M3D

meet the micro
defining the next
generation of 3D printing

User Manual

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M3D END USER AGREEMENT

This agreement between M3D LLC (a company incorporated under the laws of the State of Maryland in the United States), and you, the END-USER, which describes important disclaimers, indemnity, safety instructions, software information, and limited warranty information about its products and govern the conditions of use.

PLEASE READ THESE TERMS CAREFULLY as continuing this installation process and using M3D products and software indicates agreement with these terms.

These are the current terms and conditions for any end-user, and apply to the use or license of any M3D product. You acknowledge that you have read and understand this agreement in its entirety, and accept the terms of this end-user agreement.

CONDITIONS OF USE:

- You understand and acknowledge that the user manual for M3D's products, this end-user agreement, and the limited warranty may have been provided as a physical copy where required by law, with the initial customer purchase. A digital copy of the user manual was emailed to the purchasing customer when the product shipped. A digital copy of this agreement and the end-user agreement can be found online at www.printm3d.com if you are not the purchasing customer.
- Before attempting to use The Micro 3D Printer, you agree to read the Micro 3D Printer user manual, which contains important disclaimers, warranty, and safety information.
- If you are not the purchasing customer and first end-user, you must access a digital copy of the manual from our website.
- All terms and conditions of this agreement are subject to change, such as may be necessary by law.
- M3D reserves the right to log your acceptance of this agreement locally in your computer or as needed and allowed by law.
- M3D Consumables (such as filaments, print beds, Buildtak sheets, etc.) will be made available by M3D and its distributors. Any consumables included as part of an initial purchase does not imply inclusion of those consumables with a future purchase.
- As an end-user, you agree that without the written consent of M3D, you will not disassemble, de-compile, modify, enhance, reverse engineer, or tamper with, attempt to identify trade secrets, or attempt to circumvent safety features of M3D products and software.
- M3D is bound by US law and cannot send its products to any customers in embargoed locations, and individuals, entities, and corporations are screened against various export enforcement, a.k.a. "blacklists." This includes links or access to software products. If you are on the blacklist, you must not accept this agreement.

INDEMNITY

- You understand that 3D printers are an experimental technology and that they were intended for use under the guidelines provided in the user manual and this agreement.
- You understand and acknowledge that the user manual only describes the best practice for operating The Micro 3D Printer, and that even the best practice for operating the printer is not always presumed as safe.
- You agree to hold harmless and indemnify M3D from any personal injury that results from using its products. You are responsible for any damage or injury that may occur as a result of using M3D products.
- You understand and agree that M3D is not responsible for any injury, damage and/or loss of accessories, components, consumables, and information that may occur during the use of the product.
- You agree to hold harmless and indemnify M3D from any liabilities that result from any of the following conditions: 1) modification of The Micro 3D Printer, its consumables, and/or software; 2) use of third-party software; 3) use of any custom 3D models; 4) use of third-party power supplies or USB cables; 5) use of third-party consumables such as print beds, print bed surfaces sheets, print bed adhesives, and filaments; 6) use of The Micro 3D Printer and/or its components in any way other than intended, as described in the user's manual; 7) operation of The Micro 3D Printer or use of M3D filaments; and 8) Printing of custom objects which results in any physical hazard, legal suit, and/or intellectual property infringement.
- You agree that there is no circumstance where M3D will be held liable for any damages, including but not limited to loss of anticipated profits, business, opportunities, saving, or deals due to late delivery, performance characteristics, repair, business interruption, or any other disapproval of M3D's products or services.

- You agree to hold harmless and indemnify M3D from having any additional responsibilities to anyone other than you, the end-user.

SAFETY AND WARNINGS

- CHOKING HAZARD - The Micro 3D Printer and its consumables may include small parts that may constitute a choking hazard; additionally, these products may be used to manufacture objects that may themselves constitute a choking hazard.
- The Micro 3D Printer is NOT A TOY; children under the age of 14 should use the product under adult supervision.
- CAUTION! The printhead, exposed nozzle, extruded plastic, and areas near the nozzle may be extremely hot. Keep fingers away from the printhead and extruded material unless it has been unplugged for at least 10 minutes.
- Use M3D's products only as intended, as described by the user manual and/or this agreement and/or described within the software.
- Use M3D's products in a well-ventilated area.
- Do not leave M3D's products running while unattended.
- PRECAUTION - None of components of The Micro 3D Printer or parts printed from it or using M3D filaments are certified for food safety nor should they be regarded as food-safe therefore should not come in contact with the mouth or foods/liquids that will be ingested by humans or animals.
- PRECAUTION - None of components of The Micro 3D Printer or parts printed from it should be used for medical applications, such as but not limited to implantation, drug delivery, or ingestion.
- PRECAUTION - If any allergy develops as a result of direct or indirect contact using M3D's products, or from the 3D printed objects, discontinue use immediately.
- MAINTENANCE - After extended or improper use, the nozzle and/or its cover may need to be replaced or cleaned; the print bed and/or the Buildtak sheets covering it may need to be replaced; the extruder may need to be purged or cleaned; and the filaments may need to be purged or replaced.

SOFTWARE

- M3D software will be included with a limited, non-exclusive license as part of each purchase of a Micro 3D Printer.
- The M3D software is under development and is supported by M3D through downloadable updates. Specifications of the printer and software functionality may be expanded or modified by the software through updates. These include but are not limited to: operating system functionality; printer speed; print quality; build volume; and print resolution and accuracy.
- Software development updates are intended for ongoing product performance improvement and may require temporary reversion to older performance parameters as other features are tested, improved, or enabled.
- M3D reserves the right to contact our remote server in future versions of the software for the purpose of comparing software versions and downloading remote software updates.
- M3D software updates include firmware updates which may be pushed to The Micro 3D Printer.
- The M3D software includes terms and agreements that differ from the customer purchase agreement.
- The M3D software is proprietary and its design and contents are protected by law. Attempts to deconstruct / reverse engineer the software are considered illegal as provided by copyright law and fair use; trade secrets; patents pending; and additional local, state, and federal laws where applicable.
- All parts of this section apply to any end-user and are fully transferrable to any user.

WARRANTY TERMS

- A standard limited warranty and extended warranty options were described with full terms & conditions to the purchasing customer. The purchasing customer may access their proof of purchase and limited warranty agreement by logging into their user account at www.printm3d.com. Warranties are non-transferrable and are limited to being used by the purchasing customer who becomes the first end-user.
- There is no express warranty provided for the use of M3D software, and this software is provided free of charge and carries a value of $0, therefore you, the end-user, agree that M3D will not be liable for financial damages.
- INTERNATIONAL LIMITATIONS AND STATUTORY LAW
  - The conditions set forth in this agreement are intended to be fully binding by United States national law.

- o This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some limitations included in this agreement may not be permissible by the laws in your state, country, or locality; in this case, our agreement is not intended to restrict or modify any statutory law that preceded it but to provide warranty in lieu of any implied warranties.
  - o European Union customers - You may have additional rights granted by your national laws that precede parts of this agreement. EU customers can find their local agency at http://ec.europa.eu/consumers/ecc/index_en.htm to learn more.
- All parts of the Standard Limited Warranty section apply to the purchasing customer / first end-user and are non-transferrable.

REPAIR/SERVICE

- Repair/Service terms were provided to the purchasing customer in the customer purchase agreement. This agreement may be found by logging into their user account at www.printm3d.com.
- All parts of the Repair/Service section apply to the purchasing customer / first end-user and are non-transferrable.

RETURNS

- Return terms were provided to the purchasing customer in the customer purchase agreement. This agreement may be found by logging into their user account at www.printm3d.com.
- All parts of the Repair/Service section apply to the purchasing customer / first end-user and are non-transferrable.
- All software sales or licenses are final, non-refundable, and/or non-transferrable.

INTELLECTUAL PROPERTY

M3D and its products and services include proprietary and privileged information, also known as trade secrets. M3D® is a registered trademark of M3D LLC. Design and utility patents pending.

The Micro 3D Printer is proudly designed and assembled in Maryland. For more information, visit printm3d.com.
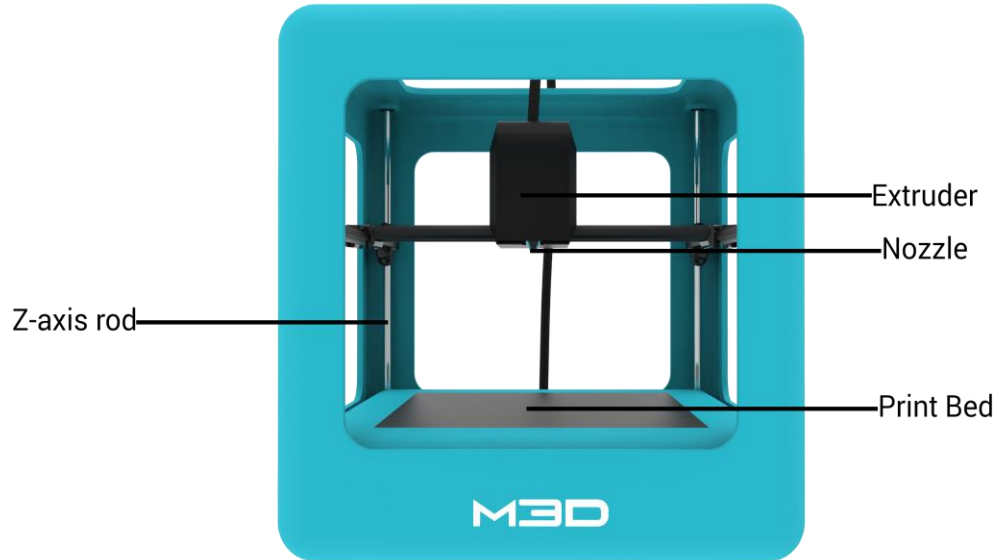
SECTION 1 - INTRODUCTION

Congratulations on purchasing The Micro, the first truly consumer 3D printer. It can be used right out of the box to make custom creations come to life. Just plug in the printer, download models, hit print, and dive headfirst into the innovative world of 3D printing.

We really hope you enjoy your 3D printing experience with The Micro! Be sure to share pictures of your favorite prints with us on social media; here are a few of ours:

1.1   Overview

1.2   Specifications

Build Volume:	Tapers towards top:
	First cube: 110 mm x 107 mm x 73.5 mm
	Second cube: 80 mm x 68 mm x 39 mm
Layer Resolution:	High - 100 microns; Medium - 150 microns; Low - 250 microns
Filament Diameter:	1.75 mm
Nozzle Diameter:	0.35 mm
Layer Thickness:	0.05 mm
Speed:	
Positioning precision:	XY - 15 microns; Z - 3 microns
Software:	M3D
Supported File Types:	.stl, .obj, .smf
System Compatibility:	Windows
Power Supply:	20W
USB:	M3D Model 410
Weight:	2 kg

SECTION 2 - GETTING STARTED

2.1   Connecting to a Computer

1. To connect The Micro to a computer, insert the M3D USB cable (provided) into the USB port at the back of the printer.

2. Insert the other end of the USB cable into an available USB port on your computer.
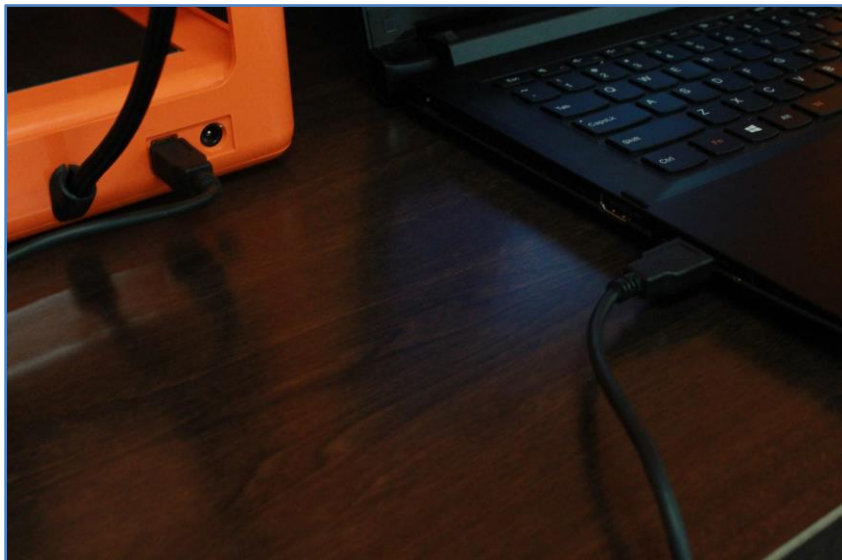
2.2   Attaching Power Supply

1. To power on The Micro, insert a genuine M3D power supply (provided) into the back of the printer, in the round hole next to the USB port.

2. Plug the country-specific external power supply into a wall socket, and The M3D power indicator LED will light up.

2.3 Detaching Power Supply

1. To power off The Micro, disconnect the USB first. Then, wait for at least 10 seconds (or calibration may fail) before detaching the power supply from the back of the printer and wall socket.

2.4   Installing M3D Software

The M3D software can be downloaded via our website user portal. If you haven't received access to our user portal, please contact us at info@printm3d.com, and we will be happy to assist you.

1. After downloading the M3D software, continue through all installation windows and prompts.

2. Run the M3D software. Your computer will automatically detect your printer. Your printer may disconnect and reconnect in seconds as it is detected and will indicate: "The new printer is ready."

3. The M3D software will check for and download the latest firmware and software updates; please allow it to update as necessary for proper printer performance and compatibility. DO NOT turn off your printer or computer during firmware and software updates.

Turn Windows Automatic Updates to Inform Only

When running a Windows PC, turn Automatic Updates to "Check for updates, but let me choose whether to download and install them" from the Control Panel; this will prevent Windows Automatic Updates from restarting your computer (resulting in a print failure) while The Micro is in operation.

SECTION 3 - LOADING FILAMENT

The Micro can be loaded with filament using either the external feed port at the top of the extruder or the internal feed port underneath the print bed. Do not load both ports at the same time during operation.

3.1   Loading Filament (External)

1. To load filament into the external feed port, select "Settings" from the M3D software's main interface. Then, select "Manage Filament."

2. Select "Insert Filament (External)."
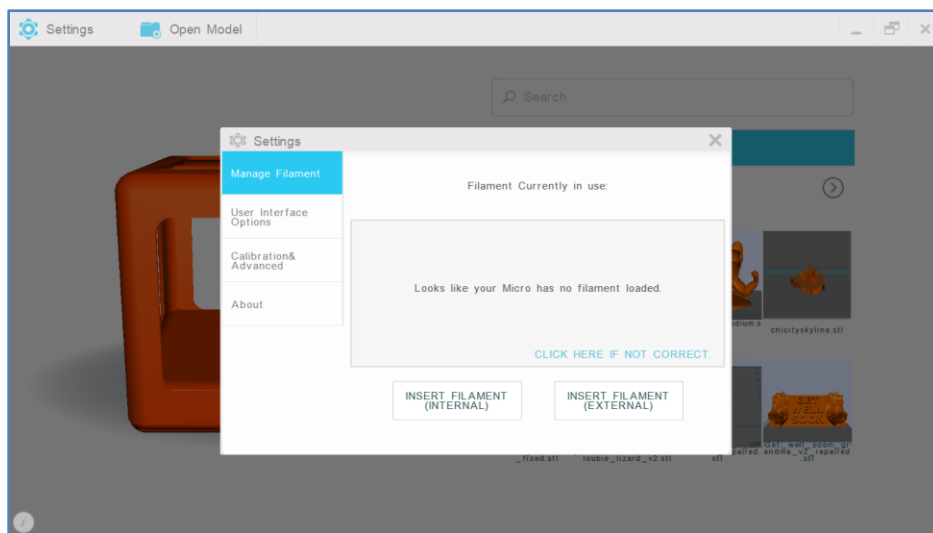

3. Confirm and enter your filament type. Select "Next."
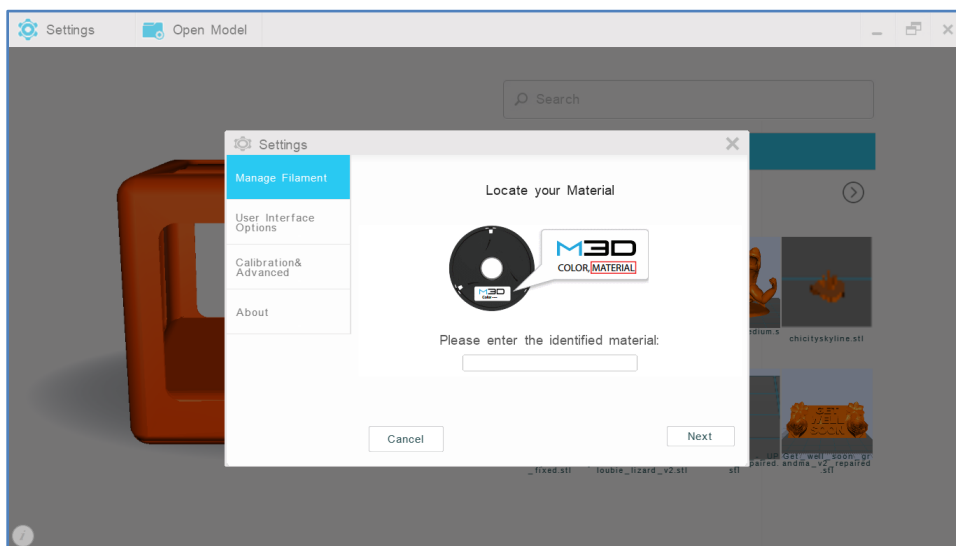
4. Confirm and select your filament color. Select "Next."
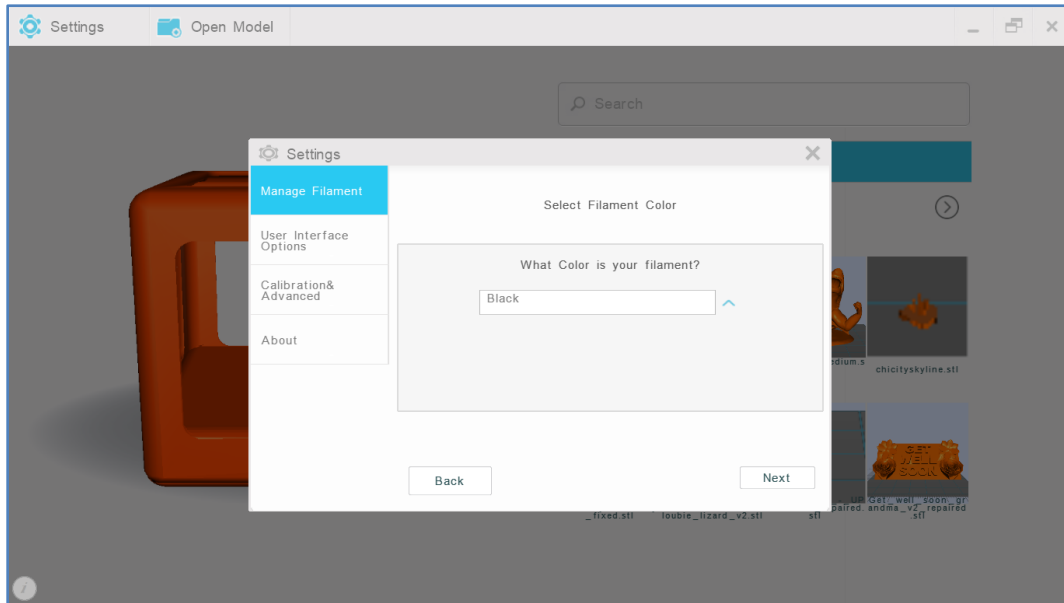
5. When prompted, insert filament into the external feed port located at the top of the extruder head. Gently guide the filament through the external feed port until it "catches" the extruder gear and begins to be pulled on its own.

6. If loaded correctly, filament will begin to exit the nozzle. Please make sure to clean the nozzle and print bed before starting to print models.
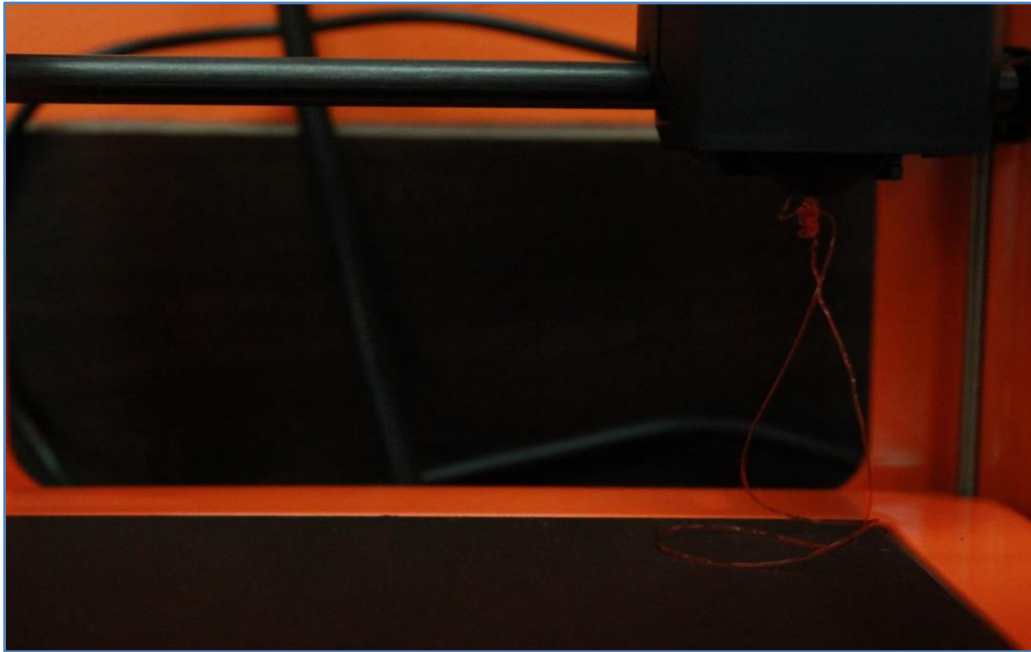
7. If filament has not exited the nozzle, select "No" and retry filament loading steps again; it may take several attempts. Otherwise, select "Yes" to finish loading filament (external).
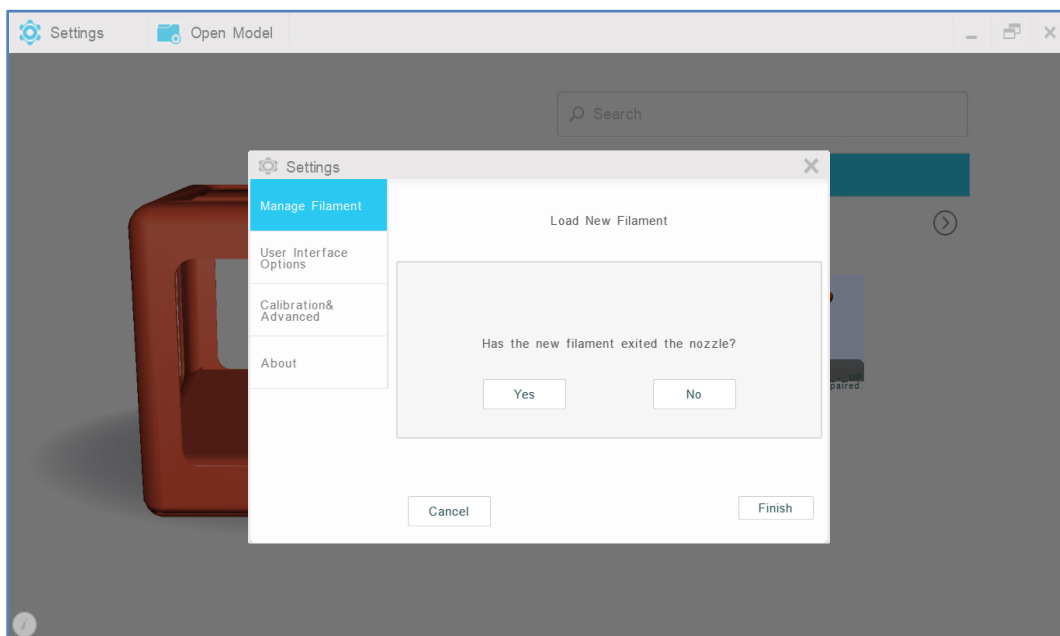
3.2   Loading Filament (Internal)

1. To load filament into the internal feed port, select "Settings" from the M3D software's main interface. Then, select "Manage Filament."

2. Select "Insert Filament (Internal)."
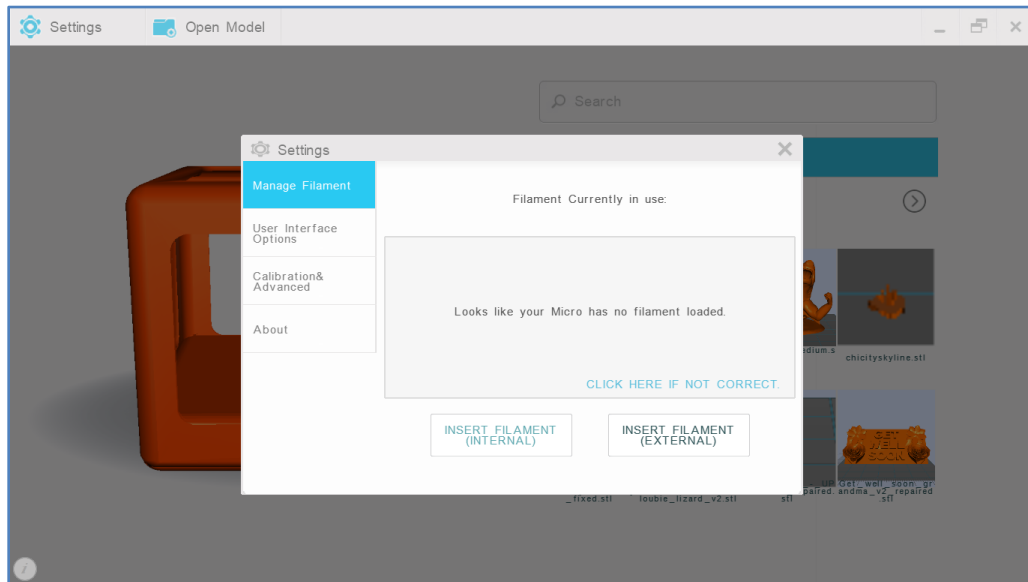
3. Confirm and enter your filament type. Select "Next."
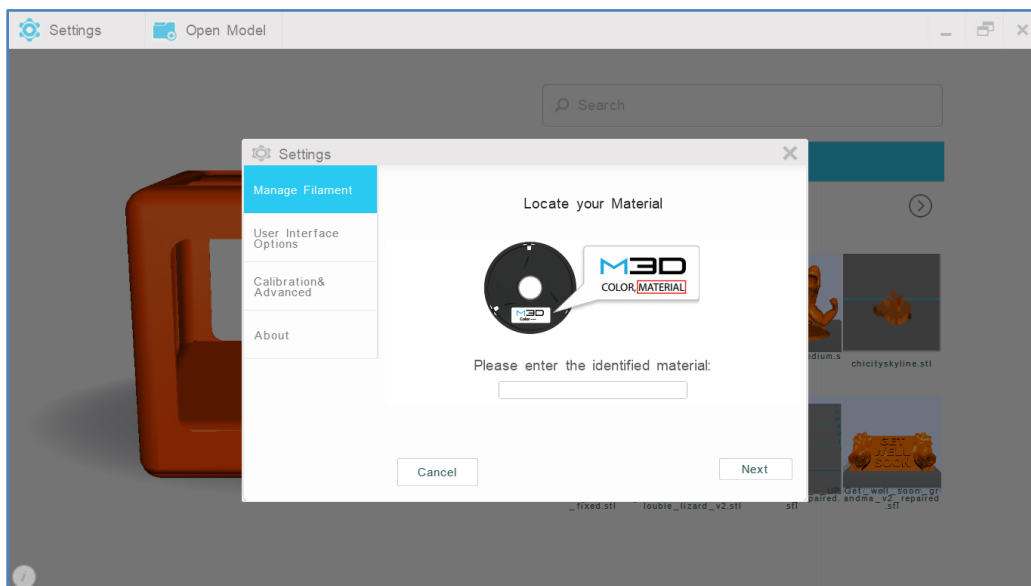
4. Confirm and select your filament color. Select "Next."
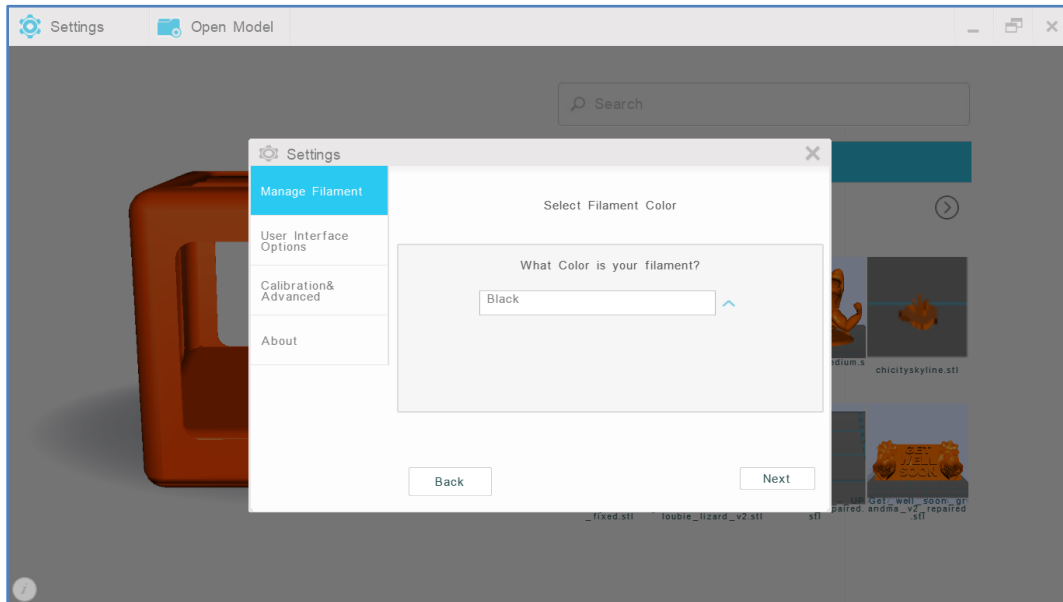
5. When prompted, push the print bed back to unlock it and lift it up to reveal the compartment underneath. Then, unwrap one meter of filament as directed and feed it into the internal filament port. Continue inserting filament through the internal feed port; you may encounter resistance and will need to firmly push the filament through.
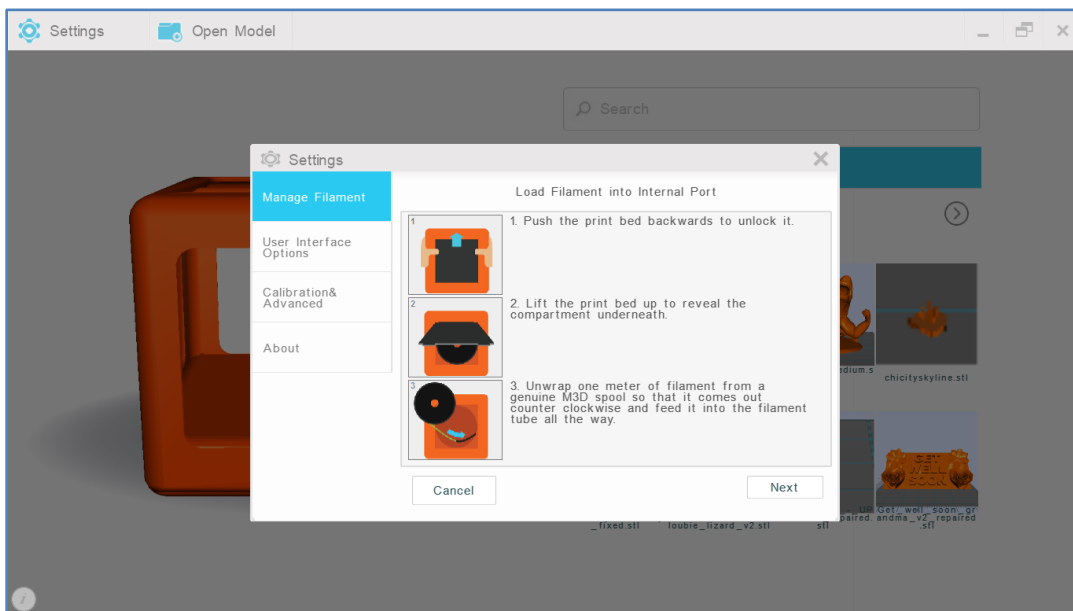
6. When prompted, wrap excess filament back onto the spool and insert the spool into the internal compartment. Make sure that the filament can unravel counter-clockwise. Then, re-insert the print bed securely and pull it forward to lock it into place.
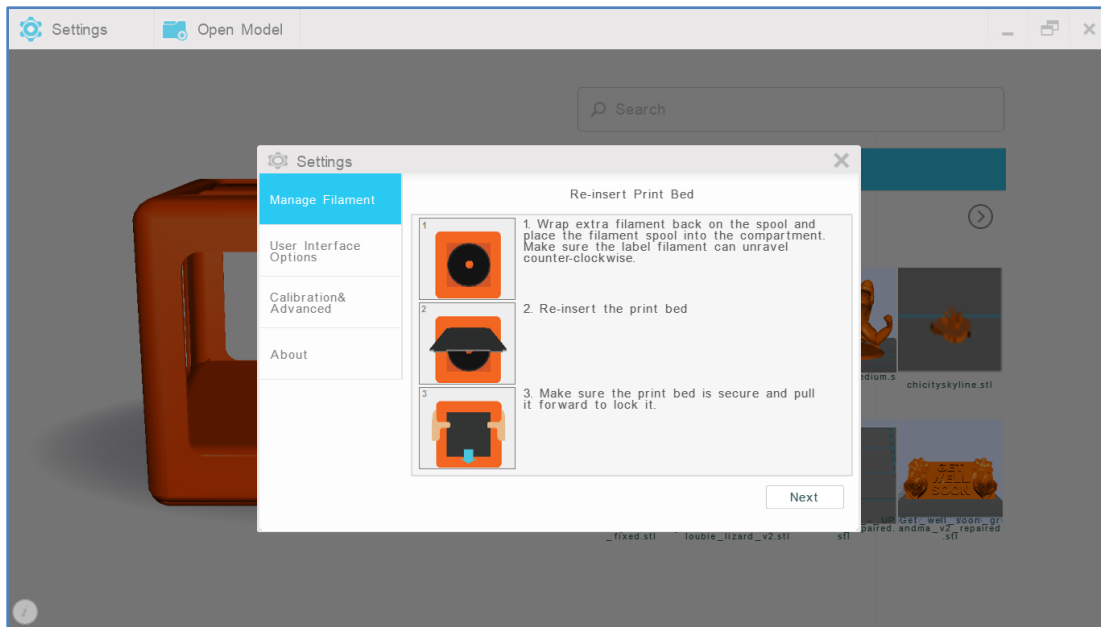
7. If loaded correctly, filament will begin to exit the nozzle. Please make sure to clean the nozzle and print bed before starting to print models.

8. If filament has not exited the nozzle, select "No" and retry filament loading steps again; it may take several attempts. Otherwise, select "Yes" to finish loading filament (internal).

SECTION 4 - PRINTING OBJECTS

4.1 Downloading and Importing Models

STL models can be downloaded and imported into the M3D software from online databases such as Thingiverse.com or Yeggi.com. The M3D software can also use models exported from 3D modeling software.

1. To load a model, select "Open Model" from the M3D software's main interface and select your model. You can also use the search bar or select from "Recent Models" from the M3D software's main interface. Your model will load into The Micro GUI.

4.2 Adjusting Models

2. Click on The Micro GUI to enter adjustment mode. From here, models can be scaled, rotated, or moved by adjusting the options on the left. Models can be scaled by all 3 dimensions simultaneously by using the right-mouse button, individually adjusted using the scale bar, or manually entered into the number box.
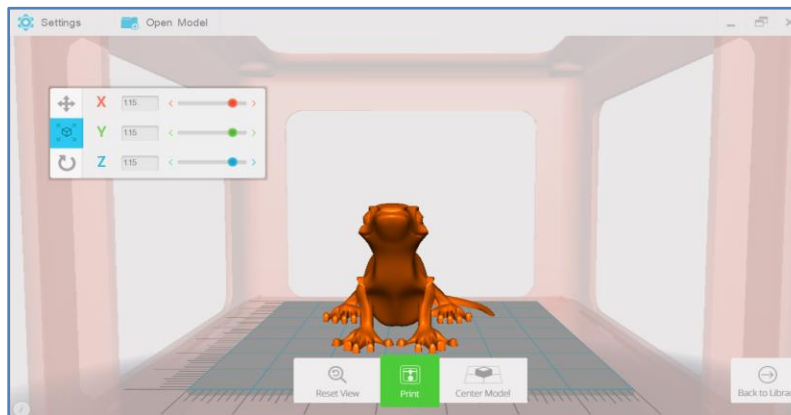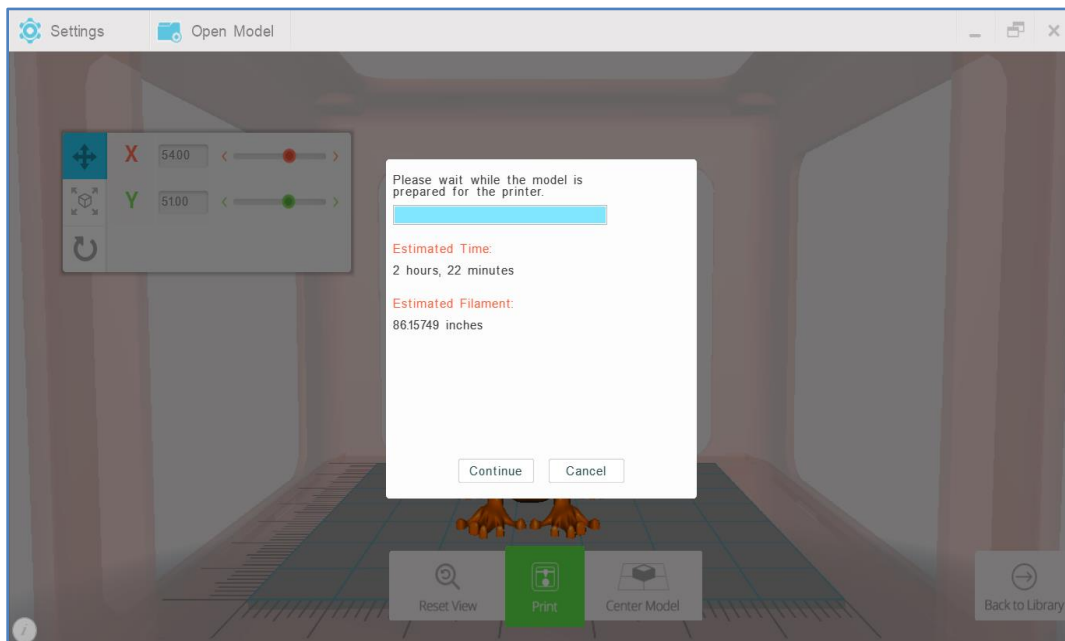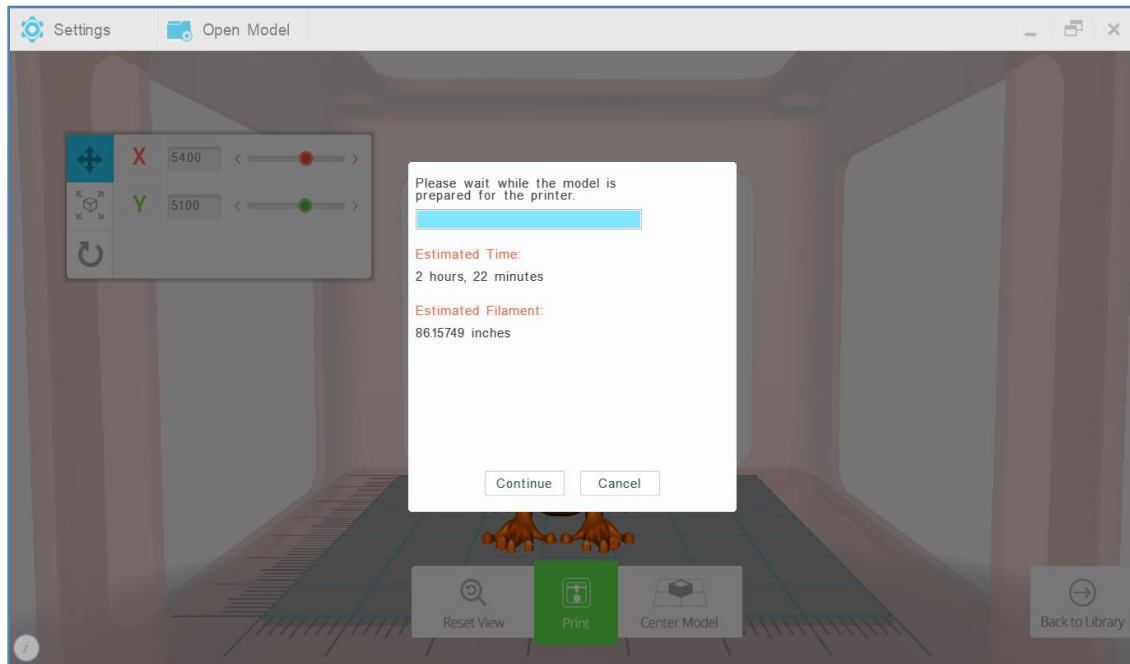
4.3   Printing Models

3. When ready to print, select "Print" and confirm your printing preferences. Select "More Options" to view support material and cut-off options.
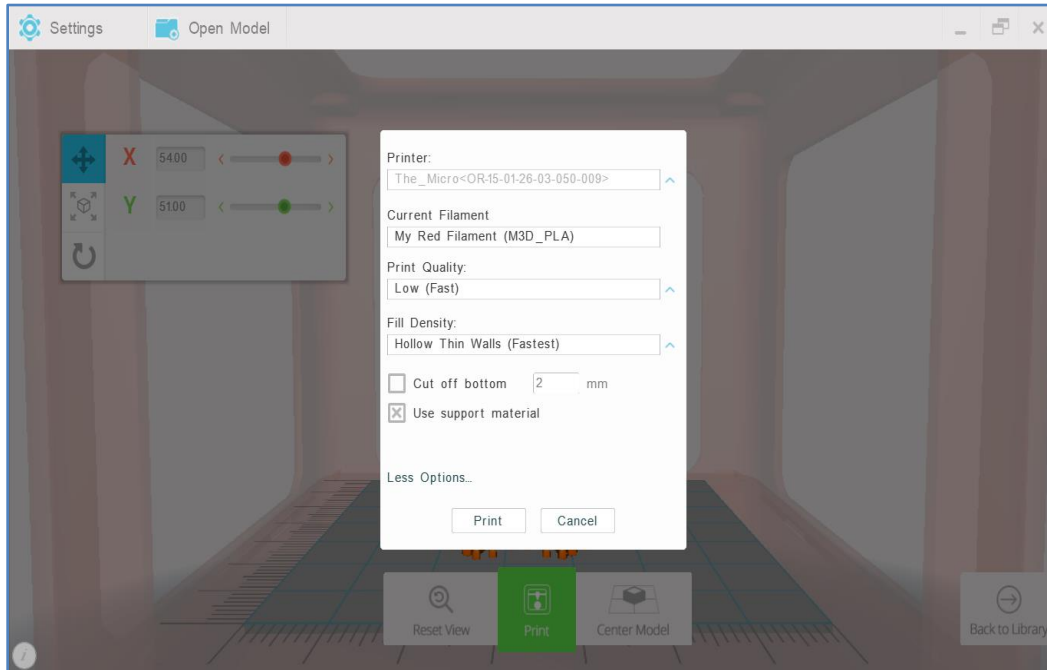
4. Select "Print" and confirm estimated time and filament amount. Then, select "Continue."

5. Make sure to clean the nozzle and make sure that the print bed is clear. Select "OK" when ready to print.

6. Watch as your model prints and comes to life!

SECTION 5 - TROUBLESHOOTING

5.1   Having Trouble?

For general information on The Micro, read our FAQ at https://printm3d.com/themicro/#specifications.

If you are experiencing any trouble with your Micro 3D printer, please feel welcome to submit a support ticket at https://m3d.freshdesk.com/support/home or contact our support staff with any further questions and concerns at info@printm3d.com.

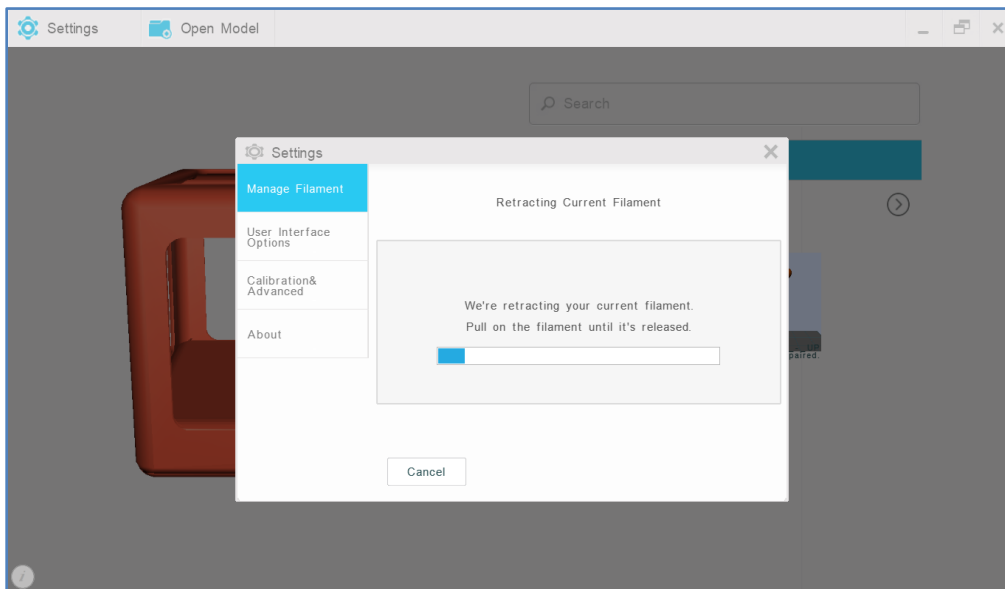To join our great community of Micro users, register at www.printm3d.com/forums.

SECTION 6 – APPENDIX
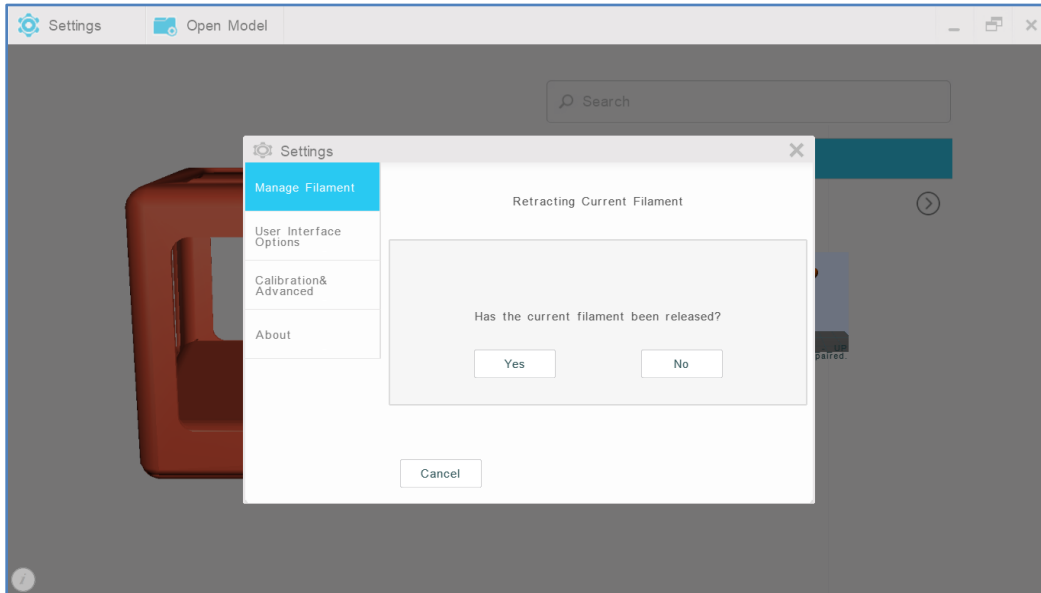
6.1   Removing Filament (External)

1. To remove filament from the external feed port, select "Settings" from the M3D software's main interface. Then, select "Manage Filament."

2. Select "Remove Filament."
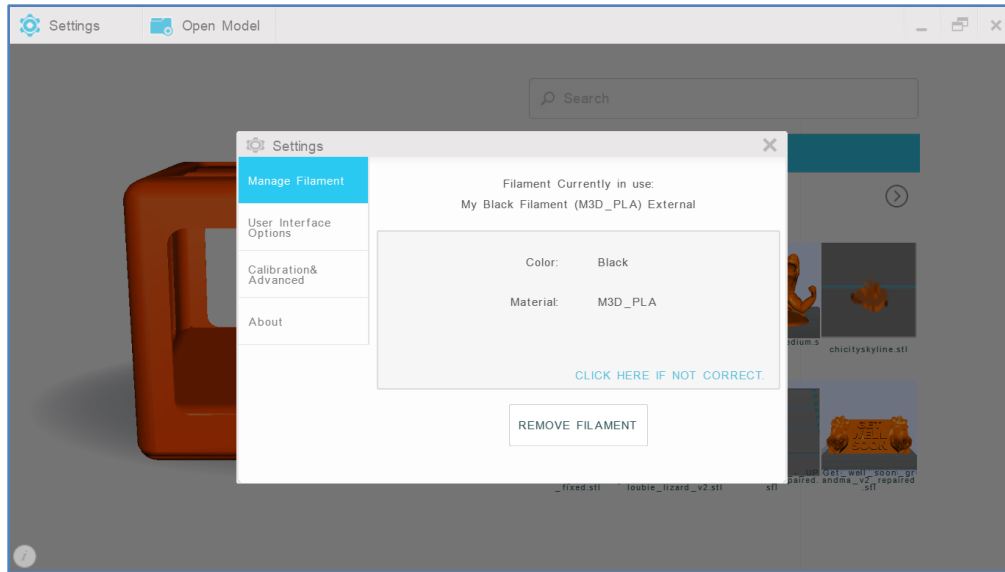
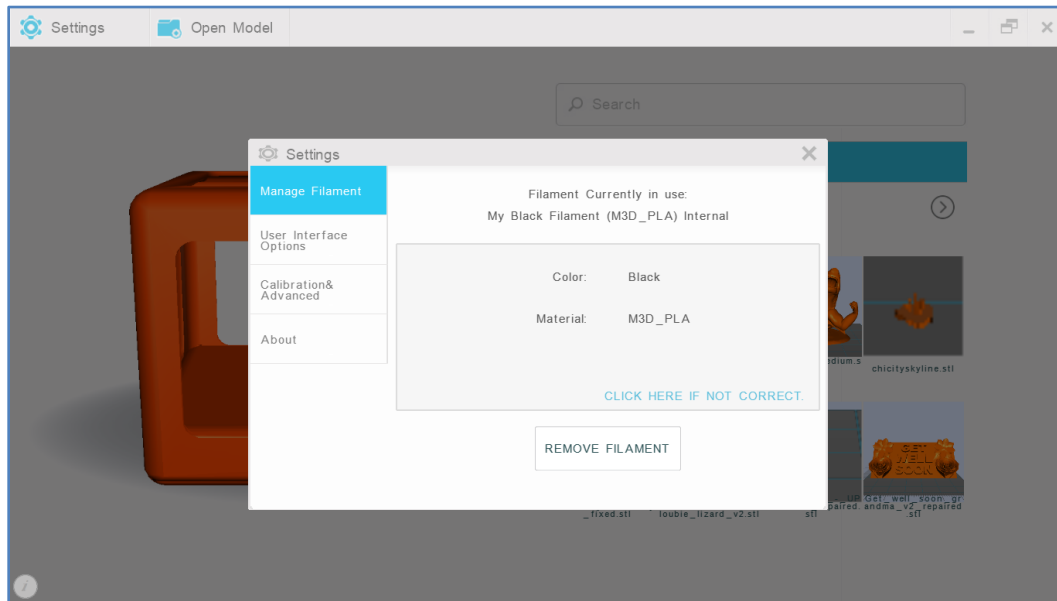3. When prompted, firmly pull on the filament until it is released.

4. If the filament has not been retracted and released, select "No" and retry filament removal steps again; it may take several attempts. Otherwise, select "Yes" to finish removing filament.

6.2   Removing Filament (Internal)

1. To remove filament from the internal feed port, select "Settings" from the M3D software's main interface. Then, select "Manage Filament."
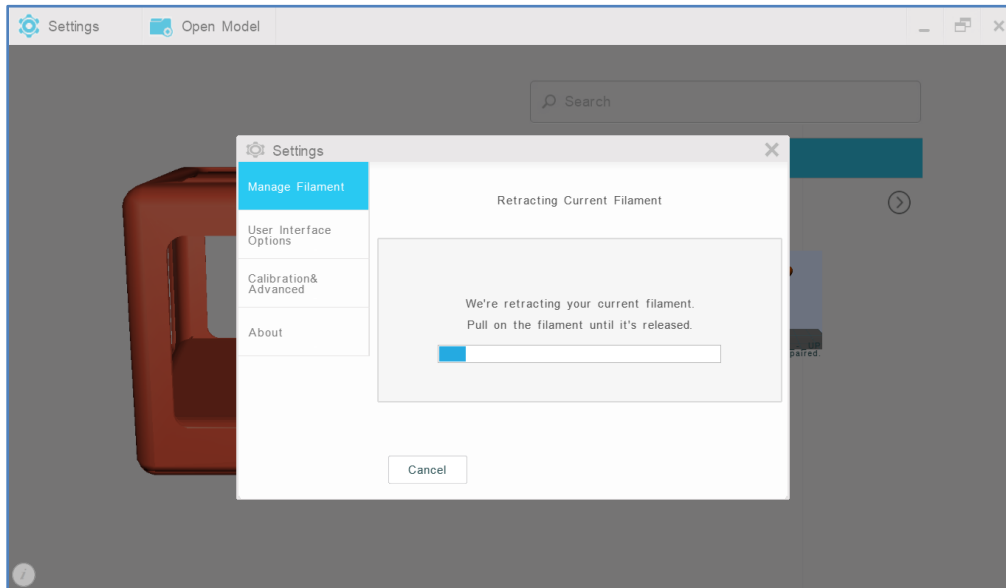
2. Select "Remove Filament."

3. When prompted, push the print bed back and lift it up to reveal the compartment underneath. Then, remove only the filament spool from the compartment, but do not pull filament from the internal feed port yet.
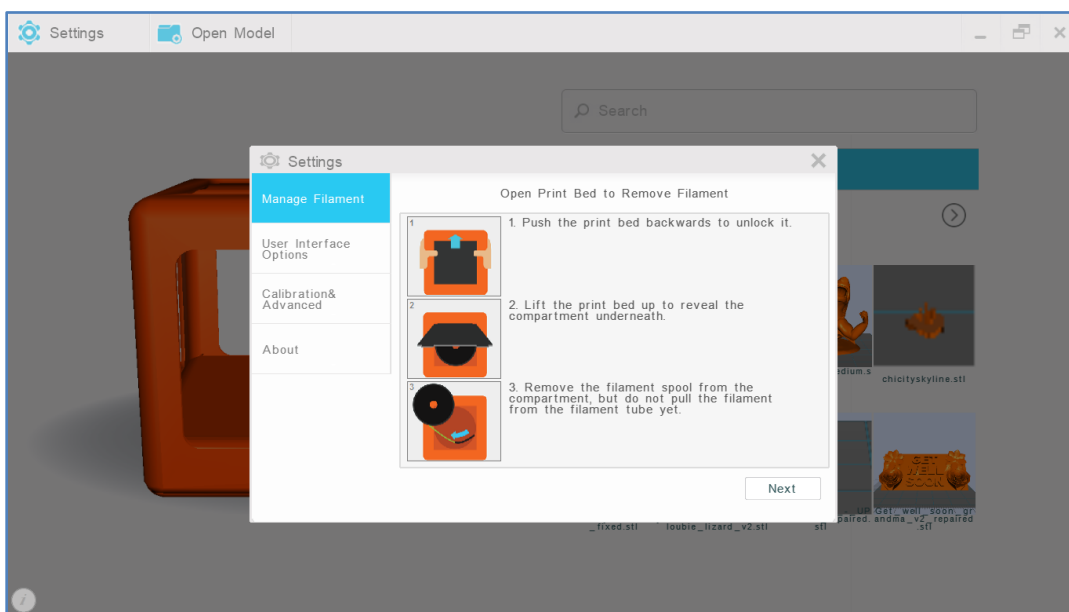
4. When prompted, firmly pull on the filament until it is released.

5. If the filament has not been retracted and released, select "No" and retry filament removal steps again; it may take several attempts. Otherwise, select "Yes" to finish removing filament.