

MakerBot® Replicator® Mini

COMPACT 3D PRINTER

— REFERENCE GUIDE —





MakerBot®

The product may differ slightly from the images and instructions in this guide as we continue to improve the MakerBot Replicator Mini. Please see www.makerbot.com/um_rep_mini for the latest version of the guide.

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LEGAL NOTICES

PRODUCT WARRANTY

The MakerBot® Replicator® Mini Compact 3D Printer is covered by a limited warranty. For terms and conditions, see makerbot.com/legal.

OVERALL PROVISIONS

All information in this reference guide (“Guide”) is subject to change at any time without notice. MakerBot Industries, LLC and our respective affiliates and suppliers (“MakerBot”) reserves the right to modify or revise this Guide in its sole discretion and at any time and makes no commitment to provide any such changes, updates, enhancements, or other additions to this Guide in a timely manner or at all. You agree to be bound by any modifications and/or revisions. Contact the MakerBot Support Team for up-to-date information.

In order to protect MakerBot proprietary and confidential information and/or trade secrets, this document may describe some aspects of MakerBot technology in generalized terms.

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WELCOME TO THE REFERENCE MANUAL FOR THE MAKERBOT REPLICATOR MINI COMPACT 3D PRINTER.

The MakerBot® Replicator® Mini is super easy to use, but it's also packed with brand-new features. Use this reference guide to familiarize yourself with the capabilities of your new MakerBot Replicator Mini and the MakerBot Desktop App. For help with setup, please refer to the Quick Start Guide that came with your MakerBot Replicator Mini, or download a copy at makerbot.com/support.

SAFETY AND COMPLIANCE



Safety alert symbols precede each safety message in this manual. These symbols indicate potential safety hazards that could harm you or others or cause product or property damage.



Warning: The MakerBot Replicator Mini Compact 3D Printer generates high temperatures. Always allow the MakerBot Replicator Smart Extruder to cool to 50°C before removing it or reaching inside the MakerBot Replicator Mini.



Warning: The MakerBot Replicator Mini includes moving parts that can cause injury. Never reach inside the MakerBot Replicator Mini while it is in operation.



Warning: There is a risk of shock. This product is not user serviceable.



Warning: Do not leave the MakerBot Replicator Mini unattended during operation.



Caution: Do not print using materials that have not been approved by MakerBot for use with the MakerBot Replicator Mini. Refer to the Specifications section for more information.



Caution: The socket outlet must be located near the equipment and must be easily accessible.



Caution: In case of emergency disconnect the MakerBot Replicator Mini from the wall socket.



Caution: The MakerBot Replicator Mini melts plastic during printing. Plastic odors are emitted during this operation. Make sure to set up the MakerBot Replicator Mini in a well-ventilated area.



Caution: Do not look directly at any operating LED component.

SAFETY AND COMPLIANCE

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: “How to Identify and Resolve Radio-TV Interference Problems.” This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under FCC rules.

MANUFACTURER

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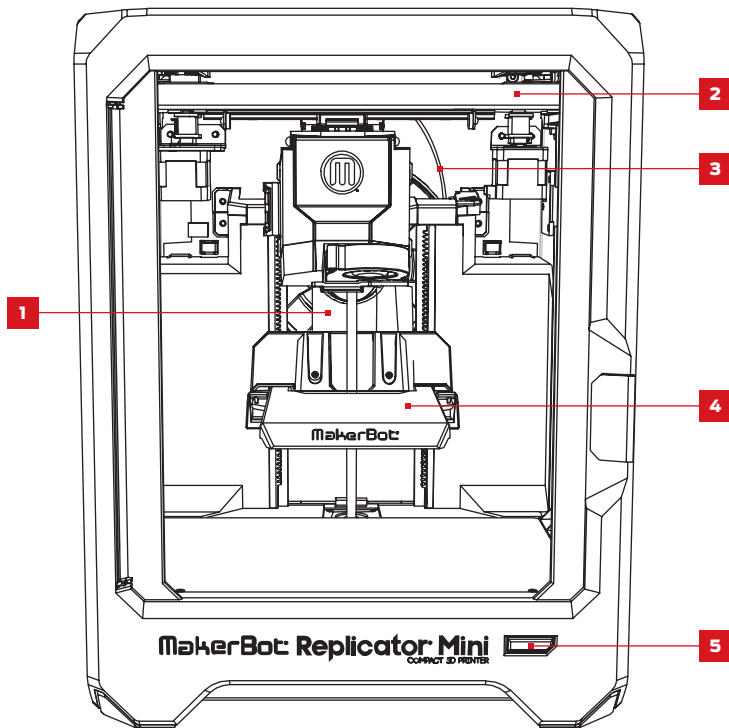


HOW IT WORKS

The MakerBot Replicator Mini makes solid, three-dimensional objects out of PLA Filament. First, use MakerBot Desktop to translate 3D design files into instructions for the MakerBot Replicator Mini. Then transfer those instructions to the MakerBot Replicator Mini via USB cable or over a Wi-Fi network. With the touch of a button, the MakerBot Replicator Mini will melt MakerBot PLA Filament and squeeze it out onto the build plate in thin lines to build your object layer by layer. This method of 3D printing is called fused deposition modeling.

DIAGRAMS

MAKERBOT REPLICATOR MINI FRONT VIEW



1. Filament Spool Pocket

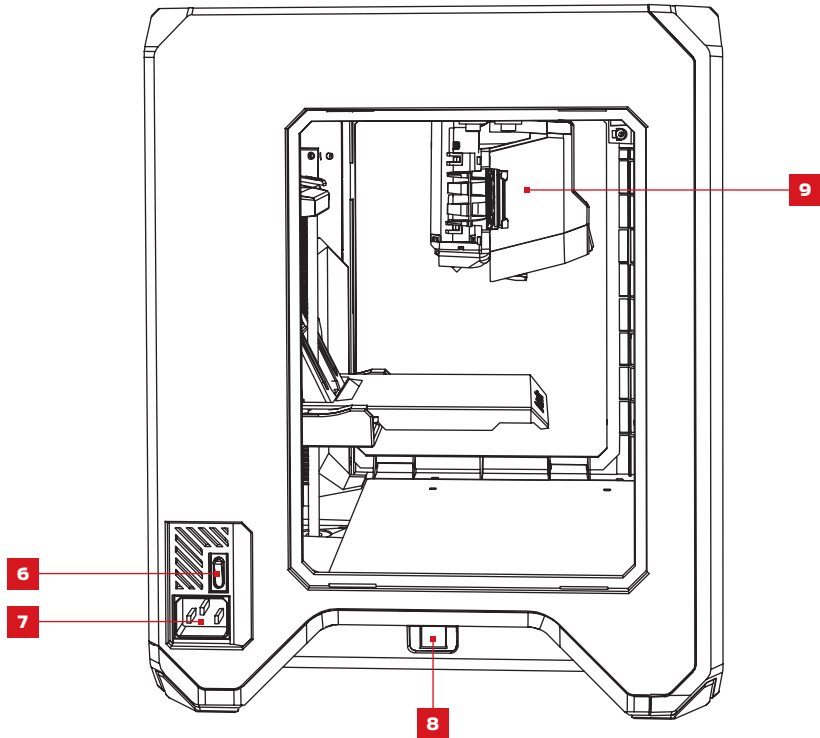
2. Gantry

3. Filament Guide Tube

4. Build Plate

5. Action Button

MAKERBOT REPLICATOR MINI SIDE VIEW



6. Power Switch

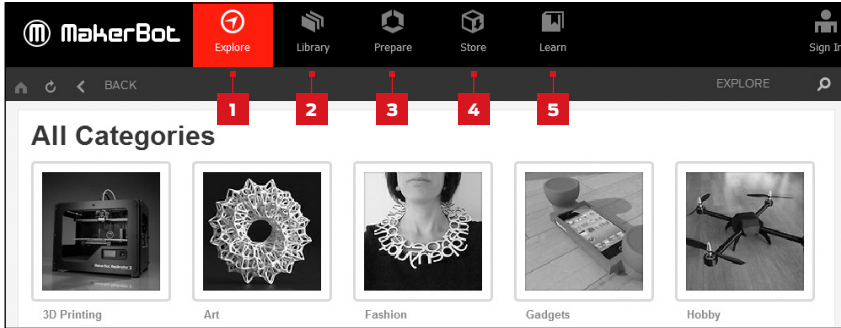
7. Power Input Port

8. USB Port

9. Extruder Assembly

ABOUT MAKERBOT DESKTOP

MakerBot Desktop is a free app for preparing 3D prints and managing your 3D content. It consists of five sections: **Explore**, **Library**, **Prepare**, **Store**, and **Learn**.



1. Explore gives you access to MakerBot Thingiverse® and the hundreds of thousands of 3D printable objects designed by the Thingiverse community. Use Explore to search Thingiverse for inspiration or for new things to print, then save them to your collections or prepare them for printing.

2. Library gives you access to your MakerBot Cloud Library and helps you organize your 3D model files. Use it to access things you've collected on Thingiverse or bought from the MakerBot Digital Store as well as your own models.

3. Prepare is where you will turn 3D models into print files. Bring 3D models into the Prepare screen to manipulate them on a virtual build plate. Then specify print options and send print files to your MakerBot Replicator Mini.

4. Store lets you buy print files for premium 3D models. The MakerBot Digital Store sells original, fun, and collectible digital content specifically designed for MakerBot Replicator Desktop 3D Printers. When you buy a model from the MakerBot Digital Store, a print file for your MakerBot Replicator Mini will be added to your MakerBot Cloud Library.

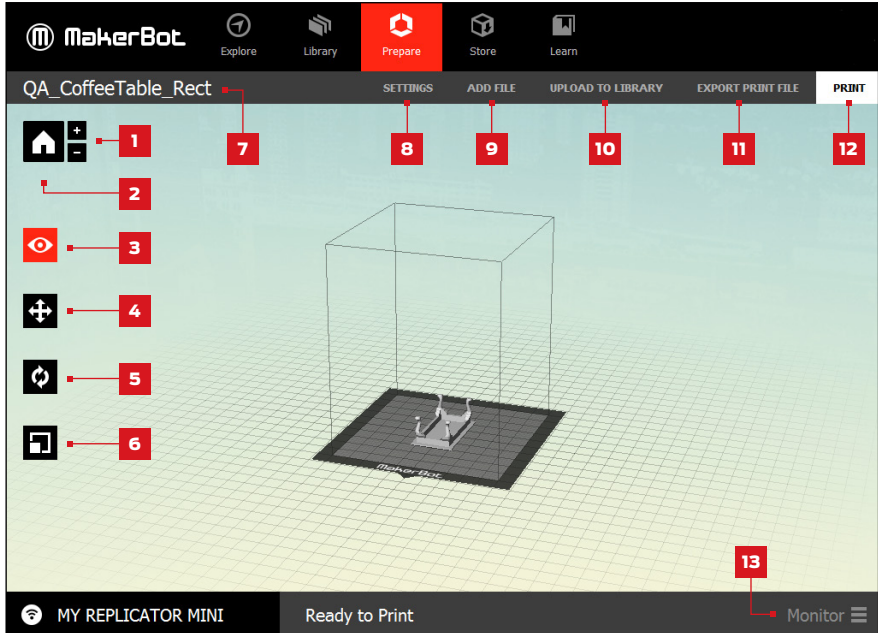
ABOUT MAKERBOT DESKTOP

5. Learn provides a highlight reel of videos that will help you level up your 3D printing skills. Within the Learn tab's various sections you can find information about setting up your MakerBot 3D Printer, learn new things about 3D printing and MakerBot Desktop, and see what other MakerBot users are doing with their 3D printers.

Use **Store** and **Explore** to find 3D models, **Library** to keep them organized, and **Prepare** to send them to your MakerBot Replicator Mini for printing. Use **Learn** to view tutorial videos.

ABOUT MAKERBOT DESKTOP

THE PREPARE SCREEN



1. +/-

- Click the **Plus** and **Minus** buttons to zoom in and out.
- You can also zoom using a track pad or the scroll wheel on your mouse.

2. Home View

- Click the **Home View** button to return to the default view of the build plate.

3. View

- Click the **View** button or press the V key to enter View mode.
- In View mode, click and drag with your mouse to rotate the build plate.
- In View mode, hold the Shift key and click and drag with your mouse to pan.
- Click the View button again to open the Change View submenu and access preset views.

ABOUT MAKERBOT DESKTOP

4. Move

- Click the **Move** button or press the M key to enter Move mode.
- In Move mode, click and drag with your mouse to move your model around on the build plate.
- In Move mode, hold the Shift key and click and drag with your mouse to move your model up and down along the z-axis.
- Click the Move button again to open the Change Position submenu and move your object by a specific distance along the x-, y-, or z-axis.

5. Turn

- Click the **Turn** button or press the T key to enter Turn mode.
- In Turn mode, click and drag with your mouse to rotate your model around the z-axis.
- Click the Turn button again to open the Change Rotation submenu and rotate your object by a specific number of degrees around the x-, y-, or z-axis.

6. Scale

- Click the **Scale** button or press the S key to enter Scale mode.
- In Scale mode, click and drag with your mouse to shrink or enlarge your model.
- Click the Scale button again to open the Change Dimensions submenu and scale your object by a specific amount along the x-, y-, or z-axis.

7. File Name

- The file name bar displays the name of the file or layout currently open. Thing files can include multiple layouts, or arrangements of models on the plate.

8. Settings

- Click **Settings** to open the settings dialog.
- Use the dialog to change print settings for the current model or layout.

9. Add File

- Click **Add File** to open an Open File dialog.
- Navigate to the location of any STL, OBJ, or Thing file and select the file to add a model to the build plate.
- Add as many models to the plate as you like.
- Duplicate models already on the plate using the Copy and Paste options in the Edit menu or the keyboard shortcuts Ctrl/Command+C and Ctrl/Command+V.

ABOUT MAKERBOT DESKTOP

10. Upload to Library

- Click **Upload to Library** to open a Save dialog.
- If you are logged into your MakerBot account, you can choose to save to your Library or to your local computer.
- If you are not logged into your MakerBot account or if you are working offline, you will be able to save your file only to your local computer.
- If you are working in an existing Thing file, you can rearrange the models on the plate and save this new layout to the Thing file without overwriting earlier layouts.

11. Export Print File

- Click **Export Print File** to slice your print and save the .makerbot file to your local computer or attached USB drive. However, you can only print to the MakerBot Replicator Mini via a USB or Wi-Fi connection.

12. Print

- Click **Print** to slice the model and send the print file to your MakerBot Replicator Mini.
- Within the Print dialog, click **Print Preview** to open a preview of the sliced model.

13. Status

- The status bar displays the connection status of any connected MakerBot Desktop 3D Printer.
- The status bar displays the progress of the current print.
- Click the menu icon at the right side of the status bar to open a print monitor panel, which will display more detailed information about your MakerBot Replicator Mini and any print in progress, including a feed of images from the onboard camera.
- Open the print monitor panel to pause or cancel a print, change filament, or change Smart Extruder.

CONNECTING TO MAKERBOT DESKTOP

You can connect your MakerBot Replicator Mini to MakerBot Desktop via USB cable or Wi-Fi at any time.

USB CABLE

1. Locate the included USB cable.
2. Insert the USB-B end of the cable into the port on the side of your MakerBot Replicator Mini and insert the USB-A end of the cable into a USB port on your computer. MakerBot Desktop will automatically detect your MakerBot Replicator Mini.

WI-FI

1. Follow the steps above for connecting via USB cable.
2. In MakerBot Desktop, go to the Devices menu and select **Device Preferences**.
3. Select the Network tab.
4. Make sure the **Enable Wi-Fi** box is checked. Select your network from the dropdown menu, enter your password, and click **Connect**. Your MakerBot Replicator Mini will connect to your Wi-Fi network.
5. Go back to the Devices menu and select **Connect to a New Device**.
6. Select your MakerBot Replicator Mini from the list of available devices.

PRINTING FROM MAKERBOT DESKTOP

1 CHOOSING YOUR MODEL

You can download a model from Thingiverse, purchase a print file from the MakerBot Digital Store, open a 3D printable STL, OBJ, or Thing file from any source, or access models and print files that are already saved in your MakerBot Cloud Library.

FINDING A MODEL ON THINGIVERSE

1. In MakerBot Desktop, click on the Explore tab. Click **Explore** at the right to browse available models, or use the search bar to look for something specific.
2. Click the thumbnail or name of any Thing to go to the Thing page.
3. On the Thing page, scroll down and click on **Thing Files** to see available files.
4. Choose which part or version you want to print and click the Prepare button next to the file name. MakerBot Desktop will open the file and take you to the Prepare tab. The file you selected will appear on the build plate.
5. To add an additional model from the same Thing to your layout, return to the Explore tab and click **Prepare** next to the name of the additional file. The new model will be added to the plate.

FINDING A MODEL IN THE MAKERBOT DIGITAL STORE

1. In MakerBot Desktop, click on the Store tab.
2. Browse the Digital Store collections or use the search bar to find a model by name.
3. Once you've found a model or series you'd like to purchase, click **BUY NOW**.
4. Set up your billing information if you haven't already.
5. Confirm your purchase. A print file for your purchased model will appear in your MakerBot Cloud Library.

PRINTING FROM MAKERBOT DESKTOP

IMPORTING A MODEL FROM YOUR LOCAL COMPUTER

You can open any 3D-printable STL, OBJ, or Thing file in MakerBot Desktop.

1. In MakerBot Desktop, click on the Prepare tab.
2. Click **Add File**.
3. Navigate to the location of your file and click **Open**. The model will appear on the build plate.

CHOOSING A MODEL FROM YOUR MAKERBOT CLOUD LIBRARY

1. In MakerBot Desktop, click on the Library tab.
2. Click one of the folders at the left side of the screen to see items available in your Library.
3. Click on a list item and then click **Prepare**. MakerBot Desktop will open the file and take you to the Prepare tab. The file you selected will appear on the build plate.

PRINTING FROM MAKERBOT DESKTOP

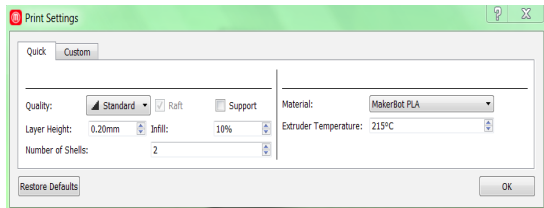
2 PREPARING YOUR MODEL

Use the Prepare Screen to manipulate your model, by changing its orientation or scaling it to a new size. You can also add additional models to the layout. When your model is ready, click **Settings** if you want to change any settings before you print.

SETTINGS

The Settings dialog allows you to select options that will affect the quality of your printed object. The MakerBot Replicator Mini prints best using the default settings in MakerBot Desktop. When you prepare a model for the MakerBot Replicator Mini, your objects will be sliced using the standard quality profile, which has a layer height of .2 mm. Every object will be built on a raft to ensure that your print adheres well to the build plate

Support. Select this checkbox to have your object printed with support structures. MakerBot Desktop will automatically generate supports for any overhanging sections of your object. Supports will be easily removable once you remove your finished print from the build plate.



Custom. Click the **Custom** tab for advanced settings, including speed, infill, model properties, and other categories. You can use the Custom tab to edit the Standard profile or to create custom profiles. For more information about the Custom tab, go to makerbot.com/support/new/Desktop.

PRINTING FROM MAKERBOT DESKTOP

3 PRINTING YOUR MODEL

SENDING THE FILE TO THE MAKERBOT REPLICATOR MINI

If Connected via Wi-Fi

Click the **Print** button to slice your model and send it to your MakerBot Replicator Mini. Click **Start Print** to confirm the print, or click **Cancel** to cancel the print. If you're connected via Wi-Fi, you can also confirm the print by pressing the blinking blue Action Button.

The Action Button will glow red, indicating that it is heating the MakerBot Replicator Smart Extruder. When the Smart Extruder is fully heated, the MakerBot Replicator Mini will start to print your model.

If Connected via USB Cable

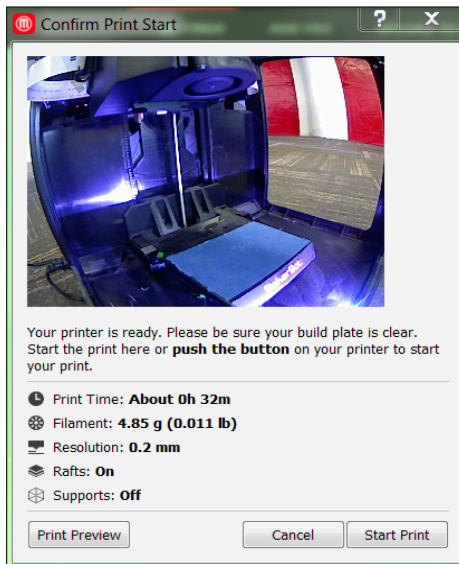
1. Click the Print button to slice your model. To send the file to your MakerBot Replicator Mini and exit the Print dialog, click **Start Print**.

If you decide not to send the file to the MakerBot Replicator Mini, click **Cancel Print**.

2. When the print file is sent to the MakerBot Replicator Mini, the Action Button will glow red, indicating that it is heating the MakerBot Replicator Smart Extruder. When the Smart Extruder is fully heated, the MakerBot Replicator Mini will start to print your model.

In the Print dialog, click **Print Preview** to see:

- estimated print time
- estimated amount of filament your print will use
- a rendering of what your print will look like



PRINTING FROM MAKERBOT DESKTOP

HOW TO PAUSE OR CANCEL A PRINT

To Pause: While the MakerBot Replicator Mini is printing, press the Action Button once to pause. The Action Button color will turn from red to blue. Press the Action Button again to resume printing. You can also pause by opening the print monitor panel in MakerBot Desktop and clicking **Pause**.

To Cancel: While the MakerBot Replicator Mini is heating or printing, press and hold the Action Button to cancel the print. You can also cancel by opening the print monitor panel in MakerBot Desktop and clicking **Cancel**.

4

POST PRINT STEPS

SHARE ON THINGIVERSE

If you are printing a file from Thingiverse, you will be prompted to share a photo once your print is finished. Photos shared to Thingiverse will appear on the Thing page in the **I Made One!** section. Sharing a photo is a nice thing to do – other Thingiverse users will love to see how your prints of their designs come out.

To share a photo, click **Share on Thingiverse**. To save the photo, click **Save Photo** and a save dialog will open. If you do not wish to share to Thingiverse or save the photo, simply click **Close**.

REMOVE RAFT

Every object printed on your MakerBot Replicator Mini will be built on a raft. The raft acts as a base for your print and any support structures, and ensures that everything adheres well to the build plate. When your print finishes, wait for the Smart Extruder to cool, then remove the build plate from the MakerBot Replicator Mini. Remove the print from the build plate, and peel the raft off of the bottom of the print.

 **Caution:** Never turn off the MakerBot Replicator Mini during or immediately after printing. Wait until the Smart Extruder has cooled to 50°C before powering down.

CHANGING FILAMENT

HOW TO CHANGE FILAMENT

You can change filament at any time when the MakerBot Replicator Mini is not heating up or printing.

1. In the print monitor panel, click **Change**. Then click **Load Filament** or **Unload Filament**.

The Smart Extruder will start to heat up. When the Smart Extruder is fully heated, the extruder motor will start to turn in the appropriate direction.

2. When you are done loading or unloading filament, click **Done** to stop the process.

NOTE: If you want to change filament during a print, first click **Pause** in the print monitor panel of MakerBot Desktop. Follow the steps above, and then click **Resume** to finish your print.

Tips

- Before loading, cut the end of your filament to create a clean edge.
- Before removing the current filament spool, unclip the filament guide tube from the spool pocket.
- Wait until the Smart Extruder finishes unloading your filament before pulling it free. Always allow the Smart Extruder to do most of the work when unloading filament.
- Clear away any excess extruded plastic before printing.


DETACHING/ATTACHING THE SMART EXTRUDER

If you need to remove the Smart Extruder from your MakerBot Replicator Mini, first unload any filament. Wait for the Smart Extruder to cool to 50°C, then pull it away from the extruder carriage.

To attach the Smart Extruder, press it against the back of the extruder carriage, with the connector pins facing the extruder carriage. Magnets will lock the Smart Extruder into place. If MakerBot Desktop doesn't recognize the Smart Extruder, open the print monitor panel and click **Attach Smart Extruder**.

HOW TO TAKE A PHOTO

You can take a photo of your print at any time using the built-in camera in the MakerBot Replicator Mini. Open the print monitor panel in MakerBot Desktop, mouse over the camera view, and click **Take a Photo**. MakerBot Desktop will take a photo and let you save it to your local computer.

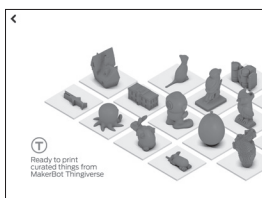
 **Warning:** Always use caution when handling the Smart Extruder. Never remove the Smart Extruder during or immediately after printing. Wait until the Smart Extruder has cooled to 50°C before handling it.

MakerBot Mobile is an app for iOS and Android devices that allows you to remotely start, monitor, pause and cancel prints on your MakerBot Replicator Mini, all from your tablet.

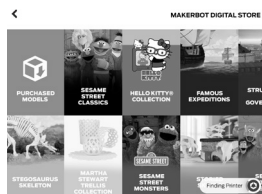
MakerBot Printshop has four features: **Makers**, **Explore**, **Digital Store**, and **My Stuff**.



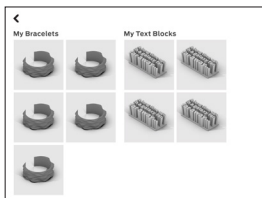
With the **Makers**, you can customize designs for signs, bracelets, rings, and other objects using base models provided by the app. With Shapemaker you can turn an image into your own, unique, printable 3D model.



In **Explore**, you can browse a selection of ready-to-print items from Thingiverse.



In **Digital Store**, you can browse premium 3D models, and purchase them right in PrintShop.



In **My Stuff**, you can access all recent prints initiated from MakerBot Printshop, as well as any saved designs that you customized using MakerBot Printshop. You can also save your designs to your MakerBot Cloud Library to access them from the MakerBot Desktop App.

Once you initiate a print with MakerBot PrintShop, you can monitor it using the app. The onboard camera on your MakerBot Replicator Mini will periodically take photos of the build area, which will be displayed in MakerBot Printshop.

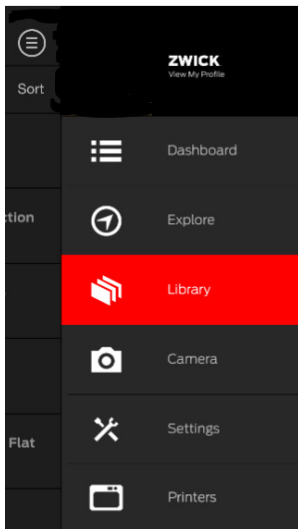
To learn more about MakerBot Printshop, go to makerbot.com/printshop

MAKERBOT MOBILE

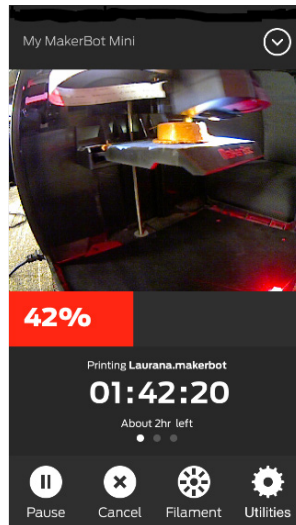
MakerBot Mobile is a free app that allows you to monitor and control your MakerBot Replicator Mini from your smartphone. With MakerBot Mobile you can:

- Start, pause, and cancel prints
- Initiate filament changes
- Receive notifications about your prints, such as print completion, any errors that may occur, and more
- Visually monitor your prints via the onboard camera

MakerBot Mobile also gives you access to your MakerBot Cloud Library and all of Thingiverse. Just tap **Print this Thing** and MakerBot Mobile will slice the file in the cloud and send it to your MakerBot Replicator Mini. Want to print something that's bigger than the MakerBot Replicator Mini's build volume? Not a problem. MakerBot Mobile will automatically rescale the object.



Maintain your profile, access Thingiverse and your MakerBot Cloud Library, view the camera feed, and more.



Monitor, pause, and cancel prints, and initiate filament changes.

UPDATING FIRMWARE

Firmware is the software that runs on your MakerBot Replicator Mini. Keeping your firmware up to date will help ensure that your MakerBot Replicator Mini is in the best possible working order. Firmware updates allow MakerBot to add new features to your MakerBot Replicator Mini and improve old ones.

If a new firmware version has become available since the last time you connected your MakerBot Replicator Mini to MakerBot Desktop, MakerBot Desktop will alert you. To check for an available firmware update at any time, go to **Devices > Update Firmware**.

TROUBLESHOOTING

PRINTING PROBLEMS

PROBLEM	SOLUTION
Can't unload filament from the MakerBot Replicator Smart Extruder.	In the print monitor panel of MakerBot Desktop, click Change , and then select Load Filament . Let the plastic extrude for a few seconds, then click Done and Unload Filament to try unloading again.
Can't remove filament from the MakerBot Replicator Smart Extruder.	Try unloading the filament while squeezing the tabs on the side of the Smart Extruder and pulling on the filament.
Filament breaks between the spool and the MakerBot Replicator Smart Extruder.	Ensure that the filament unwinds counterclockwise from the spool. Always unload any filament left in the Smart Extruder before reloading. Make sure the filament guide tube is secured to the filament spool pocket.
Filament won't extrude from the Smart Extruder.	Try unloading and then reloading the filament. Repeat this process a few times if necessary. You may be able to avoid jams in the future by allowing the Smart Extruder to cool to 50°C before removing the Smart Extruder or turning off your MakerBot Replicator Mini.

TROUBLESHOOTING

PRINTING PROBLEMS

PROBLEM	SOLUTION
Printed object is stuck to the build plate.	<p>Remove the build plate from your MakerBot Replicator Mini and wait for the object to cool down. Objects will detach more easily after they have cooled.</p> <p>If the object is still stuck, take a thin metal craft spatula and carefully work the blade under the edge of the object. When the blade is most of the way under the object, twist the handle slightly. The object should come free.</p>
Object peels off the build plate during printing.	<p>Ensure that the build plate is clean. Dust and oil from your hands or tears and wrinkles in the build plate tape can prevent objects from sticking to the plate. Wipe down the build surface with a clean, lint-free cloth. Replace ripped build plate tape with fresh tape.</p>
Object isn't sticking to the build plate.	<p>Make sure that build plate tape is not covering the metal disk at the back of the build plate. Covering the metal disks may interfere with the automated leveling process.</p>
My front door popped off. What do I do?	<p>The front door is designed to pop off without being damaged. Simply snap it back onto its hinges.</p>

TROUBLESHOOTING

CONNECTIVITY PROBLEMS

PROBLEM	SOLUTION
Can't access the Library, Explore, Store, and Learn sections of MakerBot Desktop.	You may not be logged into your MakerBot account. These features are accessible only when you are logged in. If you are logged into your MakerBot account but are still unable to access the Library, Store, Explore, and Learn sections, your computer may not be connected to the internet.
MakerBot Desktop does not recognize the MakerBot Replicator Mini.	Make sure you have selected your MakerBot Replicator Mini as the printer you want to connect to in MakerBot Desktop. Go to Devices > Connect to a New Device , and select your MakerBot Replicator Mini from the list of available networked printers.
MakerBot Desktop does not recognize that a Smart Extruder is attached.	While the Smart Extruder is attached to the extruder carriage, click Attach Smart Extruder in the print monitor panel in MakerBot Desktop. If MakerBot Desktop still displays a message that the Smart Extruder is not attached, physically detach it, reattach it, and click Attach Smart Extruder .

TROUBLESHOOTING

CONNECTIVITY PROBLEMS

PROBLEM	SOLUTION
I don't see a camera feed in the print monitor panel.	To view the camera feed, click the menu icon at the lower right corner of the MakerBot Desktop screen to show the print monitor panel. The camera feed will only be visible when the status bar is expanded. If you have expanded the status bar to show the monitor panel and the feed does not appear, make sure that your MakerBot Replicator Mini is connected via USB or a Wi-Fi network.
How do I turn off my MakerBot Replicator Mini?	Use the power switch at the back left of the MakerBot Replicator Mini to turn it off. Always wait until the Smart Extruder has cooled to 50°C before powering down.

SPECIFICATIONS

PRINTING

Print Technology:	Fused deposition modeling
Build Volume:	10.0 W x 10.0 D x 12.5 H cm [3.9 W x 3.9 D x 4.9 H in]
Layer Resolution:	200 microns
Filament:	1.75 mm [0.069 in] MakerBot PLA Filament
Nozzle Diameter:	0.4 mm [0.015 in]
Print File Type:	.makerbot

SOFTWARE

Software Bundle:	MakerBot Desktop
3D Model File Types:	.stl, .obj, .thing
Supported OS:	Windows (7+), Mac OS X (10.7+), Linux (Ubuntu 12.04, 14.04, 14.1), Fedora (20, 21)

PHYSICAL DIMENSIONS

Printer:	29.5 W x 31.0 D x 38.1 H cm [11.6 W x 12.2 D x 15.0 H in]
Shipping Box:	38.7 W x 39.7 D x 52.7 H cm [15.3 W x 15.6 D x 20.8 H in]
Printer Weight:	8 kg [18 lbs]
Shipping Weight:	10 kg [22 lbs]

TEMPERATURE

Ambient Operating Temperature:	15-26°C [60-78°F]
Storage Temperature:	0-38° C [32-100° F]

ELECTRICAL

Power Requirements:	100-240 V, 50/60Hz, 0.75-0.41 A, 100 W
Connectivity:	USB, Wi-Fi

MECHANICAL

Construction:	PC ABS with powder-coated steel reinforcement
Build Surface:	Injection molded acrylic
Stepper Motors:	1.8° step angle with 1/16 micro-stepping
XY Positioning Precision:	11 microns [0.0004 in]
Z Positioning Precision:	2.5 microns [0.0001 in]

CAMERA

Camera Resolution:	320 x 240
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BUILD PLATE: The acrylic surface on which the MakerBot Replicator Mini builds an object.

BUILD PLATE TAPE: Masking tape used as a build surface for objects printed with MakerBot PLA Filament. You can find build plate tape sized for the MakerBot Replicator Mini at store.makerbot.com

EXTRUDER ASSEMBLY: The MakerBot Replicator Smart Extruder installed in the extruder carriage.

EXTRUDER CARRIAGE: The part of the extruder assembly that sits on the gantry and moves back and forth. When the Smart Extruder is installed in the extruder carriage, the extruder assembly is complete.

EXTRUDER NOZZLE: The opening on the end of the Smart Extruder from which heated MakerBot PLA Filament emerges to be spread onto the build plate.

FIRMWARE: The software that runs on your MakerBot Replicator Mini.

GANTRY: The apparatus that allows the extruder assembly to move around.

LAYOUT: An arrangement of 3D models on the build plate.

.MAKERBOT: The format of print files for your MakerBot Replicator Mini. Print files contain instructions for your MakerBot Desktop 3D printer.

MAKERBOT ACCOUNT: The username and password you will use to sign in to the MakerBot Desktop app and to log on to Thingiverse and other MakerBot sites.

MAKERBOT CLOUD LIBRARY: The part of MakerBot Desktop where you can store and organize your own design files as well as any files you have downloaded from or collected on Thingiverse.

MAKERBOT DESKTOP: Free software for use with your MakerBot Replicator Desktop 3D Printer. MakerBot Desktop will help you discover, manage, share, and print 3D models.

MAKERBOT DIGITAL STORE: A digital store where you can download premium 3D content.

MAKERBOT PLA FILAMENT: Polylactic acid filament. PLA is a corn-based thermoplastic. MakerBot PLA Filament is the material from which you make objects on the MakerBot Replicator Mini.

GLOSSARY

MAKERBOT REPLICATOR MINI:

The MakerBot Replicator Mini Compact 3D Printer.

.OBJ: A file format used for 3D models.

PRINT PREVIEW: The feature in the Print dialog that provides an estimated print time, estimated amount of filament your print will use, and a rendering of what your print will look like.

RAFT: A plastic base printed on the build plate and used as a printing surface for your printed object. All models printed on the MakerBot Replicator Mini will be printed with a raft.

SETTINGS DIALOG: The dialog that allows you to select options that will affect the quality of your printed object.

SLICING: The process of turning a 3D model into a print file containing instructions for your MakerBot 3D printer. The MakerBot Replicator Mini uses print files with the extension .makerbot.

SMART EXTRUDER: The MakerBot Replicator Smart Extruder draws the filament from the spool, melts it, and pushes it through a nozzle onto the build plate.

.STL: A widely used file format for 3D models.

SUPPORT: Automatically generated support structures used to prop up any sections of a print that will not stand alone.

.THING: A file format used by MakerBot Desktop that stores additional information about your 3D model files, such as orientation and location on the build plate.

THINGIVERSE: MakerBot Thingiverse, an online community for sharing 3D design files.

USB CABLE: A cable that allows your computer to communicate with your MakerBot Replicator Mini.

CONTACT US

Support

makerbot.com/support

Our website has extensive documentation and troubleshooting information about your MakerBot Replicator Mini. It's a great resource when you want to try to solve issues quickly on your own.

makerbot.com/support/new/support

At MakerBot, we take pride in offering expert, responsive, friendly customer support to customers around the world. If you need help resolving an issue with the MakerBot Replicator Mini, visit the web address above for an overview of your support options.

Sales

sales@makerbot.com

To learn about other MakerBot products, including MakerBot PLA Filament, please email the address above, or call our Sales Team at 347.334.6800.

Feedback

thoughts@makerbot.com

For general questions, or to tell us what's on your mind, send an email to the address above. We love to hear from you, and using this email address helps keep our Sales and Support lines free for customers in need.



MakerBot®

WE CAN'T WAIT TO SEE WHAT YOU MAKE!