

# Disabling Signed Driver Enforcement on Windows 8

Unlike previous versions of the Windows operating system, Windows 8 imposes strict limitations on driver signing. Because of this, unsigned drivers require extra steps for installation. Be aware that you will need to complete these steps for each Arduino board and each Windows 8 computer with which you intend to use the board. This is especially important to note for educators or anyone who wants to set up a lab.

If you do not yet have an Arduino, you may consider acquiring SparkFun's Arduino-compatible [RedBoard](#), as it uses [FTDI](#) drivers, which are signed. Windows 8 will automatically install signed drivers when you plug in your Redboard, negating the need for the steps below. However, if you already have an Arduino, we recommend you pair each Arduino with a specific computer, eliminating the need to install the necessary drivers multiple times.

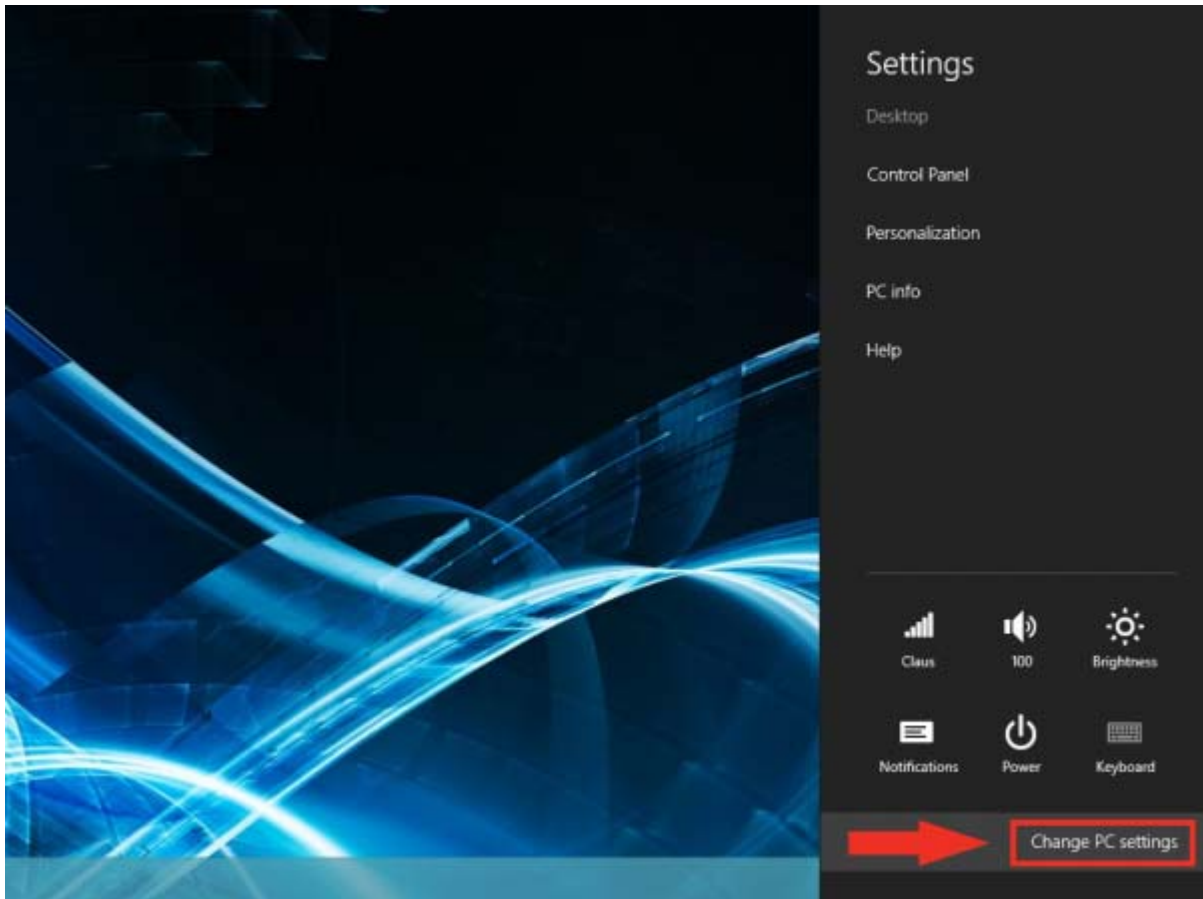
You will need to restart your computer several times throughout the course of these instructions. We recommend you print them before you begin, or use a separate computer to follow along.

## What to do:

1. Hold down the Windows key on your keyboard and press the letter C to open the Charm menu, then click the gear icon (**Settings**).

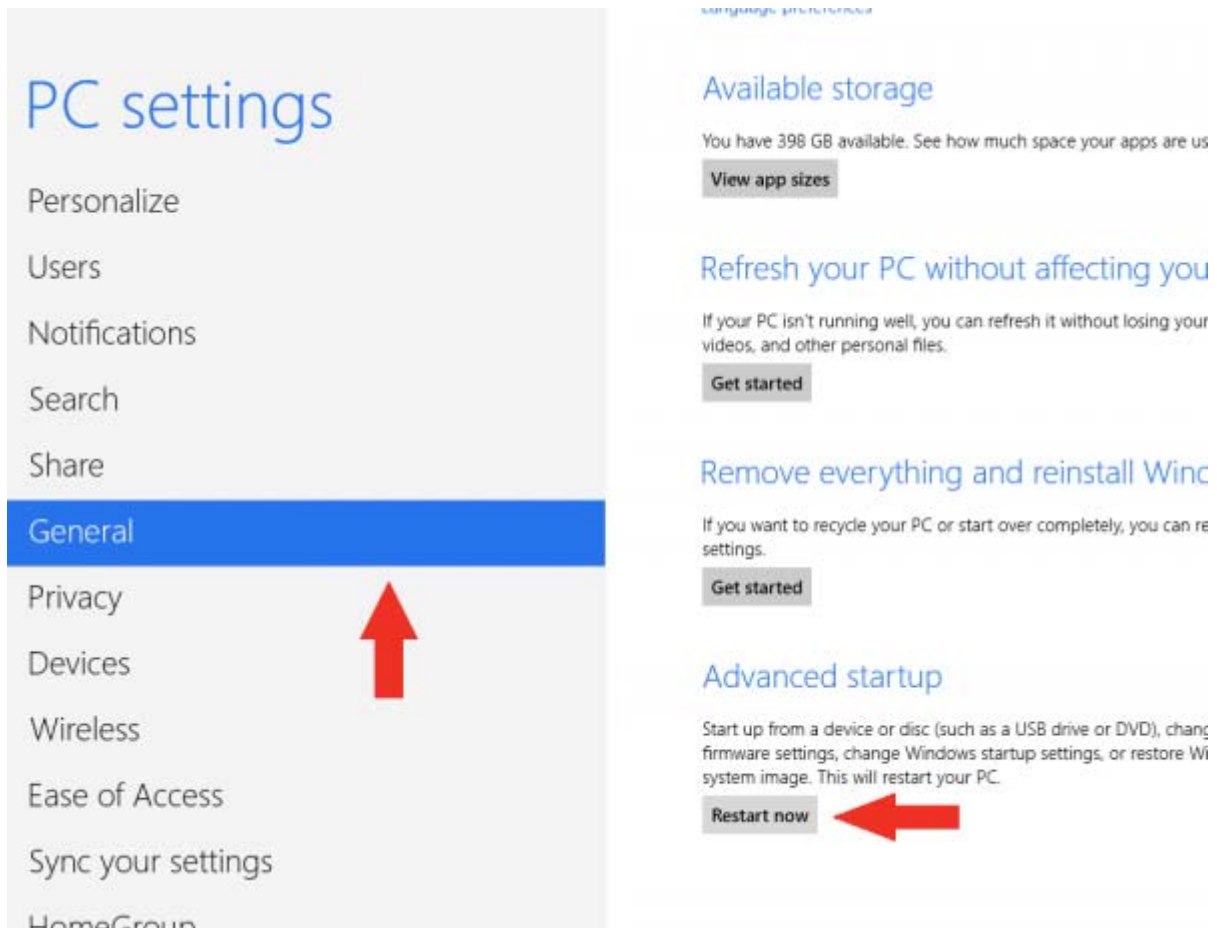


2. Click **More PC Settings**.



3. Click **General**.

4. Under *Advanced Startup*, click **Restart Now**.



**NOTE:** In Windows 8.1, the 'Restart Now' button has moved to 'PC Setting -> Update & Recovery -> Recovery.'

5. After restarting, click **Troubleshoot**.

# Choose an option



## Continue

Exit and continue to Windows 8 Consumer Preview



## Troubleshoot

Refresh or reset your PC, or use advanced tools



## Use a device

Use a USB drive, network connection, or Windows recovery DVD



## Turn off your PC



## Use another operating system

Continue with another installed version of Windows

6. Click **Advanced Options**.

# ← Troubleshoot



## Refresh your PC

If your PC isn't running well, you can refresh it without losing your files



## Reset your PC

If you want to remove all of your files, you can reset your PC completely



## Advanced options



7. Click **Windows Startup Settings**.

# ← Advanced options



## System Restore

Use a restore point recorded on your PC to restore Windows



## Command Prompt

Use the Command Prompt for advanced troubleshooting



## System Image Recovery

Recover Windows using a specific system image file



## Startup Settings

Change Windows startup behavior



## Automatic Repair

Fix problems that keep Windows from loading



8. Click **Restart**.

# ← Windows Startup Settings

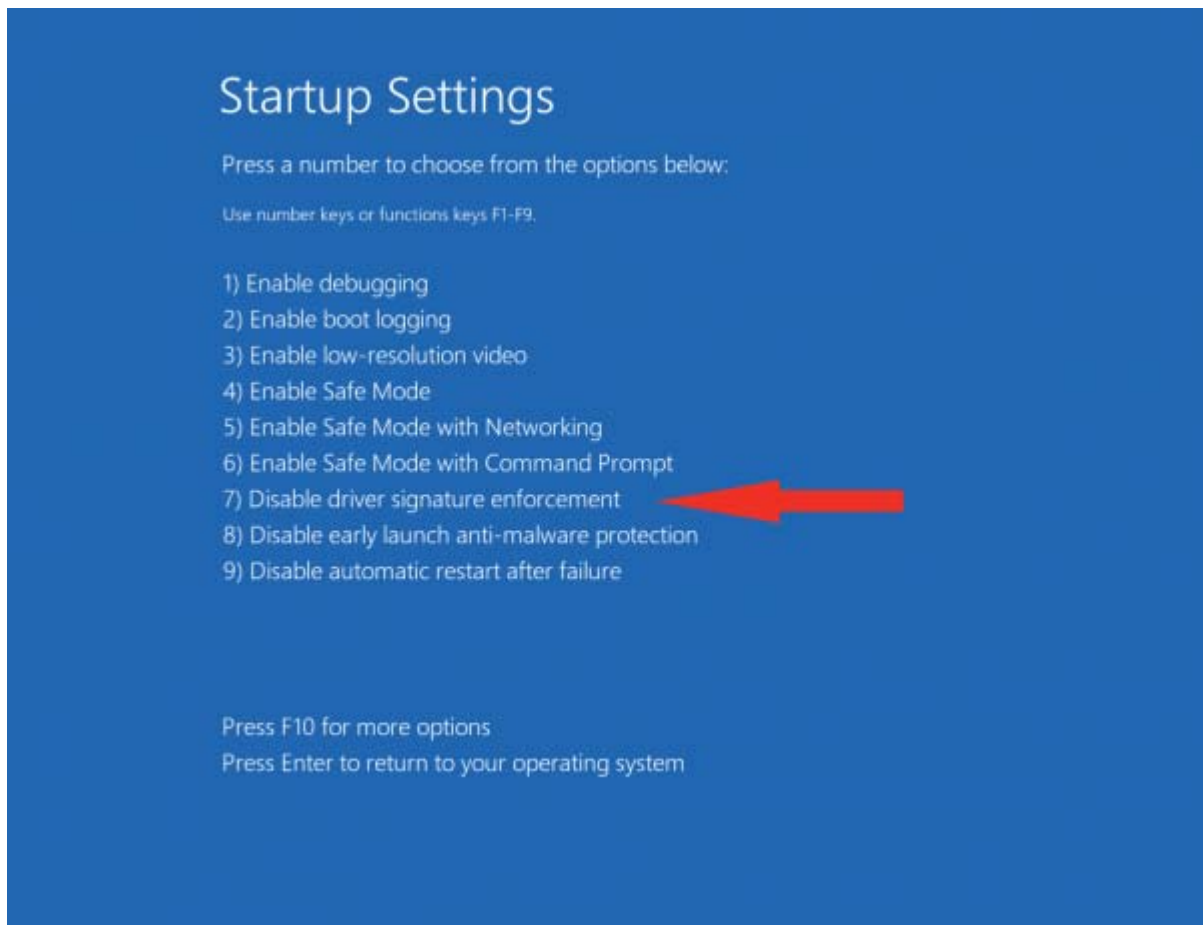
Restart to change Windows options such as:

- Disable driver signature enforcement
- Disable early-launch anti-malware protection
- Disable automatic restart on system failure
- Enable low-resolution video mode
- Enable debugging mode
- Enable boot logging
- Enable Safe Mode



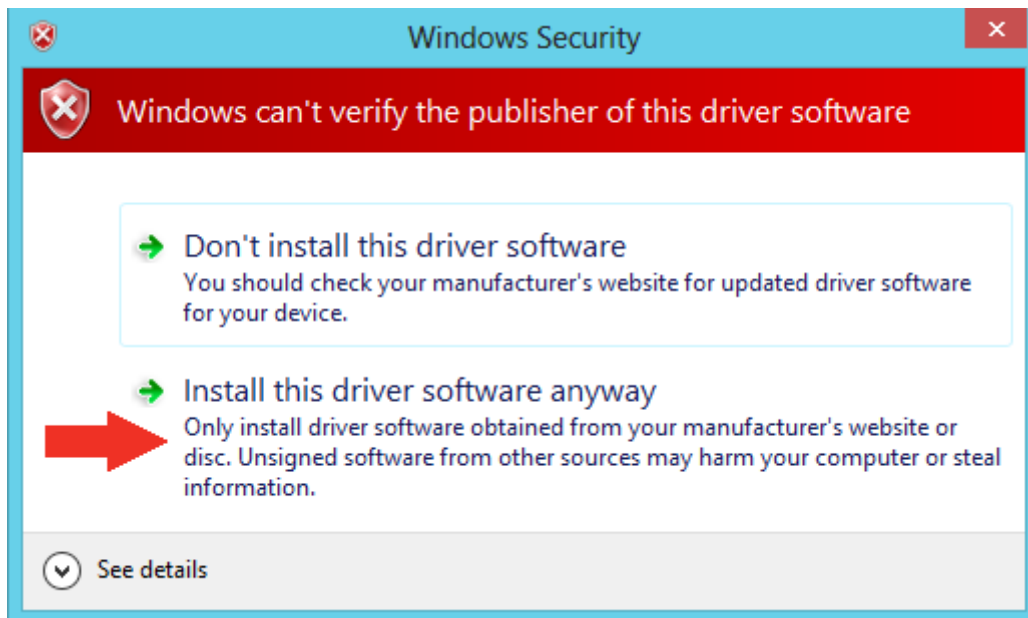
Restart

9. After restarting your computer a second time, choose **Disable driver signature enforcement** from the list by typing the number 7 on your keyboard.



Your computer will restart automatically.

10. After restarting, you will be able to install the Arduino drivers normally; however, Windows will display a warning message. When the warning appears, click **Install this driver software anyway**. If you are unfamiliar with installing Arduino drivers, check out our [Installing Arduino](#) tutorial for a step by step guide.



**Note:** The next time you restart your computer, driver signature enforcement will be in effect again. You will have to repeat this process for any new boards. If you have multiple boards to use with the same computer, we recommend installing the drivers for each one before you shut down or restart your computer.