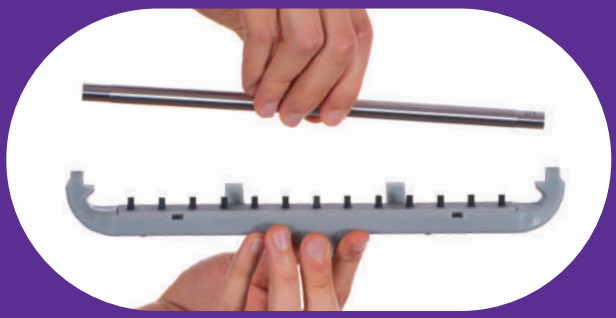


6. Place the thin film applicator to its designated place on the manifold frame.





7. Hold the thin film applicator in place.



8. Fasten the thin film applicator with M4 sized bolts. One from each side. Tighten slightly. Do not over tighten to prevent rupture of the manifold structure.

The thin film applicator is static bar and does not roll. Attempting to make the thin film applicator bar roll may cause irreversible damage.

3.1.3 Attaching the pump

Attach the assembled manifold (see 3.1.2) to the pump.

9. Take the pump head without the cap.

10. Insert the pump nose into manifold.

11. Screw on the assembled manifold until it is slightly tightened and the manifold is perpendicular to the trigger. Do not over tighten to prevent rupture of the manifold.

12. Attach the short straw to the pump.

13. Screw on the assembled system to the Magigoo bottle.

3.1.4 Preparing for first use

Find a surface that can be easily cleaned.

For the first time use, the Coater system needs to be primed by pumping several times until the glue starts coming out of the valves consistently. You should see 13 glue dots form on the surface. Clean the Coater thin film applicator and the valves after priming.

3.2 Recommendations for use

3.2.1 Before Coating

Prepare the build plate area where to apply the adhesive.

- The build plate area has to be thoroughly cleaned.
- The build plate area has to be well levelled.
- Any imperfection on the applied area may decrease the consistency of the applied coating of adhesive.

How to clean build plate:

Fill the provided spare bottle with water and attach spray head. If possible, remove the bed from the 3D printer for cleaning. Clean only when 3D printer is not operational and build plate is at room temperature. If there are solid debris, use plastic scraper to remove. Spray water on build plate or used Magigoo layer. Clean off with the cloth.

The build surface has to be very clean. Any debris or uneven surface will disrupt the application of an even thin coating.

Do not use hot water. Boiling or hot water may damage the bottle for water or the applicator system.

3.2.2 Coating

Magigoo Coater is designed and built for use in FDM/FFF 3D printing to cover the build plate of a 3D print with a thin layer of Magigoo and Magigoo Pro bed adhesive to increase the reliability of 3D print, reduce warping and provide easy release. Best results are achieved on glass build plates.

Before coating with Magigoo Adhesives, read through the adhesive safety data sheet for safe use. Before coating, check that the Coater valves and the thin film applicator are clean and dry. If necessary, wipe the thin film applicator and valves with a damp cloth and/or wipe dry. If the valves are clogged, clean the manifold first. See section 3.2.4 for Manifold cleaning instructions.

How to apply:

1. Place the thin film applicator firmly at the build surface at the far end of the surface. Hold the system so that the position of the valves are perpendicular to the surface.

2. Pump the coater once. If the new glue bottle has been attached and not primed, pump until the glue dots form on the surface.

You should see 13 adhesive dots on the surface.

3. Press the thin film applicator firmly against the surface and slide across the bed, spreading the Magigoo.

The thin film applicator is static bar and does not roll. Attempting to make the thin film applicator bar roll may cause irreversible damage.

Looking against the light you should see a very thin even coating of Magigoo.

4. Clean the valves and thin film applicator immediately after the use to avoid clogging and build-up of dry adhesive.

NB! If changing adhesive type in between the use of the Coater, the manifold has to be properly cleaned. See how to clean in point 3.2.4 Cleaning the Manifold

3.2.3 After Coating

Cleaning the thin film applicator and the valves.

The thin film applicator and valves need to be cleaned after each use.

Use a damp cloth to clean the thin film applicator and the valves.

3.2.4 Cleaning the manifold

Manifold needs to be cleaned thoroughly whenever a glue type is changed, to remove residue of previous glue. If the Magigoo Coater was not is use over longer period of time, manifold would need to be cleaned for better performance.

Clean the manifold in a safe place away from other people inside a sink or secondary container.

How to clean manifold:

1. Remove the adhesive bottle and close with a cap.

Do not use hot water. Boiling or hot water may damage the bottle for water or the applicator system.

2. Place the assembled manifold into a bottle with water.

3. Pump at least 15 times or until the water coming out looks clean.

Water may spray in different directions.

If the Coater will not be in use for longer period of time, clean the thin film applicator, valves and the manifold properly, dismantle and store away in its case.

3.2.5 Cleaning Build Plate from Magigoo

Refer to 3.2.1. Cleaning the build plate.

3.3 Adhesive compatibility

The Magigoo Coater should be used only with adhesives produced by Thought3D under the brand Magigoo or other Thought3D approved adhesives.

Magigoo Coater has been designed to work with Magigoo and Magigoo Pro 3D printing build plate adhesives. For more information on how to get the best performance out of Magigoo adhesive products refer to User Manual for Magigoo Products (www.magigoo.com/tested-materials) "GETTING MOST OUT OF MAGIGOO PRODUCTS".

For safety, always read the Safety Data Sheet for each glue type before use.

Table of adhesives and material compatibility and performance.

Adhesive	Material
Magigoo Original Standard Adhesive	PLA, ABS, PETG, HIPS, TPU
Magigoo Pro PP	Polypropylene
Magigoo Pro PC	Polycarbonate
Magigoo Pro PA	Nylon

Surface	Original	PC	PA	PP
Regular Glass	Good	OK	Acceptable	Good
Borosilicate Glass	Good	OK	OK	Good
PEI	Good	Good	OK	Good

For more information about Magigoo adhesives see our manual and tested materials database on www.magigoo.com/tested-materials, "TESTED MATERIALS" and "GETTING MOST OUT OF MAGIGOO PRODUCTS" respectfully or reach out to info@magigoo.com.

Maintenance

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4 Maintenance

The Coater is designed to be used on a daily basis. The components like thin film applicator, valves and pump may lose original functionality with normal wear and tear. If the glue dots do not form a consistent row of 13 dots, check if valves need to be cleaned or replaced. See illustration number 2 in 3.1.2.

If the Coater is not producing a thin layer when swiped, check if there is any debris on the surface or if the thin film applicator has any damage. Removing the debris from the surface or replacing the thin film applicator may be necessary.

Clean the valves and thin film applicator after each use. Clean the manifold when storing away for several days or more or when changing the type of adhesive.

Warranty

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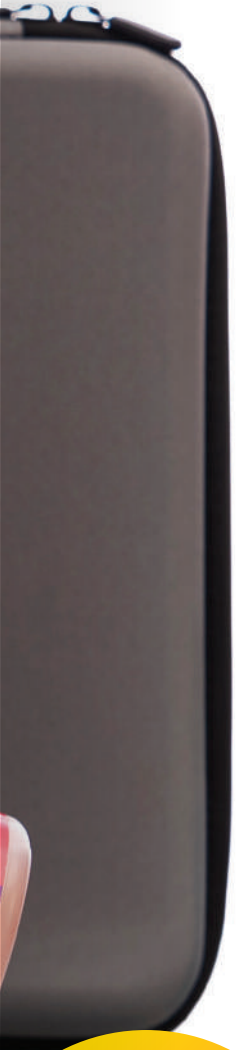

5.1 General

Thought3D Ltd (the "Manufacturer") grants a standard commercial warranty on the Magigoo Coater product (the "Product"), including all accessories supplied with it except for items which are consumables.

The warranty is additional to any contractual rights that the purchaser may have against the person supplying the Product, as well as any legal or statutory rights that the purchaser may have against the Manufacturer or any other person.

The warranty period for the Product shall run for twelve (12) months from the date the Product is first sold and delivered to the purchaser, as evidenced by the purchaser's purchase invoice. The commercial warranty is non-transferrable and thus shall not inure to the benefit of any subsequent purchasers of the Product following the first sale.

If a part of the Product is repaired or replaced during the warranty period, the warranty period still remaining for the entire product will apply to the part so repaired or replaced and shall not extend the warranty period.

The Manufacturer warrants that the Product is free from any defects in material, design and workmanship. The warranty is a statement of services that the Manufacturer shall provide under specified circumstances. Under such circumstances the Manufacturer shall offer only those services and accepts liability only to repair or replace the Product as described herein.

Any warranty claim must first be recognized as justified in accordance with the terms stipulated herein. If so, the Manufacturer shall use its best endeavours to rectify the defects free of charge in accordance with this warranty. If the defect cannot be repaired, the Manufacturer may replace the broken part or the Product free of charge by an identical replacement part or product, or, if the Product is no longer manufactured or is otherwise unavailable, with a similar replacement product of the same value. In the event repair or replacement is not possible the Manufacturer may elect to offer an appropriate refund.

Under this warranty, the Manufacturer shall not be responsible for any costs incurred by way of shipping, whether such shipping is required to return defective products to the Manufacturer for inspection or repair, or to return replacement or repaired Product(s) back to claimant.

5.2 Exclusions

The warranty shall not apply to:

i. any defect in the product arising from fair wear and tear, wilful damage, accident, negligence by the purchaser or any third party;

ii. use otherwise than as recommended by the Manufacturer, or failure to follow the Manufacturer's instructions;

iii. defects or damages arising from inappropriate, incorrect or improper use, installation, maintenance, operation and cleaning;

iv. any alteration or repair carried out without the Manufacturer's approval;

v. consumable components of the Product such as the cloth, scraper, plastic blades and valves;

vi. failure of the product caused by accident; or

vii. any other event, act, default or omission beyond the Manufacturer's control.

5.3 Conditions & Limitations

By offering this warranty, the Manufacturer accepts no liability for providing any additional services or for any damages or compensation for losses or injury of any kind resulting from product failure or non-conformity with specifications or for any delay or failure in providing warranty services whether these are direct, indirect, special or consequential. In any event, the Manufacturer is not liable for any indirect or consequential damages, including but not limited to loss of use, loss of profit or revenue. In any instance, the Manufacturer's liability shall be limited to the price paid for the Product.

Furthermore, the Manufacturer warranty is granted under the explicit condition that:

- The Product was sold, delivered and assembled by a reseller recognised by the Manufacturer;
- The Product was newly-manufactured on the date of purchase and not sold as used, refurbished or manufacturing seconds;
- The Manufacturer's installation and maintenance instructions as described in the Product manual have been observed.

For a warranty claim to be valid:

i. notification of a warranty claim must be made before the end of the warranty period and in the manner stipulated herein;

ii. it must conform with any additional stipulations of the warranty, as defined below

iii. it must be substantiated with the original purchaser's purchase invoice;

iv. the serial number sticker must still be on the Product(s); and

v. the Product(s) must be returned in the original packaging.

Since warranty claims are conditional on the submission of the original purchase invoice and packaging, the Manufacturer advises purchasers to store the invoice and official packaging in a safe place.

If the original packaging is not available anymore, the purchaser can purchase replacement packaging from the Manufacturer.

5.4 Lodging Claims

Any notification on the basis of this warranty must be made to Manufacturer within the warranty period at the following address:

Address info@thought3d.com

Address Thought3D Ltd, U2150, KBIC, Kordin Industrial Estate, Paola, PLA 3000, Malta.

5.5 Applicable law and competent court

This warranty shall be governed by the laws of the Republic of Malta and any dispute arising in connection with the same shall be submitted to the exclusive jurisdiction of the Maltese Courts.

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