



# SOFTWARE USER MANUAL

## HD600

### SOUND LEVEL DATALOGGER



# Software Information

The HD600 Sound Level Meter software program enables the transfer of real time data (and datalogger memory data) from the HD600 Meter to a PC. The software displays the data in a graphical format. The Program icons in the main software window provide a convenient method to control the major software functions.

Real-time data recording up to 40,000 data points

## System Requirements

Operating System: Windows 7, Windows 8.1 and Windows 10

### Minimum Hard requirements

- PC with 90MHz clock speed
- 32 MB RAM
- 5 MB hard disk space
- Display: 800 x 600 pixel resolution with high color (16 bit)

## Software Installation

Insert the disk into the CD drive or download the HD600 software from the Extech.com web page. Run the **ExtechInstaller.exe** program and the following menu will appear.

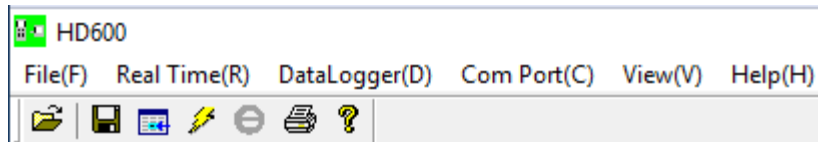
Select the **Software** button to begin the installation of the device software. Proceed through the software installation wizard using the default selections.



Click on the **Drivers** button to begin installing the USB drivers. Proceed through the installation wizard using the default selections.










# Menu



## Menus

<b>File</b>	Open, Save As, Export to Excel, Print Graph, Print Data, Exit
<b>Real Time</b>	Run a Real-Time session, Stop, Clear graph data, Setup
<b>Datalogger</b>	Download Saved data from the HD600 meter to the PC
<b>Com Port</b>	Select Auto or Manual COM port selection
<b>View</b>	Select or unselect the Tool icon menu and Status Bar
<b>Help</b>	Display Help ABOUT and Help content

## Icons

	<b>Open File</b>	Retrieve files previously stored on the PC
	<b>Save File</b>	Save the data to a file on the PC
	<b>Save to Excel</b>	Save the data in an Excel formatted file
	<b>Real-Time Start</b>	Begin collecting Real-Time data
	<b>Stop</b>	Stop collecting Real-Time data
	<b>Print</b>	Print the graph or the data of the active window
	<b>Help</b>	Open Help content documents

# Operation

## PC / Meter Communication

Connect the meter to the PC using the supplied USB cable

Turn the meter ON and press the SETUP button (clock icon on meter display will disappear)

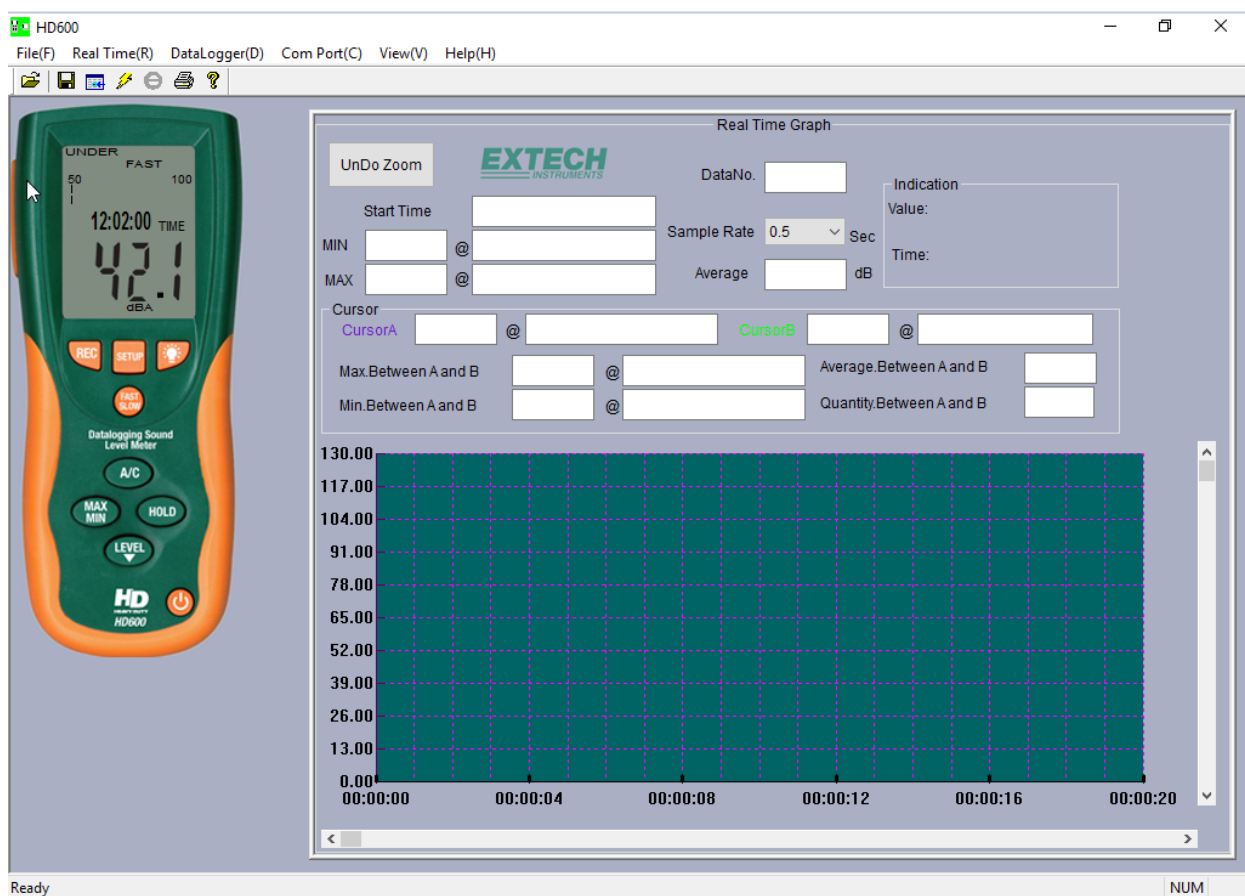
Start the HD600 program

The software should automatically select the COM port.

Note: Use the MANUAL function under the COM PORT menu heading to select a port manually if the AUTO function does not select the correct COM PORT.

It may be necessary to open the Windows Devices and Printers utility to view the Silicon Labs device in order to locate the COM port number to which the HD600 is connected.

The meter in the software window will show the same display information as the actual meter when communication is established.



## Real-Time Data Recording

Power ON the Sound Level Meter first and then connect it to the PC USB serial port using the supplied cable.

Press the **Setup** button on the meter. The clock icon will disappear from the meter display.

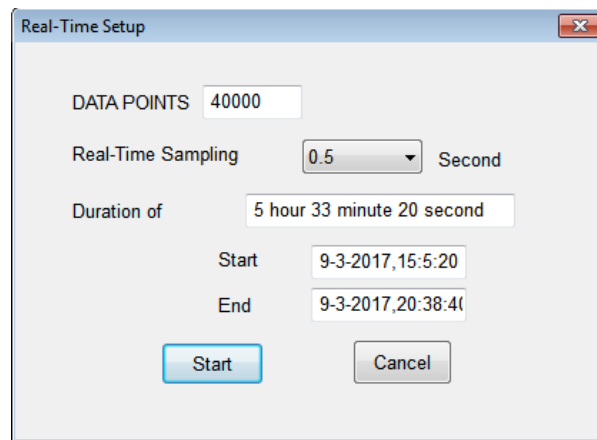
Start the HD600 program.

If the connection is successful, the virtual meter will display the same value as the Sound Level Meter.

Click on the Real-Time menu and choose Setup.

Select the sampling rate from the Real-Time Graph window.

Selections are 0.1, 0.2, 0.5, 1.0, 1.5, 2.0, 3.0, 5.0, and 10.0 seconds



Note: If the PC speed is slow, select a sampling rate greater than 0.2 seconds.

To sample a large amount of data (more than 5000), at least 64 mega bytes of RAM is recommended.

To **Start** a Recording, use either of these methods:

- Click the Start button in the Real-Time Setup window

- Click the Real Time menu and choose Run

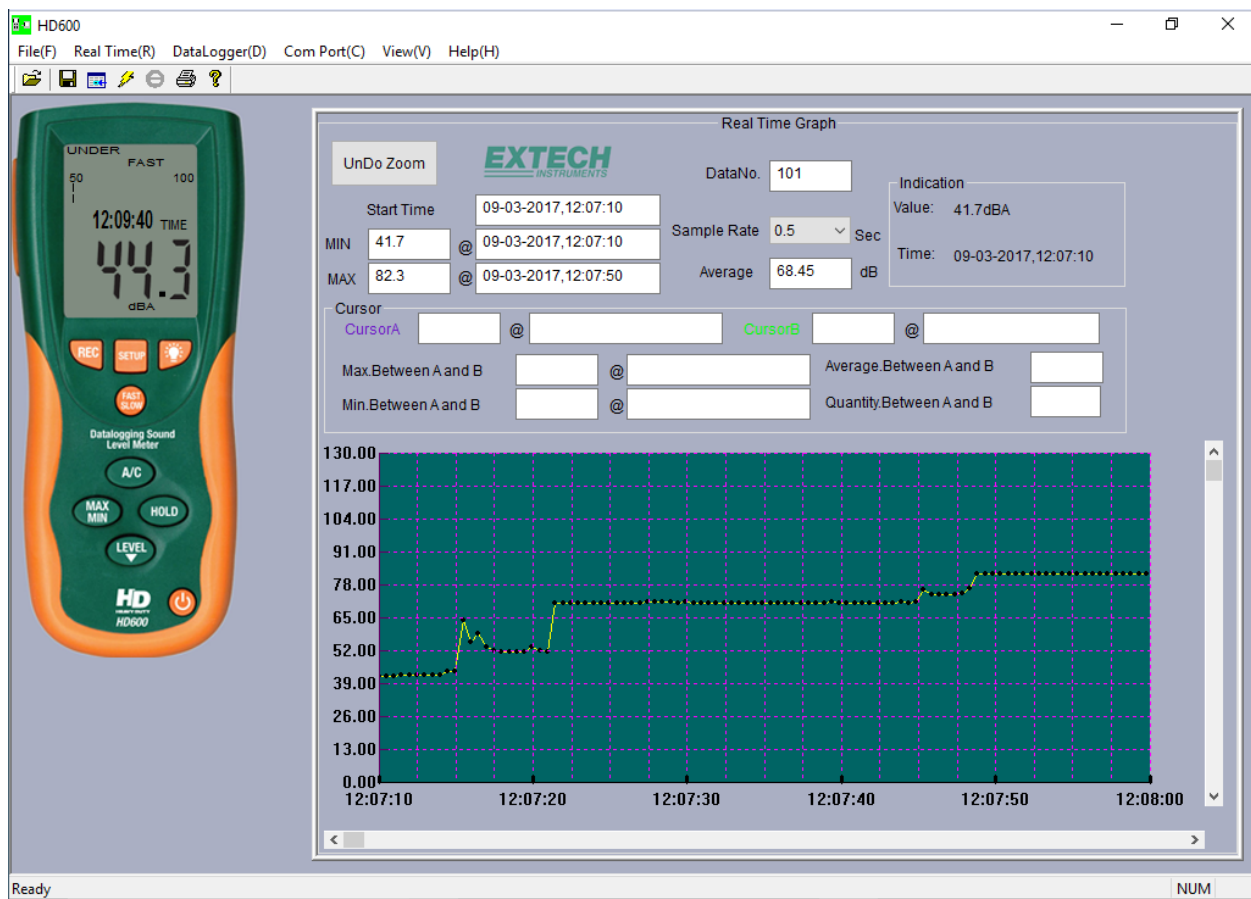
- Click on the start icon  on the Tool bar

The data will begin to plot on the Real Time Graph Window.


To **Stop** the Recording, use either of these methods:

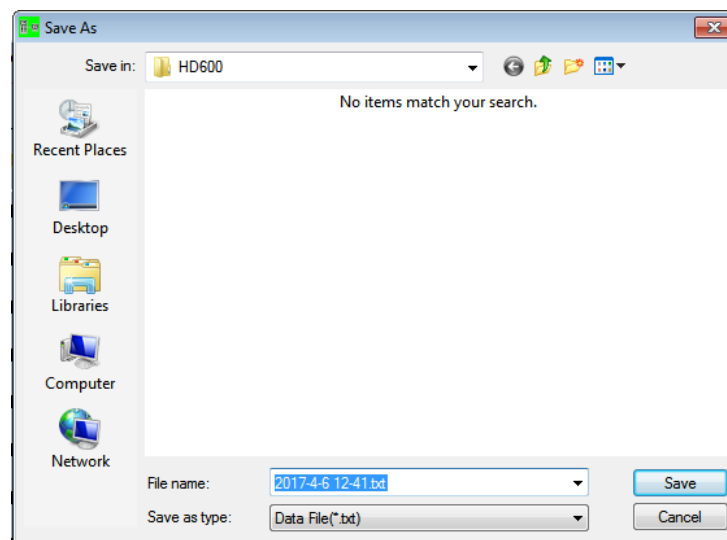
- Click the Real Time menu and choose Stop

- Click the Stop icon  in the Tool bar



## Save the Real-Time data to the PC

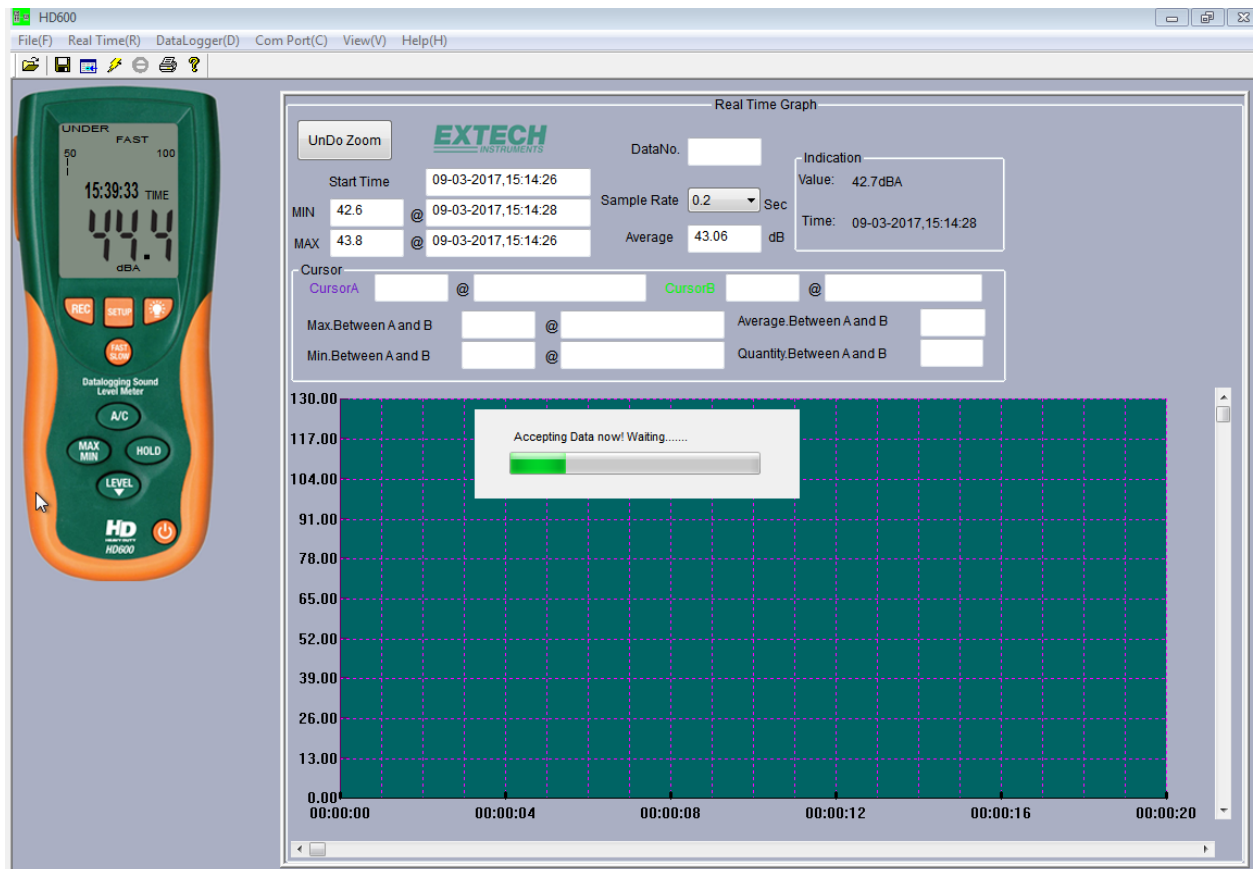
Choose File / Save As from the main menu or click  from the tool bar to save the file in a csv format (\*.txt).



## Download Recorded Data from the Meter

Turn on the HD600 meter and connect the USB cable to the PC.  
Start the HD600 program and make sure the meter is connected.

Select DataLogger from the main menu.  
The Data will download to the PC and display on the graph window.





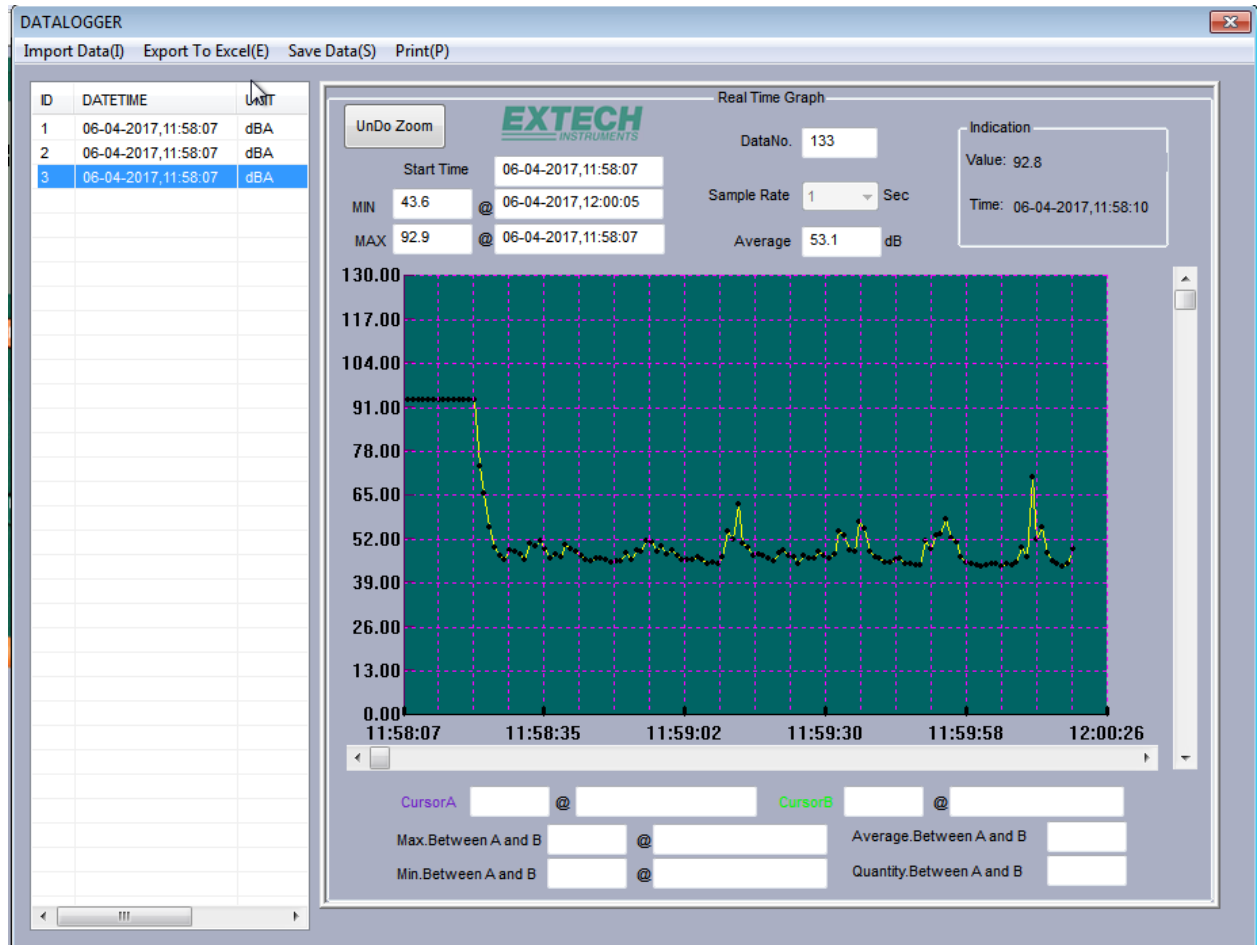
## View Saved Data

### View Downloaded Data

After downloading the data from the meter, the list on the left will show the number of data sets downloaded from the meter memory.

Each data set provides some information (Set number ID, Start date, Start time, Sampling rate, and number of data points).

Double click on a set to display its data on the graph.



### Save Downloaded Data from the HD600 meter

Click **Save Data** to save the selected data to the PC.

Note: some versions of Excel may not work with this software. In this case, use Save Data and save your data file as a CSV formatted file (\*.txt) which can be opened in Excel.

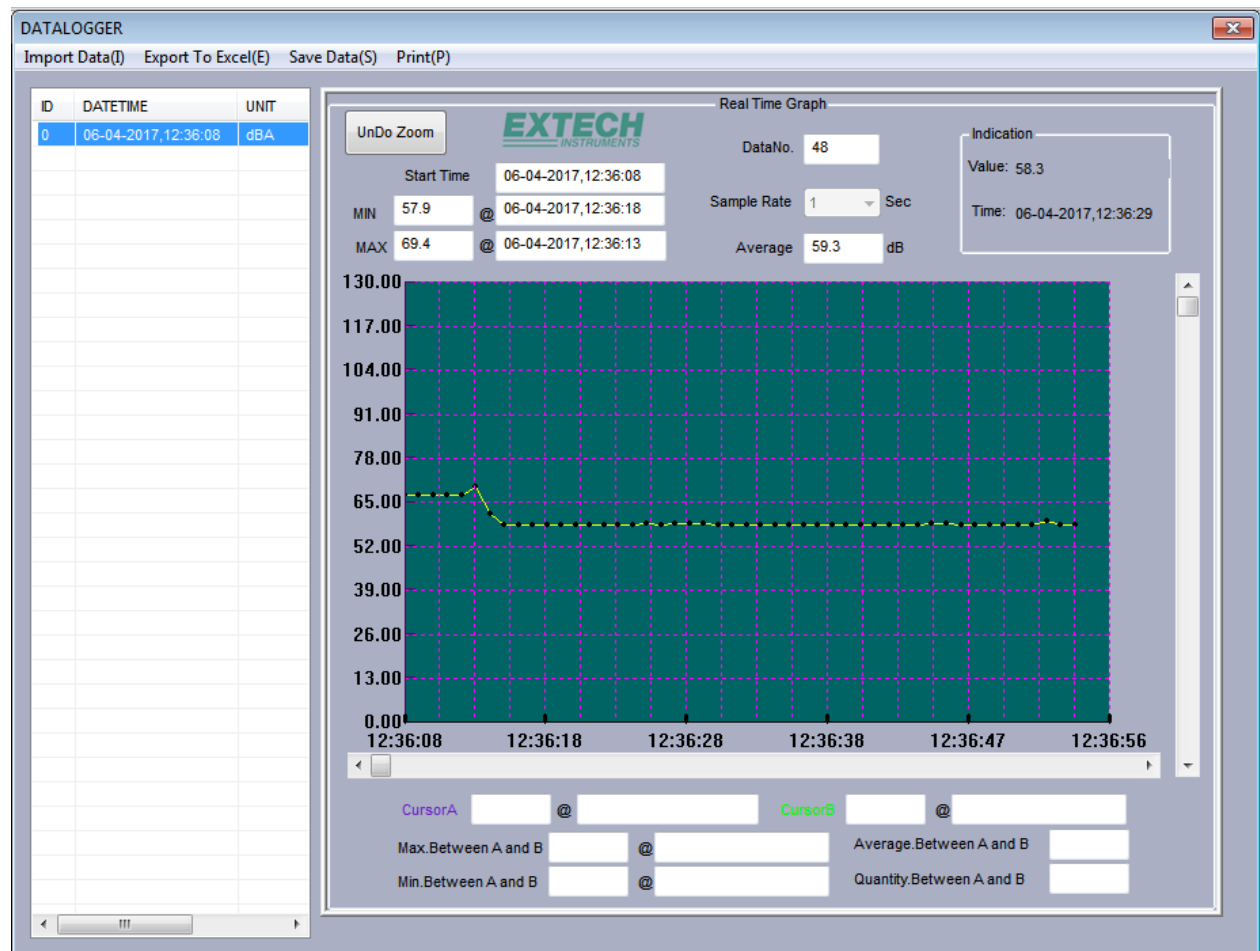
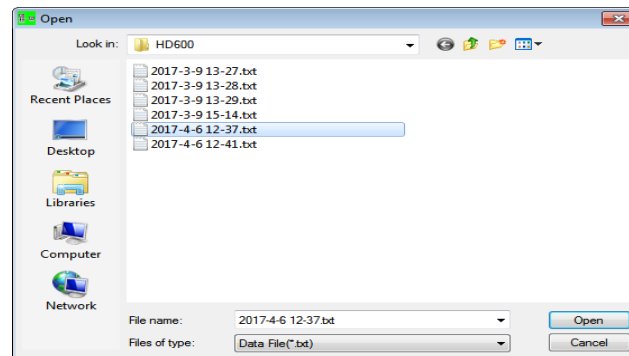
## View Previously Saved Data

On the Main Window, Click on the Open File icon or choose Open File under the FILE menu. The Datalogger window will open.

Click on Import Data and choose a data file to open.

The Data list on the left will display the data file.

Double click on a set to display its data on the graph.



## Data Analysis using Cursors

### Datalogger graph window



Click on the Open file icon

Choose a data file to open on the Datalogger graph window

Double-click on the data file in the left column to display the data on the graph.

To set the left cursor position, double-click the mouse and then left click once more to set the cursor **A** position on the graph. (purple vertical cursor).

Move the cursor and Left click again to set the cursor **B** position (green vertical cursor).

The statistics for the area between the two cursors will appear in the Cursor statistics area below the graph. Right click on a cursor line to delete it.

### Real-Time graph window

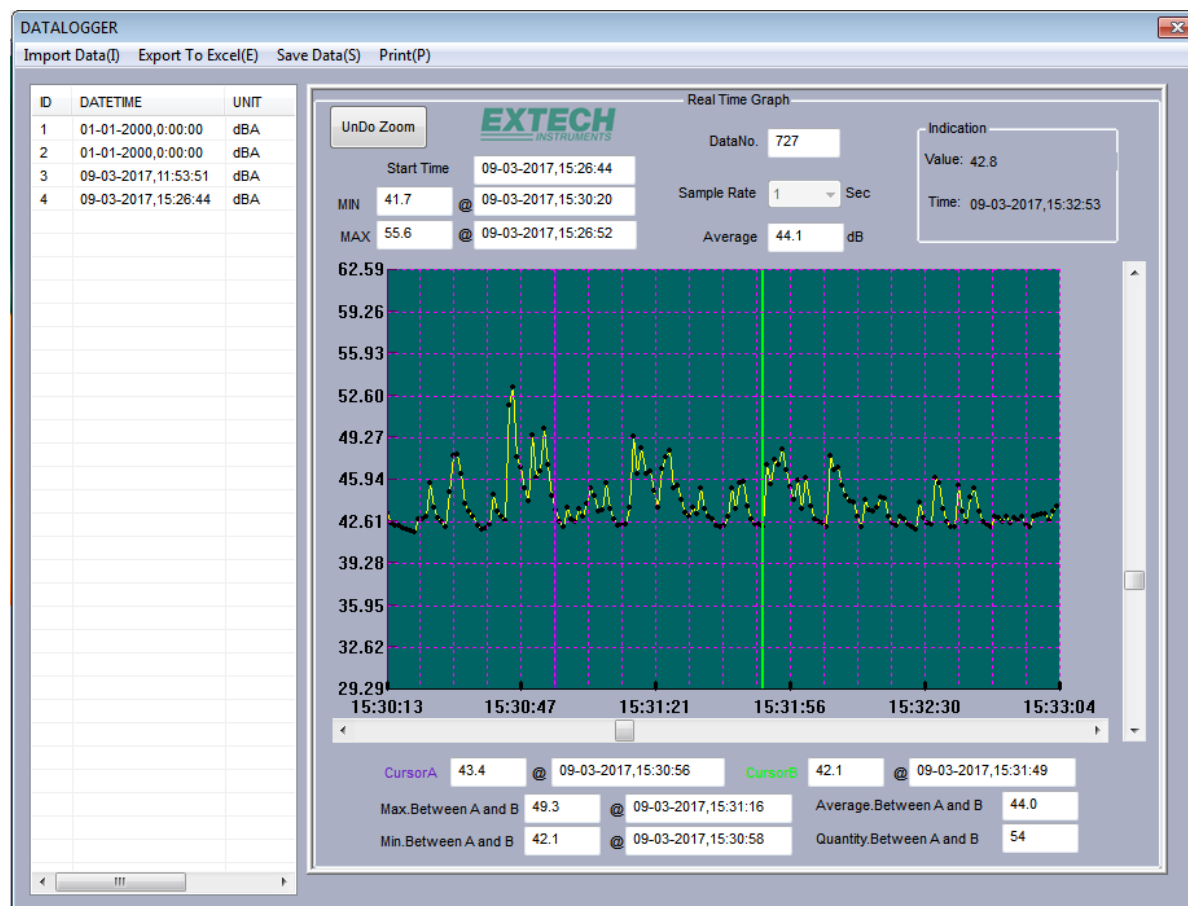
Note: You can view previously saved data files only.

You cannot analyze Real-Time data until you save the data to a file.

Left click anywhere on the graph to set the cursor **A** position (purple vertical cursor).

Move the cursor and Left click again to set the cursor **B** position (green vertical cursor).

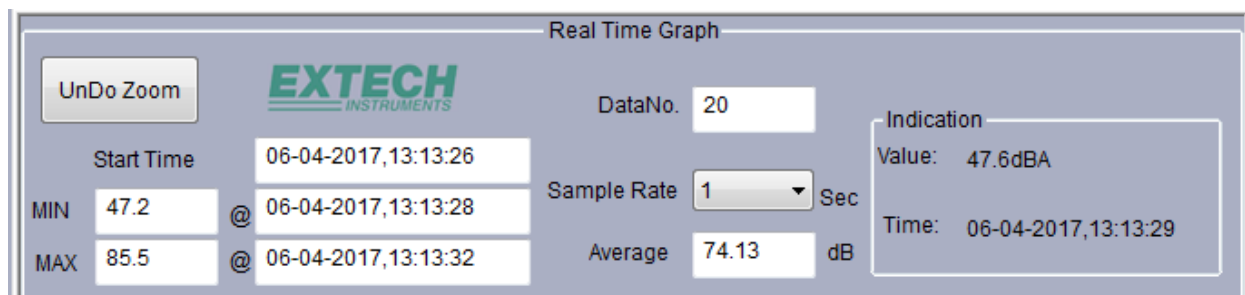
The statistics for the area between the two cursors appears in the Cursor statistics area above the graph. Right click on a cursor line to delete it.



### Data Displayed Above the Graph

The following applies to both the Main window and the Datalogger window:

Start Time	Start time of the recording
Min and Max	Minimum and Maximum dB values recorded and the indicated time stamp
Data No.	The number of data samples recorded in this set
Sample Rate	Measurement interval
Average	Simple average of all of the dB values recorded in this set
Indication	dB value and Time stamp at the cursor's present or last position

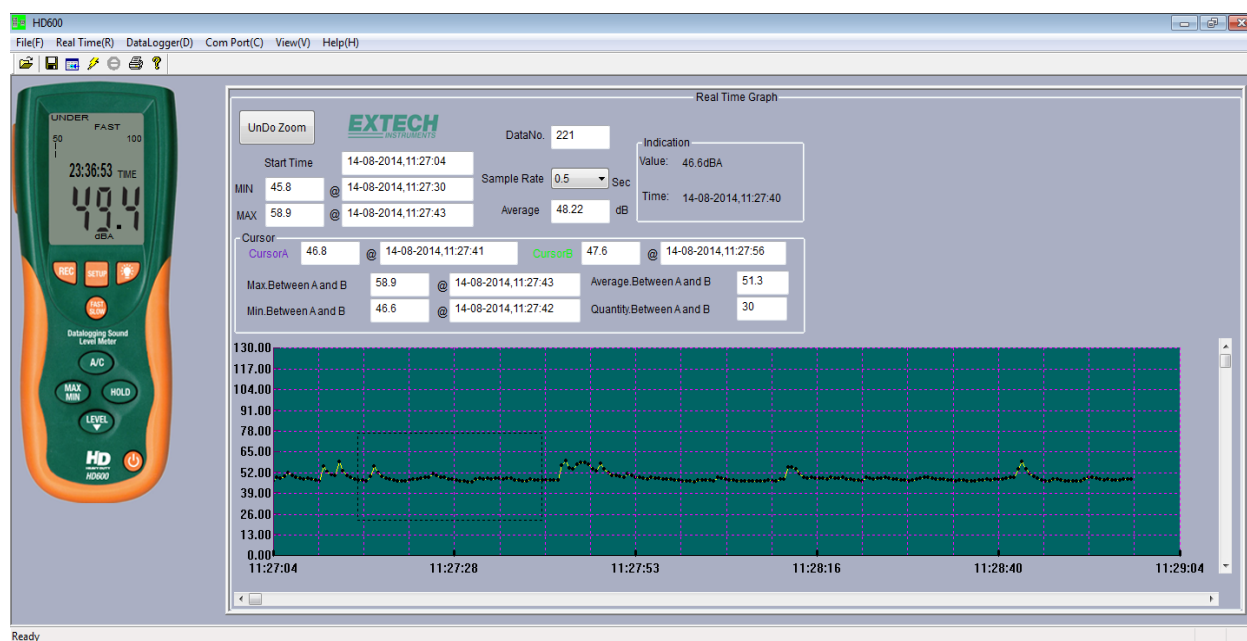


## Zoom and UndoZoom

Position the mouse cursor on the graph

Click and hold the left mouse button and drag a rectangle around a portion of the signal to zoom in on any portion of the graph.

Click the “UndoZoom” button  to return to the normal view.



## Printing the Recorded or Saved Data as a Graph or a List

### Print a saved data file

Double-click on the data file entry in the list to display the graph of the data

Click the **Print** menu item

Choose **Print Graph** to print the graph image

Choose **Print Data** to print a list of the data

### Print the Real-time display

While viewing the Real-Time data on the main window, click the Print icon to print an image of the graph or open the File menu and choose Print Graph or Print Data.

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