

OHD/Cirrus Research CK:112A & CK:112AIS doseBadge Training Guide



First you will need to download the software.

If you do not have the software, go to www.cirrusresearch.co.uk.

- On the left menu under “Products” click “Software & Updates”.
- Scroll to the bottom of the page where it says “Software downloads”.
- The item you want to download is **dBLink3**.
- **Ensure the Reader Unit is not connected to the PC.**
- It is recommended that you accept the default settings.
- You must restart your computer before opening the software

Note: All versions of Windows from 98SE through Vista are supported by dBlink 3 version 3.1.1 Build 3 and later.

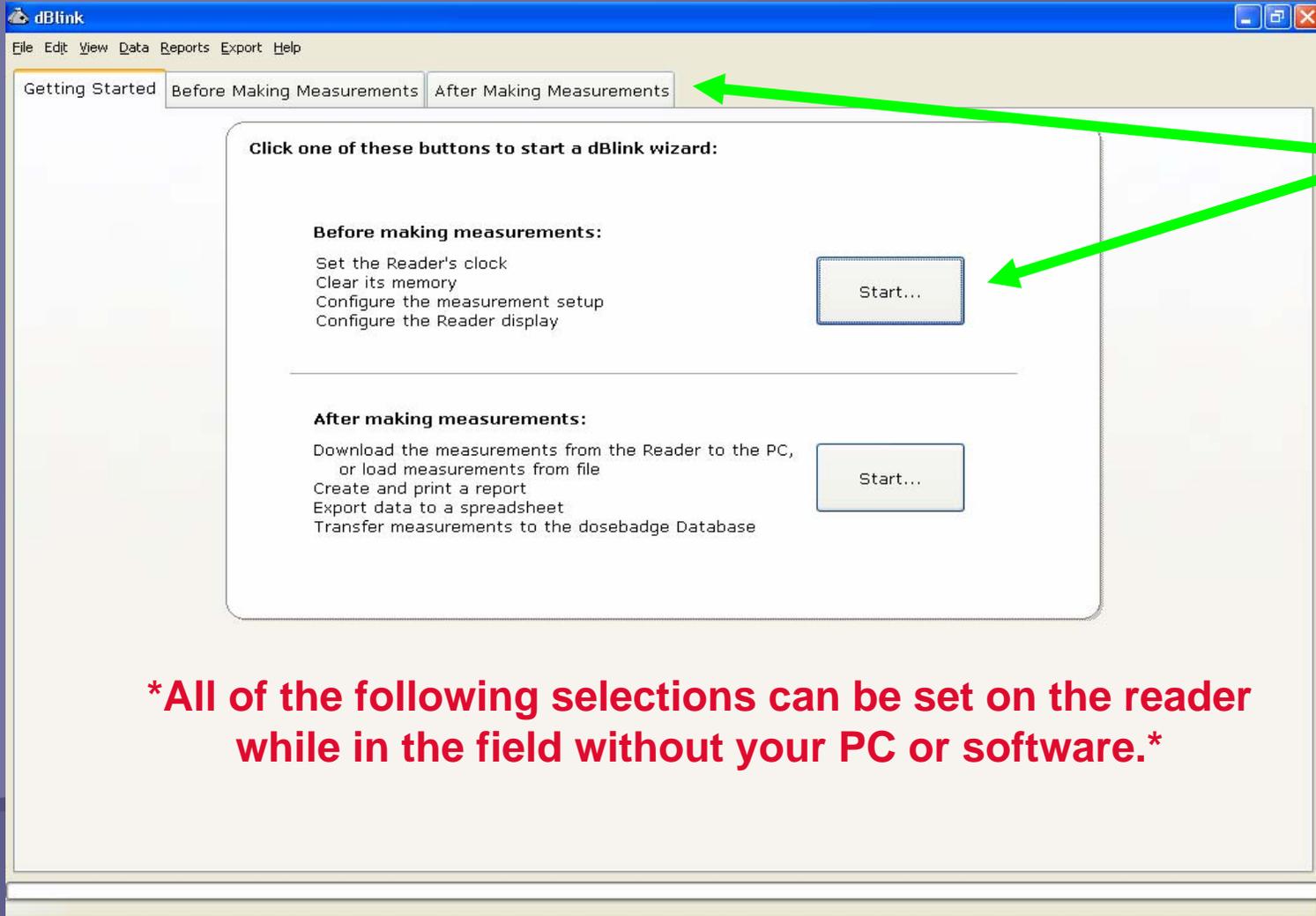
Connect the USB cable to your computer and the reader.
The dBlink3 software should open and the reader should turn
on. You are now ready to begin.



Plug this end
of the USB
cable into your
PC.

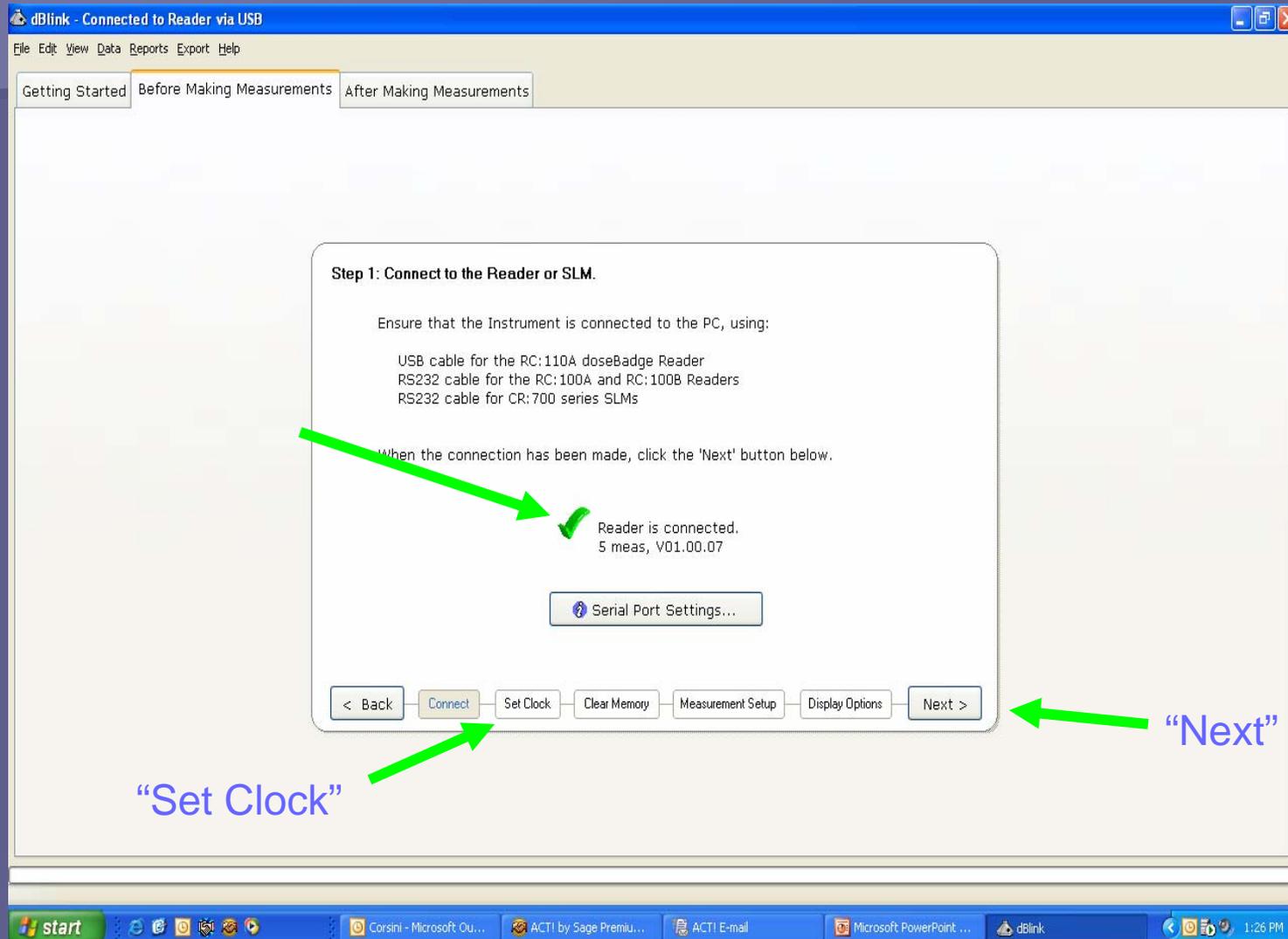
Reader Setup

Click the "Start" button
under "Before making measurement" window or click the tab.

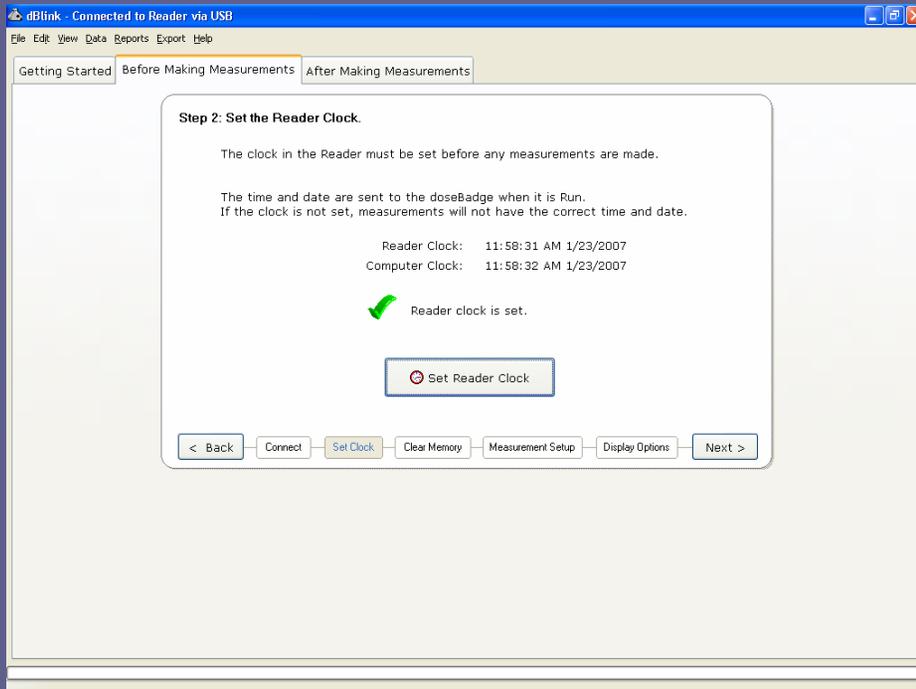
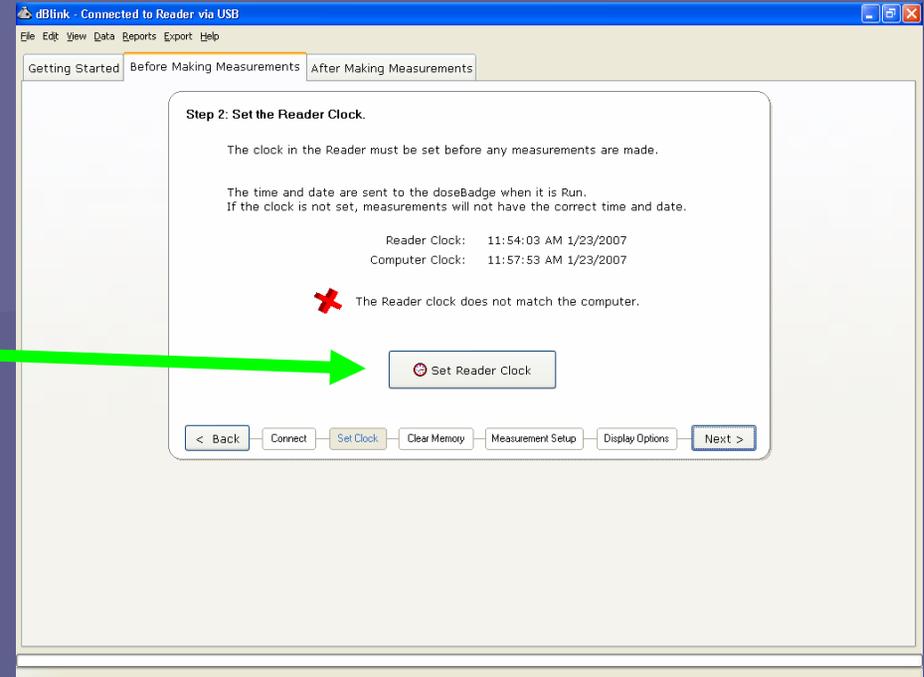


All of the following selections can be set on the reader while in the field without your PC or software.

You should see the green check mark indicating the reader is connected to the software. Click "Next" or "Set Clock" to continue the reader setup.

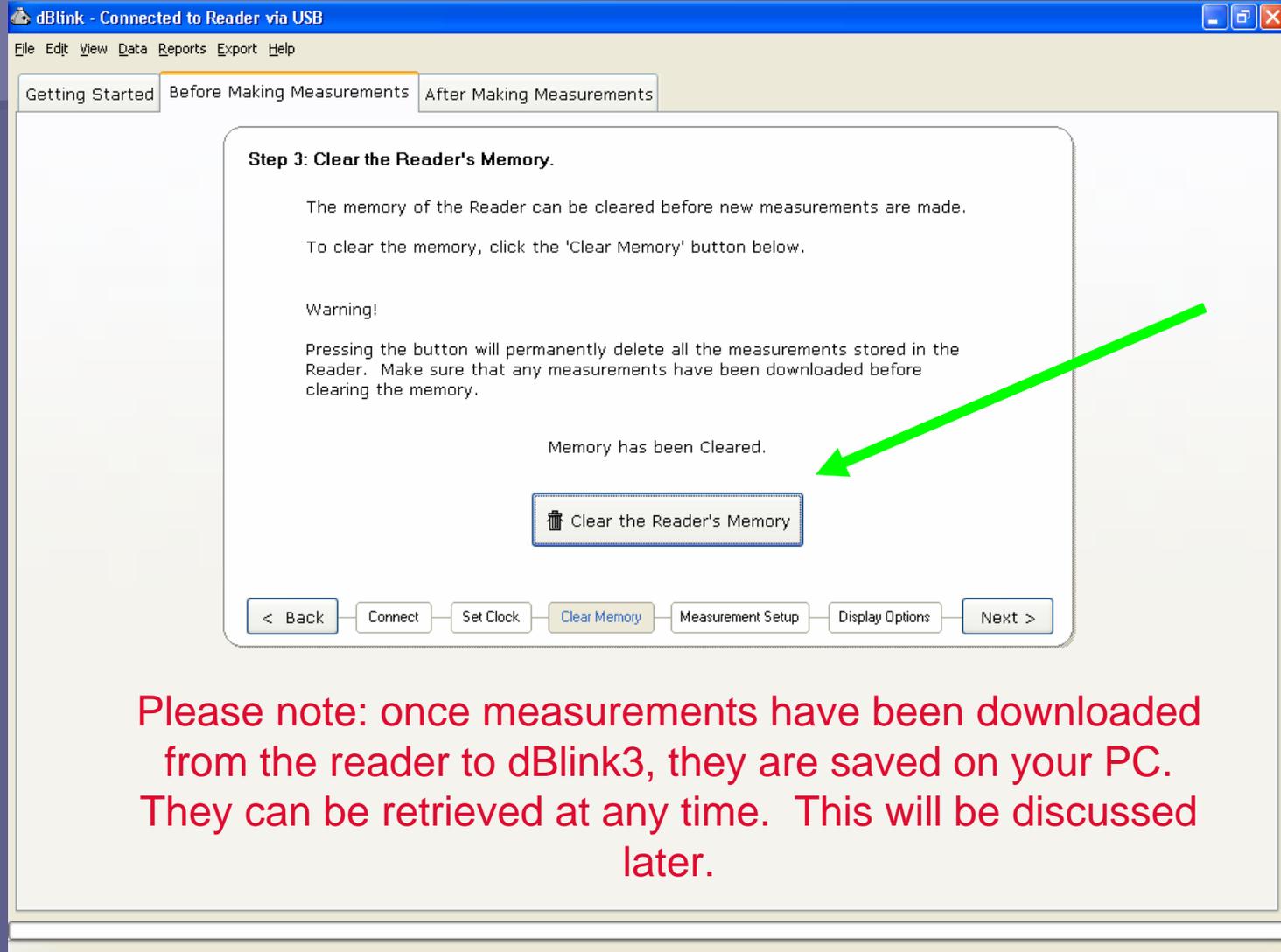


The reader clock can now be set to the computer clock so it will record the correct time and date on your measurements. Click "Set Reader Clock" to do this.



Once you see the green check mark you can click "Next" or "Clear Memory" to continue.

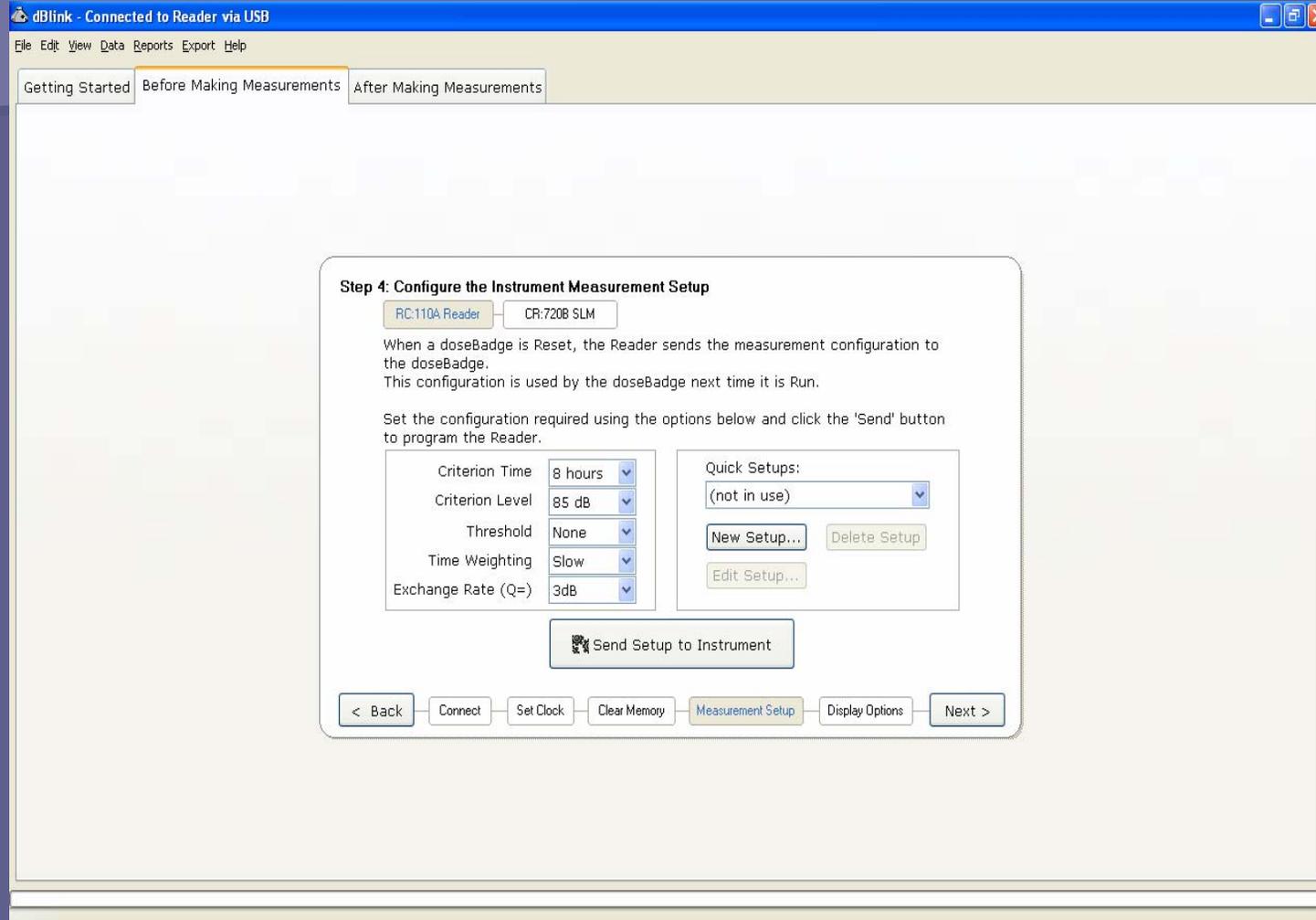
You can clear the memory of the doseBadge reader before you take another reading. However, this will permanently delete any measurements that are stored in your reader. If you do not want to clear the memory, just click "Next" or "Measurement Setup".



The screenshot shows the dBlink software interface with the title bar "dBlink - Connected to Reader via USB". The menu bar includes "File", "Edit", "View", "Data", "Reports", "Export", and "Help". There are three tabs: "Getting Started", "Before Making Measurements", and "After Making Measurements". The main content area displays "Step 3: Clear the Reader's Memory." with the following text: "The memory of the Reader can be cleared before new measurements are made. To clear the memory, click the 'Clear Memory' button below. Warning! Pressing the button will permanently delete all the measurements stored in the Reader. Make sure that any measurements have been downloaded before clearing the memory." Below this text, it says "Memory has been Cleared." and there is a button labeled "Clear the Reader's Memory" with a trash icon. A green arrow points to this button. At the bottom, there is a navigation bar with buttons: "< Back", "Connect", "Set Clock", "Clear Memory", "Measurement Setup", "Display Options", and "Next >".

Please note: once measurements have been downloaded from the reader to dBlink3, they are saved on your PC. They can be retrieved at any time. This will be discussed later.

The 'Measurement Setup' screen is not applicable to the CR:112A doseBadge series. The measurement parameters are pre-set.



Next you have the option to configure the reader display. If you do not need to, then you can disconnect the reader and begin your testing.

Step 5: Configure the Reader's Display Options

Choose which data items are displayed on the Reader's LCD display, and select a format for displaying dates.

Display Items

- Dose
- Est.Dose
- Exposure
- Est.Exposure
- LAE
- Calibrations

Date Format

- day month year
- month day year

Date Separator

- /
-

< Back Connect Set Clock Clear Memory Measurement Setup **Display Options** Finish >

Make sure you click this button to send your selections to the reader

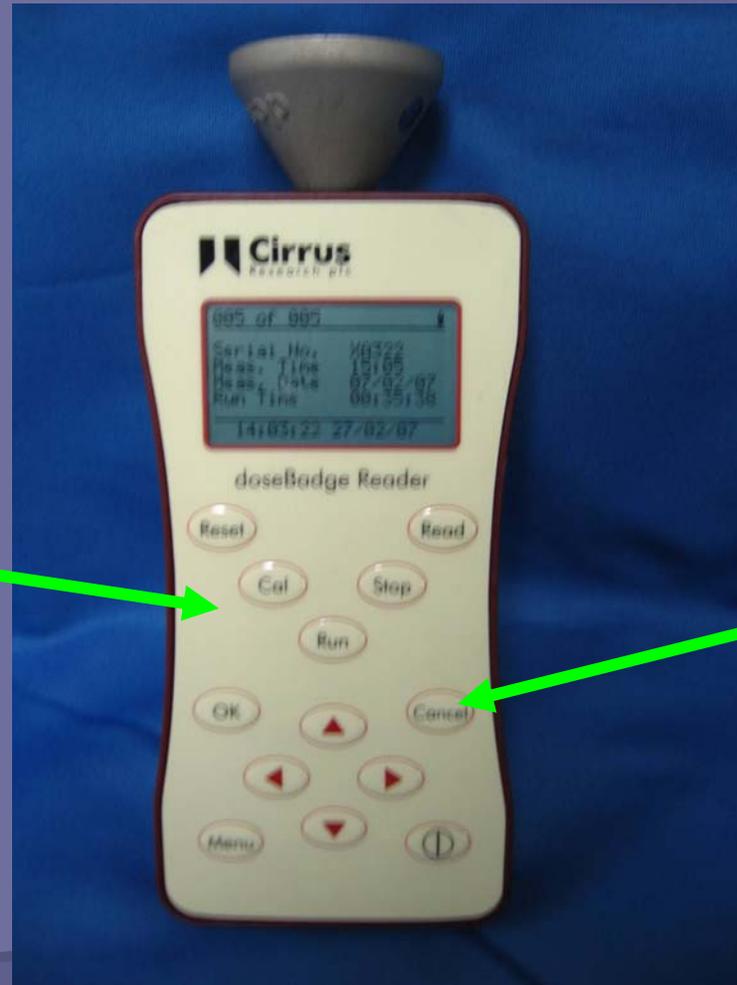
All of the settings programmed up to this point will remain stored in your reader until you change them

doseBadge Setup and Operation

Insert the doseBadge into the calibration cavity located at end of the reader.



Now you will follow the “V” pattern on your reader and this will guide you through the process to begin taking your measurements.



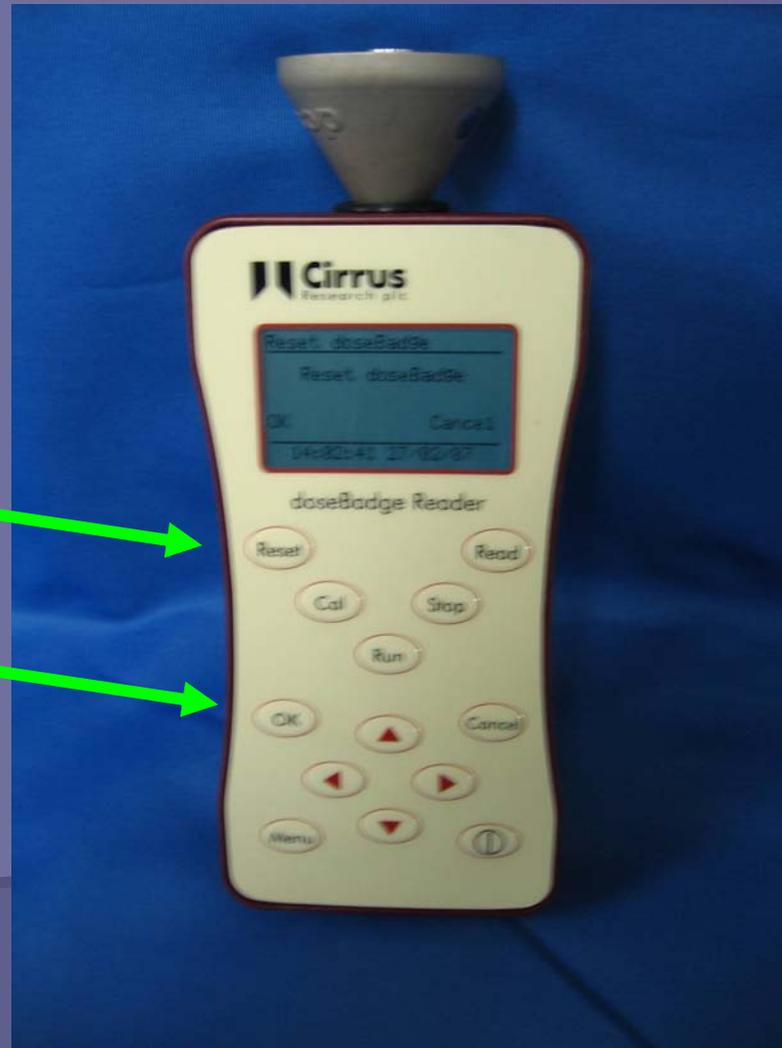
The “V” buttons command and operate the doseBadge

Operational buttons are used for programming the reader and for viewing the measurements stored in the reader

To begin, press the "Reset" button then "OK" to confirm.
This clears the doseBadge memory. It also provides the
date/time stamp to the doseBadge for the next
measurement.

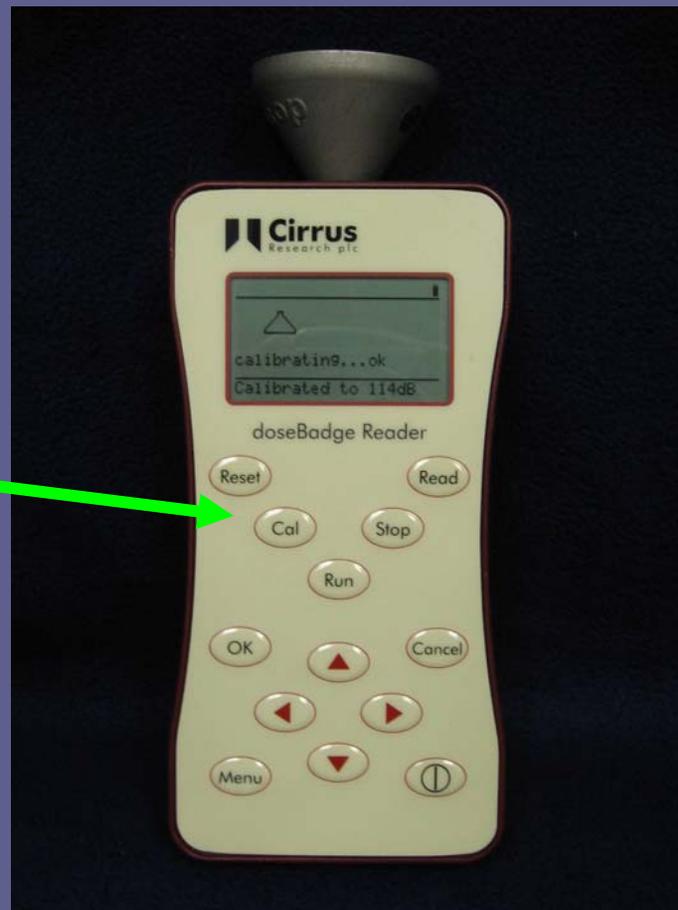
Reset

OK

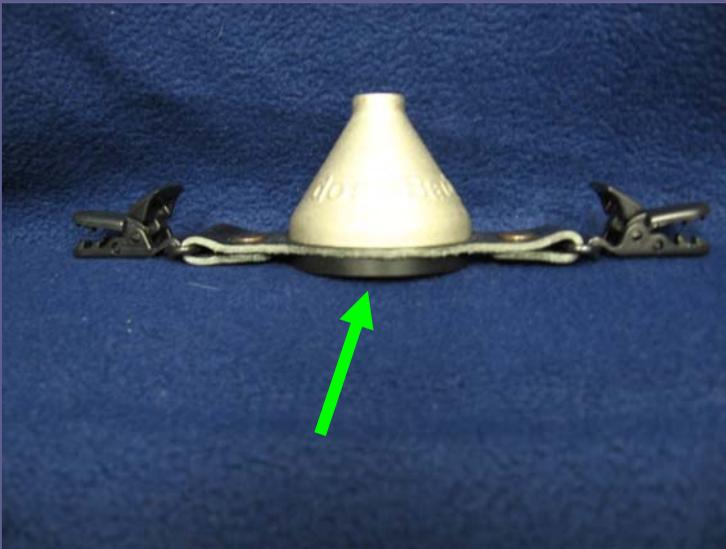


Continuing with the "V" pattern, press the "Cal" button. This will take about 10 seconds. It will say "Calibrating...ok" when finished. The doseBadge will be calibrated to 114dB. You should always pre-calibrate and post calibrate. This will give you a validation reference to the accuracy for your measurement.

CAL



Attach the doseBadge to the mounting strap using the plastic disk. The doseBadge may now be attached to the test subject.

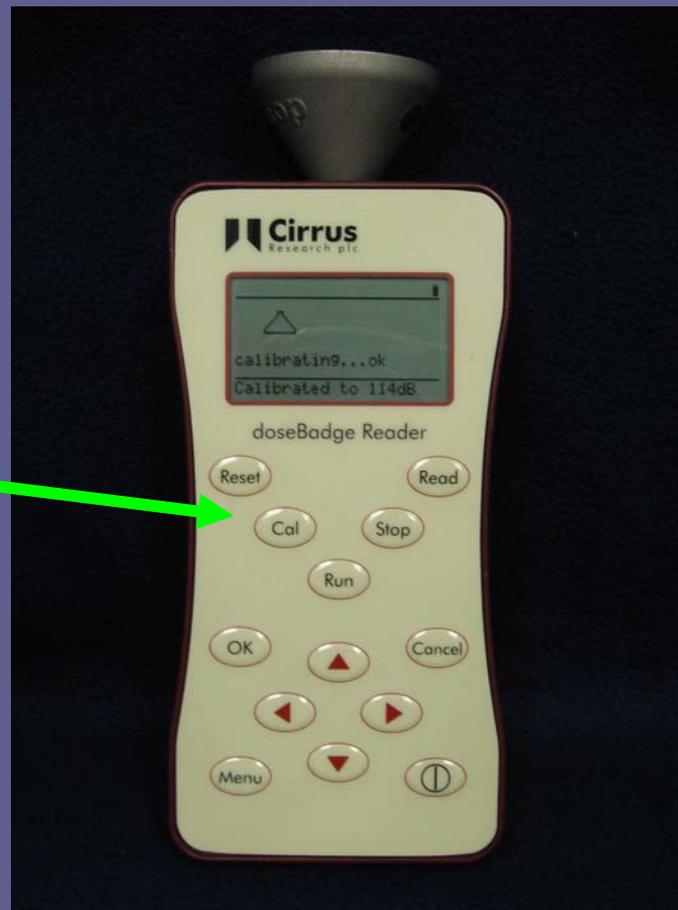


To start a measurement point either the reader or keyfob toward the doseBadge window and press “Run”. The light inside the doseBadge window should flash blue. The doseBadge is now running. It will continue to run until it is stopped by the reader or keyfob. There are no controls on the doseBadge, therefore the test subject cannot tamper with it. The doseBadge is capable of testing at least two eight hour shifts before needing to be recharged. When you are ready to stop the measurement, simply point the reader or keyfob at the doseBadge window and press “Stop”



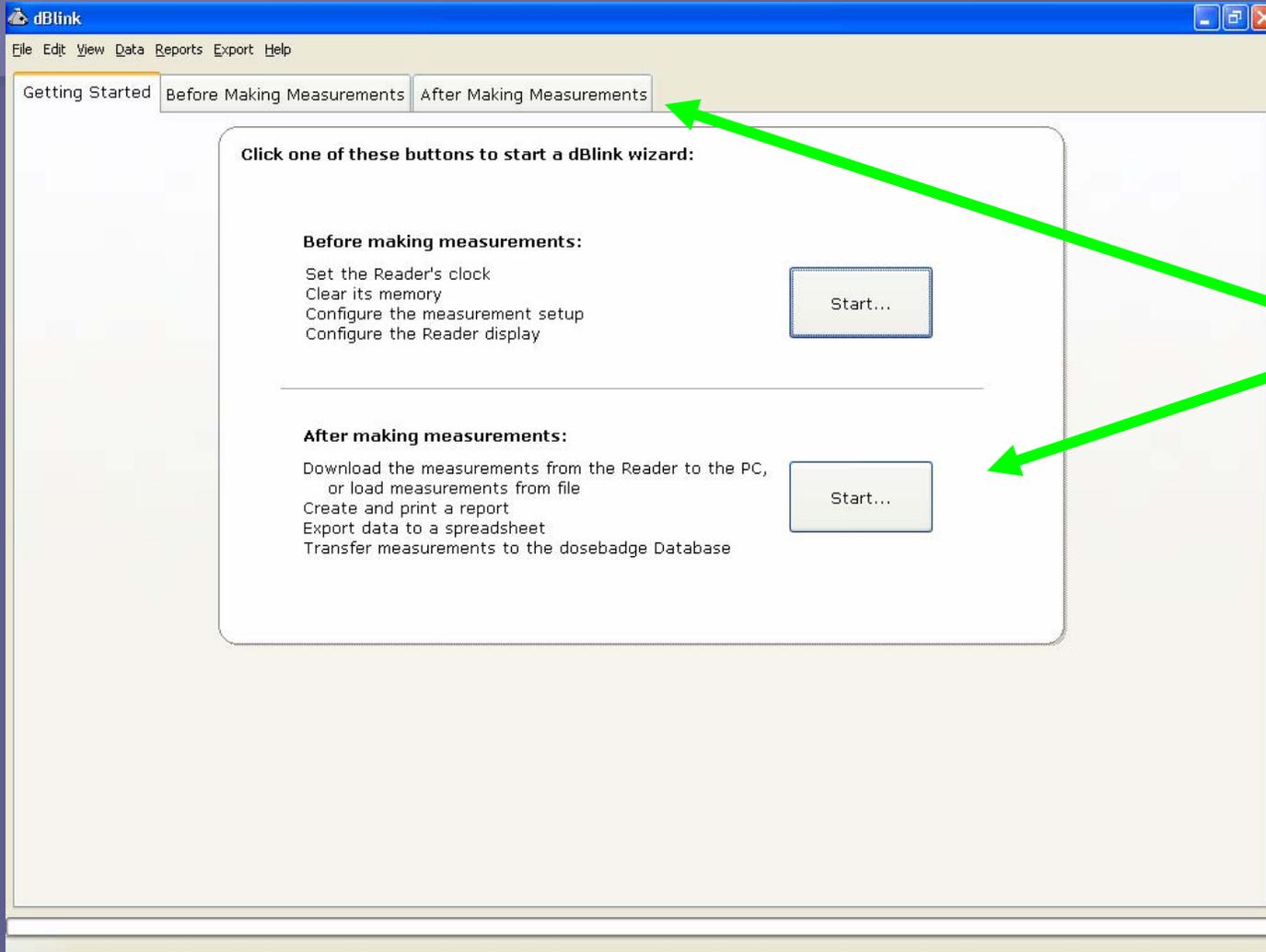
You are now ready to post calibrate the doseBadge and download your data from the doseBadge to the reader. Connect the doseBadge to the reader (align the windows) and press "Calibrate". After the post calibration is complete press the "Read" button. The measurement can now be viewed via the reader display or the dBlink3 software.

CAL



Data Download and Reporting

To download the data from the reader into the software reconnect the reader to the PC. Click the "Start" under "After making measurement" window or the tab up top.



Click to download the measurements stored in the reader.
This data file is saved automatically.

You will see a check mark when your data has been downloaded or opened.

Step 2: Load Measurements from the Reader or from Disk.

To download the measurements stored in the Reader, click here:

To load measurements from a data file on disk, click here:

2 measurements have been received.

The data can be viewed by clicking the button below.

< Back Connect **Download** Create Report Customise Report Print Report Export Data Next >

Download your data from the reader

Load files from PC

Allows either download or opened files to be viewed

The data is automatically stored in the “My documents“ > “dBlink“ > “data files” folder. The data files are named by the 2 digit date, 2 digit month, & 4 digit year of the download (example 14012007.0000crdbm).

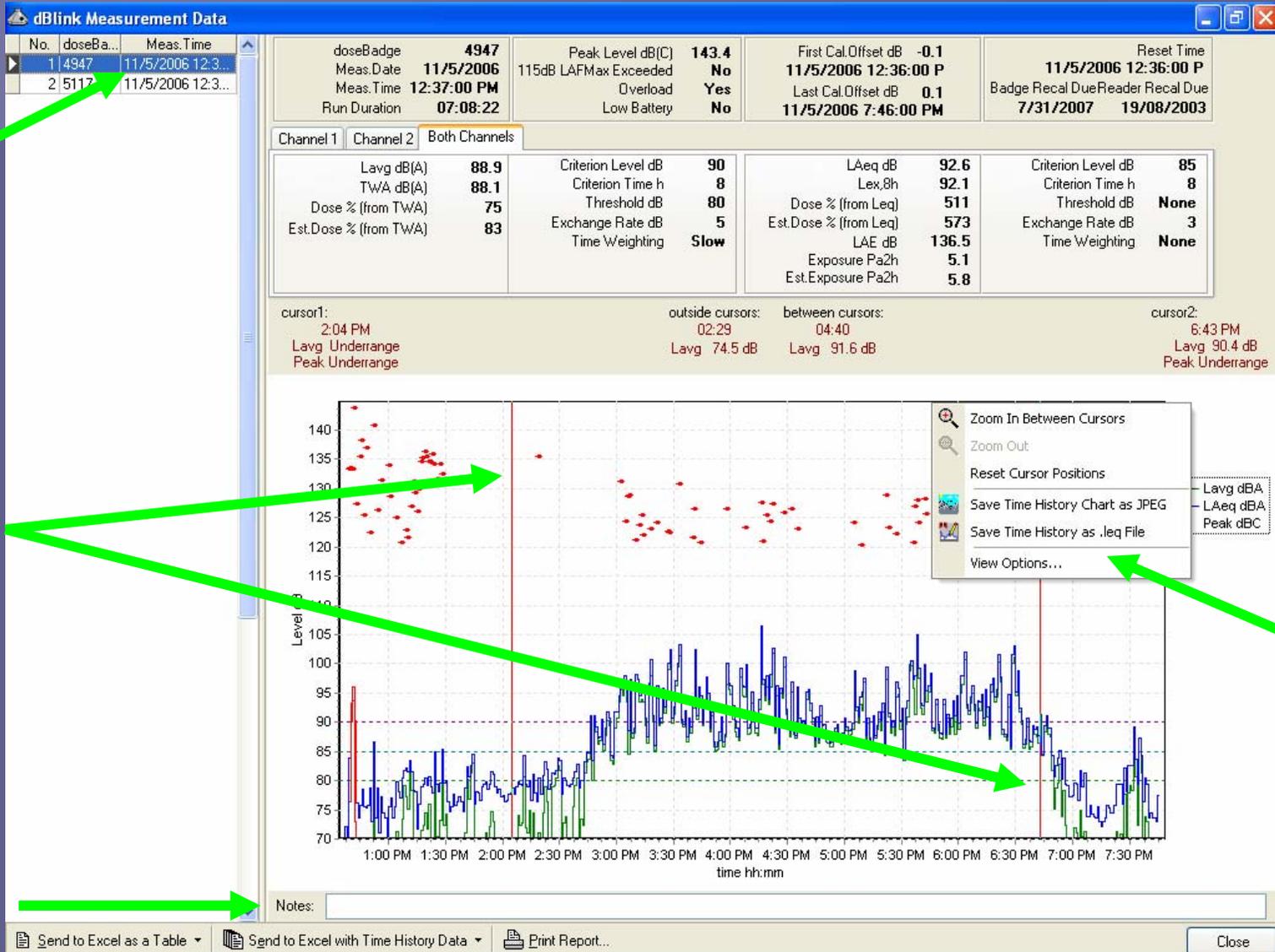
This data has been saved as: \\OHD5RV001\Users\jstrickland\My Documents\dBlink\data files\23012007_00000.crdbm

You can also view your data

Right click for more options.

The red cursors can be moved to focus in on specific time periods.

Notes specific to an individual measurement.



You can right click anywhere in the Time History graph for more options. Click "View Options" for more.

You can choose from two different types of reports: Compact Report or Comprehensive Report. A Compact Report will include multiple measurements on one page. A Comprehensive Report includes only one measurement per page.

You can choose to include all measurements or only those selected.

Step 3: Create a Report Based on this Measurement Data.

Reports can either be printed directly, or exported to other applications such as a wordprocessor, spreadsheet or Adobe PDF document.

Choose a style for the report:

Compact Report Comprehensive Report

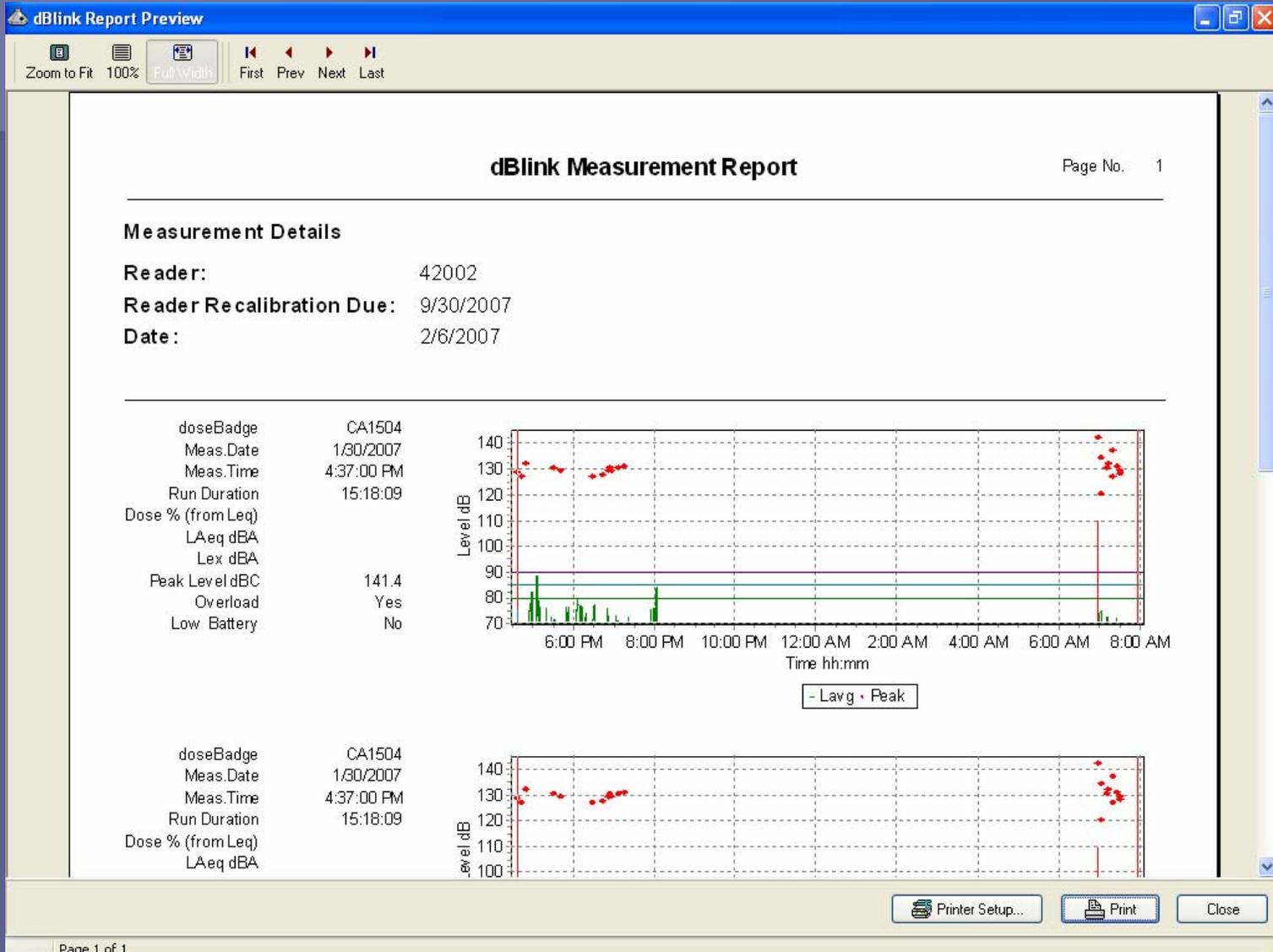
...and choose whether to include all measurements, or just those selected:

Include all Measurements in Reports
 Include only Selected Measurements in Reports

< Back Connect Download **Create Report** Customise Report Print Report Export Data Next >

This data has been saved as: \\OHDSRV001\Users\jstrickland\My Documents\dBlink\data files\23012007_00000.crdm

This is a preview of a compact report.
A compact report shows multiple
measurements on 1 page.



This is a preview of a comprehensive report.
 A comprehensive report shows a each measurement on individual pages.

dBlink Report Preview [Min] [Max] [Close]

Zoom to Fit 100% Full Width First Prev Next Last

Test Read Page No. 1

Measurement Details

Notes:
 Jill's Test Read

Reader: 41217
Reader Recalibration Due: 5/31/2007
Date: 1/23/2007

Read Order	1	Peak Level dBC	143.1	Reset Time	
doseBadge	CA1502	115dB LAFMax Exceeded	No		1/23/2007 12:10:00 P
Meas.Date	1/23/2007	Overload	Yes	First Cal.Offset dB	-0.1
Meas.Time	12:10:00 PM	Low Battery	No		1/23/2007 12:11:00 P
Run Duration	01:20:41			Last Cal.Offset dB	-0.1
Lavg dBA	43.7	Criterion Level dB	90		1/23/2007 1:32:00 PM
TWA dBA	30.8	Criterion Time h	8	Badge Recal Due	
Dose % (from TWA)	0	Threshold dB	80		11/30/2007
Est.Dose % (from TWA)	0	Exchange Rate dB	5	Reader Recal Due	
		Time Weighting	Slow		5/31/2007

Notes

[Printer Setup...] [Print] [Close]

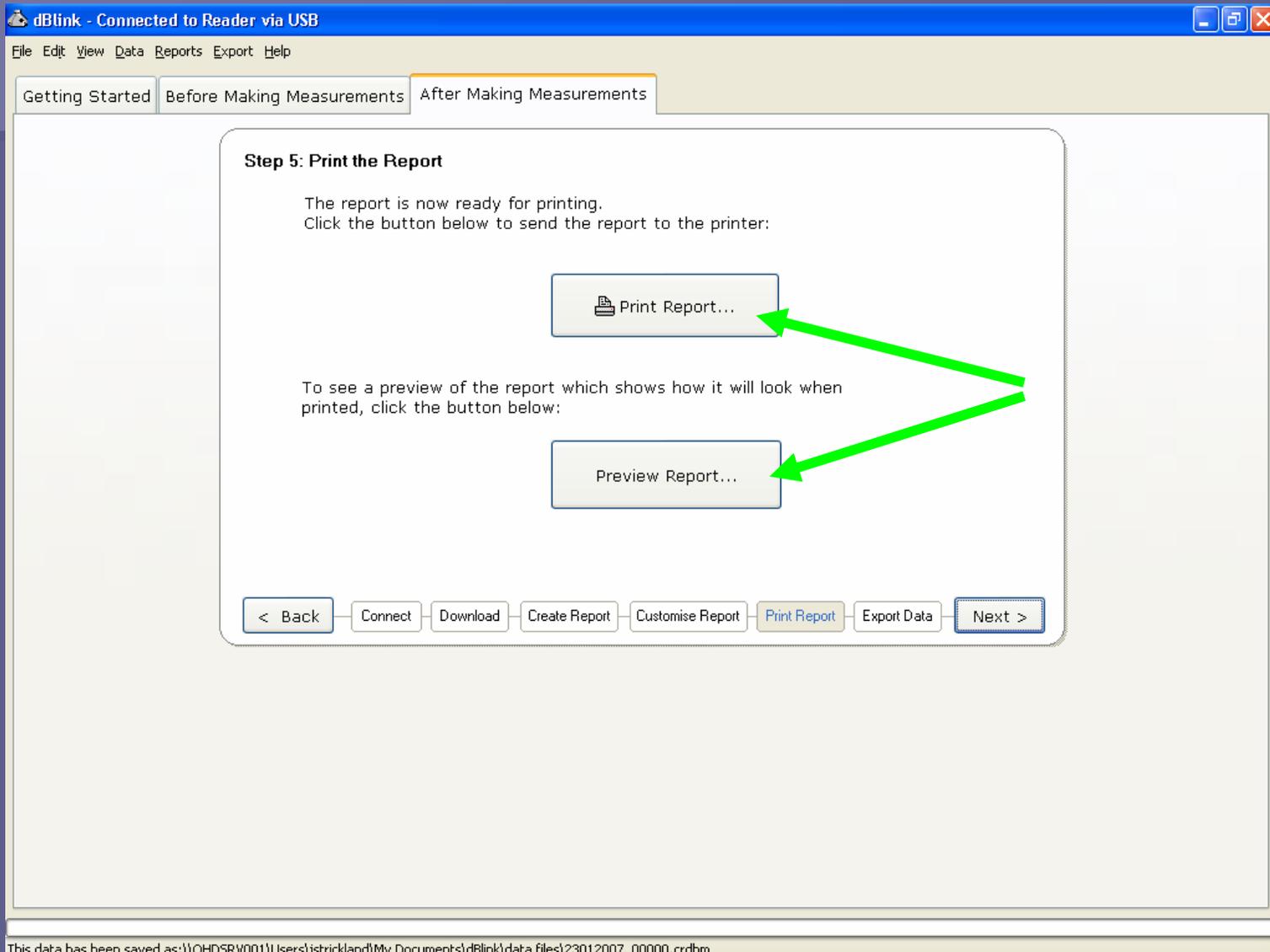
Page 1 of 2

You can customize your report by giving a title and notes about the report. For example,

The screenshot shows the 'dblink - Connected to Reader via USB' application window. The 'After Making Measurements' tab is active. The 'Step 4: Customise the Report' dialog box is open, featuring a checked checkbox 'Include the following information in the report:' and a 'Clear All' button. The 'Report Title' field is filled with 'Test Read', and the 'Notes' field contains 'Jill's Test Read'. Other fields like 'Location', 'Recommendations for Action', and 'Made by' are empty. A 'Choose Report Data Items...' button is present. At the bottom, a navigation bar includes buttons for '< Back', 'Connect', 'Download', 'Create Report', 'Customise Report', 'Print Report', 'Export Data', and 'Next >'. A green arrow points from the right side of the screen to the 'Report Title' field.

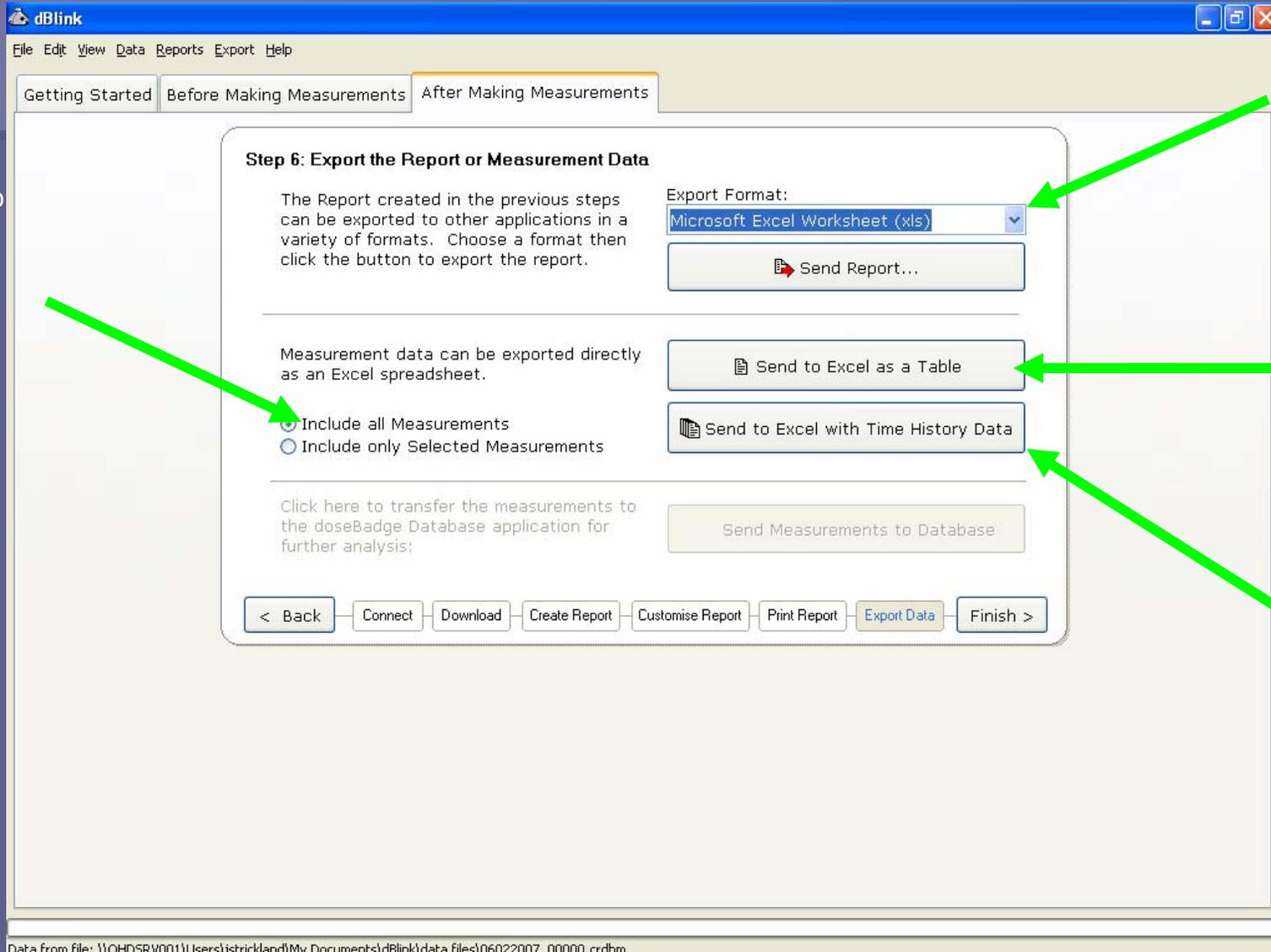
Create a title and write notes for your report.

You can either preview or print your report by clicking on the appropriate button below.



You can export your data into several different options.
The most common being a PDF file or Excel spreadsheet.

You can choose to include all measurements or only those selected.

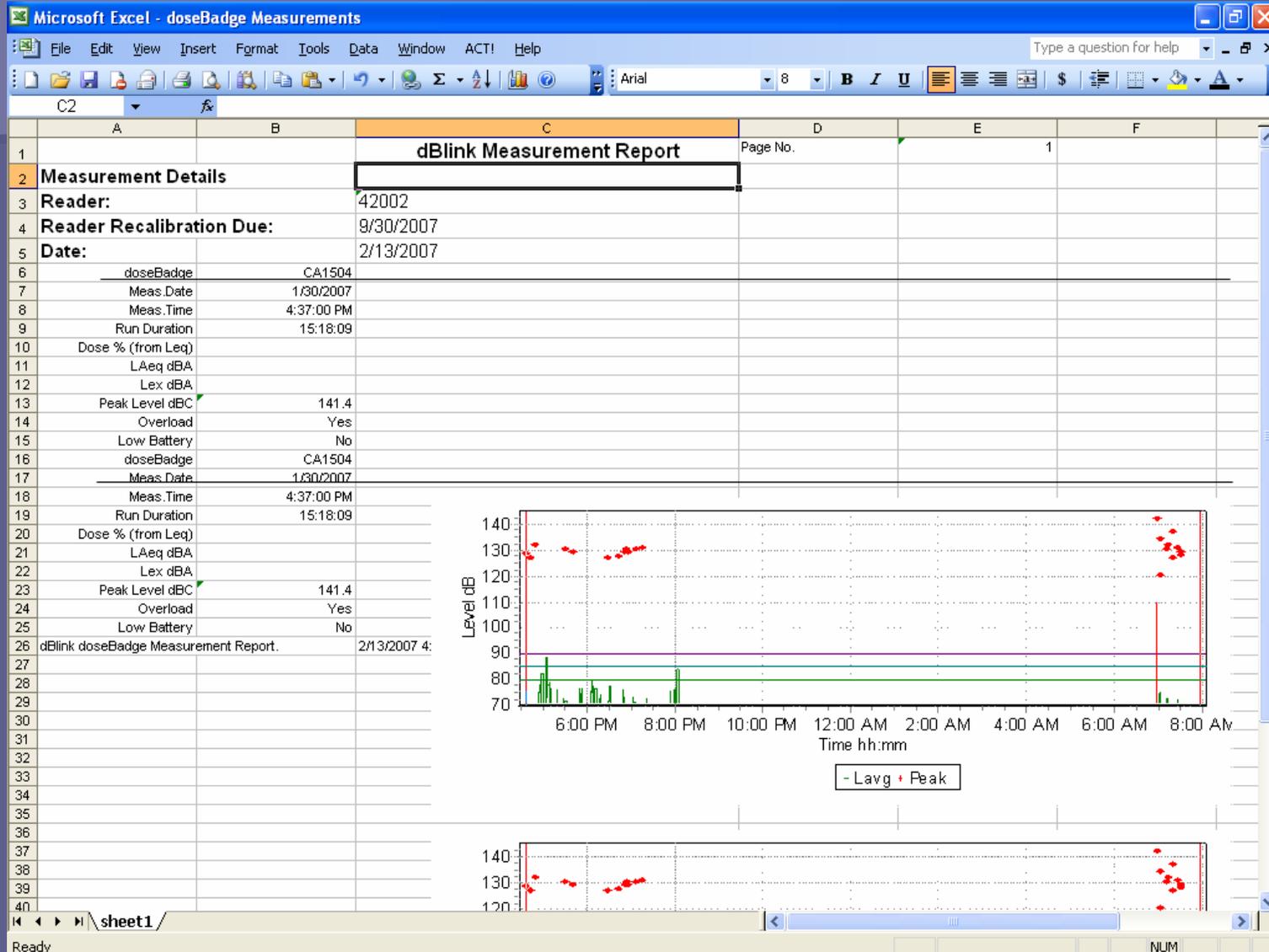


Choose from drop down menu the format you would like to use to export your report.

You can send the data to a table format in Excel.

You can send the data with time history to an excel spreadsheet.

Exported data in Excel Spreadsheet.



Exported data in Excel table

Microsoft Excel - doseBadge Measurements

File Edit View Insert Format Tools Data Window ACT! Help

Type a question for help

H17

	A	B	C	D	E	F	G	H	I	J
1	Read Order	doseBadge	Dose % (from Leq)	Exposure Pa2h	LAEq dBA	LAE dBA	Est.Dose % (from Leq)	Est.Exposure Pa2h	Lex dBA	Lavg dBA
2	1	CA1504	null	null			null	null		80
3	2	CA1504	null	null			null	null		80
4										
5	TWA dBA	Dose % (from TWA)	Est.Dose % (from TWA)	Peak Exceeded?	Overload	Low Battery	Reset Time	Run Duration	Meas.Date Time	Reader Recal Due
6	82.8	60.00	null	FALSE	FALSE	FALSE	1/30/2007 4:37:00 PM	15:18:09	1/30/2007 4:37:00 PM	9/30/2007
7	82.8	60.00	null	FALSE	FALSE	FALSE	1/30/2007 4:37:00 PM	15:18:09	1/30/2007 4:37:00 PM	9/30/2007
8										
9	Badge Recal Due	First Cal.Time	Last Cal Time	Reader	First Cal.Offset dB	Last Cal.Offset dB	Peak Level dBC	Meas.Date	Meas.Time	Criterion Level dB
10	11/30/2007	1/30/2007 4:37:00 PM		42002	-1.00	null	141.4	30/01/2007	04:37 PM	85
11	11/30/2007	1/30/2007 4:37:00 PM		42002	-1.00	null	141.4	30/01/2007	04:37 PM	85
12										
13	Criterion Time h	Threshold dB	Exchange Rate dB	Time Weighting	115dB LAFMax Exceeded	Notes	Cursor 1 Time	Cursor 2 Time	Between Cursors dBA	Outside Cursors dB/
14	8	None	3	Slow	FALSE		4:37 PM	7:55 AM	null	null
15	8	None	3	Slow	FALSE		4:37 PM	7:55 AM	null	null
16										
17	Cursor 1 dBA	Cursor 2 dBA	Duration Between Cursors	Duration Outside Cursors						
18	75.7	Underrange	null	null						
19	75.7	Underrange	null	null						
20										
21										
22										
23										
24										
25										

Ready

doseBadge Measurements/

NUM

Exported data in Excel including Time History

Microsoft Excel - doseBadge Measurements [Group]

File Edit View Insert Format Tools Data Window ACTI Help

Type a question for help

arial 10 B I U

	A	B	C	D	E	F	G	H	I
1	Time	Lavg dBA	Flags	Peak Value dBC	Battery Volts	Item	Value		
2									
3	4:37 PM	75.7		129.0	5.0	Read Order	1		
4	4:38 PM	Underrange		Underrange	5.0	doseBadge	CA1504		
5	4:39 PM	Underrange		Underrange	5.0	Dose % (from Leq)			
6	4:40 PM	Underrange		Underrange	5.0	Exposure Pa2h			
7	4:41 PM	Underrange		Underrange	5.0	LAeq dBA			
8	4:42 PM	70.2		127.0	5.0	LAE dBA			
9	4:43 PM	Underrange		Underrange	5.0	Est.Dose % (from Leq)			
10	4:44 PM	Underrange		Underrange	5.0	Est.Exposure Pa2h			
11	4:45 PM	Underrange		Underrange	5.0	Lex dBA			
12	4:46 PM	Underrange		Underrange	5.0	Lavg dBA	80		
13	4:47 PM	Underrange		Underrange	5.0	TWA dBA	82.8		
14	4:48 PM	Underrange		Underrange	5.0	Dose % (from TWA)	60		
15	4:49 PM	Underrange		Underrange	5.0	Est.Dose % (from TWA)			
16	4:50 PM	Underrange		131.9	5.0	Peak Exceeded?	Yes		
17	4:51 PM	Underrange		Underrange	5.0	Overload	Yes		
18	4:52 PM	Underrange		Underrange	5.0	Low Battery	No		
19	4:53 PM	Underrange		Underrange	5.0	Reset Time	1/30/2007 4:37:00 PM		
20	4:54 PM	Underrange		Underrange	5.0	Run Duration	15:18:09		
21	4:55 PM	75.0		Underrange	5.0	Meas.Date Time	1/30/2007 4:37:00 PM		
22	4:56 PM	77.8		Underrange	5.0	Reader Recal Due	9/30/2007		
23	4:57 PM	77.0		Underrange	5.0	Badge Recal Due	11/30/2007		
24	4:58 PM	70.2		Underrange	5.0	First Cal.Time	1/30/2007 4:37:00 PM		
25	4:59 PM	82.1		Underrange	5.0	Last Cal Time			
26	5:00 PM	Underrange		Underrange	5.0	Reader	42002		
27	5:01 PM	70.8		Underrange	5.0	First Cal.Offset dB	-1		
28	5:02 PM	Underrange		Underrange	5.0	Last Cal.Offset dB			
29	5:03 PM	Underrange		Underrange	5.0				
30	5:04 PM	72.0		Underrange	5.0				
31	5:05 PM	88.7		Underrange	5.0	Peak Level dBC	141.4		
32	5:06 PM	72.7		Underrange	5.0	Meas.Date	1/30/2007		
33	5:07 PM	76.9		Underrange	5.0	Meas.Time	4:37:00 PM		
34	5:08 PM	78.1		Underrange	5.0	Criterion Level dB	85		
35	5:09 PM	79.1		Underrange	5.0	Criterion Time h	8		
36	5:10 PM	Underrange		Underrange	5.0	Threshold dB	None		
37	5:11 PM	Underrange		Underrange	5.0	Threshold dB	None		

Ready NUM

Make sure you recharge each doseBadge when you are finished with your testing.



Quick Charge: If the doseBadges are completely flat, they will be fully charged in 2.5 hours maximum.