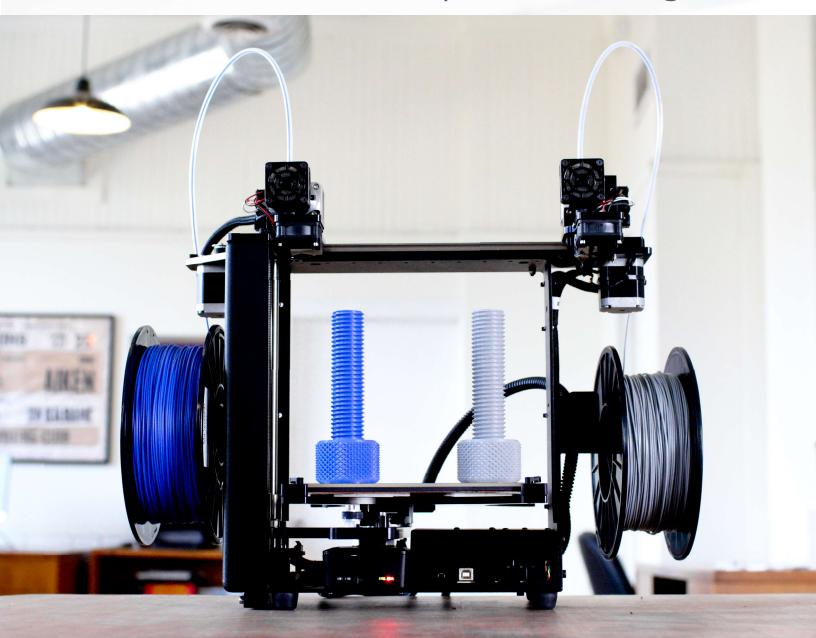


# PRODUCT KIT M3-ID

# Famously Reliable, Independent by Design



## MakerGear® LLC

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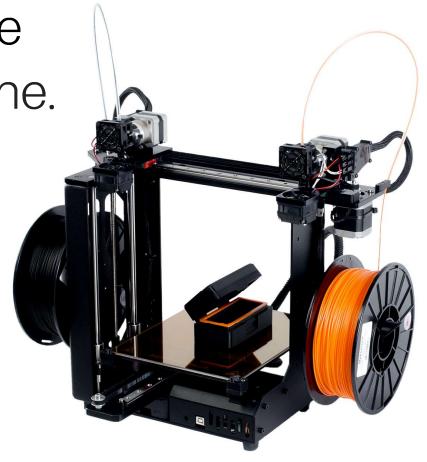


Two Heads are Better Than One.

The MakerGear M3 Independent Dual (M3-ID) is independent by design, enabling you to print more reliably in a shorter amount of time.

While one extruder is busy printing, the other is parked to the side and will not interfere with your print.

When it's time to switch, the extruders quickly change roles to continue the build with maximum speed and efficiency.





#### **Two Colors**

Print crisp, clean lines on multicolor models, right out of the box. The M3-ID is designed with flexibility in mind,

with flexibility in mind, giving you the freedom to use a broad range of filaments in the materials and colors of your choice.



### **Two Materials**

Mix and match materials and composites to achieve the ideal balance of mechanical, thermal, and chemical properties. Combine flexible components to achieve specific mechanical properties.



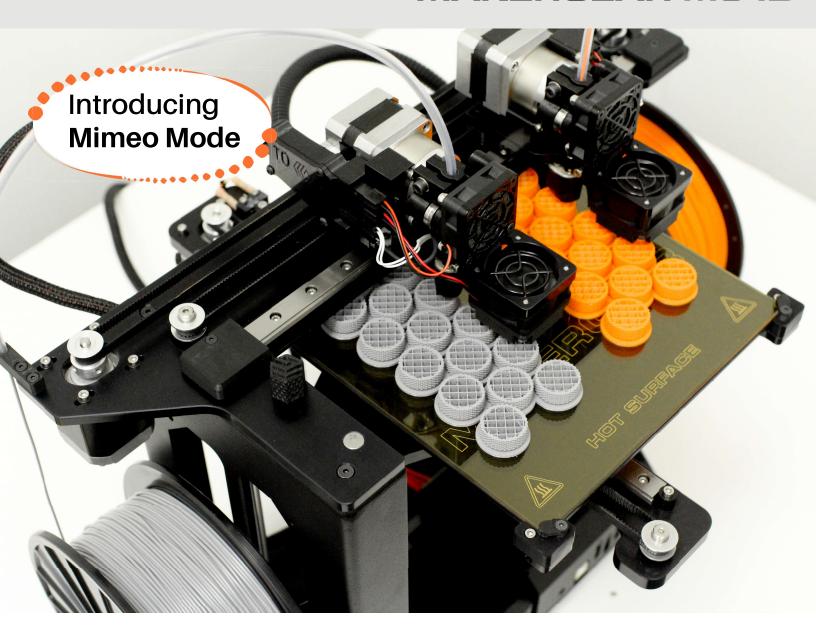
## **Soluble Support**

Print complex and intricate parts using soluble support materials, and save on material costs when using the Optimized Soluble Support features available with Simplify3D 4.0.



## **Speedy Infill**

Finish prints faster when using different diameter nozzles on each extruder. Use a course nozzle for infill and a fine nozzle for all external features and you'll get a speedy infill with a high-resolution finish.



# Double Your Throughput

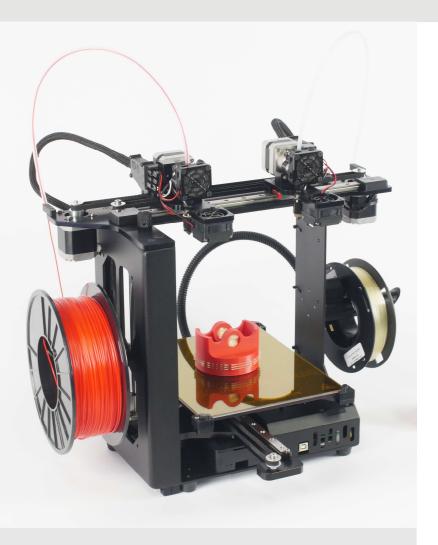
#### **Mimeo Mode**

We've changed the way dual is done. The MakerGear M3-ID is the first desktop 3D printer to fully support duplication printing with independent extruders, enabling simultaneous printing for parts up to  $100 \times 254 \times 203$  mm.

Unlike traditional dual systems, where both extruders are locked into the same task, the M3-ID's extruders are designed to work simultaneously and independently with the M3-ID's Mimeo Mode.

Independent extruders can double your printing capacity.





## **Variety of Print Materials**

The M3-ID prints in a broad range of materials including:

ABS

Polycarbonate

HIPS

Polypropylene

Nylon

PVA Dissolvable Support

• PET-G

• Flexible (TPU, TPE, etc.)

• PET-T

Carbon fiber and other

• PLA

composites

and is compatible with many additional materials.



# Ready to Run. Built to Last.

### True-Leveling™

True-Leveling is based upon a precise, software-assisted mechanical calibration process. Unlike "auto-leveling" which does not level the print surface, True-Leveling offers a calculated approach to bed calibration by integrating hardware, software, and firmware controls.

#### **Dimensional Precision**

Enabling users to create parts with highly accurate external and internal features out of the box and for years to come, this is the reason MakerGear has been awarded best-in-class, year after year.

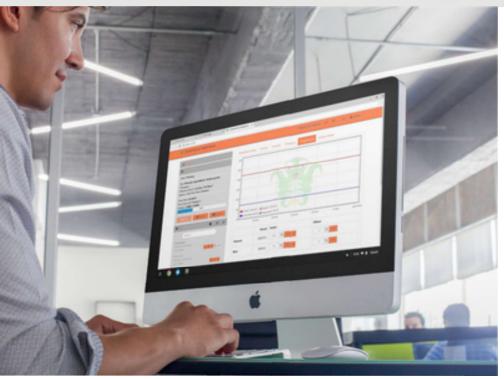
## **Modular Design**

Each print head is completely modular and runs on independent drives. They are easily accessible and developed for long-term performance.

MakerGear's V4 hot ends are sleek, simple, and swappable. Available in a variety of sizes ranging from 0.25 mm - 0.75 mm, they come in brass and stainless steel and reach temperatures up to 300 °C.

#### Wi-Fi Enabled

Wireless printer controls from tablet, phone, or remote device connected through your LAN provide the ability to control multiple printers from a single device, making the M3-ID ideal for printer farms, schools, and businesses.



# Industry-Leading Software

#### OctoPrint for MakerGear

Access everything you need in one place. From tutorials and tech support, to temperature controls and live monitoring, OctoPrint for MakerGear offers an integrated user experience with advanced customization options.

Every MakerGear M3-ID includes a Simplify3D 4.0 software license, allowing for advanced file preparation and print optimization. Controlling the M3-ID has never been easier thanks to OctoPrint for MakerGear: a highly adaptable web-based control interface for your 3D printer that also enables advanced customization options.



# Warranty and Protection Plans

# Peace of mind comes in many forms, choose what works for you.

Every MakerGear M3-ID comes with a standard 12-month warranty that includes phone and email support and fast, free fulfillment on warranty parts shipped USPS Priority or FedEx Ground.\*

Want even better coverage? Signup for the **MakerGear Premium Protection Plan** to extend your peace of mind for years to come.

 $\star \mbox{Non-US}$  customers are responsible for shipping charges.

# Specifications

#### **PRINTER & PRINTING PROPERTIES**

**Technology** Fused Filament Fabrication (FFF)

Print Head Independent Dual Extruders (direct, non-Bowden)

**Build Volume** Head One: 203 x 254 x 203 mm | Head Two: 180 x 254 x 203 mm

Mimeo Mode: 100 x 254 x 203 mm per extruder

Filament Diameter 1.75 mm

Layer Resolution $0.020 - 0.350 \, \text{mm} (20 - 350 \, \mu\text{m})$ Movement Resolution $0.001 \, \text{mm} (1 \, \mu\text{m}) \, \text{per micro-step}$ 

Print Head Travel Speed Range 30 - 450 mm/s

**Build Speed** 0.35 mm nozzle: up to 18 mm<sup>3</sup>/s

Build Plate Borosilicate glass plate coated with polyimide film

**Build Plate Temperature** 5 - 130 °C (enclosed), 5 - 120 °C (not enclosed)

**Assisted Leveling** Yes

**Assisted Leveling Method** True-Leveling™

Printable Materials ABS, ASA, HIPS, Nylon, PET-G, PET-T, PLA, polycarbonate, polypropylene, PVA,

TPE, TPU, metal composites, wood composites, carbon fiber composites,

and more

**Nozzle Type & Diameter** Brass 0.35 mm standard, 0.25 - 0.75 available

Stainless Steel 0.35 - 0.5 mm available

Nozzle Temperature 180 - 300 °C

Nozzle Heat Up Time < 2 minutes (220 °C) Build Plate Heat Up Time < 4 minutes (70 °C)

Operating Sound < 65 dBA
Connectivity Wi-Fi, LAN, USB

Monitoring Remote Monitoring Upgrade Kit (coming soon)

PHYSICAL DIMENSIONS

**Dimensions with Spool &** 533 mm (21") x 610 mm (24") x 533 mm (21")

Full Range of Motion

Unit Weight13.5 kg (29.5 lbs)Shipping Weight21.5 kg (47 lbs)

**Shipping Box Dimensions** 533 mm (21") x 533 mm (21") x 635 mm (25")

**POWER** 

**AC Input** 100 - 120 V (4 A)/ 220 - 240 V (2 A),

47 - 63 Hz100 - 120 V (4 A)/ 220 - 240 V (2 A),

47 - 63 Hz

Power Requirements/Consumption 24 V DC @ 15 A/ 360 W maximum

**SOFTWARE** 

**Supplied Software** Simplify3D 4.0, OctoPrint for MakerGear

Printer Interface OctoPrint for MakerGear

**Compatible Software** With no proprietary software required, the MakerGear M3-ID is compatible

with a wide variety of free/commercial modeling, slicing and hosting software

programs.

Supported OS MacOS, Windows, Linux, iOS, Android

File Types STL, OBJ, gCode





#### For Businesses & Professionals

Round holes, smooth surfaces, clean layer changes, and sharp corners - the M3-ID delivers the print quality and reliability needed for prototyping and product manufacturing day after day, year after year. Need more than one? Talk to us about getting a print lab up and running in your business.



#### For Schools

Whether your goal is to bring 3D printing to one classroom or an entire school district, MakerGear is dedicated to providing the information, tools, and support necessary to equip your students with the skills to succeed. Ready to use out of the box, low maintenance, and built with flexible software options, the M3 is ready for your classroom.



#### **For Makers**

Our company was founded by Makers. And since the beginning we've had an active community of dreamers and doers creating and sharing their inspiring work on our MakerGear Forum. We are proud to provide the precision tools that bring your ideas to life.

# Meet MakerGear



MADE IN THE USA Our factory is located in Beachwood, Ohio where all of our machines are built and individually tested before shipping. Many of our components are manufactured within 25 miles of the factory including the fabricated steel frame and steel parts, machined cast aluminum alignment components, extruder parts and the wiring harness. Off the shelf components (motors, power supply, etc.) are sourced from domestic and foreign suppliers.



**INDUSTRIAL PRECISION** MakerGear products are tools, not toys. MakerGear printers are designed, engineered, manufactured, and inspected according to standards that ensure optimal performance for professionals and innovators— from designers, engineers, and architects to teachers and business owners, as well as hobbyists, DIY enthusiasts, and costume designers— in dozens of industrial applications.



**REAL CUSTOMER SERVICE** If you ever need to contact MakerGear for support, our team is staffed with the most knowledgable and responsive MakerGear experts. We have an established record of providing prompt, friendly, and expedient technical support, by phone and email



THRIVING COMMUNITY When you purchase a printer from MakerGear, you become part of the thriving MakerGear community – an enthusiastic, engaged, and helpful group of 3D printing experts — particularly designers, engineers, educators, and hobbyists. Whether you are 3D printing industrial parts, architectural models, DIY quad-copter drones, or your favorite cosplay props, the MakerGear Forum offers a wealth of guidance and information about 3D printing. Join our vibrant network of makers and professionals, and contribute to our evergrowing community in which designs, inspiration, and advice are freely shared.



# **Contact Us**

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