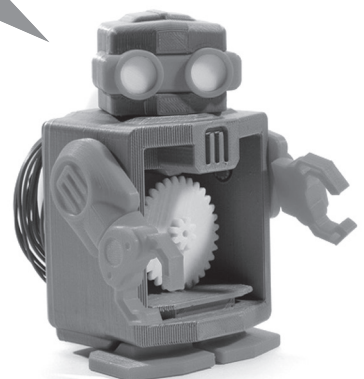# MakerBot

The Replicator™
Setup Guide

READ ME BEFORE UNPACKING!

PACKAGE CONTENTS

IN THE REPLICATOR PACKAGE

❑ The Replicator™
❑ SD card (in The Replicator™ SD card slot)

IN THE ACCESSORY BOX FOUND WITHIN THE REPLICATOR FRAME

❑ Single or Dual Stepstruder® MK8
❑ 120 mm Kapton tape
❑ 1x or 2x spool holders
❑ Feet and Bolts Kit
❑ Hex Wrench Kit
❑ MakerBot tape applicator
❑ Calibration card
❑ Service Kit

INSIDE THE REPLICATOR™ FRAME AND BELOW THE PRINTING PLATFORM

❑ 1 kg natural ABS filament
❑ 1 kg black ABS filament
   (included with Dual Stepstruder® MK8 models only)

UNDERNEATH THE REPLICATOR

❑ Power supply
❑ Power supply cable
❑ USB-A to USB-B cable
❑ 1x or 2x filament guide tubes

SAFETY INFORMATION

CAUTION: The Replicator generates high temperatures and includes moving parts that can cause injury. Never reach inside The Replicator while it is in operation and allow time for The Replicator to cool down after operation.

	WARNING
	Burn hazard. Hot surface inside. Allow to cool before servicing.

	WARNING
	Moving parts can crush and cut. Keep hands clear while operating.

Vapors / fumes may be irritating at operating temperatures. Always use The Replicator in an open, well-ventilated area.

Do not leave The Replicator unattended during operation.

Contact with extruded material may cause burns, wait for printed objects to cool before removing them from the build platform.

TRADEMARK INFORMATION

MakerBot®, Stepstruder®, BotCave™ and The Replicator™ are trademarks or registered trademarks of MakerBot Industries, LLC, all rights reserved.

WELCOME!

Hello, and congratulations on your purchase of The Replicator™! Soon, with the help of this humble guide, you will take your first steps into an entirely new dimension: the Third Dimension, or, as it's more commonly known, 3D.

Today, you'll set up The Replicator for the first time and make your first prints. Then you'll set out on the path to finding new designs to print and even create models of your own.

You have already proven your wisdom and intelligence by purchasing The Replicator. Still, we highly recommend that you **read this manual before unpacking** — this will make it much easier to start your adventure into the third dimension.

You can also find this documentation online at makerbot.com/docs/replicator.
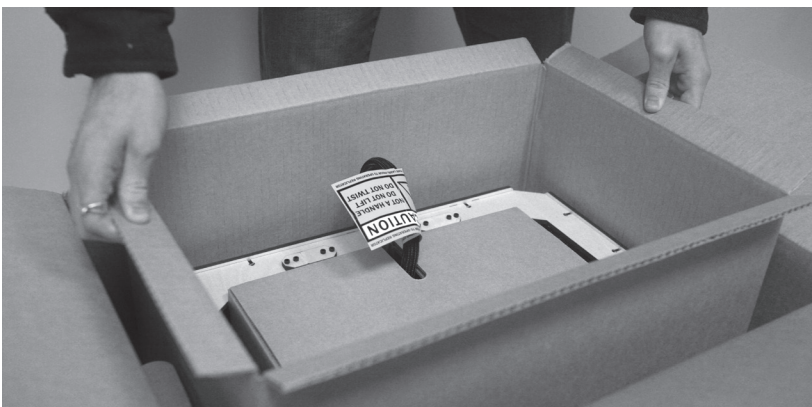
HOW TO UNPACK THE REPLICATOR™

The Replicator is packaged very carefully at the MakerBot BotCave™ — we hope you'll take your time and be just as careful unpacking it. In this section, the names of important parts and accessories will be in **bold type**. As you unpack, keep the following warning in mind:

> ⚠️ **Do not force or tear anything out of place — this may damage The Replicator.**

Place The Replicator's box on the ground next to a clean, flat workspace. Discard the top cardboard insert. Now remove the inner cardboard box — the one that fits around the outside of The Replicator.

You'll be able to see the top of The Replicator now, as well as some cardboard boxes and packing material. The large box with a thick black cable leading into it is the **Accessory Box**, where you'll find the **Stepstruder® MK8** and other crucial things. Leave it in place for now.
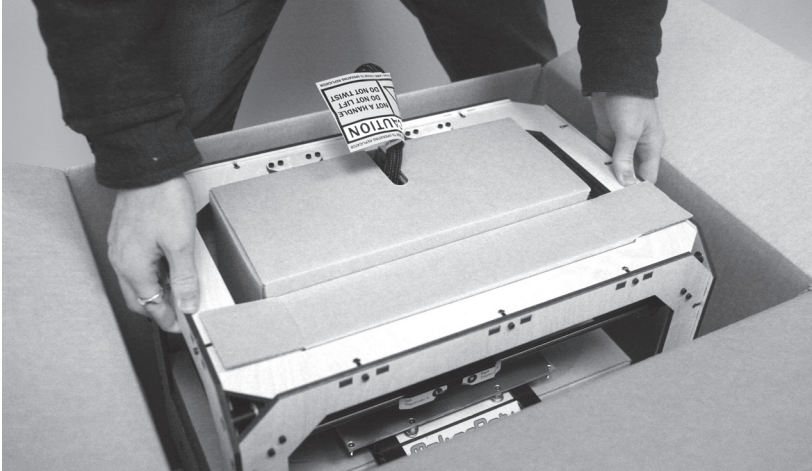

> ⚠️ **Do not grasp The Replicator by the black cable.**

Remove the inner cardboard box.

SETTING UP THE REPLICATOR™

STEP 1.
TAKE THE REPLICATOR OUT OF THE BOX

Step 1. *Lift The Replicator from the outside edge. Avoid pinching internal belts and rods.*

Now you're ready to take The Replicator out of its box. Grasp the upper frame and be careful to avoid pinching the internal belts and rods. Gently pull The Replicator out of its packaging and place it on your work surface.

In the packaging underneath you'll find the **Power Supply** and **cable**, as well as the **USB-A to USB-B cable** and the **Filament Guide Tube(s).** Take these out and set them aside.

STEP 2.
OPEN THE ACCESSORY BOX

Step 2. *Remove the cardboard insert from the Accessory Box.*

Follow the thick black cable to the **Accessory Box**. Reach in and grasp the **Stepstruder® MK8** by its sides. Leave it in its protective bag and set it down safely out of the way on your work surface.

SETTING UP THE REPLICATOR™

STEP 3.
TAKE THE STEPSTRUDER® MK8 OUT OF THE BOX

Now you can carefully remove the Accessory Box. Be careful of the black plastic **Stepstruder MK8 Mount.**

You should be able to see the build platform: it's an aluminum plate covered in Kapton tape and attached to the rods by two black arms. This is where your print will form.

Step 3. Take care when handling the Stepstruder MK8.

STEP 4.
RAISE THE BUILD PLATFORM

You'll need to raise the build platform to continue unpacking. You can either turn the threaded screw just behind The Replicator™ logo, or grasp the platform firmly on both sides and move it up with gentle pressure.

Move the platform up as far as you can; it should almost reach the black **Stepstruder MK8 Mount.**
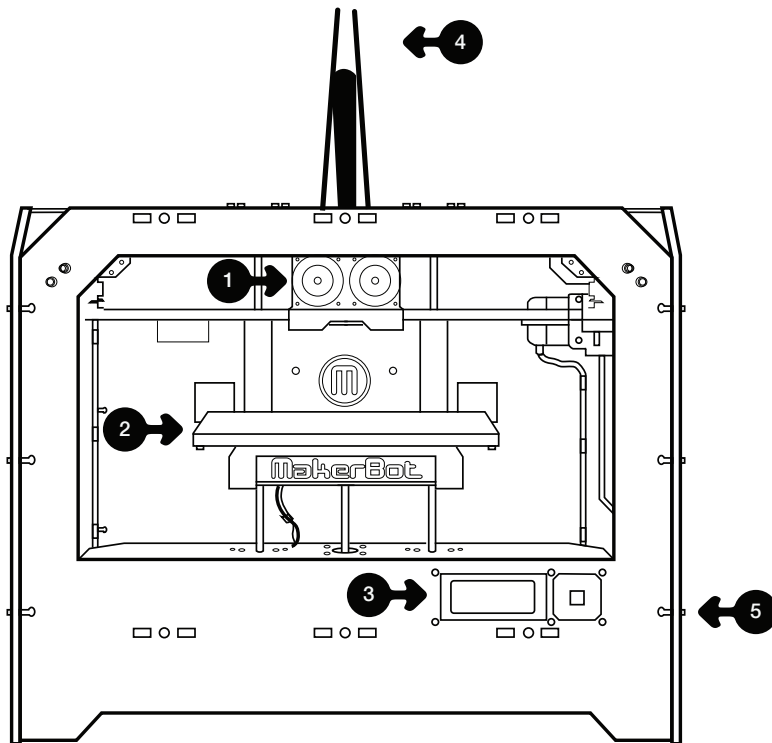

Step 4. Grasp the platform firmly on both sides and lift with gentle pressure.

Underneath the build platform you'll see one or two boxes of **MakerBot Filament**. Remove the packing material and the filament.

You have now finished unpacking The Replicator! We're really proud of it! We recommend that you keep the box it was shipped in for future transport and long-term storage.
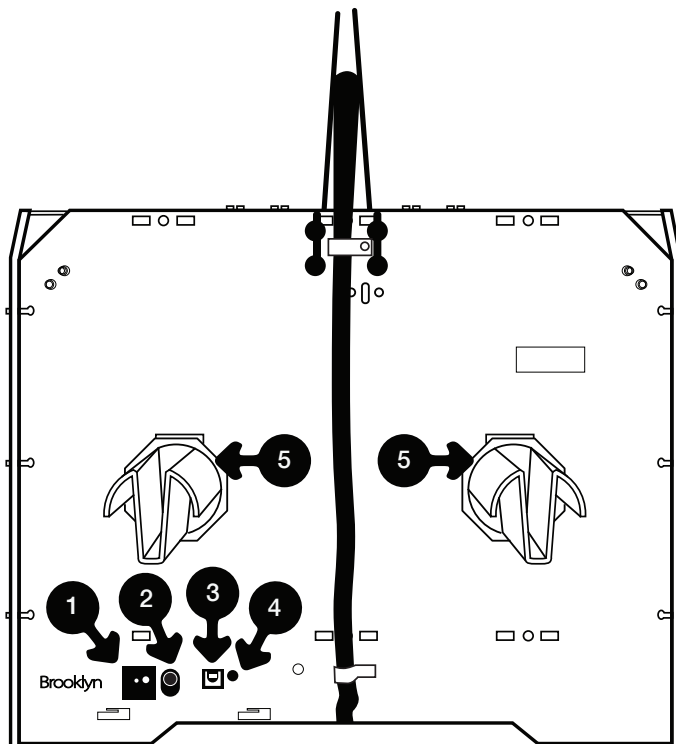
THE REPLICATOR™ DIAGRAM

Before we continue, let's familiarize ourselves with some of the main features of The Replicator

FRONT

1. Single or Dual Stepstruder® MK8 (attached to mount)
2. Build Platform
3. LCD Interface Panel
4. Filament Guide tubes
5. SD Card slot (on side panel)

BACK

1. Power switch
2. Power input
3. USB-B input
4. Reset button
5. Right and left spool holders

INITIAL HARDWARE SETUP

STEP 5.
INSTALL THE CABLE RETAINER CLIP

With the build platform raised, you have a clear view of the black cable that leads from the electronics cavity to the build platform. Attached to the cable is a black cable retainer clip. Now find the small round hole slightly to the left of center at the rear of the wooden plate below the build platform. The clip should snap easily into place.
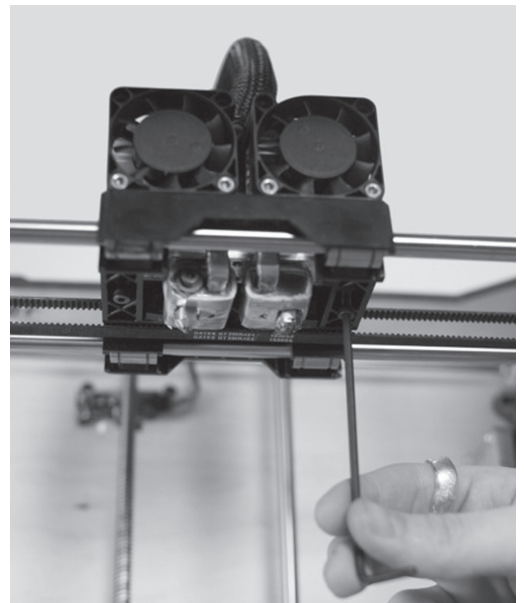

Step 5. Snap the cable clips into place.

STEP 6.
SECURE THE STEPSTRUDER® MK8 ONTO THE MOUNT

Now we're going to bolt the **Stepstruder MK8** into place. Lower the build platform all the way by turning the threaded screw behind the platform or by grasping the black plastic arms at the sides of the platform and pressing down with steady but gentle pressure. Retrieve the **Feet and Bolts Kit** from the **Accessory Box.** Remove the two black bolts from the box. Next, locate your **Hex Wrench Kit** and find the hex wrench that fits the bolts.

Grasp your **Stepstruder MK8** by its sides and take it out of its protective bag. Place it on the **Stepstruder MK8 Mount** so the bolt holes line up and the fans face forward. Secure it with the bolts and wrench.
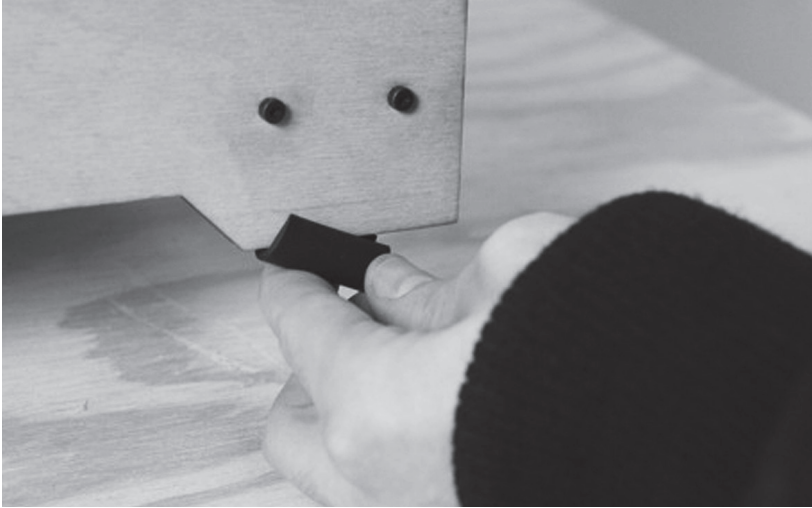

Step 6. Secure the Stepstruder MK8 with the bolts from your Feet and Bolts kit.

INITIAL HARDWARE SETUP

STEP 7.
INSTALL FEET ONTO THE BOTTOM OF THE REPLICATOR™

Step 7. Slide the feet onto The Replicator's side panels.

While you still have the **Feet and Bolts Kit** at hand, remove the four feet and fit them onto the bottom of The Replicator. They work best on the side panels.

STEP 8.
SLIDE THE SPOOL HOLDER(S) INTO PLACE

Step 8. Spool holders fit into the slots as shown.

Now, grab the **Spool Holder(s)**. If you have two spool holders, put one on each side. If you have one, put it on the left side as you face the rear.
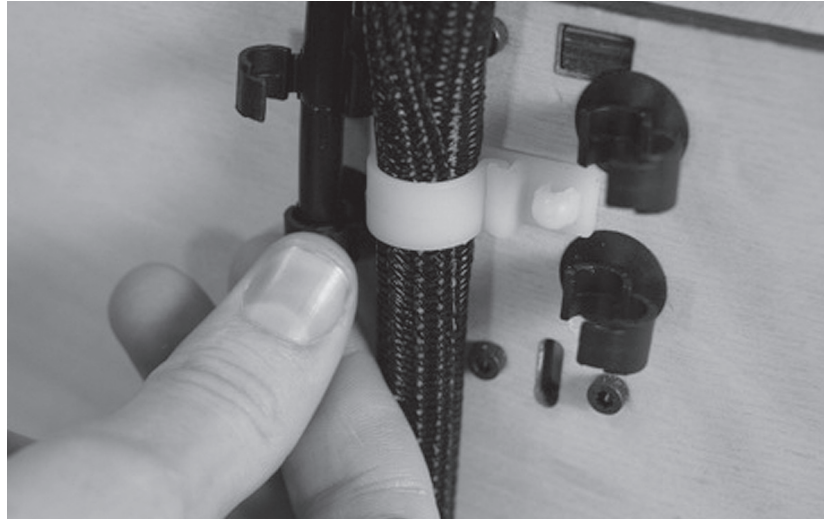
To install a spool holder, tilt it to fit through the rectangular opening and then slide it down into place.

INITIAL HARDWARE SETUP

STEP 9.
INSTALL THE FILAMENT GUIDE TUBE(S)

Next, locate your **Filament Guide Tube(s)**. These fit into the tube guide holders at the top of The Replicator's back plate. Place the very end of each tube into its holders and click them closed with your thumb and forefinger. The other end fits into the gray ring on top of the corresponding extruder. Push it in as far as it will go.

If you have a single-extruder Replicator, you'll only need to do this once.

Step 9. Snap the tube guide holders closed with your thumb and forefinger.

STEP 10.
PLUG IN THE POWER SUPPLY

Almost finished! Locate your **Power Supply** and **cable**. **Note:** this is a universal PSU which can accept 100–240 V AC at 50/60 hz. It also has a standard IEC cable input to accept international cable types if you're outside the USA.

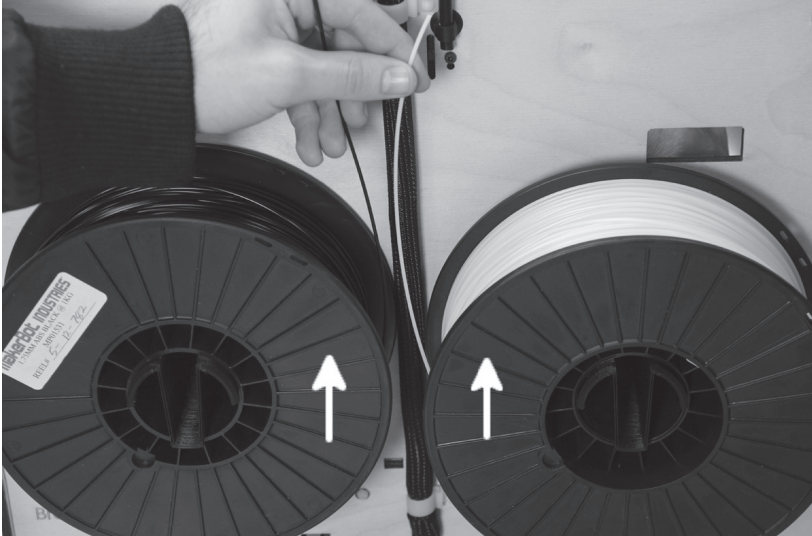⚠ **Don't stack anything on your power supply brick; without air it can overheat.**

Step 10. Make sure the power switch is in the OFF position when you connect the power cable.

Next, plug the **cable** into the **Power Supply**, and the **Power Supply** into the power input port. Before connecting anything, make sure that The Replicator's power switch is in the **OFF** position.

The next step is to locate the **USB-A to USB-B cable** and plug into the **USB-B port** on The Replicator. Don't plug the other end into anything yet.

INITIAL HARDWARE SETUP

STEP 11.
MOUNT THE FILAMENT SPOOLS

Open up your box(es) of **Filament** and hang the spool(s) on the **Spool Holder(s)**. When a spool is securely on, it will lock into place. Mount spools so they'll feed plastic up from the center. If you have two spools, they should mount flush with each other.

Guess what? You're done with the initial hardware setup! Take a moment to relax and prepare for calibration and printing.

Step 11. Make sure your spools of filament feed plastic up from the center.

NEXT STEPS

When you're ready to flip the switch and make your first prints, head to:
makerbot.com/docs/replicator/fre

Here's a preview of what you'll learn:

LET YOUR REPLICATOR TELL YOU WHAT TO DO

The LCD Interface Panel will give you instructions the first time you boot up. Just follow its directions carefully and you'll be up and running in a few minutes.

Follow Instructions on LCD Interface Panel.

NEXT STEPS

Here are a few tips about using the LCD Interface Panel:

- A **solid red M** means The Replicator is working. Look at the LCD screen or the application for status.
- A **blinking red M** means The Replicator is waiting for user input.
- Use the arrows to make selections — the left arrow will often let you go back or cancel an action.
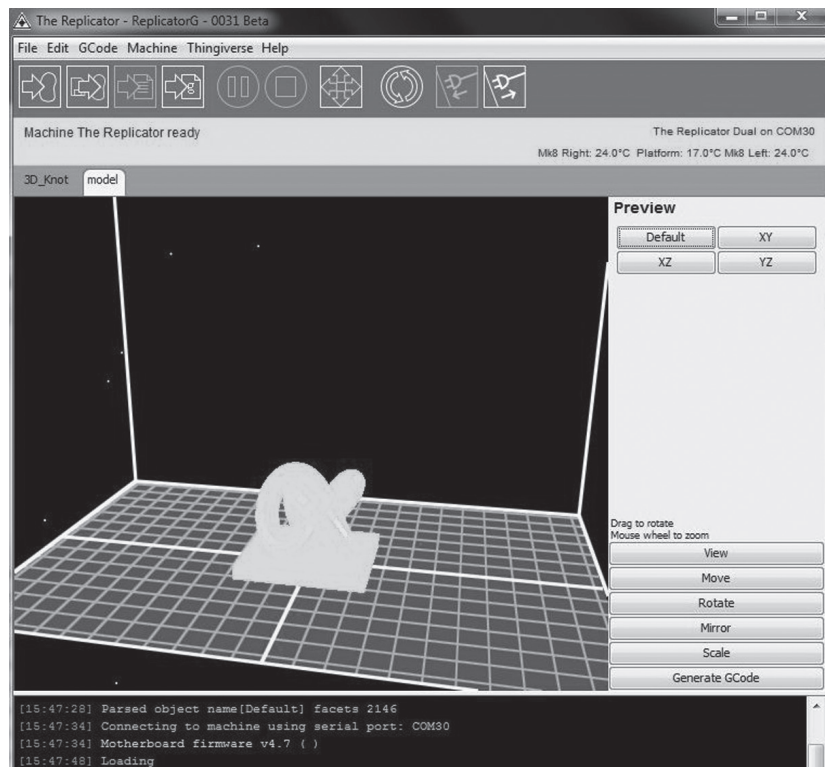
REPLICATORG SOFTWARE
YOUR KEY TO THE WORLD OF MAKERBOTTING

ReplicatorG is software that allows you to prepare new prints for The Replicator. You'll need to install ReplicatorG in order to print your own designs and the universe of objects available at thingiverse.com.

To get started, go to replicat.org/installation

If you're using Windows, you'll want to run the installer before you connect your PC to The Replicator for the first time.

Head over to makerbot.com/docs/replicator/fre to continue your 3D adventure.

ReplicatorG Software Interface

The Replicator™

For technical assistance please call 347.334.6801
or email support@makerbot.com