Windows 7 USB Connectivity with Cirrus noise measurement instruments

Cirrus Research plc Technical Note No. 27



The information contained within this document is ©Copyright Cirrus Research plc 2011. All Rights Reserved. All Trademarks Acknowledged.

Cirrus Research plc Acoustic House Bridlington Road Hunmanby North Yorkshire YO14 oPH United Kingdom

Tel: 0845 230 2434 (UK) Tel: +44 1723 891655 (International) Fax: +44 1723 891742 Email: <u>sales@cirrusresearch.co.uk</u>

Web: www.cirrusresearch.co.uk

Twitter: @cirrusresearch

Optimus \mathbb{R} is a registered trademark of Cirrus Research plc. Acoustic FingerprintTM and AuditStoreTM trademarks pending.

Version 1.2 17th March 2016

1 Introduction	.4
2 Instruments with a USB Port	.5
2.1 CR:800C & CR:260A Sound Level Meters	.5
2.2 RC:110A doseBadge Reader Unit	.6
2.2.1 Troubleshooting	.6
3 Older instruments with a serial port	.7
3.1 USB to Serial (RS232) Adaptor	.7
4 Software programs	.8
4.1 NoiseTools	.8
4.1.1 Minimum System Requirements	.8
4.1.2 Recommended System Specification	.8
4.1.3 Ideal System Specification	.8
4.2 Deaf Defier3	.8
4.3 dBLink	.8
4.4 Soundsign Software	.8

1 Introduction

If you are upgrading your PC to Windows 7 and you are using a USB connection to download measurements, you may need to update the drivers to allow your software to communicate with your instrument.

The information in this Technical Note covers the main instrument ranges and software packages and the steps needed to upgrade or update existing drivers.

Please note that the installation of the any drivers must be carried using Full Administrator Access Rights.

If you do not have full administrator access rights, you will not be able to update or install the required drivers.

If you have any questions about the access rights available to you, please contact your IT support.

The information contained in this document is correct as of the 17th March 2016.

2 Instruments with a USB Port

2.1 CR:800C & CR:260A Sound Level Meters

The CR:800C and CR:260A instruments use an FTDI Driver which is supplied with the Deaf Defier software installation CD and as part of the software download.

To update the driver:

1. Download the latest driver from the chipset manufacturer website

Click here to download the latest driver. This is available as an executable file (.exe) or a ZIP file.

http://www.ftdichip.com/Drivers/CDM/CDM20814_Setup.exe

http://www.ftdichip.com/Drivers/CDM/CDM20814_WHQL_Certified.zip

2. Disconnect the sound level meter from the PC and close the Deaf Defier3 software program completely.

3. Run the driver installation program downloaded in step 1

4. When the installation is complete, connect the Sound level meter to the PC. Windows will detect the new hardware and install the new driver. Deaf Defier3 will now be able to connect to the sound level meter.

2.2 RC:110A doseBadge Reader Unit

The RC:110A Reader Unit (USB) uses an FTDI Driver which is supplied with the dBLink software installation CD and as part of the software download available from the Cirrus website.

To update the driver:

a. Download the latest driver from the chipset manufacturer website

Click here to download the latest driver. This is available as an executable file (.exe) or a ZIP file.

http://www.ftdichip.com/Drivers/CDM/CDM20814_Setup.exe

http://www.ftdichip.com/Drivers/CDM/CDM20814_WHQL_Certified.zip

b. Disconnect the doseBadge Reader from the PC and close the dBLink3 software program completely.

c. Run the driver installation program downloaded in step 1

d. When the installation is complete, connect the RC:110A doseBadge Reader to the PC. Windows will detect the new hardware and install the new driver. dBLink will now be able to connect to the Reader.

2.2.1 Troubleshooting

The steps detailed above will install the correct Windows 7 driver for the RC:110A doseBadge Reader. If when the doseBadge Reader is connected to the PC, Windows 7 cannot find or install the driver, your Reader unit may need an upgrade.

The RC:110A doseBadge Reader units manufactured before 1st July 2009 have a different USB driver in their internal software. This may prevent the new driver from correctly identifying the Reader.

These steps do not apply to RC:110A doseBadge Reader Units manufactured after 1st July 2009.

If this occurs, you may see an error message such as "Windows cannot find the driver for this device" or similar.

1. To resolve this issue, download the following ZIP and extract the program.

http://www.cirrusresearch.co.uk/files/tools/ReaderUSBUpgrade.zip

2. Connect the RC:110A doseBadge Reader to the PC

3. Run the ReaderUSBUpgrade.exe program and follow the on-screen instruction.

When the upgrade is complete, disconnect the RC:110 doseBadge Reader Unit from the PC, wait 30 seconds and reconnect. The new USB driver will be installed correctly.

3 Older instruments with a serial port

The older Cirrus sound level meters and doseBadge Reader units listed below are connected using an RS232 output. To allow these instruments to be used with a USB port, a USB to Serial Adaptor is required. Cirrus supplies the Sunix UTS1009B USD-Serial Adaptor and this has been tested with the instruments listed below.

RC:100A doseBadge Reader RC:100B doseBadge Reader CR:700 Series (All versions) CR:800A Sound Level Meters CR:800B Sound Level Meters CR:260 Sound Level Meters (excluding CR:260A versions)

3.1 USB to Serial (RS232) Adaptor

Please note that if you are using a USB to Serial Adaptor that has not been supplied to you by Cirrus Research plc, we cannot provide support for these products. Please contact the vendor or manufacturer for support.

The Sunix USB to Serial Adaptor uses a driver and this must be the latest version to allow the unit to operate under Windows 7.

The CD supplied with the adaptor will include drivers but depending upon when the adaptor was supplied, these may not be compatible with Windows 7.

The latest drivers are available from the manufacturer's website at www.sunix.com.tw

To update the drivers:

1. Plug in the USB to Serial Converter.

2. Open the Device Manager. There will be a yellow warning icon shown next to any devices that are a problem.

3. Locate the warning for the USB to Serial Converter and uninstall the driver.

- 4. Unplug the USB to Serial Converter.
- 5. Run the current Sunix installer software.
- 6. Choose "Uninstall" from the options.
- 7. When this is complete, run the Sunix installer software again.
- 8. Choose to install a new version of the drivers.

9. When the installation is complete, connect the USB to Serial converter and Windows 7 will load the correct driver.

10. Check in the device manager that there are no warnings for the USB to Serial Converter.

This will have updated the drivers and the instrument should be able to connect successfully

4 Software programs

4.1 NoiseTools

4.1.1 Minimum System Requirements

- Windows 7 SP1 *
- CPU: 2GHz Dual Core
- Memory: 2GB
- Storage: 10GB free space
- Display: 1280×800

4.1.2 Recommended System Specification

- Windows 7 SP1 Professional/Enterprise (x64)
- CPU: 3GHz Dual Core
- Memory: 4GB
- Storage: 50GB free space
- Display: 1280×1024

4.1.3 Ideal System Specification

- Windows 8.1 Pro/Enterprise (x64) or Windows 10 (x64)
- CPU: 3GHz Quad Core
- Memory: 8GB
- Storage: 100GB free space
- Display: 2x 1920×1080
- Dedicated NVIDIA graphics card with CUDA support
- Dedicated sound card and external speakers

4.2 Deaf Defier3

The Deaf Defier3 software is compatible with the following operating systems:

Windows XP SP2 Windows Vista (32bit & 64bit versions) Windows 7 (32bit & 64bit versions)

4.3 dBLink

The dBLink software for the doseBadge is compatible with the following operating systems:

Windows XP SP2 Windows Vista (32bit & 64bit versions) Windows 7 (32bit & 64bit versions)

4.4 Soundsign Software

The SoundSign software is compatible with the following operating systems:

Windows Vista (32bit & 64bit versions) Windows 7 (32bit & 64bit versions)

The CR:203 SoundSign Data Logger requires a USB Driver which is supplied on the installation CD. This driver is compatible with the operating systems listed above.