



Software Help Manual
407355
Noise Dosimeter/Datalogger



Software Introduction

The 407355 Noise Dosimeter software allows for setup and retrieval of recorded data in the Noise Dosimeter. The built-in PC interface offers the following capabilities:

The latest version of the 407355 software is located on the Extech.com web page under Support, Software Downloads.

- **ISOUND LEVEL METER (SLM) MODE:**

The meter can connect to a PC while taking Real-Time sound measurements. The readings can be stored in a file and viewed in a Graph or Table format.

- **DOSIMETER mode:**

The meter can perform a DOSE noise survey and the recorded data can be transferred to the software for viewing and saving to the PC.

System Requirements:

Windows XP, Windows 7, Windows 8.1, Windows 10

Minimum Hardware Requirements:

HDD, CD Rom, 486 PC or above, with available COM or USB port

EGA or higher monitor

4M bytes or more memory size

Installing the Software

Install the supplied Windows PC Software by placing the supplied program disk in the PC or downloading the software from the Extech.com web site.

If the installation program does not automatically open and provide on-screen prompts, double-click the **ExtechInstaller.exe** file located in the root folder.

Click the **Software** button and follow the on-screen prompts to complete the installation.

Click the **Drivers** button to install the Prolific driver that is used with the **USB100** adapter cable.

Note: if using a different USB adapter cable, please load the driver for that cable.

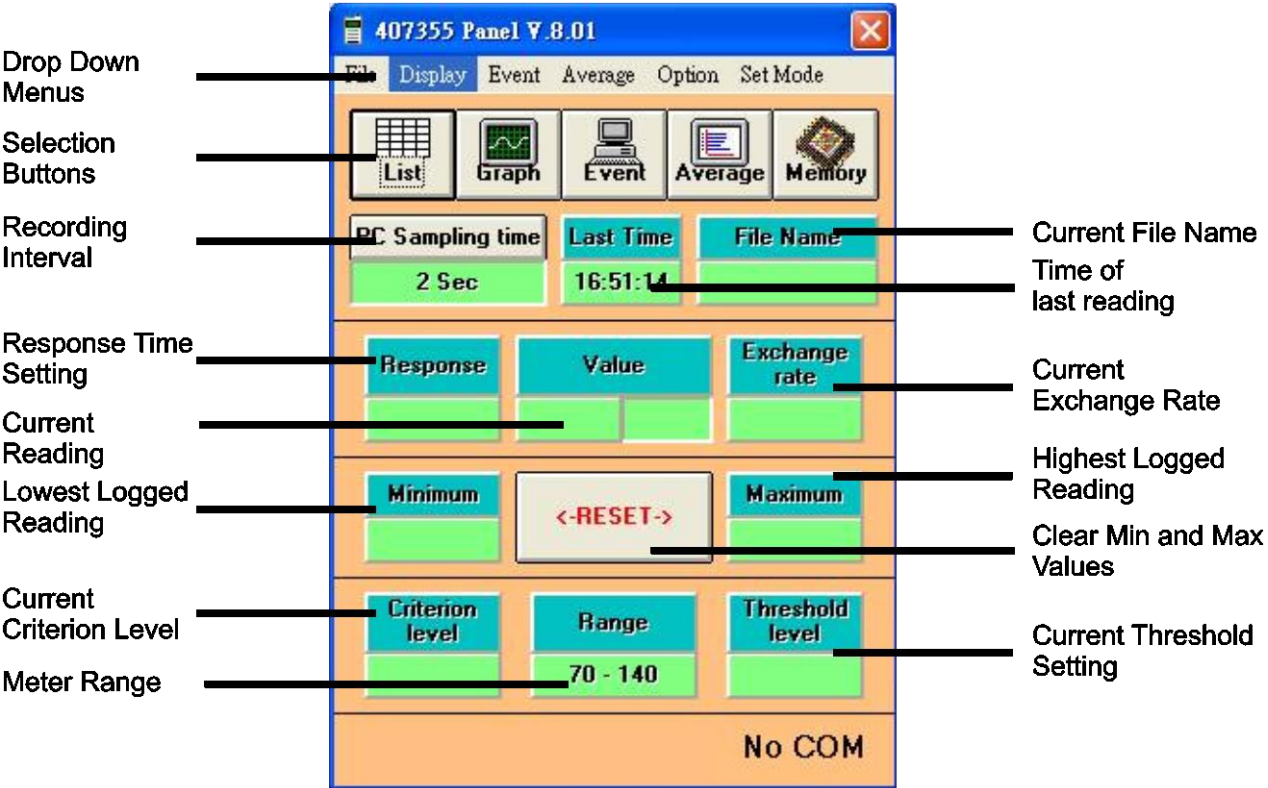


Before running the 407355 software, connect the PC interface cable to the USB100 Serial to USB converter cable and connect this to the PC's USB port.

Once the driver has installed, note the Comm Port number the USB adapter has been assigned to.

Main Software Window and Menus

The MAIN SOFTWARE window has numerous functions and displays as detailed below.



Menus

File

Open	Save a new Sound Level (SLM) data file to the PC. Readings will be stored in this file when START RECORDING is selected.
Start Recording	Start recording Real Time data to currently Open file.
Stop Recording	Stop recording data and close Open data file.
View File	Open a saved SLM data file previously saved to pc.
Exit	Closes the program

Display

	Allows selection of formatting for data display during Data Acquisition
List	Data is viewed in a list
Graph	Data is viewed in a graph
Analog Display	Data is viewed in an analog display
Digital Display	Data is viewed in a digital display

Events

Launches Event Window for Dosimeter Event data download

Average

Launches Average Window

Option

TWA	Time Weighted Average
Occupational Noise Standard	Set up unit automatically for dosimeter recording with parameters for a given country

Set Mode

Manually set parameters for Dose noise survey and Time and Date.

Help

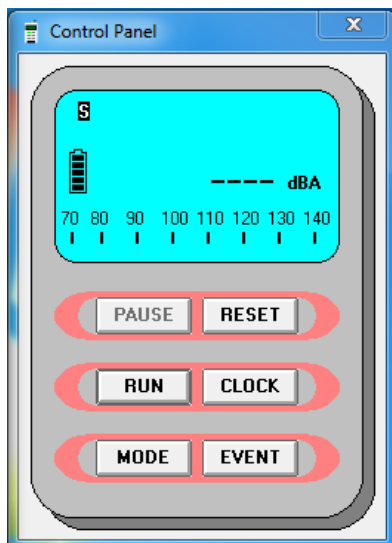
Software Help document

Buttons

List	Launches real time data list
Graph	Launches real time graph
Event	Launches Event Window for Dosimeter Event data download
Average	Launches Average Window
Memory	Downloads SLM data from meter memory

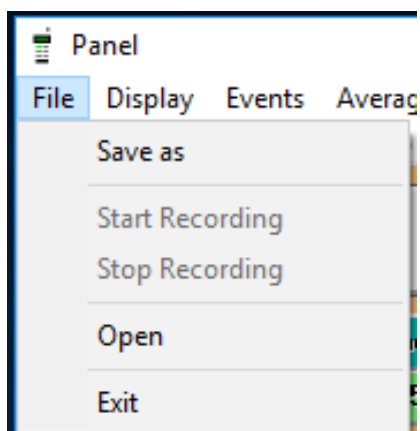
CONTROL PANEL

The Control Panel window can remotely control the meter and view meter readings. Click on the buttons in the CONTROL PANEL window to change meter view.

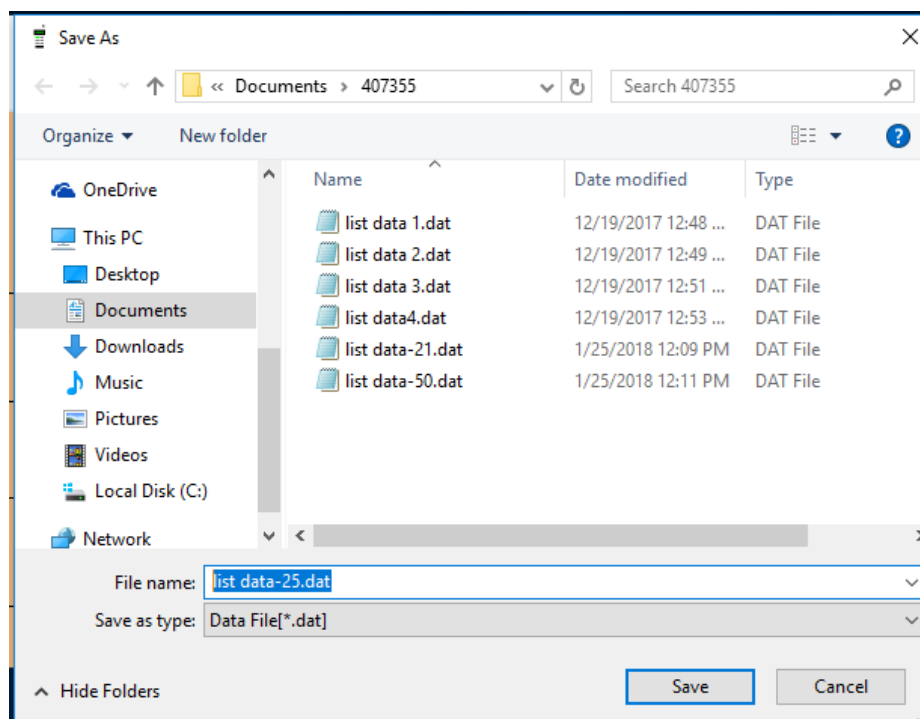


Real-Time Sound Level Data Acquisition

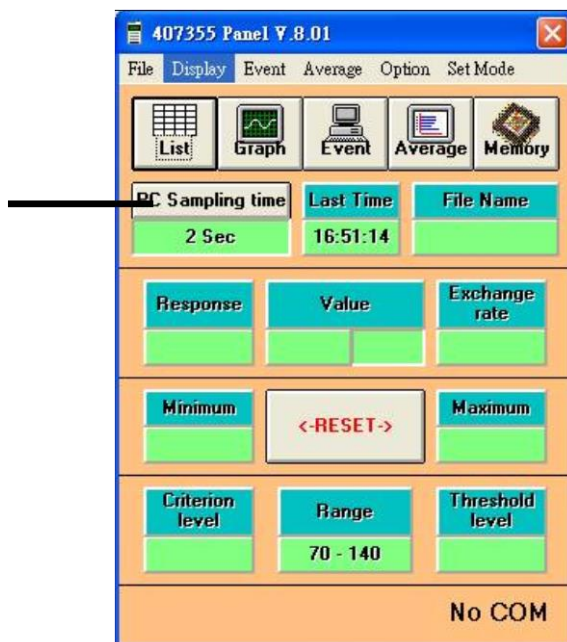
To stream Sound Level data to the pc, select **Save as** from the **FILE** drop down menu.



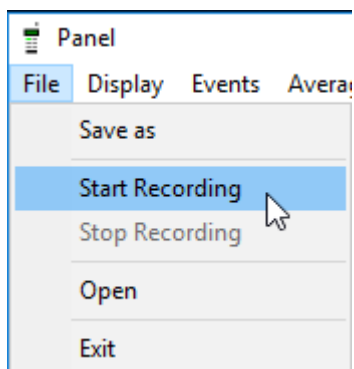
When the SAVE AS dialog box opens, name the file and click SAVE.



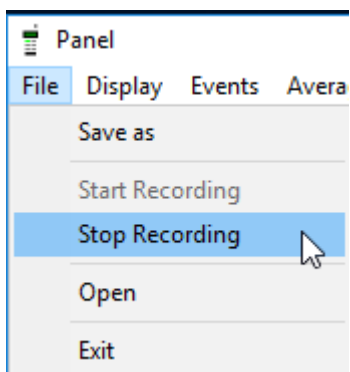
Click on **PC Sampling Time** to set the desired Sample Rate.



Click File menu - **Start Recording** to initiate a recording.

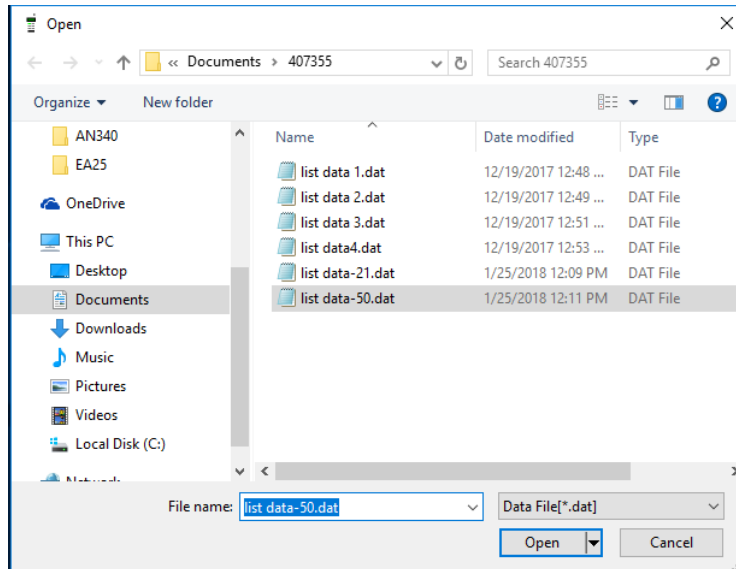


Click **Stop Recording** to end recording:




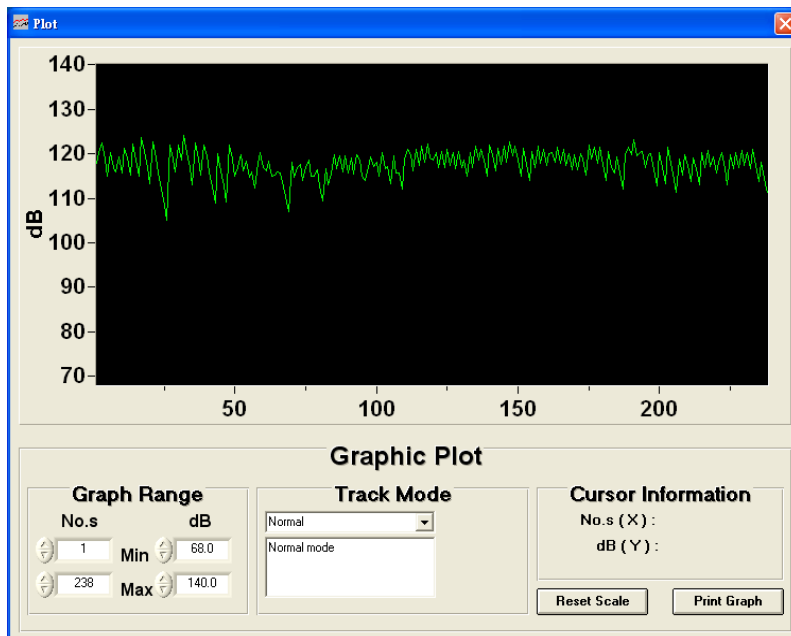
Open a Saved Data File


To open a file saved to the pc, select **OPEN** from the **FILE** drop down menu. Select the desired file and open. A data list window will appear.

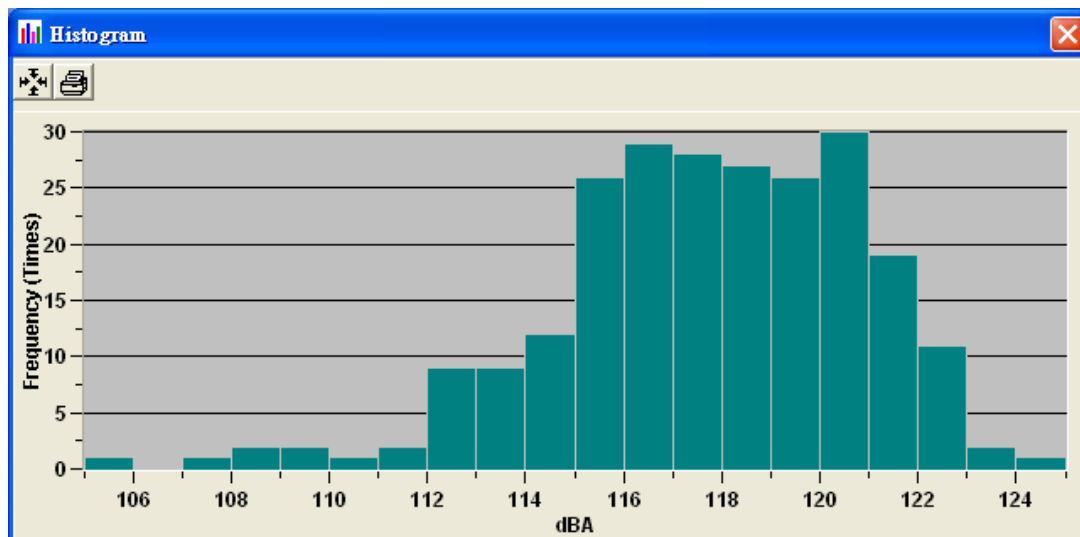


No.s	Date	Time	dBA
1	2007/04/26	06:18:26.1	105.1
2	2007/04/26	06:18:26.2	113.8
3	2007/04/26	06:18:26.3	111.1
4	2007/04/26	06:18:26.4	107.5
5	2007/04/26	06:18:26.5	104.0
6	2007/04/26	06:18:26.6	118.3
7	2007/04/26	06:18:26.7	114.6
8	2007/04/26	06:18:26.8	111.7
9	2007/04/26	06:18:26.9	118.7
10	2007/04/26	06:18:27.0	114.9
11	2007/04/26	06:18:27.1	118.9
12	2007/04/26	06:18:27.2	115.3
13	2007/04/26	06:18:27.3	121.3
14	2007/04/26	06:18:27.4	117.7
15	2007/04/26	06:18:27.5	114.2
16	2007/04/26	06:18:27.6	120.3
17	2007/04/26	06:18:27.7	116.6
18	2007/04/26	06:18:27.8	114.2

Click on the Graphing button  to display data in a graph:



Click on the Histogram button  to plot data as a histogram.
Data can be plotted with 1 dB or 0.1 dB resolution:



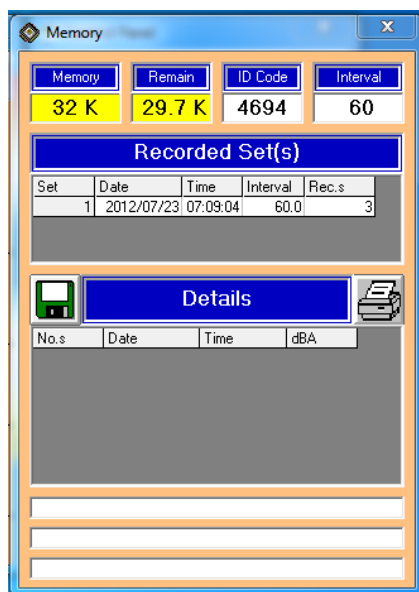
Click on the Printer button  to print the graph or Histogram.

Download Recorded SLM Data

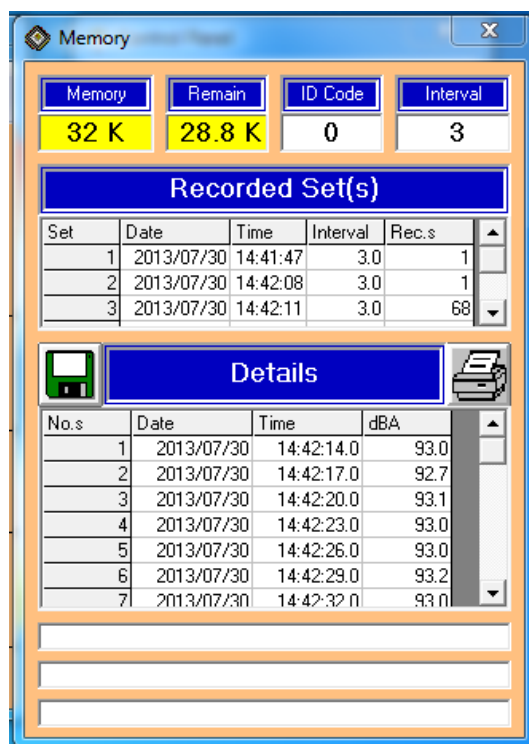
To download Sound Level data recorded in the meter memory, click on the **Memory**



Selection button. The Memory window will appear and data will download:



Click on the desired **Set** number to display data for that Set:

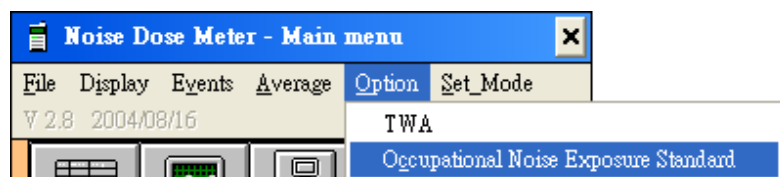


Dosimeter Setup

Occupational Noise Standard:

The Occupational Noise Exposure Standard window is a convenient way to automatically set up the meter's noise survey parameters for a given country.

Select **Option / Occupational Noise Standard** in the Drop Down Menu:



The following Dose window will appear. Click OK:

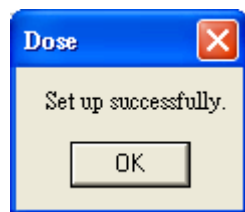


The following window will appear. Click on the desired country to complete setup:

Country	Criterion level dBA	Exposure time	Exchange Rate	MAX SPL	Peak SPL	Allowable/per day
Germany	90	8	-	-	-	-
France	90	40	-	-	-	-
Belgium	90	40	5	110	140	100
U.K.	90	8	3	135	150	-
Ireland	90	-	-	-	-	-
Italy	90	8	5	115	140	-
Denmark	90	40	3	115	-	-
Sweden	90	40	3	115	-	-
U.S.A	90	8	5	115	140	100
Canada	90	8	5	115	140	-
Australia	90	8	3	115	-	-
Japan	85	8	3	-	-	-
Taiwan	90	8	5	115	140	-
Brazil	85	8	5	130	-	100

It may take a few minutes for the operation to complete.

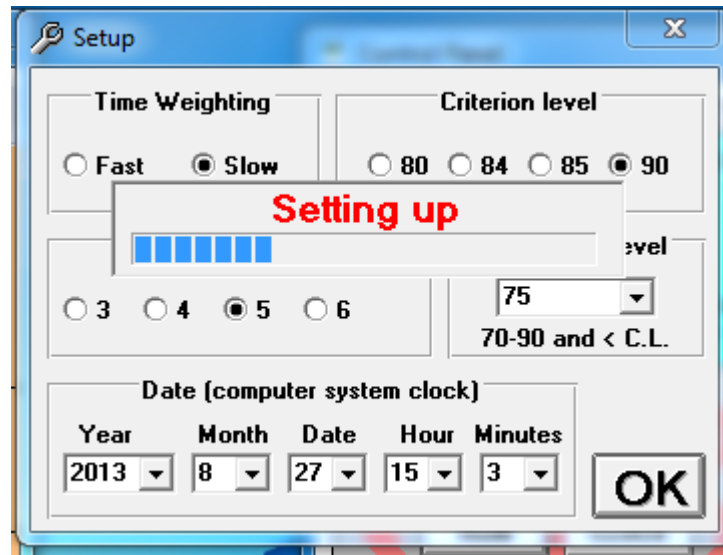
The following window will appear to confirm successful setup:



Set Mode

The **Set Mode** is used to change the noise survey parameters and the Time/Date. The Time and Date from the PC will be set in the meter.

Select the desired settings and press the **OK** button when finished. It may take several minutes for the operation to complete.



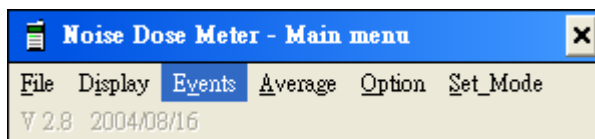
Download Recorded Dosimeter Events

NOTE: After performing a Dose measurement session, it is important that the User stop the meter correctly, or the collected data can be lost.

To stop a Dose measurement session correctly, press the RUN button on the meter, the word PAUSE will appear on the display. Then, Press and HOLD the RUN button until the clock icon disappears and the Event indicator (E) starts to blink. It is now safe to turn off the meter or download the data from the meter.

Connect the meter to the PC and start the 407355 Software.

Select **Events** Menu or click on the **Event** Button:



The Event Window will appear:



Click on the Open Event icon and choose all banks or a specific bank.

Click **OK** to download the Dose Event data from the meter.




	E1	E2	E3	E4	E5
Used or not	Used	Used	Unused	Unused	Unused
Criterion level	90dB	90dB			
Threshold level	88dB	88dB			
Exchange Rate	5dB	5dB			
Time Weighting	Fast	Fast			
dBRMS 115	No	Yes			
Exceed 140dB	No	No			
Start Date(mm:dd)	05-03	05-03			
Start Time(hh:mm)	02:44	02:45			
Stop Time(hh:mm)	02:45	02:46			
Exposure Time(hh:mm)	00:00	00:00			
Dose Value(%)	.6	.57			
TWA(8hr %Dose)	53.0	52.7			
PEAK FLAG TIME(hh:mm)					
PEAK DURATION(mm:ss)					

Name:

Address:

Company:

Click on the SAVE icon  to save this Event data to the PC.

Click on the Open file icon  to open and review previously saved Dose event data.

Click on the Printer button  to print the page.

Dose Event Window Parameters

	E1	E2	E3	E4	E5
Used or not	Used	Used	Unused	Unused	Unused
Criterion level	90dB	90dB			
Threshold level	88dB	88dB			
Exchange Rate	5dB	5dB			
Time Weighting	Fast	Fast			
dB(RMS 115	No	Yes			
Exceed 140dB	No	No			
Start Date(mm:dd)	05-03	05-03			
Start Time(hh:mm)	02:44	02:45			
Stop Time(hh:mm)	02:45	02:46			
Exposure Time(hh:mm)	00:00	00:00			
Dose Value(%)	.6	.57			
TWA(8hr %Dose)	53.0	52.7			
PEAK FLAG TIME(hh:mm)					
PEAK DURATION(mm:ss)					

Name:

Address:

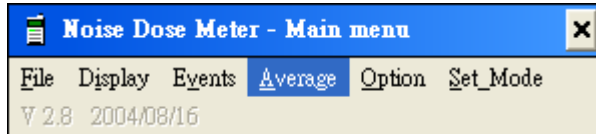
Company:

- **USED OR NOT:** Indicates whether or not there are data records in a particular bank. The word RECORDING will appear if the meter is currently performing a noise survey.
- **Criterion, Threshold, Exchange, and Time weighting** are the settings configured by the user for a noise survey as described in the 407355 User Guide.
- **115VdB RMS:** Alerts the user that the sound level reached 115dB.
- **EXCEED 140dB:** Alerts the user that the sound level reached 140dB.
- **START DATE and TIME:** Date and time when noise survey began.
- **STOP TIME:** Time of day noise survey ended.
- **EXPOSURE TIME:** Duration of test.
- **DOSE VALUE:** Dose value in percent for the period of the test.
- **TWA:** Projected sound level in dB.
- **PEAK FLAG TIME:** Time of day when sound level reached 140dB.
- **PEAK DURATION:** Interval of time that sound level was equal or greater than 140dB.

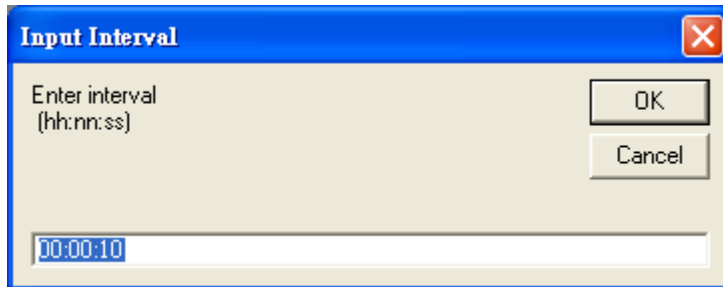
Average Mode



In AVERAGE mode, select a sampling interval and the software shows a value that represents the average of all the readings taken during the Real-time sampling interval.

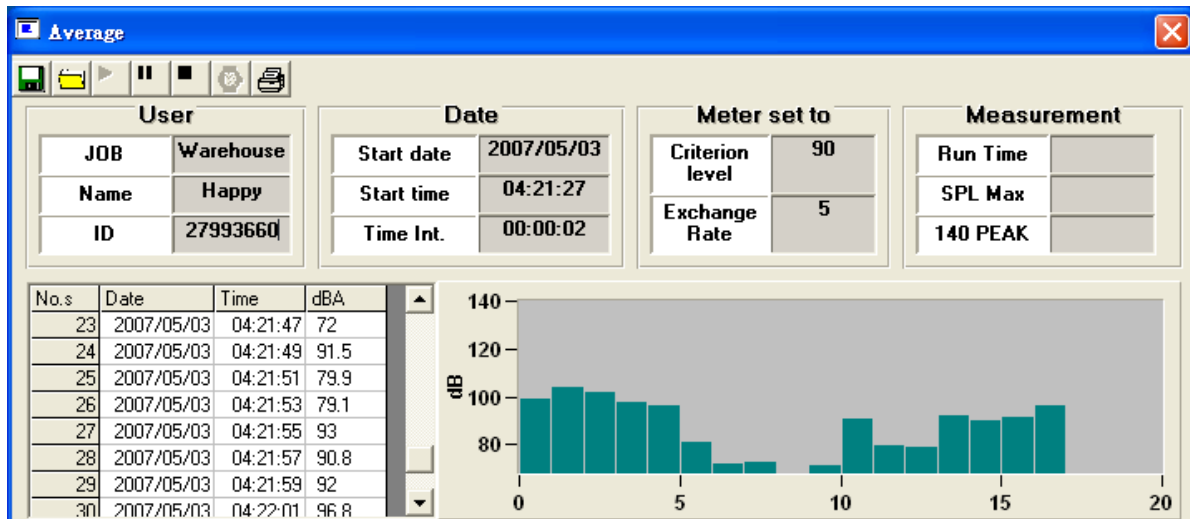
Select **Average** from the Drop Down Menu or click on the AVERAGE Button



Click the **Interval** button  to set up a sampling interval



Click the Start button  to start averaging. Click the Stop button  to stop. Data is displayed on the window.



Average Mode - Table Data Descriptions

USER	(Optional) Personalize the data record.
DATE	Program supplied START DATE/TIME and the selected Sample Interval.
METER SET TO	User supplied Criterion level and Exchange rate. If these fields do not automatically fill in, go to the EVENTS menu item and download the EVENT register information.
MEASUREMENT	Program supplied data. RUN TIME Total test time. SPL MAX Highest average reading taken during the test. DOSE %DOSE value calculated for the test

Click on the Printer button  to print the page.

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