

## COMMON SCALE INTERFACE (CSI)

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### CSI FOR PC-DMIS SOFTWARE INSTALL MANUAL

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P/N: H003149 (ELECTRONIC MANUAL)  
Revision 3



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# 1. Introduction

In order for PC-DMIS to operate with the “Common Scale Interface” (CSI) hardware, it is required to install software support for interfacing PC-DMIS to the CSI hardware. An installation program named “InstallCSI.exe” is provided to perform the installation. This guide provides step by step instructions for performing the installation. Please refer to the CSI Users Manual (part# H003145) for details on using PC-DMIS with the CSI hardware. Please uninstall any existing installation of the CSI support for PC-DMIS before doing a new install (see Uninstall section).

## 2. Running InstallCSI.exe

You may run InstallCSI.exe directly from the CD, copy it to a temporary location on your hard drive and execute it, or even run it from a USB storage device. The only requirement is that all 3 files listed below be in the same folder when it is executed:

Operating System: Windows XP and Windows 7 32 bit

Part # H003134 is the CSI software for 32 bit Windows

InstallCSI.exe - Displays dialog to select language and then launches Install\_CSI.bat

Install\_CSI.bat – Runs Microsoft Installer application msiexec.exe with Setup\_CSI.msi file

Setup\_CSI.msi - Microsoft Installer script invoked by Install\_CSI.bat

Operating System: Windows 7 64 bit

Part #H004757 is the CSI software for 64 bit Windows

InstallCSI.exe - Displays dialog to select language and then launches Install\_CSI32.bat

Install\_CSI32.bat – Runs Microsoft Installer application msiexec.exe with Setup\_CSI32.msi file

Setup\_CSI32.msi - Microsoft Installer script invoked by Install\_CSI.bat

Currently PC-DMIS is only available as a 32 bit application and will run under WOW64 on a Windows 64 bit OS. A 64 bit device driver is required to interface to the CSI hardware on Windows 64 bit OS so this CSI install will install the 64 bit driver and DLL files required to Communicate with this driver. If you attempt to install the 64 bit release on a 32 bit OS then the installer will display a warning and abort the install.

Note: When a 64 bit version of PC-DMIS is available a new installation will be available for that target.

Run InstallCSI and the following dialog will be displayed. Select the language that matches the language being used by PC-DMIS and select OK. The CSI software has just a few messages that may be displayed while running PC-DMIS, hence the need for selecting a language. If using a CSI box with CMM that uses TTL encoders then also check the box show below.



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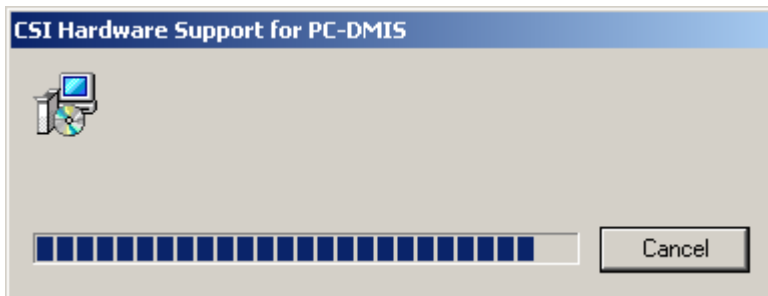
**Note:** The install messages shown below have NOT been translated, they will be in English regardless of the language selected. The language selection determines the language that is used for the messages displayed by the CSI interface software when PC-DMIS is running. See the CSI Quick Reference Manual or the CSI Users Manual for some of the messages that are displayed by the CSI interface software (for example the messages related to performing axis counter reset).

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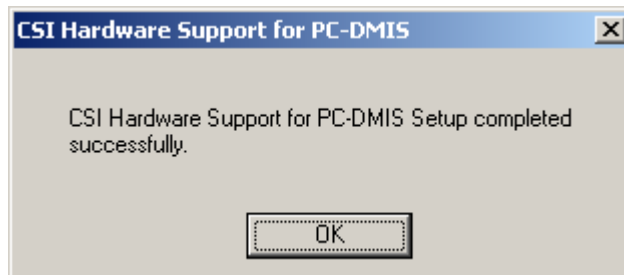
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## Windows 32 bit Example

The screens in this section are Windows XP example screens.  
After selecting the language this screen will appear as it performs the installation:



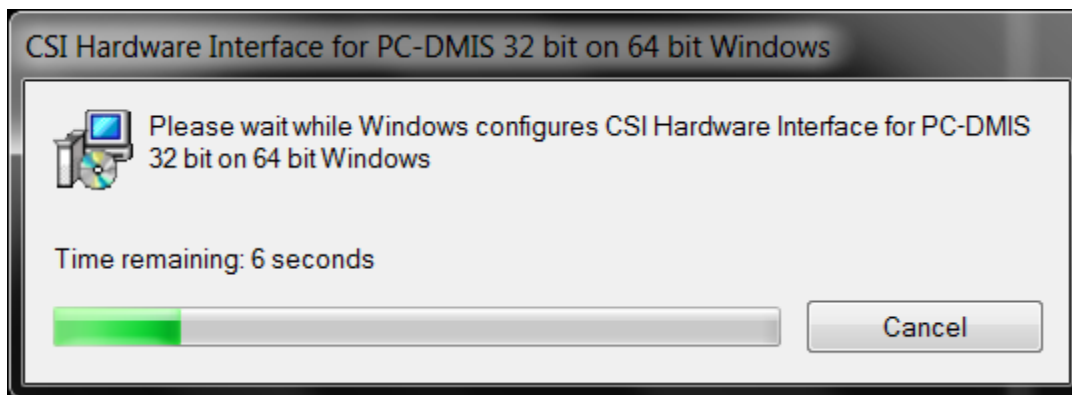
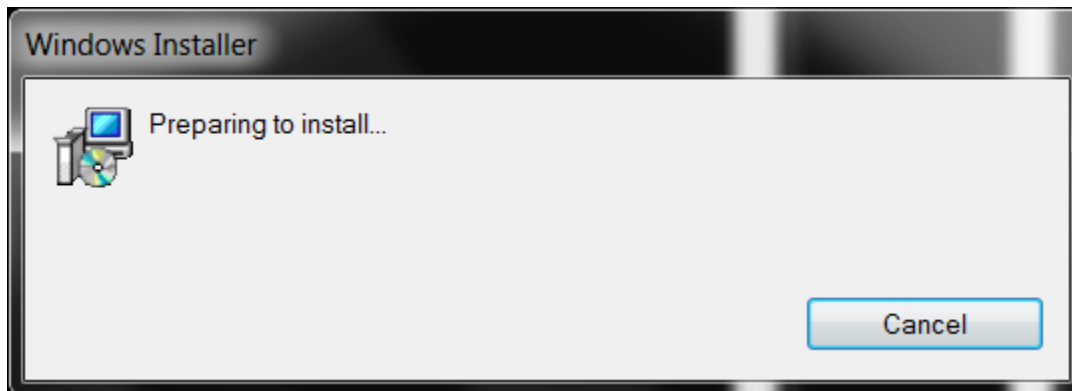
Upon completion this message is displayed. Select OK to clear it.



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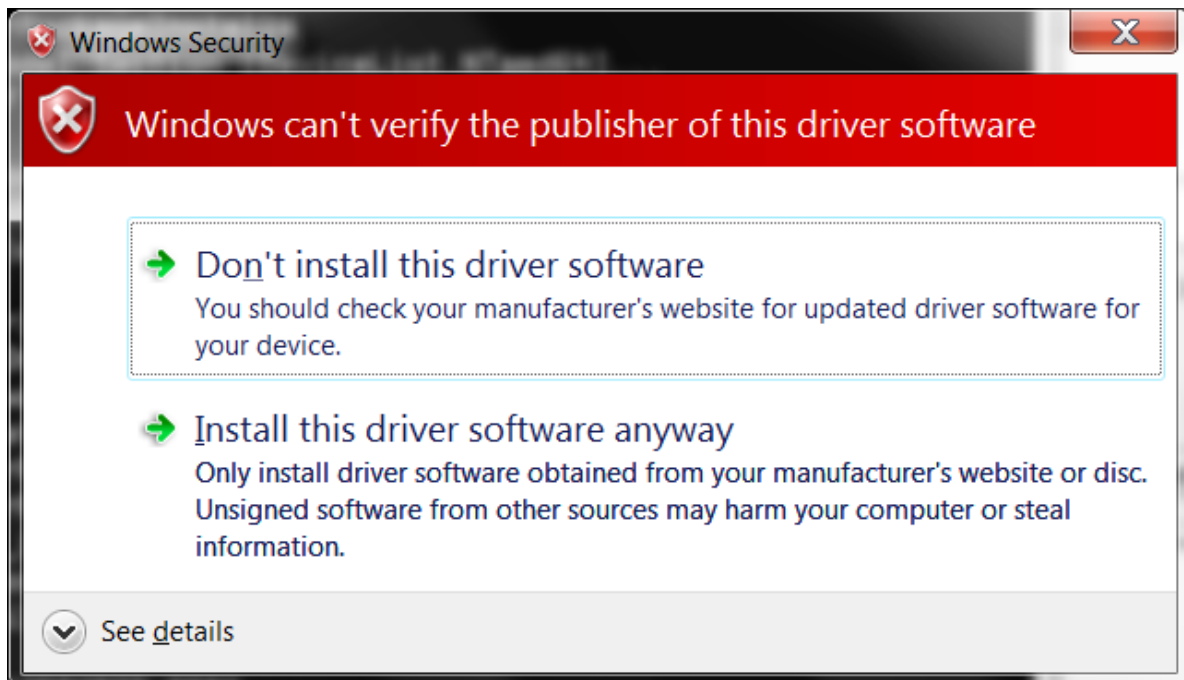
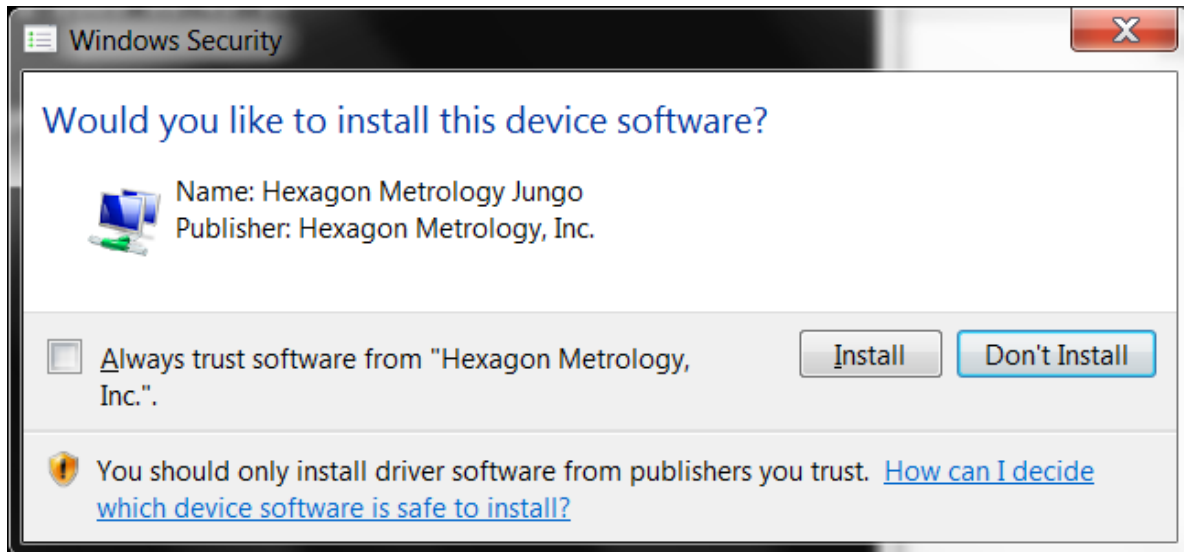
## Windows 64 Bit Example

After selecting the language the following screens will appear as it performs the installation (example is from Windows 7 64 bit install):



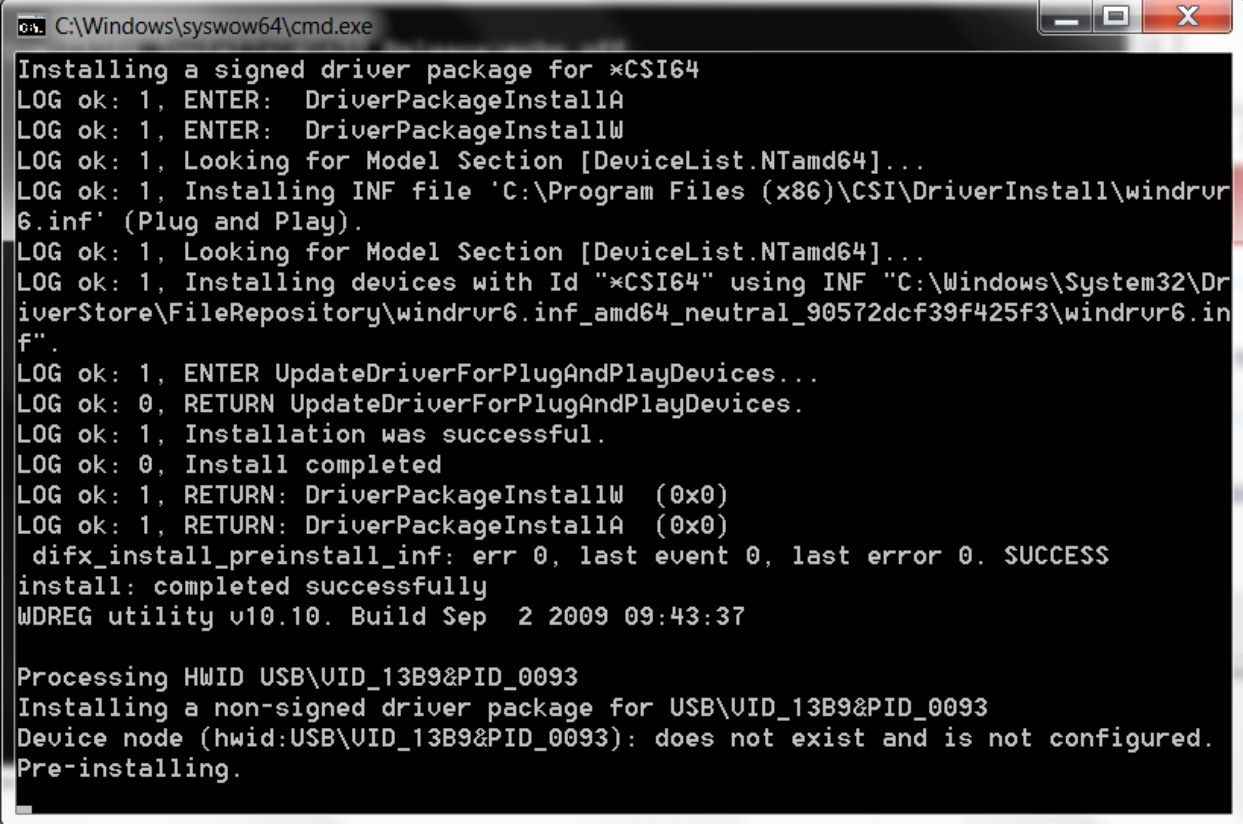
Note that this install is for PC-DMIS 32 bit running under WOW64 of Windows 7 64 bit.

When the 64 bit device drivers are being installed for the first time, you will see the following screens. Choose the “install” option in both cases.





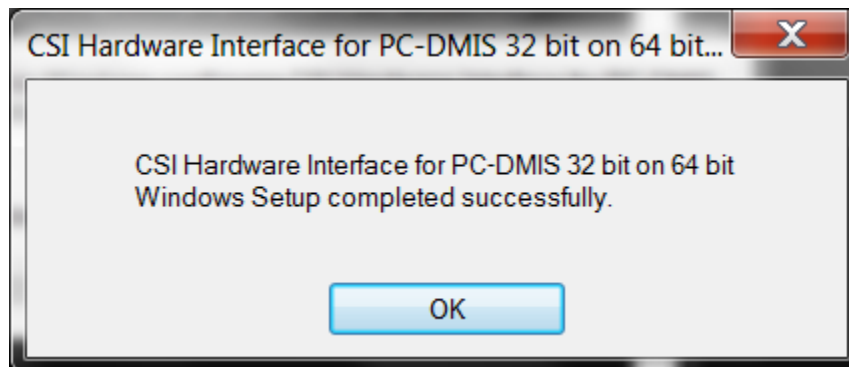
A batch file that runs from a command prompt performs the driver installation. The following command prompt screen will be visible when the driver is being installed.



```
C:\Windows\syswow64\cmd.exe
Installing a signed driver package for *CSI64
LOG ok: 1, ENTER: DriverPackageInstallA
LOG ok: 1, ENTER: DriverPackageInstallW
LOG ok: 1, Looking for Model Section [DeviceList.NTamd64]...
LOG ok: 1, Installing INF file 'C:\Program Files (x86)\CSI\DriverInstall\windrvr6.inf' (Plug and Play).
LOG ok: 1, Looking for Model Section [DeviceList.NTamd64]...
LOG ok: 1, Installing devices with Id "*CSI64" using INF "C:\Windows\System32\DriverStore\FileRepository\windrvr6.inf_amd64_neutral_90572dcf39f425f3\windrvr6.inf".
LOG ok: 1, ENTER UpdateDriverForPlugAndPlayDevices...
LOG ok: 0, RETURN UpdateDriverForPlugAndPlayDevices.
LOG ok: 1, Installation was successful.
LOG ok: 0, Install completed
LOG ok: 1, RETURN: DriverPackageInstallW (0x0)
LOG ok: 1, RETURN: DriverPackageInstallA (0x0)
difx_install_preinstall_inf: err 0, last event 0, last error 0. SUCCESS
install: completed successfully
WDREG utility v10.10. Build Sep  2 2009 09:43:37

Processing HWID USB\VID_13B9&PID_0093
Installing a non-signed driver package for USB\VID_13B9&PID_0093
Device node (hwid:USB\VID_13B9&PID_0093): does not exist and is not configured.
Pre-installing.
```

On completion you should see this message:



## 3. Device Driver Installation

In order for PC-DMIS to be able to “communicate” with the CSI hardware over the USB connection it is necessary to install a device driver for the CSI hardware. The driver files have already been installed when InstallCSI was executed (in previous section), but Windows has not yet made the “connection” between the driver and the CSI USB device. Since USB is “plug and play” the drivers do not get completely installed until the CSI hardware is connected to a USB port on the PC. Note that if you connect to a different USB port on your PC each time, then it is necessary to go through the following steps for each new USB port you use.

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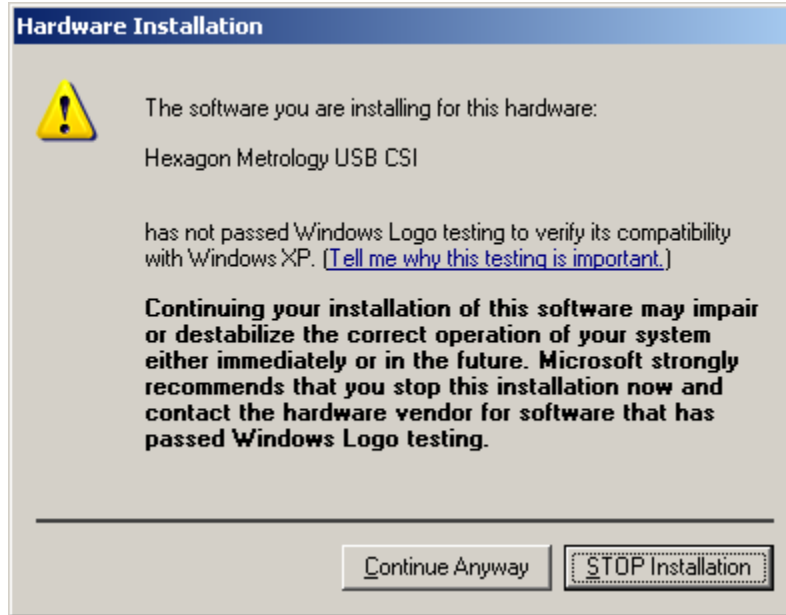
### Windows 32 bit Driver Install Example

With the CSI box powered on, connect the USB port labeled “HOST” to a free USB port on the PC. Windows will display a “Found New Hardware” message similar to below (this is a Windows XP example and will differ for Windows 7 32 bit):



### CSI for PC-DMIS Software Install Manual

Choose “Next” button with the default “Install the software automatically” selected. The next screen will then be displayed. Choose “Continue Anyway” (example shown is Windows XP)



The following screens appear after choosing “Continue Anyway”:

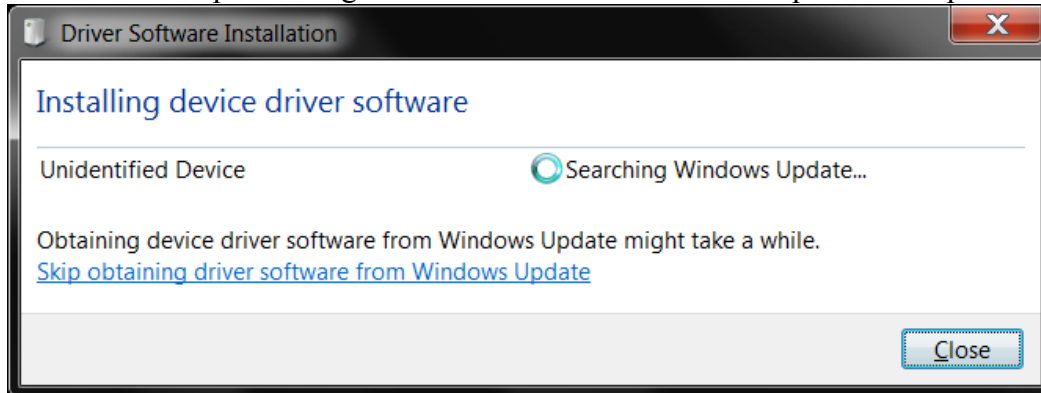




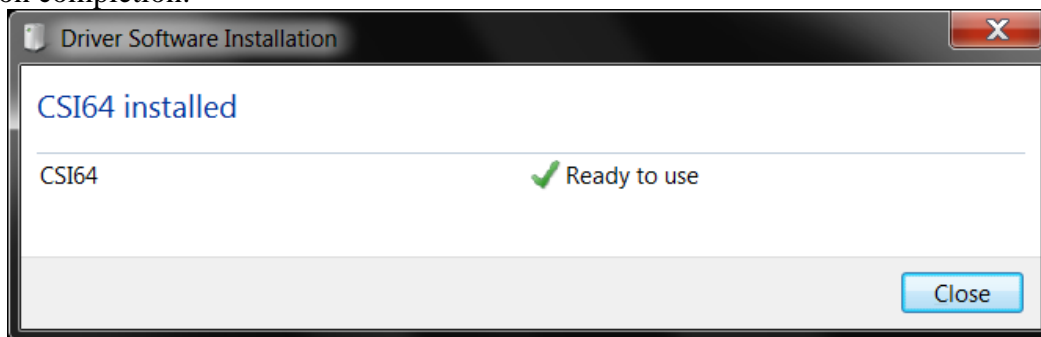
## Windows 64 bit Driver Install Example

With the CSI box powered on, connect the USB port labeled “HOST” to a free USB port on the PC. Assuming this is the first time you are installing the driver for this USB port, you will see a message as follows (you will only see this message if you click on the message in lower right corner of the screen that says “Installing device driver software click here for status”):

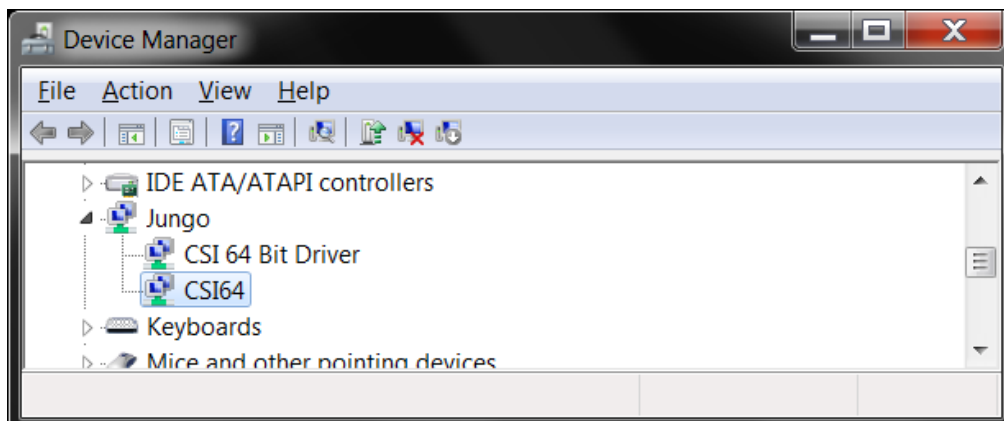
You can choose to “Skip obtaining driver software from Windows Update” to expedite the install.



Upon completion:



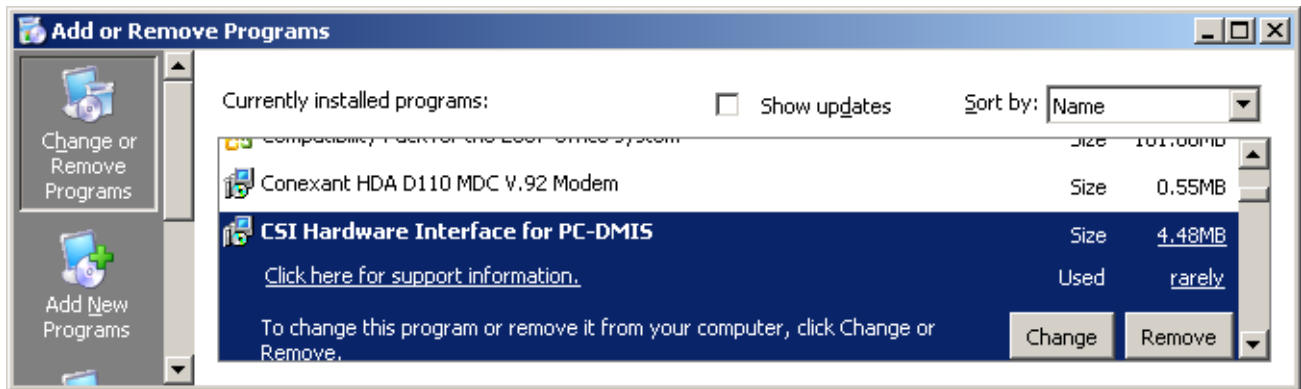
In device manager you should see the following devices. When CSI hardware is not attached then only the “CSI 64 Bit Driver” device appears.



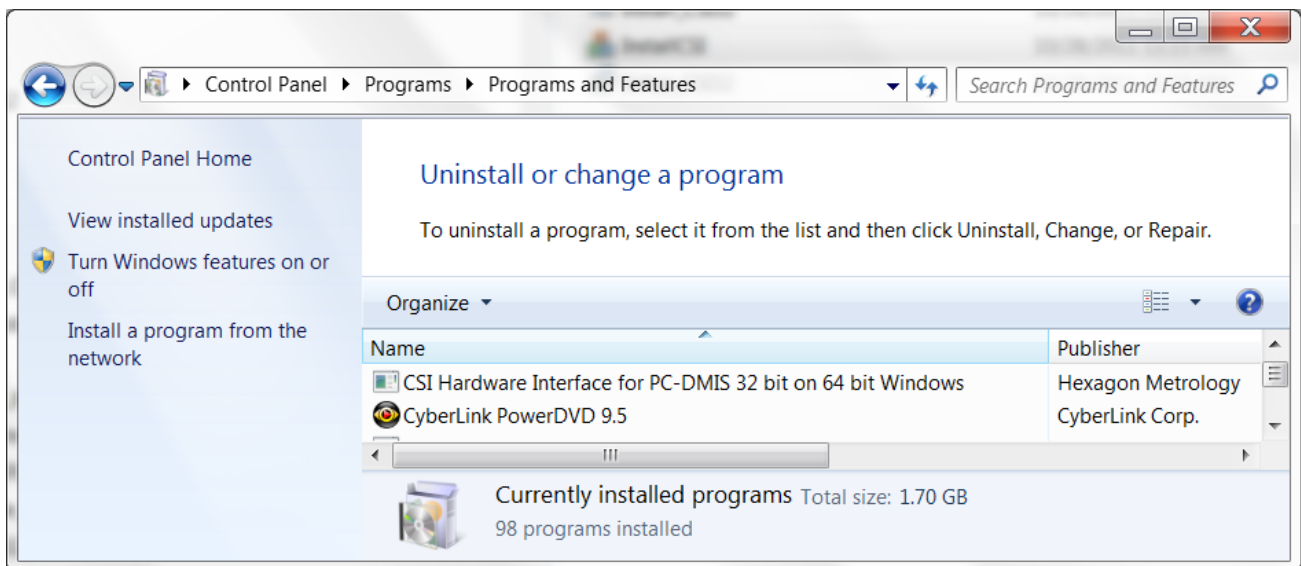
# 4. Uninstalling CSI Support For PC-DMIS

If an existing installation of CSI support for PC-DMIS is already installed, then you need to uninstall it before installing the new version. Go to the Windows control panel and choose the “Add or Remove Programs” applet. Look for the “CSI Hardware Interface for PC-DMIS” program as shown in the screen below. Select it and choose “remove”.

Windows 32 bit:



Windows 64 bit (for 32 bit PC-DMIS):



## 5. Special Considerations

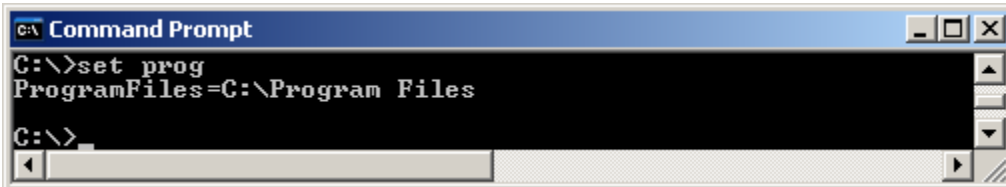
There are some instances where it may be required to modify the Install\_CSI.bat (or Install\_CSI32.bat) file in order for the install to complete successfully. InstallCSI.exe invokes this batch file when it is executed (see section 2). This is an unlikely scenario but this section describes when you may have to do this and what changes would have to be made.

Since the CSI interface software components must be copied into an existing PC-DMIS folder, the CSI installer must locate the existing PC-DMIS folder and copy required files to that folder. If multiple installations of PC-DMIS are located on the PC, then the install will copy CSI interface files to ALL the PC-DMIS folders that it finds (PC-DMIS 2009MR2, PC-DMIS 2010, etc). If PC-DMIS has been installed to a folder OTHER than the standard Windows “Program Files” folder, then the Install\_CSI.bat file will have to be edited so the CSI installer is able to locate the PC-DMIS folder. The Install\_CSI.bat uses the following command line to perform the install:

```
msiexec /i setup_csi.msi TARGETDIR="%ProgramFiles%\CSI\"  
PCDMISRootDir="%ProgramFiles%\WAI\" /qb+
```

%ProgramFiles% is a Windows environment variable set for the standard windows “Program Files” location.

Example:



```
C:\>set prog  
ProgramFiles=C:\Program Files  
C:\>
```

If PC-DMIS is installed somewhere other than the ““%ProgramFiles%\WAI” folder then the “PCDMISRootDir=” must be changed to the path where it is installed. For example if PC-DMIS 2010 was installed under C:\WAI then the command line in Install\_csi.bat would need to be changed as follows:

```
msiexec /i setup_csi.msi TARGETDIR="%ProgramFiles%\CSI\" PCDMISRootDir="c:\WAI\" qb+
```

**NOTE:** For the Install\_CSI32.bat used by the CSIInstall.exe for the Windows 64 installation the default TARGETDIR and PCDMISRootDir use the environment variable “%ProgramFiles(x86)%”

## 6. USB Virtual COM Port Driver Installation

For advanced users or service personnel it may be necessary to connect to the CSI hardware using Hyperterminal. The CSI Users Manual describes using hyperterminal with CSI. There is a second USB port on the back of the CSI box that can be used for this purpose labeled “SRVC”. In order to use this port, it is necessary to install a USB->COM port driver so the CSI device appears as a COM port to Hyperterminal. This is done similar to the driver install described in section 3.

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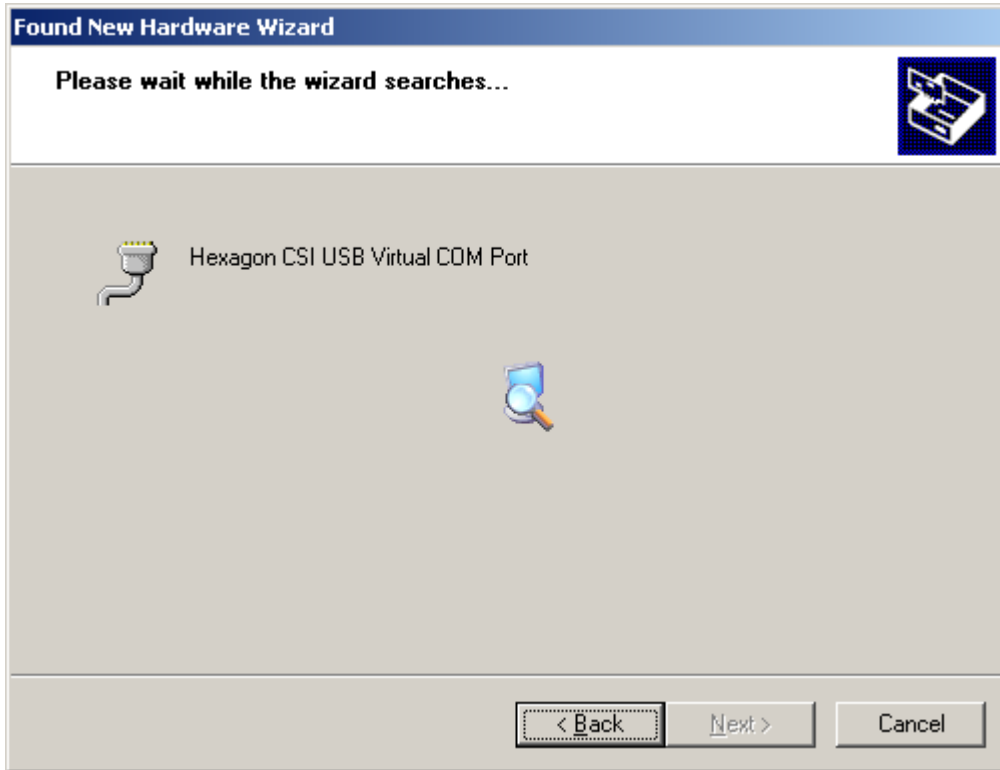
### Windows 32 Bit

The following screens are examples from Windows XP.

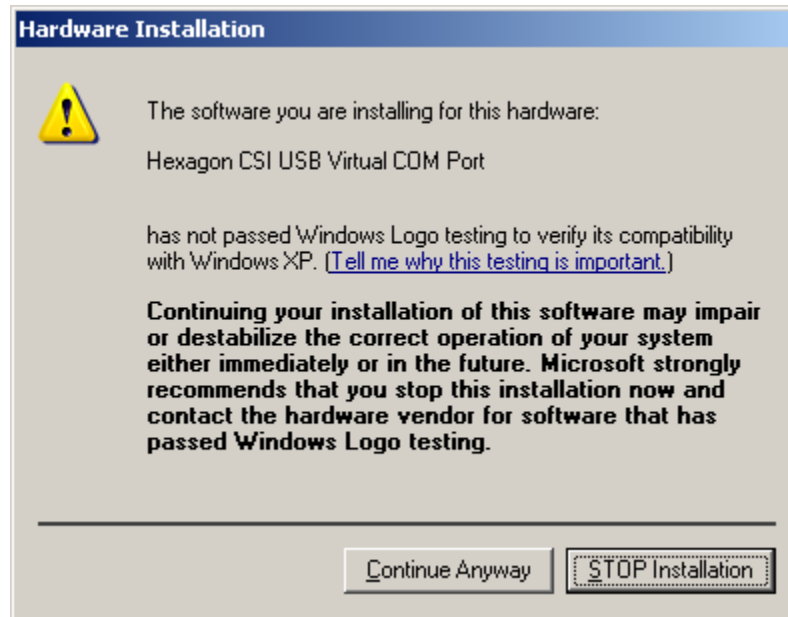
With CSI powered on, connect the USB cable from the CSI USB port labeled “SRVC” to a free USB port on the PC. The “Found New Hardware” wizard below will appear (if this is the first time connecting to this USB port). Choose “Next” to continue the install.



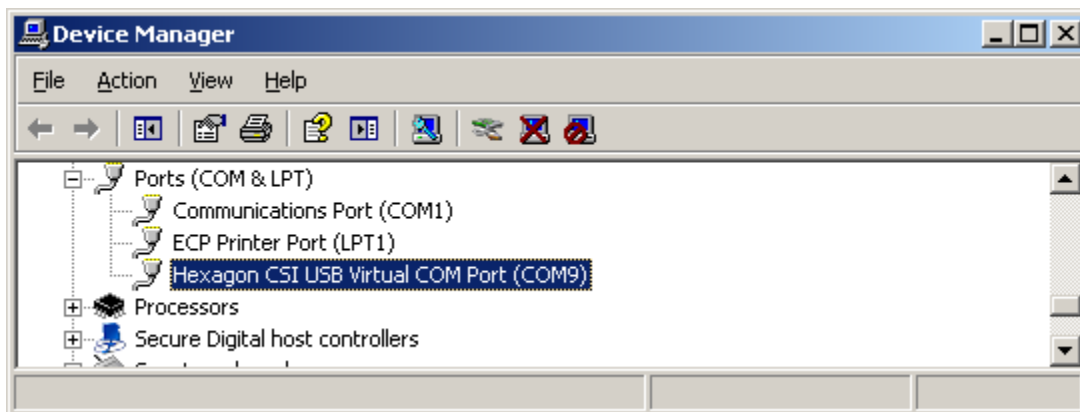




Select "Continue Anyway" to complete the installation



If you run the Windows “Device Manager” you will see the COM port that is assigned to the CSI (only when plugged in). Example below shows CSI as COM9.

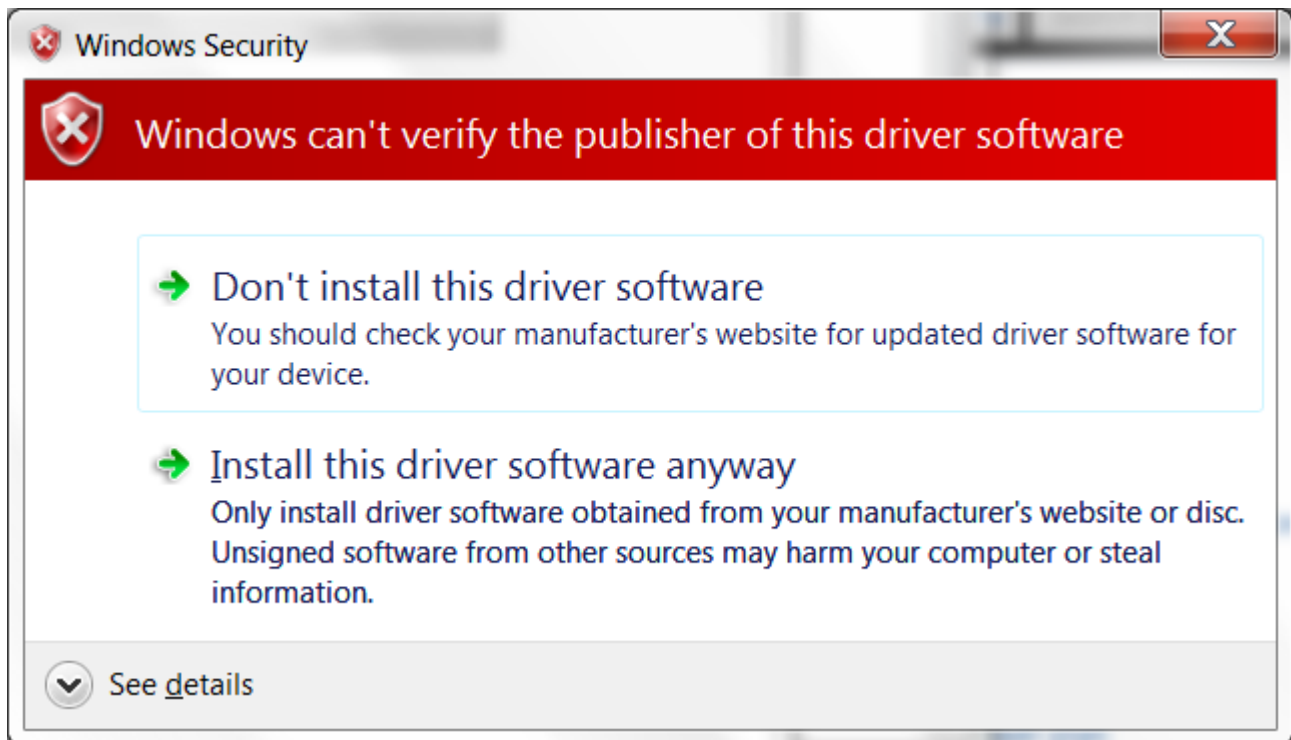


## Windows 64 bit

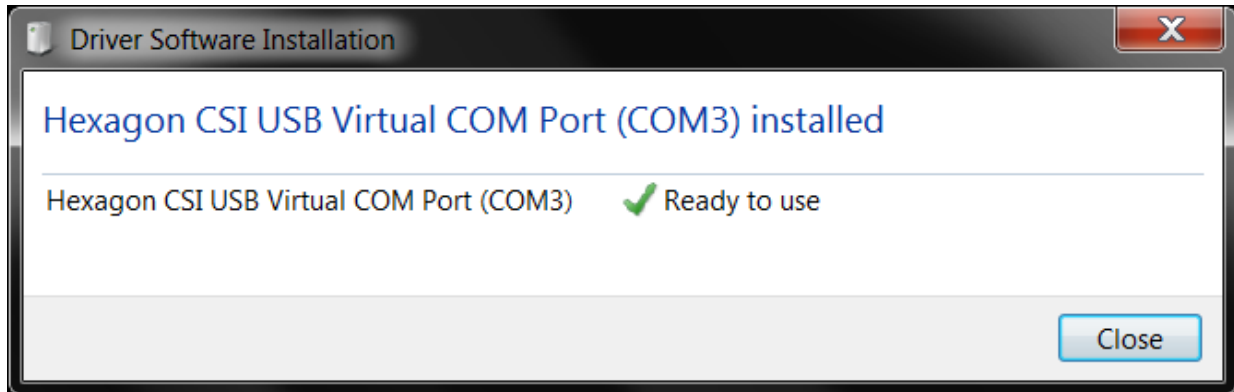
The following screens are examples of the USB virtual COM port driver install from Windows 7 x64. Please note that Windows 7 does NOT have hyperterminal installed by default like previous versions of Windows. However hyperterminal will run successfully under Windows 7 if the hypertrm.exe and hypertrm.dll files are copied from an older Windows OS (for example Windows XP) to the Windows 7 PC (under the “Program Files (x86)” folder). It can then be used to communicate with the CSI box via the service port after the COM port driver is installed.

With CSI powered on, connect the USB cable from the CSI USB port labeled “SRVC” to a free USB port on the PC.

Choose to “Install this driver software anyway” from below screen.



When the installation has completed the following screen is displayed (COM port may differ)



You can also check for the COM port number in device manager as shown here (COM 5 in this example)

