

Demo Application User Installation and Operation Guide

Overview

The Navitar Demonstration Application (Demo App) is designed to operate on a variety of Microsoft Windows operating systems including Windows XP, Windows 7, and Windows 8.

Navitar's entire software suite has been updated to a managed .NET framework. The Software was designed such that only one GUI is required to run all Navitar controllers (LED or MOTOR) both past and present (backwards compatibility). The system, on start-up, recognizes what device, or devices, are connected and provides the appropriate attributes for each one in separate tabs.

The Demo App is designed using familiar and intuitive user interface options that allow testing, demonstration, and operation of Navitar controllers in a simple easy to understand operator environment.

Prerequisites – Operating System

A PC running Windows XP, Windows 7, or Windows 8 is required. The software was developed using the Microsoft .NET framework and therefor the Microsoft .NET 4.0 or higher client framework is a requirement for operation. The client install is typically already present on windows PC's but if required it can be downloaded free from Microsoft here: <http://www.microsoft.com/en-us/download/details.aspx?id=17851>

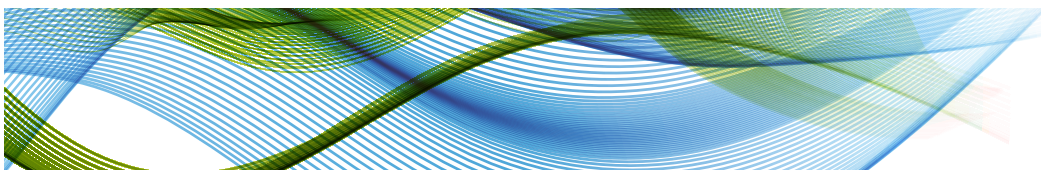
Prerequisites - Communications

The installation PC must have one of the following communication interfaces:

- RS-232
- USB 1.0 or higher

Demo App Installation

Download the provided DemoAppSetup_1.0.0.0.msi file.



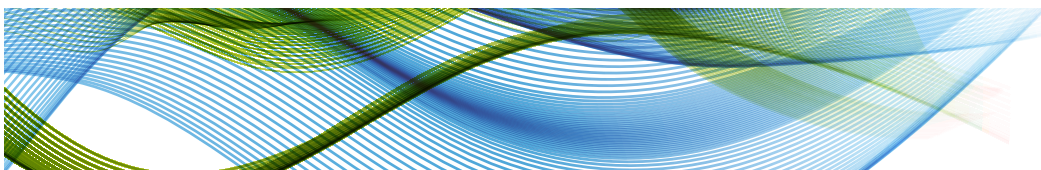
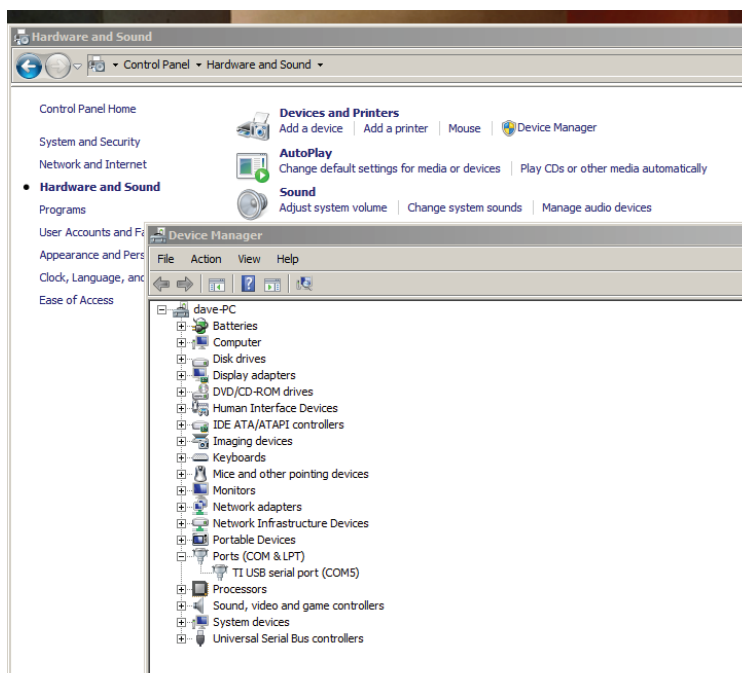
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- 1) Double click the setup file to start the software installation
- 2) When the installation completes a shortcut will be placed on the desktop

Windows Driver Installation

Download from Navitar support or locate the provided windows drivers

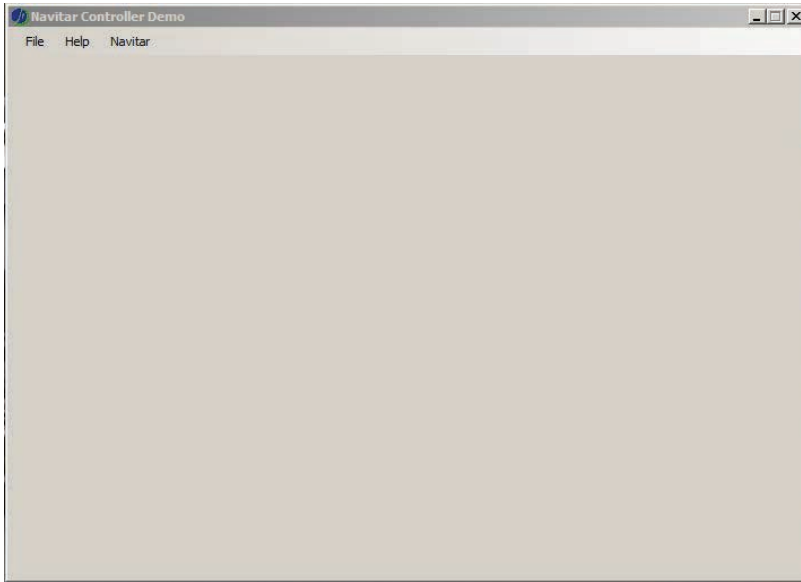
- 1) Connect with USB and power up the Navitar controller, no motors need be connected to the controller for this step. Windows will discover the new hardware and prompt for drivers, select "I will provide the drivers" and browse to the provided windows driver directory.
- 2) Select continue and when prompted that the drivers are not signed select "continue anyway" *If installing on a windows 8 machine please follow procedure to install unsigned drivers for windows 8 outlined at the end of this document.
- 3) If successful, when you open windows device manager you should see something similar to the screen capture shown below. If the device has a yellow exclamation mark next to it the drivers did not properly install, you may right click the device and brose to the drivers to install them.



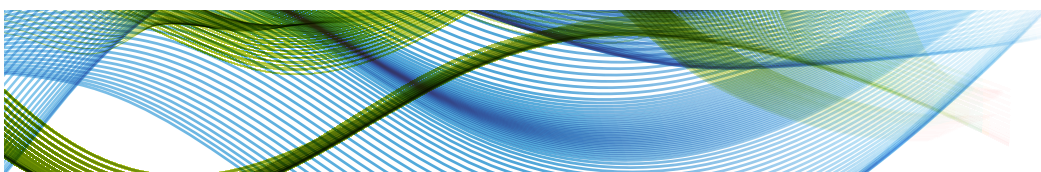
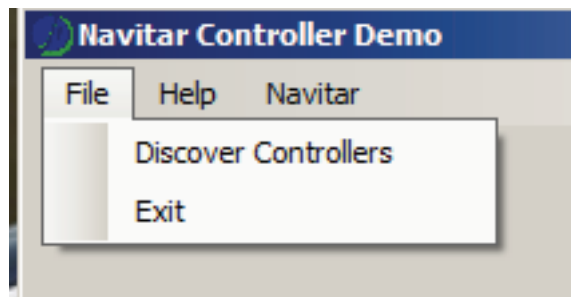
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Demo Application Operation

Double click the desktop shortcut for the Navitar Demo App . Upon launching the application any controllers powered up and connected to the PC will be detected. If no controllers are connected or the connected controllers are not powered up the following screen will be displayed:

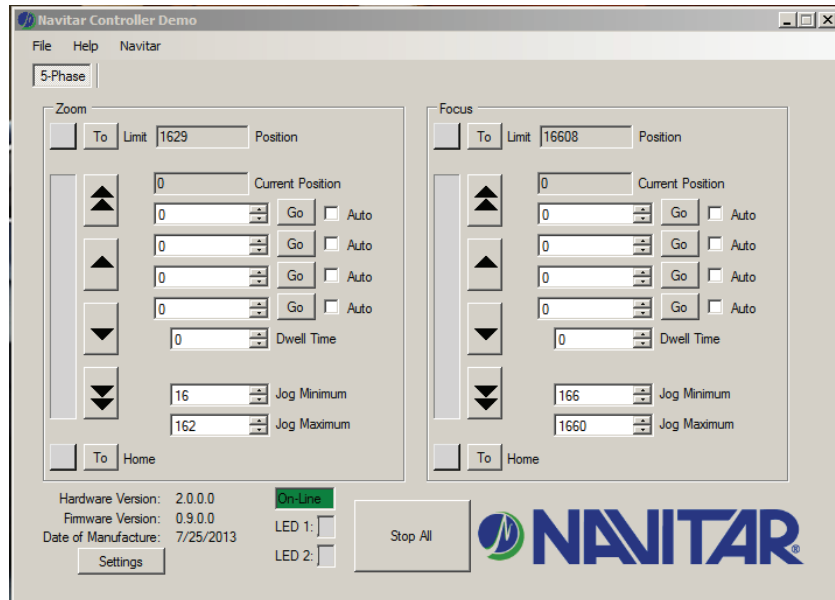


If a controller is connected or powered up you can connect to it by selecting "file" "Discover Controllers" as shown below:

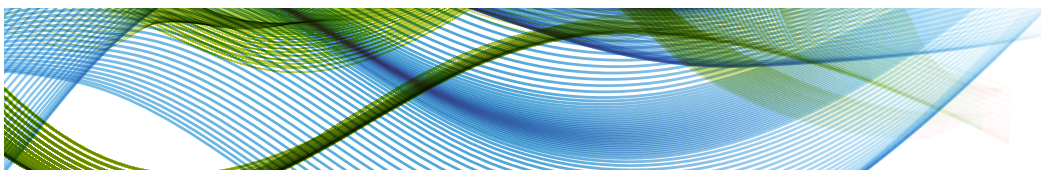
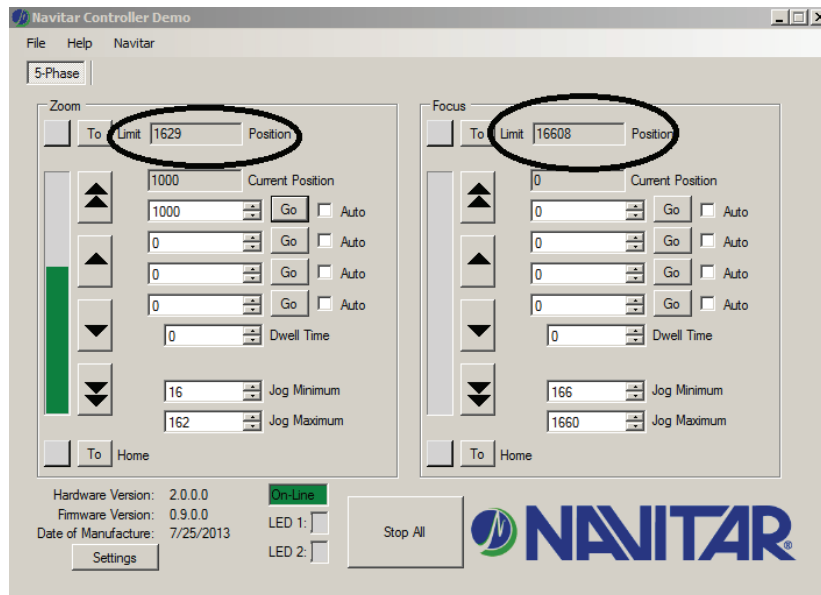


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When connected to a controller the UI will display the parameters for that particular controller, options vary, the 5 phase is shown below:

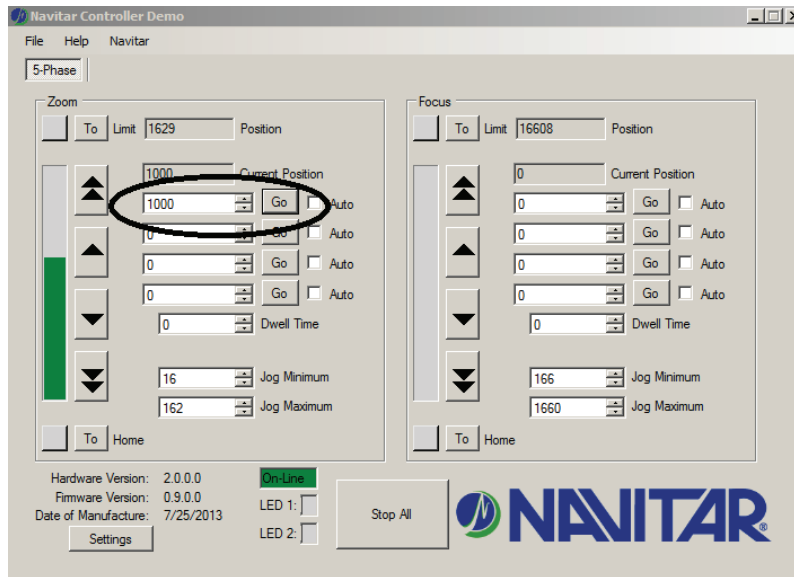


Upon power up, the motor controller will initialize and locate the limits of travel for each active axis as shown below:

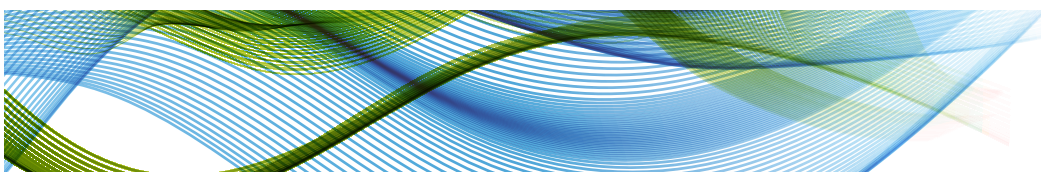
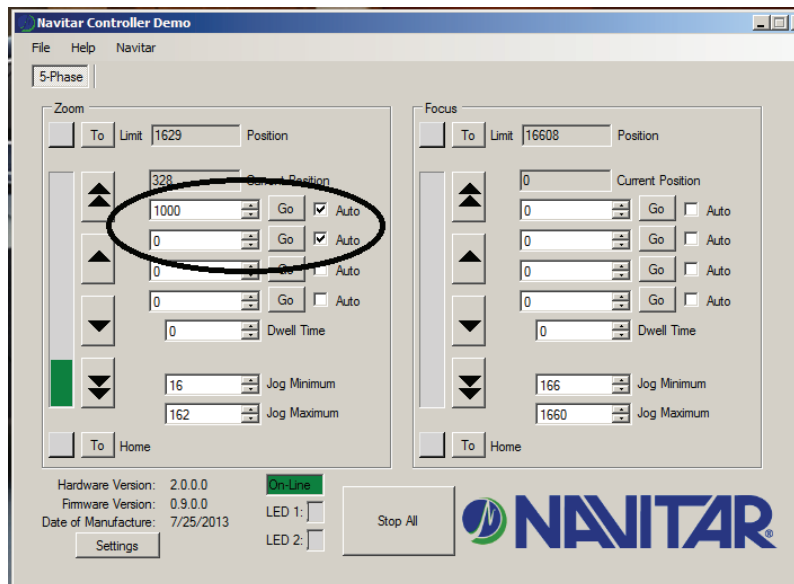


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You may command the axis to a desired position by simply entering the target value in one of the numerical target boxes and clicking the “go” button adjacent to it.

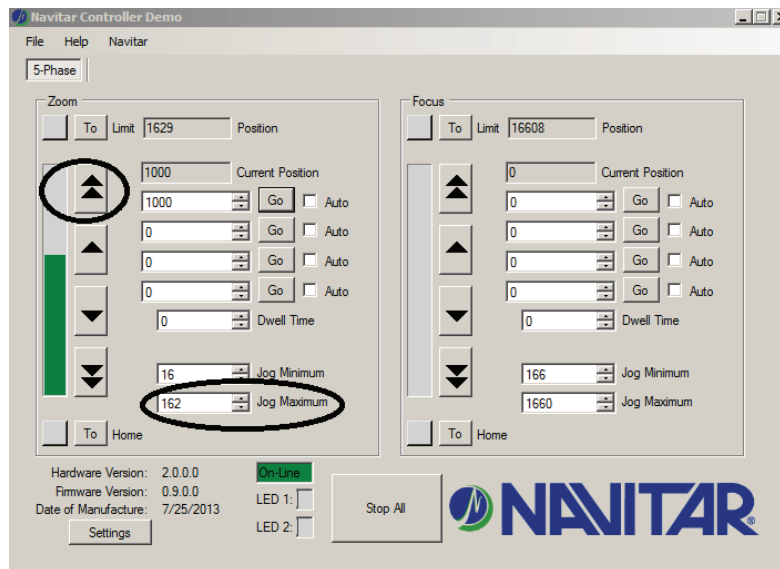


To command an axis to continually cycle between two target points, you enter the desired positions and check the “auto” box adjacent to those positions, in the example shown below the controller will continuously cycle the axis between 1000 and 0.

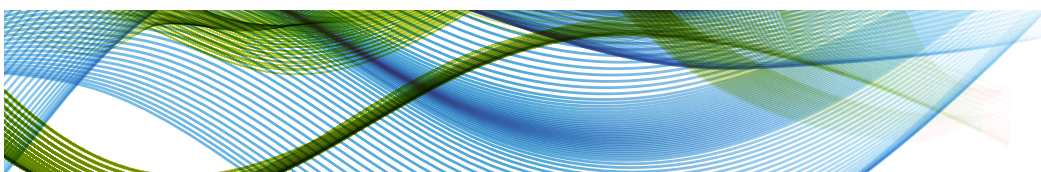
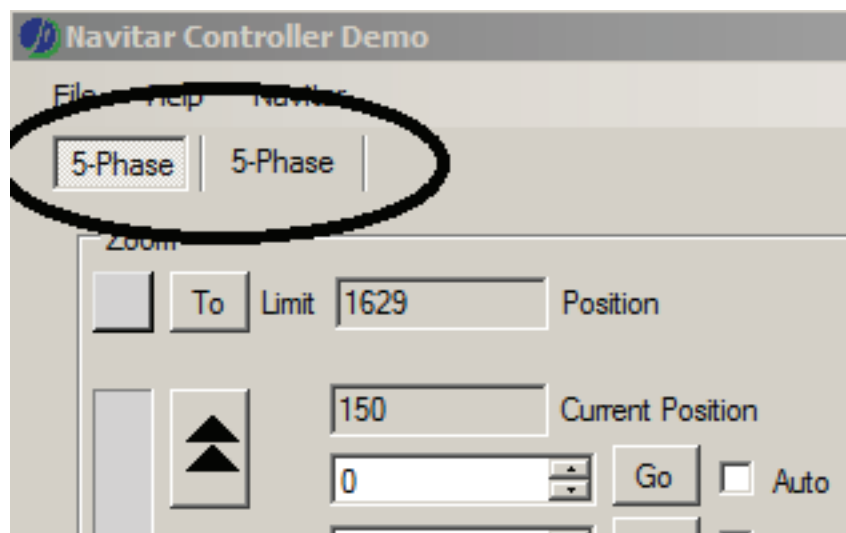


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To move, or jog an axis, you may click the jog buttons adjacent to the axis position indicator. The controller will drive the motor in the direction indicated by the arrow. The amount the axis will jog with each click is determined by the values entered in the respective Jog minimum and jog maximum boxes.



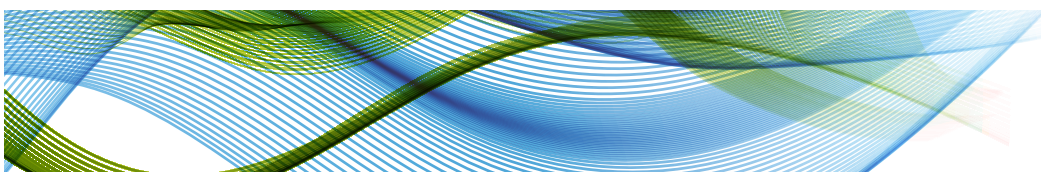
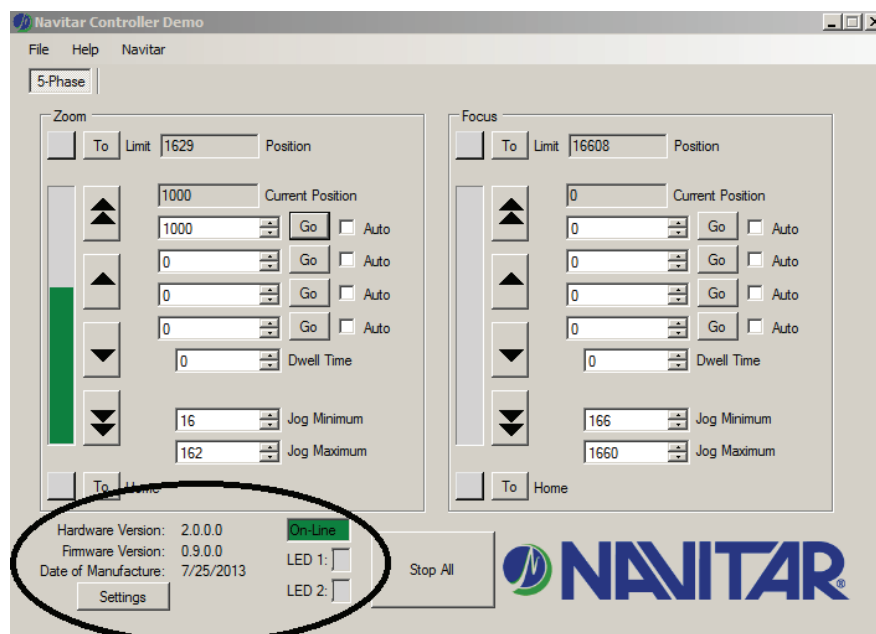
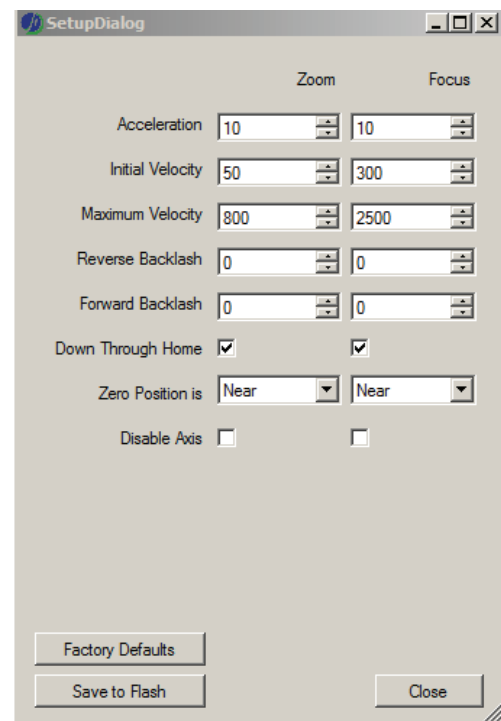
If additional controllers are connected the interface will add “Tabs” across the top of the display. Each tab will indicate the type of controller connected and will have a settings page appropriate for that controller. In the example shown below two “5 phase” controllers are connected.



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Selecting the “settings” radio button in the lower left of the display will allow the user to customize parameters associated with the type of controller connected. Use caution when deviating from the manufacturer default settings.

The lower pane of the display provides detailed information regarding the hardware, firmware, date of manufacture, status of the LED’s, and status of the communication interface to the controller.



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How to install an unsigned driver on Windows 8

Windows 8 by default will not let you install unsigned drivers. In order to do this, you can follow the steps shown below to start Windows 8 in "Disable Driver Signature Enforcement" mode. Move the cursor over the top or bottom right corner of the screen and it will show extra options on the right side (this is the new Charm Bar in Windows 8). Choose the Settings option (icon looks like a Gear). Choose Power option.

Choose **General** on the left hand side and then click **Restart** now button on the right.

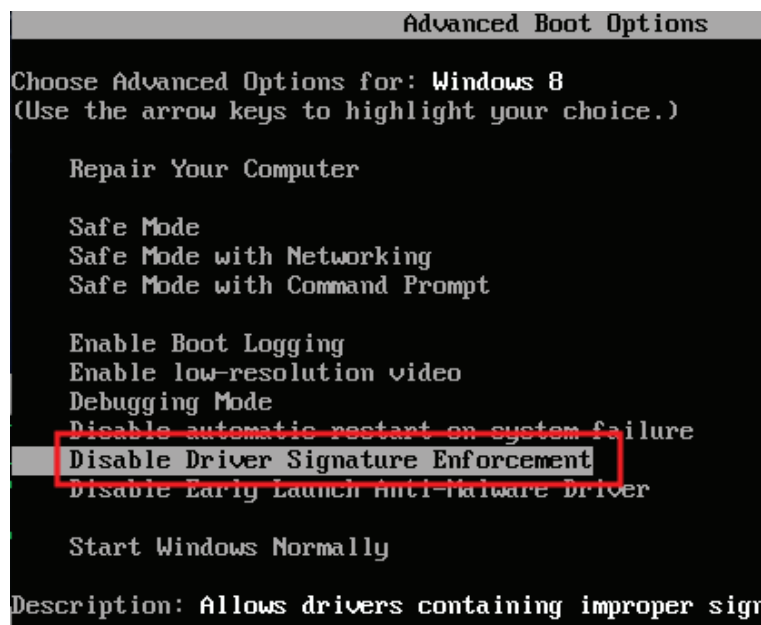
Click **Troubleshoot**

Click **Advanced options**

Click **Startup Settings**

Click the **Restart** button

Choose the **Disable Driver Signature Enforcement** and hit the Enter key to start Windows.



You should now be able to install the driver needed. After the driver installs, you can reboot the computer and it will revert back to enabling driver signature enforcement again.

