

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

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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 setting up your MakerBot Replicator Mini, please refer to the Quick Start Guide that came with it, 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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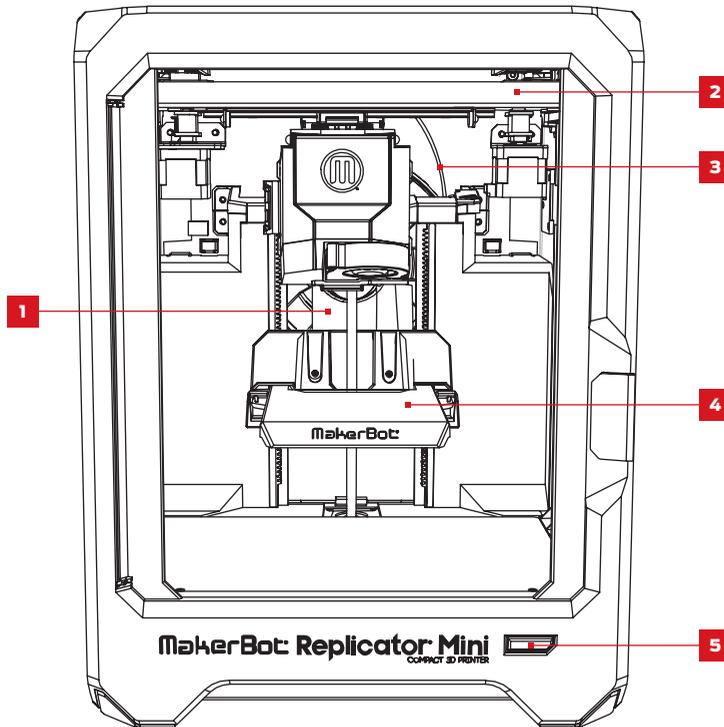


ABOUT THE MAKERBOT REPLICATOR MINI

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

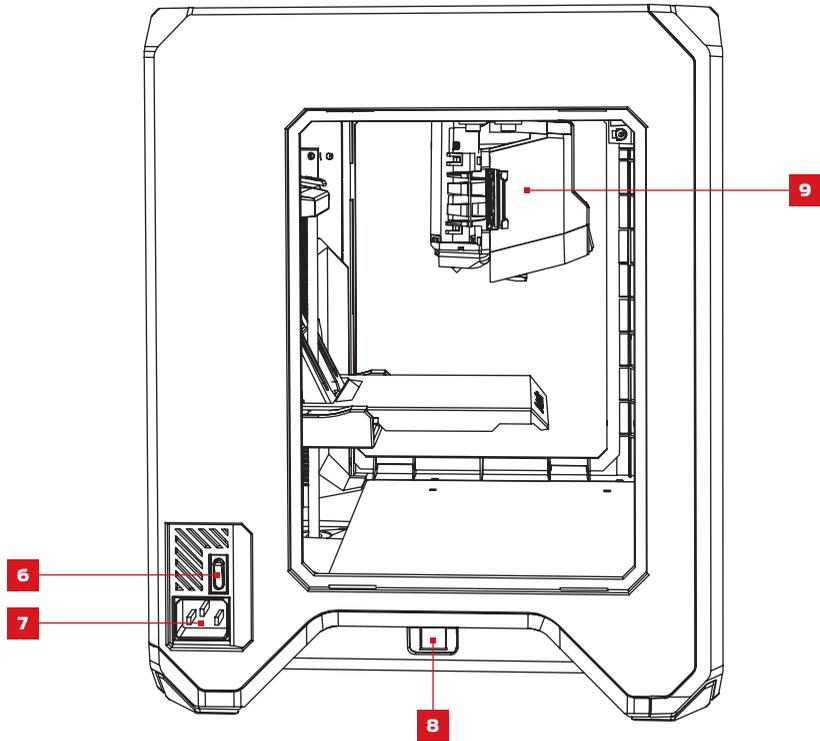
2. Gantry

3. Filament Guide Tube

4. Build Plate

5. Action Button

MAKERBOT REPLICATOR MINI SIDE VIEW



6. Power Switch

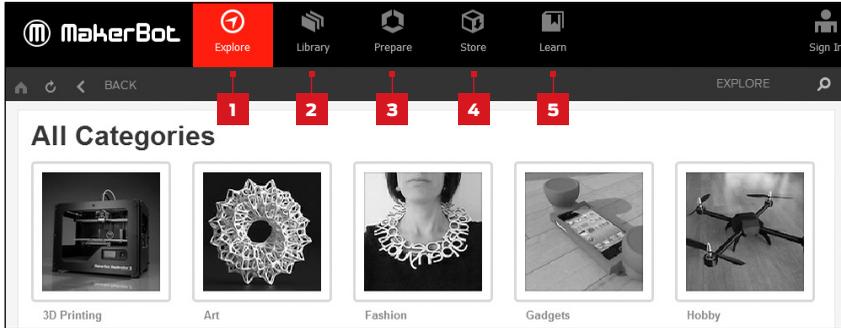
7. Power Input Port

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.

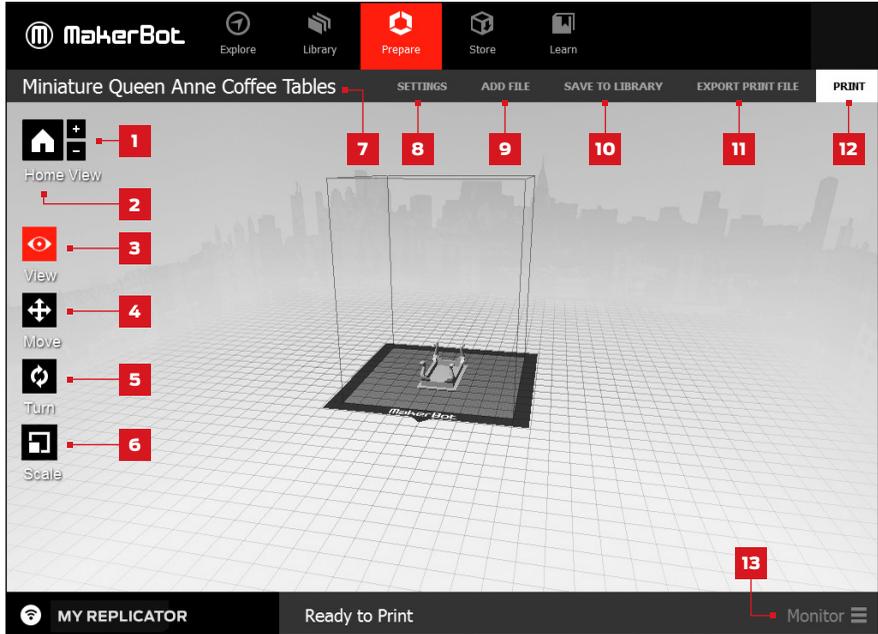
ABOUT MAKERBOT DESKTOP

5. Learn provides video tutorials on common processes such as Exporting Files, Preparing to Print, and Exploring Thingiverse. Look for new tutorials with each update of MakerBot Desktop. You can also replay the MakerBot Desktop walkthrough in the Learn tab.

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 tutorials.

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. Save to Library

- Click **Save 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 if connected via Wi-Fi.
- 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. Click **Wi-Fi Settings**.
4. Select your network from the dropdown menu and enter your password. Your MakerBot Replicator Mini will automatically be connected 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. Your MakerBot Replicator Mini should now be connected to MakerBot Desktop via Wi-Fi.

PRINTING FROM MAKERBOT DESKTOP

1 CHOOSING YOUR MODEL

You can download a model from Thingiverse or the MakerBot Digital Store, open a 3D printable STL, OBJ, or Thing file from any source, or access objects 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. If you haven't already, set up your billing information.
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

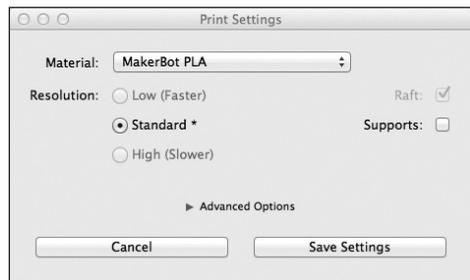
Use the Prepare Screen to manipulate your model, such as changing its orientation or scaling it to a new size. You can also add more models to the layout. Then, to change any print settings before you print, click the **Settings** button.

SETTINGS

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

1. **Supports.** 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.

2. **Advanced Settings.** Some options have been grayed out to make your printing experience with the MakerBot Replicator Mini as simple and as easy as possible. You can still access additional options by clicking on **Advanced Options**. For information on what the advanced settings are and how to use them, 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

1. Click the Print button to slice your model and send it to your MakerBot Replicator Mini. Click **OK** to exit the print dialog, or click **Cancel Print** to cancel the print.

2. When the print file is sent to the MakerBot Replicator Mini, the Action Button will blink blue. Press the Action Button to confirm the print. The Action Button will then glow red, indicating 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**.

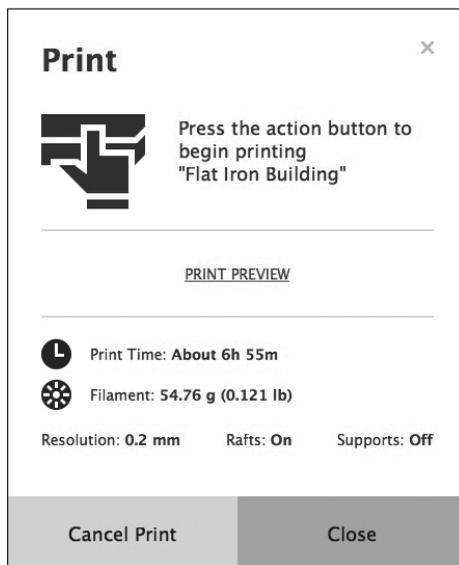
If you decide not to send the file to the MakerBot Replicator Mini, click **Cancel Print**.

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.

PRINT PREVIEW

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 then 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 then clicking **Cancel**.

4

POST PRINT STEPS

REMOVE RAFT

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 off the raft from the bottom of the print. 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. The raft will be easily removable once you remove your finished print from the build plate.

SHARE ON THINGIVERSE

If you are printing a file from Thingiverse, it's nice to let the model's designer know. In the Explore tab of MakerBot Desktop, click on **View in Browser**, which will open up your default web browser to the model's thing page. Then click **I Made One**. You'll have the opportunity to upload photos of your print and add a description. When you're ready, click **Create** to link your photos to the original design's thing page.

 **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.

To Load

- In the print monitor panel, click **Change**. Then click **Load**. The Smart Extruder will start to heat up. When the Smart Extruder is fully heated, the extruder motor will start to turn.
- When you hear the motor turning, grasp the top of the extruder assembly and push the free end of filament into the loading tube at the top of the Smart Extruder. Keep pushing on the filament until you feel the Smart Extruder pulling it in.
- Wait until you begin to see plastic emerging from the extruder nozzle. Then click **Done** to stop the process.

To Unload

- In the print monitor panel, click **Change**. Then click **Unload**. The Smart Extruder will start to heat up. When the Smart Extruder is fully heated, it will go through a two-part unloading process.
- Remove the filament from your Smart Extruder only when MakerBot Desktop directs you to. Then click **Done**.

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.
- Clip the filament guide tube back into place after inserting a new filament spool.
- Clear away any excess extruded filament 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. You must be connected to a Wi-Fi network to use the camera.

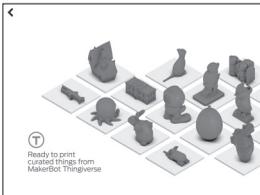
 **Warning:** Always use caution when handling the Smart Extruder. Never remove the Smart Extruder during or immediately after printing. Wait until the Smart Extruder has cooled to 50° C before handling it.

MakerBot PrintShop is a free app that allows you to design and customize prints, explore Thingiverse, and monitor and control your MakerBot Replicator Mini, all from your tablet.

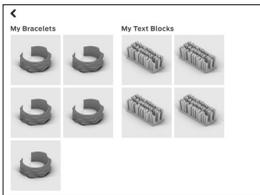
MakerBot Printshop has three features: **Makers**, **Explore**, and **My Stuff**.



With the **Makers**, you can customize designs for signs, bracelets, and other objects using base models provided by the app.



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



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

Once you initiate a print with MakerBot PrintShop, you can monitor that print as it's happening. The onboard camera on your MakerBot Replicator Mini will periodically take photos of the build area, viewable right on your tablet. You can also pause and cancel prints directly from MakerBot PrintShop.

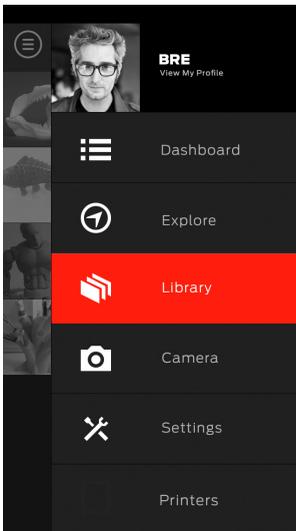
To learn more about MakerBot Printshop, go to makerbot.com/printshop

MAKERBOT MOBILE

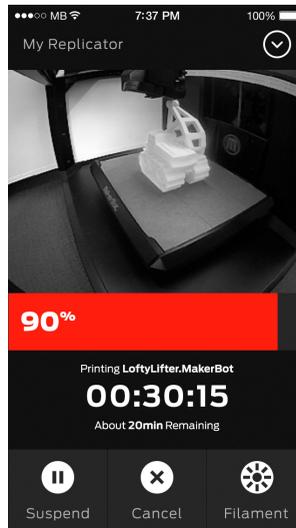
MakerBot Mobile is a free app that allows you to monitor and control your MakerBot Replicator Mini from your smartphone. With MakerBot Mobile you can:

- 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

CONNECTIVITY PROBLEMS

PROBLEM	SOLUTION
Can't access the Library, Explore, and Store 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, and Explore 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.
The MakerBot Replicator Smart Extruder is installed, but MakerBot Desktop displays a message stating it is not installed.	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 .
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.

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 filament 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.	Make sure to wait to remove the filament until MakerBot Desktop has instructed you to do so. If you still cannot remove the filament, try 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 disks at the back of the build plate. Covering the metal disks may interfere with the automated leveling process.</p>

TROUBLESHOOTING

MECHANICAL PROBLEMS

PROBLEM	SOLUTION
My front door popped off. What do I do?	The front door is designed to pop off without being damaged. Simply snap it back onto its hinges.
My MakerBot Replicator Mini didn't come with a lid.	After internal product testing on the MakerBot Replicator Mini, we saw better performance without the top door, so we decided to remove it from the design.

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+, Fedora 19+)

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, 50/60 Hz, 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.

SUPPORTS: 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/submit-a-case/

At MakerBot, we take pride in offering expert, responsive, friendly customer support to our customers around the world. If you need help resolving an issue with your MakerBot Replicator Mini, open a case with the MakerBot Support Team at the web address above.

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.



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