

doseBadge Reader Support in the NoiseTools Software

Cirrus Research plc
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Cirrus Research plc

Acoustic House

Bridlington Road

Hunmanby

North Yorkshire

YO14 0PH

United Kingdom

Tel: 0845 230 2434 (UK)

Tel: +44 1723 891655 (International)

Fax: +44 1723 891742

Email: sales@cirrusresearch.co.uk

Web: www.cirrusresearch.co.uk

Twitter: @cirrusresearch

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1 Introduction

This Technical Note covers common issues encountered when installing the doseBadge Reader software on new PCs, or when moving from older dBLink doseBadge software to NoiseTools.

Please note that several of the points below cover the technical details of USB driver installation, and are described in technical terms suitable for I.T. Professionals.

The latest Reader USB driver is WHQL certified (i.e. signed) and is compatible with all versions of Windows for the PC, including 32-bit and 64-bit versions of Windows 7, Windows 8 and Windows 10.

Please note that NoiseTools is **not compatible** with the Surface RT version of Windows.

2 doseBadge Reader – supported models

The models supported by NoiseTools are:

- RC:110A
- RC:112
- RC:110AL

These Reader models have a standard USB 'type B' connector at the base of the case.

Older Readers, including RC:100A and RC:100B, used an RS232 'round mini-DIN' connector and required a USB-to-serial converter to work with the dBLink software on PCs without RS232 ports.

The RC:100A & RC:100B models are not supported by the NoiseTools software.

3 Is NoiseTools up-to-date?

It is always advisable to update to the latest version of NoiseTools, to be assured of the latest features and compatibility with newer versions of Windows.

3.1 Diagnostics

To check the version of NoiseTools you are using, choose 'Help | About... ' from the main menu. The version is shown in the 'About & Support Information' dialog as shown below in Figure 1

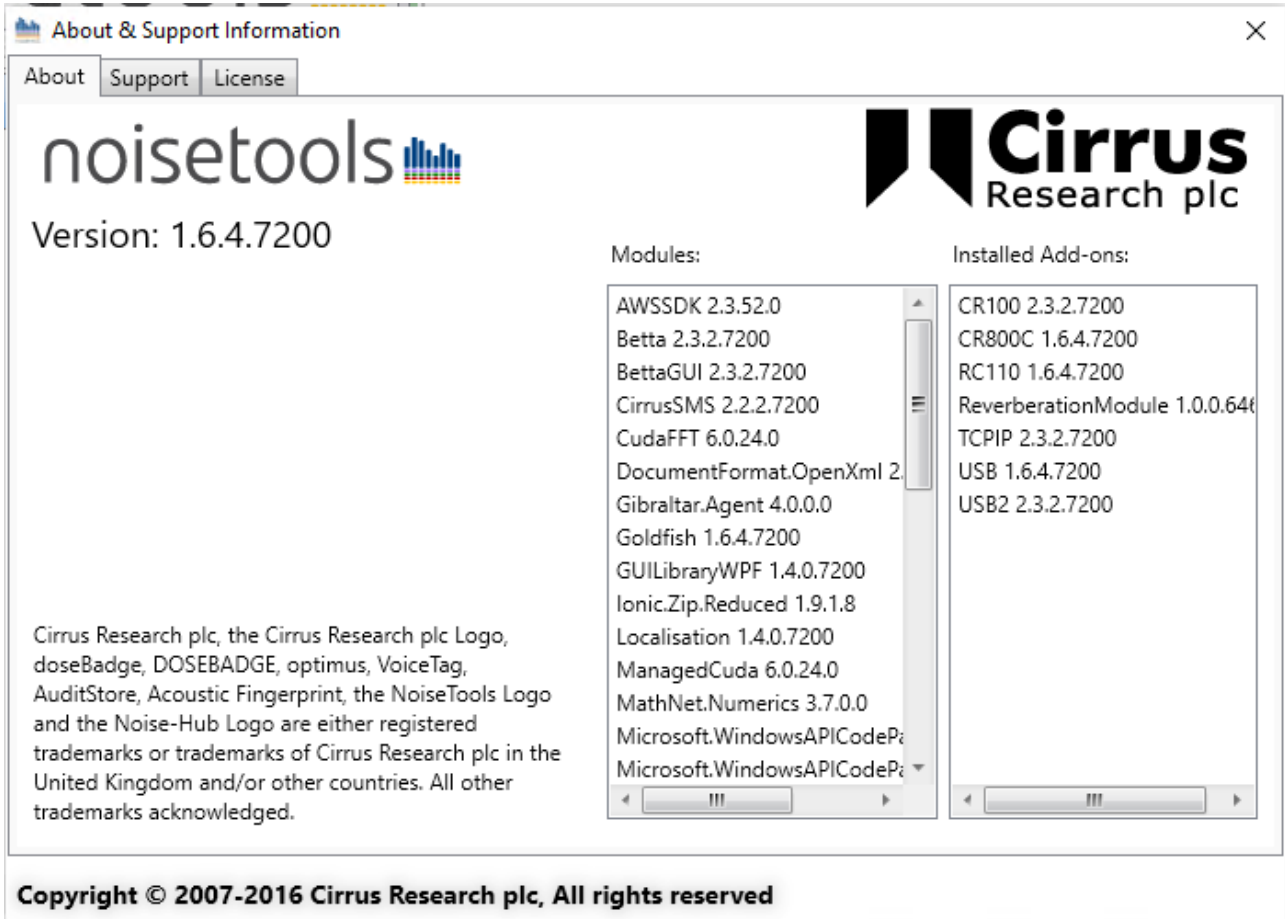


Figure 1

3.2 Solution

Updating to the latest version can be done either within NoiseTools – by choosing 'Help | Check For Updates...' from the main menu – or by downloading the full installation package from the 'Software Downloads' section of the Cirrus Research website.

Please visit www.cirrusresearch.co.uk/library/software

4 Is dBlink Running?

The dBlink application is now obsolete, and has been replaced by NoiseTools. If dBlink remains installed after NoiseTools has been installed on a PC, it may continue running in the background.

The Reader can only connect to one piece of software at a time, so dBlink may 'steal' the connection and prevent NoiseTools connecting to the Reader.

4.1 Diagnostics

When dBlink is running in the background, a silver 'doseBadge' icon is shown in the notification area on the Windows Taskbar as shown below in Figure 2.

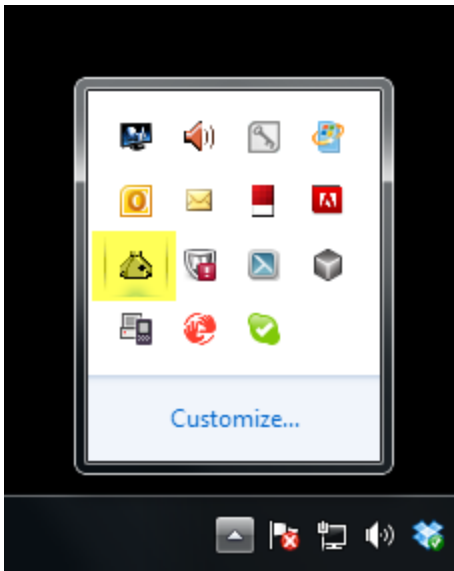


Figure 2

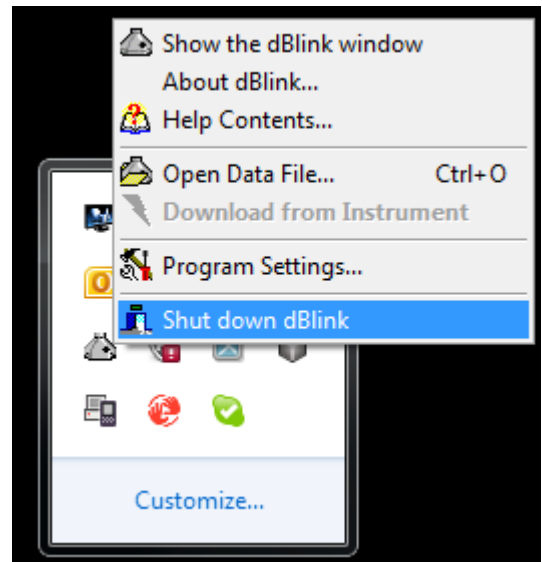


Figure 3

4.2 Solution

If dBlink is no longer required it can be un-installed via the Control Panel, Add/Remove Programs applet. If you do not wish to remove dBlink completely, it can be shut down by right-clicking the silver icon and choosing 'Shut down dBlink' as shown in

Figure 3

dBlink will, by default, start automatically when the PC starts. This can be disabled by de-selecting the “run dBlink in the system tray” option in the program settings (as shown below in Figure 4)

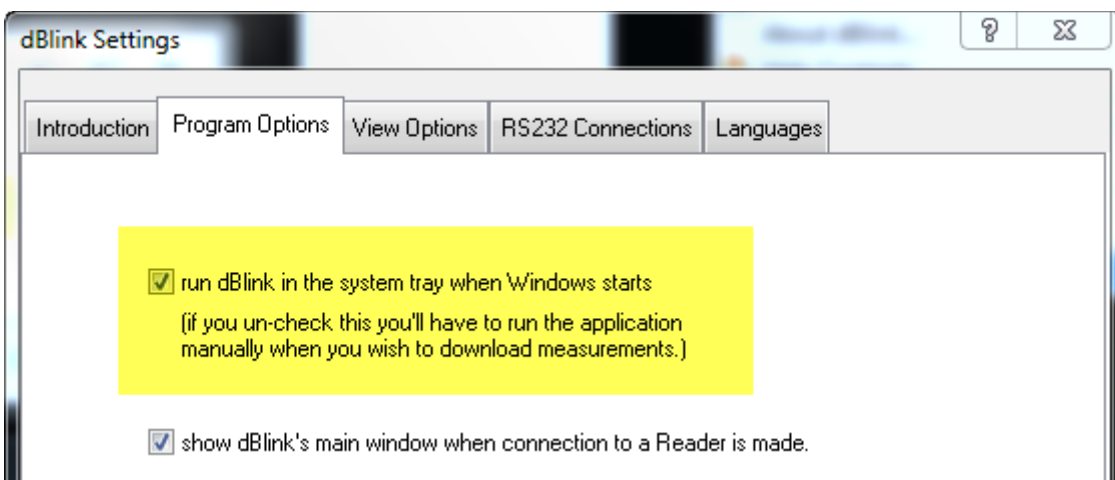


Figure 4

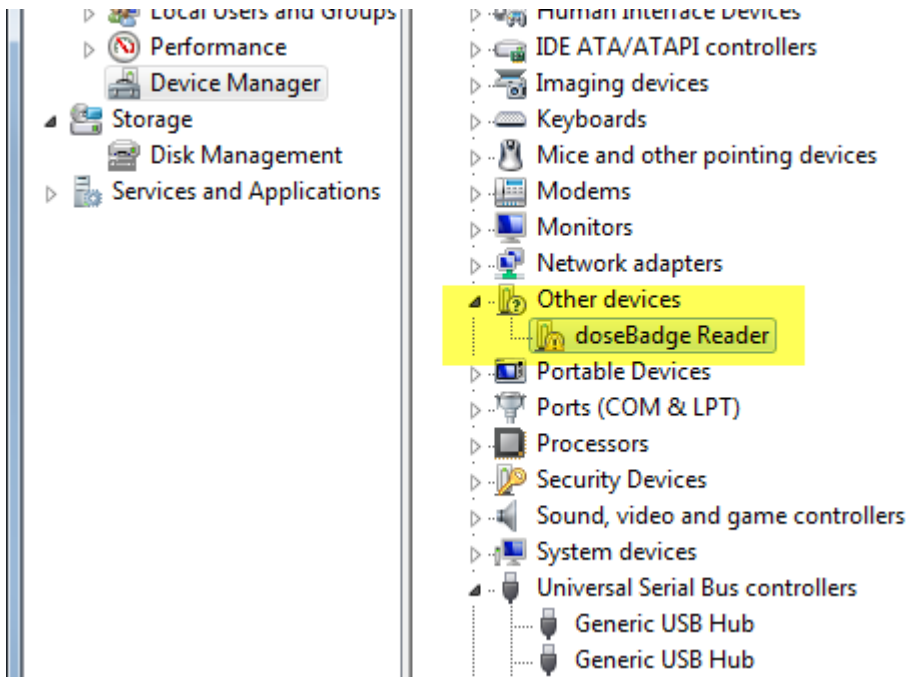
5 Was the Reader connected before the Cirrus software was installed?

When Cirrus software is installed from CD or download, the appropriate USB driver information is passed to Windows so it can recognise Reader hardware in the future.

However, if a Reader is connected via USB to a PC that does not have Cirrus software installed yet, Windows may not be able to identify the hardware and will mark it as an 'Unknown Device'. The Reader will not be able to connect to NoiseTools until the problem is rectified.

5.1 Diagnostics

In the Device Manager the Reader will appear in the 'Unknown Devices' section, marked with a yellow warning triangle:



Note that the device may be identified as 'doseBadge Reader' or by a generic description such as 'USB to Serial device'.

5.2 Solution

Update the driver manually via the Device Manager (right-click on the Reader's entry and choose 'Update Driver Software' to start the New Hardware Wizard).

The correct USB driver may be found automatically online, or can be downloaded as an executable file (.exe) or a ZIP file.

http://www.ftdichip.com/Drivers/CDM/CDM20824_Setup.exe

<http://www.ftdichip.com/Drivers/CDM/CDM%202.08.24%20WHQL%20Certified.zip>

6 Reader USB version

RC:110A, RC:112 & RC:110AL Readers manufactured before July 2009 were fitted with a USB 'identifier' that is not fully compatible with Windows Vista, Windows 7 or Windows 8.

Instruments with a serial number of 51930 or earlier will have been fitted with this identifier.



Updating the USB identifier is a simple process, but it **must** be carried out on a PC that already has the correct USB driver installed. For customers updating from an older PC (with Windows 98 or XP) the update must be done on the old PC before it is replaced by the new one.

If you do not have access to an old PC that worked with your Reader, the update can be carried out by a Cirrus Research Service Centre. Please contact Cirrus Research for details.

6.1 Diagnostics

The Reader identifies itself to Windows using a USB Device PID&VID. This is shown in the Properties sheet for the Reader in the Device Manager, as shown in the examples below.

The Reader may be shown in the Universal Serial Bus controllers section as **doseBadge Reader** (as shown below in Figure 5 and Figure 6) or as **USB Serial Converter** (as shown in Figure 7 and Figure 8)

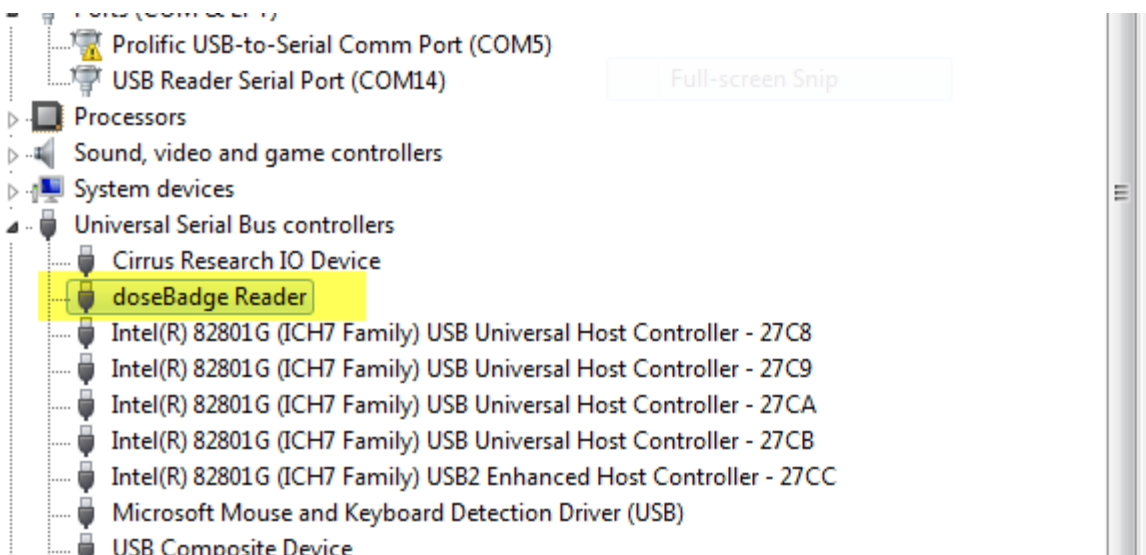


Figure 5

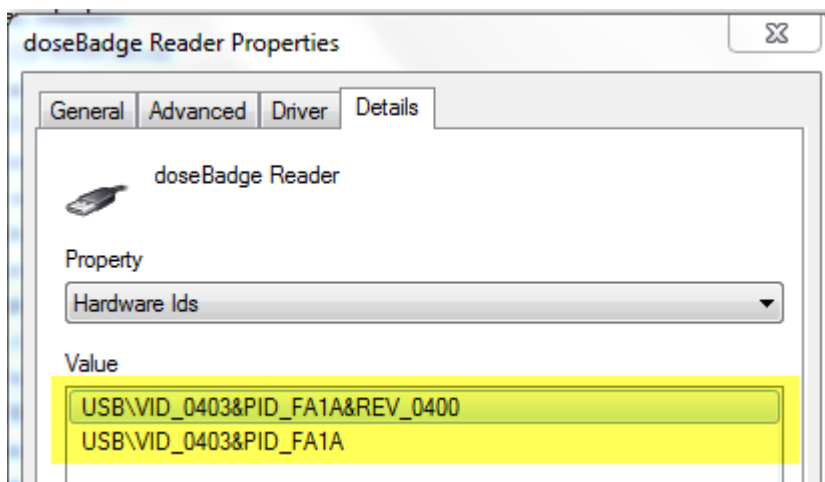


Figure 6

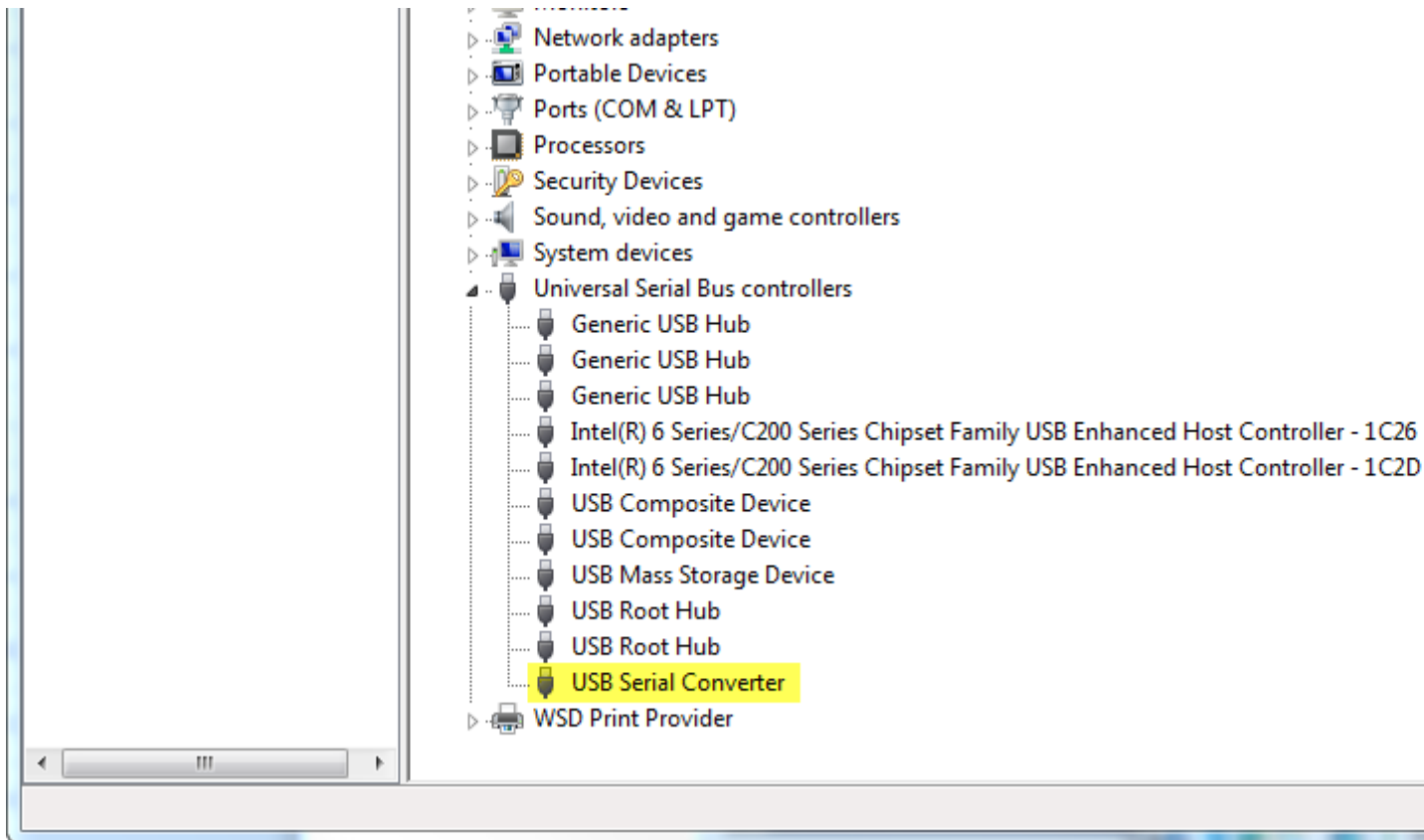


Figure 7

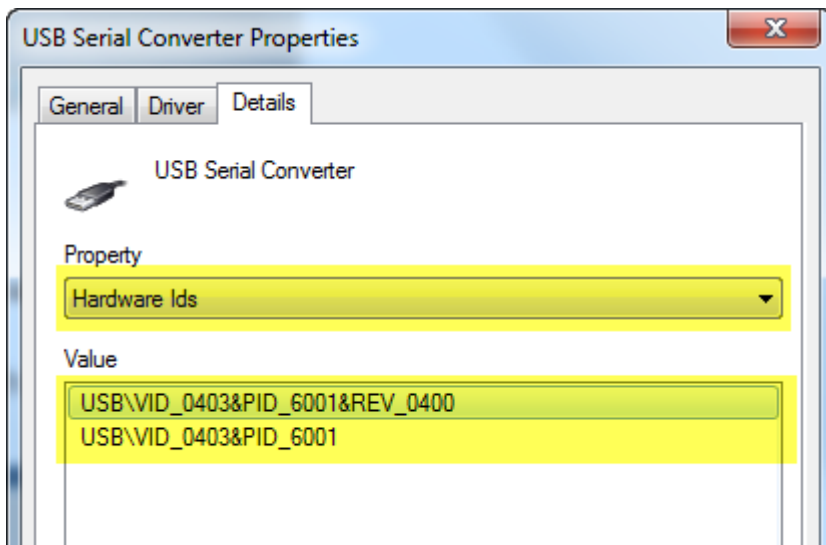


Figure 8

The old identifiers are: VID_0403&PID_FA1A

The new identifiers are VID_0403&PID_6001

6.2 Solution

If you have access to an older PC on which the Reader driver is correctly installed:

1. Download the upgrade tool from this link:
<http://www.cirrusresearch.co.uk/files/tools/ReaderUSBUpgrade.zip>
2. Extract the application ReaderUSBUpgrade.exe from the .zip archive.
3. Connect the RC:110A doseBadge Reader to the PC
4. Run the application and follow the on-screen instruction.

When the upgrade is complete, the Reader can be disconnected. It now contains the new USB identifier.

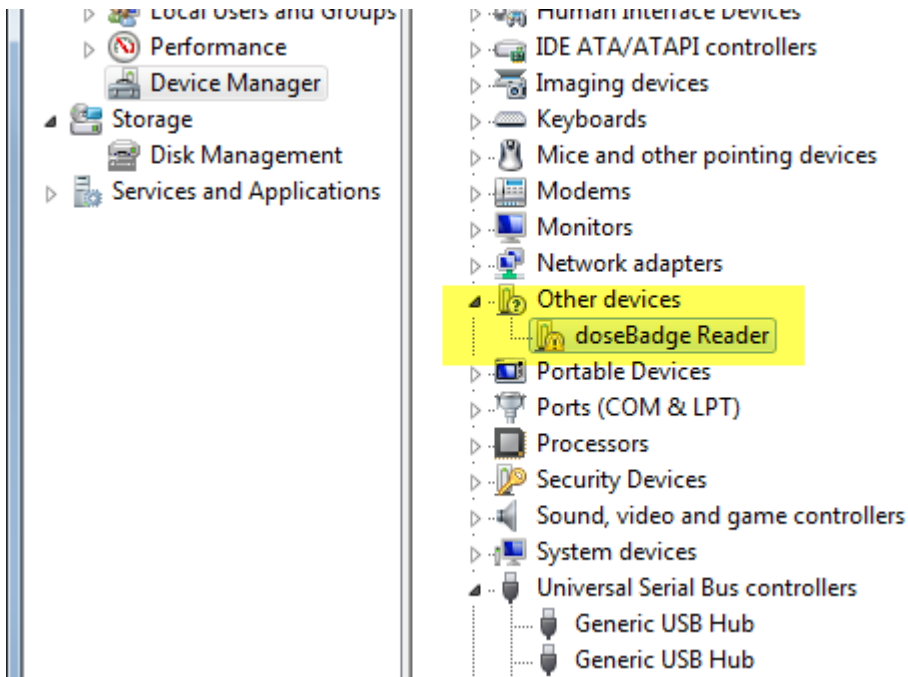
7 Was the Reader connected before the Cirrus software was installed?

When Cirrus software is installed from CD or download, the appropriate USB driver information is passed to Windows so it can recognise Reader hardware in the future.

However, if a Reader is connected via USB to a PC that does not have Cirrus software installed yet, Windows may not be able to identify the hardware and will mark it as an 'Unknown Device'. The Reader will not be able to connect to NoiseTools until the problem is rectified.

7.1 Diagnostics

In the Device Manager the Reader will appear in the 'Unknown Devices' section, marked with a yellow warning triangle:



Note that the device may be identified as 'doseBadge Reader' or by a generic description such as 'USB to Serial device'.

7.2 Solution

Update the driver manually via the Device Manager (right-click on the Reader's entry and choose 'Update Driver Software' to start the New Hardware Wizard).

The correct USB driver may be found automatically online, or can be downloaded as an executable file (.exe) or a ZIP file.

http://www.ftdichip.com/Drivers/CDM/CDM20824_Setup.exe

<http://www.ftdichip.com/Drivers/CDM/CDM%202.08.24%20WHQL%20Certified.zip>

8 Limited User Account Permissions

On many corporate and Public Sector IT systems, general users have limited permissions in their desktop user accounts.

In particular, USB driver installation is often prevented for security reasons.

8.1 Diagnostics

In many cases it is difficult to determine whether limited permissions are responsible for a Reader connection problem.

Error messages may appear when the Reader is connected for the first time – such as 'insufficient access rights'.

However Windows may give no information to show that the USB driver has not been installed.

The Reader may be shown as an 'Unknown Device' in the Device Manager as shown above.

8.2 Solution

Please consult your IT department and give them this document as a reference.

It is usually possible for an I.T. Person to use Administrator Permissions to install the Reader USB driver as described in the sections above.

The addresses given below are the Cirrus Research plc offices. Cirrus Research plc also have approved distributors and agents in many countries worldwide. For details of your local representative, please contact Cirrus Research plc at the address below. Contact details for Cirrus Research authorised distributors and agents are also available from the Internet Web site at the address shown below.

Main Office

Cirrus Research plc

Acoustic House

Bridlington Road

Hunmanby

North Yorkshire

United Kingdom

YO14 0PH

Telephone: +44 (0)1723 891655

Fax: +44 (0)1723 891742

E-mail: sales@cirrusresearch.co.uk

Web Site: www.cirrusresearch.co.uk

Germany

Cirrus Research plc Deutschland

Arabella Center

Lyoner Strasse 44 – 48

D-60528 Frankfurt

Germany

Tel: +49 (0)69 95932047

Fax: +49 (0)69 95932049

E-mail: vertrieb@cirrusresearch.de

Website: www.cirrusresearch.de

