

Introduction

In a few simple steps, this guide will get you up and running making noise measurements. We want you to get the best performance from your CEL-35X *d*Badge system and recommend that for advanced information you refer to the instruction manual.

Charging

Charge the CEL-35X *d*Badge by using the charger provided. During charging the red LED will flash. Ensure the *d*Badge has enough charge for the required measurement duration by looking at the screen, which will show the run time available for the current charge held in the battery. The LED will turn blue when charging is complete. Charging from flat will take approximately 90 minutes:



Switching the CEL-35X On/Off

Press the Left ('L') key to switch the CEL-35X on. The CEL-35X will run through a start up sequence as shown below.



The first screen displays the model number and the firmware version. The next screen shows user defined text which is configured using dB35 software.



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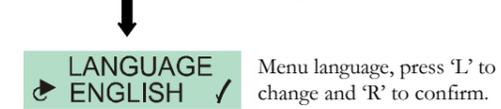
The *d*Badge can be switched off by holding down the 'L' key for 3 seconds.



The final screen displays the current time and date. This is automatically set by the software when the *d*Badge is connected to a PC. It is recommended that prior to using the *d*Badge units for the first time, they are connected to a PC so that the time is set correctly. The *d*Badge screen will then display data from the last run. See section on reviewing measurement data.

Configuring the dBadge

By pressing and holding the right ('R') key down during the start up sequence the configuration menu can be accessed. Pressing the 'L' key will make the changes to the current settings, and the 'R' key will confirm the changes and move on to the next screen. The screens are shown below, once the final screen has been confirmed by pressing the 'R' button, the *d*Badge will return to standard operation.



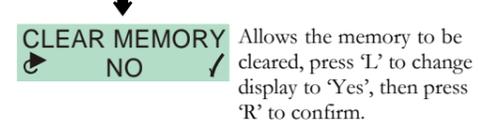
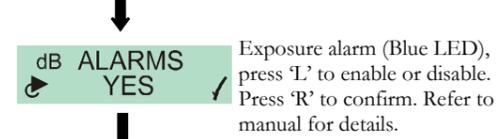
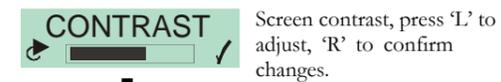
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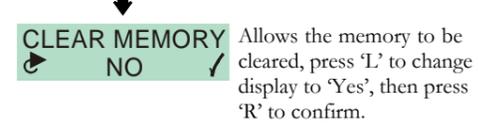
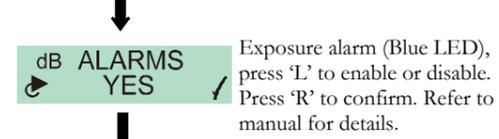
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If the memory is to be cleared, a second screen appears for confirmation. Change the option to 'Yes' by pressing the 'L' key, then press 'R' to confirm deletion.

Fitting and Removing the Windshield

It is recommended the windshield is fitted to the *d*Badge unit when in use. This provides protection and will prevent air movement from affecting the measurements. When fitting or removing the windshield always hold the black plastic ring at the base of the windshield. Locate the tabs into the holes then gently twist clockwise to lock. For calibration of the *d*Badge with a CEL-110 acoustic calibrator, the windshield will need to be removed. Simply twist the black plastic ring at the base of the windshield anticlockwise then lift the windshield off. DO NOT use the foam to twist the windshield on and off.



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Calibration

To calibrate the *d*Badge, place the CEL-110 acoustic calibrator over the microphone as shown below. Be careful to push the calibrator straight onto the *d*Badge without twisting, this ensures the screw on microphone is not loosened or over tightened.



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Switch on the CEL-110 calibrator. The *d*Badge will automatically recognise a calibration tone is present and enter the calibration mode, showing the screen below.

Press the 'R' key to confirm that you wish to calibrate. The *d*Badge will take a few seconds to automatically adjust to the required level of 114.0dB.



Once calibration is completed a 'CAL OK' message will appear. The *d*Badge stores the calibration date, time and level then returns to the default screens.

Starting a Measurement

To start a measurement, press and hold both keys for 3 seconds. During a measurement run the [▶] symbol will be displayed in the top left of the screen to show a measurement is being taken.



For advice on fitting the *d*Badge to an individual, please refer to manual.

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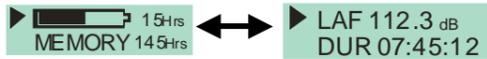
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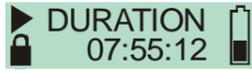
The screen will then cycle between the dB level and duration and the memory/battery status.



Locking the Keys

Keys can be locked during a measurement run to prevent tampering and also to prevent dB levels being displayed. Whilst holding the 'R' key down, press the 'L' key 3 times to lock the keys.

A padlock symbol appears on screen, as shown below.



To unlock the keys simply repeat the procedure described above.

Stopping a Measurement

To stop the measurement, hold both keys down for 3 seconds until the ► symbol disappears. Once stopped, the *d*Badge will display the data from the last measurement run.

Reviewing Measurement Data

When the *d*Badge is not measuring, the screen will cycle through data from the previous measurement run. The data displayed will depend on the configuration of the

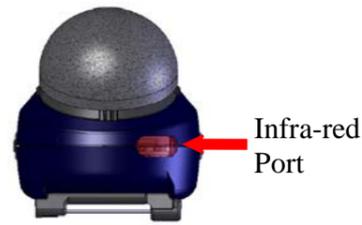
*d*Badge, either ISO or OSHA data. The data shown is displayed below. By pressing the 'R' key on any of these screens, the display will freeze for 5 seconds before resuming.

	ISO View	OSHA View
Battery and memory status	10Hrs MEMORY 80Hrs	10Hrs MEMORY 80Hrs
Instantaneous SPL and time	13:45:03 LAF 112.3 dB	14:05:09 LAS 109.1 dB
Duration of last measurement run	DURATION 07:45:12	DURATION 07:59:32
Time averaged and peak data	LAEQ 89.9 LCPK 101.4 dB	LAVG 111.4 LZPK 119.4 dB
Calculated noise exposure data	PA ² Hrs 3.20	OSHA DOSE 4.3 %
Projected noise exposure data	PROJ DOSE 352.5 %	PROJ DOSE 175.3 %
Hearing protection selection data	LCEQ 94.7 dB LC-A 4.8 dB	LCEQ 94.7 dB LC-A 4.8 dB

Items outlined in red available on CEL-352 *d*Badge 'Plus' only.

Downloading Data to PC

Ensure the infra-red download adaptor (193200B) is connected to the USB port of your PC Start the dB35 software on the PC, then hold the infra-red port on the *d*Badge facing, and near to the infra-red adaptor.



dB35 will detect when a *d*Badge is within range, and will automatically download the unit's data to your PC, clear the memory and reset the time on the *d*Badge.

Error Messages

If any error messages occur during the procedures described in this field guide, please refer to the troubleshooting section in the instruction manual for the *d*Badge.

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Mounting Clips

Please refer to main manual for changing *d*Badge clips as placing the incorrect screw in the hole can cause damage to the *d*Badge.

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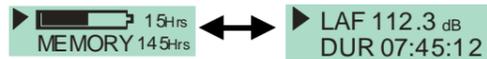
CEL-35X *d*Badge
HB3324-04
August 2008



Consult main manual for safety information on using Intrinsically Safe models

The CEL-35X *d*Badge consists of the instrument body, microphone, windshield and mounting kit. The CEL-35X represents either the CEL-350 *d*Badge or the CEL-352 *d*Badge 'Plus'.

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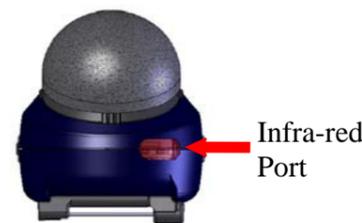
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