



MAKERBOT REPLICATOR 2 : TECHNICAL SUPPORT ARTICLE

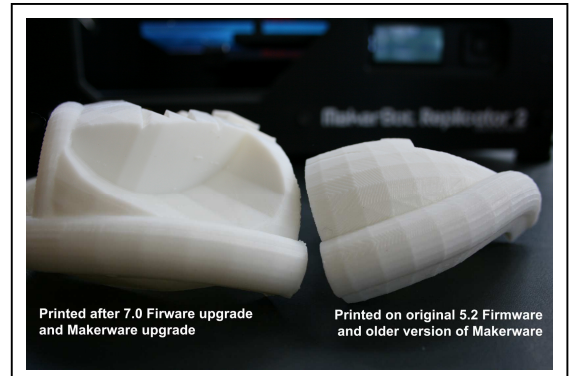
UPGRADING MAKERWARE AND FIRMWARE

Version 1.1

WHY UPGRADE MAKERWARE AND YOUR FIRMWARE?

One of the best things about Makerbot is the fact that development on their machines does not stop when they are put in the box. They are constantly improving the FIRMWARE (the software on your motherboard that controls the machine) and MAKERWARE (the software we use to slice our models in just the way we want)

As an example, the Replicator 1 came out as a 270 micron machine, and now you can make beautiful 100 micron prints thanks to firmware upgrades. The 7.0 Firmware upgrade, coupled with the Makerware upgrade at the same time also saw a dramatic improvement in the Replicator 2, just check out the photos



How to Your Upgrade your Firmware

So in theory, when the bot is connected to your computer the you should be able to just

- Open Makerware
 - Go to Bots ► upload firmware
- and you are away

NOTE : YOU WILL HAVE TO THEN UPGRADE MAKERWARE TO THE LATEST VERSION ALSO

As with Firmware 7.0 the format of files it takes changed from S3G to X3G and trying to run S3G files after the firmware update will shake your machine to bits

This being said the firmware 7 rocks. The print quality improvement is amazing.

IMPORTANT INFO

Tip 1 : Connecting your Bot to Your PC Through Makerware

This problem usually occurs because something has gone wrong with Conveyor, the part of the MakerWare tool-chain that handles the connection to your bot. Go to the Services menu and select "Restart Conveyor."

Some people (ourselves included) have found the latest version of Makerware (1.1.2.67) has difficulty actually connecting to your bot. So if you have not already updated your Makerware software do the firmware update first. We have a little app that runs outside Makerware and installs firmware for you.

We can also email an older version for people to use if they are experiencing this problem.

Tip 2 : Connecting to your bot through Replicator G after you install Makerware

MakerWare connects to your MakerBot via a service called Conveyor. Once you install MakerWare, Conveyor will run in the background and prevent other programs, like ReplicatorG, from connecting to your bot. To reconnect to ReplicatorG, you'll have to stop Conveyor. The easiest way to do this is through the Services menu in MakerWare. How to stop Conveyor when you do not have MakerWare open depends on what operating system you're using. On Windows computers, you can stop Conveyor through the Services application, which you can find by searching your computer. On Macs, open up Terminal and enter "sudo launchctl unload / Library/LaunchDaemons/com.makerbot.conveyor.plist". On Linux computers the command is "sudo stop conveyor". If you need to restart Conveyor, you can do that from MakerWare's Services menu.

Tip 3 : Do not hit your head against a wall - if your having problems contact us.

How to Your Upgrade your Makerware

You have to Uninstall Makerware and then install the lastest version which you can download from <http://www.makerbot.com/makerware/>

Having trouble installing Makerware?

If you already have ReplicatorG installed, make sure it's not running. It interferes with Conveyor, one of the components of the MakerWare package; and then try running the installer again. Running the installer again may also help if the problem is not related to ReplicatorG. If the installation fails a second time, please contact us.

I get a security Warning when I Try To install Makerware

Your operating system may not recognize the drivers MakerWare is installing, but that's fine. Just hit "OK" and the installation will continue. We have also seen some antivirus programs identify MakerWare as a virus. We assume this is because they haven't seen MakerWare before. Don't worry about it; we promise it's safe.

BilbyCNC hopes you found this helpful. Please visit support.bilbycnc.com.au if you need further assistance





MAKERBOT REPLICATOR 2 : TECHNICAL SUPPORT ARTICLE

UPGRADING FIRMWARE—UPGRADE FAILED

Version 1.1

HAVING TROUBLE UPGRADING YOUR FIRMWARE?

One of the best things about Makerbot is their constant commitment to improvement. The firmware upgrades are a perfect example....but what if your machine does not want to take the upgrade...don't fret we have the solution ;)

Especially on the older Replicator 1's but occasionally on the Replicator 2's (more likely with a Mac than PC) some people have had the firmware upgrade stop mid point. You may then get an error message on your LED screen, or more likely see two rows of black pixels.

There are two solutions we have for you.

1. Using Replicator G

Go into MakerWare and go to Services -> Stop Conveyor, then close Makerware and open ReplicatorG 0037.

Then turn the bot on, in that order.

Now go to Machine -> Connection (Serial Port) and select the appropriate port. If it doesn't show up, hit Rescan Serial Ports, then go back to Machine -> Connection (Serial Port) and select the port.

Next, go to Machine -> Upload New Firmware. Select board version (eg board v1.5 for The Replicator 1, OR v1.7 for The Replicator 2), and firmware (Eg v7.0 - *at the time this was written these were the latest versions*) You might have to hit the reset button anywhere from one second before to up to five seconds after hitting Upload. The timing might be a bit tricky, but keep trying at it, and you'll get it eventually!

Once that's done, close ReplicatorG and re-open MakerWare, then go to Services -> Restart Conveyor.

Replicator 1 users note : Now, in order to upgrade the firmware on an original Replicator, the process is a bit different than how the prompts say to do it:

1. MakerWare has to show the Replicator is connected.
2. Go to Bots -> Upload Firmware -> Replicator Dual/Single -> 6.2. Press Next.
3. Press Upload immediately before pressing the reset button and holding it for 1-2 seconds, then release it.

2. Using the BotTools

We have two little apps, one for Mac users and the other for PC's.

[winBotTool_v1.01.zip](#)

[macBotTool_v1.0.zip](#)

We can email them to you if required and will have them online under technical support

Open MakerWare and, from the services dropdown, select "Stop Conveyor." Then extract the files.

For Windows, run "run_botTool". Select your bot's COM port and the firmware version you want to upload, click next, and follow the instructions on screen.

For Mac, hold down control and run "bot_tool_v1". Select your bot's COM port and the firmware version you want to upload, click next, and follow the instructions on screen.

BilbyCNC hopes you found this helpful. Please visit support.bilbycnc.com.au if you need further assistance