



plug & play instruments  
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## Installing or updating the driver

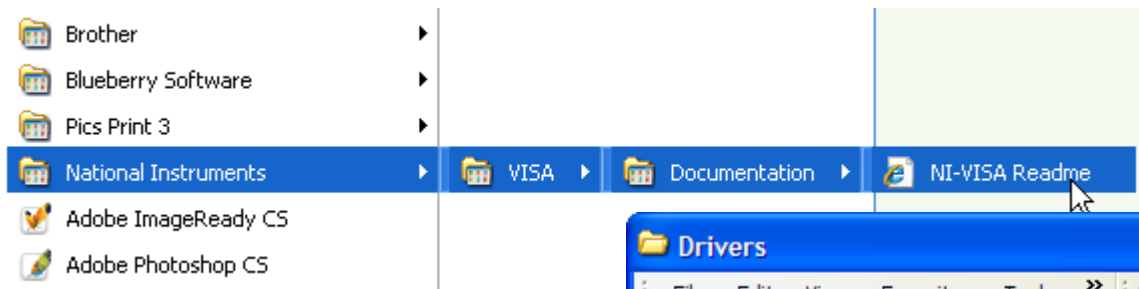
Cleverscope has recently updated the USB driver used for the CS328A to be based on the National Instruments VISA system. This improves reliability, provides access to Vista 64, and allows us to implement an Ethernet based connection. All future versions of Cleverscope will use NI-VISA. The CS328 continues to use the FTDI driver, and does **not** need to be updated to Visa. However an updated version of the FTDI driver is included with the installation disk and zip, and it supports Vista. If you are using Vista, you will need to update the driver as shown in step 6 onwards, but use the 'Cleverscope CS328.inf' file instead.

**NOTE:** if you are having problems installing the .inf file - Windows reports 'a required section was not found', please see 'Choosing the correct .inf file' at the end of this document.

If you are not certain if you already have the NI-VISA driver installed, follow the instructions below.

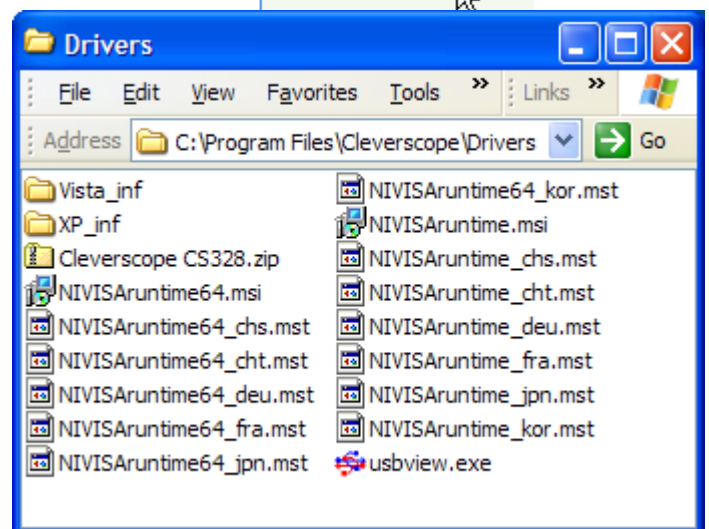
Follow these steps to check for NI-VISA and install the latest Cleverscope USB driver.

1. Unzip the update into your Program Files/Cleverscope Directory. This will place a directory labelled 'Drivers' into the Cleverscope directory.
2. Next you need to determine if NI-VISA is already installed. There is no need to install it again! Choose the 'Start' menu command and see if you can navigate to 'National Instruments/Visa/Documentation/NI-VISA Readme'. If so, you have NI-VISA installed. If not, you will need to install it now.

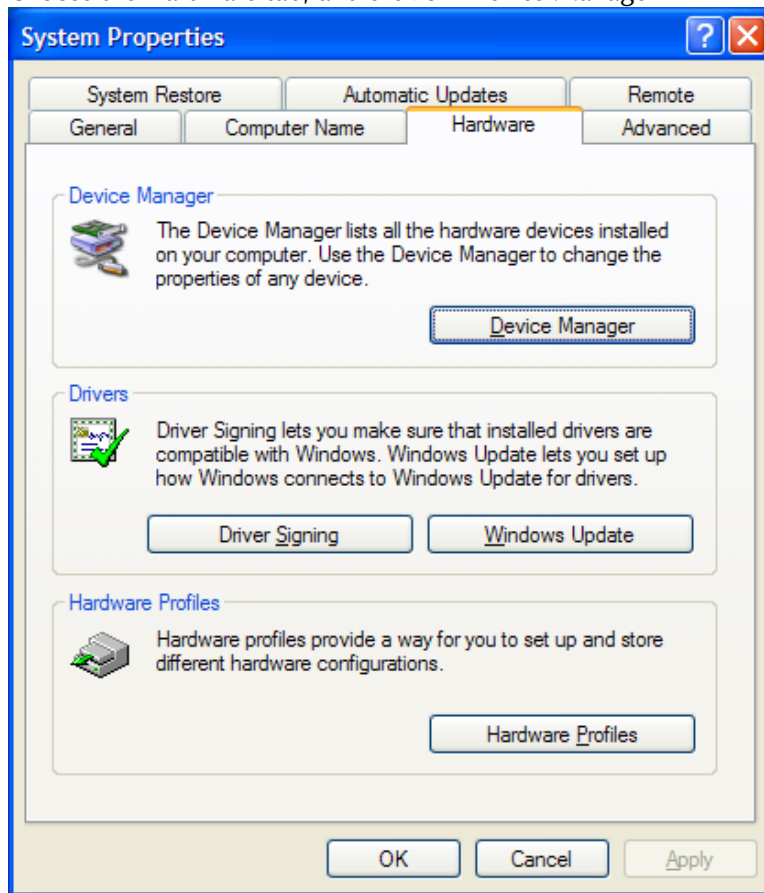


To install the NI-Visa system navigate to Program Files/Cleverscope/Drivers. Locate the entry 'NIVISAruntime.msi' (the directory is shown here to the side). Double click on the NIVISAruntime.msi entry, and follow the instructions to install NI-VISA. If you have Vista 64, run NIVISAruntime64.msi, after you have run NIVISAruntime.msi.

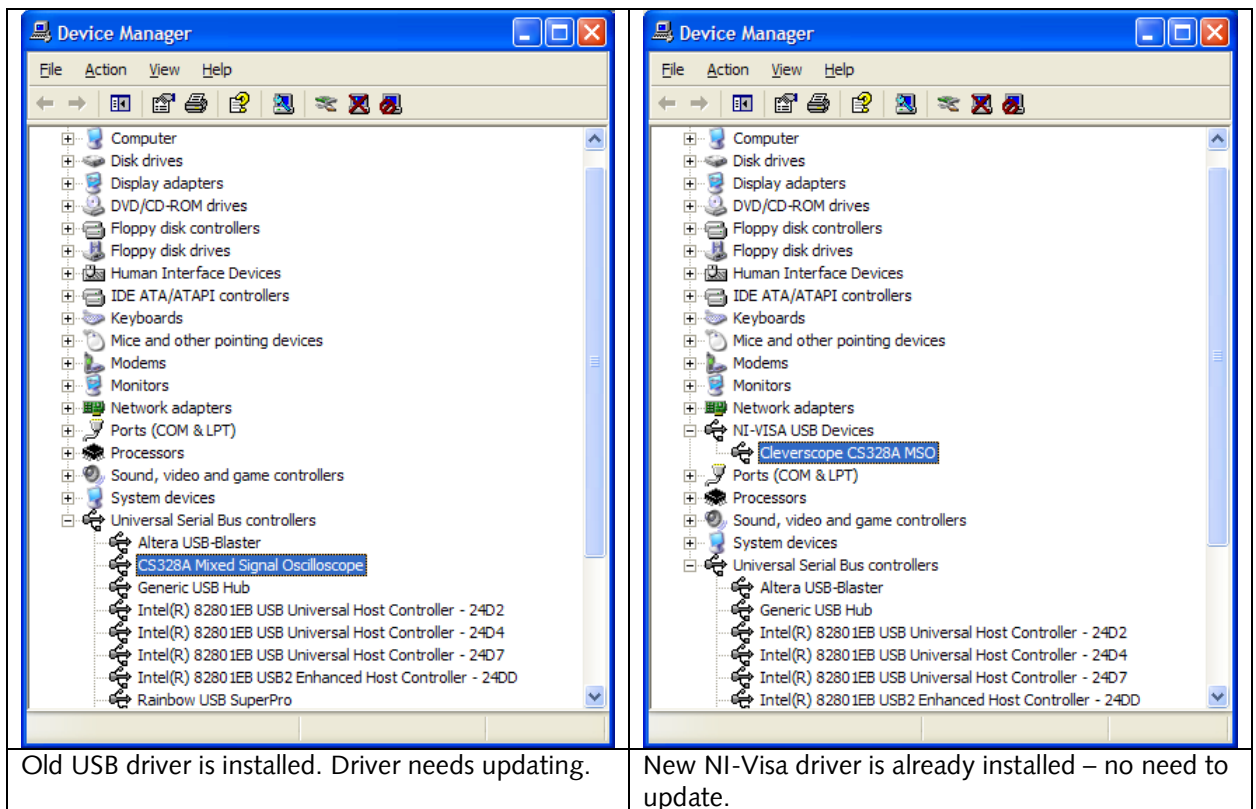
Once that's done, use Start/Settings/Control Panel and then click on the 'System' item.



3. Choose the Hardware tab, and click on 'Device Manager'.



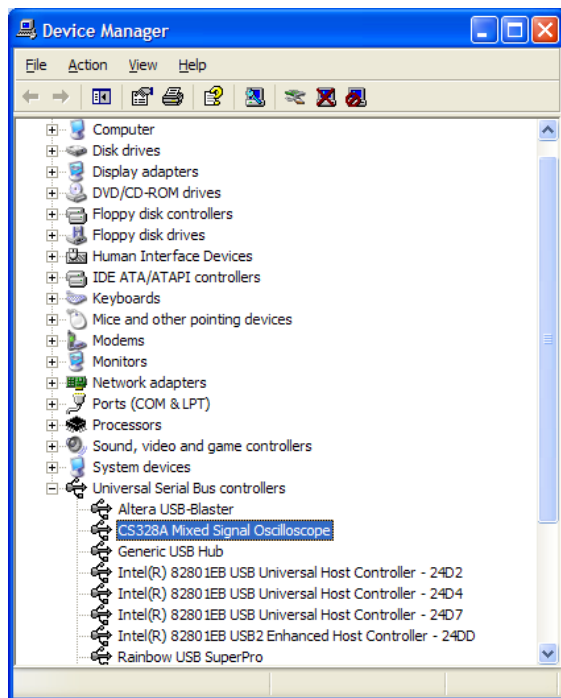
4. Check the entries on the device manager display. You will see one of two displays:



5. If the display shows the NI-Visa driver, then there is no need to update the driver. However, if the display shows a CS328A Mixed Signal Oscilloscope entry under Universal Serial Bus controllers, you will need to

update the driver.

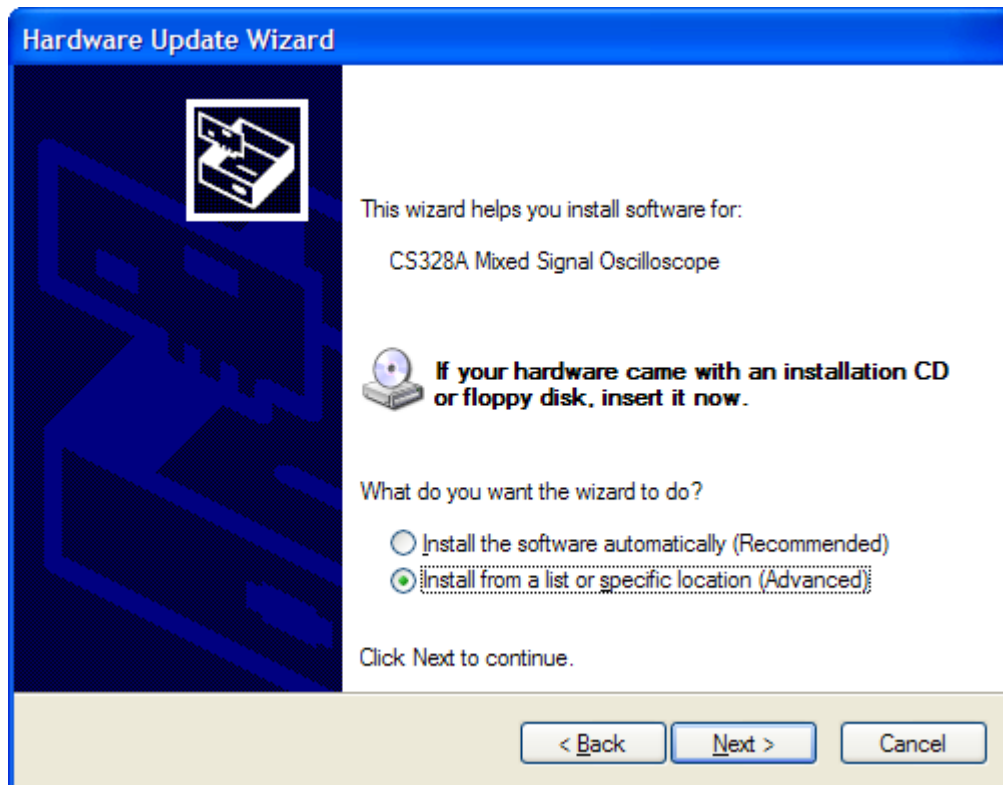
6. Right click on the 'CS328A Mixed Signal Oscilloscope Entry, and choose the 'Update Driver.' entry.



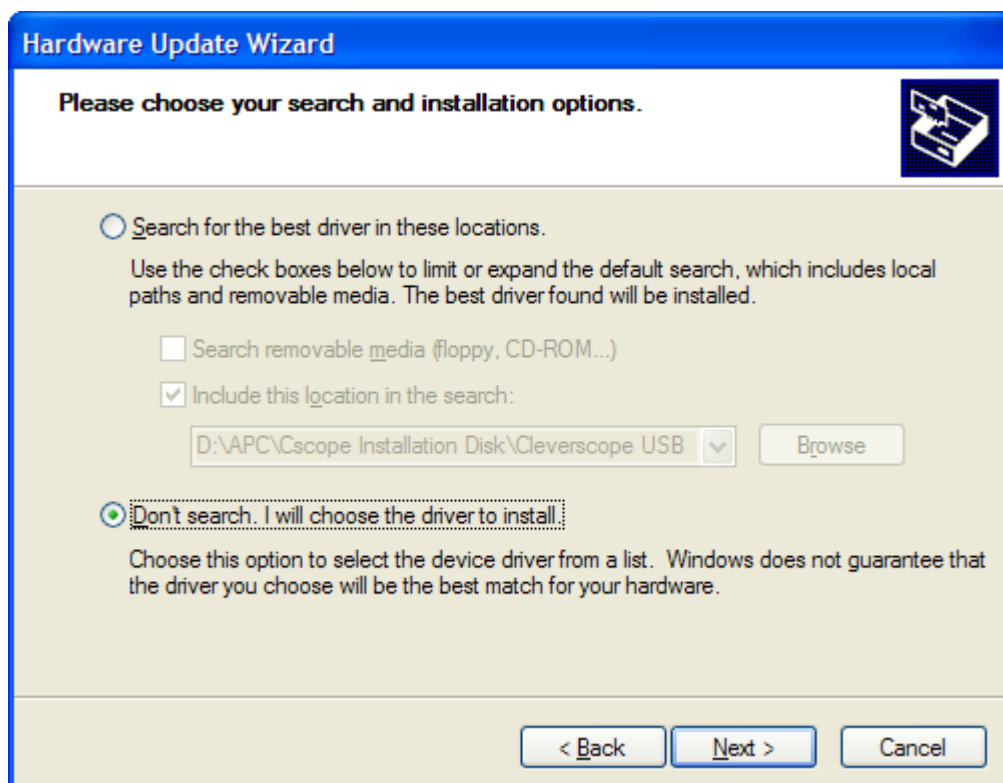
7. The 'Welcome to the Hardware Update Wizard' will appear. Choose 'No, not at this time', and click next'.



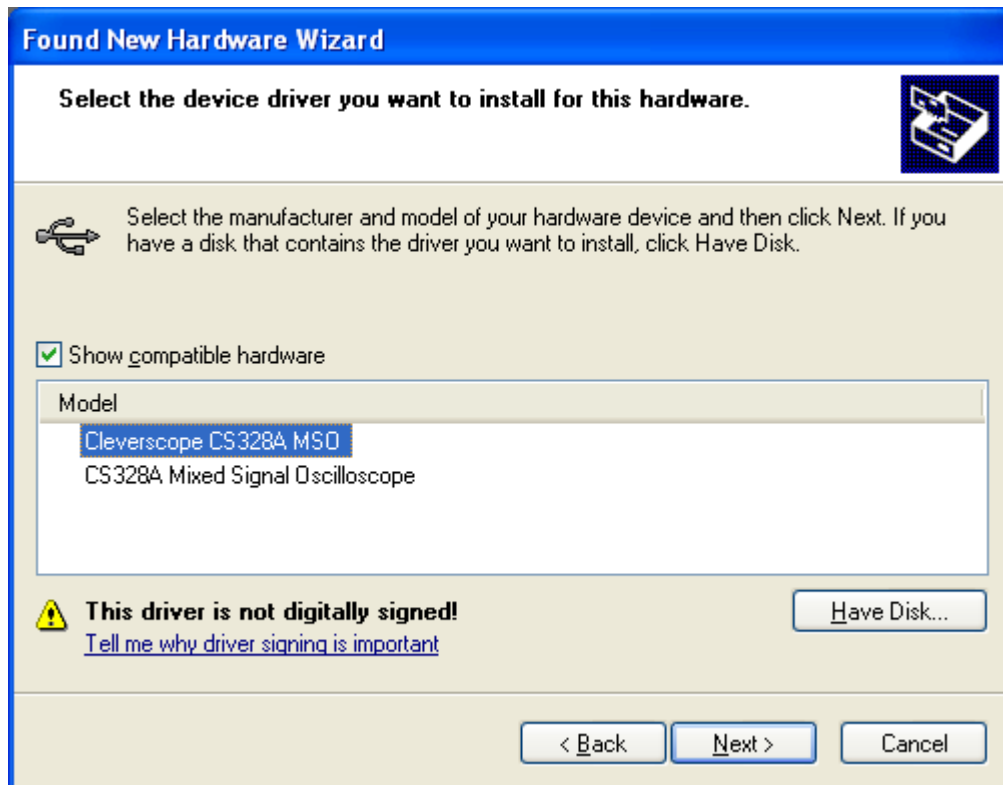
8. Click on 'Install from a specific location (Advanced)' and click Next



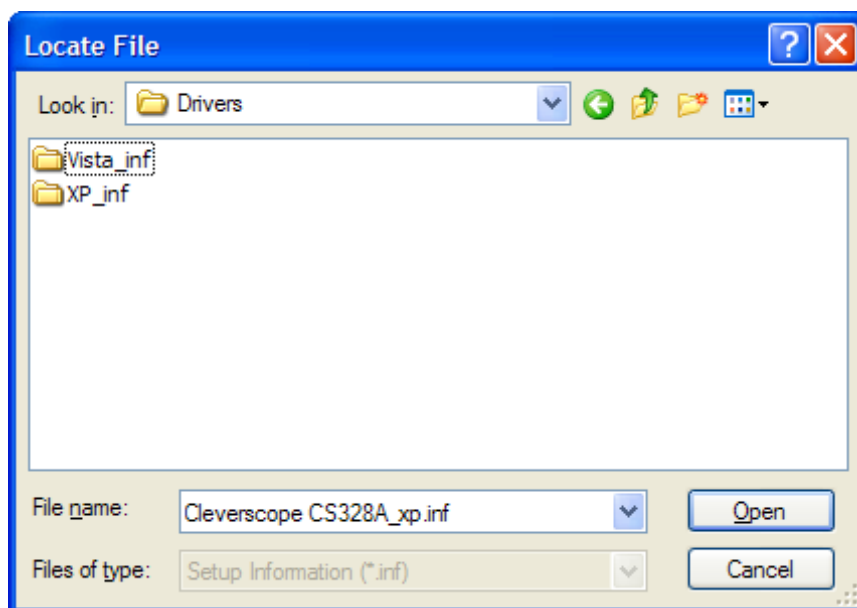
9. Click on 'Don't search. I will choose the driver to install', and click Next.



10. You will see the following dialog. Click on the 'Have Disk' button, regardless of the entries in the driver window. Click Next.

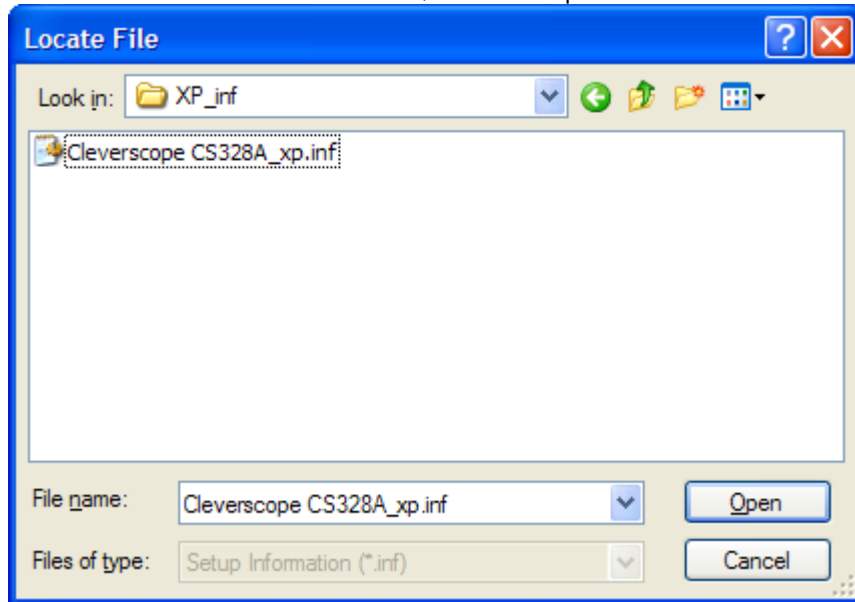


11. Navigate to the Program Files/Cleverscope/Drivers directory, and you will see two sub folders:

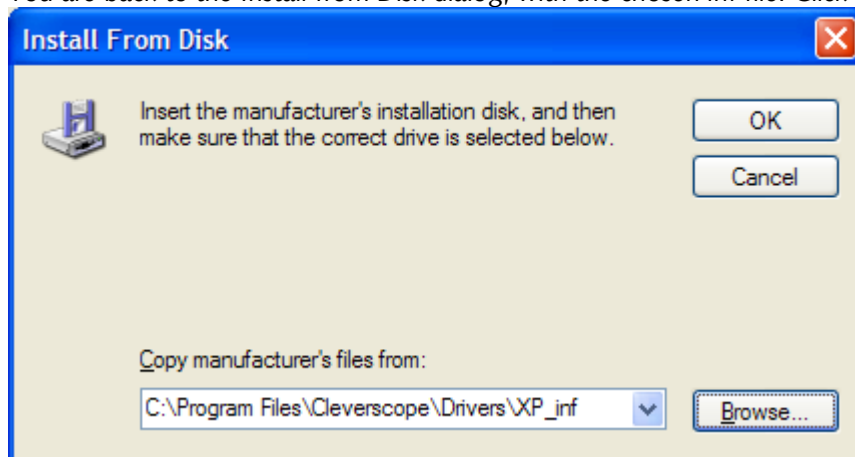


Choose the folder that matches your operating system (XP/Windows 2000 or Vista), and click Open.

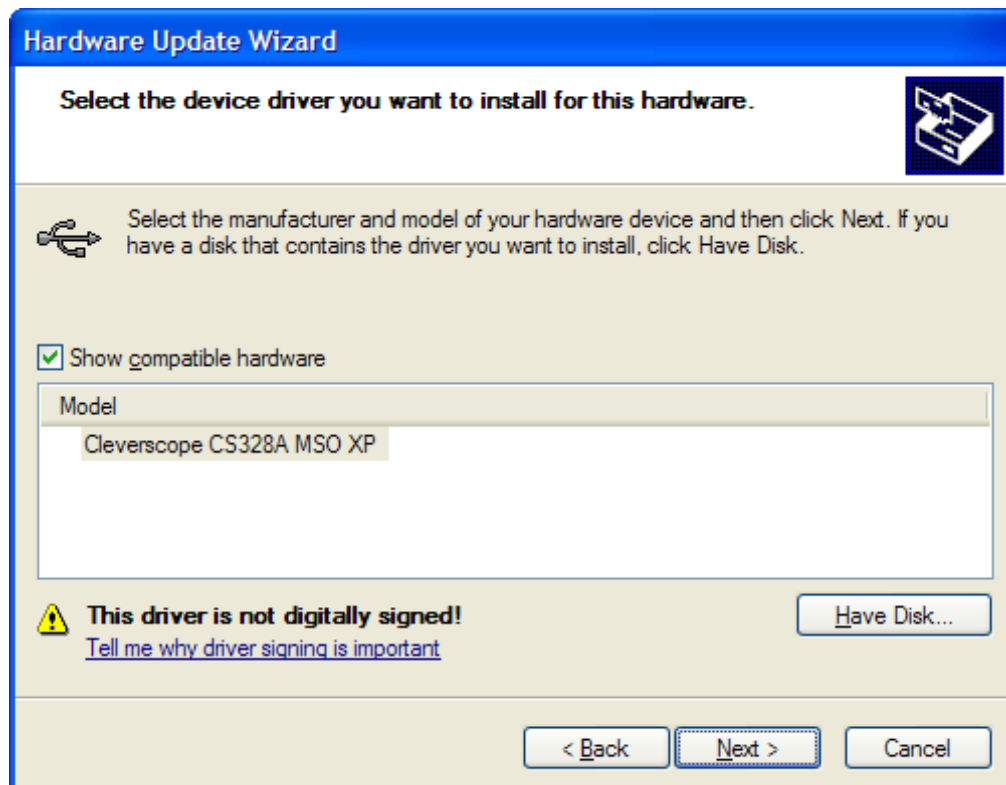
12. Now choose the inf file that's visible, and click Open.



13. You are back to the Install from Disk dialog, with the chosen inf file. Click Ok.



You should see:

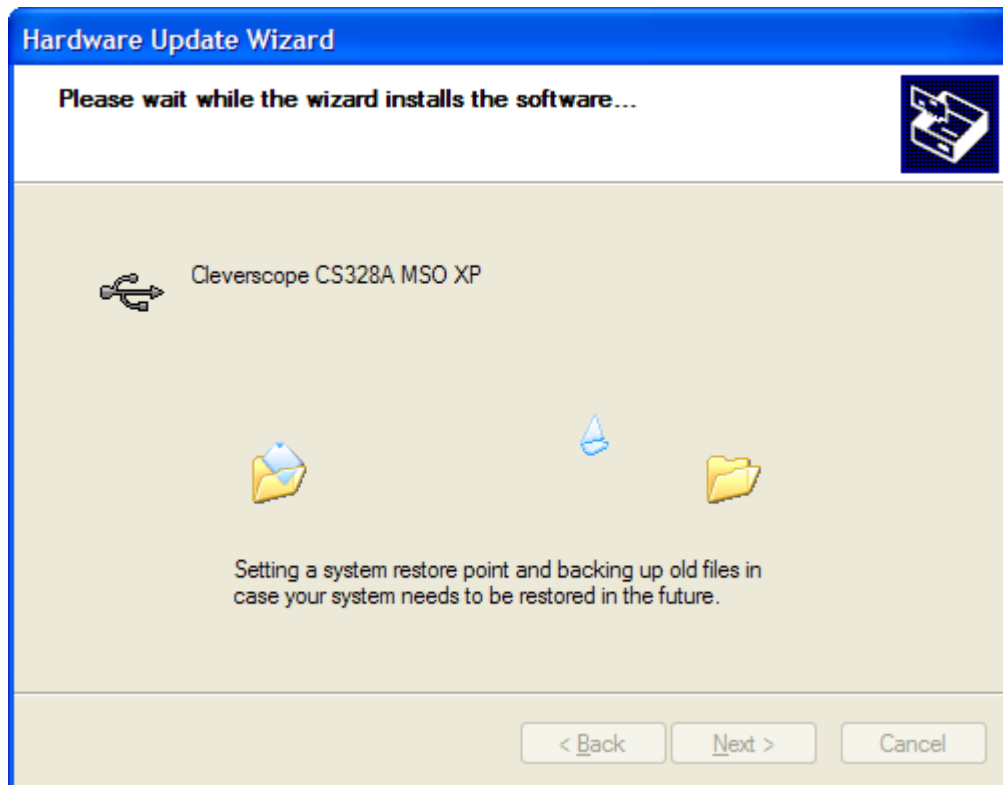


Select the entry Cleverscope Entry. There should be only one.

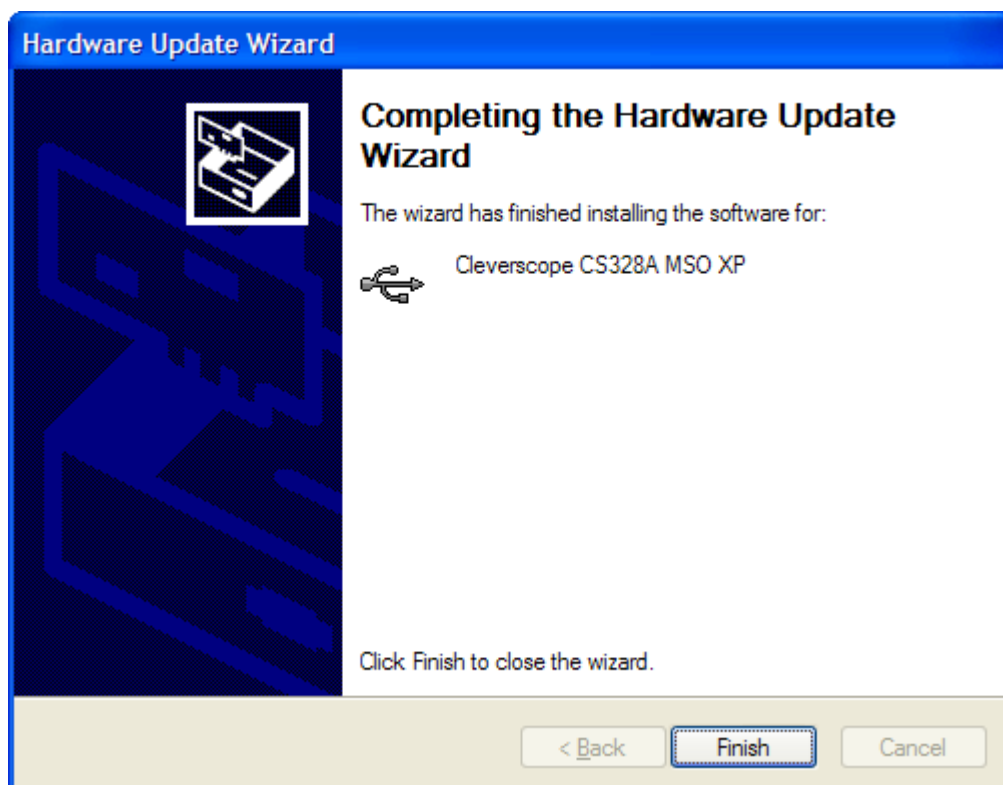
Click Next.

You should see the entry being installed. If file is not Microsoft approved click on 'Install anyway'.

14. The wizard should be installing the driver:

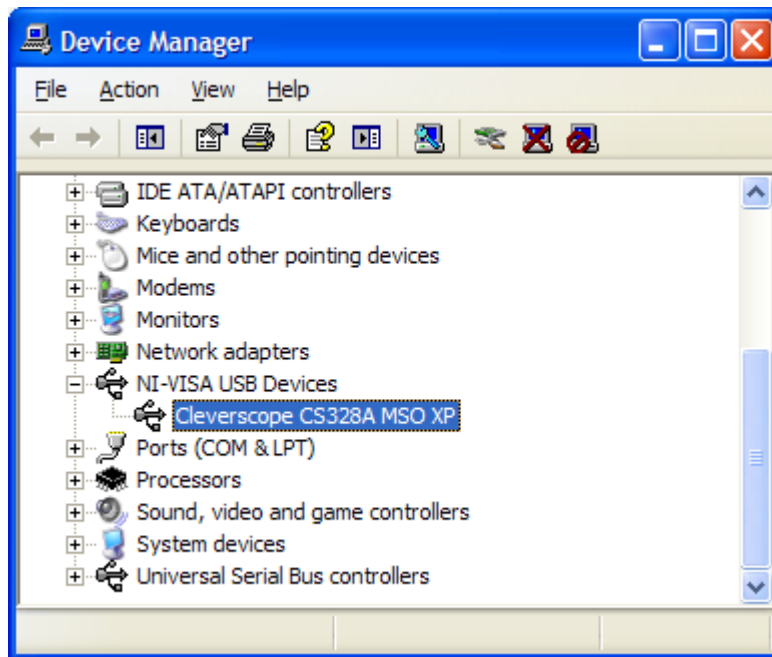


and success:



15. Click Finish. You should now be able to use your Cleverscope. The driver should be installed. Note that you will need to set the correct driver for every port on your machine. This is usually done automatically when you plug the Cleverscope into a port that has not been previously configured.

16. Now you should see the NI-Visa device as shown:



17. Start up the application, and verify communication using the 'Auto' button. Note that we suggest that you have firmware version 6430 or later loaded.

## ***Choosing the correct .inf file***

In earlier versions of the Cleverscope application we had the two .inf files in the same directory. For some installations Windows does not give the user the option of choosing which .inf file to use, and then loaded the wrong version. The result is a message along the lines of 'a required section could not be found'.

The solution to this problem is to delete the unwanted .inf file (eg the XP version in a Vista installation), and then use the driver update method shown above to navigate to the directory containing the required .inf file, and then let Vista or XP find it, and install it.

Our new file structure should mean that the correct inf file is found.