Galaxy Installation Guide

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1 Introduction

Galaxy is Spitronics' new software innovation for supporting the latest cutting edge engine management hardware by Spitronics. Galaxy provides a user friendly solution for tuning all of the latest Spitronics devices using only one application.

This installation guide contains detailed instructions for installing Galaxy on your computer. This guide will also describe how to uninstall Galaxy if necessary.

1.1 Target audience

This document is intended for any person familiar with the use of, and with reasonable understanding of, the Windows® operating system.

1.2 Requirements for installing Galaxy

Galaxy is only available for Windows® operating systems. Galaxy is not intended to be used on versions below Windows XP, and is currently supported on the latest Windows version – Windows 10.

A current 'entry level' computer will suffice for running Spitronics Galaxy. Spitronics *recommends* the following criteria as a *minimum*:
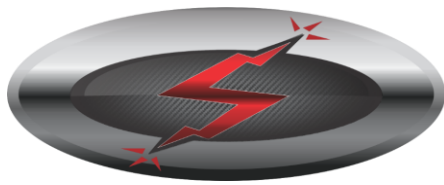
- 1.8GHz processor
- 2GB RAM
- 1024 x 768 screen resolution
- 250MB hard disk space for a full installation
- A working internet connection

1.3 Required for running Galaxy

Please note that although Galaxy may install successfully on your computer, and may even launch correctly, if you do not have the correct USB drivers installed Galaxy will not be able to communicate with your Spitronics device. Please see "Installing USB Drivers" for more information.

1.4 Terminology, acronyms and abbreviations

1.4.1 **Galaxy**. A Windows® based software application for connecting to, and communicating with, Spitronics devices such as ECU's and TCU's

1.4.2 **Orbit**. A Windows® service that runs in the background ensuring that Galaxy is up to date with the latest releases.

1.4.3 **ECU** – Engine Control Unit. A Spitronics electronic device that ensures optimal engine performance on internal combustion engines.

1.4.4 **TCU** – Transmission Control Unit. A Spitronics device that ensures optimal transmission (or gearbox) efficiency.

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1.4.5 **Module**. A separate software application that runs as part of Galaxy providing extended functionality (can also be referred to as a plugin). Spitronics has 3 types of plugins used by Galaxy titled as follows:

1.4.6 **Applications**. This is a plugin that is intended for configuring or tuning Spitronics core hardware devices. An example of an application is Mercury.

1.4.7 **Plugins**. Typically a module that provides assistive functionality for Spitronics and Spitronics core products. An example of a plugin is the Updater which can be used to ensure that Spitronics files on your computer is in sync with the files on the remote Spitronics web server.

1.4.8 **Additional**. A module that provides useful features within Galaxy but is not necessarily Spitronics related.

1.5 Supporting information

Additional information can be found on the Spitronics website: http://www.spitronics.com. Updates and relevant files can be downloaded from http://www.spitronics.com/downloads.

1.6 Acquiring the installation file

Galaxy needs to be installed on a computer using an installation file which is known as the *Galaxy installer*. The latest file can be downloaded from the Spitronics website at http://www.spitronics.co.za/downloads → Tuning Software → Galaxy Ver 3.

There are currently 3 Galaxy installers available, each of which is discussed below:
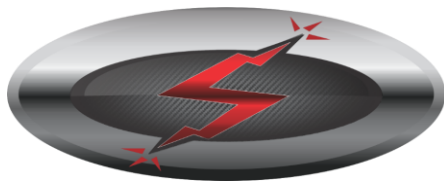
1.6.1 Full installer (file size: ±160mb)

This installer is intended for both 32 bit and 64 bit Windows versions (Windows 7, Windows 8 and Windows 10). It includes all the latest firmware (HEX files), drawings and maps usually available from Spitronics' downloads page. This installer also installs the necessary Spitronics USB drivers.

1.6.2 Partial installer (file size: ±25mb)

This installer can be used for any Windows version from XP and up. It does not include any extra features, or files and does not install the Spitronics USB drivers.

⚠ *It is important to note that any additional files not installed on the computer using the partial installer will be downloaded by Galaxy's Orbit service.*

2 Galaxy installation

The installer is a program that will install Galaxy on your computer.

2.1 Choosing the correct installer

If you have a slow internet connection then it would probably be best to download the partial installer which is the smallest of the installers available. This installer will work for all current versions of Windows. Once installed, Orbit will run in the background downloading files that are missing from this, smaller, installation and may consume a lot of your bandwidth. Downloading of these files will happen once off, and Orbit will only update updated files on a regular basis thereafter.

If you do not want these files to be downloaded, then automatic updates can be disabled, or the Orbit service can be disabled to prevent the files from being downloaded (instructions on disabling updates and disabling Orbit can be found further on in this document).

If you have a reasonably quick internet connection, then it is recommended that you download the installer that is right for your version of Windows – either 32bit or 64bit.
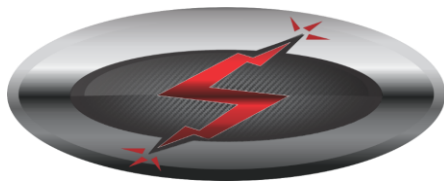
To see which type of Windows you have follow these instructions:

2.1.1   Click on the Windows Start button.
2.1.2   In the search text box, type out the word "System".
2.1.3   In the results Window, click on the option listed as "System" under the heading "Control Panel".
2.1.4   Check what your "System type" under the "System" section.
2.1.5   Download the correct file (as detailed in section 1.5 above) to a location on your computer where you will know where to access it (e.g. your Downloads folder).

2.2 Opening the installer

To run the Galaxy installer, you need to access the file you downloaded as explained above. To run the Galaxy installer, follow these instructions:

2.2.1   Click on the Windows Start button.
2.2.2   In the search text box, type out the word "Run".
2.2.3   In the results Window, click on the option listed as "Run" under the heading "Programs".
2.2.4   In the window that opens, click on the browse button in the bottom right corner.
2.2.5   Use the Browse window to locate your Galaxy installer file, select the file by left-clicking on it and then click on the Open button in the bottom right corner.
2.2.6   When focus returns to the Run window, click on the OK button at the bottom left of the window. This will start the installation.

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If you are prompted to verify the publisher (as shown in Figure 1) click "Run" to continue the installation.
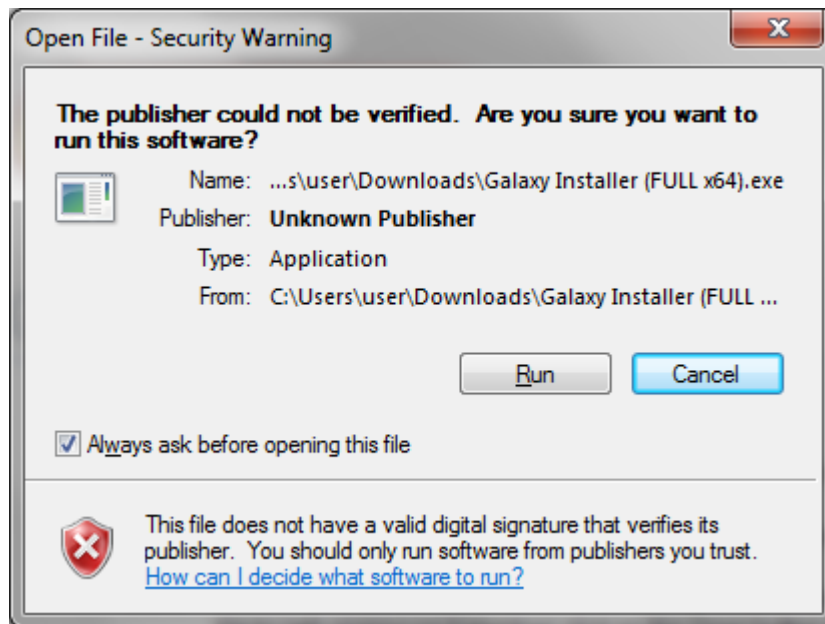

Figure 1

2.3   Running the installer

Follow these instructions to successfully install Galaxy on your computer.

2.3.1   When first opened, the installer will need to load. Allow this process to complete and do not click "Cancel" unless you intend to abort the installation.
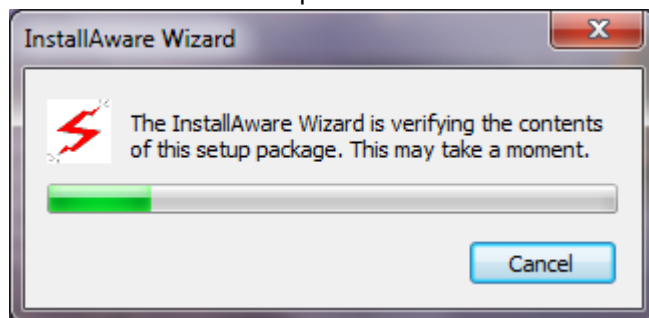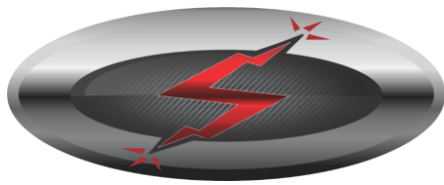

Figure 2

2.3.2   The following screen confirms that this is the Galaxy installer. Click "Next" to continue.

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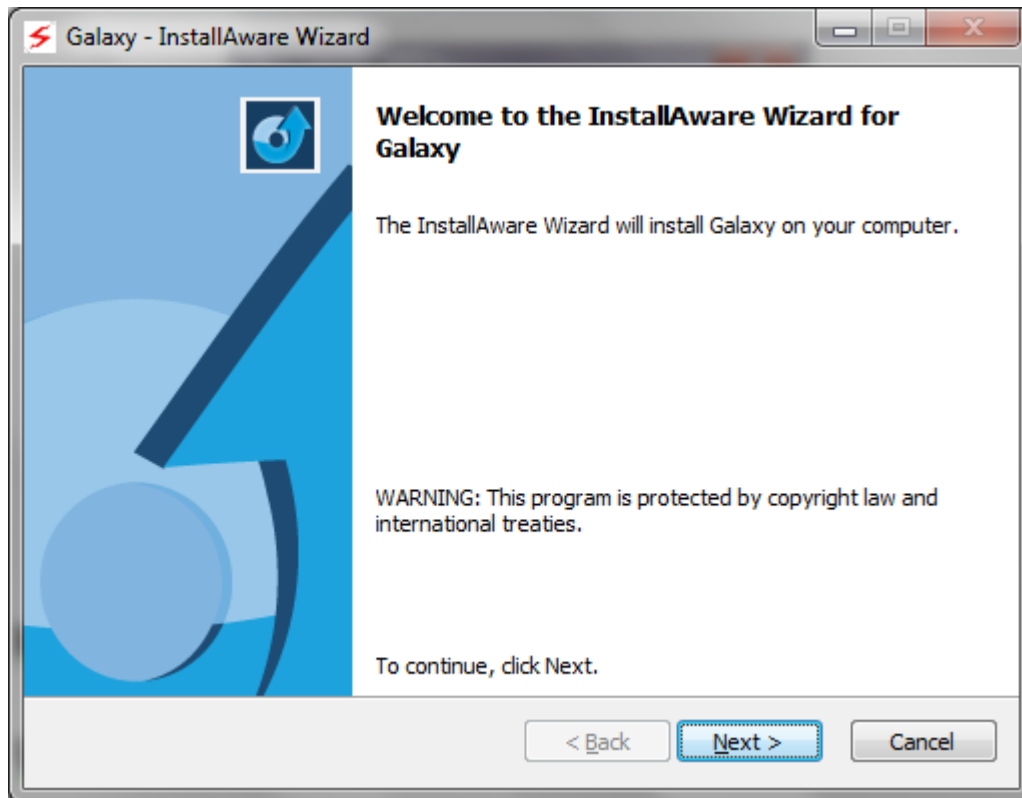
Figure 3

    2.3.3   On the next screen, the Terms and Conditions for the use of Spitronics' software is displayed. Please read these carefully to ensure you understand and agree. The installation cannot continue unless you agree. In order to agree with the terms, click on the check box labelled "I accept the terms of the license agreement" in the bottom left of the window. The "Next" button will then become enabled. Click "Next" to continue.

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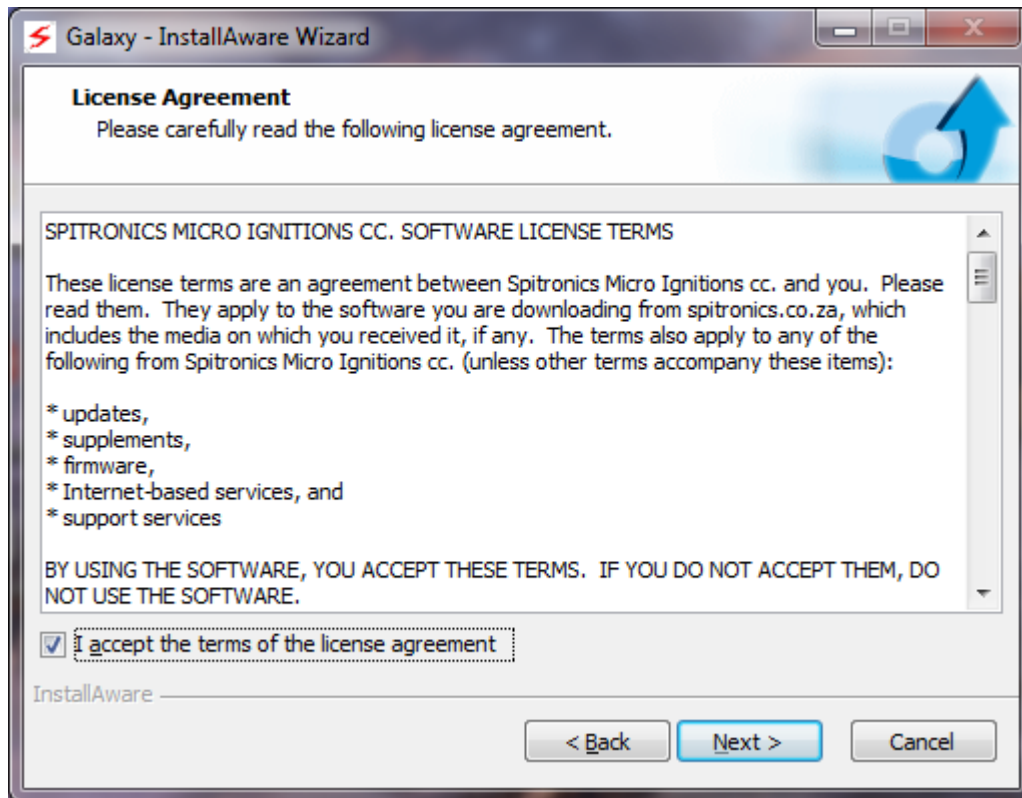
Figure 4

2.3.4 On the following screen you may, if you so choose, change the location of the Galaxy installation files on your computer. It is *strongly recommended* that you do not change the recommended settings provided. Click "Next" to continue.
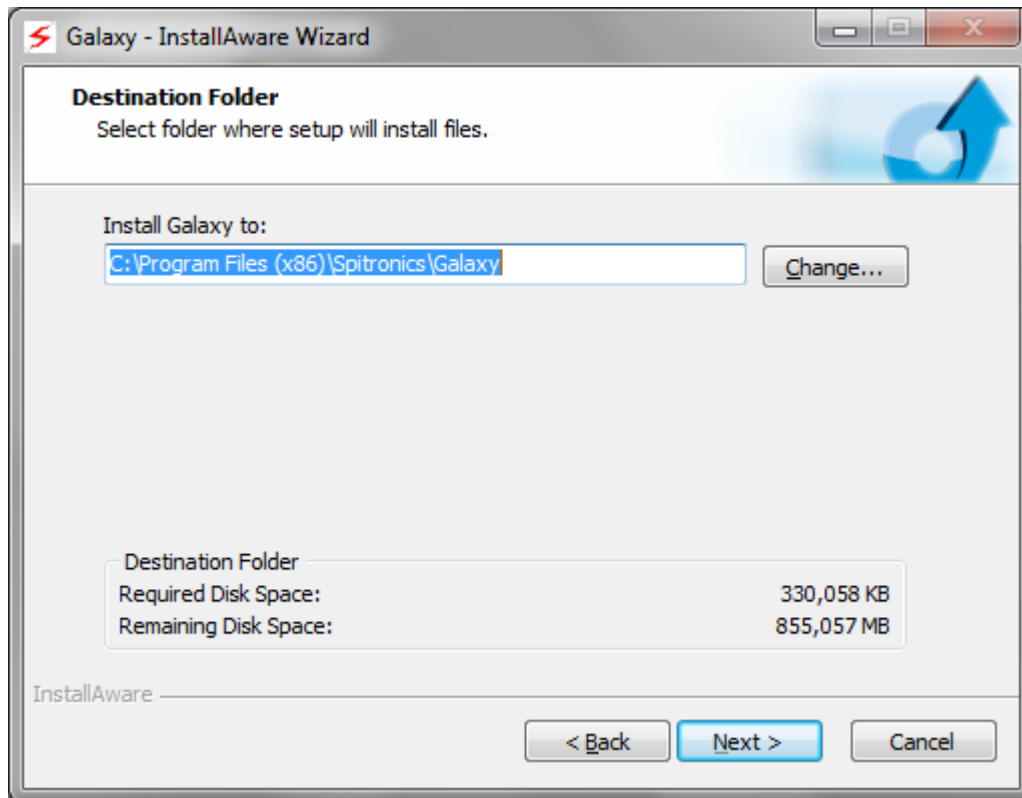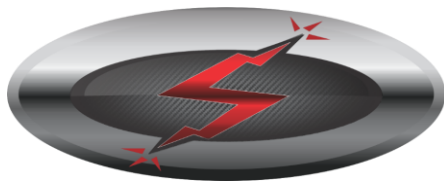
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Figure 5

    2.3.5   The next window allows you to confirm that you are ready to install Galaxy according to the criteria specified on the previous screens. When you are ready, click the "Next" button and the installation will commence.
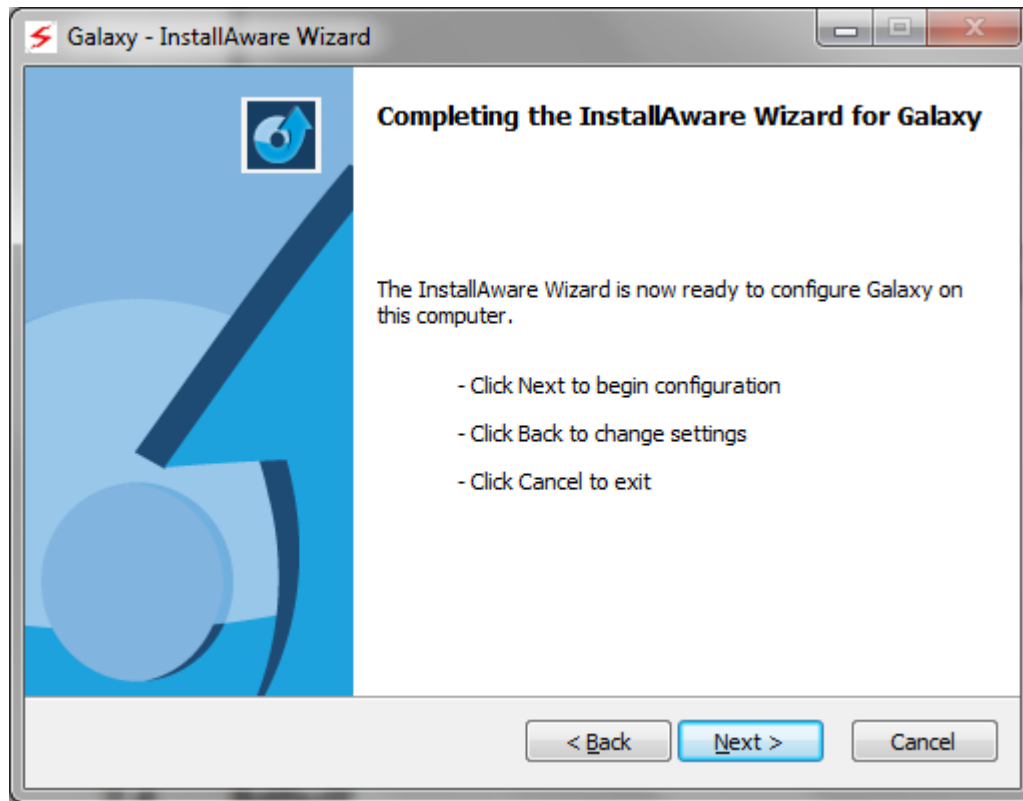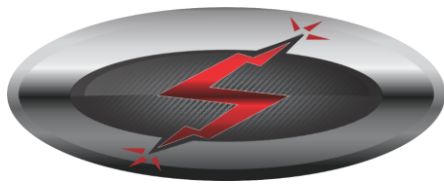
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Figure 6

    2.3.6   The installation will copy files to your computer and may take a few minutes to complete. Progress of the installation is displayed as shown in Figure 7 below.
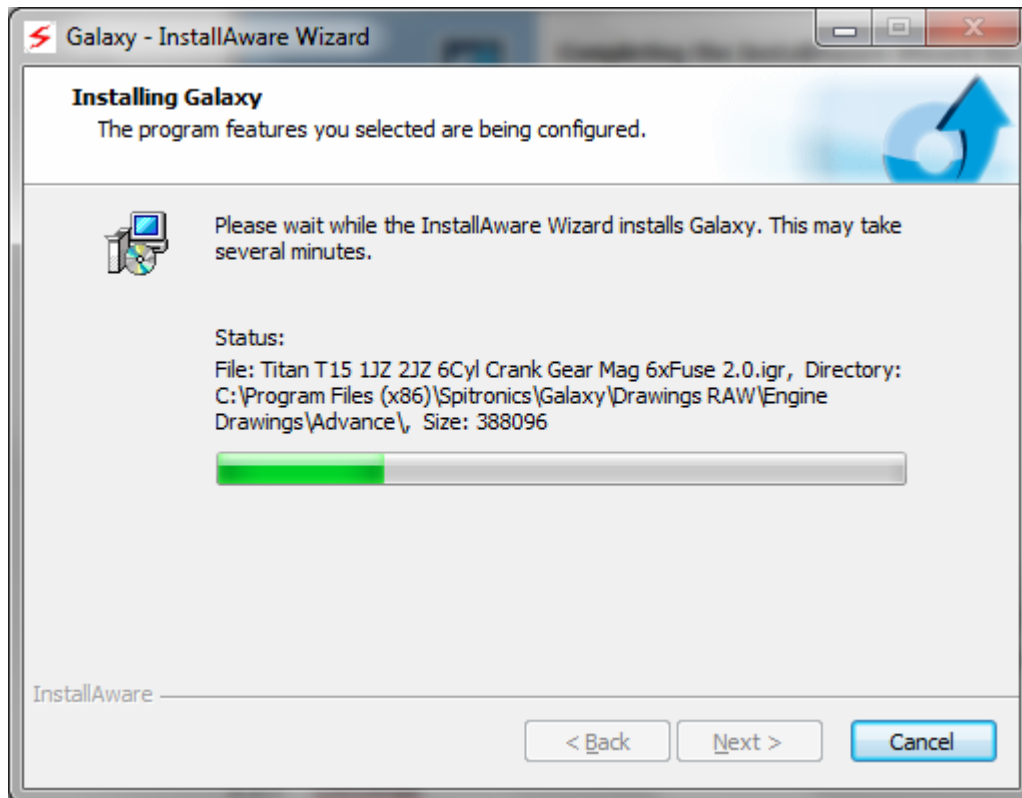
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2.3.7 Once the installation has completed, the following window (Figure 8) will be displayed prompting you for a selection. Please ensure the option *"Run Galaxy now" remains checked,* and then click "Finish". Doing so will ensure that Spitronics Orbit is installed as a service on your computer – see Figure 8 below.
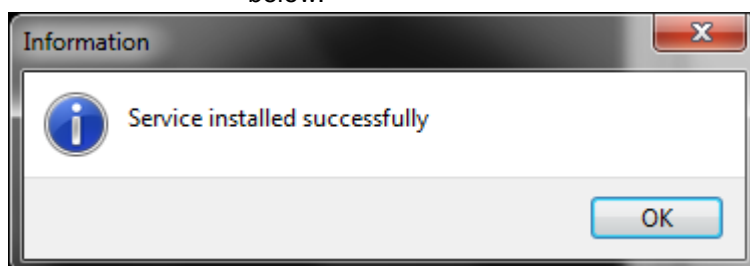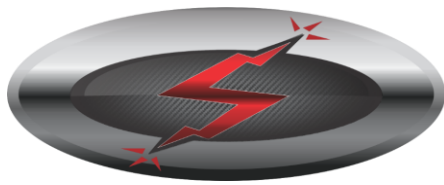
2.3.8 If a Program Compatibility Assistant window is displayed after installing Galaxy, click on the option listed as "This program installed correctly" as shown below.
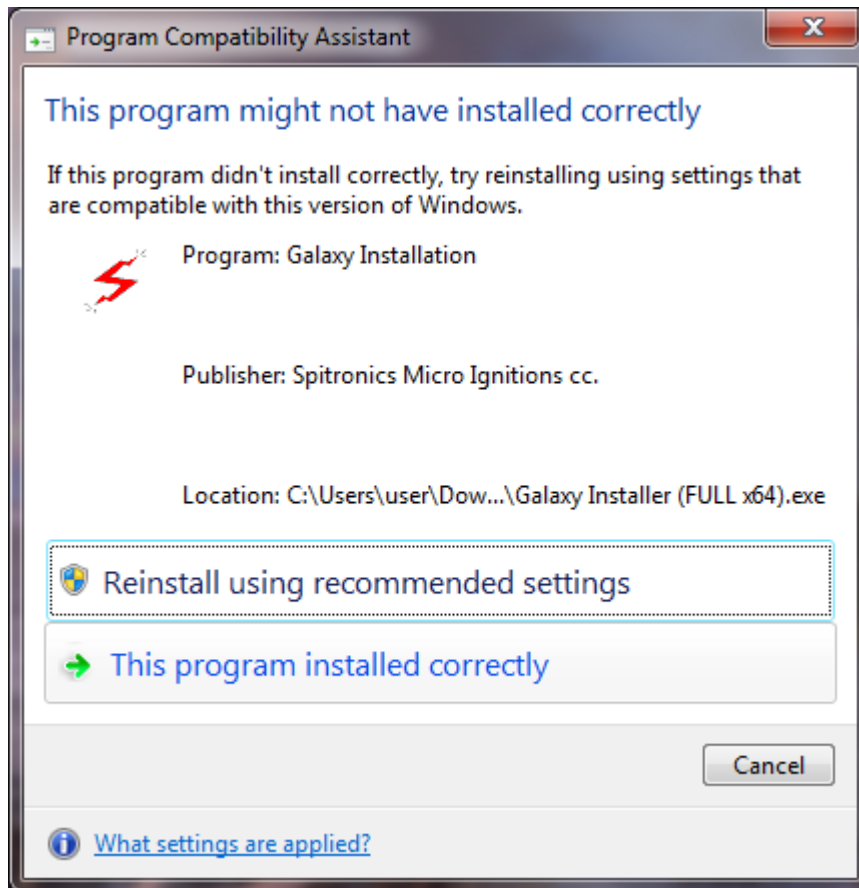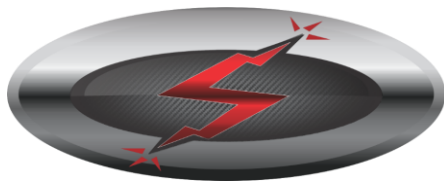
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Figure 9

Galaxy is now installed on your computer.

3 Running Galaxy

After successfully installing Galaxy you will find that a shortcut has been placed on your desktop. More shortcuts have also been placed under your Windows Start menu.

To initiate Galaxy, double-click on the shortcut and Galaxy will open.

⚠ *In some cases it may be necessary to run Galaxy with additional privileges. In order to do so, instead of double-clicking on your shortcut right-click and select "Run as administrator".*

*If the User Account Control window is displayed asking if you want to allow the program to make changes to your computer, click "**Yes**" to allow Galaxy to run with altered privileges.*

Opening Galaxy for the first time after an installation will require the current user to confirm that they agree to the terms of use. Please read these terms carefully before agreeing. The terms and conditions displayed can be printed by clicking on the print button in the top left of the window.

Upon agreeing, this window will not appear again for the same user when Galaxy is opened. To agree, click on the check box labelled "I agree to these terms and conditions." When checked, the button to the right of this check box will change from a red cross to a green tick. Click on the green tick to open Galaxy.
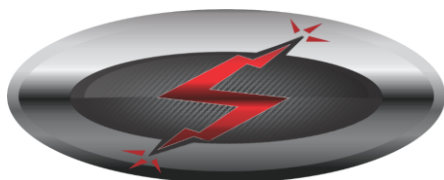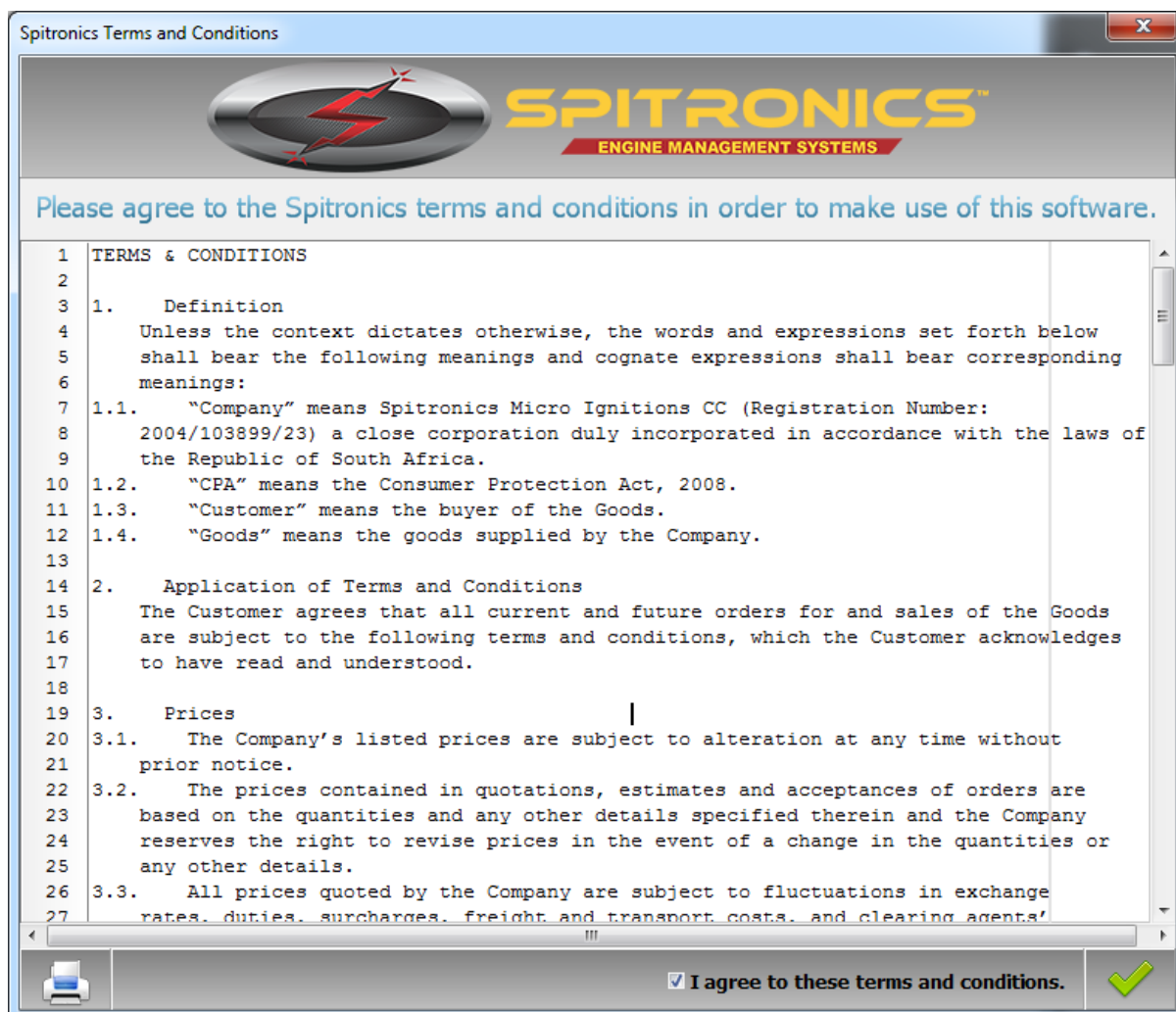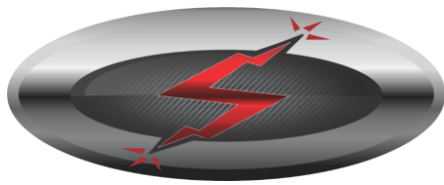
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Figure 10

Please note that the use of Spitronics' Galaxy software is not discussed in this document. Please see the relevant documentation for using Galaxy.

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4. Turn automatic updates on/off

Automatic updates keep Galaxy and related Spitronics files updated on your computer. This is done using an internet connection which may consume your bandwidth. If you do not want Galaxy to keep your files automatically updated, then disable your automatic updates by following this set of instructions.

4.1 Turn off automatic updates

    4.1.1   Open Galaxy **with administrator privileges** (see Section 3 above).

    4.1.2   Click on the "Settings and Configuration" button (see Figure 11)
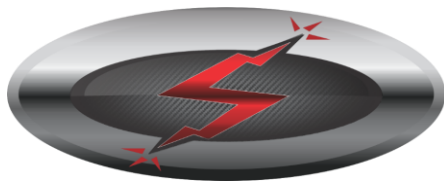
Figure 11

    4.1.3   In the Settings and Configuration window, click on "Automatic Updates" on the left. On the right side of the window, uncheck the option labelled "Enable automatic updates".

    4.1.4   Close the "Settings and Configuration" window (changes are saved automatically), and then close Galaxy.

4.2 Turn on automatic updates

    4.2.1   To enable automatic updates follow steps 4.1.1 and 4.1.2.

    4.2.2   In the Settings and Configuration window, click on "Automatic Updates" on the left. On the right side of the window, click on the check box labelled "Enable automatic updates" so that it is checked.

    4.2.3   Close the "Settings and Configuration" window (changes are saved automatically), and then close Galaxy.

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5 Installing plugins

From time to time Spitronics may make new modules (or plugins) available for Galaxy that can be downloaded from the Spitronics website. Typically a plugin is file that has a *.bpl* file extension, or even a *.dll* file extension. For example: *Mercury1000.bpl*.

5.1 Getting the Spitronics bin folder

Before installing a new plugin, the location of Spitronics bin folder is required.
The bin folder resides within the Spitronics root folder. Follow these steps to obtain the Spitronics root folder

    5.1.1   Open Galaxy (see Section 3 above).

    5.1.2   Click on the "Settings and Configuration" button (see Figure 11)

    5.1.3   In the Settings and Configuration window, click on "Application Settings" on the left. You will see a section labelled "Application Preferences" on the right where the Spitronics root folder is displayed.
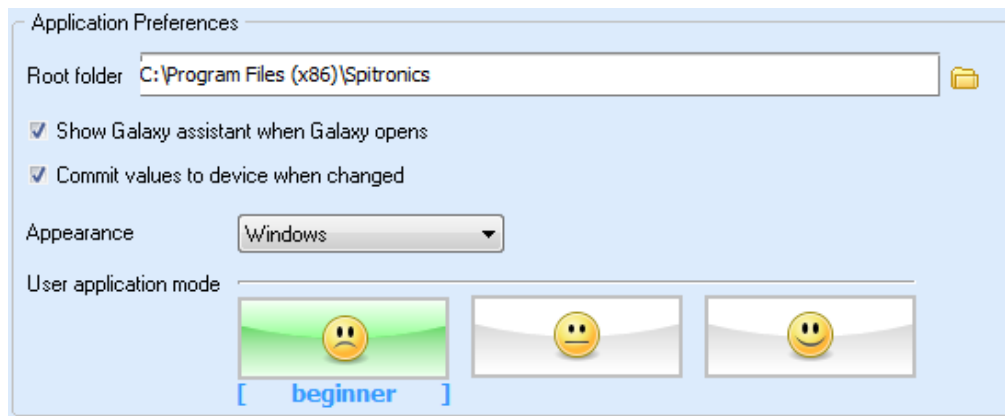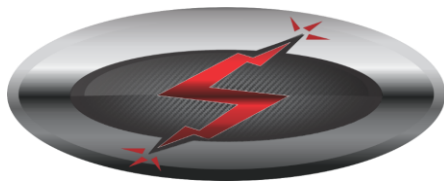

Figure 12

    5.1.4   The bin folder is located in the Spitronics root folder. Using the example shown in Figure 12 above, the bin folder is "C:\Program Files (x86)\Spitronics\Bin".

5.2 Installing the plugin

Once you have the plugin downloaded, simply save (or copy) the plugin file to the bin folder as discussed above. If Galaxy was open during the time you performed the save (or copy) you will need to close Galaxy before opening Galaxy again to make use of the new module.

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6 Uninstalling Galaxy

Before selecting to uninstall Galaxy, ensure Galaxy is not running. If it is then close Galaxy first. When Galaxy is closed, run the Galaxy installer – as detailed below – to uninstall Galaxy.

6.1   Running the installer

The Galaxy installer (now installed on your computer) will uninstall Galaxy for you. Follow these steps to uninstall Galaxy.

6.1.1   Click on the Windows Start button.

6.1.2   In the search text box, type out the word "Uninstall".

6.1.3   In the results Window, click on the option listed as "Uninstall a program" under the heading "Control Panel".

6.1.4   In the list of installed programs, locate "Galaxy". Select Galaxy by clicking on it, and then click on the Uninstall button at the top of the list.

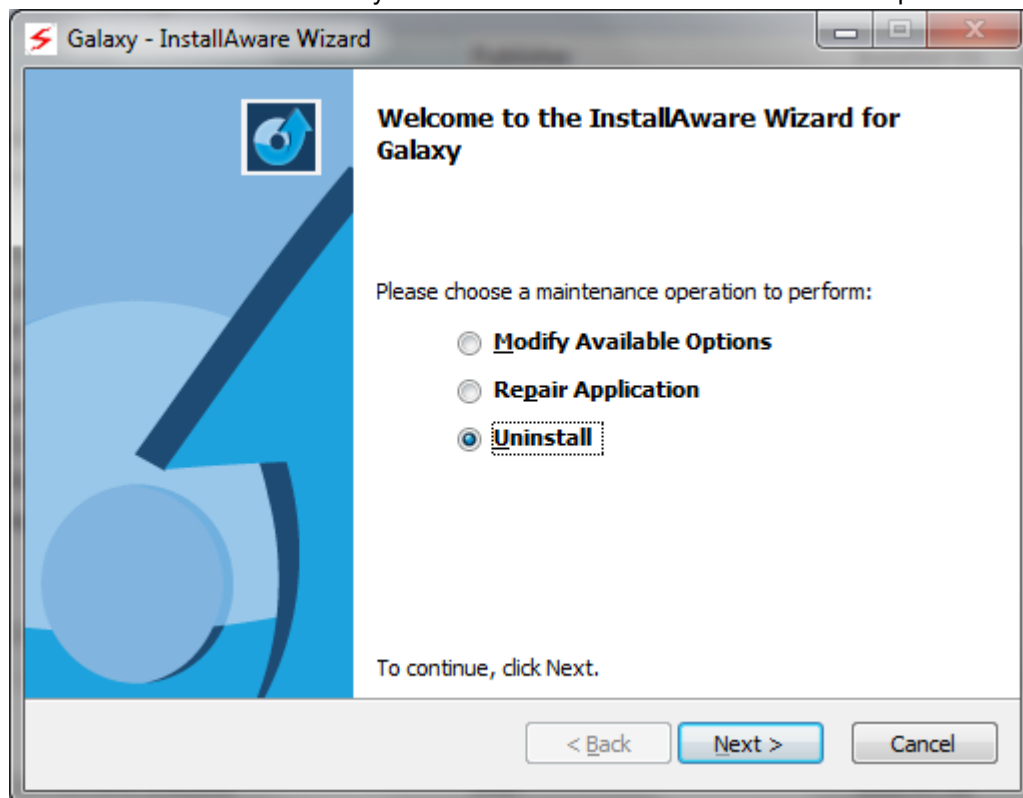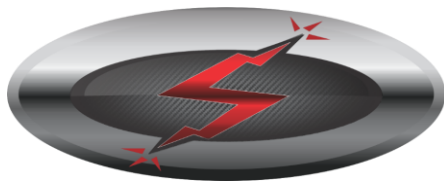6.1.5   The Galaxy installer will launch. Select the "Uninstall" option and click "Next".

Figure 13

6.1.6   The next window will ask for confirmation on uninstalling Galaxy. If you are certain you want to uninstall Galaxy, click "Next".
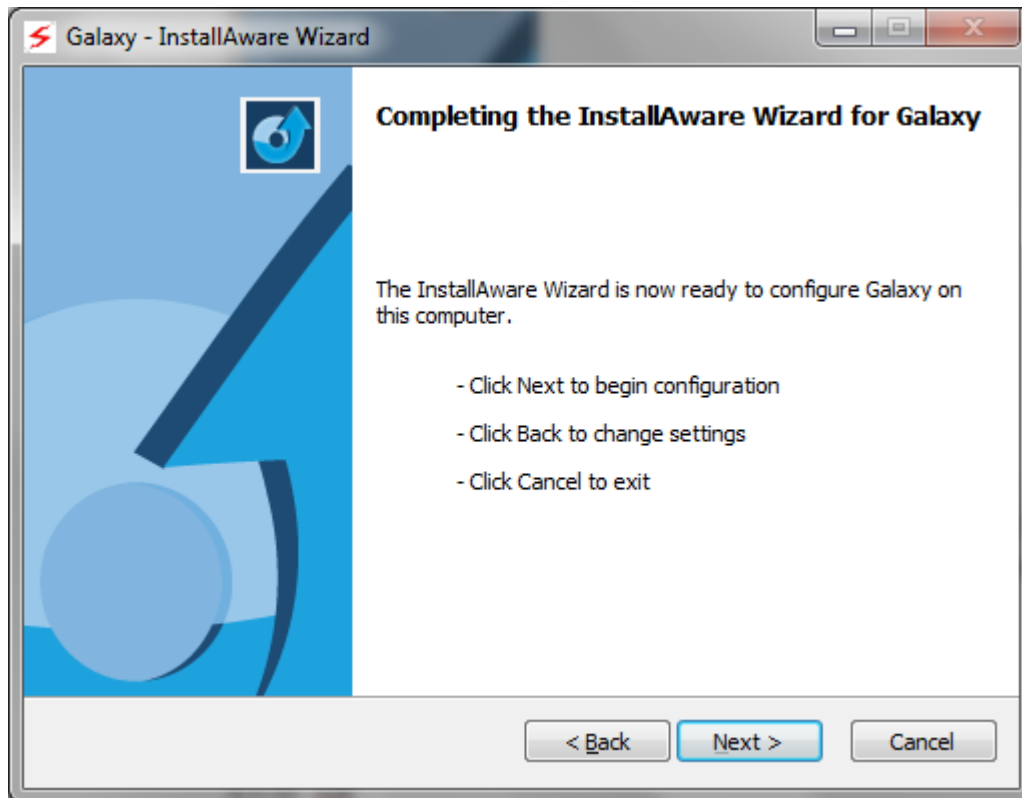
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Figure 14

      6.1.7   Upon clicking next, the Orbit service will be uninstalled first, and a notice will be displayed confirming this. Click OK.
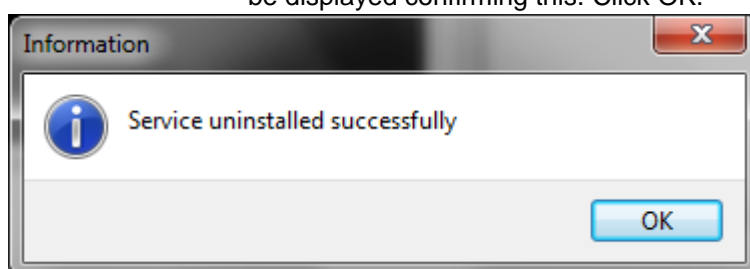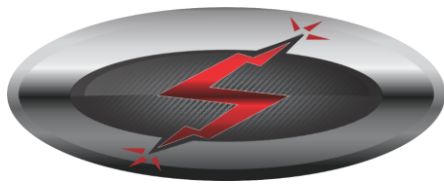

Figure 15

      6.1.8   Next, all of the additional files that we installed will be removed along with all of the relevant Galaxy files.
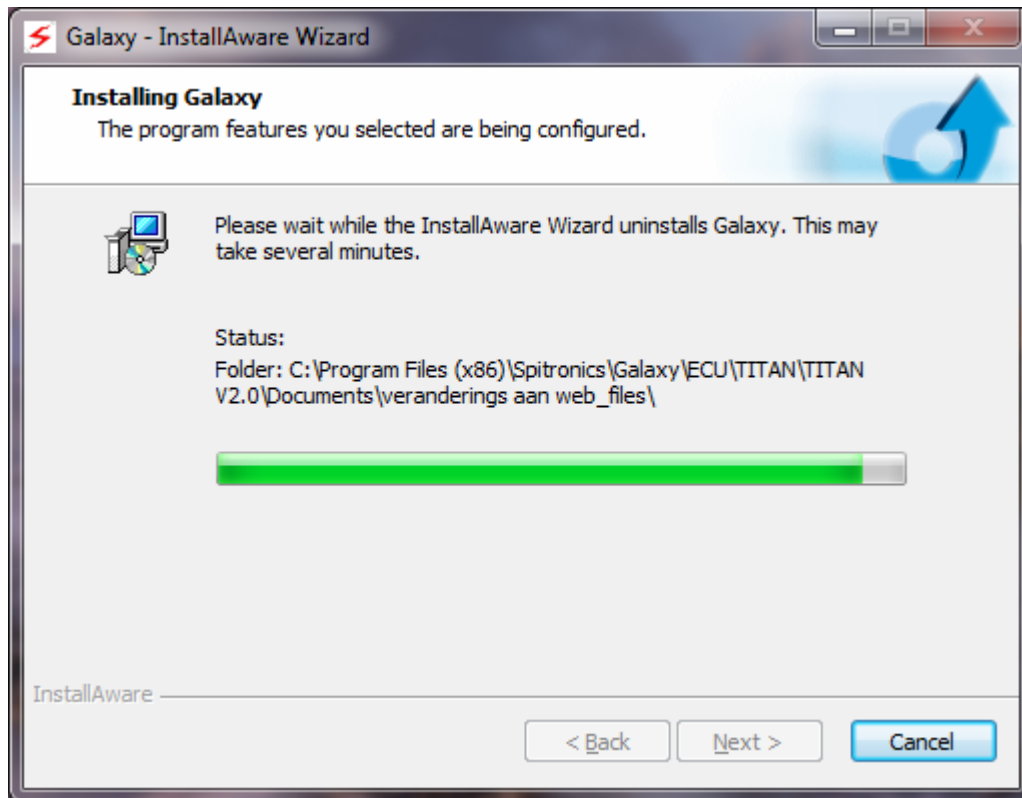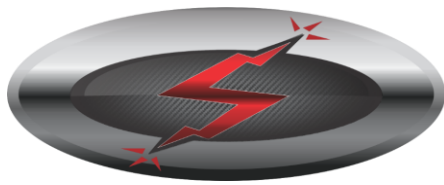
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Figure 16

6.1.9   When the uninstallation has completed removing files, the Galaxy installer will confirm that the operation completed successfully.
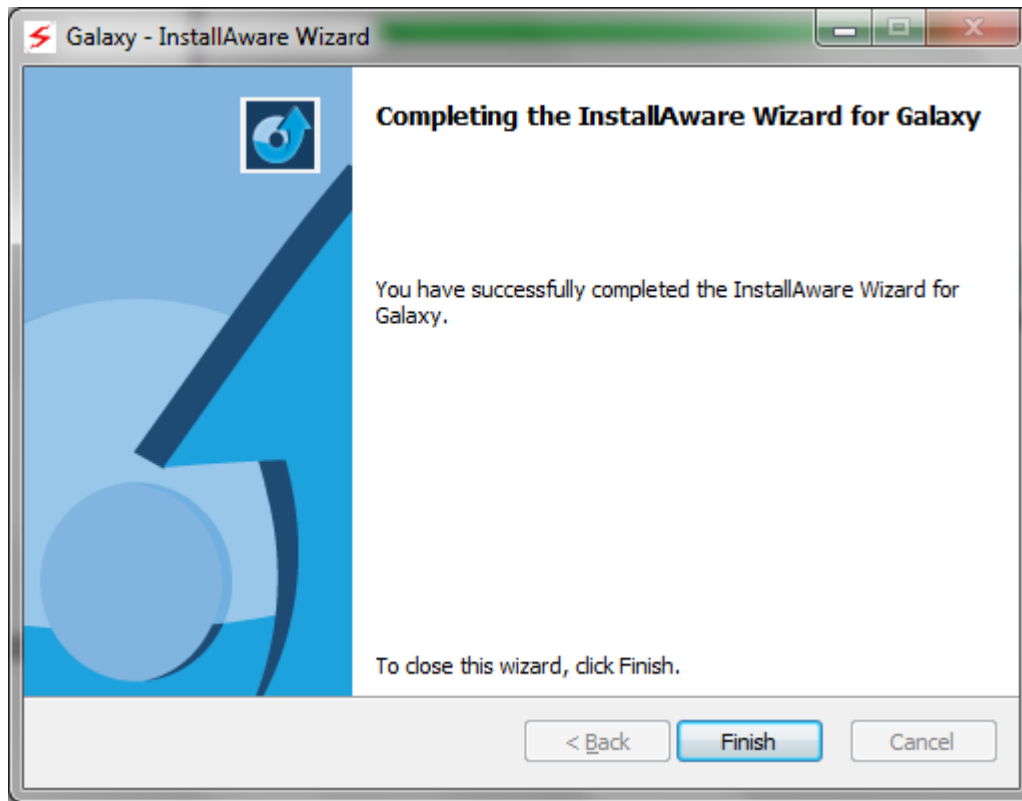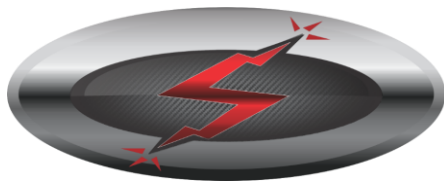
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6.1.10   Click on "Finish" to complete the uninstallation of Galaxy.

7 Acquiring and Installing Spitronics USB Drivers

USB Drivers need to be installed in order to provide Galaxy with the ability to communicate with your Spitronics device on Windows. It is specifically required to allow your computer to identify and recognise the USB cable connecting the Spitronics device to the computer.

7.1 Acquiring USB Drivers

The latest USB drivers can be downloaded from www.spitronics.com/downloads.

Two file types are available, namely a ".rar" file and a ".zip" file. Both formats are compressed archives that need to be extracted after downloading. If you are not sure if you have the correct software required for extracting a ".rar" file, then choose to download the ".zip" file since this format is supported in Windows as a standard.

7.2 Determining Your System Type

The installation of the USB drivers require that you know your operating system type, namely either 32-bit or 64-bit. To determine your system type, follow these instructions:

7.2.1   Click on the Windows Start button.
7.2.2   In the search box, type "system". The results of the search will be shown above as you type.
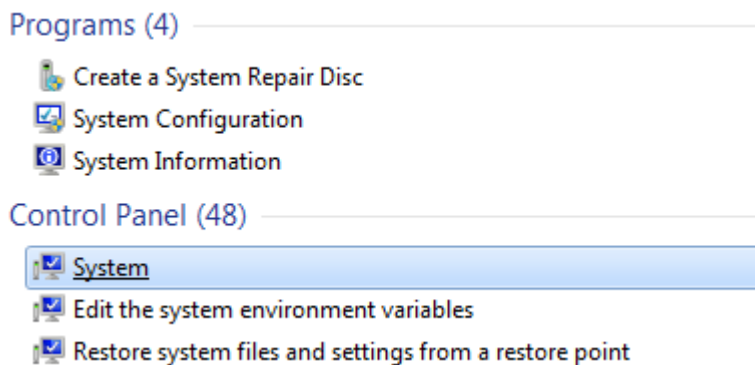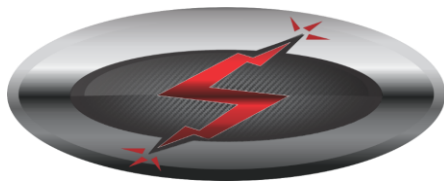7.2.3   In the result set above, double click on "system" under the "Control Panel" section:

Figure 18

7.2.4   A window will open showing basic information about your computer. In the list, under the System section, check the "System type". This will show whether you have a 32-bit operating system or a 64-bit operating system.

7.3 Installing the USB Drivers

Once you know your system type follow these instructions to successfully install the Spitronics USB drivers on your computer:

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7.3.1   Using Computer Explorer, find the archive file downloaded and extract its contents by right-clicking on the file and selecting "Extract Here":
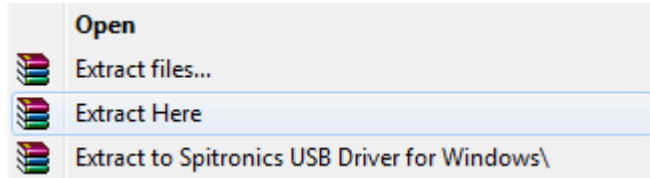

Figure 19

7.3.2   This will create a folder with the same name "Spitronics USB Driver for Windows". Open this folder.

7.3.3   Knowing your system type, double click on the correct setup file for your system. If you have a 32-bit operating system, launch "CP210xVCPInstaller_x86.exe". If you have a 64-bit operating system, launch "CP210xVCPInstaller_x64.exe".

7.3.4   If you are presented with a User Account Control window asking if you you want to allow the program to make changes to your computer, select "Yes"
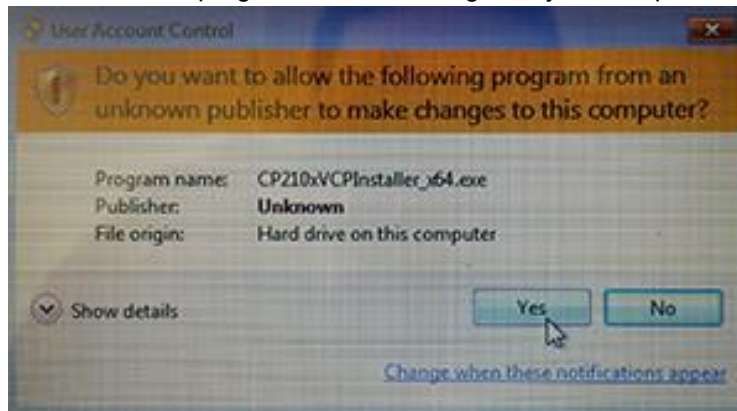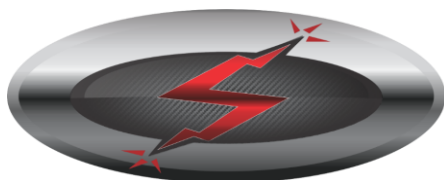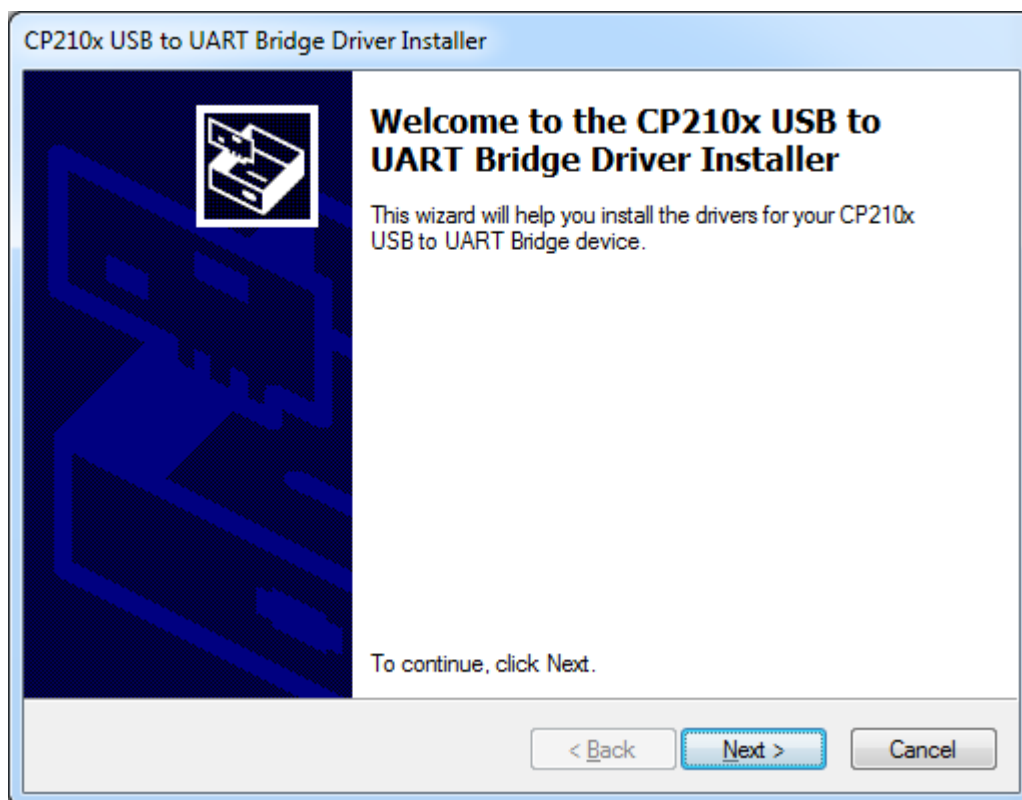

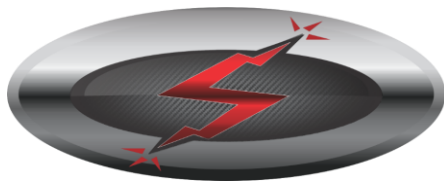
Figure 20

7.3.5   Click next at the welcome screen
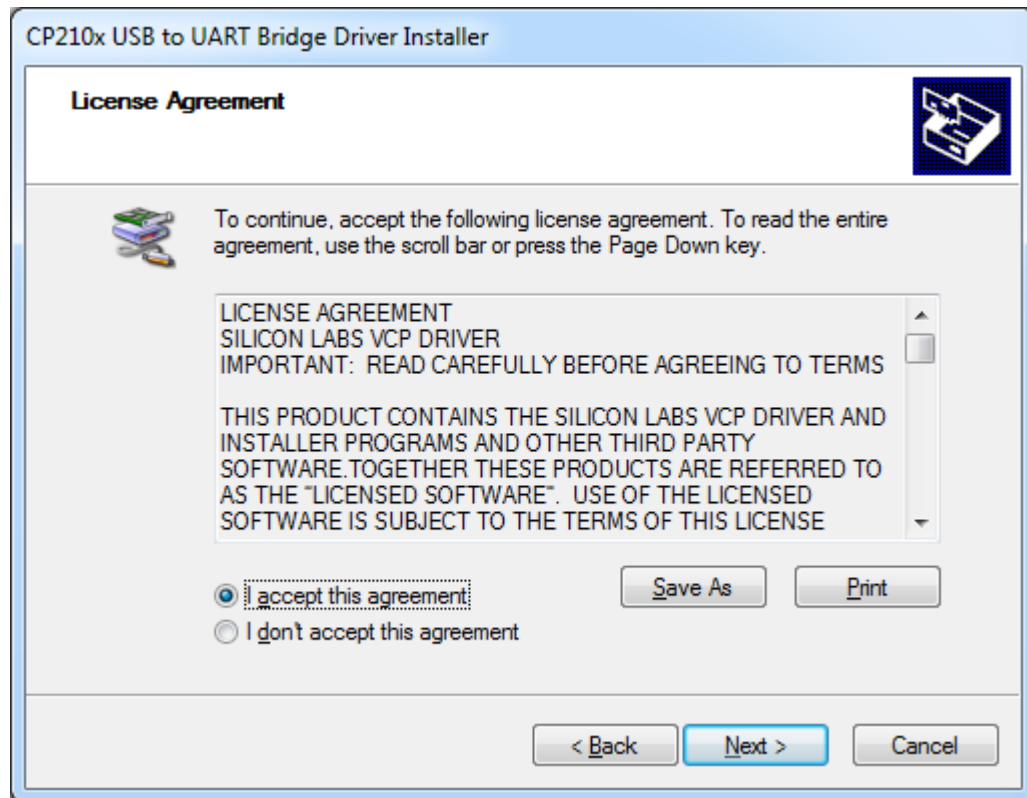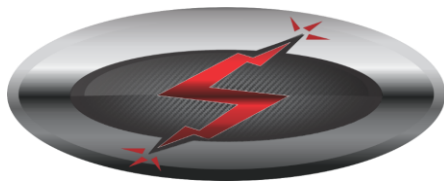
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7.3.6   Select "I accept this agreement" on the License Agreement screen and click Next
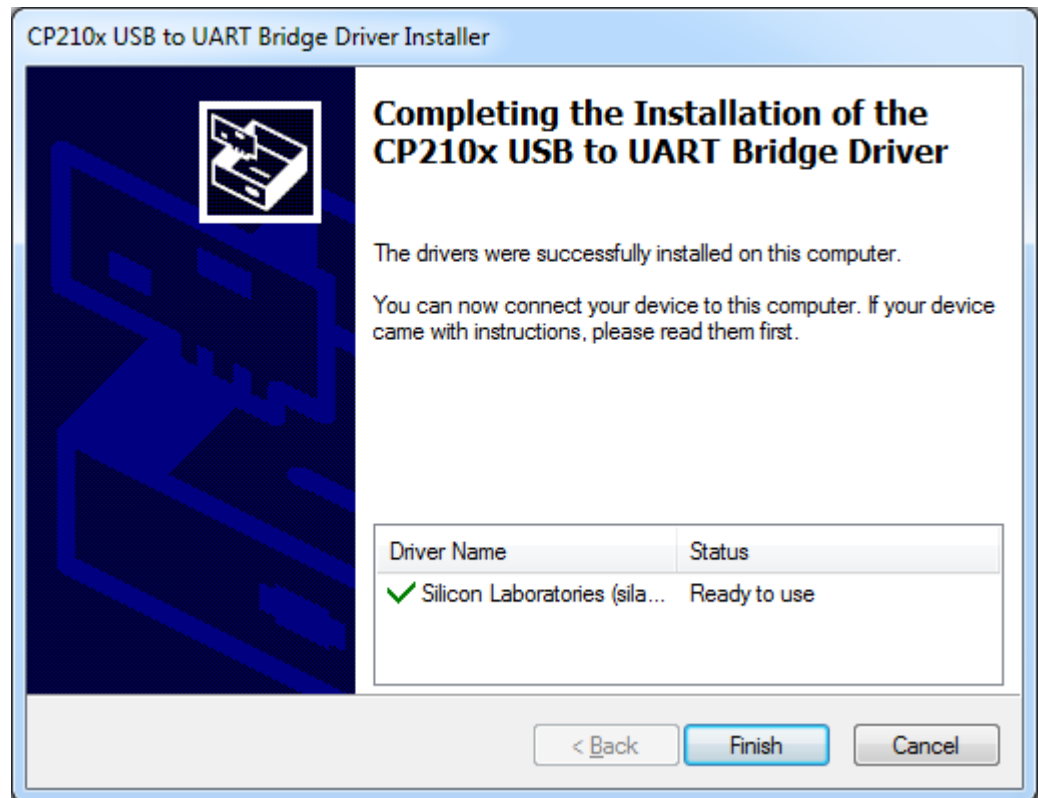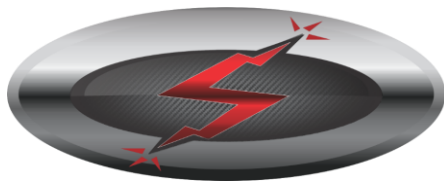
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7.3.7   If the drivers have installed correctly the completion screen will show the results confirming success – the status should indicate "Ready to use". Click the finish button to complete the installation.

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8 Uninstalling the USB Device Drivers

In the event of the installation of the USB device drivers not working correctly, the USB device drivers can be uninstalled and then reinstalled (see above for installing USB device drivers).

8.1   How to uninstall the USB device drivers

To remove the device drivers do as follows:

8.1.1   Ensure that your USB cable is connected to the computer.

8.1.2   Click on the Windows Start button.

8.1.3   In the search field type "Device Manager".

8.1.4   In the above search results, under the Control Panel section, double-click on "Device Manager"

8.1.5   Expand "Ports (COM & LPT)

8.1.6   Find and right-click on "Silicon Labs CP210x USB to UART Bridge".

8.1.7   Select "Uninstall"

8.1.8   A window will be displayed asking for confirmation. Ensure the checkbox "Delete the driver software for this device" is checked. Click OK.

Figure 21

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9 Known Problems and their Solutions

The following is a list of known issues that have been encountered installing Galaxy, running Galaxy, or getting Galaxy to connect to a device after an installation. If none of these options work for you, contact support: http://www.spitronics.com/support/.

9.1 Communication with device failed

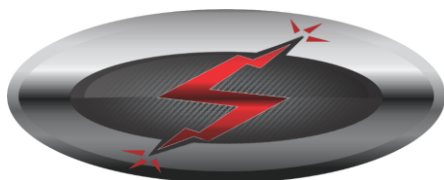| Known Problem	Solution
The device is not connected via the USB cable to the computer.	Ensure the Spitronics device is connected to the cable via the UART port and that the cable is in turn connected to the computer via the USB port.
The Spitronics device does not have power.	Ensure that there is power. The Spitronics device's LED's should be on.
The USB drivers have not been installed	Please refer to "Acquiring and Installing Spitronics USB Drivers" above on how to acquire and install the USB drivers.
The USB drivers have not been correctly installed	The USB drivers should be uninstalled and reinstalled. Please see relevant sections above on uninstalling and installing device drivers.
The unit has the incorrect firmware loaded.	Please speak to your agent to confirm that the correct firmware has been loaded and that the unit has been activated.

9.2 Unable to agree to the Terms and Conditions

Known Problem	Solution
Your screen resolution restricts the display of the entire Terms and Conditions screen.	This issue has been addressed in Galaxy version 3.4.6. If your installer's Galaxy version is before 3.4.6 please download the latest installer from the Spitronics website (see "Acquiring the installation file" above).

9.3 No options available after installing Galaxy

Known Problem	Solution
Galaxy's configuration settings became corrupted during the installation.	Galaxy must be uninstalled and re-installed. In order to ensure that Galaxy is properly uninstalled, download the file "GalaxyCleaner.rar" from the Spitronics website: http://www.spitronics.com/downloads/ →Tuning Software →Galaxy Ver 3. Extract the file and run the application "GalaxyCleaner.exe". After Galaxy has been cleaned from your computer, install it again as per the instructions above.

9.4 Galaxy requires an update to continue

Galaxy Installation Guide

Known Problem	Solution
The Galaxy installer did not update Galaxy's date configuration correctly and Galaxy thinks that the software needs to be updated in order to continue.	If you have access to the internet, click on the button. This will open Galaxy's Live Update. Now click on the button and the update will begin. After the update completes (even if no files were updated) close Galaxy and open it again. If you do not have access to the internet you will need to obtain an update CD (or flash drive) from your agent in order to conduct a local update. Upon running Galaxy Live Update with a CD, or flash drive inserted, you will be presented with a selection for a Local Update or an Internet Update. Select Local Update to update from the CD or flash drive when no internet connection is available.