

Imaginator Quick Start Guide

Quick Prep

- **Safety Information**
 - **Caution:** Do not remove yellow Kapton tape from build plate.
 - **Warning:** The Imaginator extruders and build plate generates high temperatures with quickly moving parts that can cause injury. Never reach inside machine while it is operating, allow time for The Replicator to cool after operation.
 - **Caution:** The Imaginator is sensitive to electrostatic discharge. Make sure to ground yourself by touching a grounded object before opening and touching sensitive electronic parts. If opening the Imaginator Replicator for service, ensure that the power supply is turned off and the cord is disconnected.
 - **Caution:** Failing to level the platform can cause damage to the extruders, platform film or both
 - **Caution:** The black cable extending from the back of the machine to the top of the extruder IS NOT a handle. Do not lift the machine with this cable
 - **Caution:** When manually moving the build plate DO NOT grasp the metal plate, DO grasp the black plastic under the metal plate

- **Package contents**
 - Imaginator 3D Printer
 - Power and USB Cord
 - SD Card
 - Hex Wrenches
 - Bolt and nut service Kit
 - 2 Filament spool holders
 - 2 filament guide tubes
 - Quick Start Guide

- **Assembly**
 - Remove extruder from the box and place on carriage with fans facing forward
 - If extruder carriage is assembled backwards, dual prints will not print correctly
 - To gain access to the screw holes on the bottom of the carriage you may have to gently lower the build plate by gently pressing on the rear of the plate
 - Find 2 short screws in the bolt kit and attach extruder to carriage
 - Attach power cable and USB cable
 - Attach filament guides to back of machine and run 1 guide into each extruder top
 - Attach spool holders to back of machine and place filament in place

First Run

- **Note:** If you find that your prints are not sticking to the build plate, it is highly recommended to cover your build plate in 3M Blue Painter's Tape.
- **Note:** All of the single extruded files on the SD Card are setup for the right extruder.
- The extruder assembly should be bolted in place, filament guide tubes connected, and your spools of filament mounted on the spool holders.
- Turn on the Imaginator and LEVEL THE PLATFORM make sure there is not a plastic bead hanging from the extruder tips before leveling.

- After turning on your Imaginator look for the menu on the LCD
- Using the down arrow key select <Utilities> by moving the chevron to your choice and pressing the "I" key in the center of the key pad
- Select <Level Build Plate>
- Follow instructions on the LCD

- Load Filament
 - Lower the build platform
 - If using a single spool of filament, load the right side extruder
 - Using the down arrow key select <Utilities> by moving the chevron to your choice and pressing the "I" key in the center of the key pad
 - Select <Change Filament>
 - Select <Load Left>
 - Follow instructions on the LCD
 - Repeat for <Load Right>

- First SD Print
 - Insert SD Card in slot
 - On LCD select <Build from SD>
 - Select item to build
 - Enjoy!

Computer Setup

Note:

Although we provide a cable to directly hook your Imaginator to your computer, we strongly suggest that you do not do so unless you are updating the firmware on your Imaginator. We suggest that you only save the .x3g to the 2GB SD card and print directly from the SD card reader in your Imaginator for best results.

- Currently the recommended software for Imaginator 3D is Makerware or Makerbot Desktop
 - Makerware can be downloaded [here \(http://www.makerbot.com/makerware\)](http://www.makerbot.com/makerware)
 - Makerbot Desktop can be downloaded [here \(http://www.makerbot.com/desktop\)](http://www.makerbot.com/desktop)

- Also, our version of ReplicatorG will work
 - Step 1 Download and Install Python
(<https://www.python.org/download/releases/2.7.8/>)
 - Step 2 Download and unzip ReplicatorG into your desired directory
(<http://imaginatord.com/wp-content/uploads/replicatorg-0040-r01-windows.zip>)
 - Run Replicator G from within its own directory

- Using ReplicatorG
 - <http://replicat.org/usage>

FAQ

What is 3D printing and how does it work?

A 3D printer is considered additive manufacturing. Whereas almost all mass production manufacturing is a subtractive process where plastic or metal pieces are usually molded and then cut away from their shell, 3D printers eject only the plastic needed to create a plastic part.

The 3D printer actually works much like a standard printer. The only difference is the platform moves down after each pass of the print carriage. The print software slices the 3D design into many horizontal slices. It then sends each horizontal slice (in the order from bottom to top) to the printer and then moves to the next slice.

What can I make with my Imaginator 3D?

Mold creation

Custom 3D Art Creation

Jewelry Creation

Replace broken household and automobile objects, knobs, covers, etc. or customize them

Small electronics covers and boxes, Raspberry Pi, cell phone, circuit boards

Robot, remote control, railroad hobby creation

Custom cookie cutter creation

Custom tool making

3D prototype creation

Custom toys and figurines

Custom Christmas ornaments, Halloween costumes (body parts, masks, and props)

Custom company logos, team logos, school logos

What software and operating systems do I need to have to run Imaginator 3D?

What kind of plastic filament can I use?

The Imaginator works best with PLA plastic; however, since the build plate is heated, unlike other machines, it will print with ABS, too!

Where can I download designs?

Free Design Sites

Imaginator 3D...<http://www.imaginator3d.com/>

Makerbot file repository...<http://www.thingiverse.com/>

My Mini Factory (free and commercial files)...www.myminifactory.com/Software

Autodesk123D...<http://www.123dapp.com/project/search/state/all>

Paid Design Sites (with some free files)

Shapeways...<http://www.shapeways.com/>

Grabcad... <http://grabcad.com/>

TruboSquid...<http://www.turbosquid.com/>

Trimble 3d Warehouse... <https://3dwarehouse.sketchup.com/index.html>

Making Society (*37 Marketplaces to Share, Buy and Sell Designs for 3D Printing*)...

<http://makingsociety.com/2013/07/37-3d-printing-marketplaces-to-share-buy-and-sell-3d-designs/>