
VOLTCRAFT®

User Manual

Voltsoft

1 Introduction

Dear Customer,

Welcome to Voltcraft®. Thank you for purchasing this product and we are sure you have made a very good decision.

Voltcraft® - in the field of measuring, charging and network technology, this name represents high quality products which perform superbly and which are created by experts employing continuous innovation and improvement. From ambitious hobby electronics enthusiast to professional user, products from Voltcraft® brand family provide the optimum solution even for the most demanding tasks. Voltcraft® products also offer an almost unbeatable price-performance ratio. This is why we are absolutely certain: With our Voltcraft® product line, we have created the foundation for a long, prosperous and successful customer partnership.

We wish you have a great deal of enjoyment from your new Voltcraft® product!

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2 Using this Manual

The Voltsoft System (Voltsoft) is integrated control software for controlling different Voltcraft® electronic products. By using Voltsoft, you can manage your Voltcraft® products using only a single piece of software.

This manual will explain the usage and workflow of different components of Voltsoft, and also discuss how Voltsoft can control different hardware models.

There are many terms and abbreviations in this manual that may be unfamiliar to you if you are new to web hosting. You can find information on these terms and abbreviations in the glossary of this manual or by searching them using an Internet search engine such as Google.

3 Installation

3.1 System Requirements

To install Voltsoft, your computer should contain:

- Pentium 233-megahertz (MHz) processor or faster
- At least 1GB of RAM
- At least 2GB of available space on the hard disk
- USB 2.0 / 3.0 Port(s)

Voltsoft only supports the following operating systems:

- Microsoft Windows Vista Service Pack 2 or above
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 10

If your Windows does not contain the corresponding service pack version, please perform a Windows update first.

.NET framework library version:

- .NET framework 2.0 SP2

If your Windows does not contain the corresponding .NET framework, Voltsoft setup will help you to download it from the Internet. However, it is recommended upgrading first before installation.

Some device may not work if connecting via USB Hubs, included:

- DL101T / DL121TH / DL161S / DL180THP / DL111K

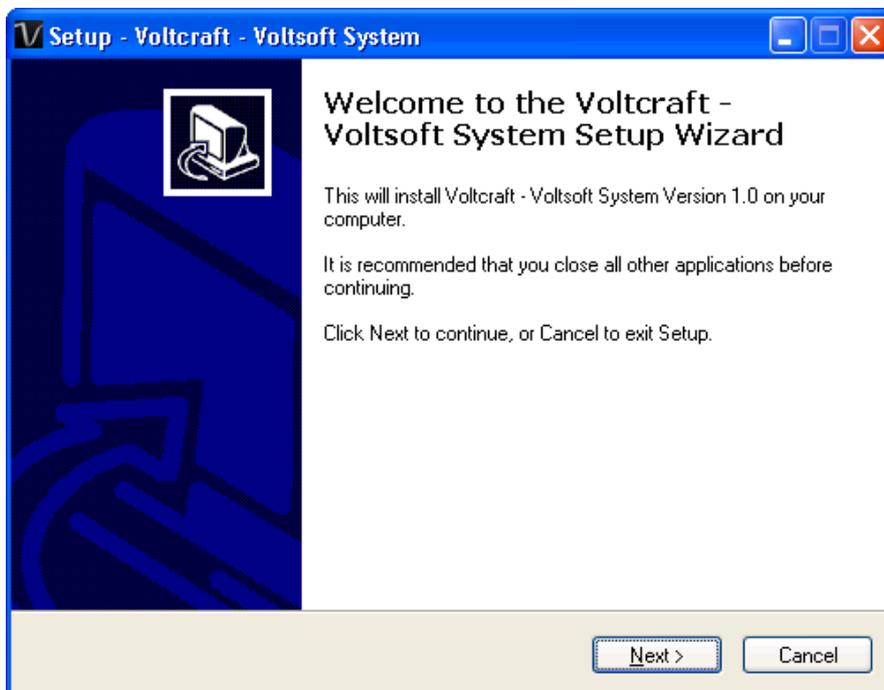
3.2 Install Voltsoft

1. Insert the installation CD-ROM in your drive.
2. The menu will be opened automatically (if installation doesn't start, double-click autorun.exe in your CD-ROM directory). Follow the on-screen instructions.

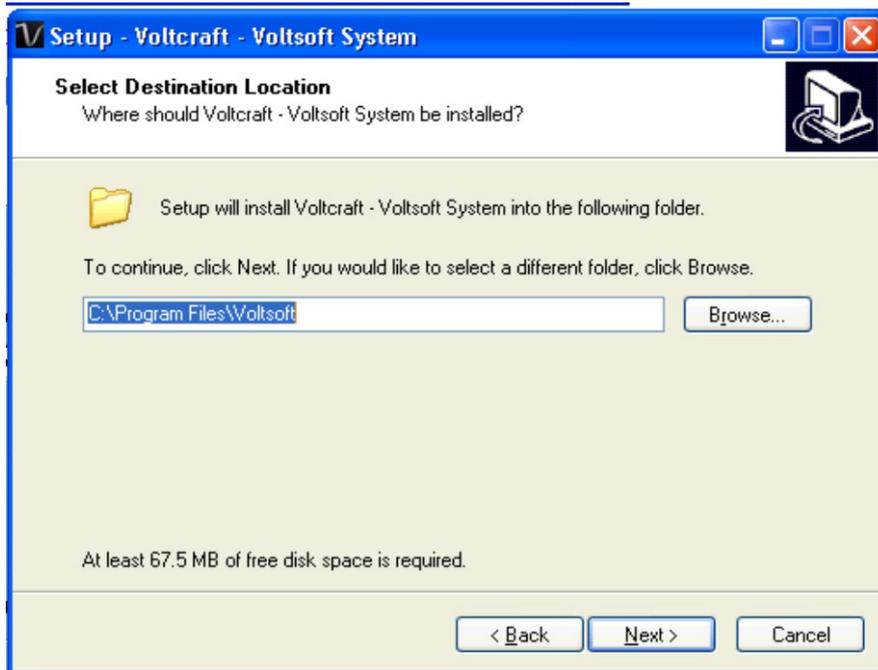
Step 1: Select the installation language



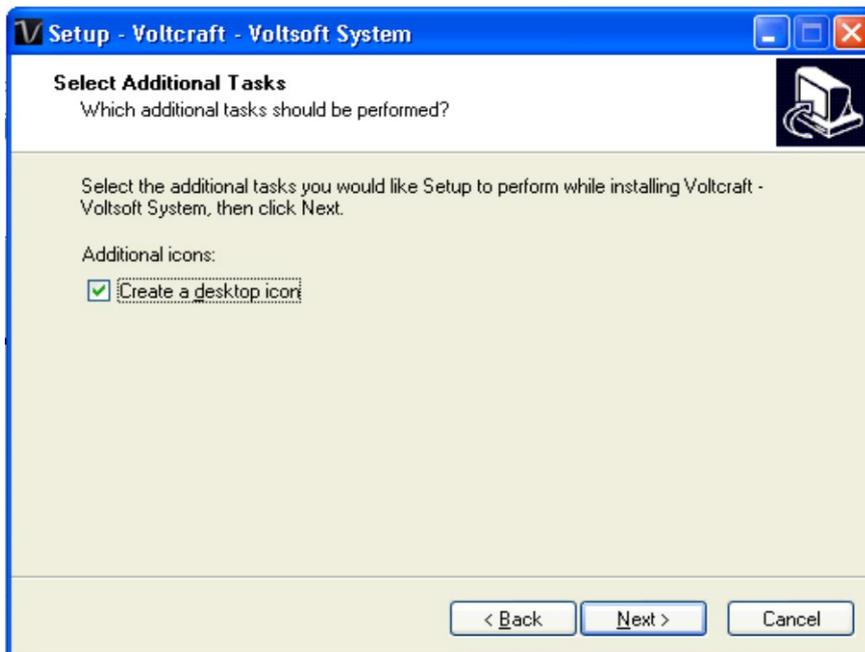
Step 2: Click "Next" for all the following steps



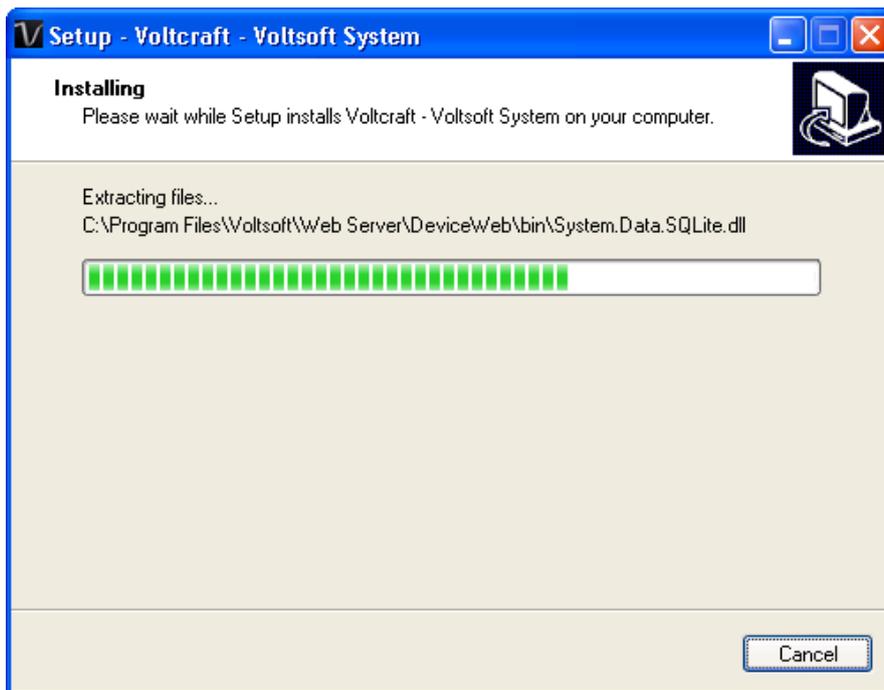
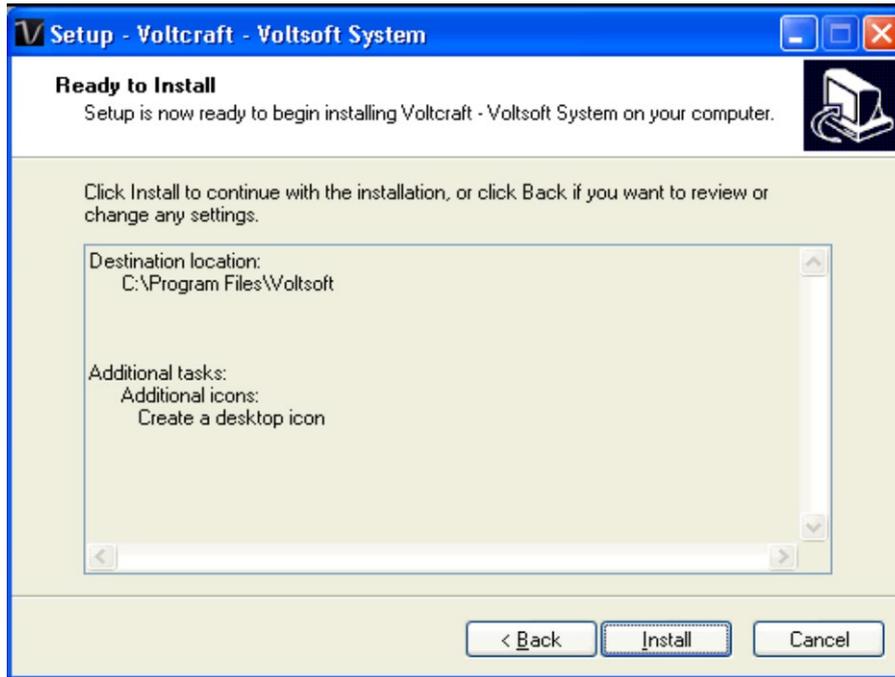
Step 3: Select Destination Location



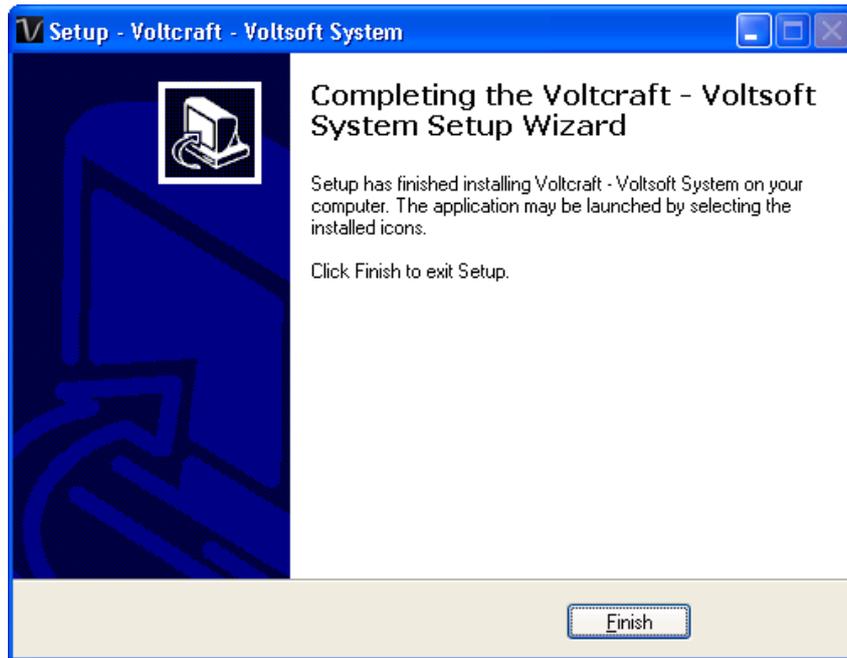
Step 4: Tick the checkbox to create desktop icon for Voltsoft



Step 5: Click "Install". Installation will begin.

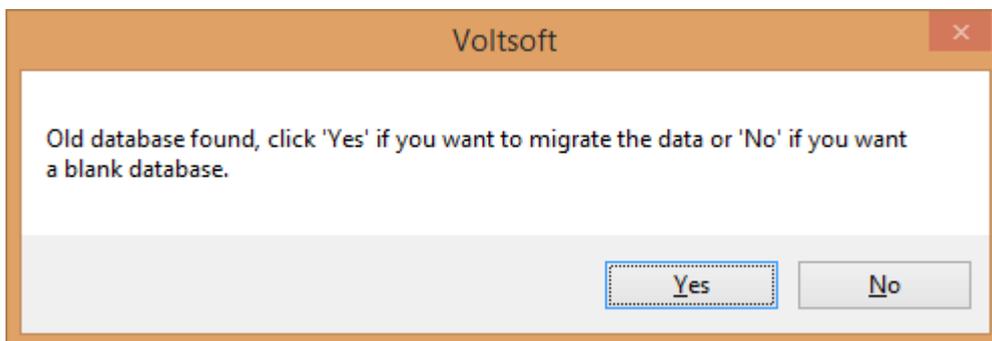


Step 6: Click "Finish" to complete the installation



3.3 Migrate existing data

If you have an old version of Voltsoft installed, following dialog will be prompt. Click "Yes" if you want to keep existing data or "No" if you want to have an empty database.



3.4 Register Voltsoft

Voltsoft has two different versions: Standard and Professional. The professional version contains more features than the standard edition.

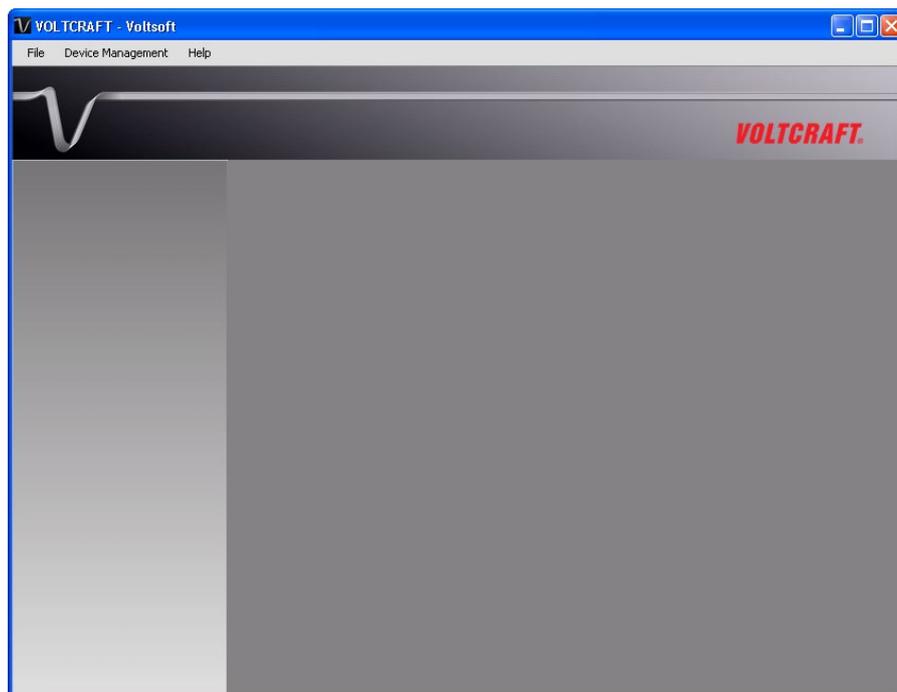
Standard vs. Professional

	Standard	Professional
User Management		✓
Email Management		✓
General Settings	✓	✓
Language Preference	✓	✓
Email Template		✓
Device Management (Add / Remove)	✓	✓
Custom Graph		✓
Email Alert		✓

Voltsoft will be installed by default as the standard version. In order to enable the professional features, you have to purchase a software package (VoltSoft Data Logger, BN: 101333) and enter a valid license key (which is attached on CD) to register.

To register:

1. Launch the Voltsoft Windows client



2. Click Help -> Online Activation

3. Enter a valid license key and the registration information.
4. Enter the proxy server settings if your computer accesses the Internet through a proxy server.
5. Please read and accept our privacy policy and license agreement.
6. Click the "Activate" button to perform online activation.
7. If activation is successful the following message will be displayed:



If there is any problem during online activation, user can activate via offline activation.

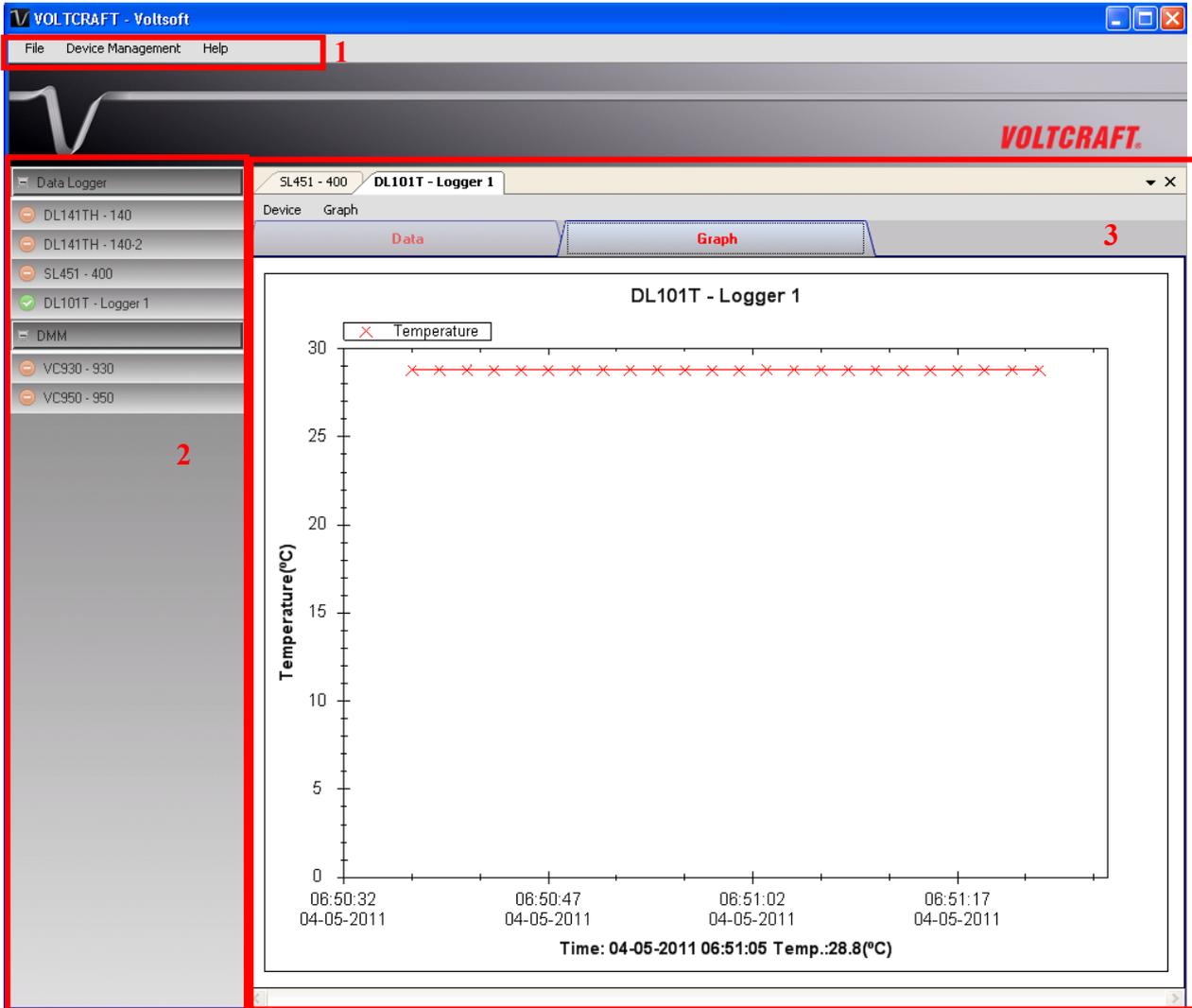
1. Click the Offline Activation button and select the location for saving the activation file (Voltsoft.config)
2. Send the Voltsoft.config to our customer service, email kundenservice@conrad.de
3. Our customer service will return the license file (dms.config) to you.
4. Copy it to the install directory (e.g. C:\Program Files (x86)\Voltsoft)
5. Start Voltsoft again.

4 Standard Version

4.1 Launch the Voltsoft Windows Client

To start the application, please go to Start Menu -> All Programs -> Voltcraft -> Voltsoft Client

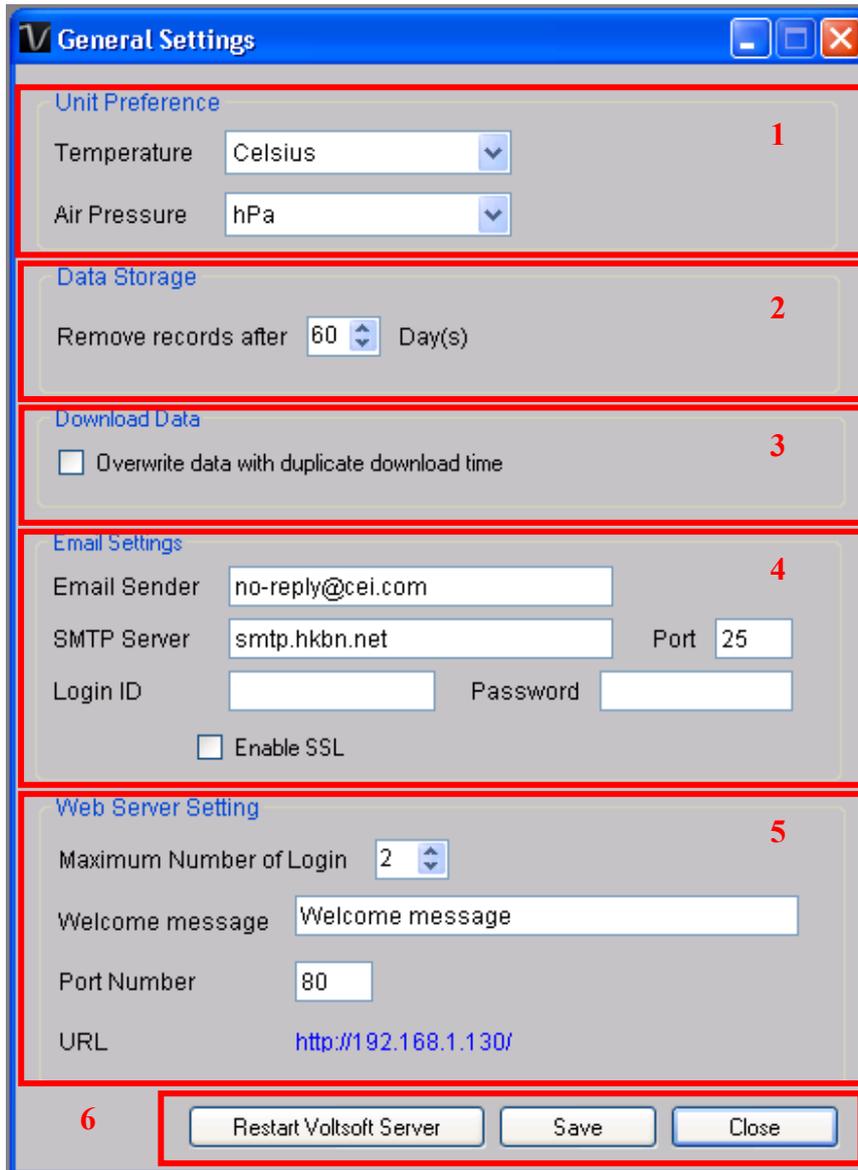
Main screen of the Voltsoft client is as follows:



1	Main Menu Area	Users can access different functions through the main menu.
2	Device List Area	Contains the list of devices which are already registered in the system. Green icon – Indicates that the device is currently connected to the computer Red icon - Indicates that the device is currently not available. Clicking on the icon can open that device in the device control panel area.
3	Device Control Panel	The opened device will be displayed in this area.

4.2 General Settings

To launch this module, please click File->Settings.

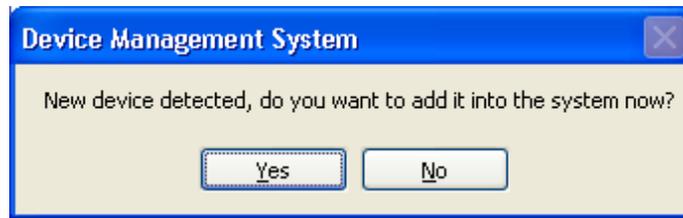


1	Unit Preference	Select the measurement unit used in Voltsoft.
2	Data Storage	In order to prevent data overload, the system will delete old data automatically. User can specify the number of days to keep the device readings.
3	Download Data	If this option was checked and the system is downloading new data with measurement time, which already existed in the database, then existing data will be overwritten.
4	Email Settings	<p>This area configures the outgoing email settings.</p> <p>Email Sender – This will be the email sender of the alert email.</p> <p>SMTP Server and Port – The outgoing SMTP server name and port number. (for Gmail, port number is 465)</p> <p>Login ID and Password – The SMTP server login and password (if required).</p> <p>Enable SSL – Check this checkbox if your SMTP server requires SSL encryption (i.e. Gmail)</p>

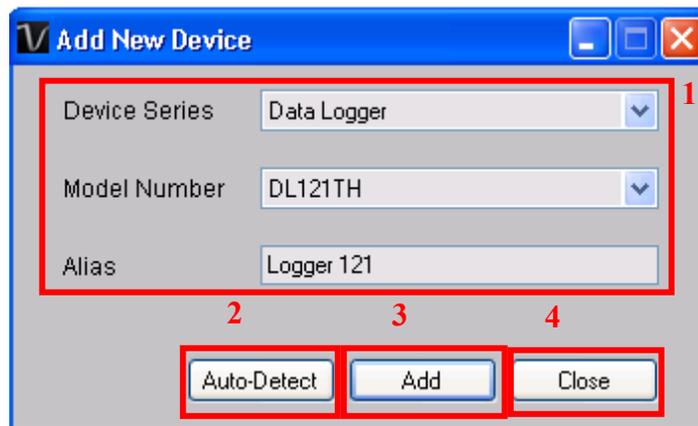
		This setting is available in the professional version only.
5	Web Server Setting	This option are no longer in use.
6	Restart Voltsoft Server	Restart the Voltsoft Server.
	Save	Save and quit this module.
	Close	Quit this module without saving.

4.3 Add New Device

This module should automatically pop up when the user plugs a new device into the computer.



However, to launch this module manually, click Device Management->Add New Device.

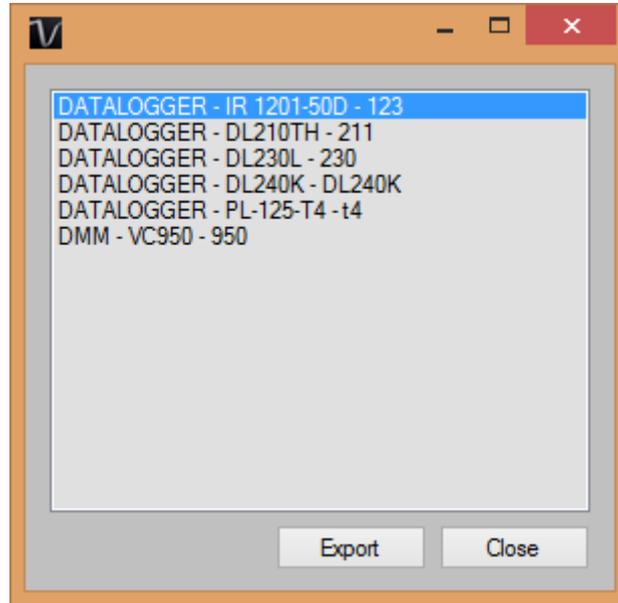


1	Select Device	To add a new device: 1. Select the device series (only Data Logger available in the current version). 2. Select model number. 3. Enter a unique alias.
2	Auto-detect	Click this button to let the system detect if there is any device connected but not yet registered.
3	Add	Click the Add button to confirm the addition.
4	Close	Click the Close button to close this module.

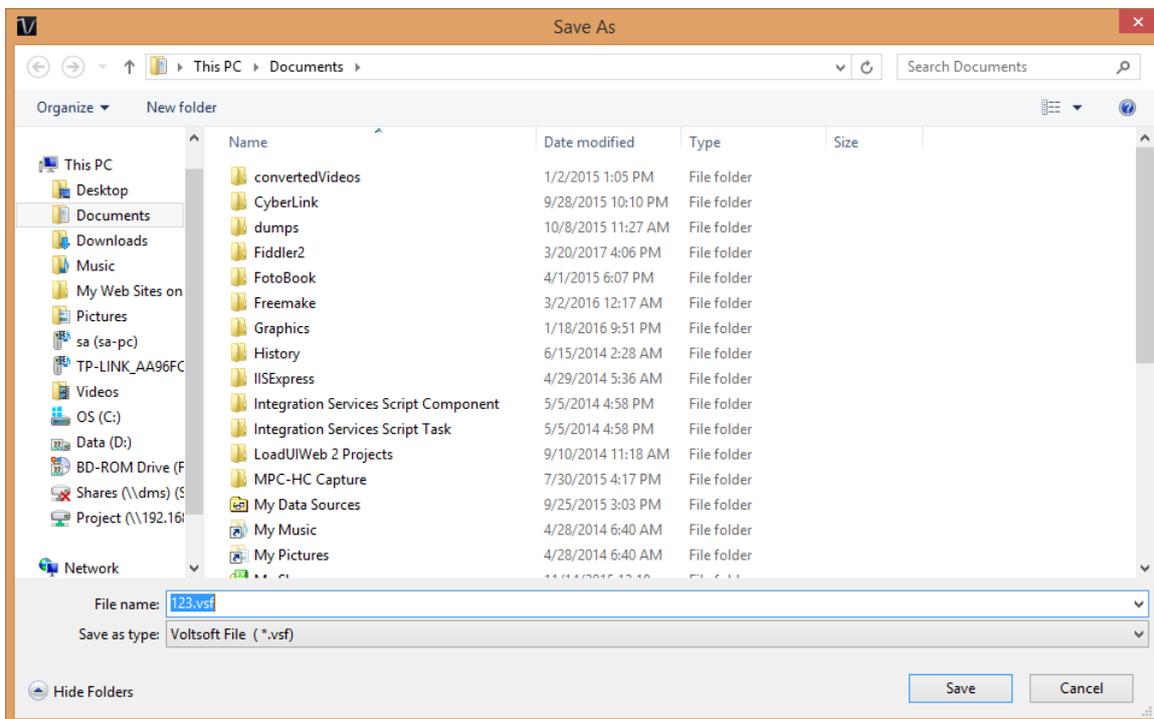
4.4 Export

This module allows the user to export device setting and readings.

Click Data > Export to launch this module.



Select the device want to export, then click the "Export" button.

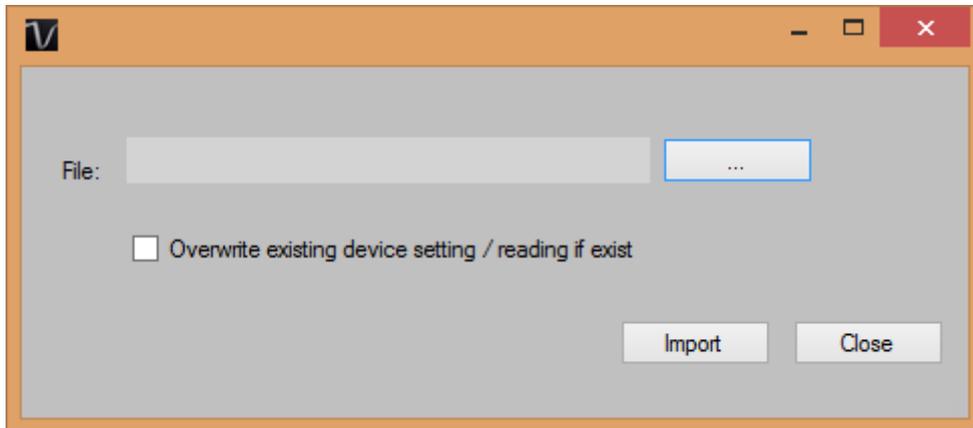


Select the location for export file, then click "Save".

4.5 Import

This module allows the user to import device setting and readings.

Click Data > Import to launch this module.



To import device setting / readings, user need to browse the export file (The .vsf generated by the export module), then click the import button.

If the device already exist in voltsoft and you want to overwrite the setting / readings, please check the "Overwrite existing device setting reading if exist" option.

4.6 Remove Existing Device

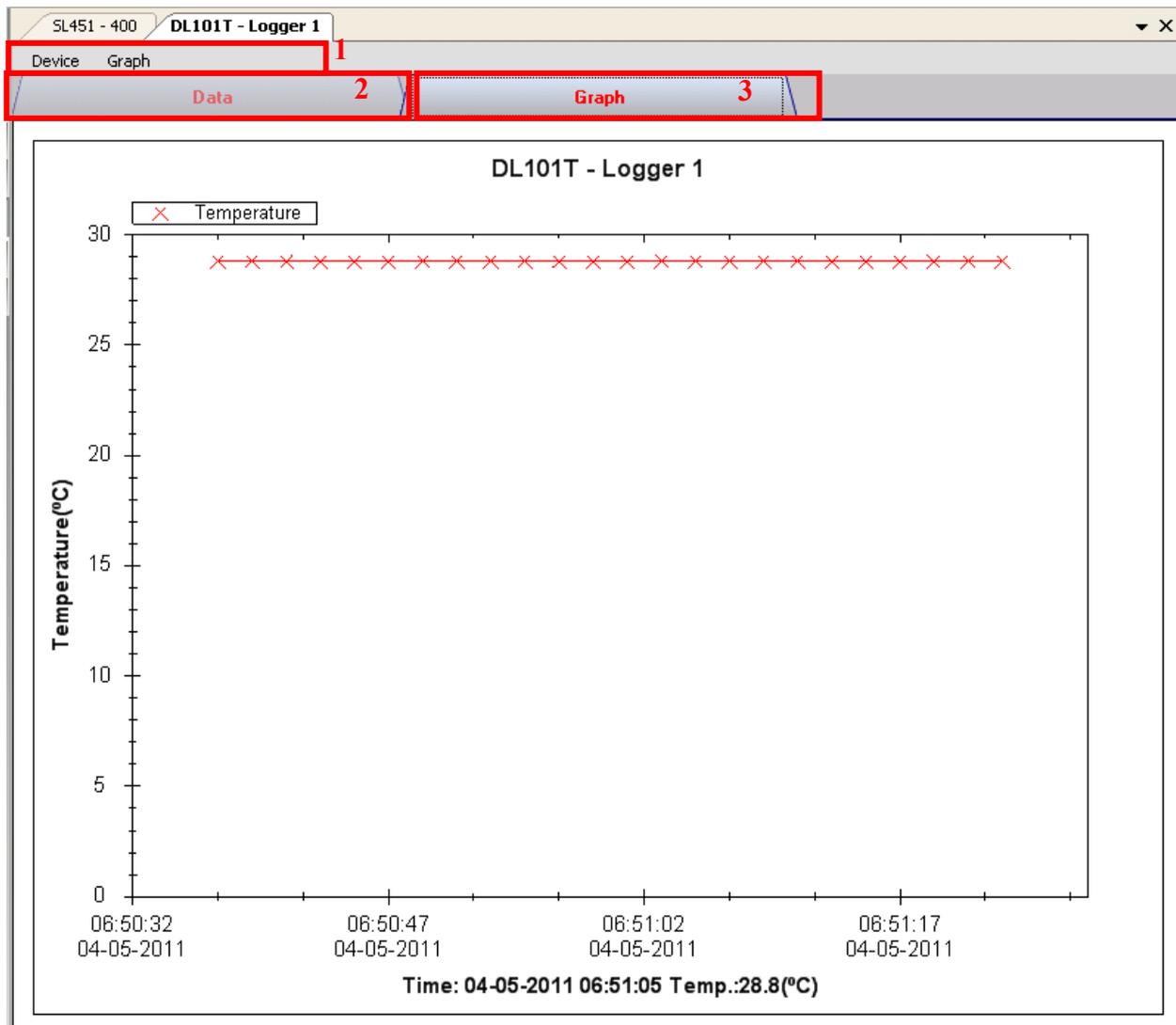
This module allows the user to remove devices which are no longer in use. To launch this module, click Device Management->Remove Existing Device.



To remove a device, click the device in the list and click the "Remove" button. Click "Remove All" button to remove all devices at the same time.

4.7 Device Control Panel

The opened device will be displayed in the device control panel area in tab format. Each tab will contain information for one single device.



Each device tab contains:

1	Device Menu Area	Each device will contain its own menu, which will be explained in an upcoming section.
2	Data Tab	Display the selected data in list form.
3	Graph Tab	Display the selected data in a graphical format.

The function of the modules may be different for different devices, therefore, they will be discussed in individual device section.

5 Professional Version

All features of the standard version and some advanced features are included in the professional version. The following features will be available after online activation of the professional version.

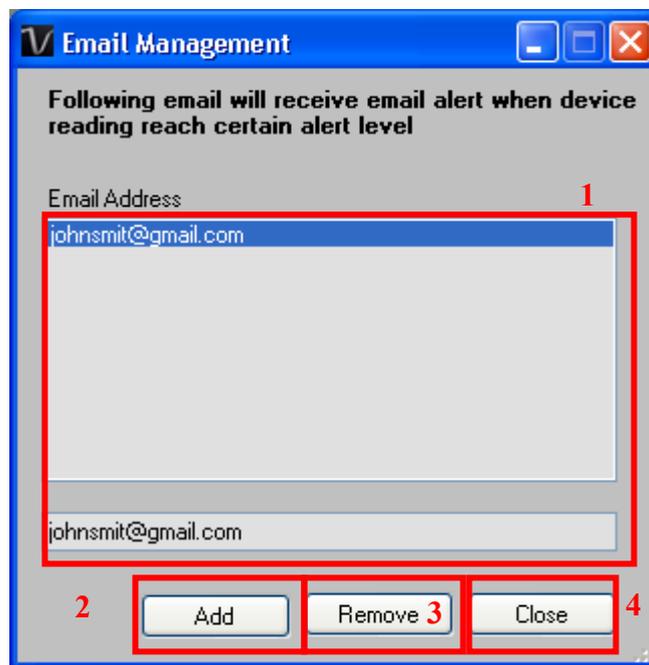
5.1 User Management

This feature no longer valid.

5.2

5.2 Email Management

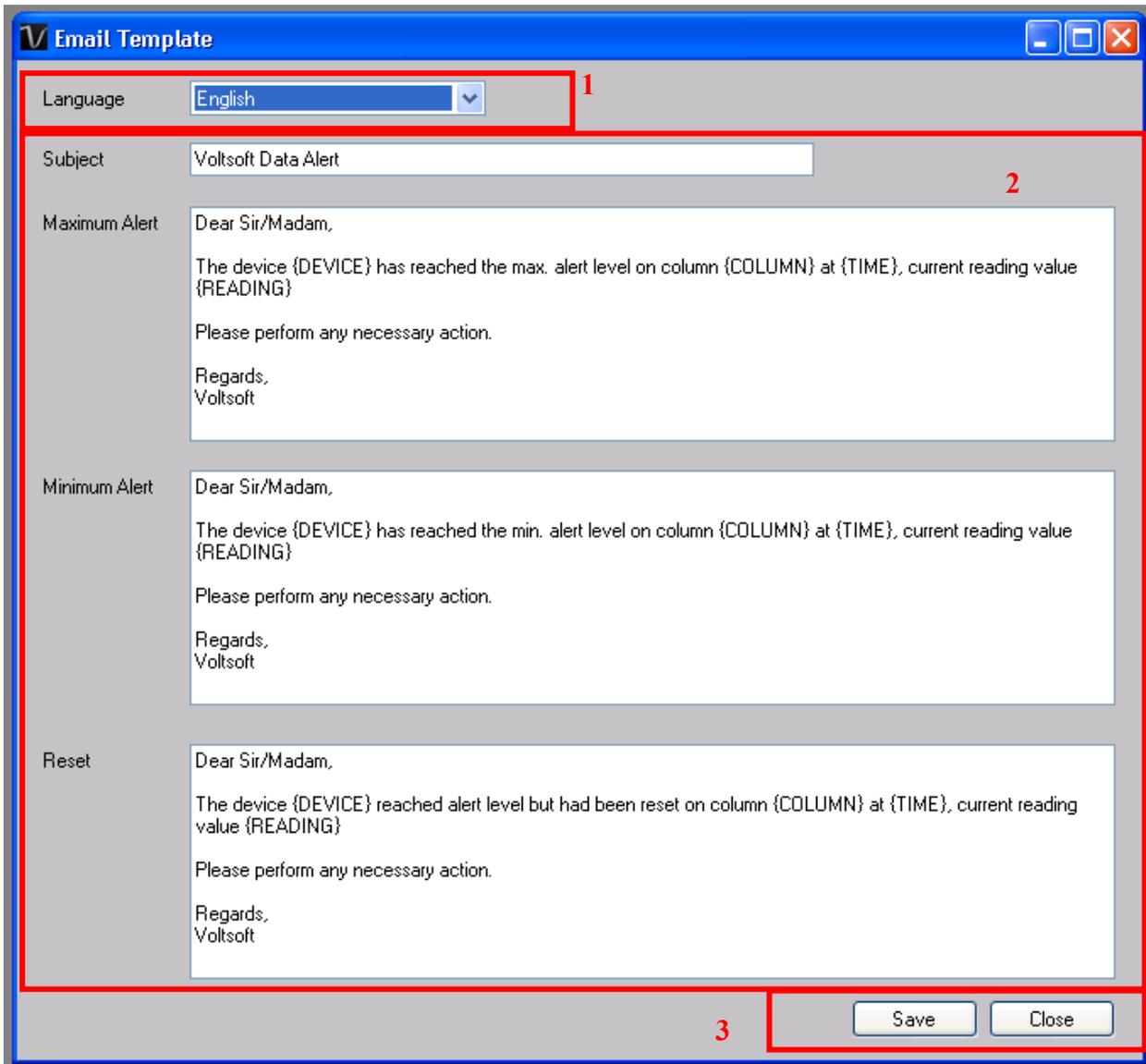
This module allows the user to manage the email addresses of those who will receive email alerts. To launch this module, click File->Email Management in the main menu.



1	Email Address	The email address is configured within Voltsoft.
2	Add New Email	Input a new email address and click the Add button to add a new email into the system.
3	Remove Email	Click on an email in the email address list and click the Remove button to remove the email from the system.
4	Close	Close this module.

5.3 Email Template

To launch this module, click Preference->Email Template.



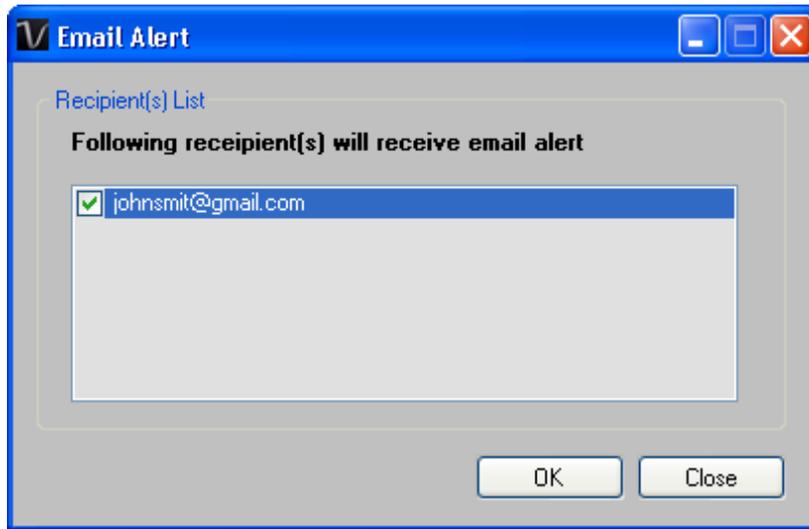
1	Language	Select the language of the email template.
2	Message Content	<p>Fill in the title and content for the email template which will be sent in the different cases:</p> <p>Case 1: Maximum Alert This email will be sent when a reading is higher than the maximum alarm level.</p> <p>Case 2: Minimum Alert This email will be sent when a reading is lower than the minimum alarm level.</p> <p>Case 3: Reset Level This email will be sent when a reading was previously at a max/min alarm level but has returned to a normal level.</p>
3	Save	Click the Save button to save the template.
4	Close	Click the Close button to close the module.

Variable

The following labels are defined as variables and will be replaced when sending out.

1	{DEVICE}	The device alias
2	{COLUMN}	The device reading name
3	{READING}	The device reading value
4	{TIME}	The time the event happened

5.4 Email Alert



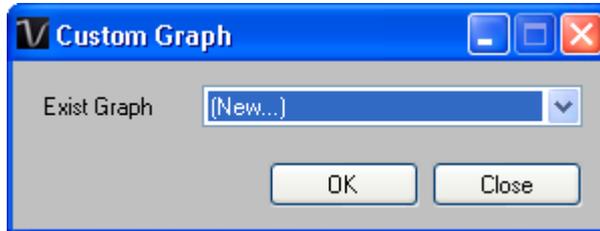
Voltsoft has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level.

The user can use this module to select who will receive the email for the specific device.

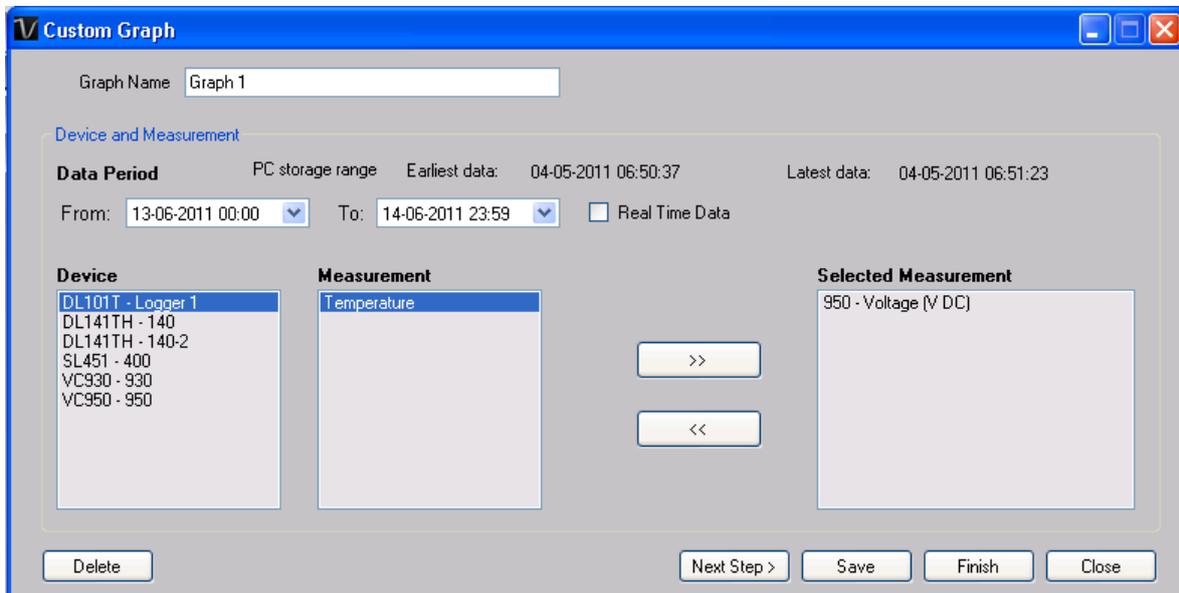
5.5 Custom Graph

Custom Graph allows the user to graph the measurement readings from more than one device. To create a custom graph:

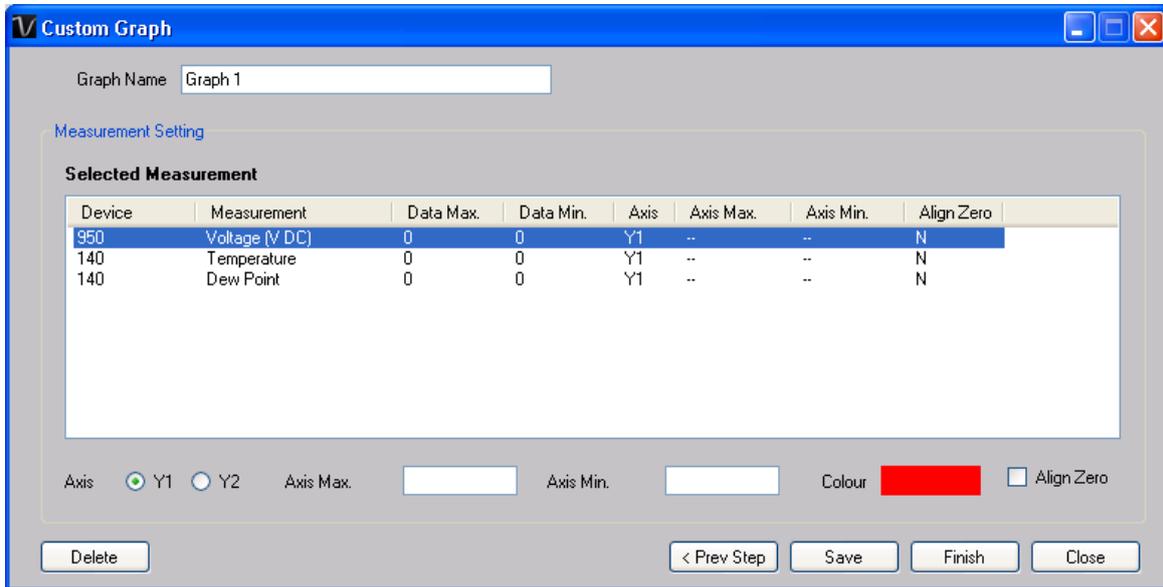
1. Select Device Management->Custom Graph in main menu.



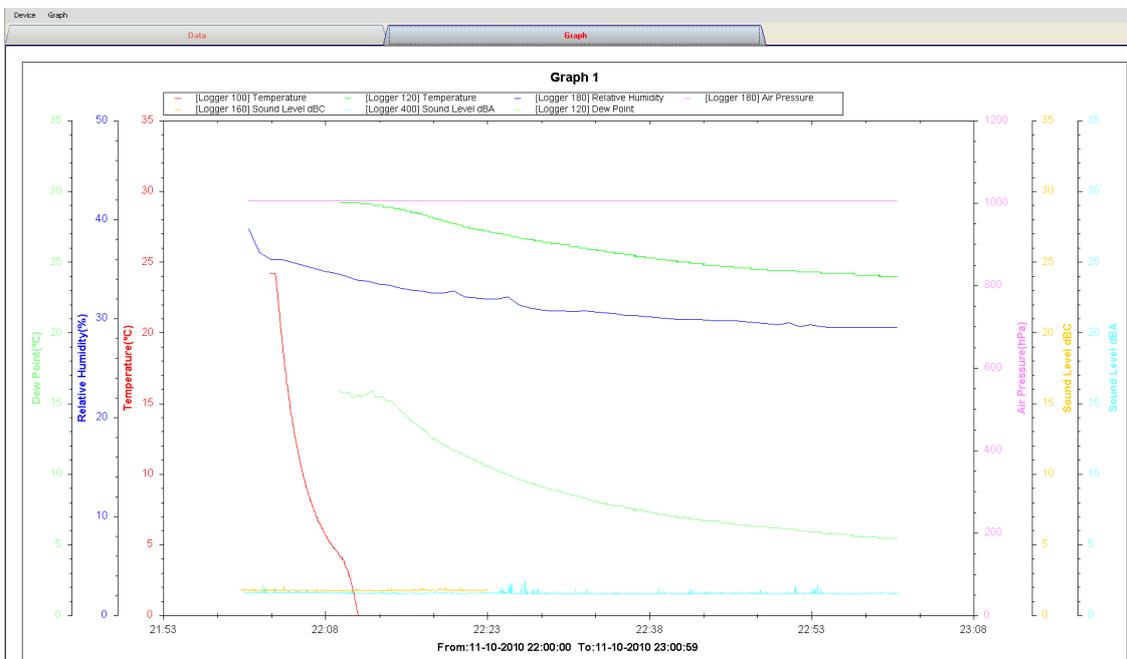
2. Select New to create a new graph or select the previous saved graph. Click OK to continue.
3. The Custom Graph detailed interface will be displayed:



4. Then the user needs to:
 - I. Select the data period or real-time data (only specific devices support real-time reading).
 - II. Select the device and measurement column.
 - III. Click Next Step> to continue.



- IV. For each column, the system will show the data maximum and minimum values for the selected period.
- V. For each column, the user can specify whether it is drawn in Y1 or Y2, specify the Y-axis maximum and minimum values, the corresponding colour of the line or align the Zero level to the same level or not.
- VI. Click Finish to generate the graph.



6 Supported Devices

Voltsoft currently support following devise:

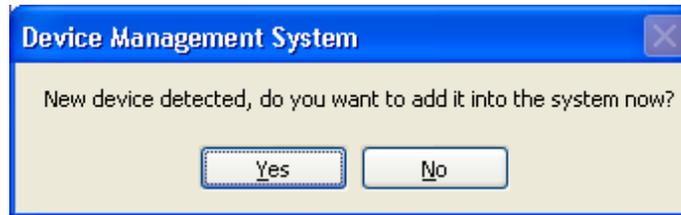
Type	Device Name
Data Logger	DL101T
Data Logger	DL111K
Data Logger	DL121TH
Data Logger	DL131G
Data Logger	DL141TH
Data Logger	DL141TH2K
Data Logger	DL151AN
Data Logger	DL161S
Data Logger	DL181THP
Data Logger	DL191A
Data Logger	DL191V
Data Logger	DL201THM
Data Logger	DL200T
Data Logger	DL210TH
Data Logger	DL220THP
Data Logger	IR 1200-50D
Data Logger	PL-125-T2USB / PL-125-T4USB
Data Logger	SL451
DMM	VC930 / VC950
DMM	VC880 / VC650BT
DMM	VC890
EL4000	EL4000

6.1 DL101T

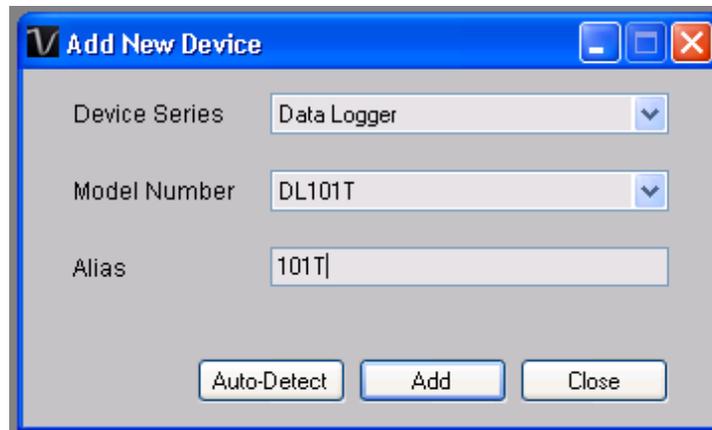
DL101T is a data logger for storing temperature reading.

6.1.1 Add new DL101T

When Voltsoft detects a new DL101T attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

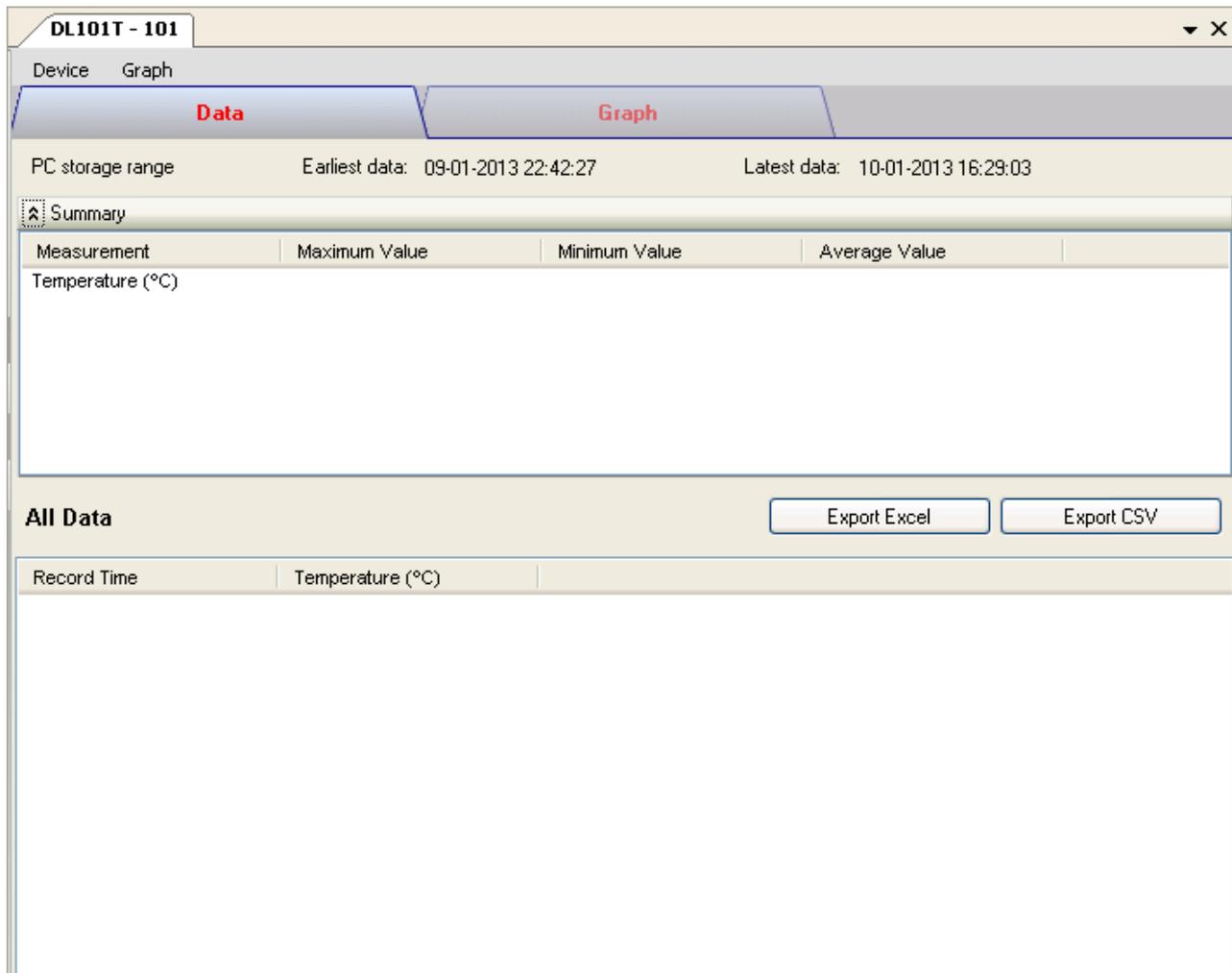


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.1.2 Remove DL101T

To remove DL101T, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

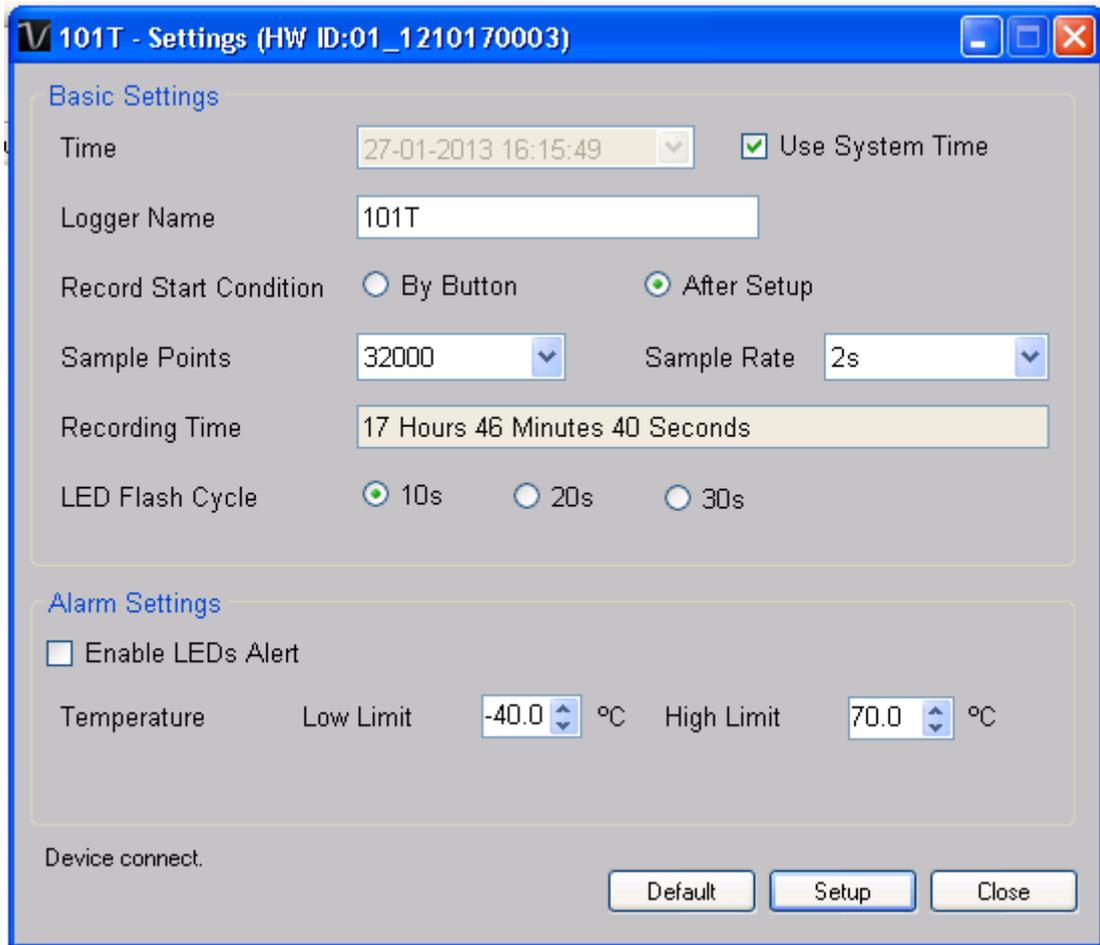
6.1.3 DL101T – Device Control Panel



The DL101T Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL101T.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.1.4 DL101T - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.1.5 DL101T - Download Data

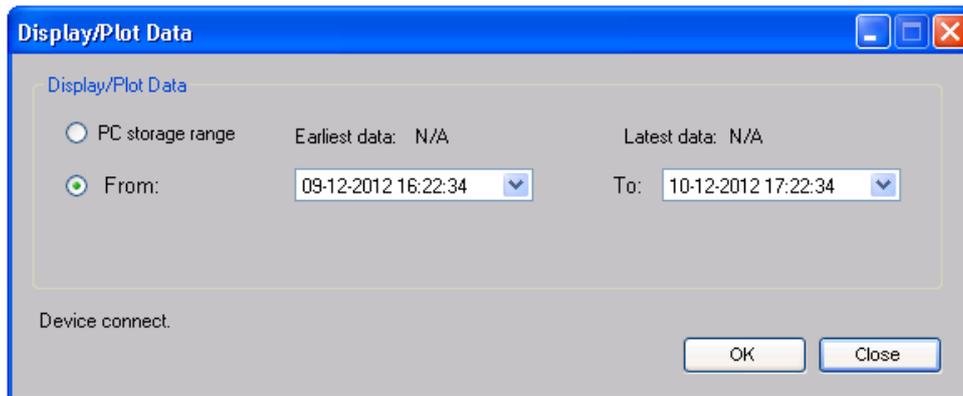
This module allows user to download the data from DL101T.



Click "OK" button to stop the recording and start downloading.

6.1.6 DL101T – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

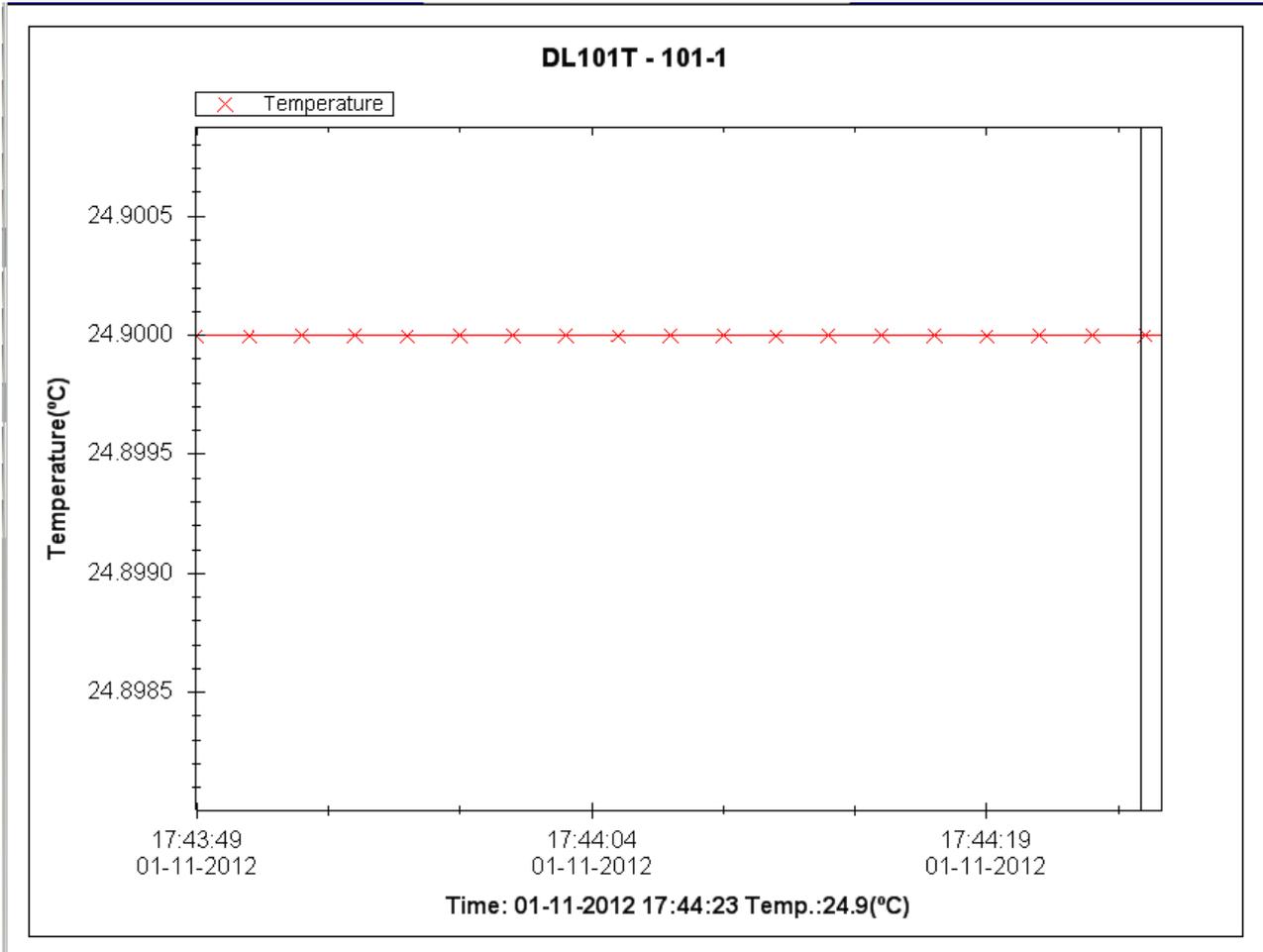
6.1.7 DL101T – Data View

DL101T contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, depending on the setting in general setting.

Record Time	Temperature (°C)
01-11-2012 16:56:03	25.4
01-11-2012 16:56:05	25.4
01-11-2012 16:56:07	25.4
01-11-2012 16:56:09	25.4
01-11-2012 16:56:11	25.4
01-11-2012 16:56:13	25.4
01-11-2012 16:56:15	25.4
01-11-2012 16:56:17	25.4
01-11-2012 16:56:19	25.4
01-11-2012 16:56:21	25.4
01-11-2012 16:56:23	25.4
01-11-2012 16:56:25	25.4
01-11-2012 16:56:27	25.4
01-11-2012 16:56:29	25.4
01-11-2012 16:56:31	25.4
01-11-2012 16:56:33	25.4
01-11-2012 16:56:35	25.4
01-11-2012 16:56:37	25.4
01-11-2012 16:56:39	25.4
01-11-2012 16:56:41	25.4
01-11-2012 16:56:43	25.4
01-11-2012 16:56:45	25.4
01-11-2012 16:56:47	25.4
01-11-2012 16:56:49	25.4
01-11-2012 16:56:51	25.4
01-11-2012 16:56:53	25.4
01-11-2012 16:56:55	25.4
01-11-2012 16:56:57	25.4
01-11-2012 16:56:59	25.4
01-11-2012 16:57:01	25.4
01-11-2012 16:57:03	25.4
01-11-2012 16:57:05	25.4
01-11-2012 16:57:07	25.4
01-11-2012 16:57:09	25.4
01-11-2012 16:57:11	25.4
01-11-2012 16:57:13	25.4

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.1.8 DL101T – Graph View



Our graph support following operations

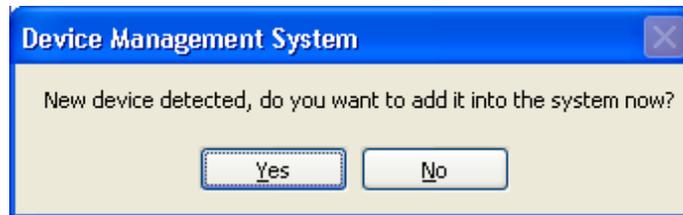
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.2 DL121TH

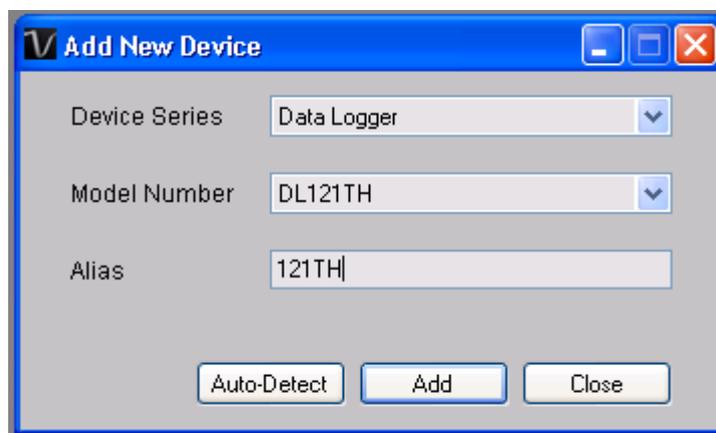
DL121TH is a data logger for storing temperature and humidity reading.

6.2.1 Add new DL121TH

When Voltsoft detected a new DL121TH attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.2.2 Remove DL121TH

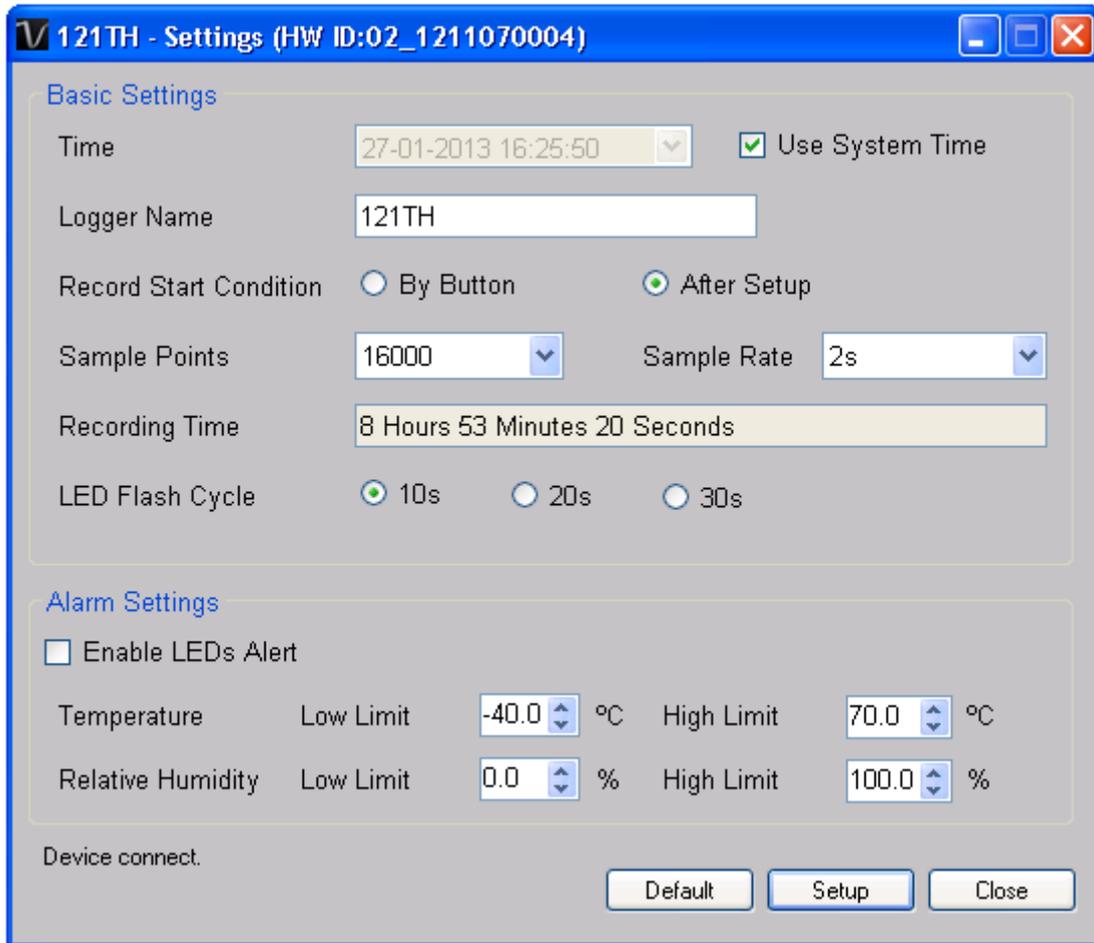
To remove DL121TH, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

6.2.3 DL121TH – Device Control Panel

DL121TH contain follow items in menu:

1	Device -> Settings	This will launch the setting page of DL121TH.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.2.4 DL121TH - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Relative humidity Low / High Alarm	Configure the humidity low / high alarm level.
11	Default Button	Reload the factory default settings.
12	Setup Button	Save changes.
13	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.2.5 DL121TH - Download Data

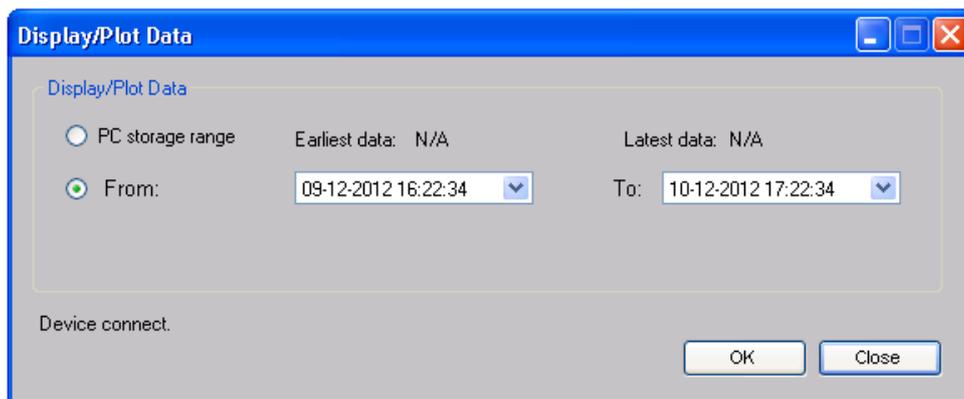
This module allows user to download the data from DL121TH.



Click "OK" button to stop the recording and start downloading.

6.2.6 DL121TH – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.2.7 DL121TH – Data View

DL121TH contains three measurements (Temperature, relative humidity and dew point), template / dew point unit can be Celsius or Fahrenheit, depending on the setting in general setting.

Device Graph

Data **Graph**

PC storage range Earliest data: 10-10-2012 15:40:38 Latest data: 11-10-2012 00:33:56

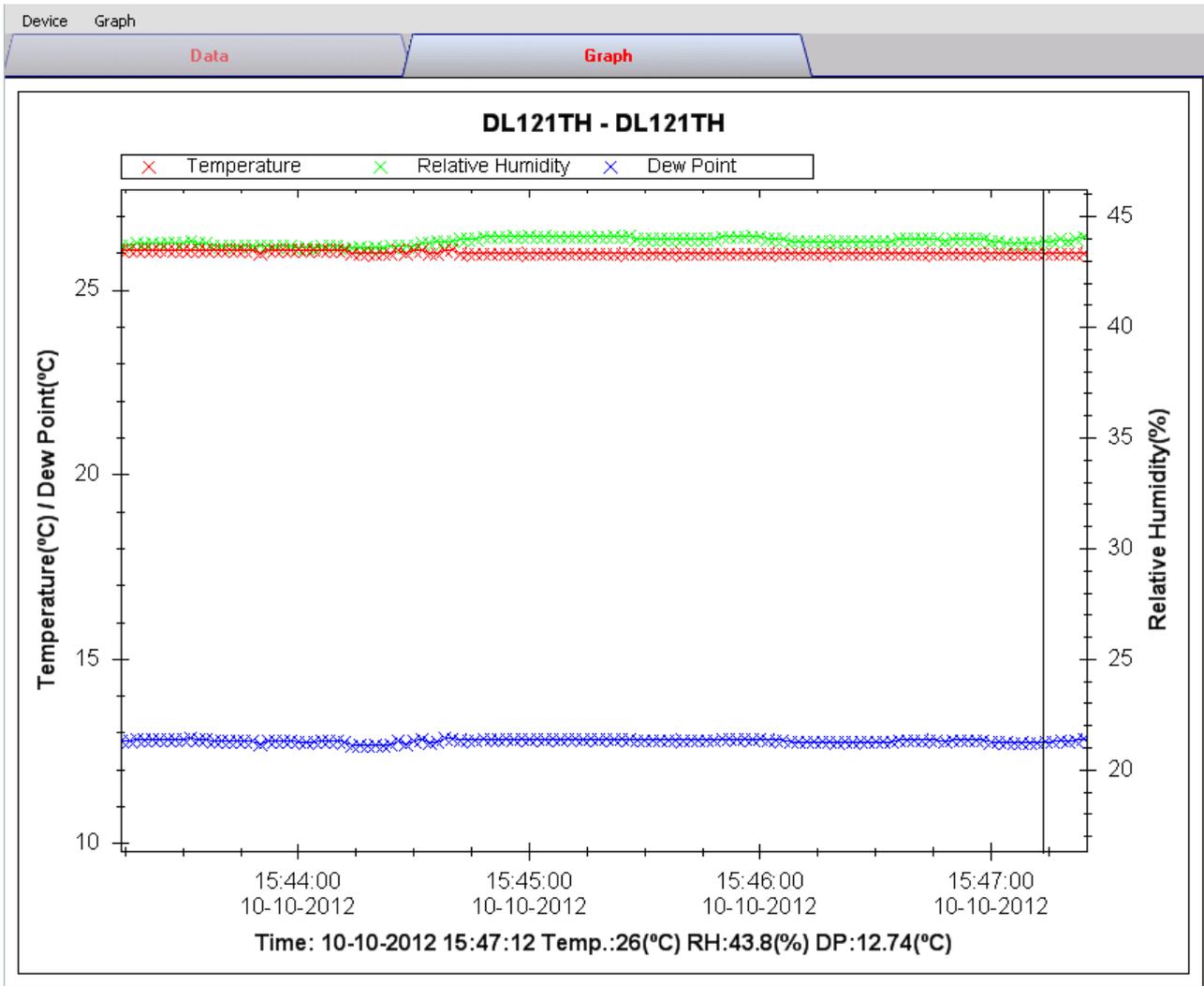
Summary

All Data Export Excel Export CSV

Record Time	Temperature (°C)	Relative Humidity (%)	Dew Point (°C)
10-10-2012 15:40:38	26.1	44.2	12.97
10-10-2012 15:40:40	26.1	44.2	12.97
10-10-2012 15:40:42	26.1	44.2	12.97
10-10-2012 15:40:44	26.1	44.2	12.97
10-10-2012 15:40:46	26.1	44.2	12.97
10-10-2012 15:40:48	26.1	44.2	12.97
10-10-2012 15:40:50	26.1	44.2	12.97
10-10-2012 15:40:52	26.1	44.2	12.97
10-10-2012 15:40:54	26.1	44.1	12.93
10-10-2012 15:40:56	26.1	44.1	12.93
10-10-2012 15:40:58	26.1	44.1	12.93
10-10-2012 15:41:00	26.1	44.1	12.93
10-10-2012 15:41:02	26.1	44.0	12.90
10-10-2012 15:41:04	26.1	44.0	12.90
10-10-2012 15:41:06	26.1	44.0	12.90
10-10-2012 15:41:08	26.1	43.9	12.86
10-10-2012 15:41:10	26.1	43.9	12.86
10-10-2012 15:41:12	26.1	43.9	12.86
10-10-2012 15:41:14	26.1	43.9	12.86
10-10-2012 15:41:16	26.1	43.9	12.86
10-10-2012 15:41:18	26.1	43.9	12.86
10-10-2012 15:41:20	26.1	43.9	12.86
10-10-2012 15:41:22	26.1	43.9	12.86
10-10-2012 15:41:24	26.1	43.9	12.86
10-10-2012 15:41:26	26.1	43.9	12.86
10-10-2012 15:41:28	26.1	43.9	12.86
10-10-2012 15:41:30	26.1	43.9	12.86
10-10-2012 15:41:32	26.1	43.9	12.86
10-10-2012 15:41:34	26.1	43.9	12.86
10-10-2012 15:41:36	26.1	43.9	12.86
10-10-2012 15:41:38	26.1	43.9	12.86
10-10-2012 15:41:40	26.1	43.9	12.86
10-10-2012 15:41:42	26.1	43.9	12.86
10-10-2012 15:41:44	26.1	43.9	12.86
10-10-2012 15:41:46	26.1	43.8	12.83
10-10-2012 15:41:48	26.1	43.7	12.79

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.2.8 DL121TH – Graph View



Our graph supports the following operations

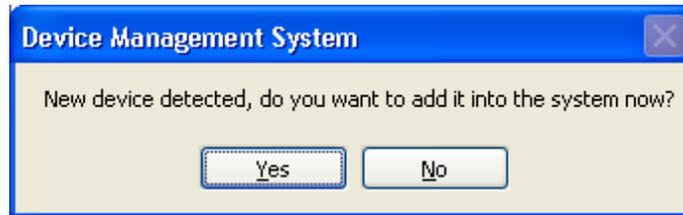
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.3 DL131G

DL131G is a data logger for storing vibration reading. DL131G supports real time and real time Fast Fourier Transform (FFT) measurement.

6.3.1 Add new DL131G

When Voltsoft detected a new DL131G attached, the following dialog will be popped up:



Click "Yes", following dialog will be displayed:

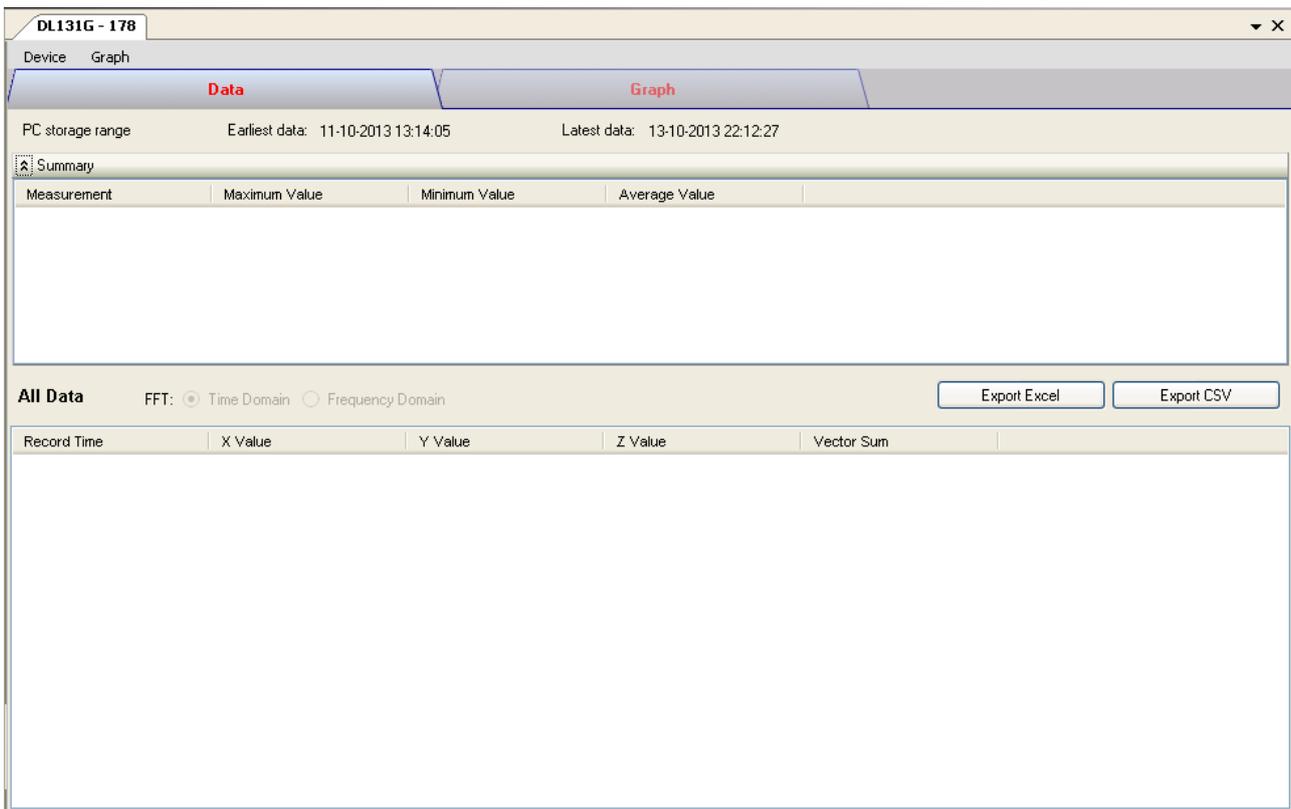


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.3.2 Remove DL131G

To remove DL131G, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

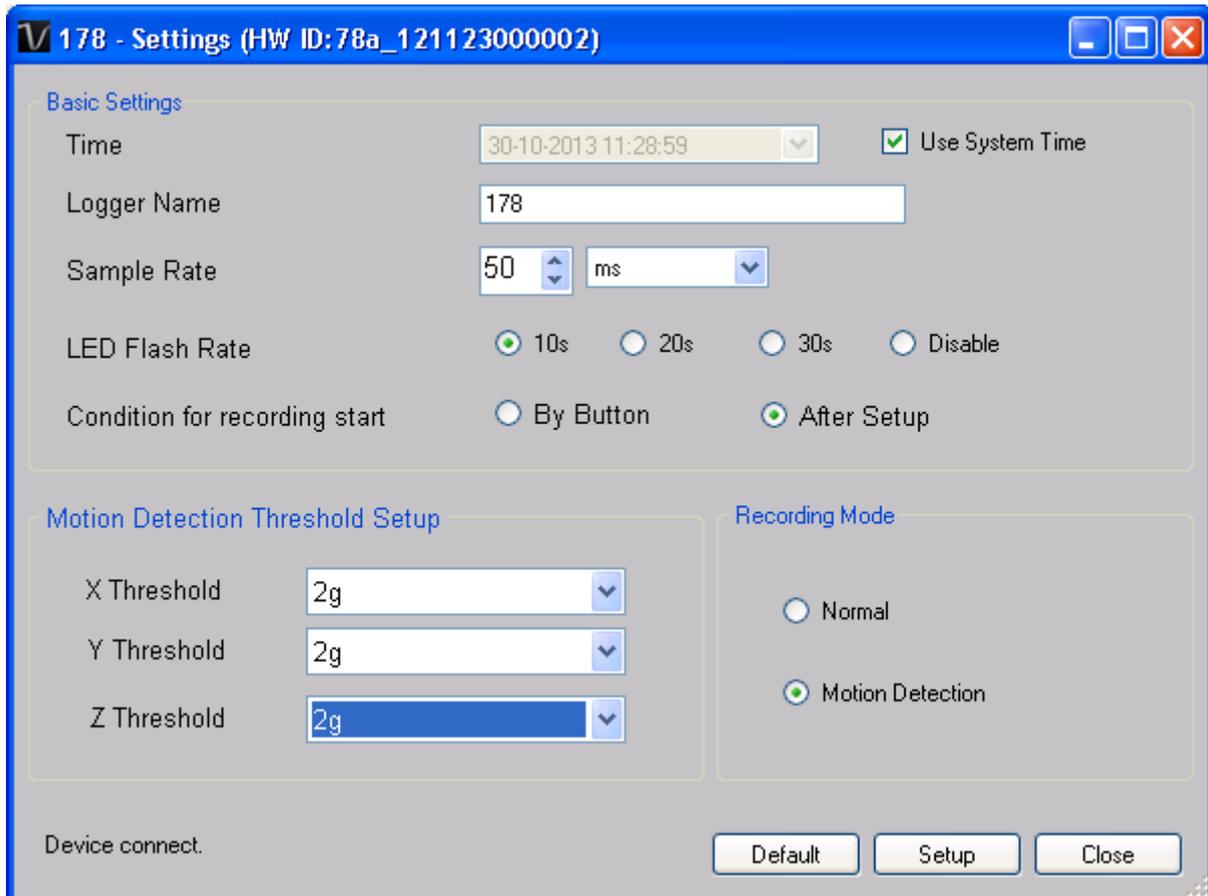
6.3.3 DL131G – Device Control Panel



The DL131G Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL131G.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.
14	Graph -> View All Data	Zoom out the graph to view all data.

6.3.4 DL131G – Settings



1	Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Sample Rate	Instruct the data logger to log readings at a specific rate.
4	LED Flash RateCycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
5	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
6	Motion Detection Threshold Setup	The Motion Detection Threshold Setup filed allows the user to set the acceleration detection threshold. Once the acceleration value is over the threshold, the DATALOGGER will work.
7	Recording Mode	The DATA LOGGER Record Mode can be set as Normal and Motion Detection.
8	Default Button	Load the factory default settings.
9	Setup Button	Save changes.
10	Close Button	Close this interface.

6.3.5 DL131G - Download Data

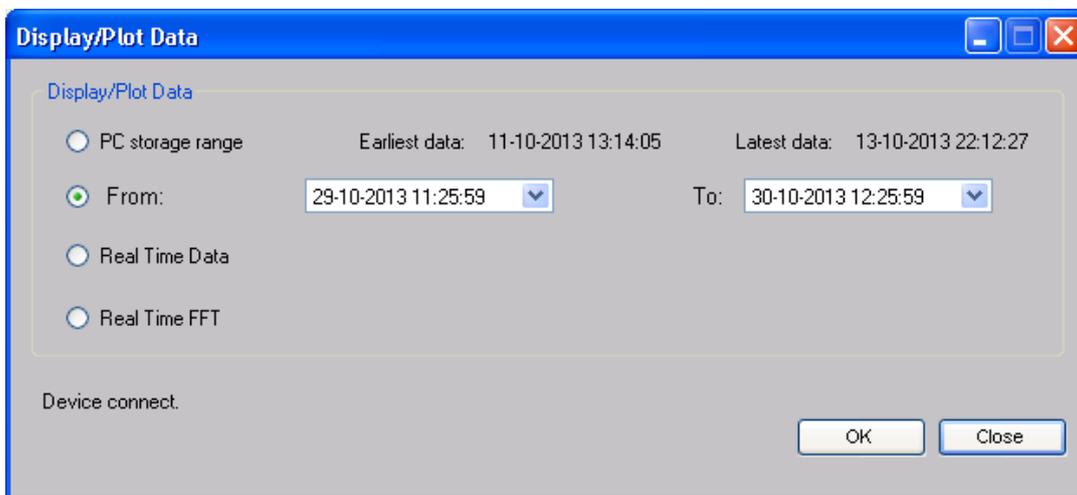
This module allows user to download the data from DL131G.



Click "OK" button to stop the recording and start downloading.

6.3.6 DL131G – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

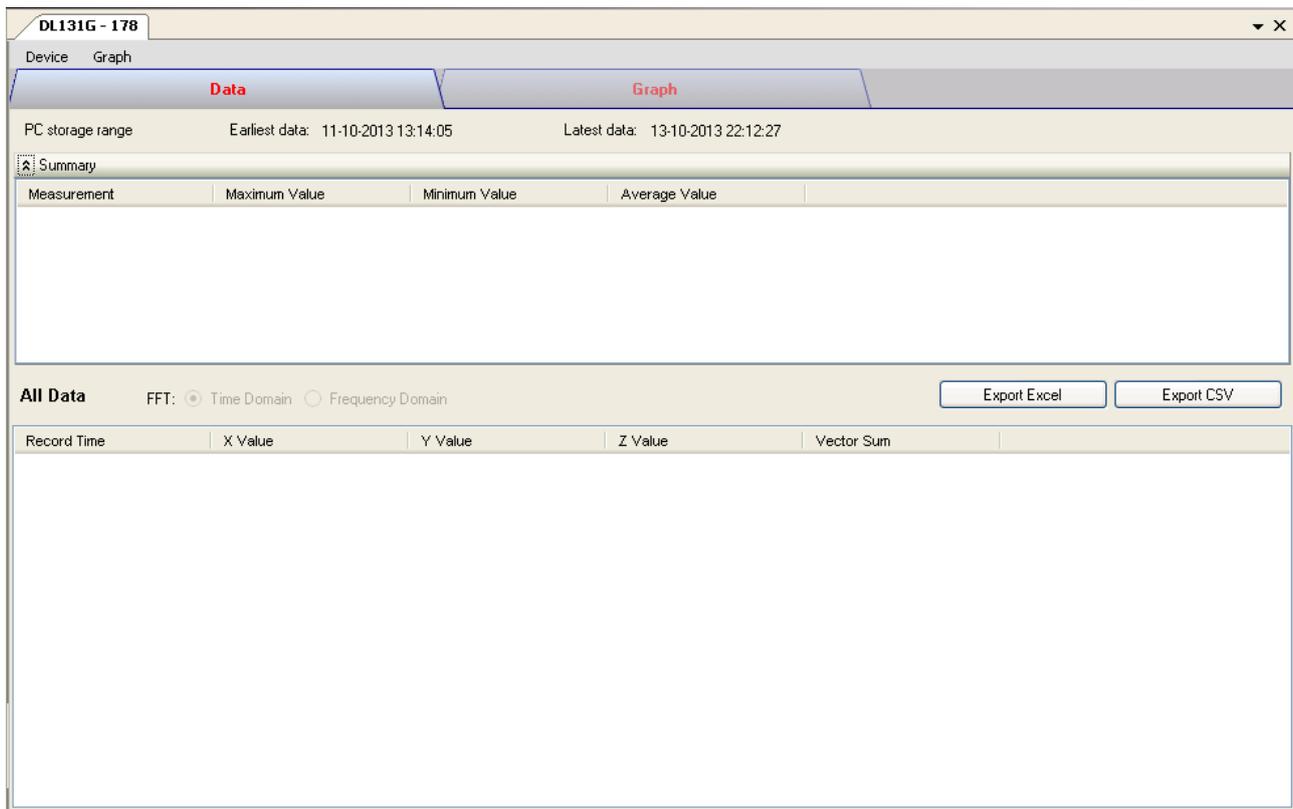


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode.
4	Real Time FFT	Read real-time spectral data for FFT analysis.
5	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
6	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

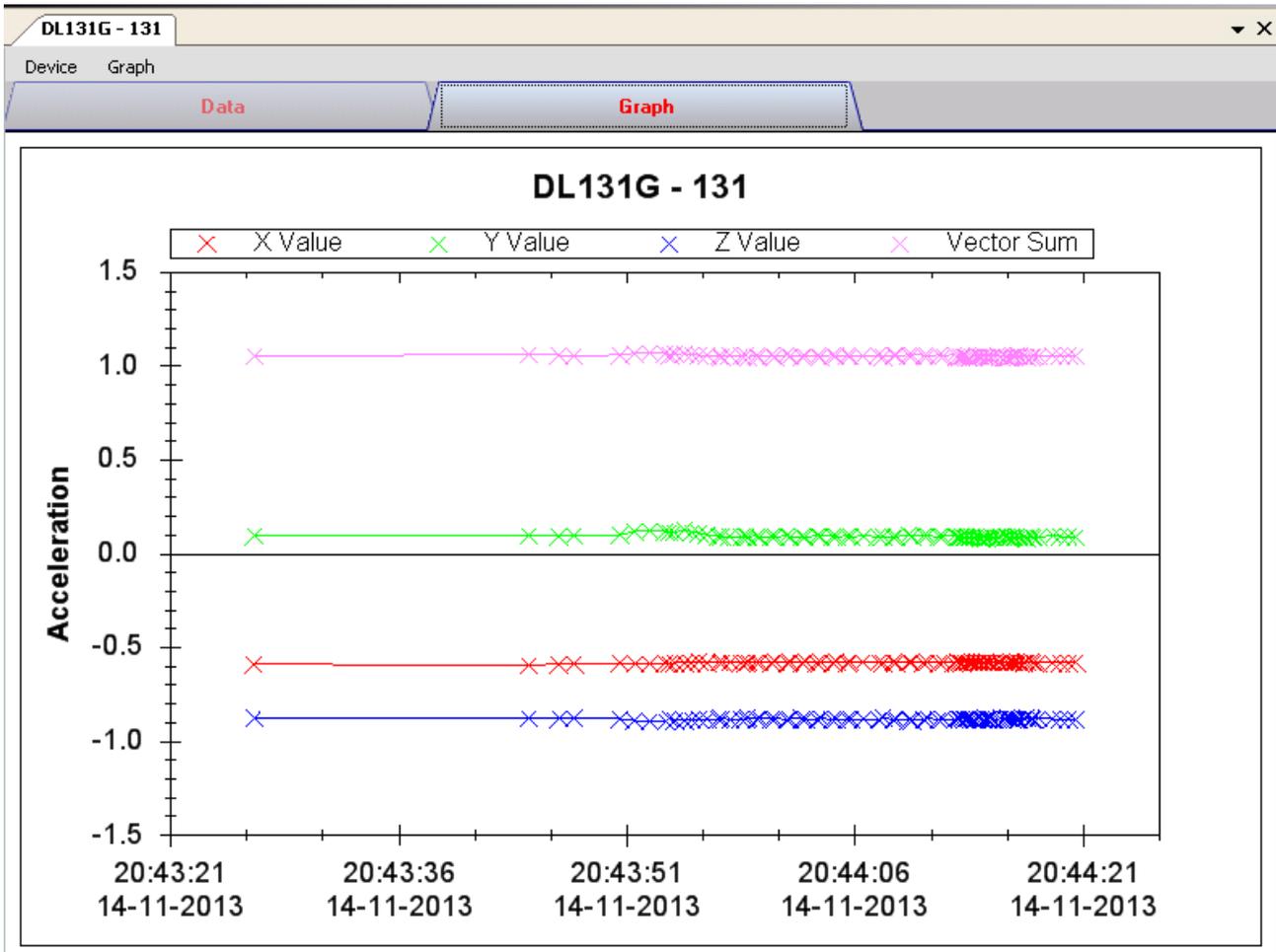
6.3.7 DL131G – Data View

DL131G contains four measurements (X Value, Y Value, Z Value and Vector Sum).



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.3.8 DL131G – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.3.9 DL131G – Real Time FFT

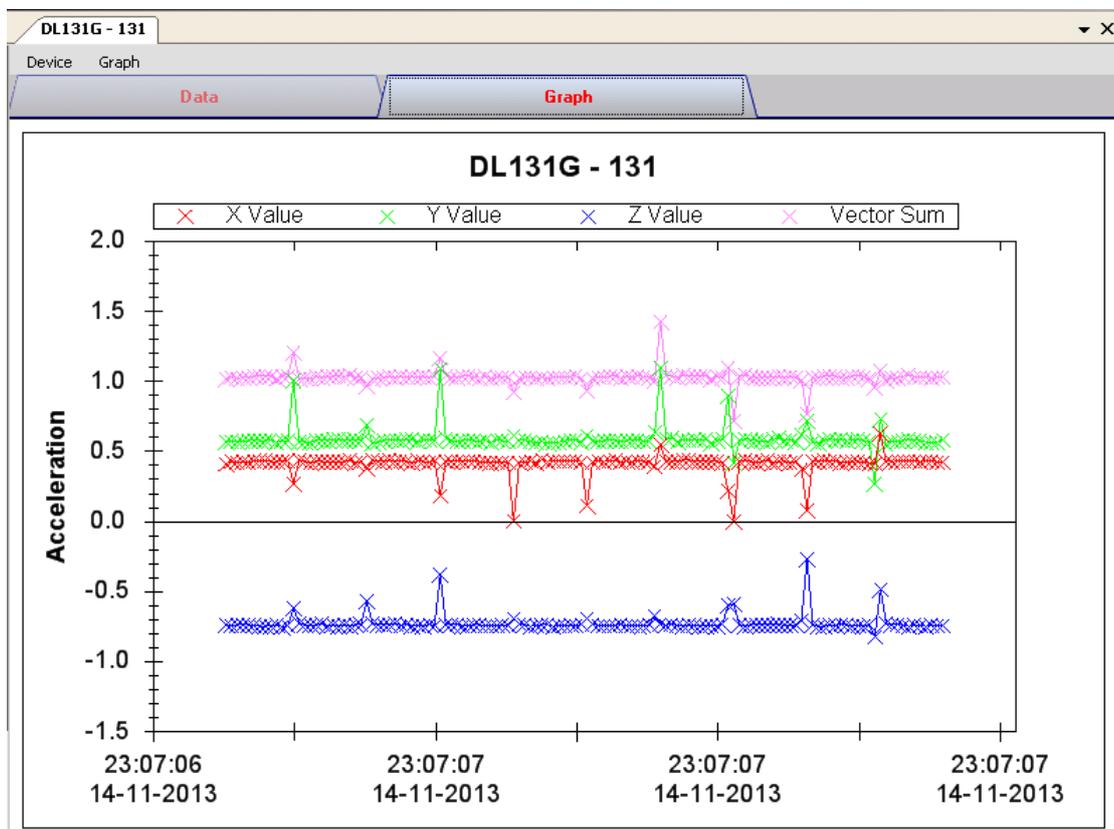
The logger will enter real time FFT mode when select “Real Time FFT” in “Display / Plot Data”.

In FFT mode, there is two options for displaying data: Time Domain and Frequency Domain.

Time Domain:

In time domain mode, total 128 reading will be download at any specific period of time.

Record Time	X Value	Y Value	Z Value	Vector Sum
30-10-2013 12:07:45 879	-0.28	0.80	-0.44	0.96
30-10-2013 12:07:45 883	0.90	1.01	-0.34	1.40
30-10-2013 12:07:45 887	-0.14	0.74	-0.35	0.93
30-10-2013 12:07:45 891	-0.22	0.73	-0.36	0.94
30-10-2013 12:07:45 895	-0.21	0.74	-0.38	0.85
30-10-2013 12:07:45 899	-0.19	0.76	-0.37	0.86
30-10-2013 12:07:45 903	-0.20	0.72	-0.43	0.86
30-10-2013 12:07:45 907	-0.18	0.70	-0.45	0.85
30-10-2013 12:07:45 911	0.07	0.81	0.02	0.82
30-10-2013 12:07:45 915	0.09	0.86	0.00	0.87
30-10-2013 12:07:45 919	0.09	0.89	0.02	0.90
30-10-2013 12:07:45 923	0.09	0.87	0.03	0.89
30-10-2013 12:07:45 927	0.08	0.87	0.02	0.88
30-10-2013 12:07:45 931	0.08	0.89	0.02	0.89
30-10-2013 12:07:45 935	0.09	0.87	0.02	0.87
30-10-2013 12:07:45 939	0.08	0.88	0.01	0.89
30-10-2013 12:07:45 943	0.08	0.87	0.01	0.88
30-10-2013 12:07:45 947	0.08	0.88	0.02	0.88
30-10-2013 12:07:45 951	0.08	0.88	0.01	0.89
30-10-2013 12:07:45 955	0.08	0.87	0.02	0.88
30-10-2013 12:07:45 959	0.08	0.88	0.01	0.88
30-10-2013 12:07:45 963	-0.11	0.31	0.26	0.42
30-10-2013 12:07:45 967	0.02	0.71	-0.09	0.72
30-10-2013 12:07:45 971	0.07	0.90	0.04	0.90
30-10-2013 12:07:45 975	0.08	0.88	0.03	0.88
30-10-2013 12:07:45 979	0.08	0.87	0.02	0.87
30-10-2013 12:07:45 983	0.09	0.88	0.01	0.89
30-10-2013 12:07:45 987	0.09	0.90	0.02	0.90
30-10-2013 12:07:45 991	0.08	0.88	0.02	0.89
30-10-2013 12:07:45 995	0.08	0.89	0.03	0.89
30-10-2013 12:07:45 999	0.08	0.88	0.03	0.89
30-10-2013 12:07:46 003	0.08	0.88	0.02	0.88
30-10-2013 12:07:46 007	0.08	0.88	0.02	0.89
30-10-2013 12:07:46 011	0.09	0.88	0.01	0.88
30-10-2013 12:07:46 015	0.00	0.84	0.24	0.87



Frequency Domain:

In frequency domain mode, the 128 reading downloaded will be calculate and transform to 256 readings to display.

DL131G - 178

Device Graph

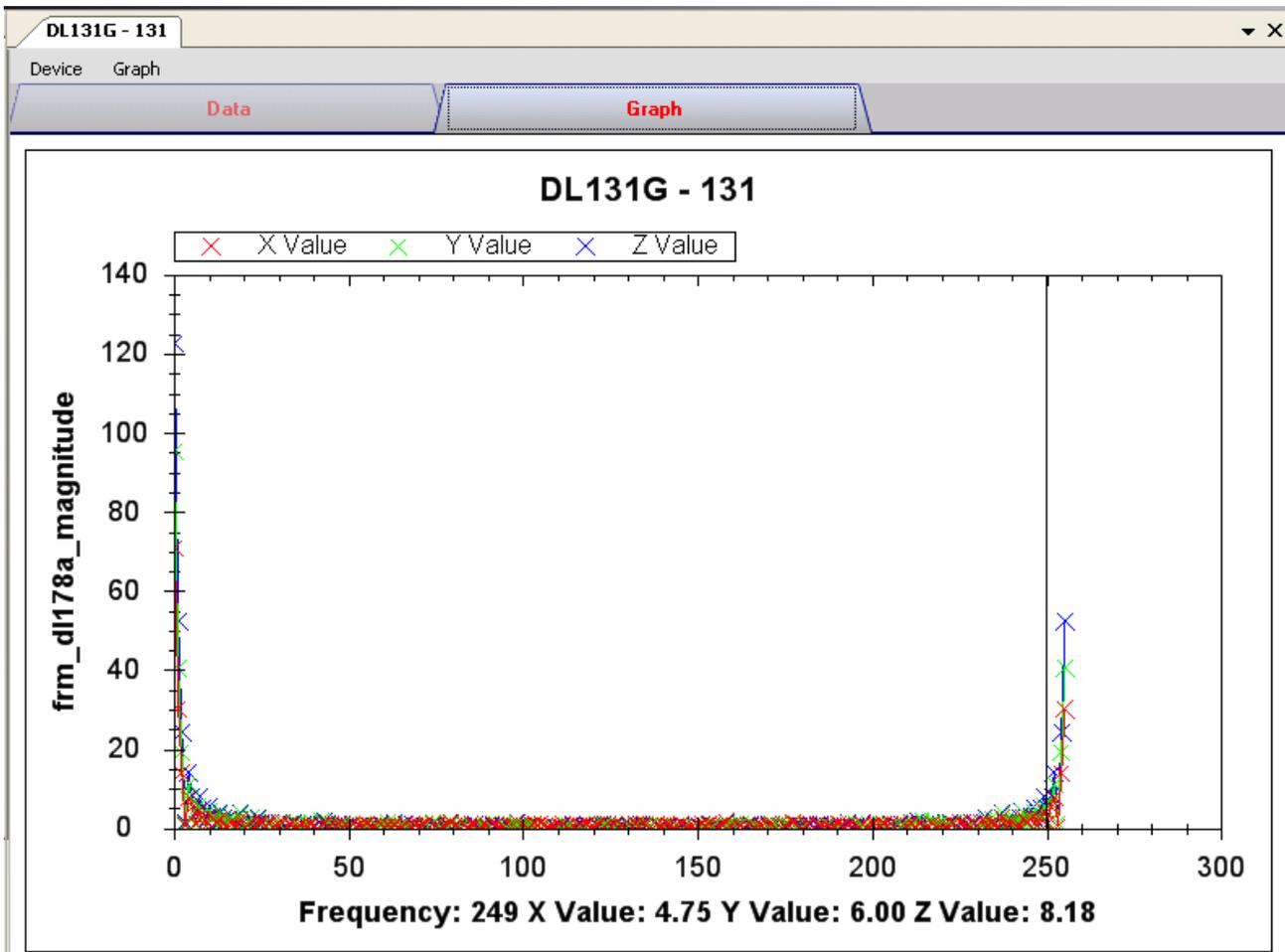
Data Graph

PC storage range Earliest data: 11-10-2013 13:14:05 Latest data: 13-10-2013 22:12:27

Summary

All Data FFT: Time Domain Frequency Domain Export Excel Export CSV

Frequency	X Value	Y Value	Z Value
0	12.12	145.45	9.98
1	4.90	62.90	3.94
2	2.91	28.61	2.75
3	0.50	2.88	0.73
4	1.90	15.80	1.44
5	0.77	11.30	0.80
6	0.89	3.27	0.34
7	0.45	8.99	1.13
8	0.80	6.14	0.16
9	0.27	2.25	0.19
10	0.47	6.90	0.67
11	1.34	4.02	0.36
12	1.10	2.68	0.78
13	1.40	5.46	0.47
14	0.26	2.06	0.21
15	0.43	1.51	0.25
16	1.19	4.38	0.63
17	0.53	2.95	1.54
18	1.43	2.74	0.93
19	2.22	4.40	2.10
20	1.73	1.30	1.55
21	0.60	2.56	0.56
22	0.41	4.10	0.11
23	0.37	0.86	1.55
24	0.16	2.18	0.78
25	0.30	2.57	0.79
26	0.80	0.31	0.28
27	0.51	2.08	0.34
28	0.62	2.39	0.52
29	0.64	0.59	0.36
30	1.34	2.06	0.92
31	1.00	2.74	0.71
32	0.94	1.31	0.57
33	0.22	1.90	0.19
34	0.14	1.73	0.14

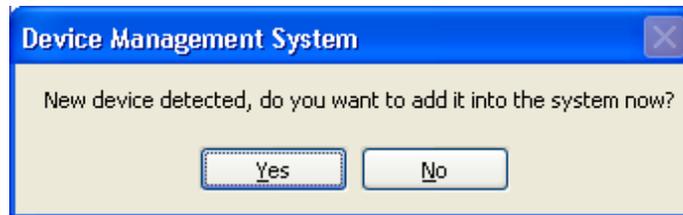


6.4 DL141TH

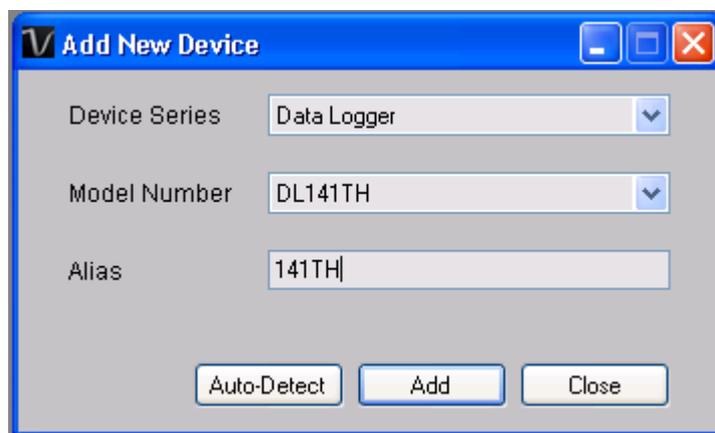
DL141TH is a data logger for storing temperature and humidity readings.

6.4.1 Add new DL141TH

When Voltsoft detected a new DL141TH attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

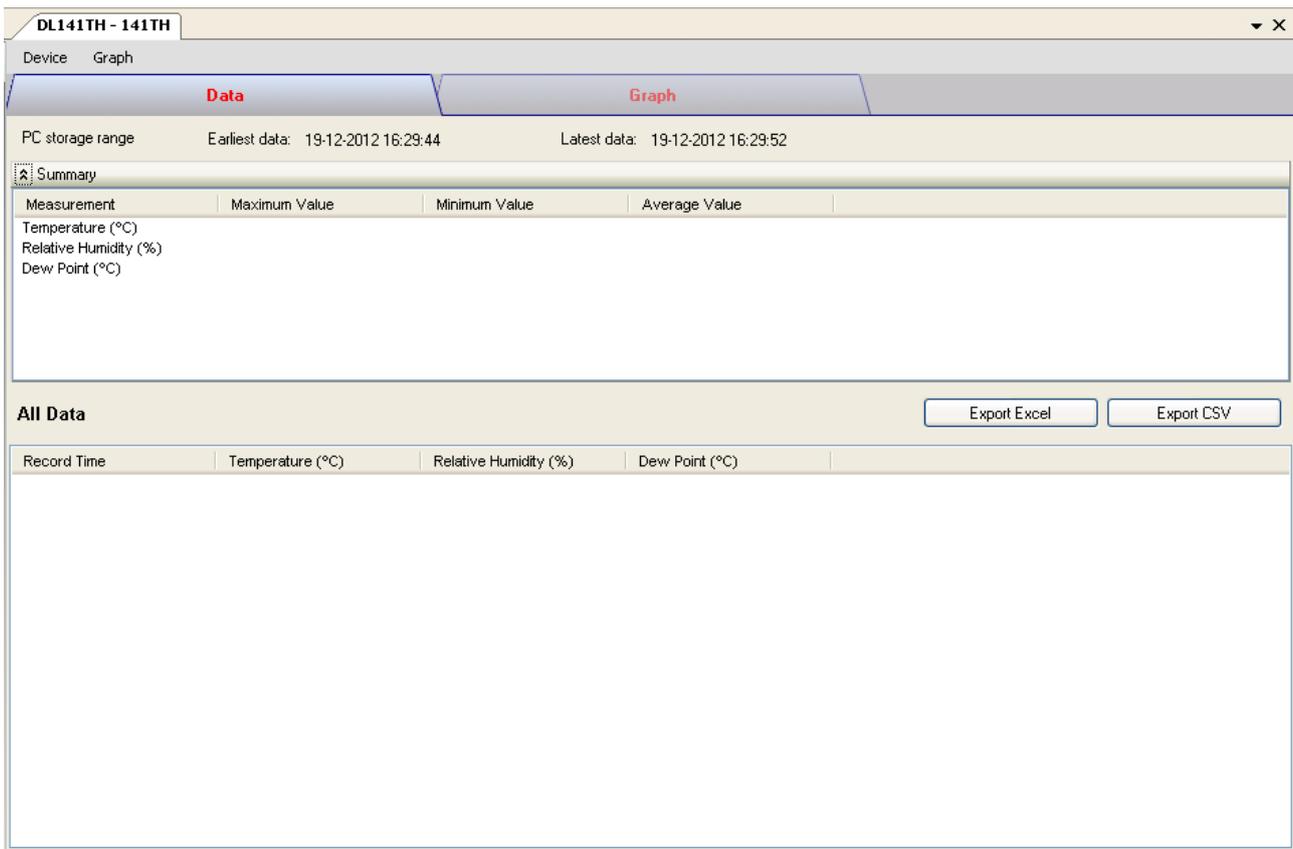


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.4.2 Remove DL141TH

To remove DL141TH, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

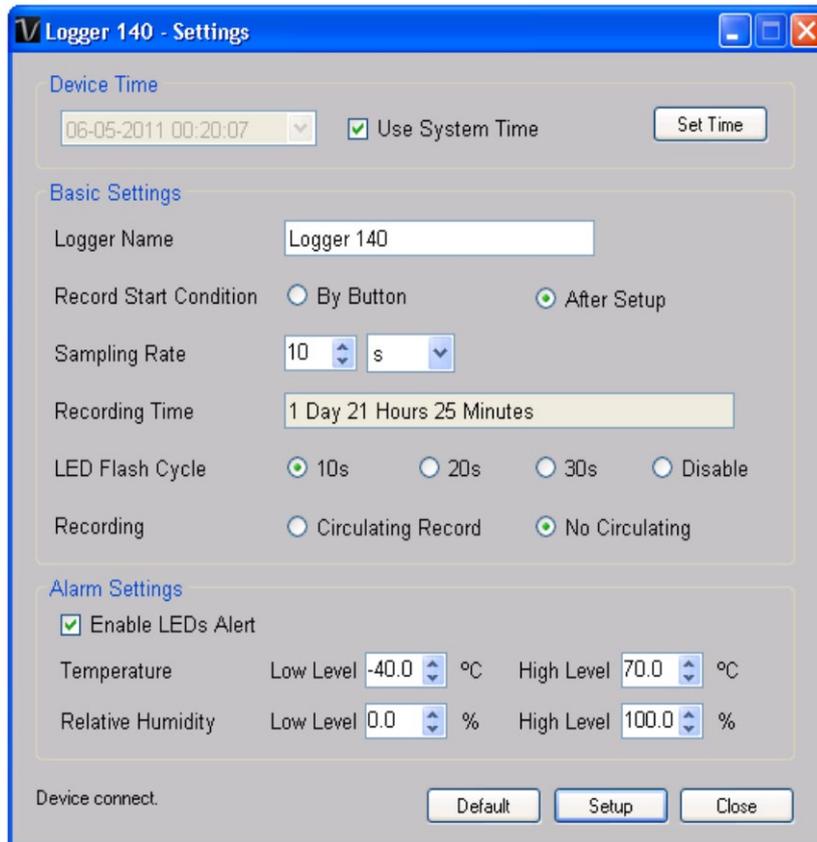
6.4.3 DL141TH – Device Control Panel



The DL141TH Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL141TH.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.4.4 DL141TH – Settings



1	Device Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Enter the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
	Sample Rate	Instruct the data logger to log readings at a specific rate. The user can input specific data in the edit box on the left and select the time unit using the combo box on the right.
5	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
6	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Recording	Instruct the data logger to continue logging data, recording over the earlier data (Circulating Record), or to stop logging (No Circulating) when the data logger memory is full.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Humidity Low / High Alarm	Configure the humidity low / high alarm level.
11	Default Button	Reload the factory default settings.
12	Setup Button	Save changes.
13	Close Button	Close this interface.

6.4.5 DL141TH - Download Data

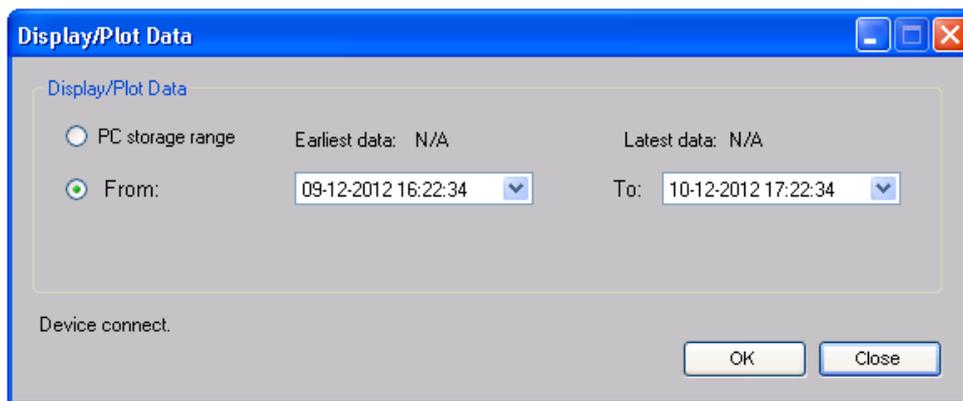
This module allows user to download the data from DL141TH.



Click "OK" button to stop the recording and start downloading.

6.4.6 DL141TH – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.4.7 DL141TH – Data View

DL141TH contains three measurements (Temperature, relative humidity and dew point), template / dew point unit can be Celsius or Fahrenheit, depending on the setting in general setting.

DL141TH - 141TH

Device Graph

Data **Graph**

PC storage range Earliest data: 15-10-2007 15:26:34 Latest data: 15-10-2007 15:29:37

Summary

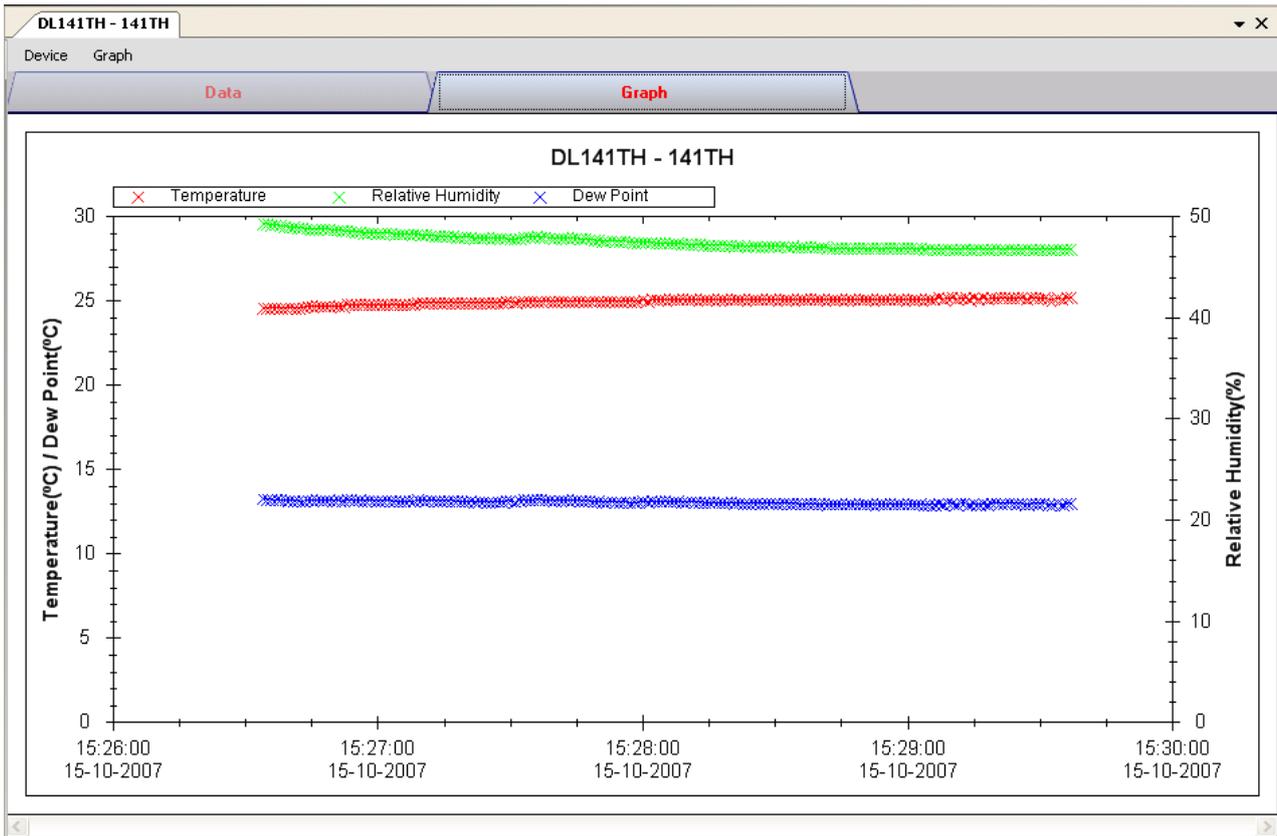
Measurement	Maximum Value	Minimum Value	Average Value
Temperature (°C)	25.2	24.6	25.00
Relative Humidity (%)	49.3	46.8	47.56
Dew Point (°C)	13.27	12.93	13.09

All Data Export Excel Export CSV

Record Time	Temperature (°C)	Relative Humidity (%)	Dew Point (°C)
15-10-2007 15:26:34	24.6	49.3	13.27
15-10-2007 15:26:35	24.6	49.3	13.27
15-10-2007 15:26:36	24.6	49.2	13.24
15-10-2007 15:26:37	24.6	49.2	13.24
15-10-2007 15:26:38	24.6	49.1	13.21
15-10-2007 15:26:39	24.6	49.1	13.21
15-10-2007 15:26:40	24.6	49.0	13.18
15-10-2007 15:26:41	24.6	49.0	13.18
15-10-2007 15:26:42	24.6	48.9	13.15
15-10-2007 15:26:43	24.6	48.9	13.15
15-10-2007 15:26:44	24.7	48.8	13.21
15-10-2007 15:26:45	24.7	48.8	13.21
15-10-2007 15:26:46	24.7	48.8	13.21
15-10-2007 15:26:47	24.7	48.8	13.21
15-10-2007 15:26:48	24.7	48.8	13.21
15-10-2007 15:26:49	24.7	48.8	13.21
15-10-2007 15:26:50	24.7	48.7	13.18
15-10-2007 15:26:51	24.7	48.7	13.18

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.4.8 DL141TH – Graph View



Our graph supports the following operations

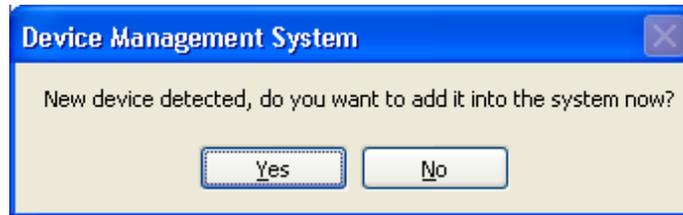
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.5 DL161S

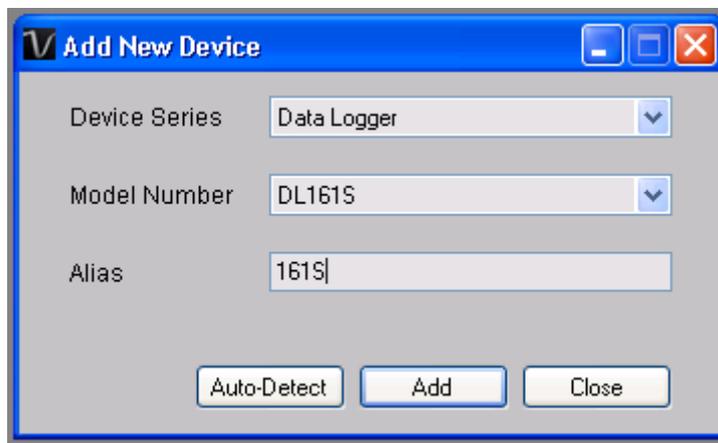
DL161S is a data logger for storing sound level reading. DL161S supports real time measurement.

6.5.1 Add new DL161S

When Voltsoft detected a new DL161S attached, the following dialog will be popped up:



Click "Yes", following dialog will be displayed:

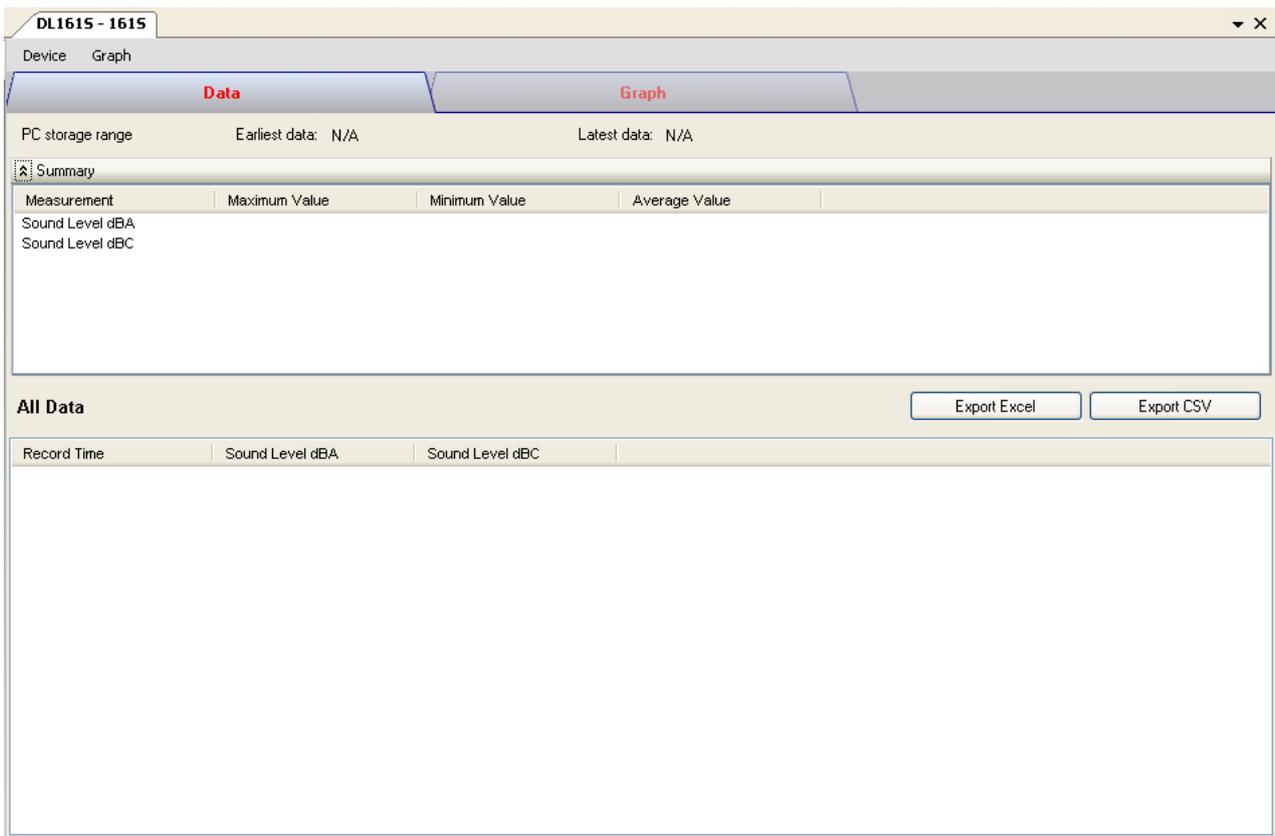


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.5.2 Remove DL161S

To remove DL161S, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

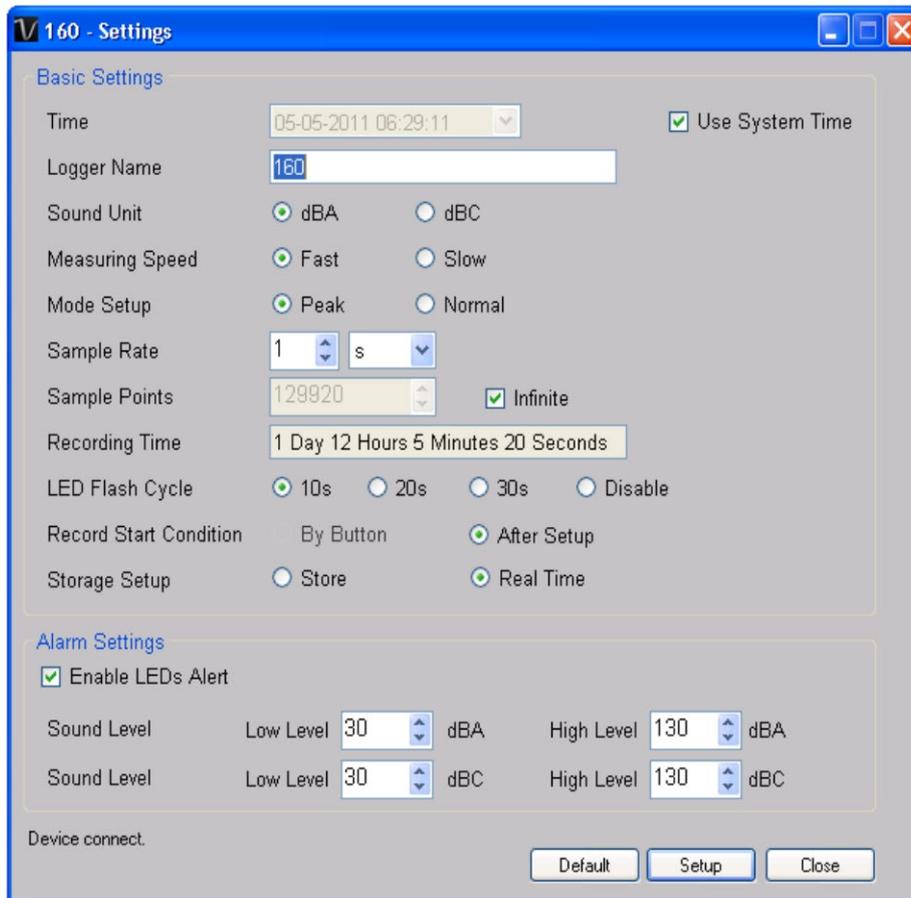
6.5.3 DL161S – Device Control Panel



The DL161S Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL161S.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
6	Device -> Calibration	Launch the calibration module.
7	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
8	Graph -> Background Colour	Change the background colour of the graph to either black or white.
9	Graph -> Grid	Control whether to show / hide the grid on the graph area.
10	Graph -> Line	Control whether to show / hide the line on the graph area.
11	Graph -> Points Indicator	Control whether to show / hide the points indicator.
12	Graph -> Print	Prints the generated chart.
13	Graph -> Save Image As	Save the image in the chosen file format.
14	Graph -> Zoom Out	Zoom out one level.
15	Graph -> Zoom To Fit	Undo all zoom in and out.
16	Graph -> View All Data	Zoom out the graph to view all data.

6.5.4 DL161S – Settings



1	Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Sound Unit	The sound unit can be dBA or dBC.
4	Measuring speed	The measuring speed can be Fast or Slow.
5	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
6	Sample Rate	Instruct the data logger to log readings at a specific rate.
7	Sample Points	Configure the data logger sample points.
8	Infinite	For real time mode only, the download will not stop until the user stopped the download.
9	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
10	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
11	Logger Mode	Manual – The data logger will start recording only after the user presses the red button on the device. Instant – The data logger will start recording immediately after setup.
12	Storage Setup	Storage can be Store or Real Time. Store – The data will be stored in offline mode.

		Real Time – The data will be stored in real time mode.
13	LED Flash for High / Low Alarm	Enable / disable LED flash when the alarm is triggered.
14	Low / High Alarm for dBA	Configure the sound level (at unit dBA) for the low / high alarm level.
15	Low / High Alarm for dBC	Configure the sound level (at unit dBC) for the low / high alarm level.
16	Default Button	Load the factory default settings.
17	Setup Button	Save changes.
18	Close Button	Close this interface.

6.5.5 DL161S - Download Data

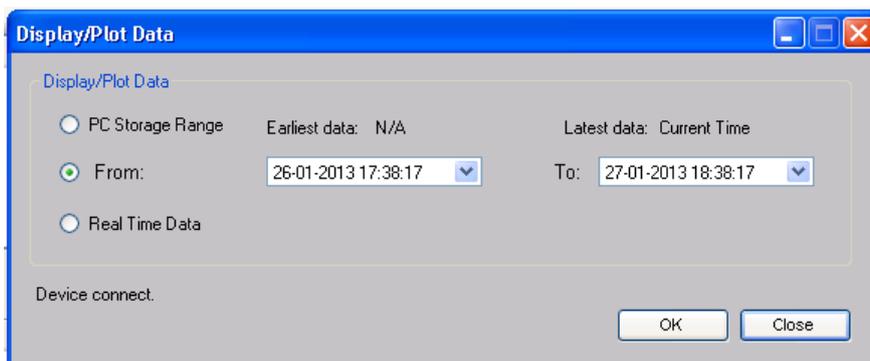
This module allows user to download the data from DL161S.



Click "OK" button to stop the recording and start downloading.

6.5.6 DL161S – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.5.7 DL161S – Data View

DL161S contains two measurements (sound level in dBA and sound level in dBC), the device can record only one measurement at any specific unit of time (Control in Setting).

DL161S - 161S

Device Graph

Data **Graph**

PC storage range Earliest data: 27-01-2013 18:20:24 Latest data: Current Time

Summary

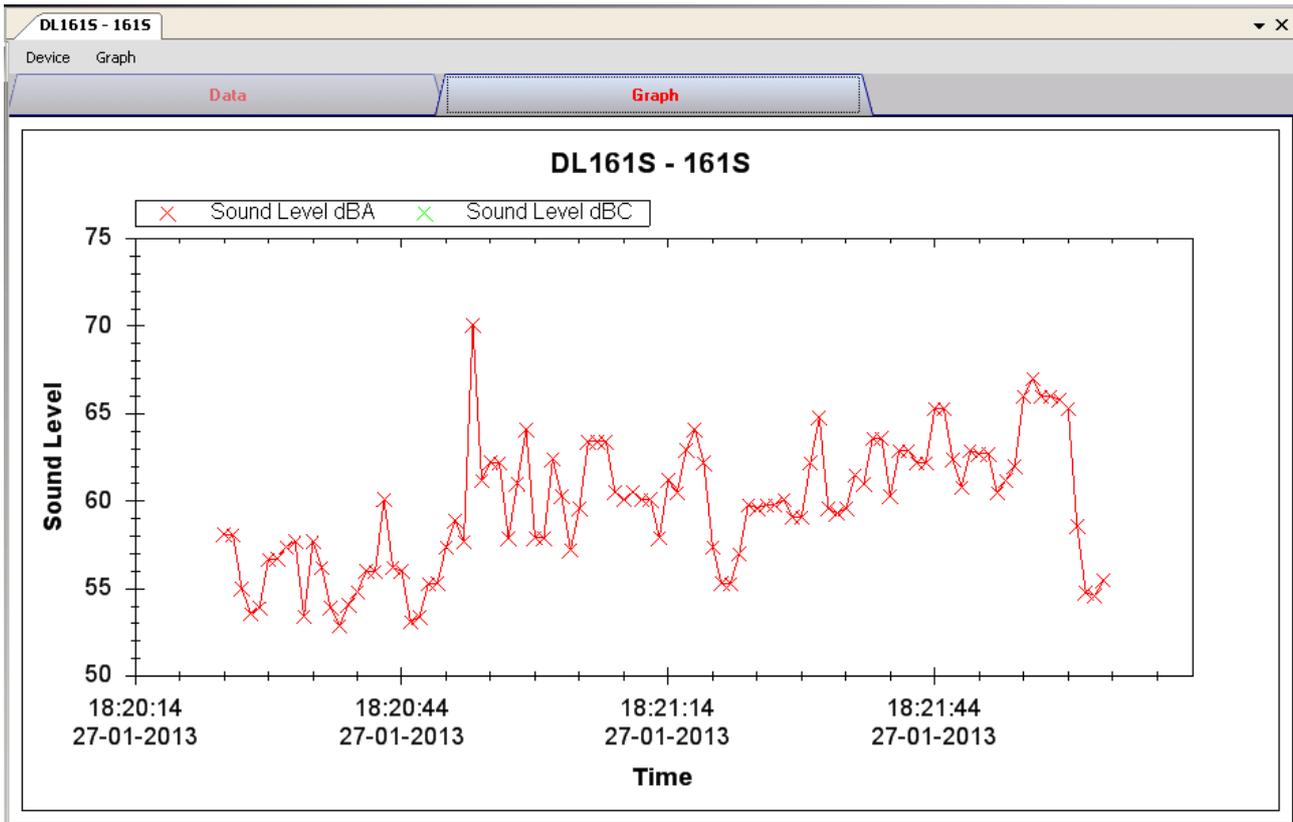
Measurement	Maximum Value	Minimum Value	Average Value
Sound Level dBA	70.1	52.9	59.73
Sound Level dBC			

All Data Export Excel Export CSV

Record Time	Sound Level dBA	Sound Level dBC
27-01-2013 18:20:24	58.1	
27-01-2013 18:20:25	58.1	
27-01-2013 18:20:26	55.0	
27-01-2013 18:20:27	53.6	
27-01-2013 18:20:28	53.9	
27-01-2013 18:20:29	56.7	
27-01-2013 18:20:30	56.7	
27-01-2013 18:20:31	57.4	
27-01-2013 18:20:32	57.7	
27-01-2013 18:20:33	53.4	
27-01-2013 18:20:34	57.7	
27-01-2013 18:20:35	56.2	
27-01-2013 18:20:36	53.9	
27-01-2013 18:20:37	52.9	
27-01-2013 18:20:38	54.1	
27-01-2013 18:20:39	54.8	
27-01-2013 18:20:40	56.0	
27-01-2013 18:20:41	56.0	

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

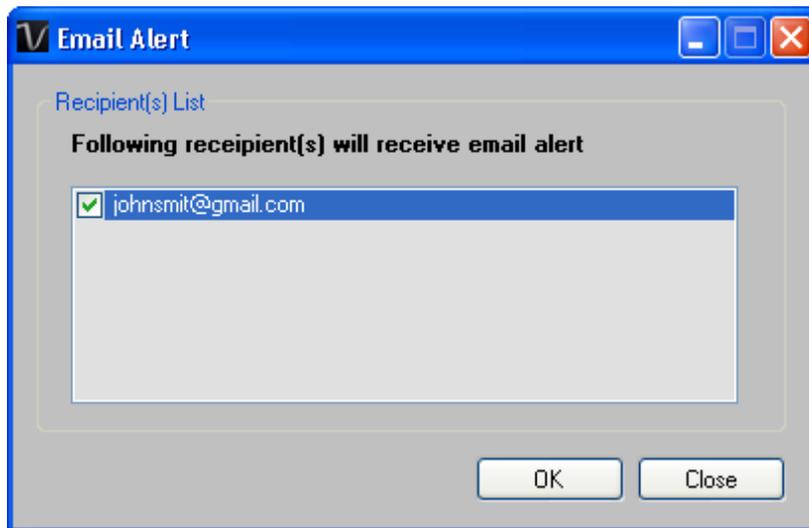
6.5.8 DL161S – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.5.9 DL161S – Email Alert

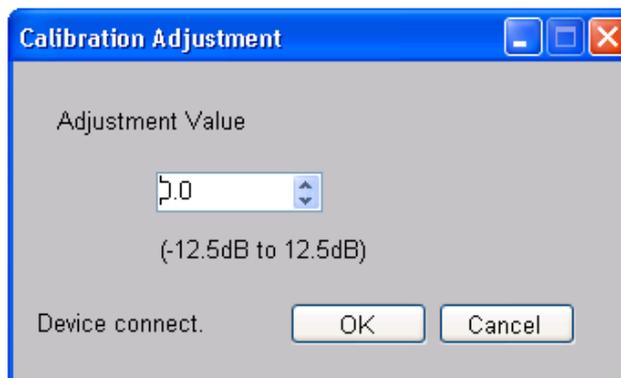


As DL161S supports real time measurement, therefore, it has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level. The alert level can be configured in Setting.

User can use this module to select who will receive the email for the specific device.

6.5.10 DL161S – Calibration

DL161S provides an interface to the user for sound level calibration. The calibration adjustment value is allowed between -12.5 dB and 12.5 dB.



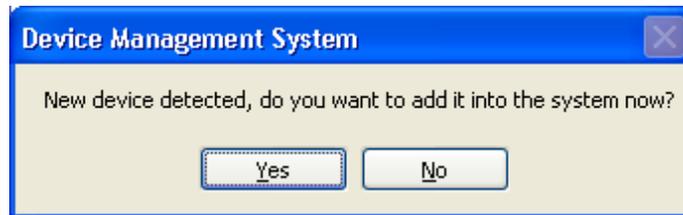
Enter the value and click "OK" to set the value.

6.6 DL141TH2K

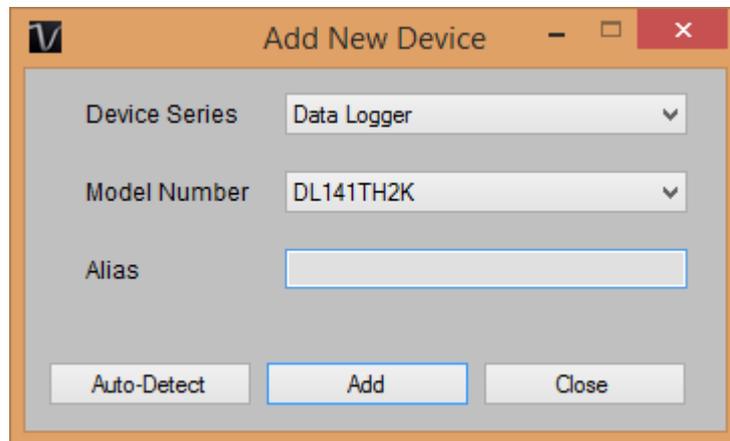
DL141TH2K is a data logger for storing light level.

6.6.1 Add new DL141TH2K

When Voltsoft detects a new DL141TH2K attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

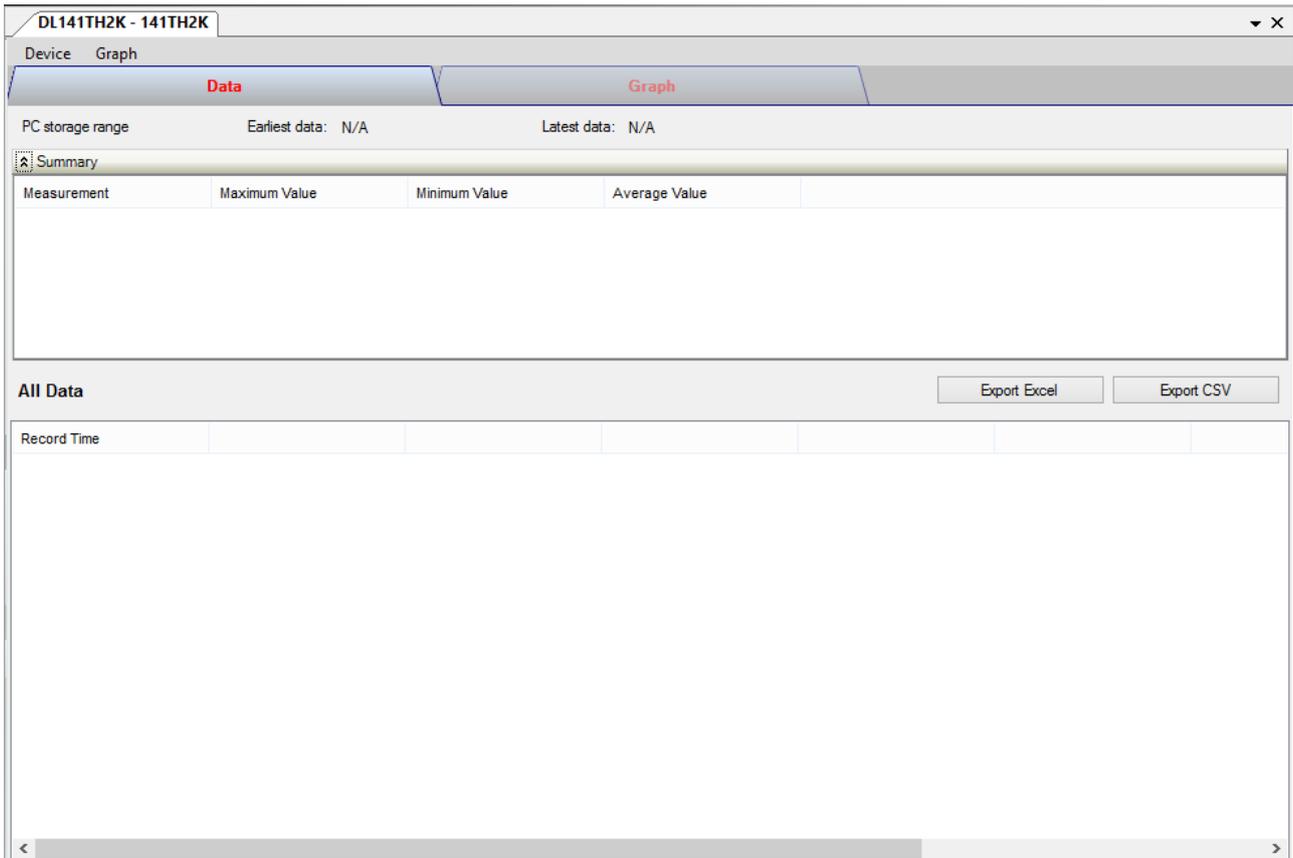


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.6.2 Remove DL141TH2K

To remove DL141TH2K, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

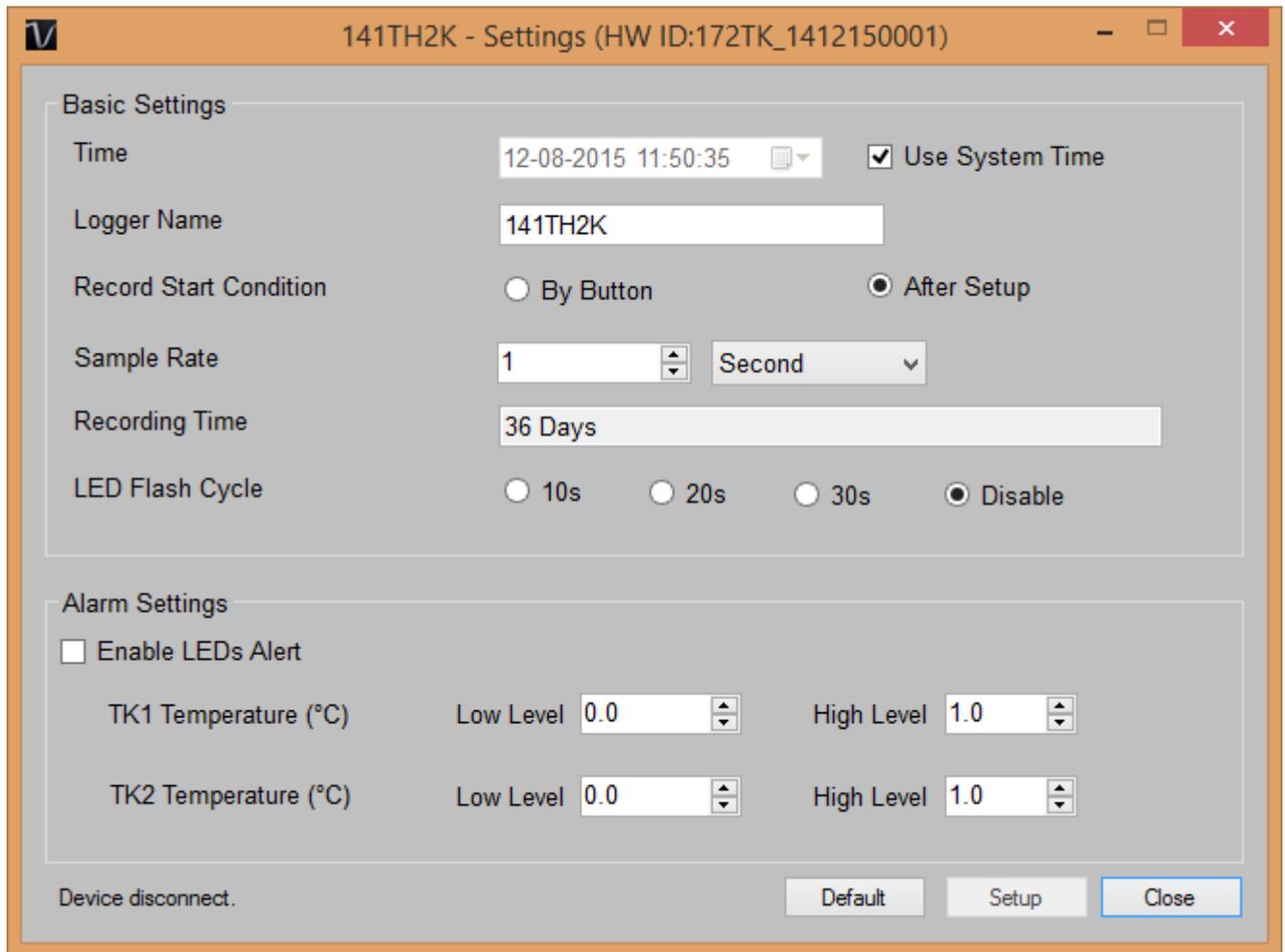
6.6.3 DL141TH2K– Device Control Panel



The DL141TH2K Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL141TH2K.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.6.4 DT141TH2K - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.6.5 DL141TH2K - Download Data

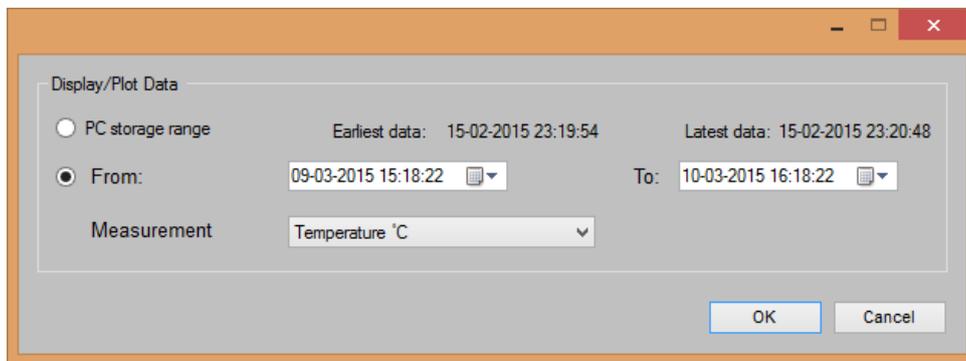
This module allows user to download the data from DL141TH2K.



Click "OK" button to stop the recording and start downloading.

6.6.6 DL141TH2K– Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.6.7 DL141TH2K – Data View

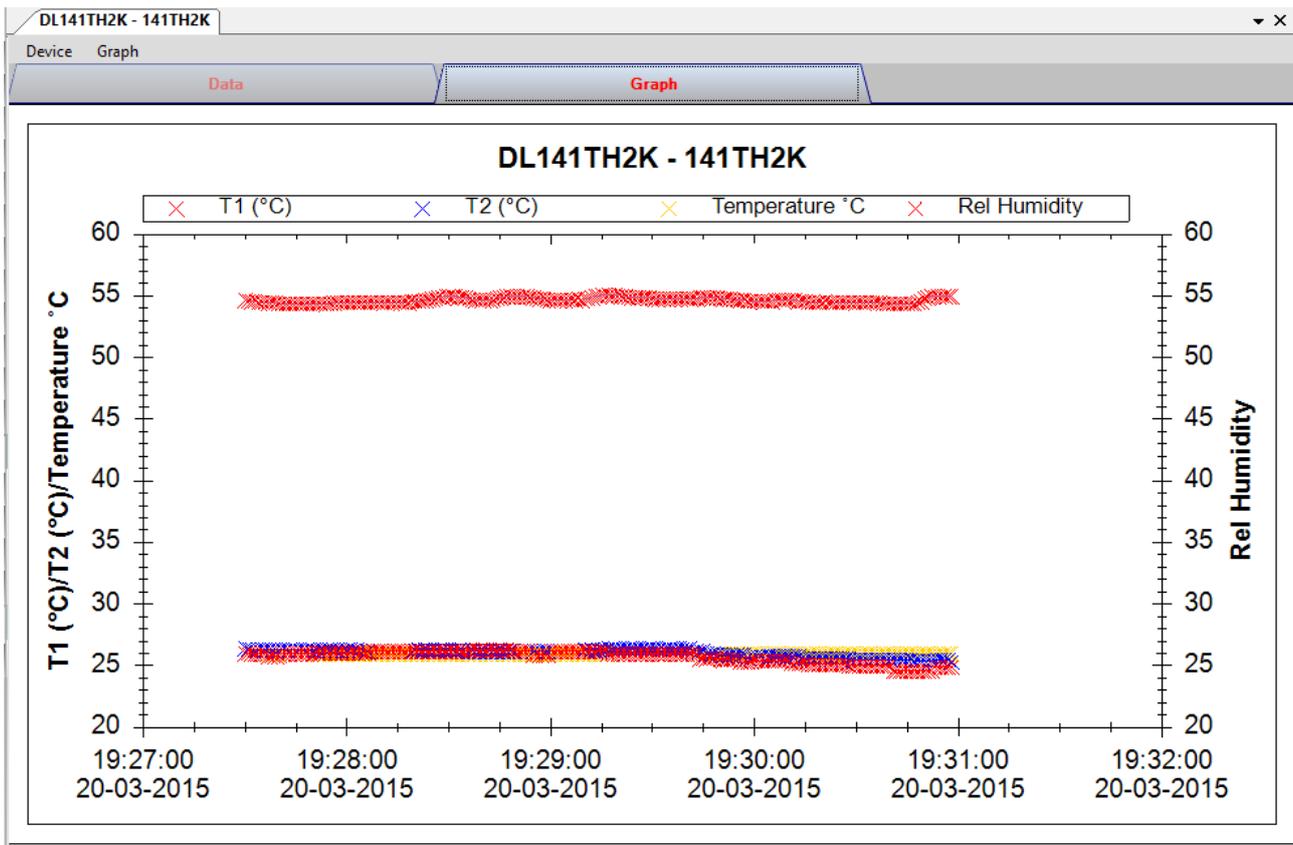
DL141TH2K contains total four measurements:T1, T2, Temperature and Relative humidity.

Measurement	Maximum Value	Minimum Value	Average Value
T1 (°C)	26.3	24.6	25.75
T2 (°C)	26.4	25.3	26.06
Temperature °C	26	26	26.00
Rel Humidity	55.1	54.4	

Record Time	T1 (°C)	T2 (°C)	Temperature °C	Rel Humidity
20-03-2015 19:27:30	26.0	26.4	26	54.7
20-03-2015 19:27:31	26.0	26.4	26	54.6
20-03-2015 19:27:32	26.0	26.3	26	54.6
20-03-2015 19:27:33	26.0	26.3	26	54.6
20-03-2015 19:27:34	26.0	26.3	26	54.5
20-03-2015 19:27:35	26.0	26.3	26	54.5
20-03-2015 19:27:36	26.0	26.3	26	54.5
20-03-2015 19:27:37	25.8	26.3	26	54.5
20-03-2015 19:27:38	25.8	26.3	26	54.5
20-03-2015 19:27:39	25.8	26.3	26	54.5
20-03-2015 19:27:40	25.8	26.3	26	54.4
20-03-2015 19:27:41	26.0	26.3	26	54.4
20-03-2015 19:27:42	26.0	26.3	26	54.4
20-03-2015 19:27:43	26.0	26.3	26	54.4
20-03-2015 19:27:44	26.0	26.3	26	54.4
20-03-2015 19:27:45	26.0	26.3	26	54.4

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.6.8 DL141TH2K– Graph View



Our graph support following operations

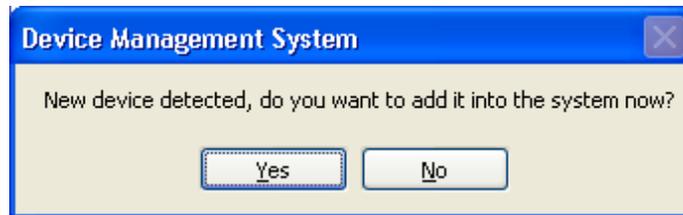
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.7 DL181THP

DL181THP is a data logger for storing temperature, humidity and air pressure reading.

6.7.1 Add new DL181THP

When Voltsoft detected a new DL181THP attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

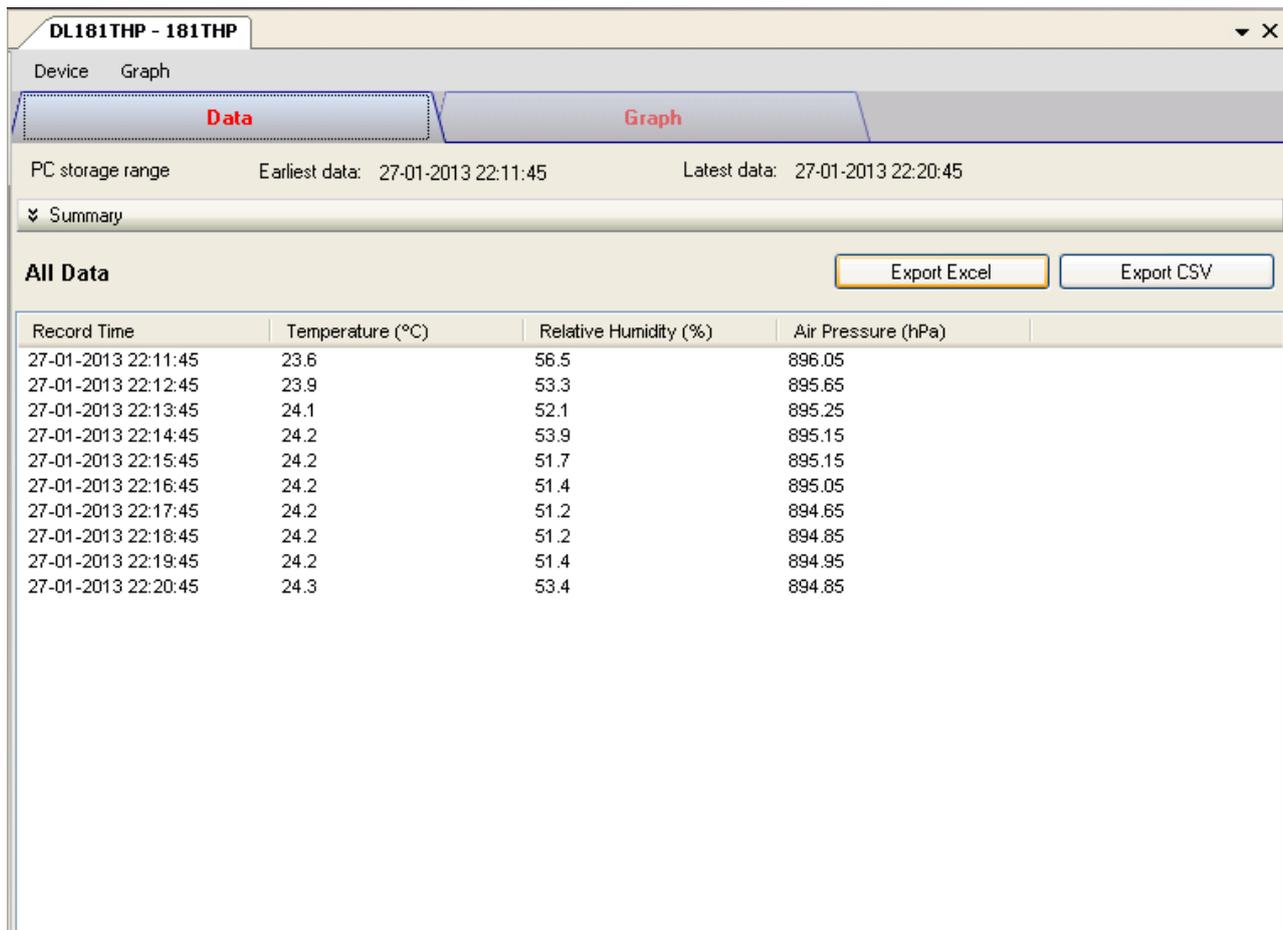


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.7.2 Remove DL181THP

To remove DL181THP, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

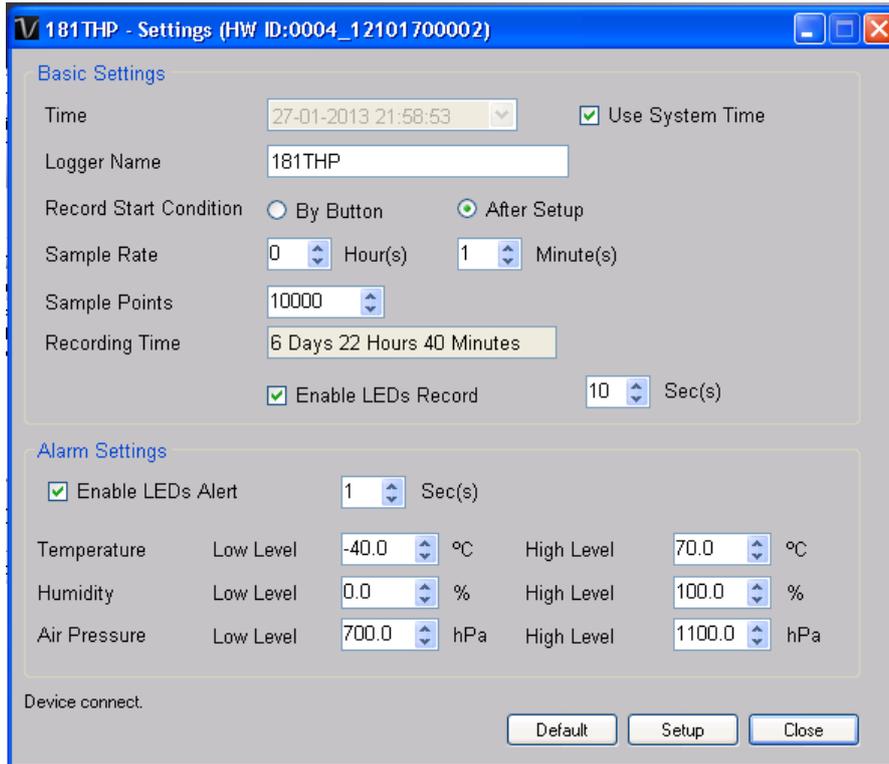
6.7.3 DL181THP – Device Control Panel



The DL181THP Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL181THP.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.7.4 DL181THP – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Sample Points	Configure the data logger sample points.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	Altitude	Allows user to set the current altitude.
8	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
9	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
10	Temperature Low / High Alarm	Configure the temperature low / high alarm level
11	Humidity Low / High Alarm	Configure the humidity low / high alarm level
12	Air Pressure Low / High Alarm	Configure the air pressure low / high alarm level
13	Default Button	Load the factory default settings.
14	Setup Button	Save changes.
15	Close Button	Close this interface.

6.7.5 DL181THP - Download Data

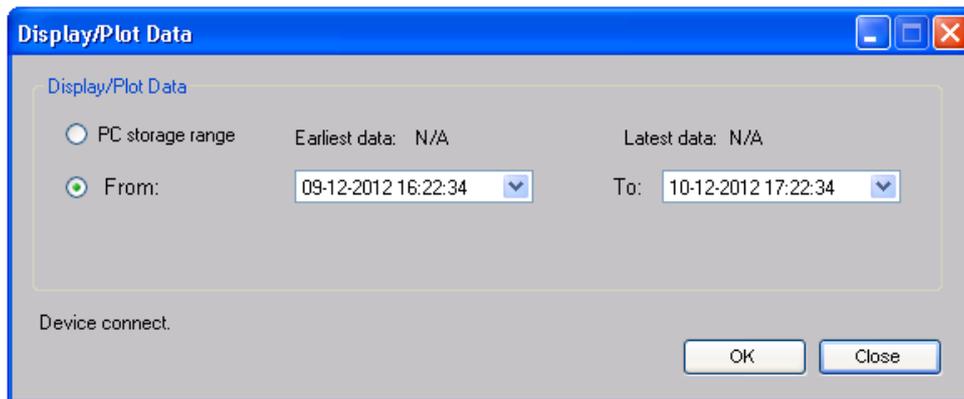
This module allows user to download the data from DL181THP.



Click "OK" button to stop the recording and start downloading.

6.7.6 DL181THP – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

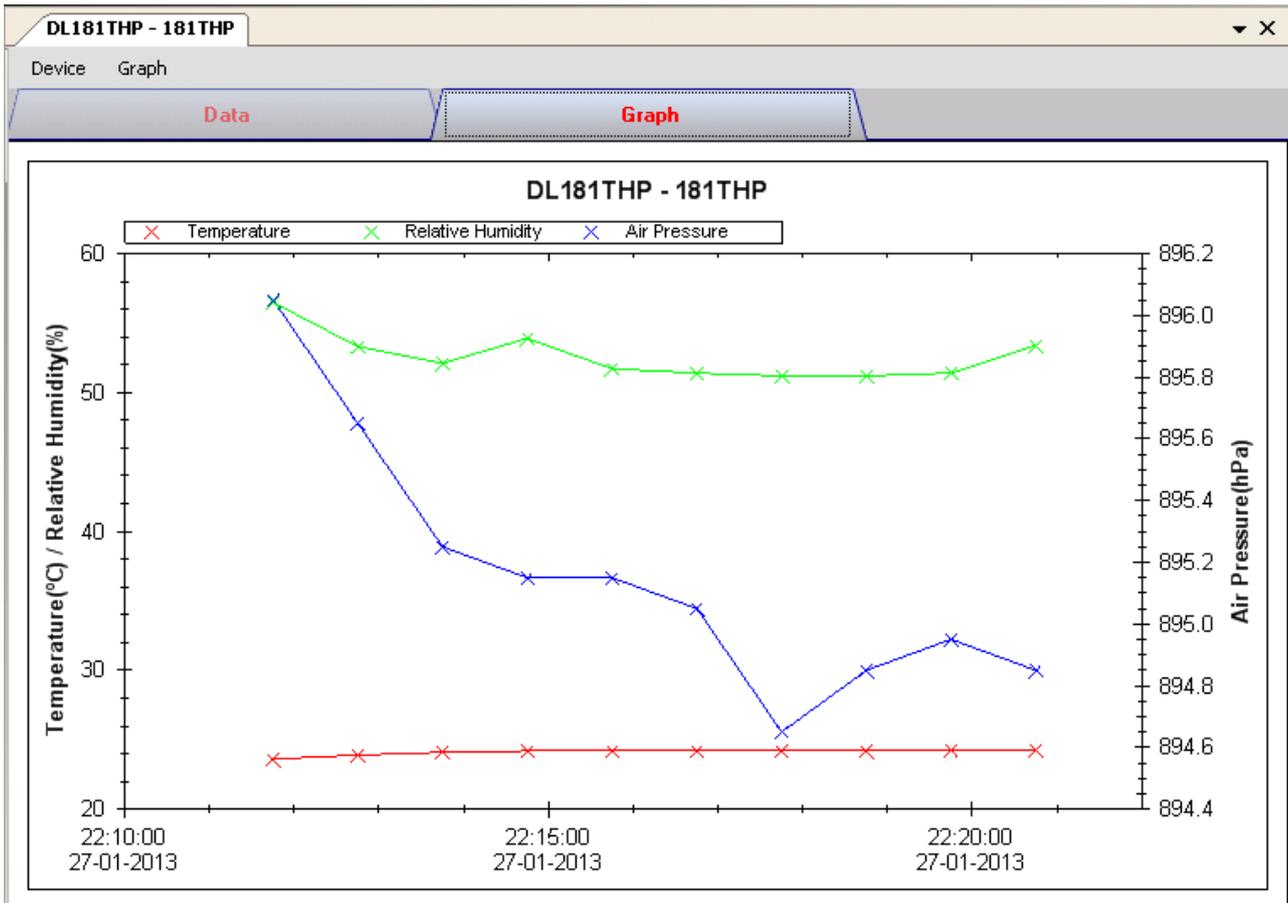
6.7.7 DL181THP – Data View

DL181THP contains three measurements (Temperature, relative humidity and pressure), template unit can be Celsius or Fahrenheit and pressure unit can be hPa / kPa / Bar / SPI, depending on the setting in general setting.

Record Time	Temperature (°C)	Relative Humidity (%)	Air Pressure (hPa)
27-01-2013 22:11:45	23.6	56.5	896.05
27-01-2013 22:12:45	23.9	53.3	895.65
27-01-2013 22:13:45	24.1	52.1	895.25
27-01-2013 22:14:45	24.2	53.9	895.15
27-01-2013 22:15:45	24.2	51.7	895.15
27-01-2013 22:16:45	24.2	51.4	895.05
27-01-2013 22:17:45	24.2	51.2	894.65
27-01-2013 22:18:45	24.2	51.2	894.85
27-01-2013 22:19:45	24.2	51.4	894.95
27-01-2013 22:20:45	24.3	53.4	894.85

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.7.8 DL181THP – Graph View



Our graph support following operations

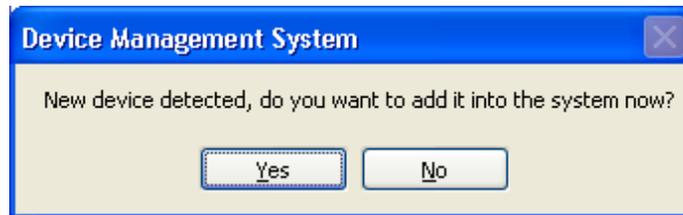
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.8 DL131LUX

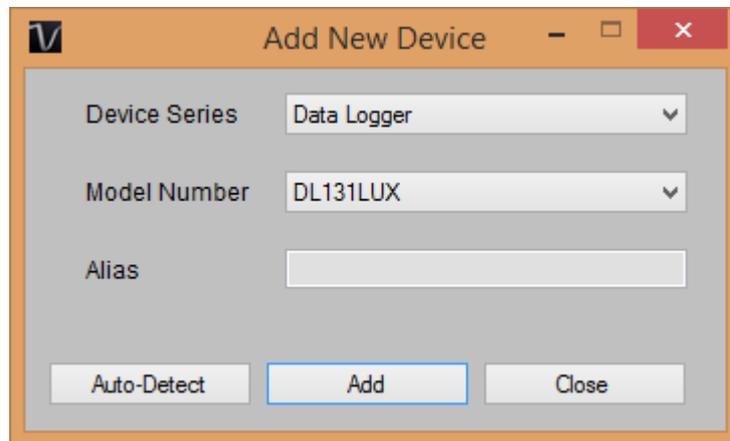
DL131LUX is a data logger for storing light level.

6.8.1 Add new DL131LUX

When Voltsoft detects a new DL131LUX attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

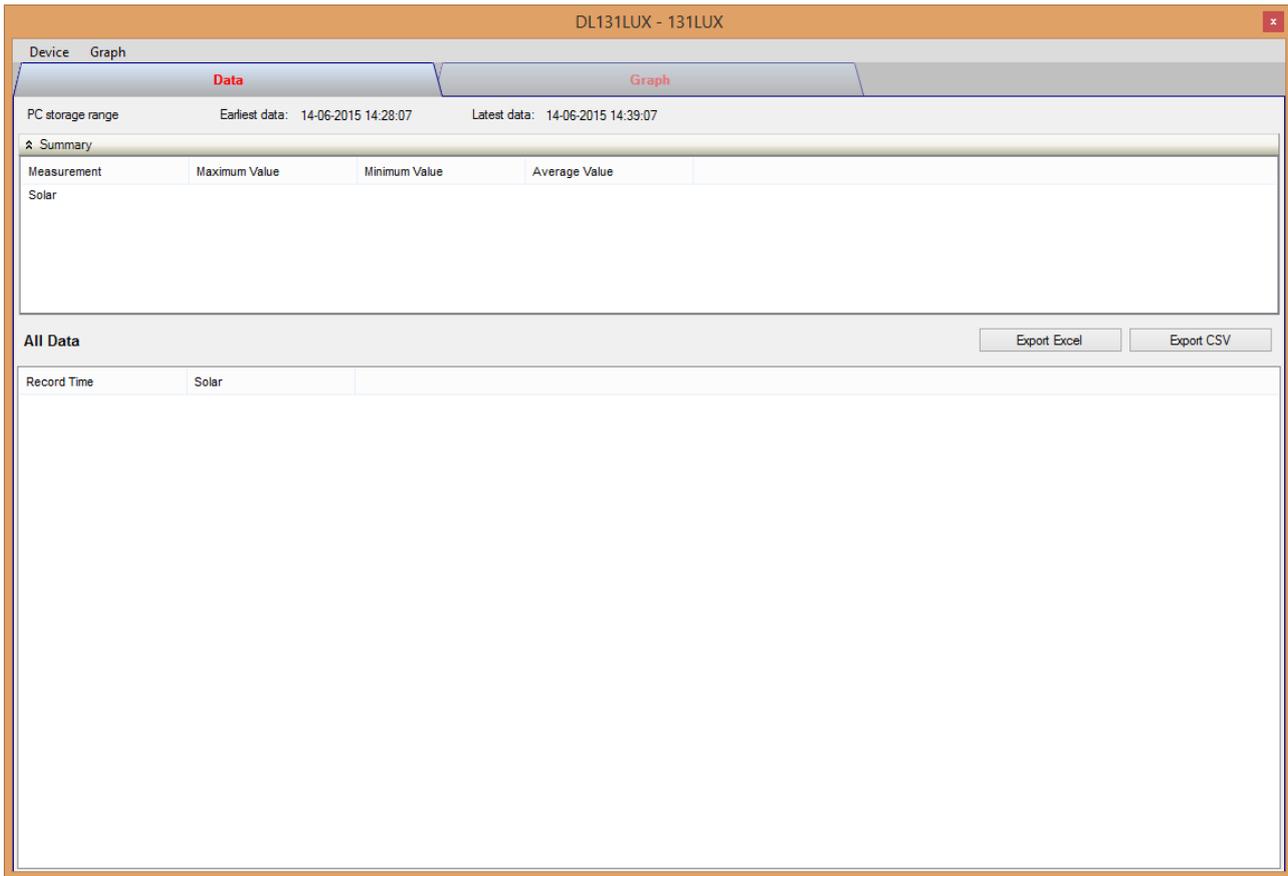


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.8.2 Remove DL131LUX

To remove DL131LUX, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

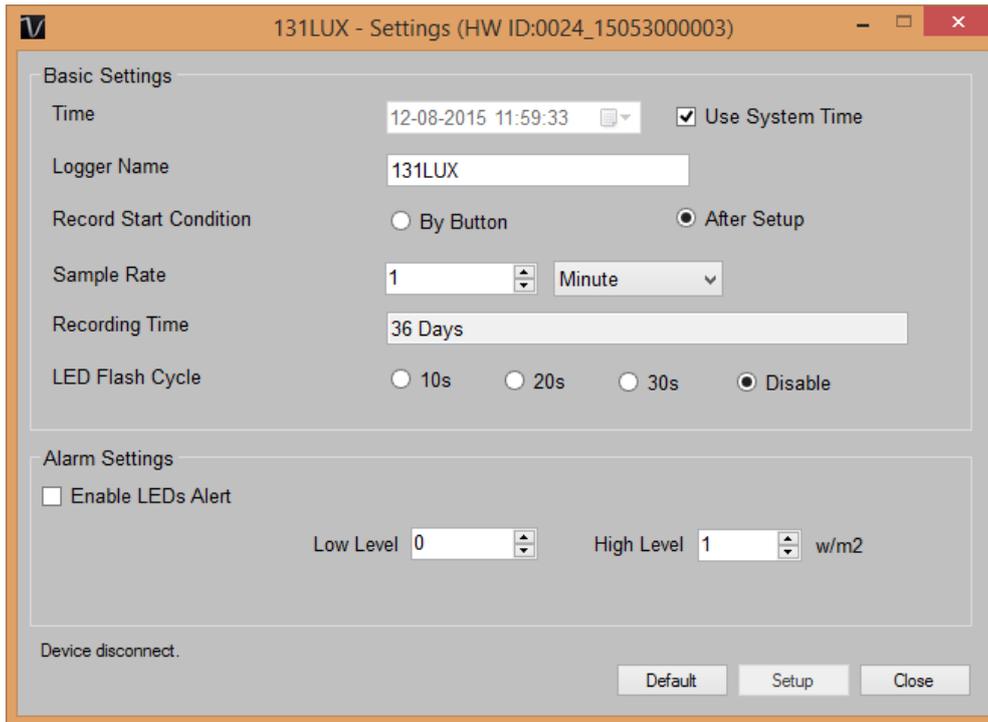
6.8.3 DL131LUX – Device Control Panel



The DL131LUX Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL131LUX.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.8.4 DL131LUX - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.8.5 DL131LUX - Download Data

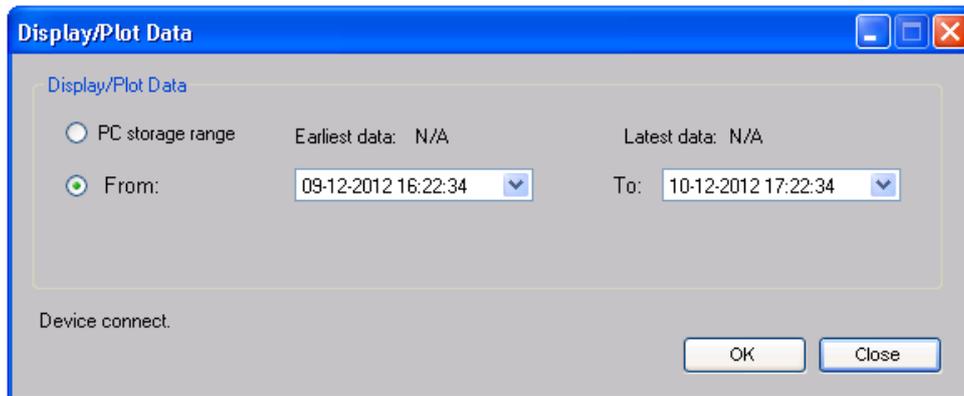
This module allows user to download the data from DL131LUX.



Click "OK" button to stop the recording and start downloading.

6.8.6 DL131LUX – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.8.7 DL131LUX – Data View

DL131LUX contains one measurement only, the light level.

DL131LUX - 131LUX

Device Graph

Data **Graph**

PC storage range Earliest data: 14-06-2015 14:28:07 Latest data: 14-06-2015 14:39:07

Summary

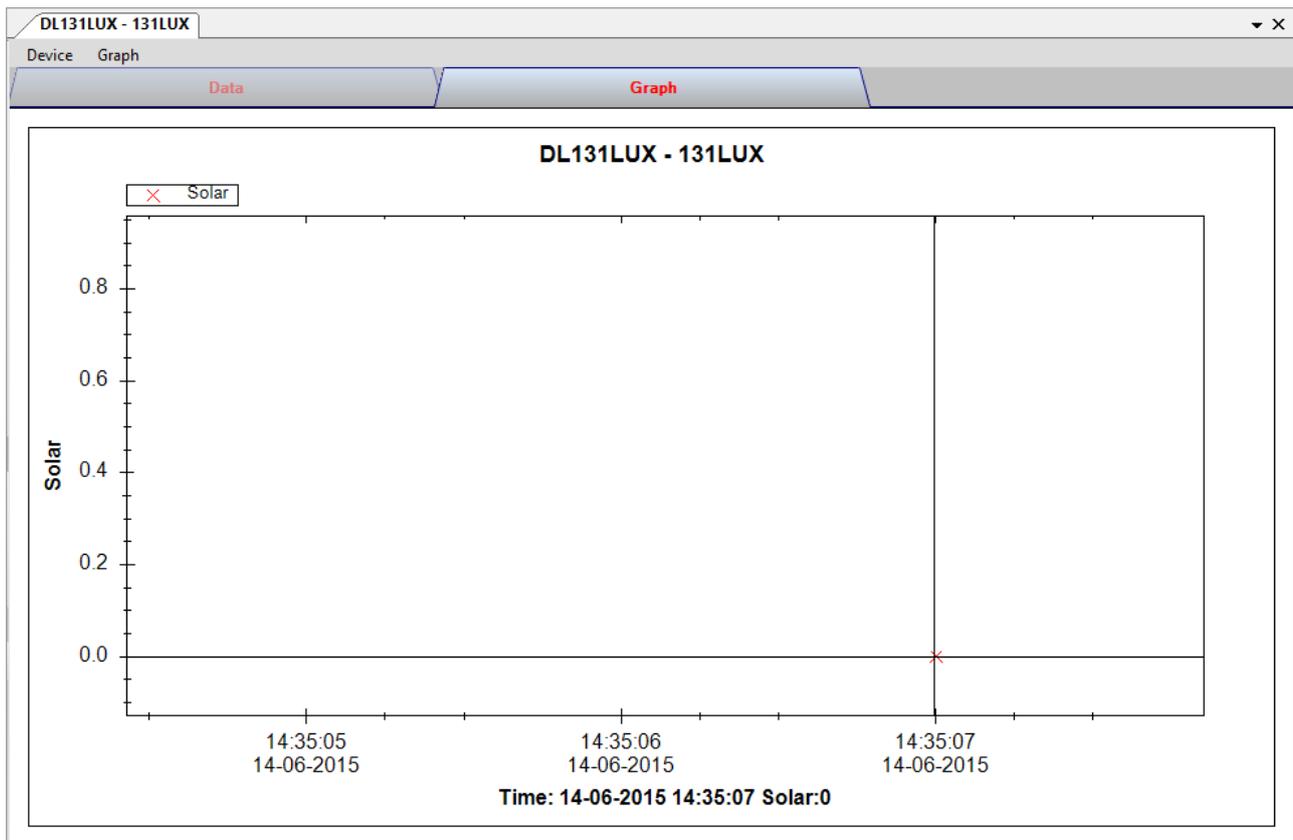
Measurement	Maximum Value	Minimum Value	Average Value
Solar	0	0	0.00

All Data Export Excel Export CSV

Record Time	Solar
14-06-2015 14:28:07	0
14-06-2015 14:29:07	0
14-06-2015 14:30:07	0
14-06-2015 14:31:07	0
14-06-2015 14:32:07	0
14-06-2015 14:33:07	0
14-06-2015 14:34:07	0
14-06-2015 14:35:07	0
14-06-2015 14:36:07	0
14-06-2015 14:37:07	0
14-06-2015 14:38:07	0
14-06-2015 14:39:07	0

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.8.8 DL131LUX – Graph View



Our graph support following operations

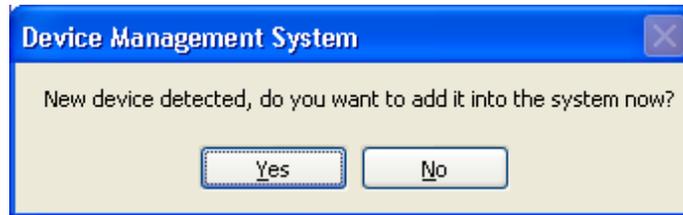
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.9 DL161SAN

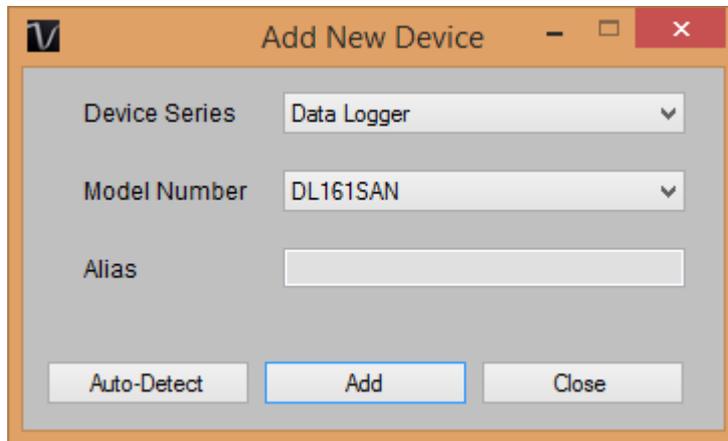
DL161SAN is a data logger for storing wind speed.

6.9.1 Add new DL161SAN

When Voltsoft detects a new DL161SAN attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

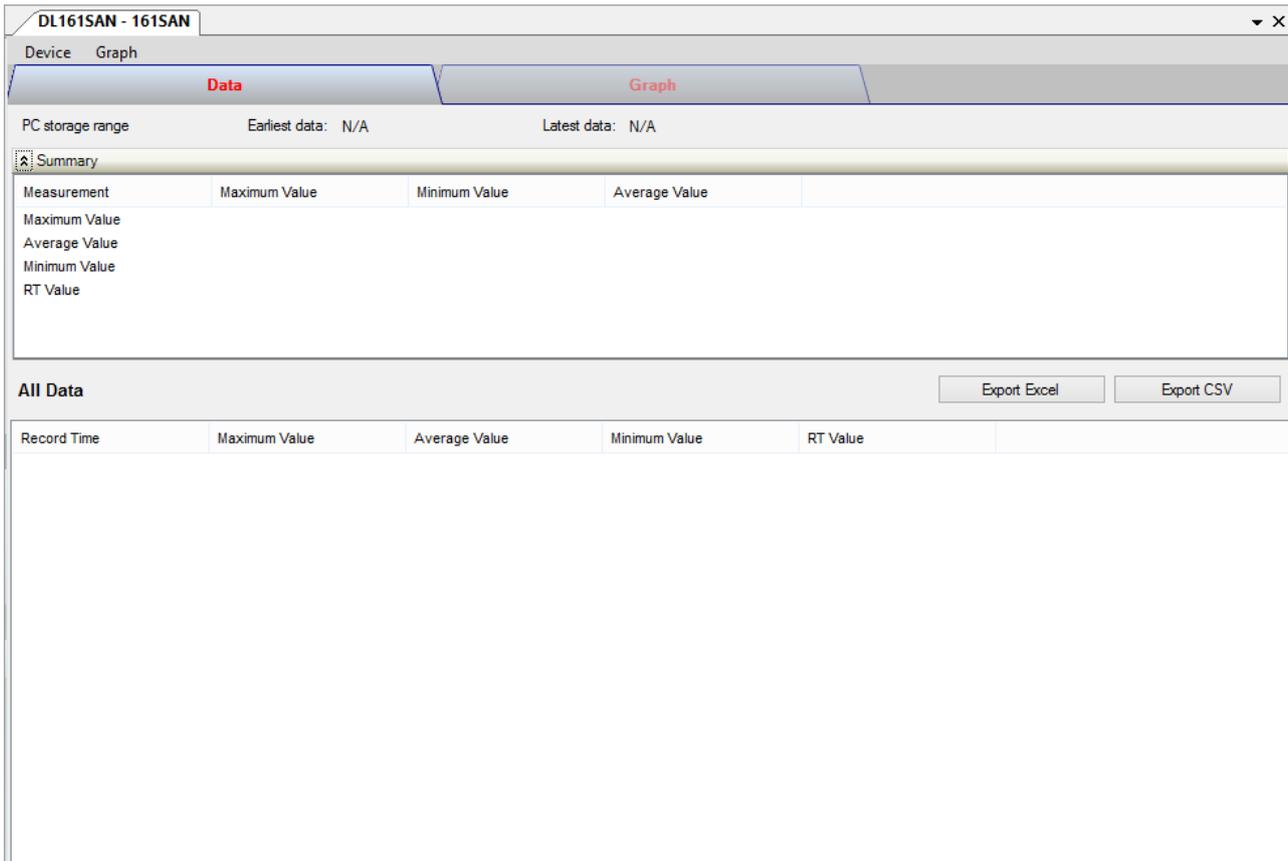


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.9.2 Remove DL161SAN

To remove DL161SAN, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

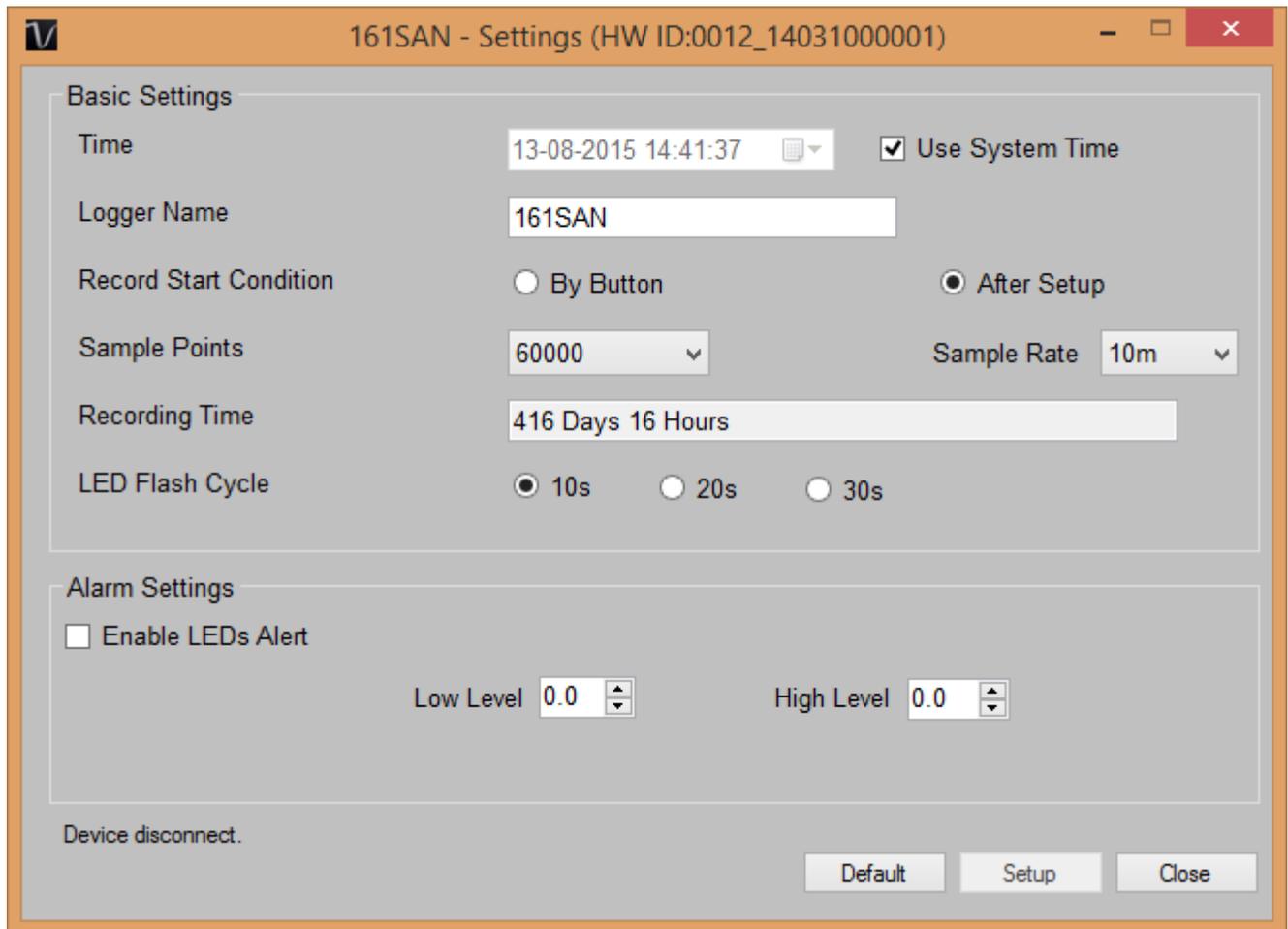
6.9.3 DL161SAN – Device Control Panel



The DL161SAN Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL161SAN.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.9.4 DL161SAN - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.9.5 DL161SAN - Download Data

This module allows user to download the data from DL161SAN.

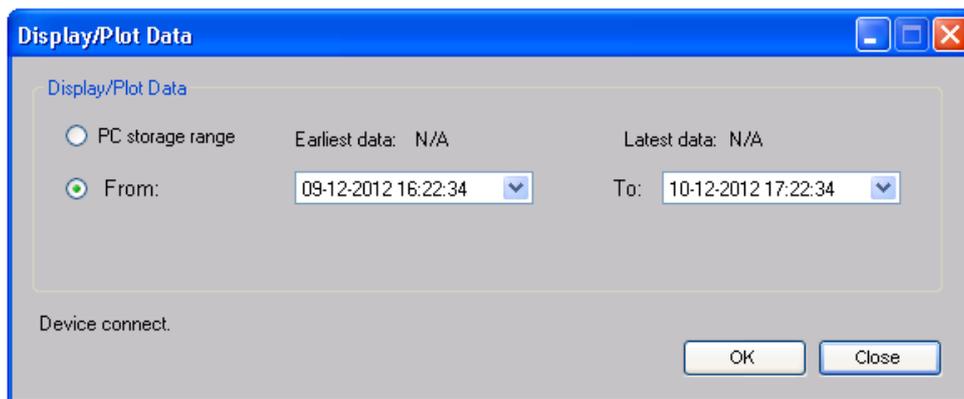


Click "OK" button to stop the recording and start downloading.

*You must place the datalogger on the key lock before download data.

6.9.6 DL161SAN – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.9.7 DL161SAN – Data View

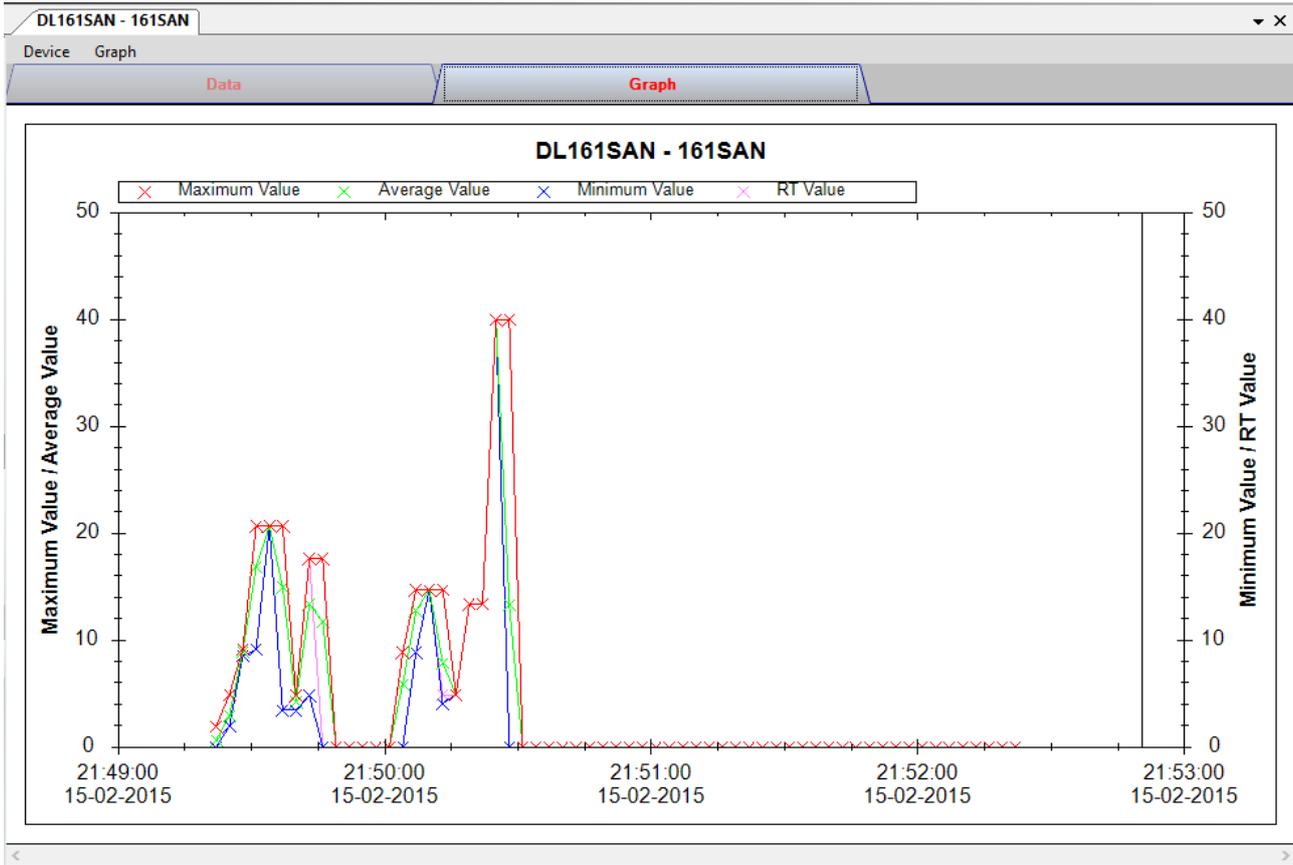
DL161SAN contains four measurement: Maximum Value, Average Value, Minimum Value and RT Value.

Measurement	Maximum Value	Minimum Value	Average Value
Maximum Value	40	0	4.64
Average Value	40	0	3.62
Minimum Value	40	0	2.48
RT Value	40	0	3.25

Record Time	Maximum Value	Average Value	Minimum Value	RT Value
15-02-2015 21:49:22	1.94	0.64	0	1.94
15-02-2015 21:49:25	4.92	2.93	1.94	4.92
15-02-2015 21:49:28	9.14	8.92	8.5	9.14
15-02-2015 21:49:31	20.69	16.83	9.14	20.69
15-02-2015 21:49:34	20.69	20.69	20.69	20.69
15-02-2015 21:49:37	20.69	14.93	3.43	3.43
15-02-2015 21:49:40	4.82	4.22	3.43	4.82
15-02-2015 21:49:43	17.63	13.35	4.82	17.63
15-02-2015 21:49:46	17.63	11.75	0	0
15-02-2015 21:49:49	0	0	0	0
15-02-2015 21:49:52	0	0	0	0
15-02-2015 21:49:55	0	0	0	0
15-02-2015 21:49:58	0	0	0	0
15-02-2015 21:50:01	0	0	0	0
15-02-2015 21:50:04	8.85	5.89	0	8.85
15-02-2015 21:50:07	14.72	12.76	8.85	14.72
15-02-2015 21:50:10	14.72	14.72	14.72	14.72
15-02-2015 21:50:13	14.72	7.89	4.08	4.87
15-02-2015 21:50:16	4.87	4.87	4.87	4.87
15-02-2015 21:50:19	13.42	13.42	13.42	13.42
15-02-2015 21:50:22	13.42	13.42	13.42	13.42

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.9.8 DL161SAN – Graph View



Our graph support following operations

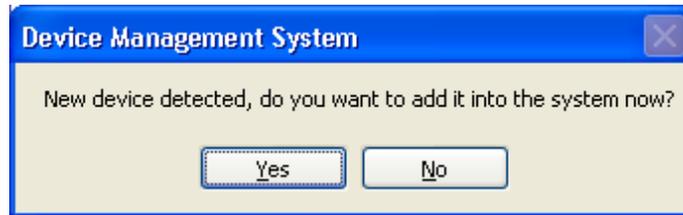
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.10 DL201THM

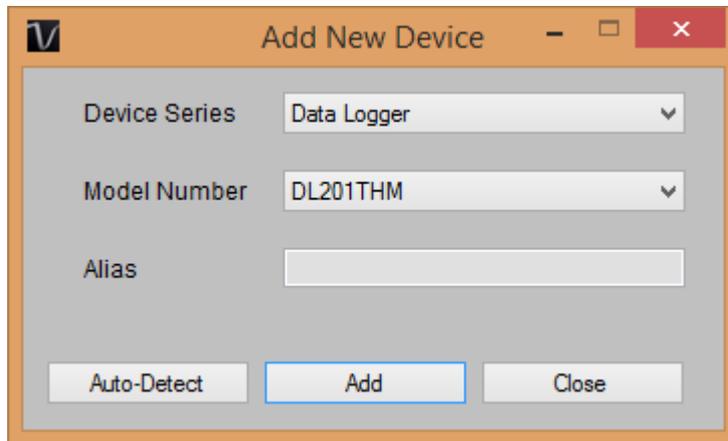
DL201THM is a data logger for storing moisture.

6.10.1 Add new DL201THM

When Voltsoft detects a new DL201THM attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

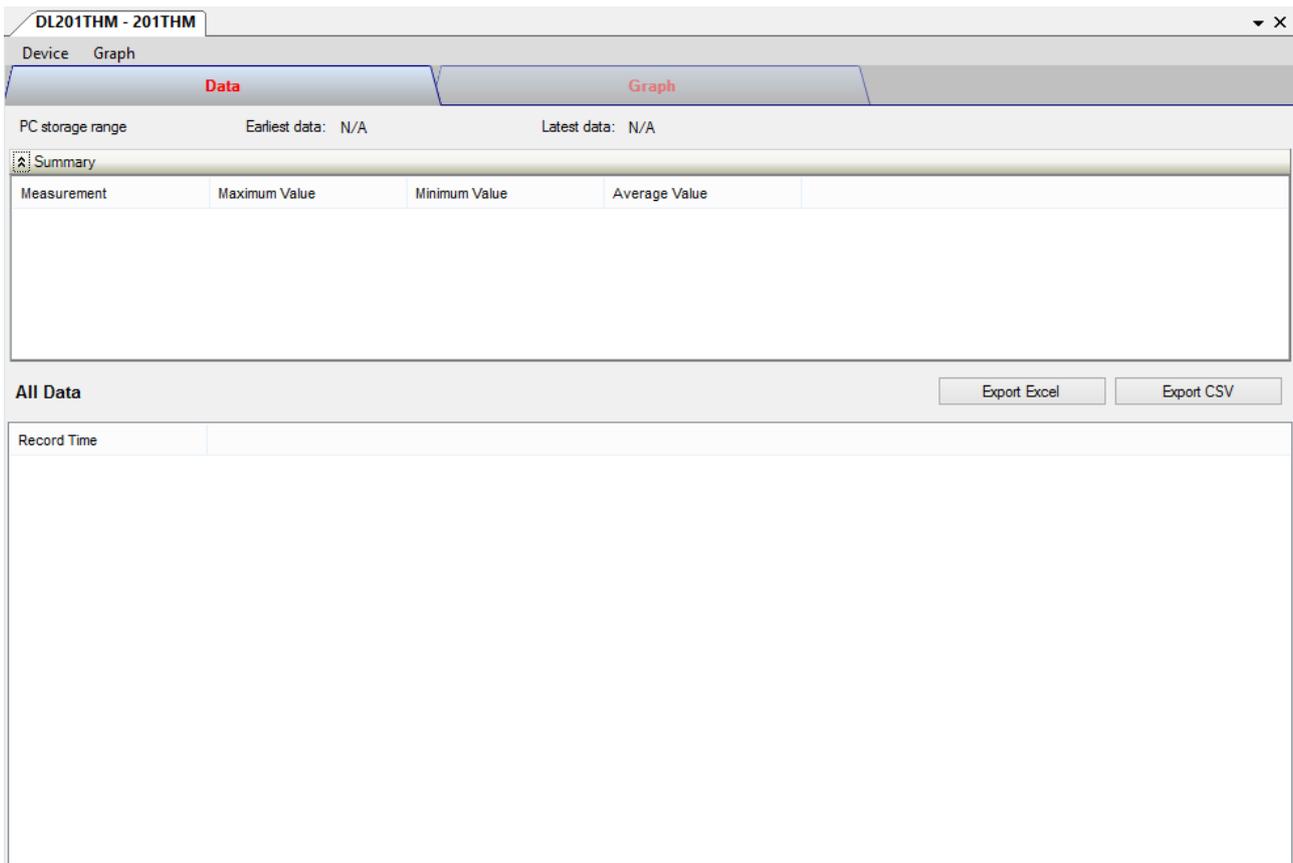


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.10.2 Remove DL201THM

To remove DL201THM, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

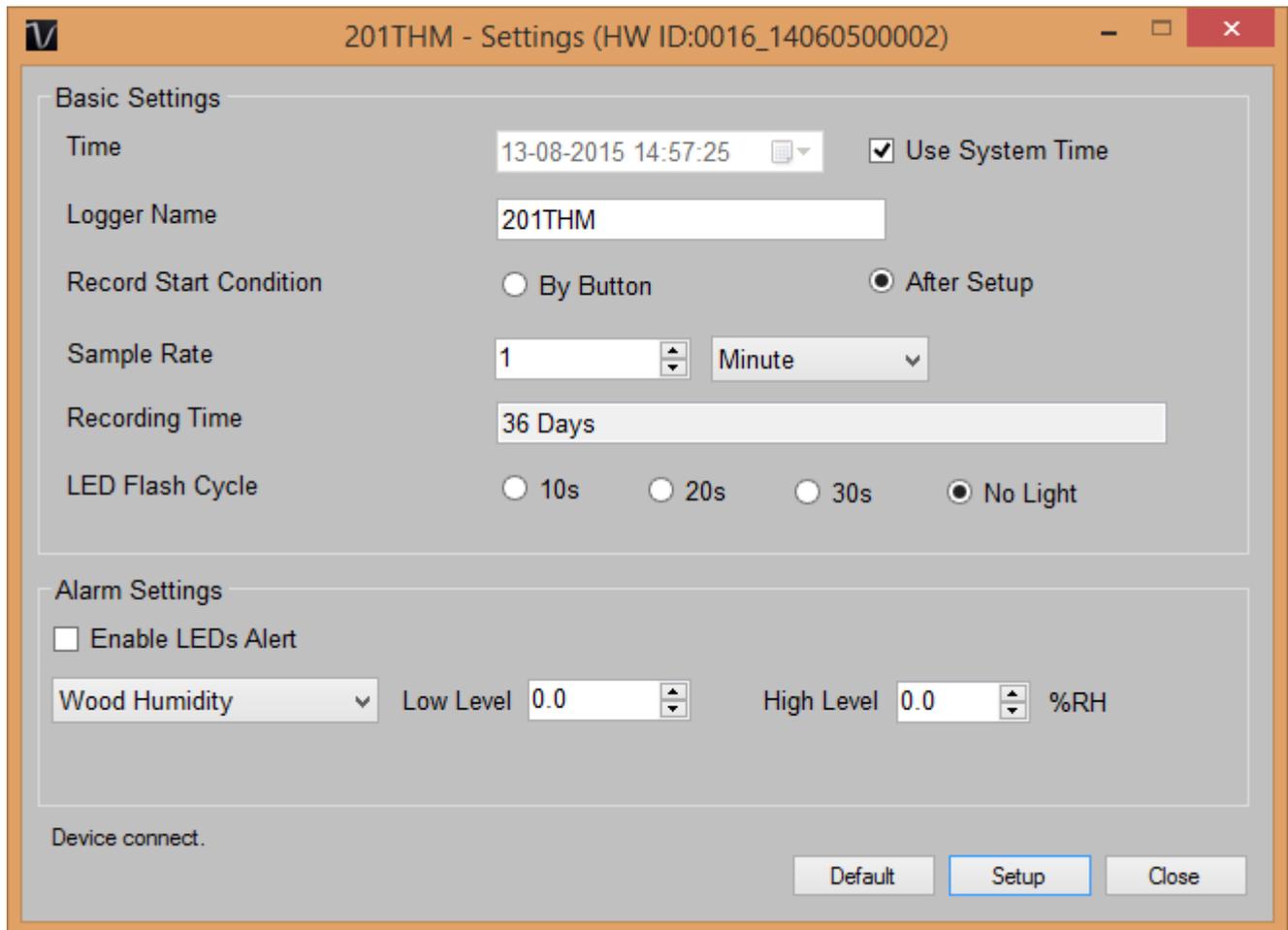
6.10.3 DL201THM – Device Control Panel



The DL201THM Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL201THM.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.10.4 DL201THM - Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level for different measurement.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.10.5 DL201THM - Download Data

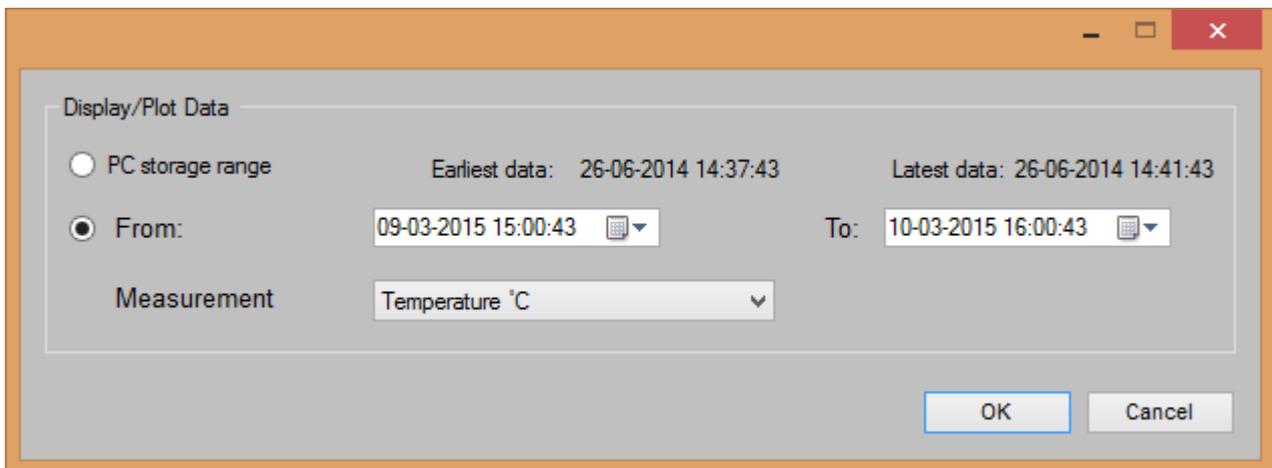
This module allows user to download the data from DL201THM.



Click "OK" button to stop the recording and start downloading.

6.10.6 DL201THM – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.10.7 DL201THM – Data View

DL201THM contains three measurements: Wood humidity, Temperature, Relative humidity.

DL201THM - 201THM
▼ ×

Device Graph

Data
Graph

PC storage range Earliest data: 26-06-2014 14:37:43 Latest data: 26-06-2014 14:41:43

Summary

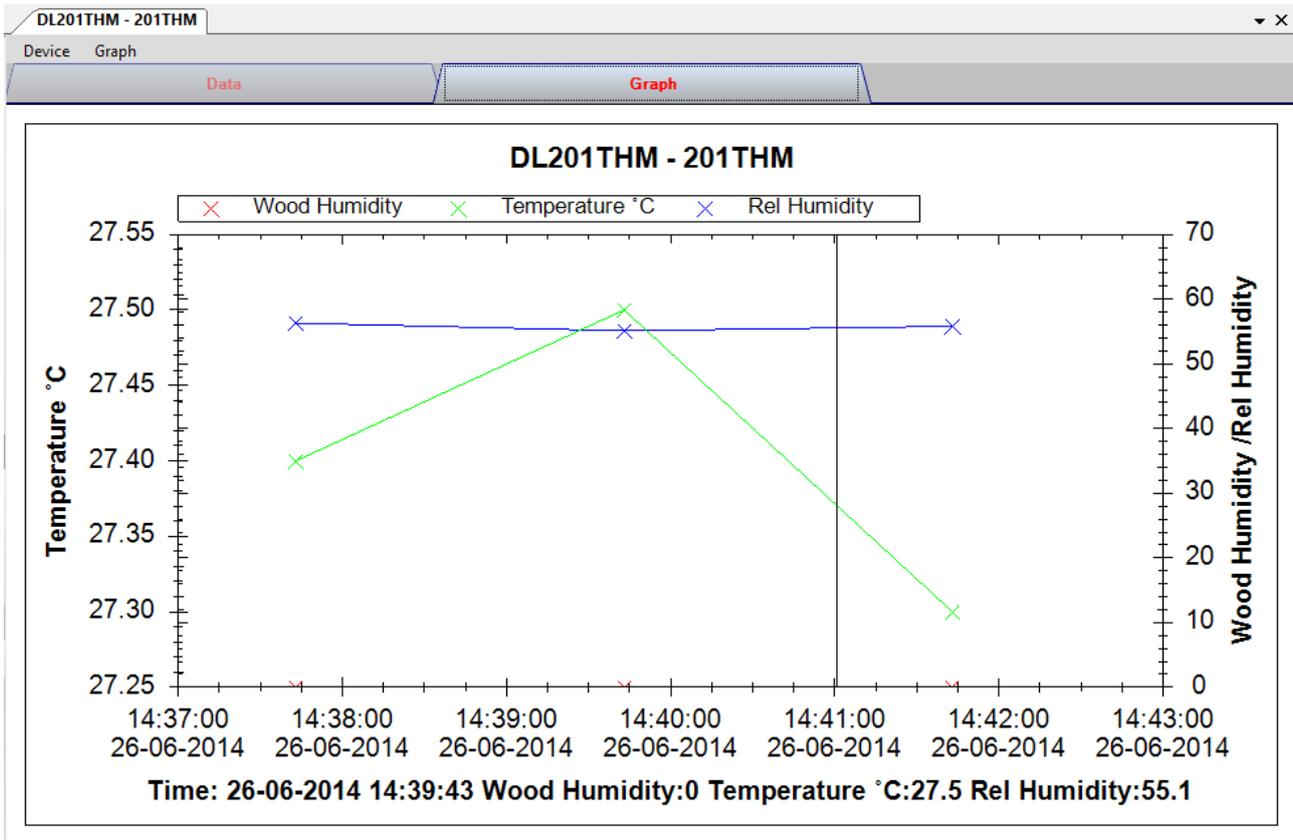
Measurement	Maximum Value	Minimum Value	Average Value
Wood Humidity	0	0	0.00
Temperature °C (°C)	27.3	27.3	27.40
Rel Humidity	55.1	55.1	55.73

All Data

Record Time	Wood Humidity	Temperature °C (°C)	Rel Humidity
26-06-2014 14:37:43	0	27.4	56.3
26-06-2014 14:39:43	0	27.5	55.1
26-06-2014 14:41:43	0	27.3	55.8

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.10.8 DL201THM – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.11 DL200T / DL210TH / DL220THP

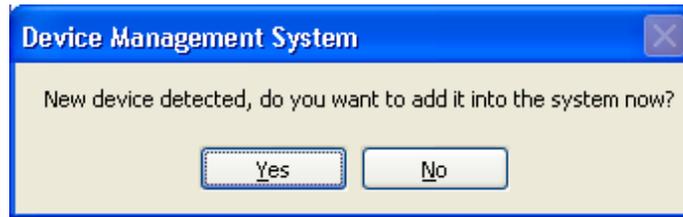
DL200T is a data logger for storing temperature.

DL210TH is a data logger for storing temperature and humidity.

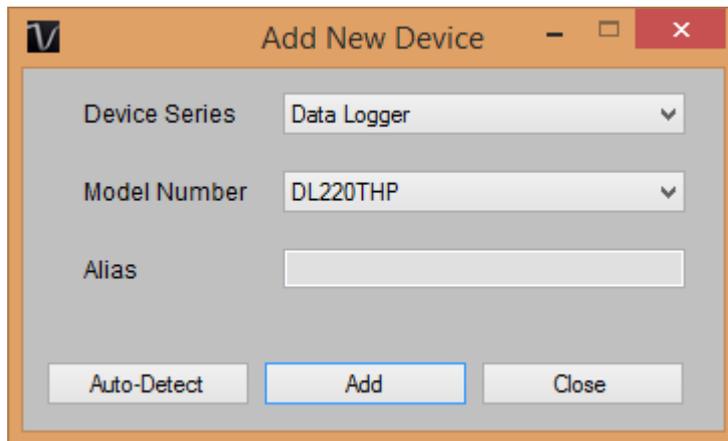
DL220THP is a data logger for storing temperature, humidity and air pressure reading.

6.11.1 Add new DL200T / DL210TH / DL220THP

When Voltsoft detects a new DL200T / DL210TH / DL220THP attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

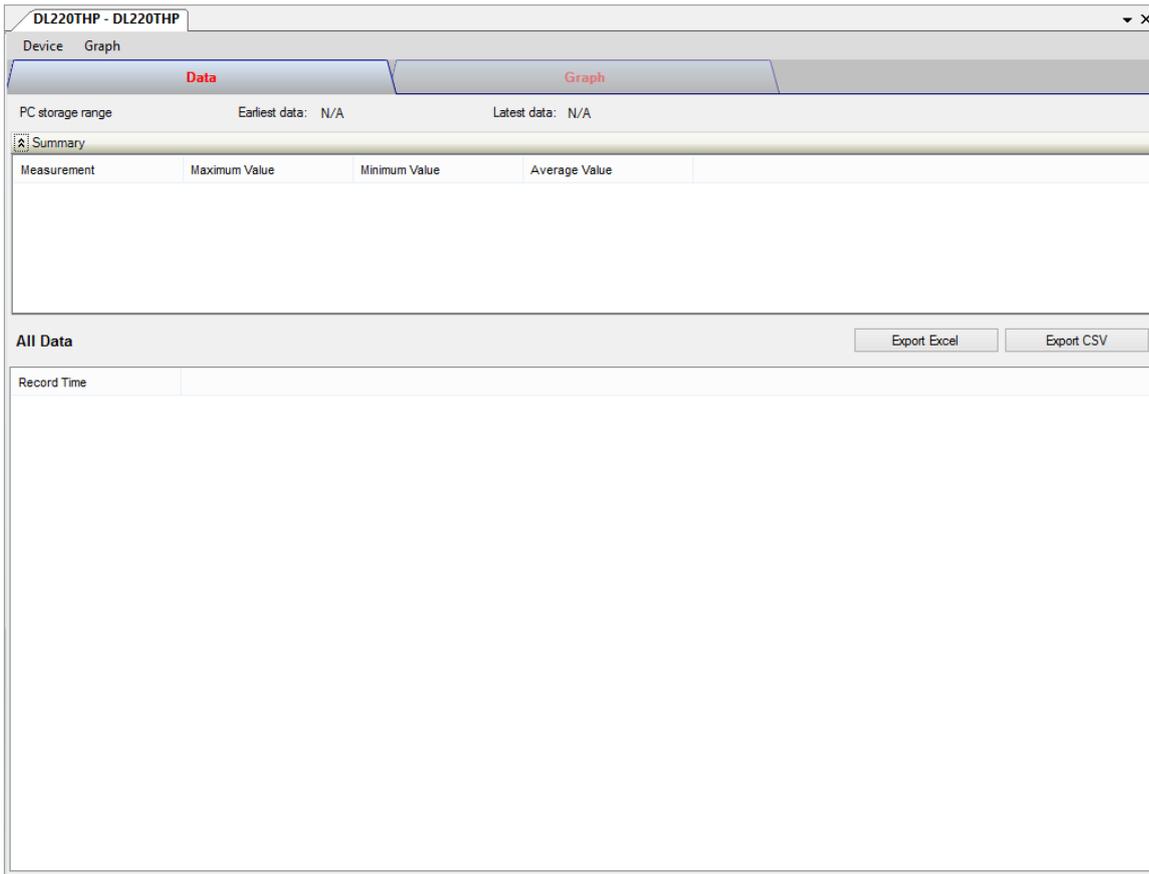


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.11.2 Remove DL200T / DL210TH / DL220THP

To remove DL200T / DL210TH / DL220THP, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

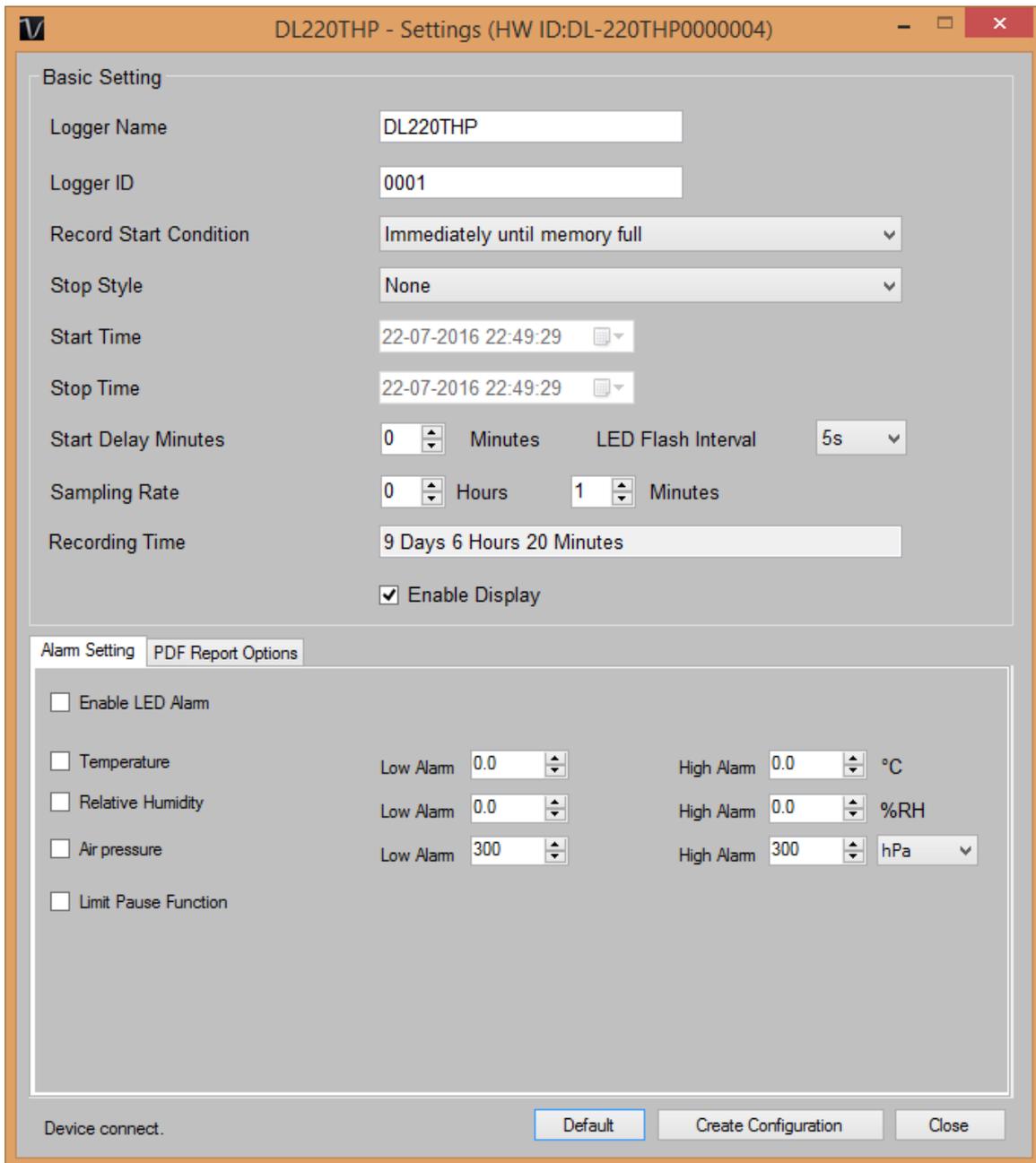
6.11.3 DL200T / DL210TH / DL220THP – Device Control Panel



The DL200T / DL210TH / DL220THP Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL200T / DL210TH / DL220THP.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.11.4 DL200T / DL210TH / DL220THP - Settings



1	Logger Name	Input the unique alias for that device.
2	Logger ID	Logger ID is a four digit identifier. Enter a number between 0000 and 9999 e.g. 0014.
2	Record Start Condition	<p>"IMMEDIATELY UNTIL MEMORY FULL": Data logger starts recording data immediately until the memory is full.</p> <p>"START UPON KEYPRESS": Data logger starts recording after holding button ENTER pressed for few seconds. Data logger stops recording until memory is full.</p> <p>"START UPON START TIME": Data logger starts recording at a defined date and time until the memory is full.</p> <p>"START/STOP TIME": Data logger starts and stops recording data at a defined date and time.</p>

		"CIRCULAR LOGGING": Data logger starts recording immediately and circularly. The newest data overwrites the oldest data. It stops recording/logging once the battery is depleted or "CIRCULAR LOGGING" has been replaced by another "RECORD START CONDITION" during configuration.
4	Stop Style	"NONE": No stop condition is specified. Data logger stops recording based on the "RECORD START CONDITION" setting. "STOP BUTTON": Data logger stops recording after holding button ENTER pressed for few seconds. "AFTER PDF CREATED": Data logger stops recording after PDF report is generated.
5	Start Time	Define date and time when to start recording data.
6	Stop Time	Define date and time when to stop recording data.
7	Start Delay Minutes	Define delay time of immediate start of recording.
8	Sampling Rate	Define how frequent the data logger measures and records data in "SECONDS", "MINUTES" or "HOURS".
9	Recording Time	This value is automatically calculated based on the sampling rate and cannot be set by the user.
10	LED Flash Interval	Select how fast the LED control lights (2,3) shall flash. Choose an interval of 5, 10, 15, 20, 25 or 30 seconds.
11	Enable Display	Remove the checkmark from the check box to turn off the LC display, or check the checkbox to turn on the LC display.
12	Enable LED Alarm	The LED alarm indicates when a measured value is outside the defined range. To disable the LED alarm, remove the checkmark in the checkbox. To enable the LED alarm, check the checkbox .
13	Limit Pause Function	During recording, the limit alarm can be suspended. Select "ENABLE" or "DISABLE" to enable/disable the pause function. Pause function will not stop the recording.
14	Low Alarm / High Alarm	Select parameter(s) by checking parameter checkboxes and specify the low and high alarm in numbers. For air pressure, choose the desired unit from the drop menu (DL-220THP only).
15	Language	Choose the language, in which the PDF report shall be shown, from the selection box.
16	PDF File Name	Click on "INSERT NAME" to define the pattern of the file name. A new window "PLEASE CHOOSE THE NAME PATTERN BELOW" opens. Choose the required elements (OWNER/SERIAL ID/MODELNAME/DATE/TIME/LOCATION) and their order. Up to 6 elements can be chosen. Chosen elements appear in the field "FILE NAME". Press "CLEAR" to delete all chosen elements. The field

		"FILE NAME" is empty again. Press "CLOSE" to save the file name pattern and close this window.
17	Date Format	Select your preferred date format from menu
18	Time Format	Select between 12 hour or 24 hour format.
19	Owner	Key in the owner's name.
20	Location	Key in the location's name e.g. the name of the location where you will record.
21	Report Title	Enter a report title, which will be shown on the PDF report.
22	User Text	Enter some remarks or additional information if needed.
23	Default Button	Reload the factory default settings.
24	Create Configuration Button	Save changes.
25	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.11.5 DL200T / DL210TH / DL220THP - Download Data

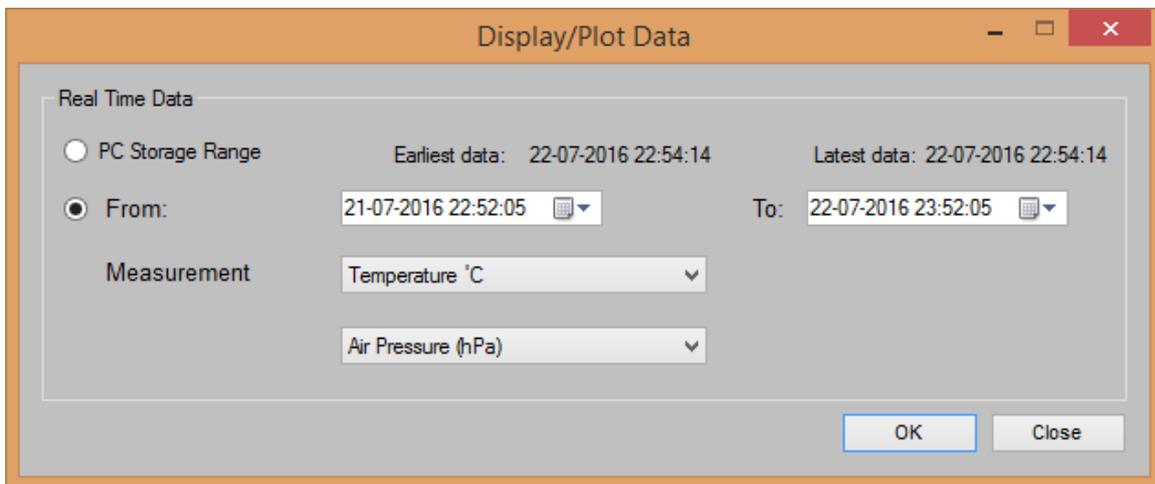
This module allows user to download the data from DL200T / DL210TH / DL220THP.



Click "OK" button to stop the recording and start downloading.

6.11.6 DL200T / DL210TH / DL220THP – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	For DL200T / DL210TH, user can select Celsius or Fahrenheit record to download. For DL220THP, user can select air pressure unit too.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Close	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.11.7 DL200T / DL210TH / DL220THP – Data View

DL200T contain two measurement: Temperature and Pause.
 DL210TH contain three measurements: Temperature, humidity and Pause.
 DL220THP contains four measurements: Temperature, humidity, air pressure and Pause.

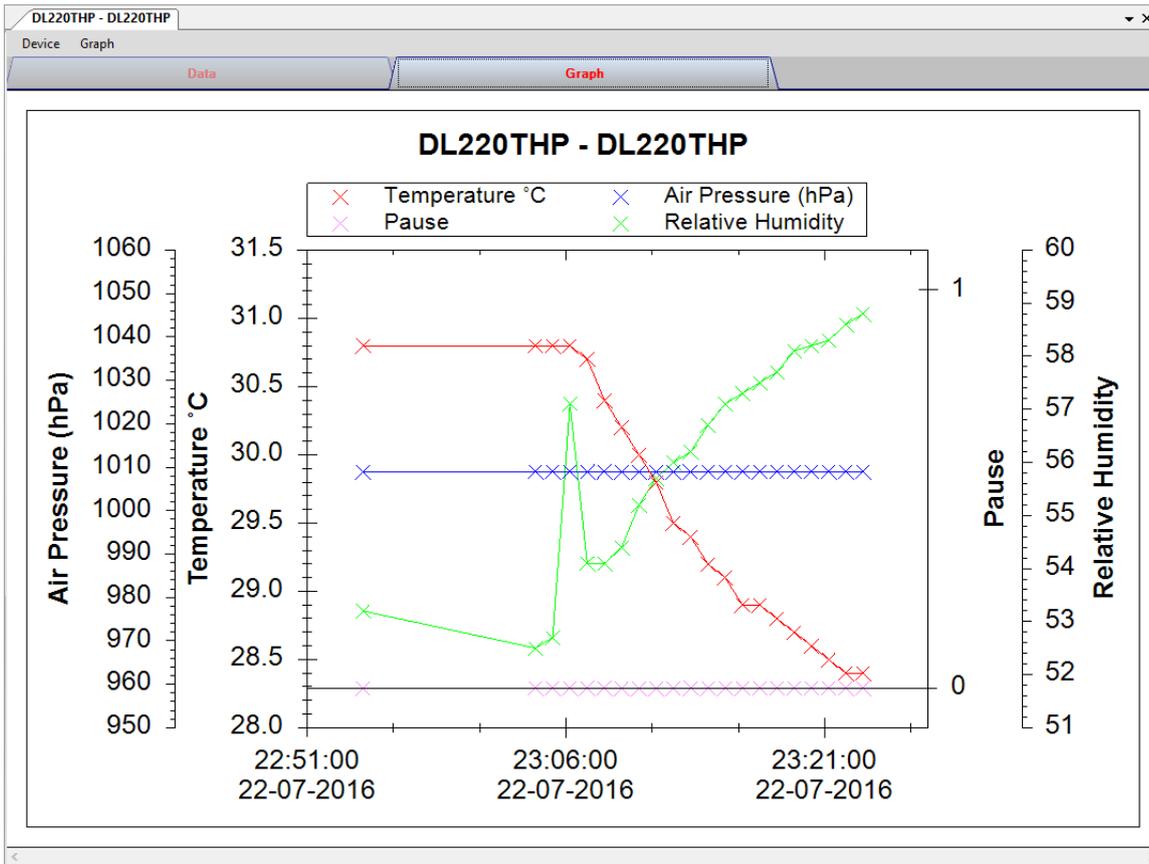
Pause will only have value 0 or 1 to indicate the limit alarm was suspended or not (1 = suspended).

Measurement	Maximum Value	Minimum Value	Average Value
Temperature °C (°C)	30.8	28.4	29.56
Relative Humidity (%)	58.8	52.5	56.17
Air Pressure (hPa)	1009	1009	1,009.00

Record Time	Temperature °C (°C)	Relative Humidity (%)	Air Pressure (hPa)	Pause
22-07-2016 22:54:14	30.8	53.2	1009	0
22-07-2016 23:04:14	30.8	52.5	1009	0
22-07-2016 23:05:14	30.8	52.7	1009	0
22-07-2016 23:06:14	30.8	57.1	1009	0
22-07-2016 23:07:14	30.7	54.1	1009	0
22-07-2016 23:08:14	30.4	54.1	1009	0
22-07-2016 23:09:14	30.2	54.4	1009	0
22-07-2016 23:10:14	30.0	55.2	1009	0
22-07-2016 23:11:14	29.8	55.7	1009	0
22-07-2016 23:12:14	29.5	56.0	1009	0
22-07-2016 23:13:14	29.4	56.2	1009	0
22-07-2016 23:14:14	29.2	56.7	1009	0
22-07-2016 23:15:14	29.1	57.1	1009	0
22-07-2016 23:16:14	28.9	57.3	1009	0
22-07-2016 23:17:14	28.9	57.5	1009	0
22-07-2016 23:18:14	28.8	57.7	1009	0
22-07-2016 23:19:14	28.7	58.1	1009	0
22-07-2016 23:20:14	28.6	58.2	1009	0
22-07-2016 23:21:14	28.5	58.3	1009	0
22-07-2016 23:22:14	28.4	58.6	1009	0
22-07-2016 23:23:14	28.4	58.8	1009	0

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.11.8 DL200T / DL210TH / DL220THP – Graph View



Our graph support following operations

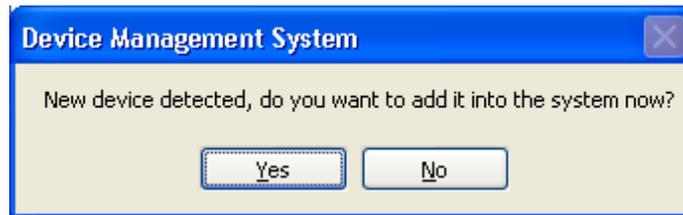
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.12 DL230L / DL240K

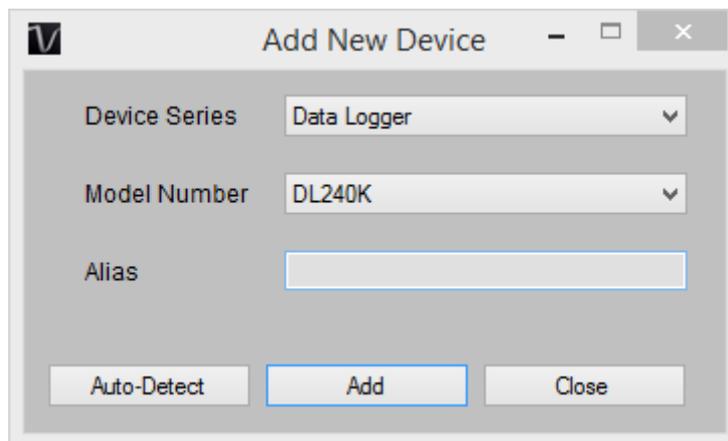
DL230L is a data logger for storing illuminance.
DL240K is a data logger for storing temperature.

6.12.1 Add new DL230L / DL240K

When Voltsoft detects a new DL230L / DL240K attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

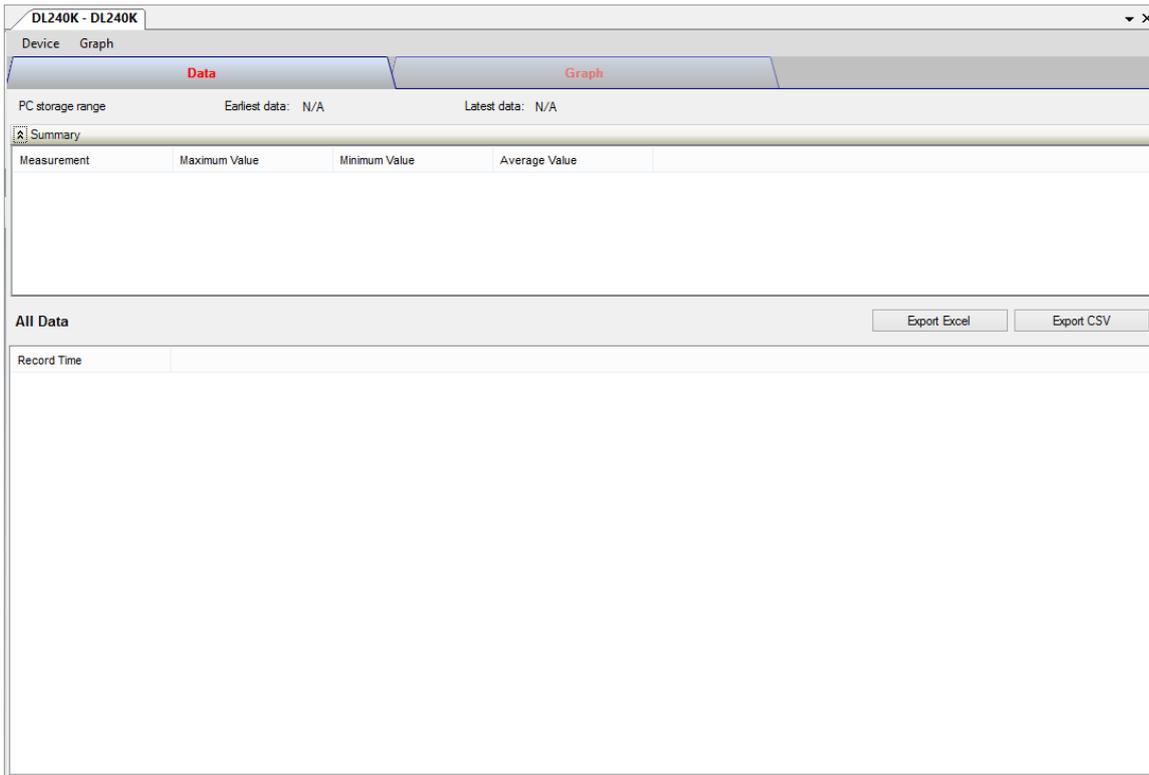


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.12.2 Remove DL230L / DL240K

To remove DL230L / DL240K, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

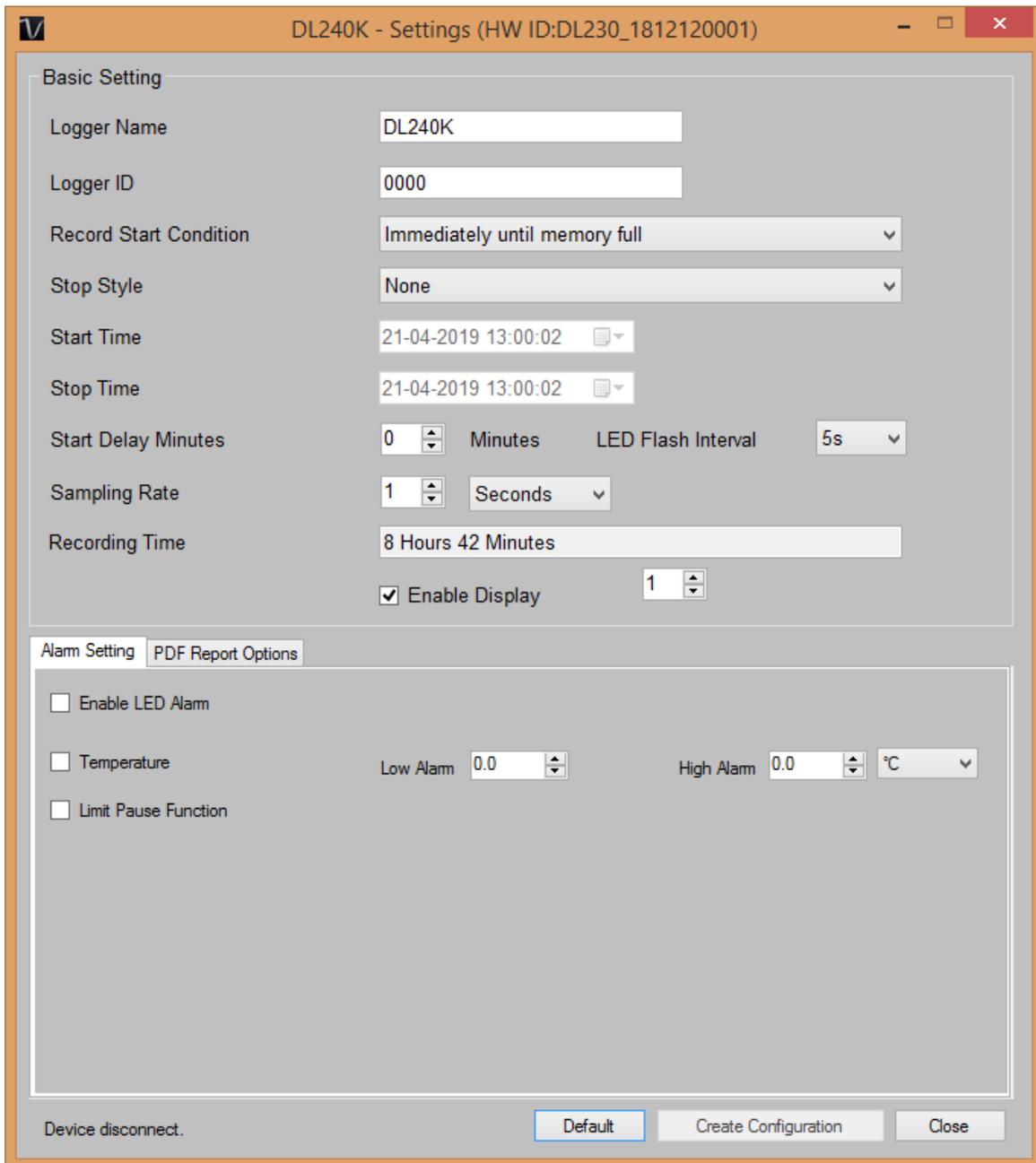
6.12.3 DL230L / DL240K – Device Control Panel



The DL230L / DL240K Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL230L / DL240K.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.12.4 DL230L / DL240K - Settings



1	Logger Name	Input the unique alias for that device.
2	Logger ID	Logger ID is a four digit identifier. Enter a number between 0000 and 9999 e.g. 0014.
2	Record Start Condition	<p>"IMMEDIATELY UNTIL MEMORY FULL": Data logger starts recording data immediately until the memory is full.</p> <p>"START UPON KEYPRESS": Data logger starts recording after holding button ENTER pressed for few seconds. Data logger stops recording until memory is full.</p> <p>"START UPON START TIME": Data logger starts recording at a defined date and time until the memory is full.</p> <p>"START/STOP TIME": Data logger starts and stops recording data at a defined date and time.</p>

		"CIRCULAR LOGGING": Data logger starts recording immediately and circularly. The newest data overwrites the oldest data. It stops recording/logging once the battery is depleted or "CIRCULAR LOGGING" has been replaced by another "RECORD START CONDITION" during configuration.
4	Stop Style	"NONE": No stop condition is specified. Data logger stops recording based on the "RECORD START CONDITION" setting. "STOP BUTTON": Data logger stops recording after holding button ENTER pressed for few seconds. "AFTER PDF CREATED": Data logger stops recording after PDF report is generated.
5	Start Time	Define date and time when to start recording data.
6	Stop Time	Define date and time when to stop recording data.
7	Start Delay Minutes	Define delay time of immediate start of recording.
8	Sampling Rate	Define how frequent the data logger measures and records data in "SECONDS", "MINUTES" or "HOURS".
9	Recording Time	This value is automatically calculated based on the sampling rate and cannot be set by the user.
10	LED Flash Interval	Select how fast the LED control lights (2,3) shall flash. Choose an interval of 5, 10, 15, 20, 25 or 30 seconds.
11	Enable Display	Remove the checkmark from the check box to turn off the LC display, or check the checkbox to turn on the LC display.
12	Enable LED Alarm	The LED alarm indicates when a measured value is outside the defined range. To disable the LED alarm, remove the checkmark in the checkbox. To enable the LED alarm, check the checkbox .
13	Limit Pause Function	During recording, the limit alarm can be suspended. Select "ENABLE" or "DISABLE" to enable/disable the pause function. Pause function will not stop the recording.
14	Low Alarm / High Alarm	Select parameter(s) by checking parameter checkboxes and specify the low and high alarm in numbers.
15	Language	Choose the language, in which the PDF report shall be shown, from the selection box.
16	PDF File Name	Click on "INSERT NAME" to define the pattern of the file name. A new window "PLEASE CHOOSE THE NAME PATTERN BELOW" opens. Choose the required elements (OWNER/SERIAL ID/MODELNAME/DATE/TIME/LOCATION) and their order. Up to 6 elements can be chosen. Chosen elements appear in the field "FILE NAME". Press "CLEAR" to delete all chosen elements. The field "FILE NAME" is empty again.

		Press "CLOSE" to save the file name pattern and close this window.
17	Date Format	Select your preferred date format from menu
18	Time Format	Select between 12 hour or 24 hour format.
19	Owner	Key in the owner's name.
20	Location	Key in the location's name e.g. the name of the location where you will record.
21	Report Title	Enter a report title, which will be shown on the PDF report.
22	User Text	Enter some remarks or additional information if needed.
23	Default Button	Reload the factory default settings.
24	Create Configuration Button	Save changes.
25	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

6.12.5 DL230L / DL240K - Download Data

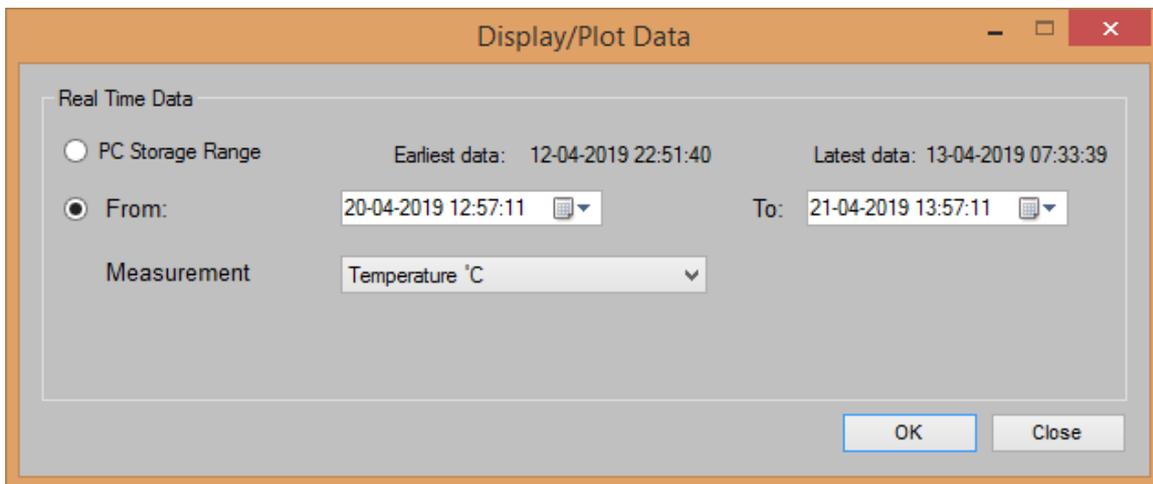
This module allows user to download the data from DL230L / DL240K.



Click "OK" button to stop the recording and start downloading.

6.12.6 DL230L / DL240K – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	For DL230L, user can select LUX or FC record to download For DL240K, user can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Close	Close this module.

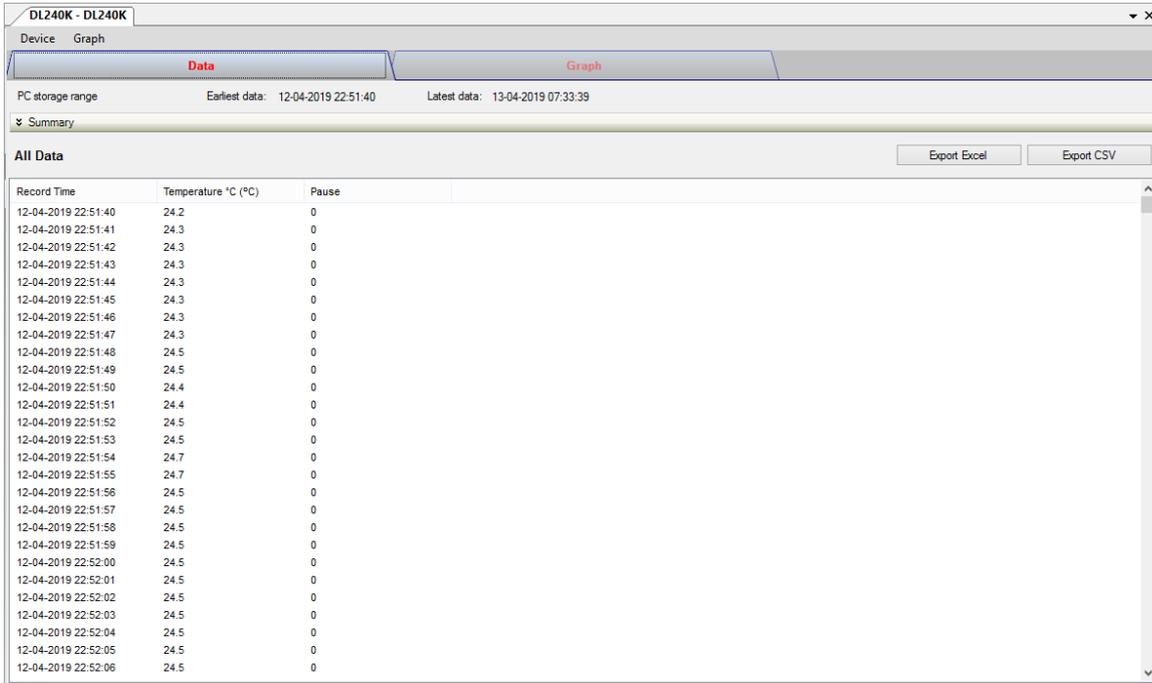
The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.12.7 DL230L / DL240K – Data View

DL230L contain two measurement: Illuminance and Pause

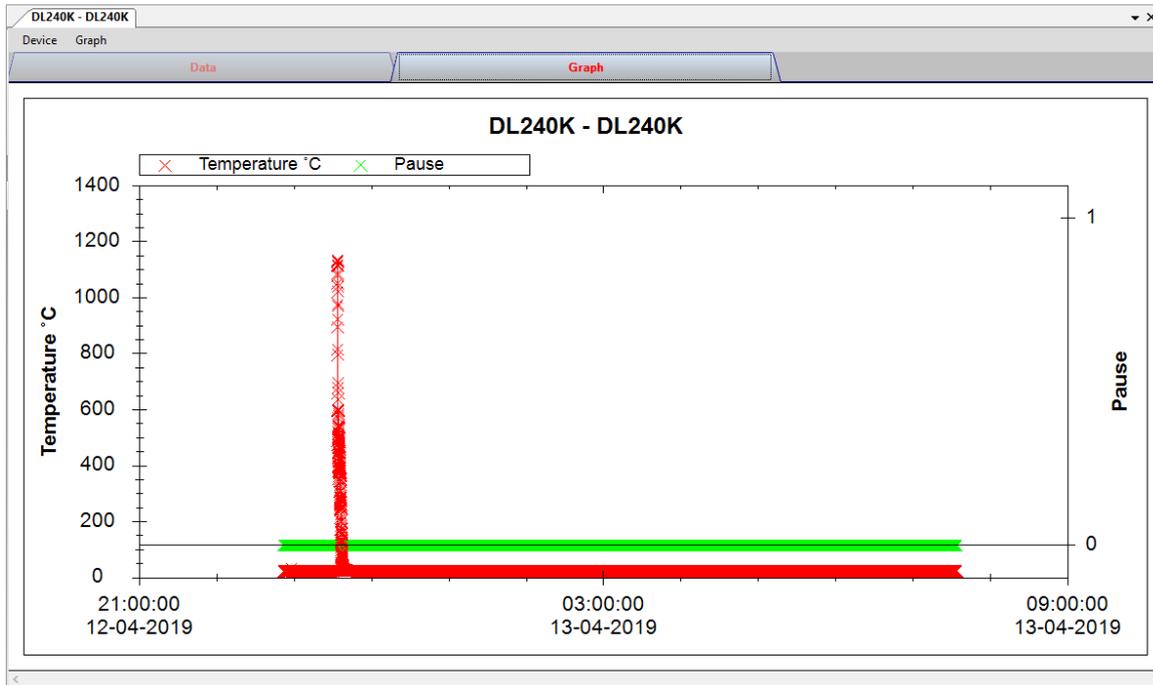
DL240K contain two measurement: Temperature and Pause.

Pause will only have value 0 or 1 to indicate the limit alarm was suspended or not (1 = suspended).



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.12.8 DL230L / DL240K – Graph View



Our graph support following operations

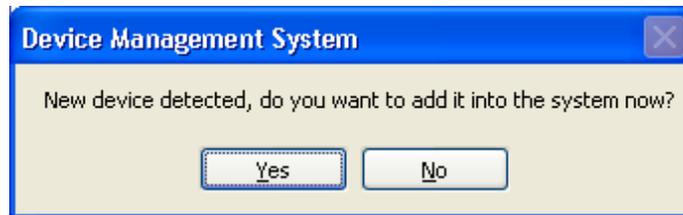
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.13 DL111K

DL111K is a data logger for storing temperature reading.

6.13.1 Add new DL111K

When Voltsoft detected a new DL111K attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

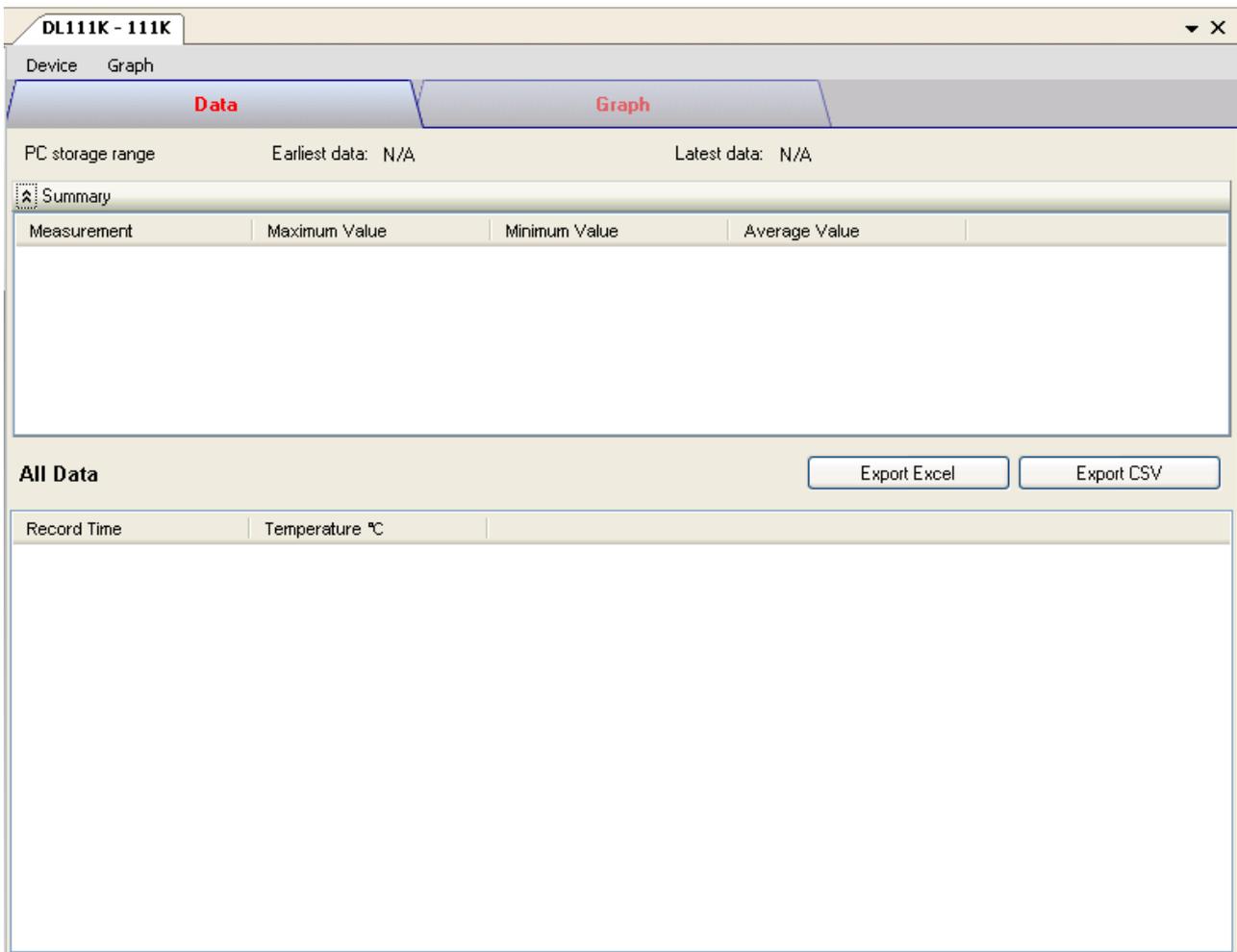


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.13.2 Remove DL111K

To remove DL111K, go to Device Management -> Remove Existing Device and its PC data Storage, select the device want to remove and click the "Remove" button.

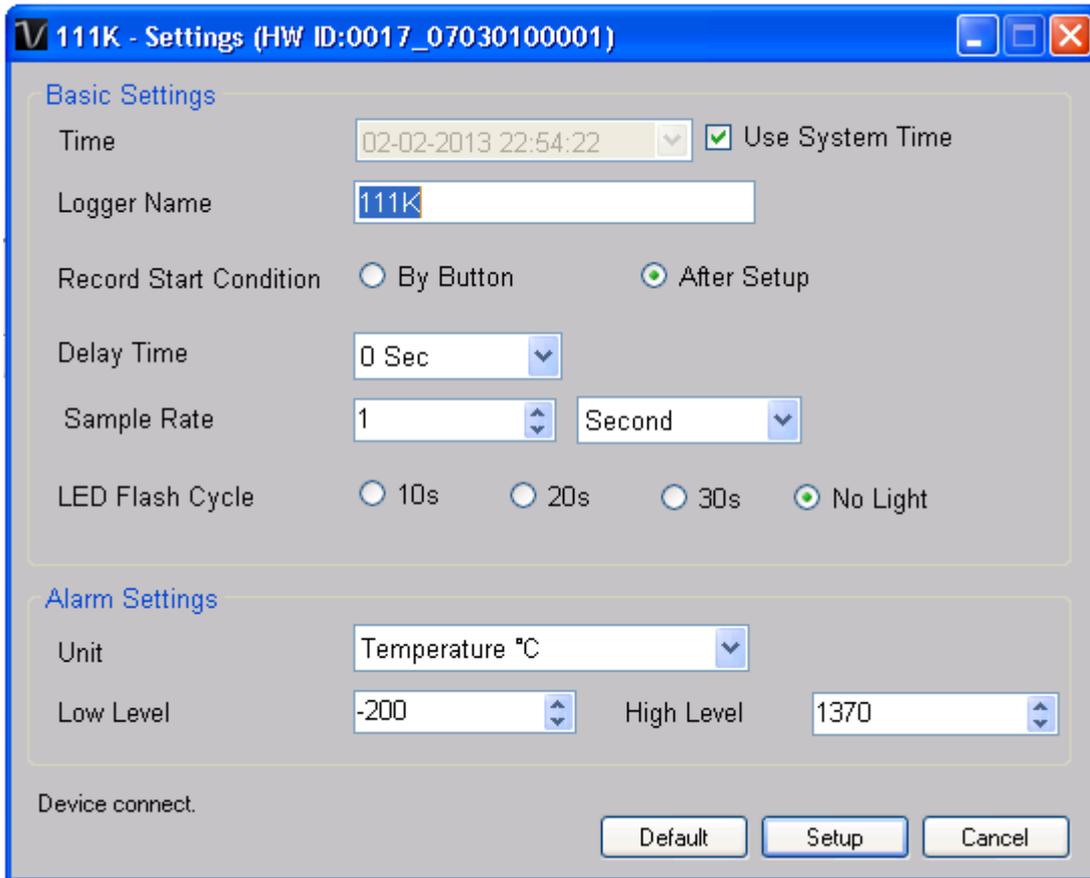
6.13.3 DL111K – Device Control Panel



The DL111K Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL111K.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.13.4 DL111K – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Delay Time	Only available if “After Setup” selected.
5	Sample Rate	Specify the delay time for recording start after setup.
7	LED Flash Cycle	Instruct the logger to log readings at a specific rate.
8	Unit	Configure the LED flash cycle - the longer the time, the longer the battery life.
9	Temperature Low / High Alarm	Select temperature unit (Celsius or Fahrenheit)
10	Default Button	Configure the temperature low / high alarm level.
11	Setup Button	Reload the factory default settings.
12	Close Button	Save changes.
		Close this interface.

6.13.5 DL111K - Download Data

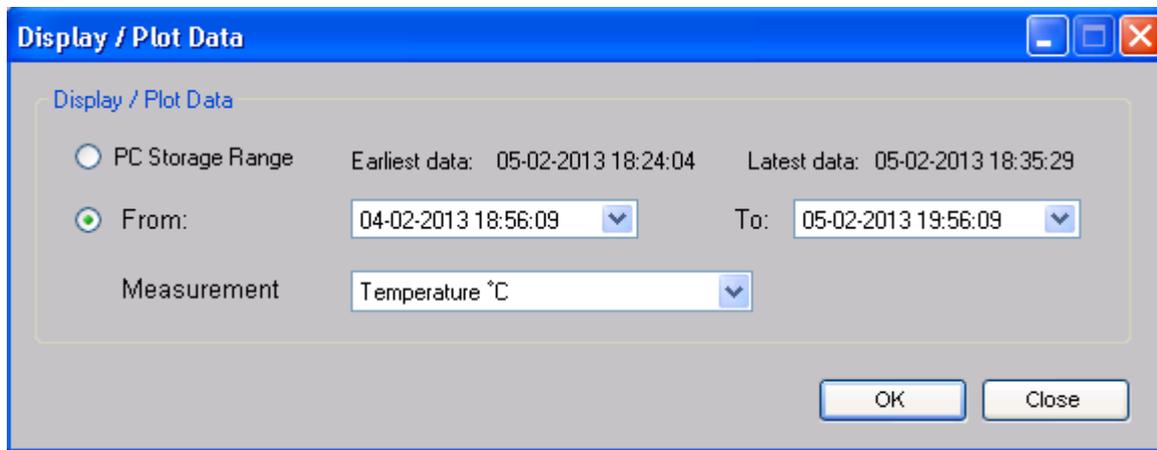
This module allows user to download the data from DL111K.



Click "OK" button to stop the recording and start downloading.

6.13.6 DL111K – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

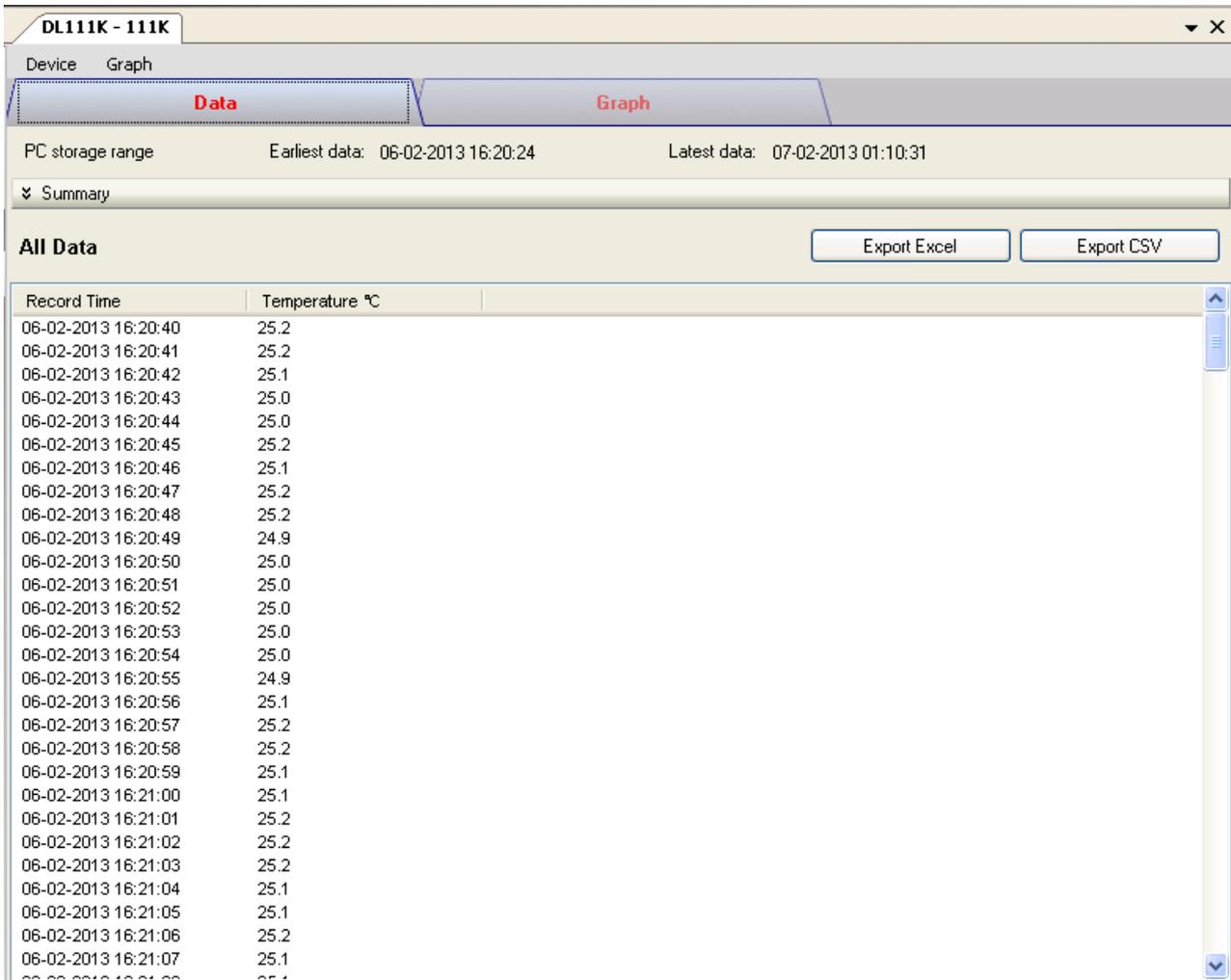


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

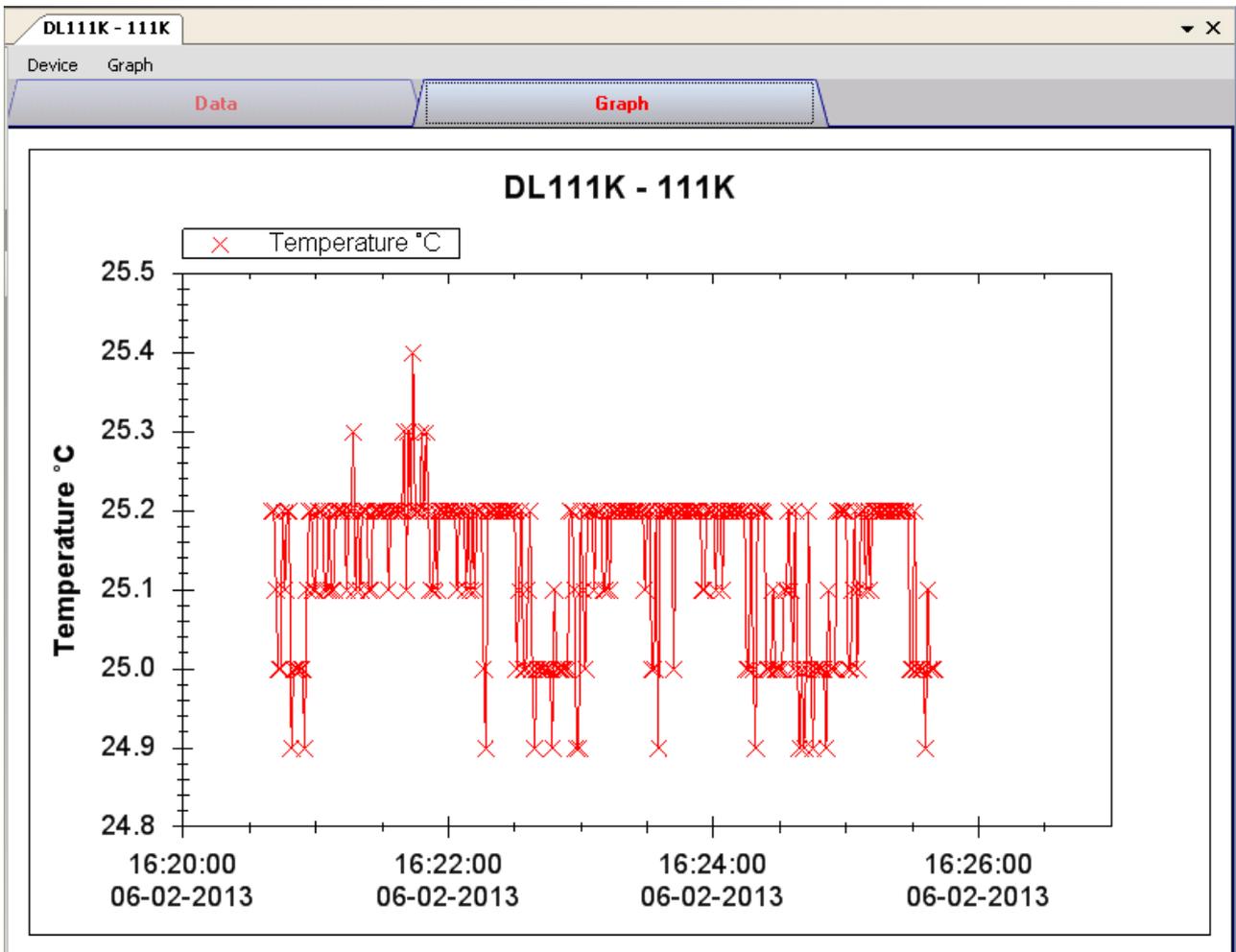
6.13.7 DL111K – Data View

DL111K contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, and can be selected in Display / Plot Data dialog.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.13.8 DL111K – Graph View



Our graph supports the following operations

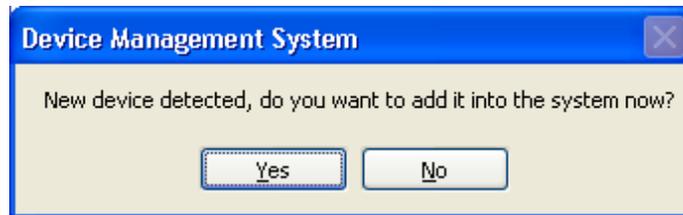
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.14 DL191A

DL191A is a data logger for measuring current.

6.14.1 Add new DL191A

When Voltsoft detected a new DL191A attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.14.2 Remove DL191A

To remove DL191A, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

6.14.3 DL191A – Device Control Panel

Device Graph

Data **Graph**

PC storage range Earliest data: 29-03-2013 17:32:30 Latest data: 29-03-2013 17:32:52

Summary

Measurement	Maximum Value	Minimum Value	Average Value
Current (mA)	0.02	0.02	0.02

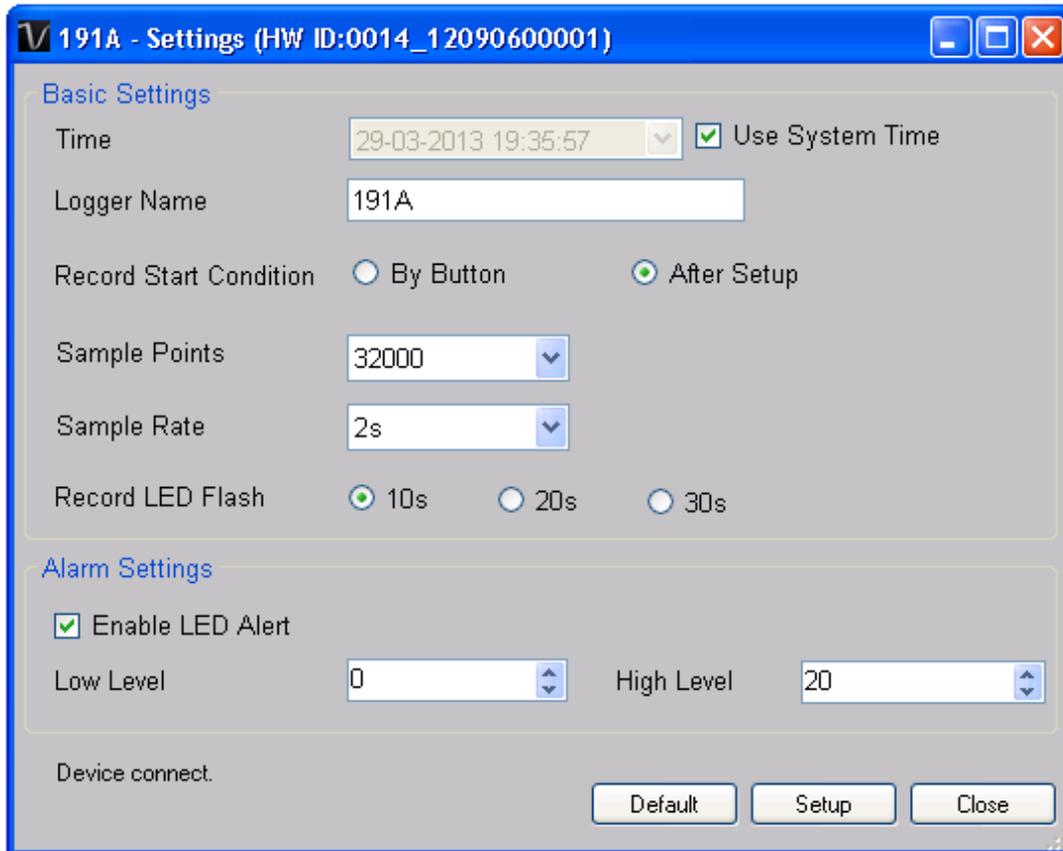
All Data Export Excel Export CSV

Record Time	Current (mA)
29-03-2013 17:32:30	0.02
29-03-2013 17:32:32	0.02
29-03-2013 17:32:34	0.02
29-03-2013 17:32:36	0.02
29-03-2013 17:32:38	0.02
29-03-2013 17:32:40	0.02
29-03-2013 17:32:42	0.02
29-03-2013 17:32:44	0.02
29-03-2013 17:32:46	0.02
29-03-2013 17:32:48	0.02
29-03-2013 17:32:50	0.02
29-03-2013 17:32:52	0.02

The DL191A Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL191A.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.14.4 DL191A – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for current.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.

6.14.5 DL191A - Download Data

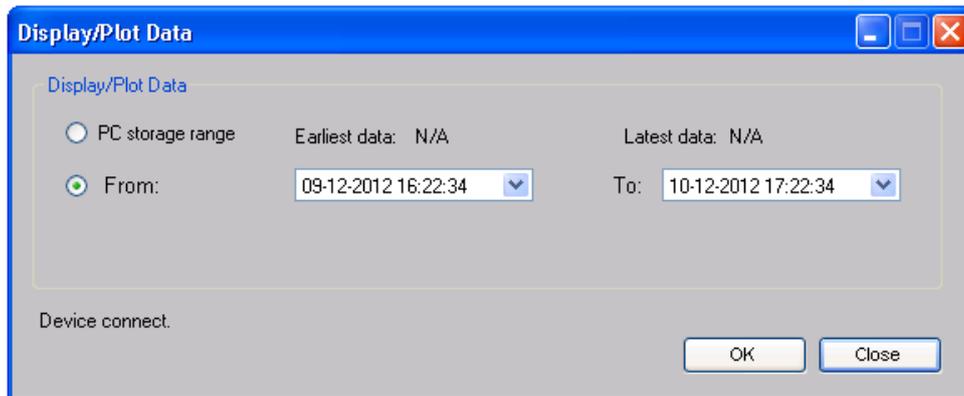
This module allows user to download the data from DL191A.



Click "OK" button to stop the recording and start downloading.

6.14.6 DL191A – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click on OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

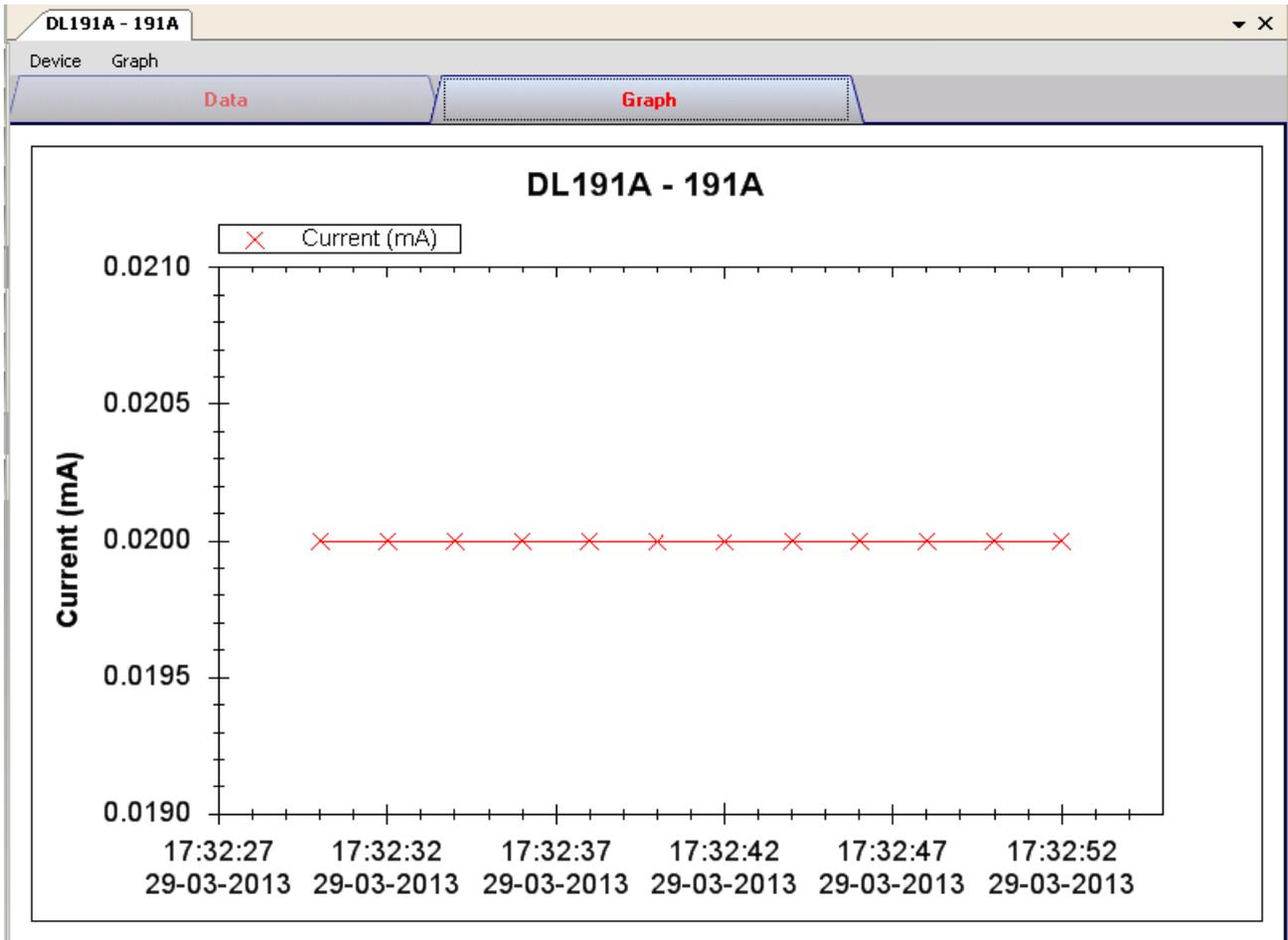
6.14.7 DL191A – Data View

DL191A contains one measurement (current) only.

Record Time	Current (mA)
29-03-2013 17:32:30	0.02
29-03-2013 17:32:32	0.02
29-03-2013 17:32:34	0.02
29-03-2013 17:32:36	0.02
29-03-2013 17:32:38	0.02
29-03-2013 17:32:40	0.02
29-03-2013 17:32:42	0.02
29-03-2013 17:32:44	0.02
29-03-2013 17:32:46	0.02
29-03-2013 17:32:48	0.02
29-03-2013 17:32:50	0.02
29-03-2013 17:32:52	0.02

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.14.8 DL191A – Graph View



Our graph supports the following operations

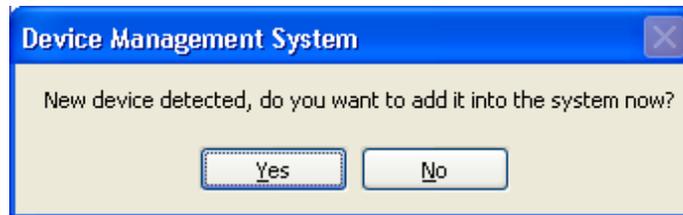
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.15 DL191V

DL191V is a data logger for measuring voltage.

6.15.1 Add new DL191V

When Voltsoft detected a new DL191V attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

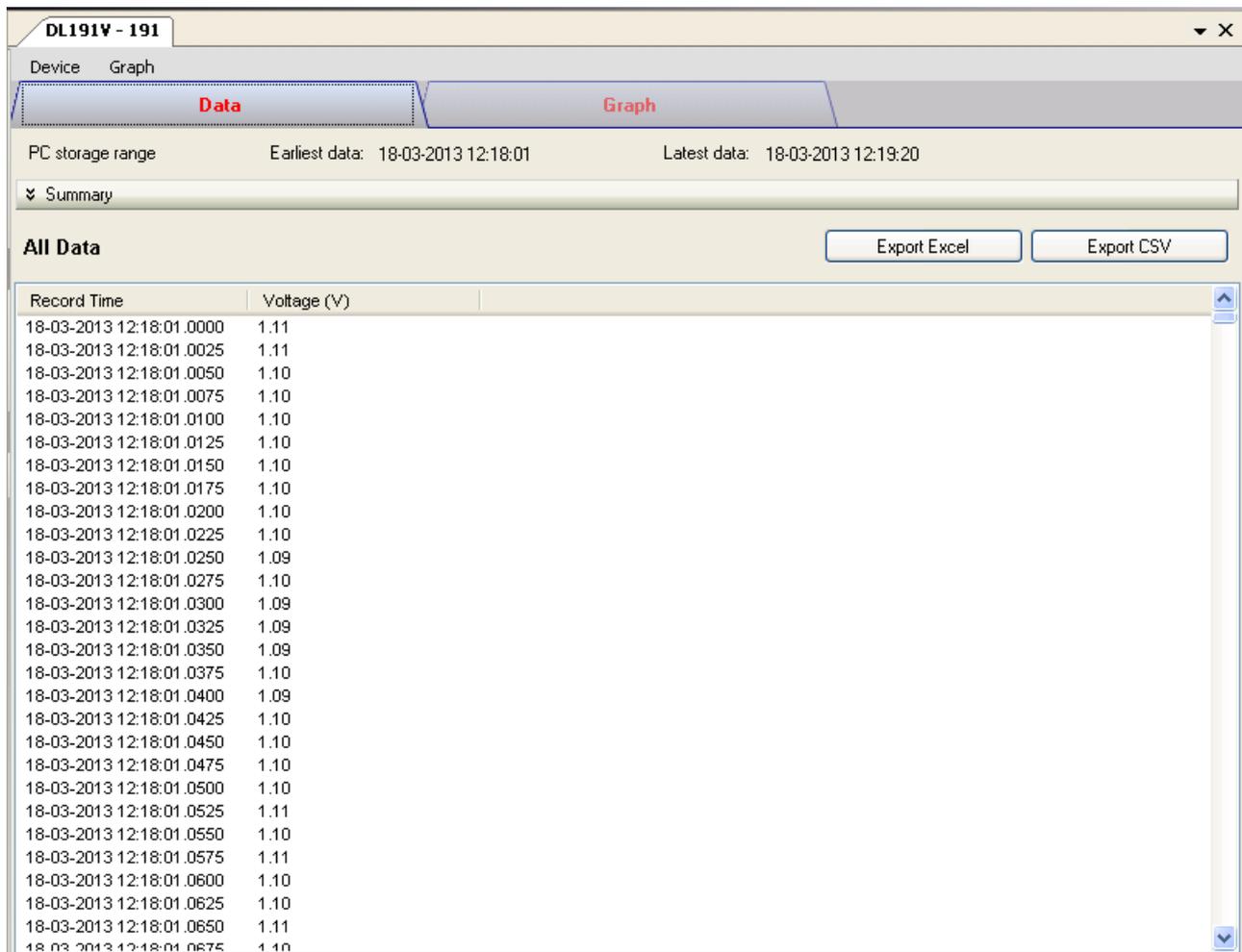


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.15.2 Remove DL191V

To remove DL191V, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

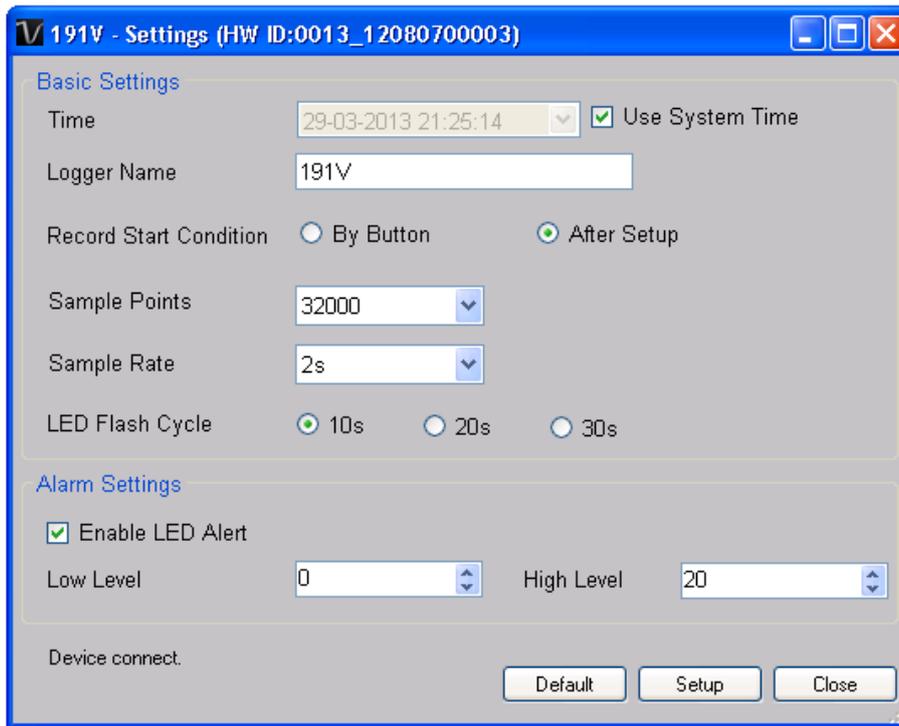
6.15.3 DL191V – Device Control Panel



The DL191V Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL191V.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.15.4 DL191V – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for voltage.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.

6.15.5 DL191V - Download Data

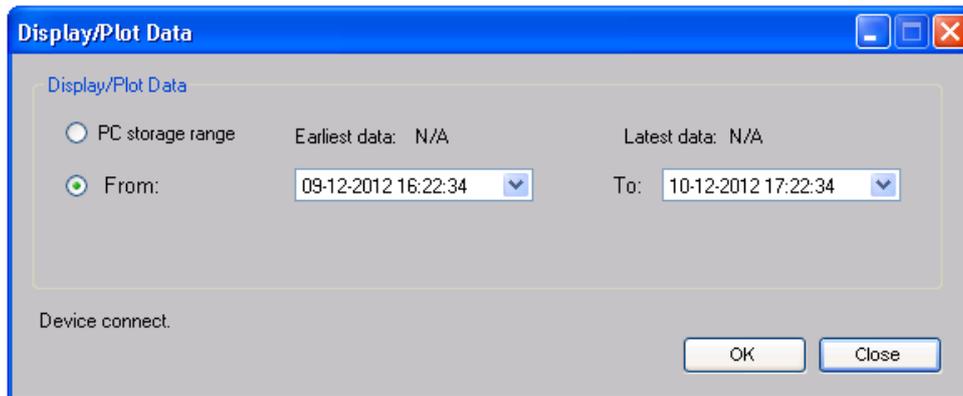
This module allows user to download the data from DL191V.



Click "OK" button to stop the recording and start downloading.

6.15.6 DL191V – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.15.7 DL191V – Data View

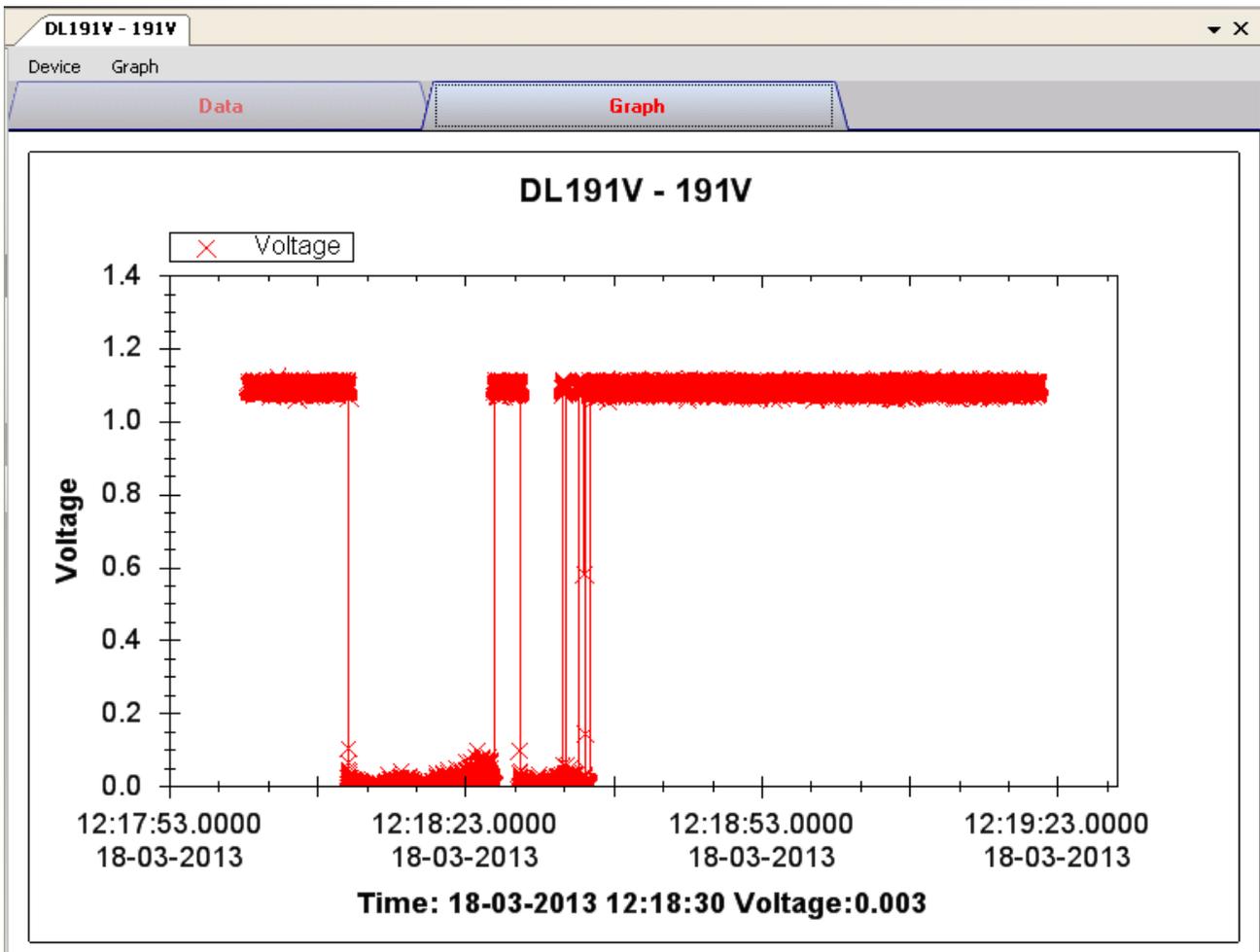
DL191V contains one measurement (voltage) only.

The screenshot shows the 'DL191V - 191' window with the 'Data' tab active. The 'PC storage range' is displayed as 'Earliest data: 18-03-2013 12:18:01' and 'Latest data: 18-03-2013 12:19:20'. Below this is a 'Summary' section and an 'All Data' table. The table has two columns: 'Record Time' and 'Voltage (V)'. The data in the table is as follows:

Record Time	Voltage (V)
18-03-2013 12:18:01.0000	1.11
18-03-2013 12:18:01.0025	1.11
18-03-2013 12:18:01.0050	1.10
18-03-2013 12:18:01.0075	1.10
18-03-2013 12:18:01.0100	1.10
18-03-2013 12:18:01.0125	1.10
18-03-2013 12:18:01.0150	1.10
18-03-2013 12:18:01.0175	1.10
18-03-2013 12:18:01.0200	1.10
18-03-2013 12:18:01.0225	1.10
18-03-2013 12:18:01.0250	1.09
18-03-2013 12:18:01.0275	1.10
18-03-2013 12:18:01.0300	1.09
18-03-2013 12:18:01.0325	1.09
18-03-2013 12:18:01.0350	1.09
18-03-2013 12:18:01.0375	1.10
18-03-2013 12:18:01.0400	1.09
18-03-2013 12:18:01.0425	1.10
18-03-2013 12:18:01.0450	1.10
18-03-2013 12:18:01.0475	1.10
18-03-2013 12:18:01.0500	1.10
18-03-2013 12:18:01.0525	1.11
18-03-2013 12:18:01.0550	1.10
18-03-2013 12:18:01.0575	1.11
18-03-2013 12:18:01.0600	1.10
18-03-2013 12:18:01.0625	1.10
18-03-2013 12:18:01.0650	1.11
18-03-2013 12:18:01.0675	1.10

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.15.8 DL191V – Graph View



Our graph supports the following operations

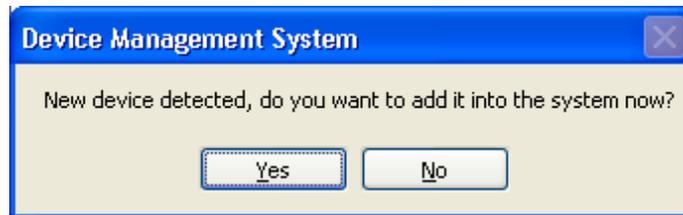
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.16 DL151AN

DL151AN is a data logger for measuring air velocity.

6.16.1 Add new DL151AN

When Voltsoft detected a new DL151AN attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

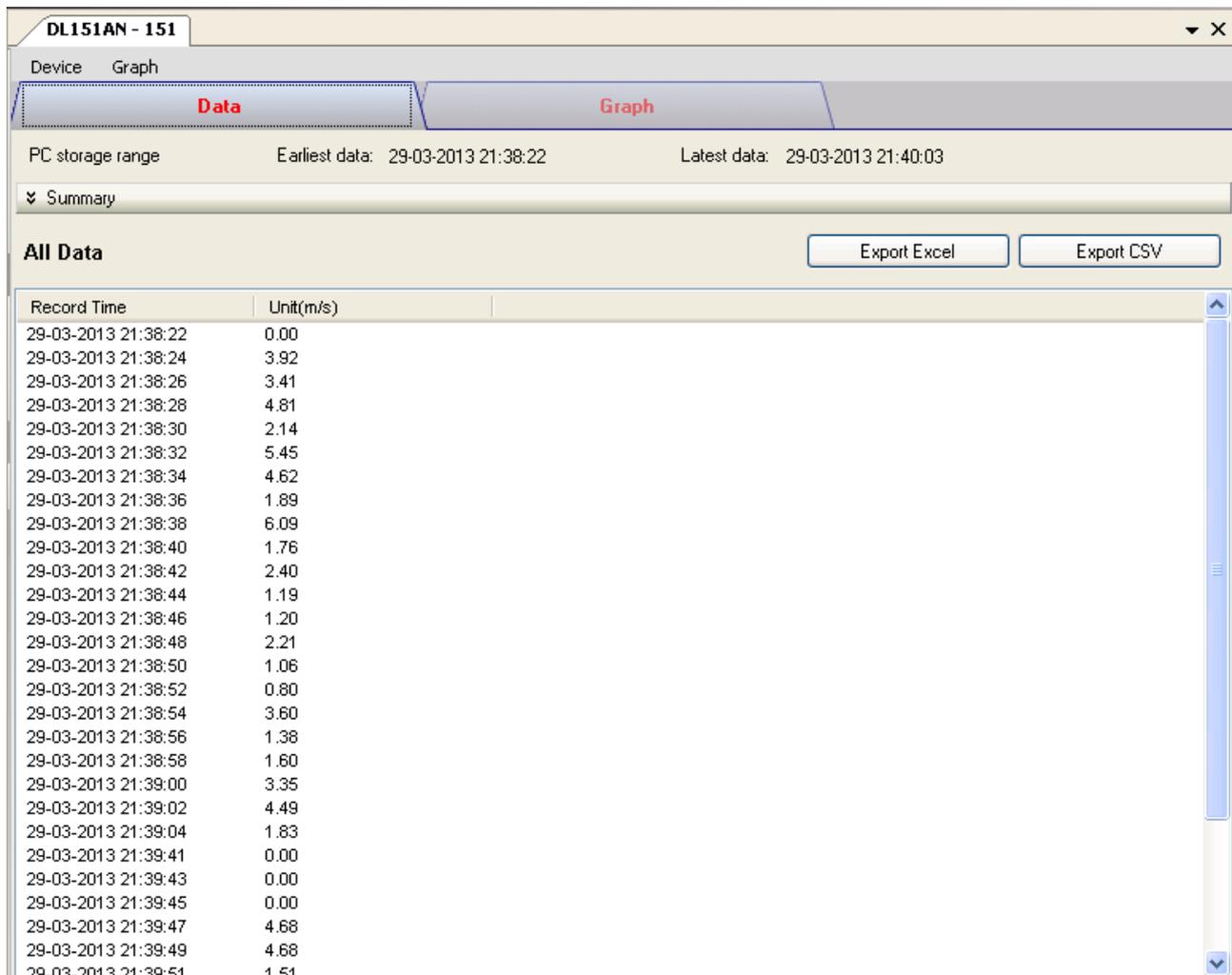


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.16.2 Remove DL151AN

To remove DL151AN, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

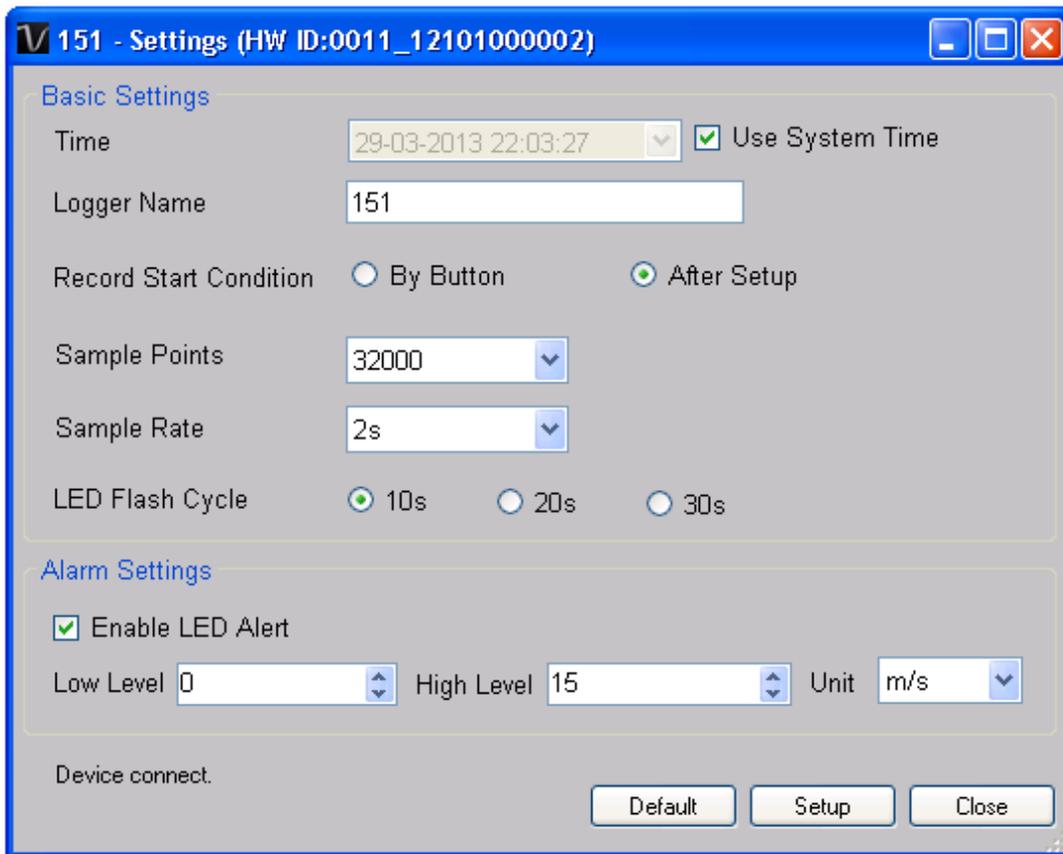
6.16.3 DL151AN – Device Control Panel



The DL151AN Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL151AN.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.16.4 DL151AN – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for air velocity.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.

6.16.5 DL151AN - Download Data

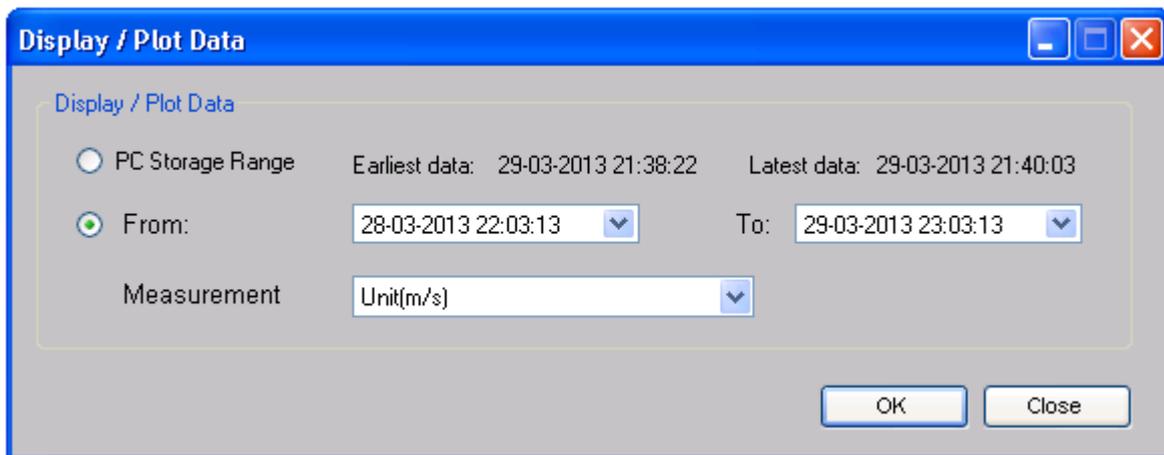
This module allows user to download the data from DL151AN.



Click "OK" button to stop the recording and start downloading.

6.16.6 DL151AN – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement unit to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

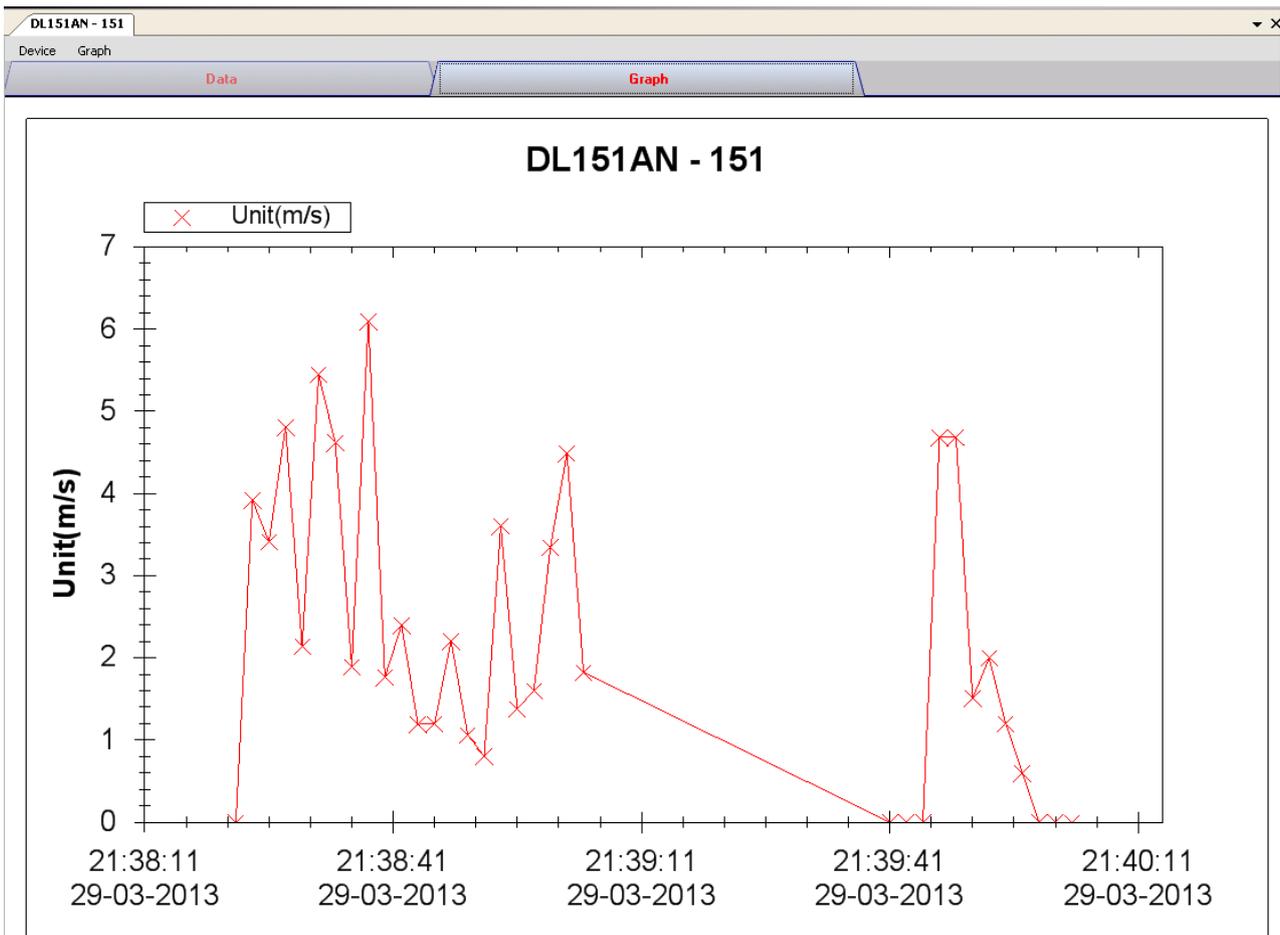
6.16.7 DL151AN – Data View

DL151AN contains one measurement (air velocity) only, but in different unit (m/s, ft/min, knots, km/h and MPH).

Record Time	Unit(m/s)
29-03-2013 21:38:22	0.00
29-03-2013 21:38:24	3.92
29-03-2013 21:38:26	3.41
29-03-2013 21:38:28	4.81
29-03-2013 21:38:30	2.14
29-03-2013 21:38:32	5.45
29-03-2013 21:38:34	4.62
29-03-2013 21:38:36	1.89
29-03-2013 21:38:38	6.09
29-03-2013 21:38:40	1.76
29-03-2013 21:38:42	2.40
29-03-2013 21:38:44	1.19
29-03-2013 21:38:46	1.20
29-03-2013 21:38:48	2.21
29-03-2013 21:38:50	1.06
29-03-2013 21:38:52	0.80
29-03-2013 21:38:54	3.60
29-03-2013 21:38:56	1.38
29-03-2013 21:38:58	1.60
29-03-2013 21:39:00	3.35
29-03-2013 21:39:02	4.49
29-03-2013 21:39:04	1.83
29-03-2013 21:39:41	0.00
29-03-2013 21:39:43	0.00
29-03-2013 21:39:45	0.00
29-03-2013 21:39:47	4.68
29-03-2013 21:39:49	4.68
29-03-2013 21:39:51	1.51

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.16.8 DL151AN – Graph View



Our graph supports the following operations

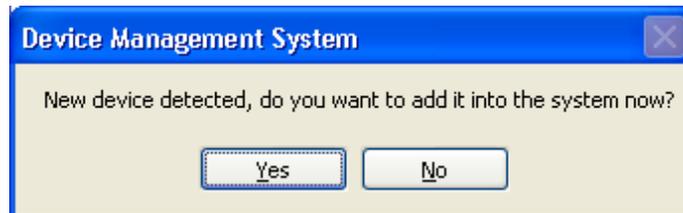
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.17 PL-125-T2 / PL-125-T4

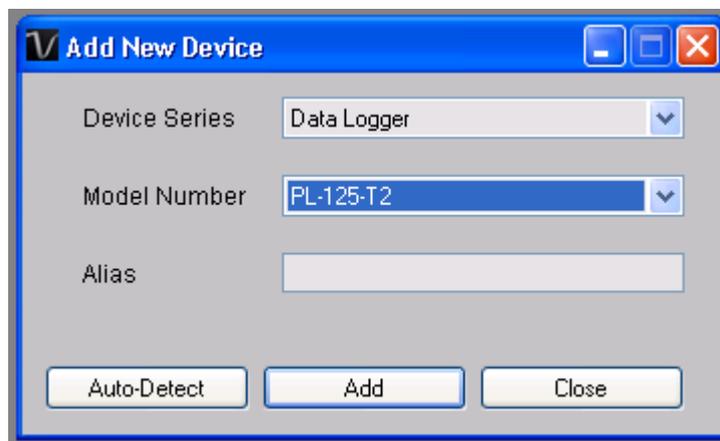
PL-125-T2 / PL-125-T4 are data loggers for storing temperature reading. PL-125-T2 has two channels while PL-125-T4 has four channels for measurement.

6.17.1 Add new PL-125-T2 / PL-125-T4

When Voltsoft detected a new PL-125-T2 / PL-125-T4 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

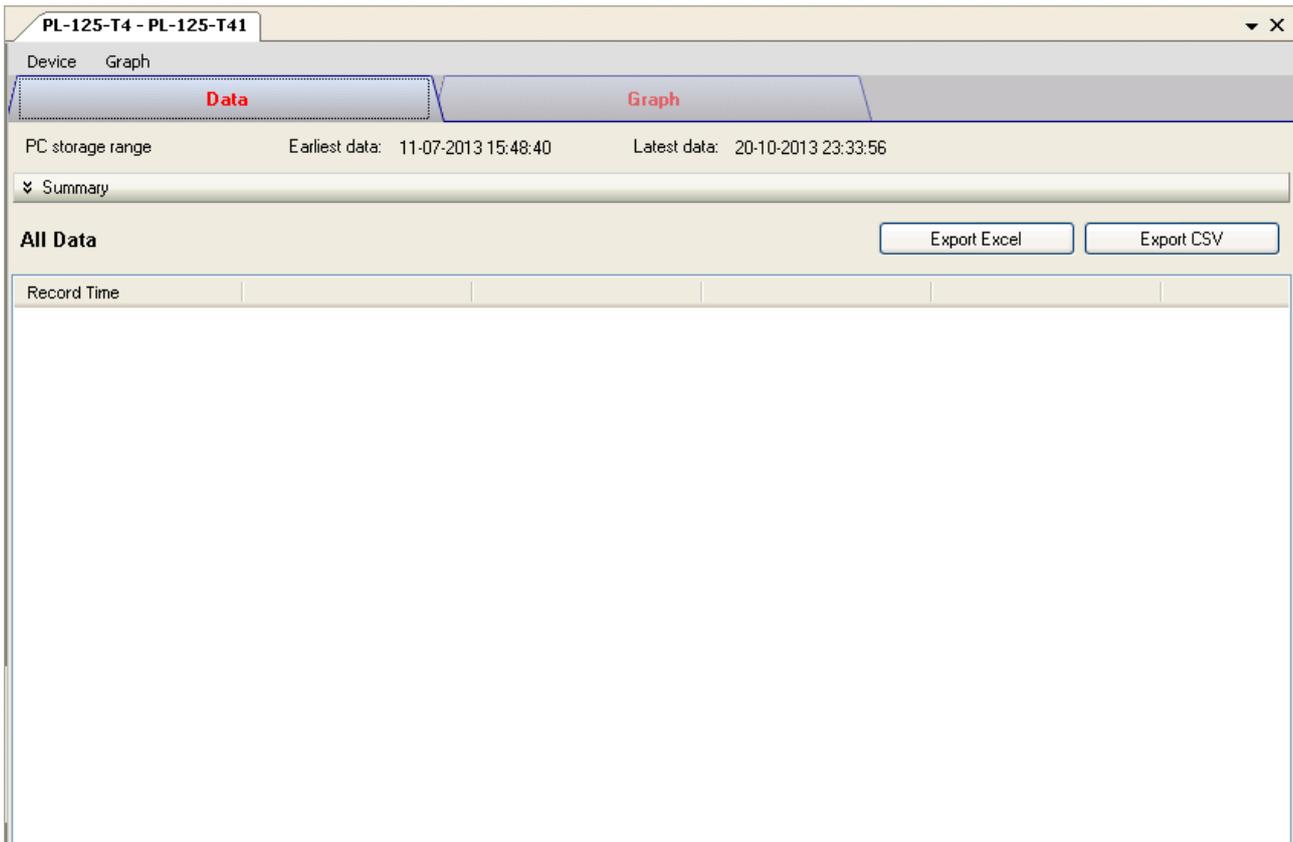


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.17.2 Remove PL-125-T2 / PL-125-T4

To remove PL-125-T2 / PL-125-T4, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

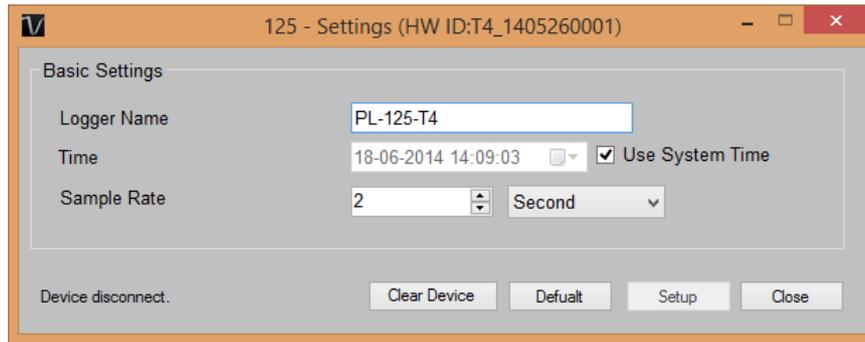
6.17.3 PL-125-T2 / PL-125-T4 – Device Control Panel



6.11.3 PL-125-T2 / PL-125-T4 contain follow items in menu:

1	Device -> Settings	This will launch the setting page of PL125-T2 / PL-125-T4.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.17.4 PL125-T2 / PL-125-T4 - Settings



1	Logger Name	Input the unique alias for that device.
2	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
3	Sample Rate	Instruct the logger to log readings at a specific rate.
4	Clear Device	Clear the memory on logger.
5	Default Button	Reload the factory default settings.
6	Setup Button	Save changes.
7	Close Button	Close this interface.

6.17.5 PL125-T2 / PL-125-T4 - Download Data

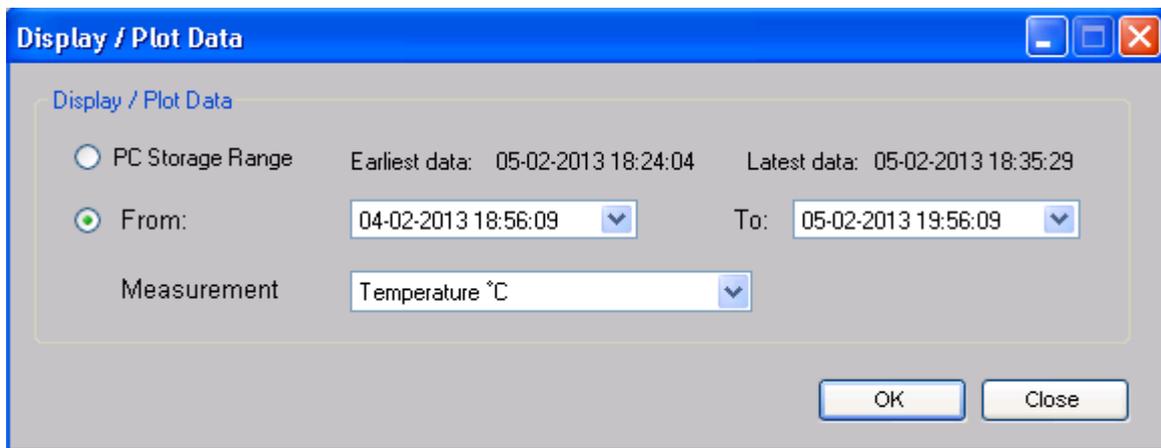
This module allows user to download the data from PL125-T2 / PL-125-T4.



Click "OK" button to stop the recording and start downloading.

6.17.6 PL125-T2 / PL-125-T4 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

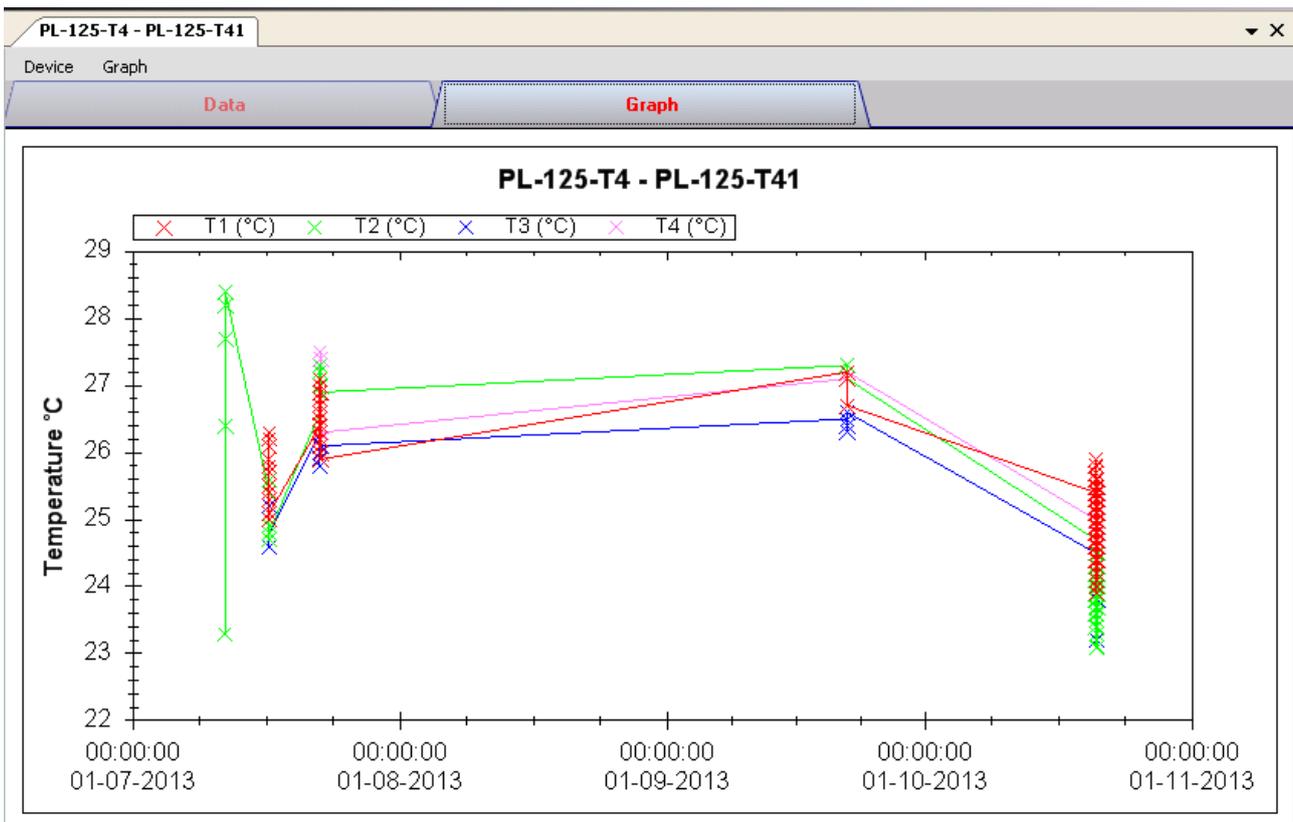
6.17.7 PL125-T2 / PL-125-T4 – Data View

PL125-T2 / PL-125-T4 are both measuring template. PL125-T2 will have two measurements and PL125-T4 will have four measurements. Template unit can be Celsius or Fahrenheit, depending on the selection in download page.

Record Time	T1 (°C)	T2 (°C)	T3 (°C)	T4 (°C)
16-07-2013 18:23:15	25.8	25.5	25.5	25.1
16-07-2013 18:23:16	25.8	25.5	25.4	25.1
16-07-2013 18:23:17	25.8	25.5	25.4	25.2
16-07-2013 18:24:52	26.3	25.6	25.3	25.8
16-07-2013 18:24:53	26.3	25.6	25.3	25.8
16-07-2013 18:24:54	26.3	25.6	25.3	25.8
16-07-2013 18:24:55	26.2	25.6	25.3	25.7
16-07-2013 18:24:56	26.3	25.6	25.3	25.9
16-07-2013 18:24:57	26.3	25.6	25.3	25.9
16-07-2013 18:24:58	26.3	25.6	25.3	25.9
16-07-2013 18:24:59	26.3	25.8	25.5	25.9
16-07-2013 18:25:00	26.3	25.6	25.5	25.9
16-07-2013 18:25:01	26.3	25.6	25.5	25.9
16-07-2013 18:25:02	26.3	25.7	25.5	25.7
16-07-2013 18:25:03	26.3	25.7	25.5	25.7
16-07-2013 18:25:04	26.3	25.7	25.4	25.7
16-07-2013 18:25:05	26.2	25.6	25.4	25.7
16-07-2013 18:25:06	26.2	25.6	25.4	25.7
16-07-2013 18:25:07	26.2	25.6	25.4	25.7
16-07-2013 18:25:08	26.2	25.6	25.2	25.7
16-07-2013 18:25:09	26.2	25.6	25.2	25.7
16-07-2013 18:25:10	26.2	25.6	25.2	25.7
16-07-2013 18:25:11	26.2	25.6	25.2	25.7
16-07-2013 18:25:12	26.2	25.7	25.2	25.7

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.17.8 PL125-T2 / PL-125-T4 – Graph View



Our graph supports the following operations

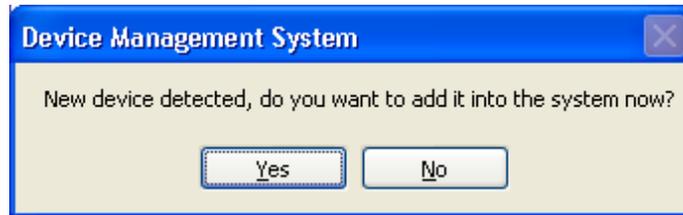
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.18 IR 1200-50D / IR 1201-50D

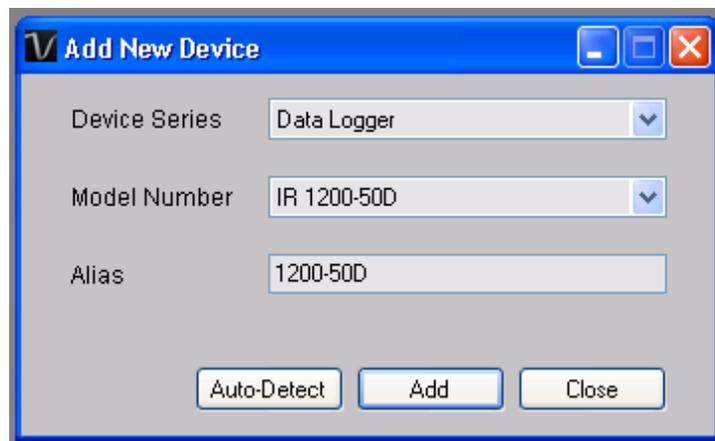
IR 1200-50D / IR 1201-50D is a data logger for measuring temperature.

6.18.1 Add new IR 1200-50D / IR 1201-50D

When Voltsoft detected a new IR 1200-50D / IR 1201-50D attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

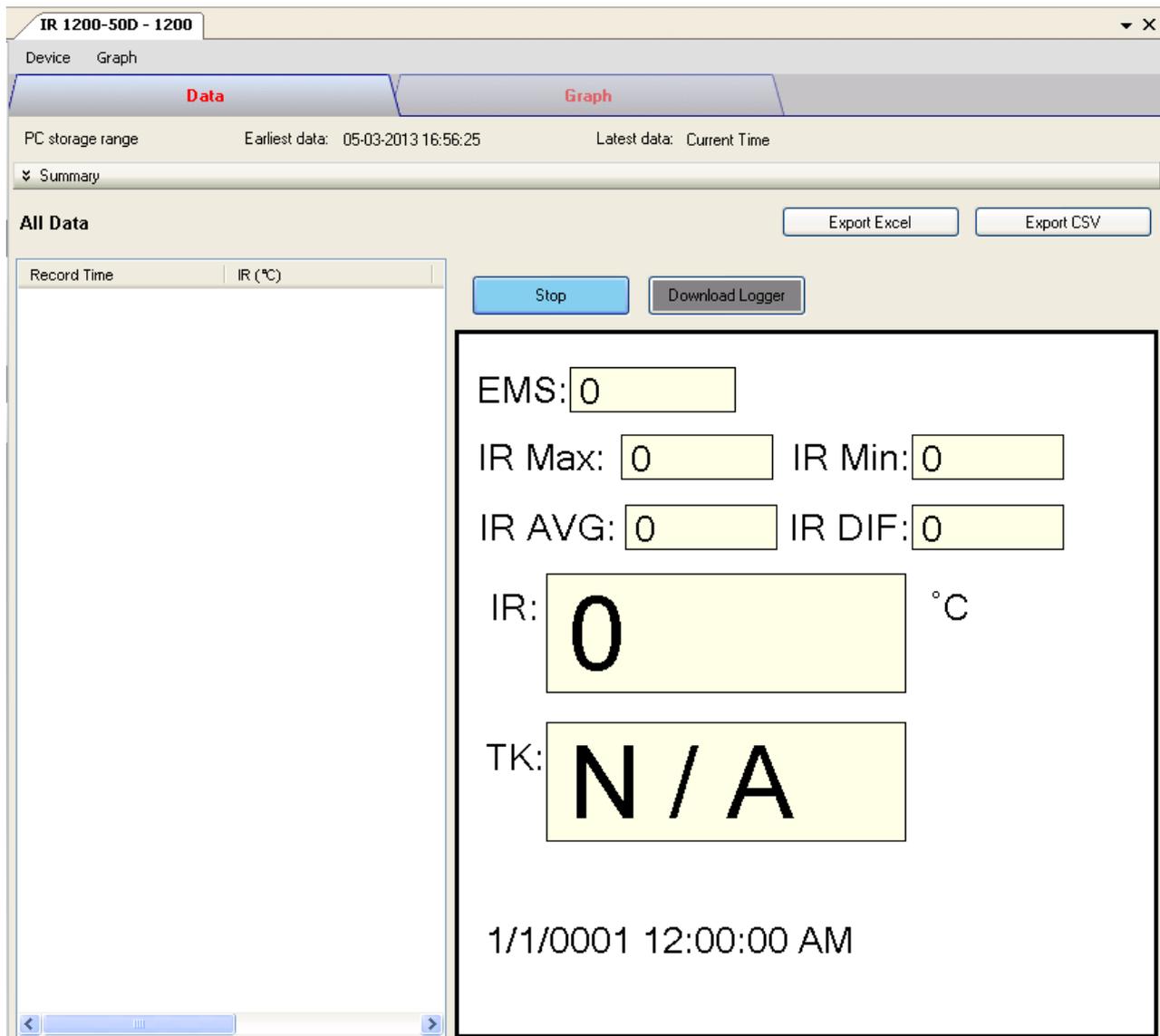


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.18.2 Remove IR 1200-50D / IR 1201-50D

To remove IR 1200-50D, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

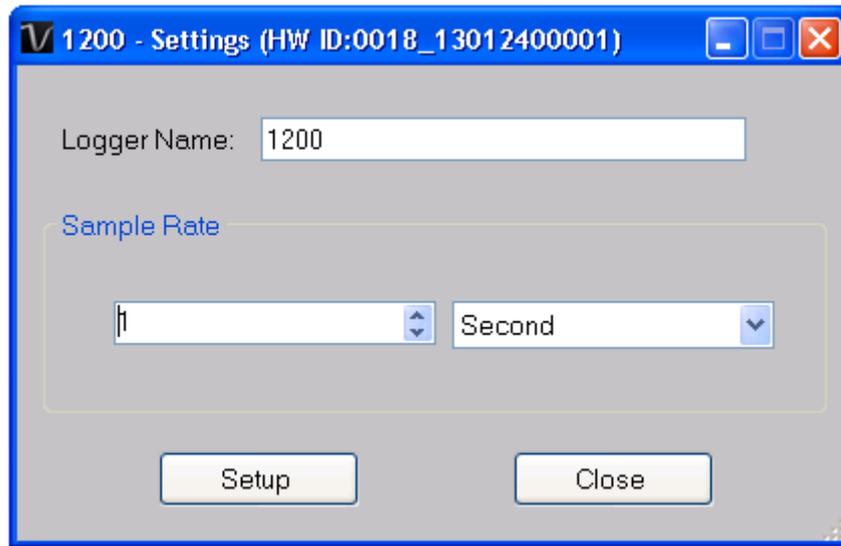
6.18.3 IR 1200-50D / IR 1201-50D – Device Control Panel



The IR 1200-50D / IR 1201-50D Device Control Panel contains the follow items in menu:

1	Device -> Settings	This will launch the setting page of IR 1200-50D / IR 1201-50D.
2	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
3	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
4	Graph -> Background Colour	Change the background colour of the graph to either black or white.
5	Graph -> Grid	Control whether to show / hide the grid on the graph area.
6	Graph -> Line	Control whether to show / hide the line on the graph area.
7	Graph -> Points Indicator	Control whether to show / hide the points indicator.
8	Graph -> Print	Prints the generated chart.
9	Graph -> Save Image As	Save the image in the chosen file format.
10	Graph -> Zoom Out	Zoom out one level.
11	Graph -> Zoom To Fit	Undo all zoom in and out.

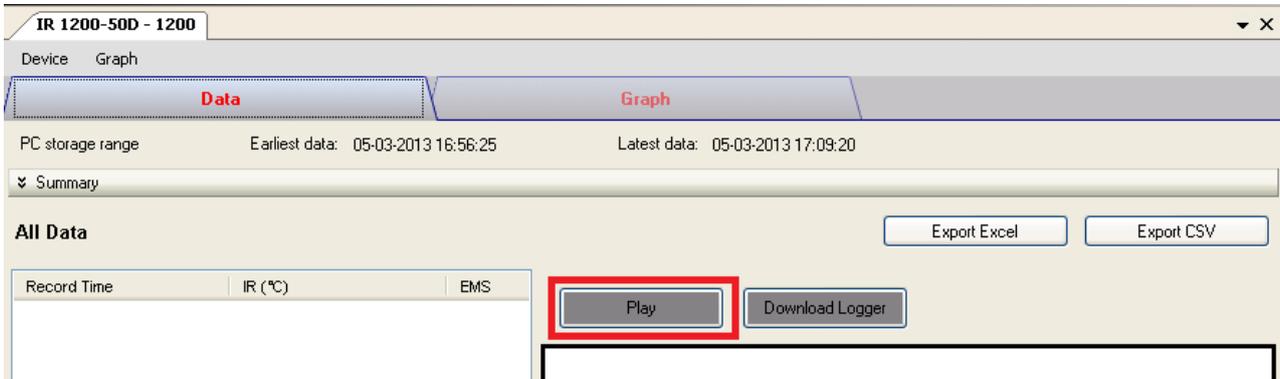
6.18.4 IR 1200-50D / IR 1201-50D – Settings



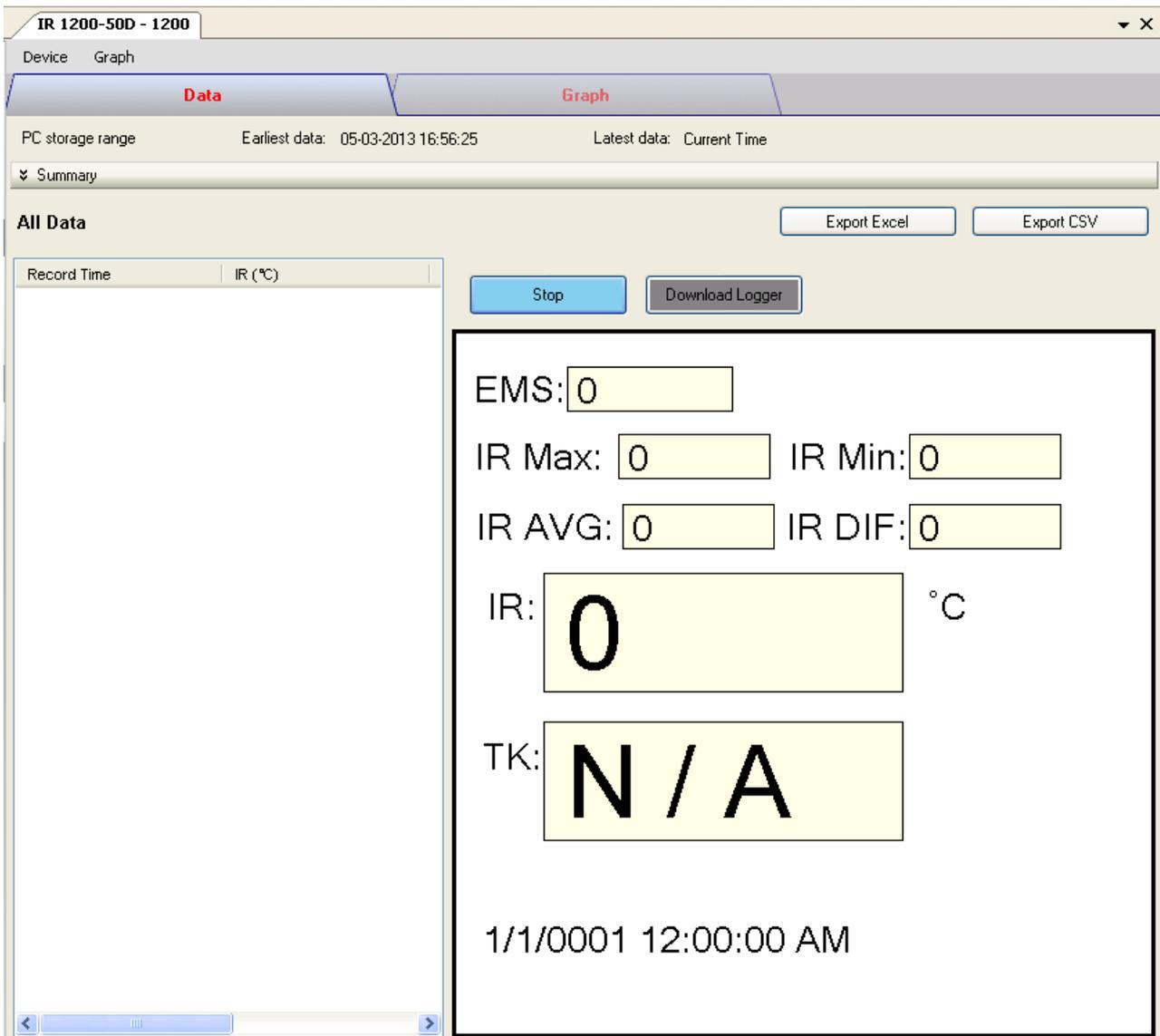
1	Logger Name	Input the unique alias for that device.
2	Sample Rate	Instruct the data logger to log readings at a specific rate (for real time mode only).
3	Setup Button	Save changes.
4	Close Button	Close this interface.

6.18.5 IR 1200-50D / IR 1201-50D – Play (Real Time Mode)

Click the "Play" button in device control panel will switch IR 1200-50D / IR 1201-50D into real time mode and the button label will become "Stop", click it again to leave real time mode.

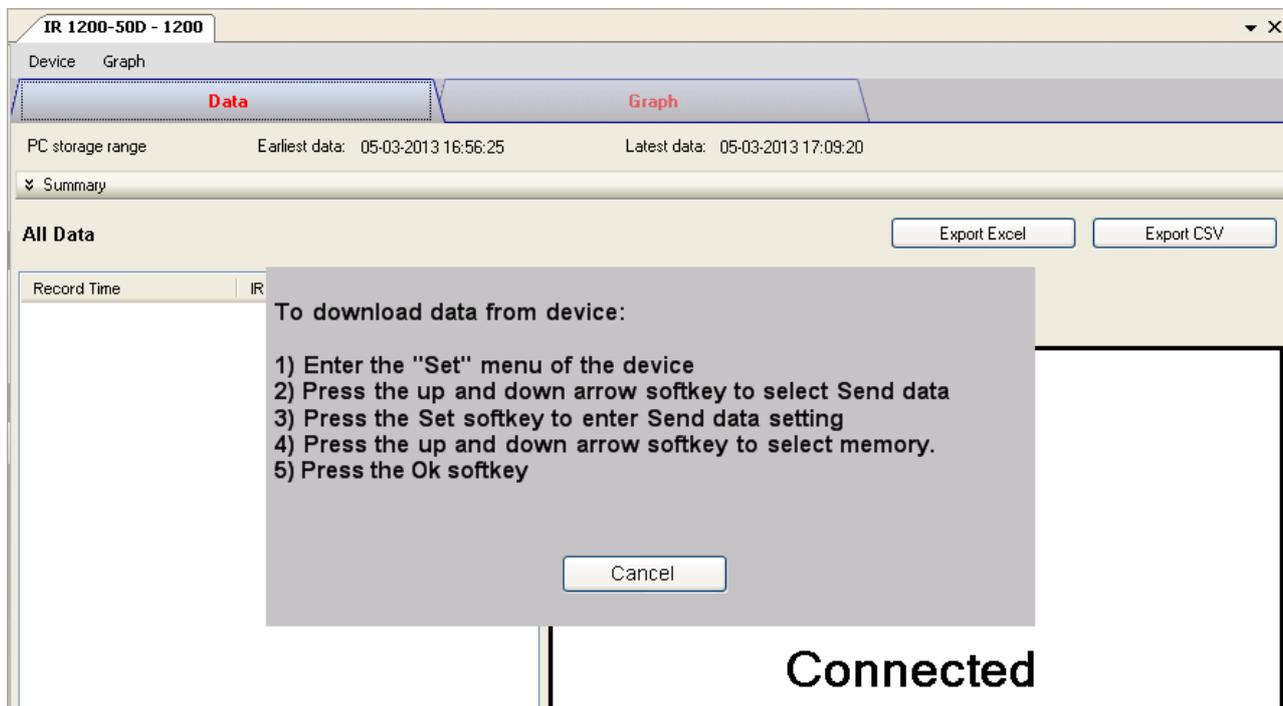


In real time mode, pressing the trigger on the device will start sending data to PC, no data will be sent if the trigger is not pressed.

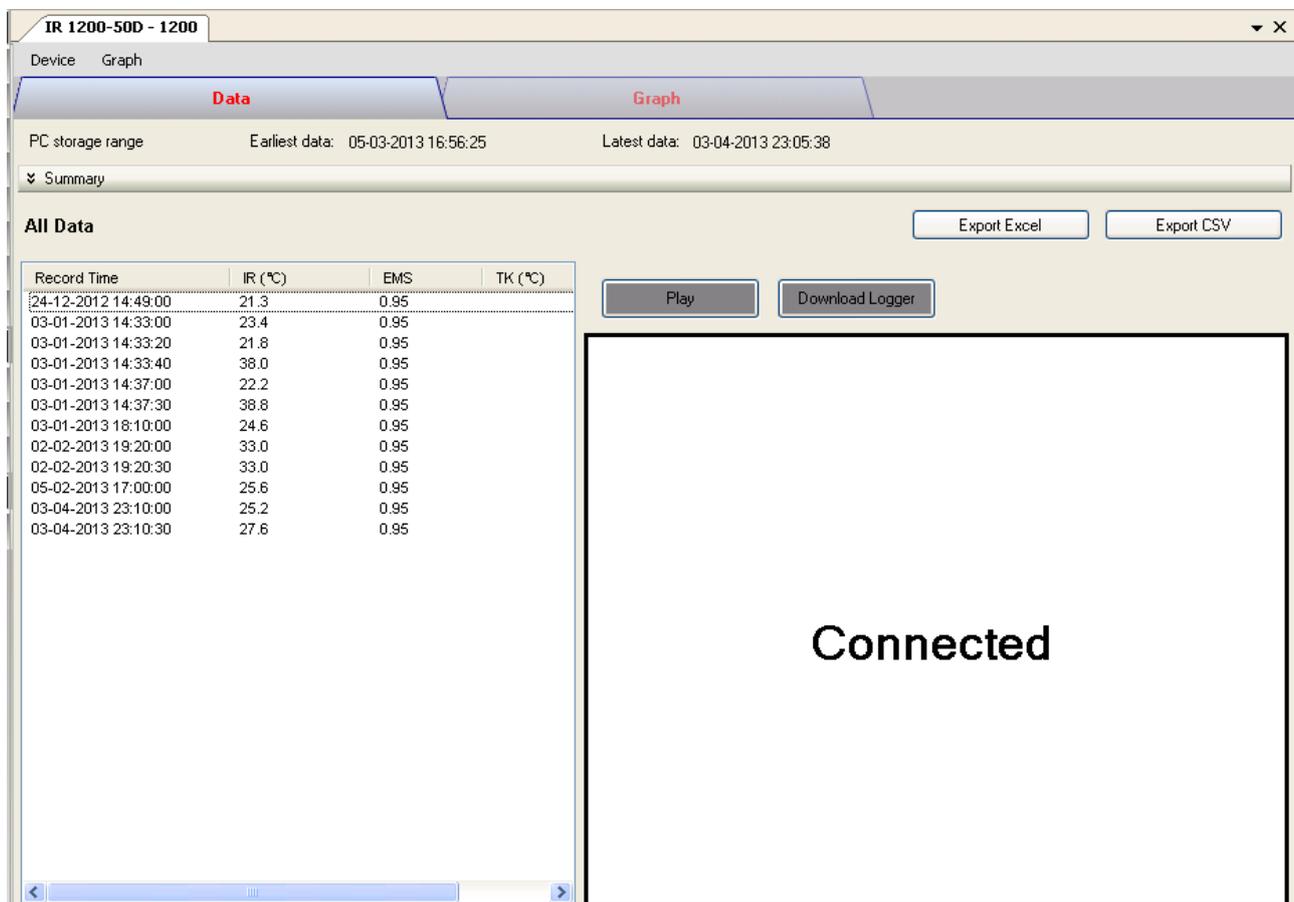


6.18.6 IR 1200-50D / IR 1201-50D – Download Store Data

Click the "Download Logger" button in the device control panel will trigger the download data action, and the following dialog will be popped up:

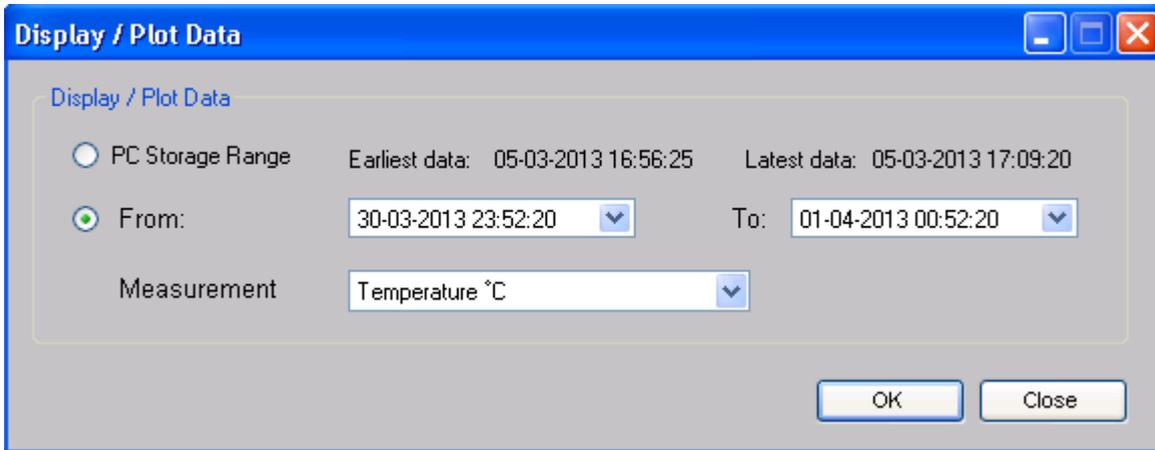


Follows the instructions displayed, if success, the dialog will dismiss and data will be displayed.



6.18.7 IR 1200-50D / IR 1201-50D – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

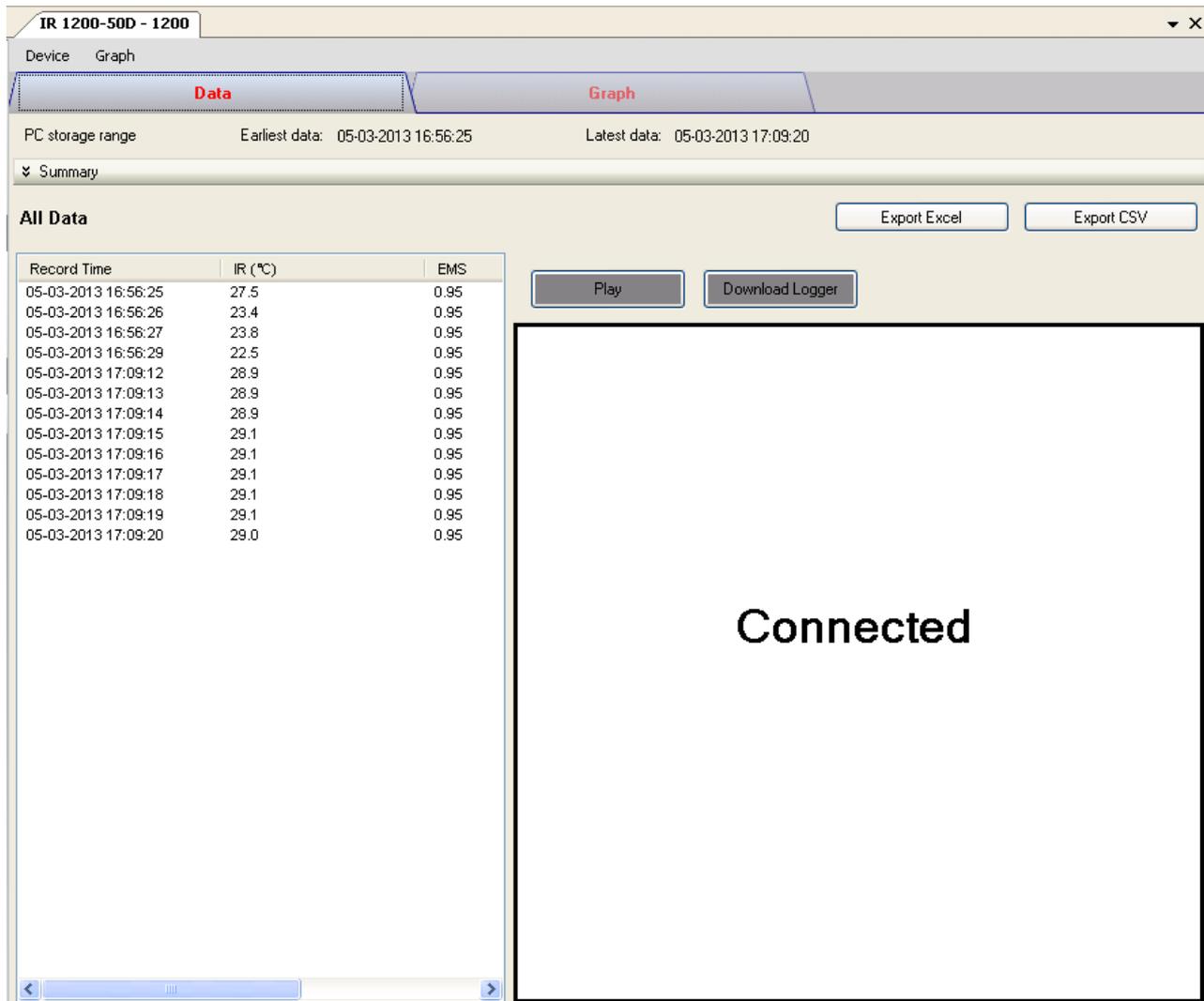


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement unit to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

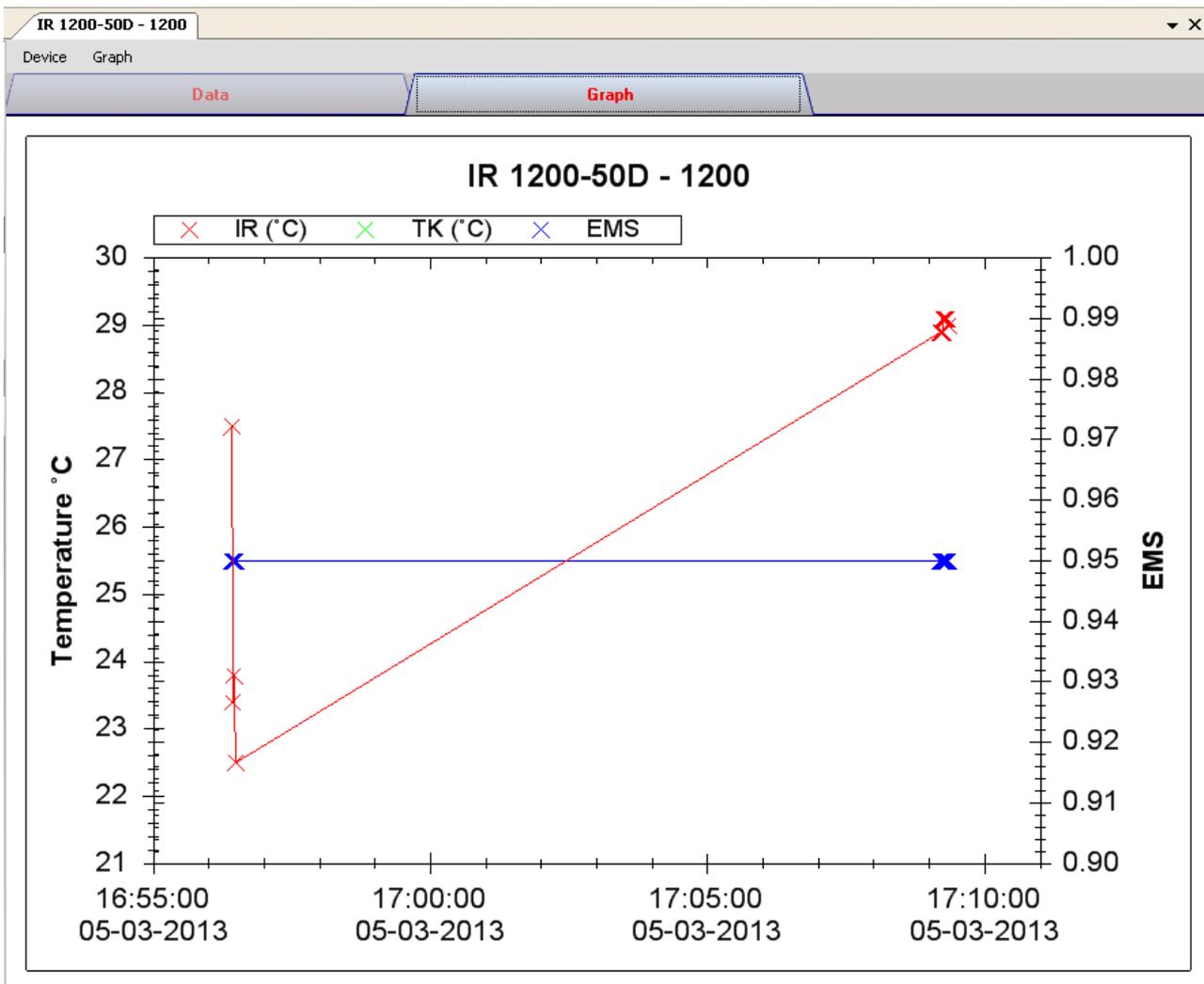
6.18.8 IR 1200-50D / IR 1201-50D – Data View

IR 1200-50D / IR1200-51D contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, can be selected in Display / Plot Data dialog.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.
3	Play	Enter the real time mode.
4	Download Logger	Download stored data in device.

6.18.9 IR 1200-50D / IR 1201-50D – Graph View



Our graph supports the following operations

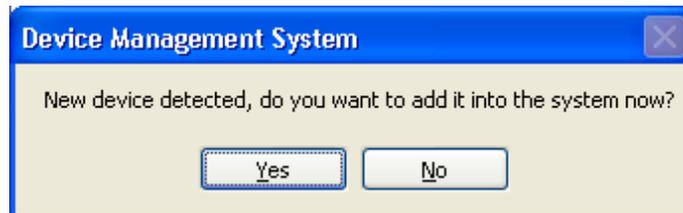
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.19 SL451

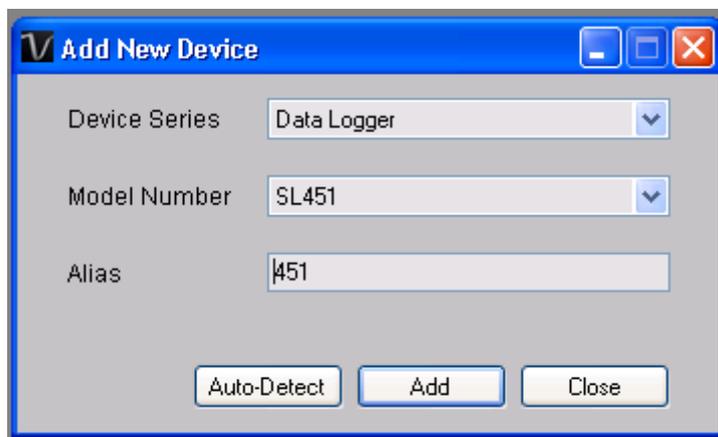
SL451 is a data logger for storing sound level reading. SL451 support real time measurement.

6.19.1 Add new SL451

To add SL451 to Voltsoft, first connect SL451 to PC via USB port, press the "SETUP" button on the device until the circle icon (on lower left corner) disappears. When Voltsoft detected a new SL451 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

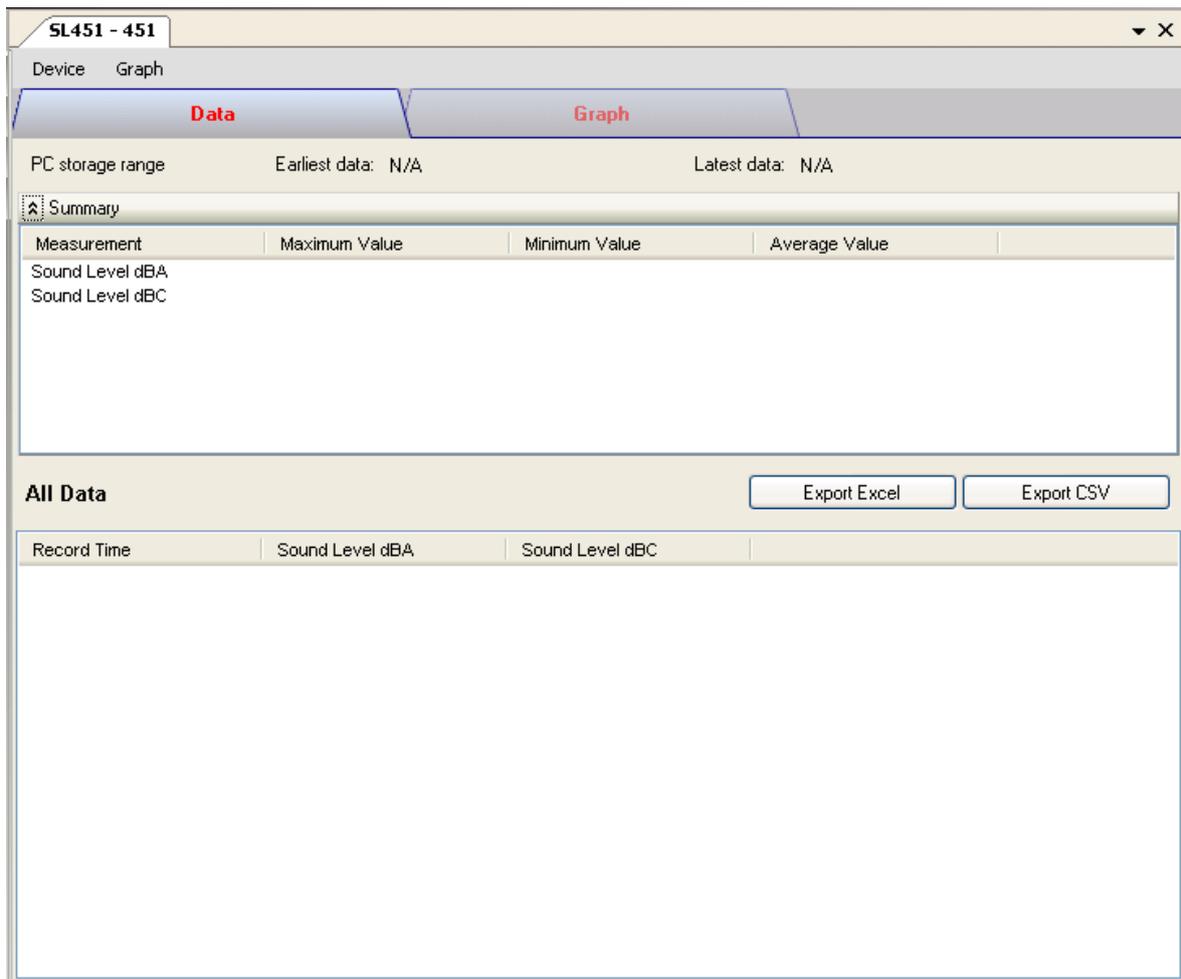


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.19.2 Remove SL451

To remove SL451, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

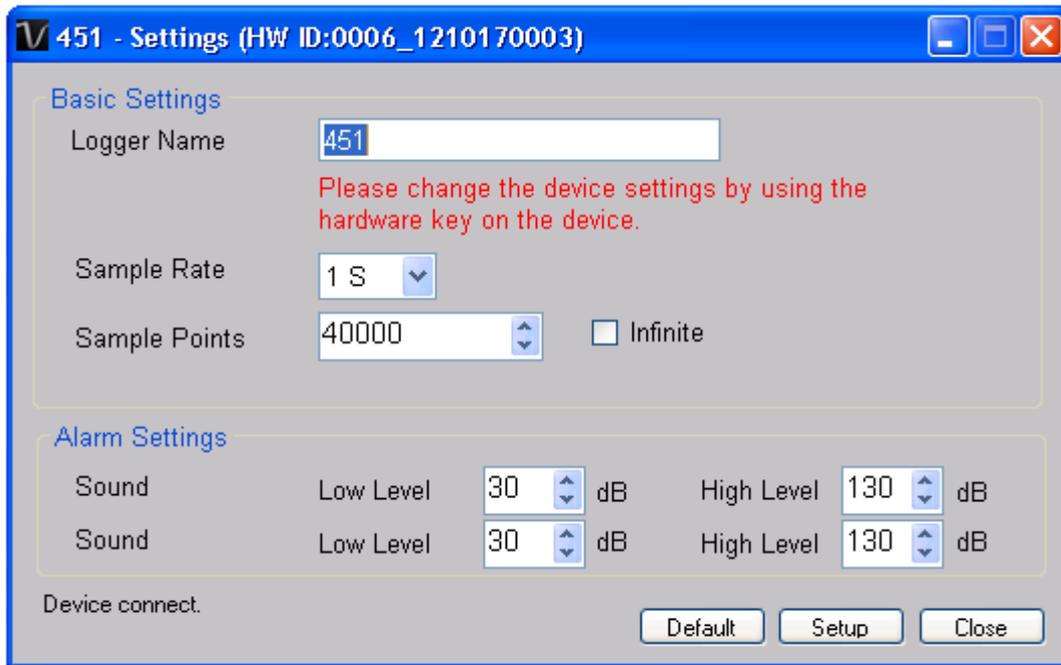
6.19.3 SL451 – Device Control Panel



The SL451 Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of SL451.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
6	Device -> Calibration	Launch the calibration module.
7	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
8	Graph -> Background Colour	Change the background colour of the graph to either black or white.
9	Graph -> Grid	Control whether to show / hide the grid on the graph area.
10	Graph -> Line	Control whether to show / hide the line on the graph area.
11	Graph -> Points Indicator	Control whether to show / hide the points indicator.
12	Graph -> Print	Prints the generated chart.
13	Graph -> Save Image As	Save the image in the chosen file format.
14	Graph -> Zoom Out	Zoom out one level.
15	Graph -> Zoom To Fit	Undo all zoom in and out.
16	Graph -> View All Data	Zoom out the graph to view all data.

6.19.4 SL451 – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Rate	Instruct the data logger to log readings at a specific rate.
3	Sample Points	Configure the data logger sample points.
4	Infinite	For real time mode only, the download will not stop until the user stopped the download.
5	Low / High Alarm for dBA	Configure the sound level (at unit dBA) for the low / high alarm level.
6	Low / High Alarm for dBC	Configure the sound level (at unit dBC) for the low / high alarm level.
7	Default Button	Load the factory default settings.
8	Setup Button	Save changes.
9	Close Button	Close this interface.

6.19.5 SL451 - Download Data

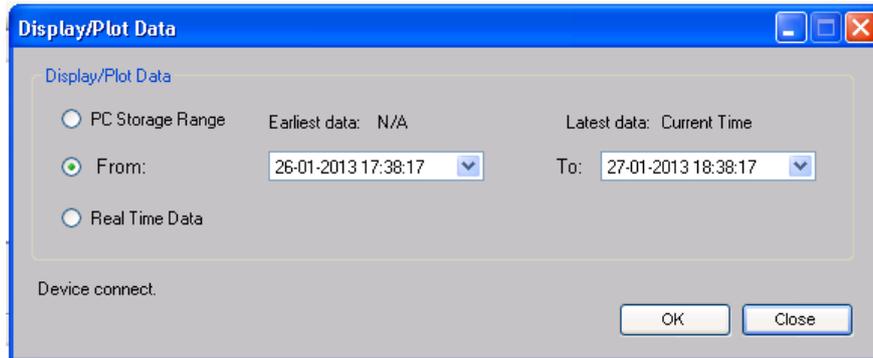
This module allows user to download the data from SL451, it will download the data when user pressed the "REC" button on the device.



Click "OK" button to stop the recording and start downloading.

6.19.6 SL451 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode. (by press the "Setup" button in Settings)
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

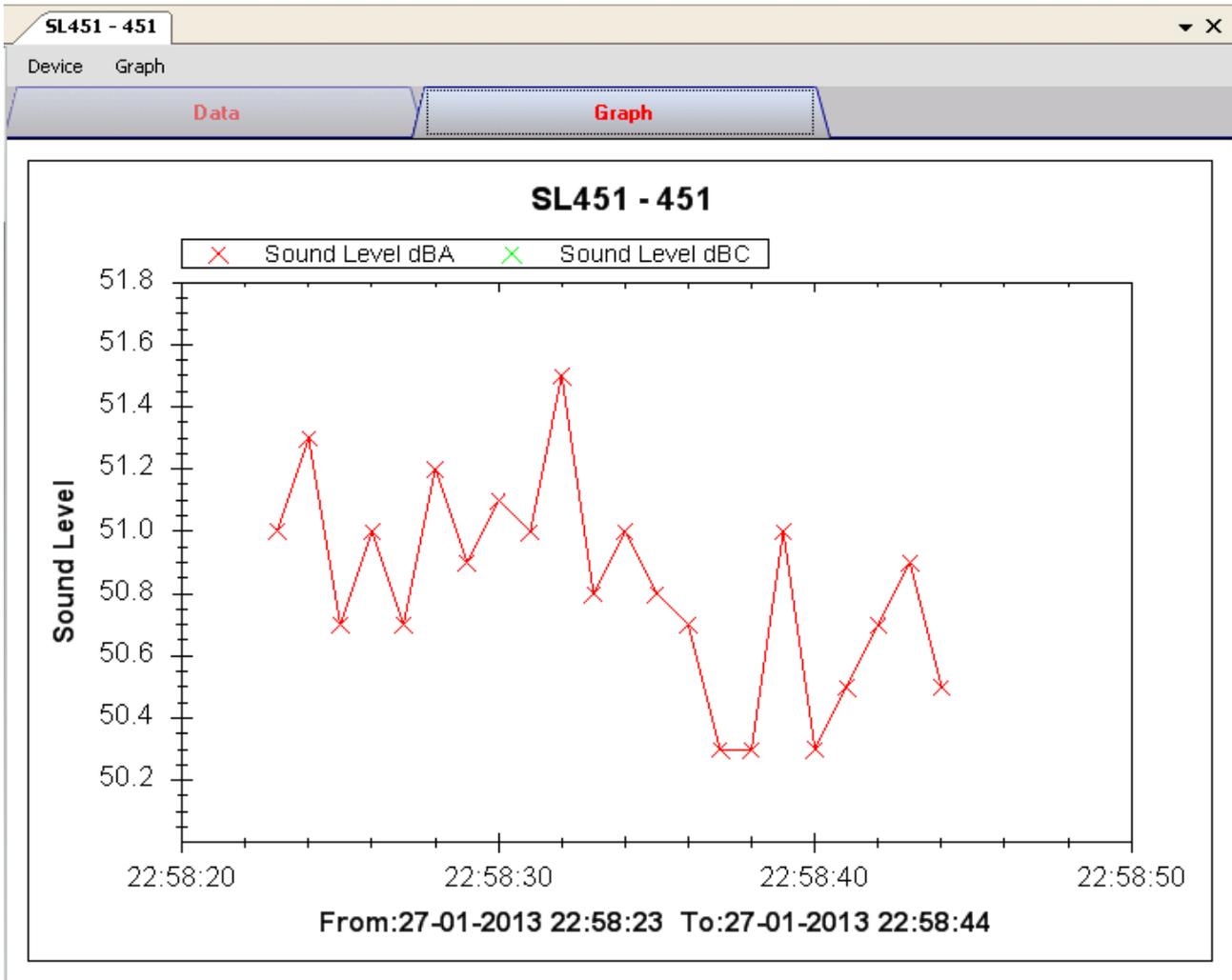
6.19.7 SL451 – Data View

SL451 contains two measurements (sound level in dBA and sound level in dBC), the device can record only one measurement at any specific unit of time (by press the "A/C" button on device).

Record Time	Sound Level dBA	Sound Level dBC
27-01-2013 22:58:24	51.3	
27-01-2013 22:58:25	50.7	
27-01-2013 22:58:26	51	
27-01-2013 22:58:27	50.7	
27-01-2013 22:58:28	51.2	
27-01-2013 22:58:29	50.9	
27-01-2013 22:58:30	51.1	
27-01-2013 22:58:31	51	
27-01-2013 22:58:32	51.5	
27-01-2013 22:58:33	50.8	
27-01-2013 22:58:34	51	
27-01-2013 22:58:35	50.8	
27-01-2013 22:58:36	50.7	
27-01-2013 22:58:37	50.3	
27-01-2013 22:58:38	50.3	
27-01-2013 22:58:39	51	
27-01-2013 22:58:40	50.3	
27-01-2013 22:58:41	50.5	
27-01-2013 22:58:42	50.7	
27-01-2013 22:58:43	50.9	
27-01-2013 22:58:44	50.5	

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

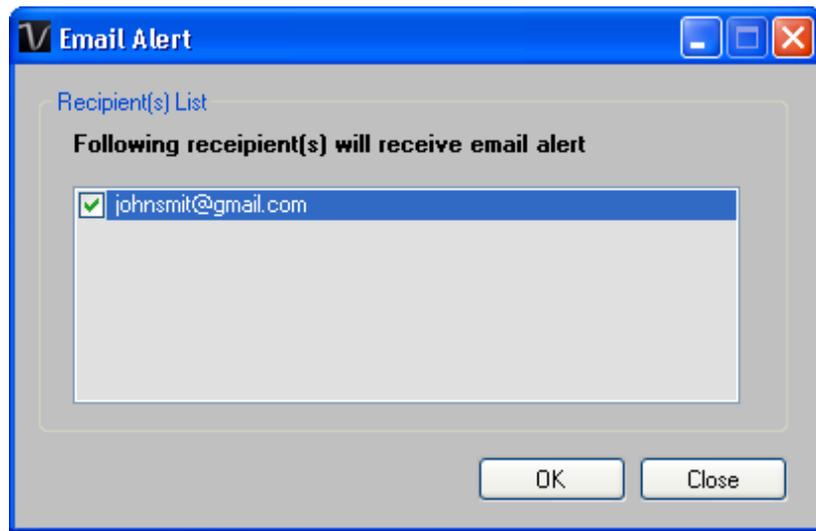
6.19.8 SL451 – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.19.9 SL451 – Email Alert



As SL451 supports real time measurement, therefore, it has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level. The alert level can be configured in Setting.

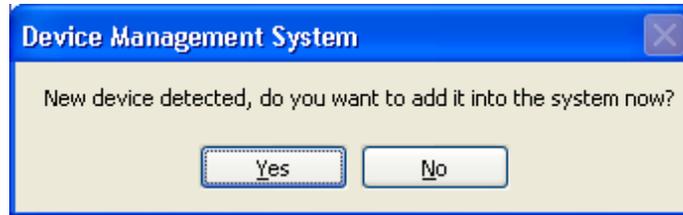
User can use this module to select who will receive the email for the specific device.

6.20 VC930 / VC950

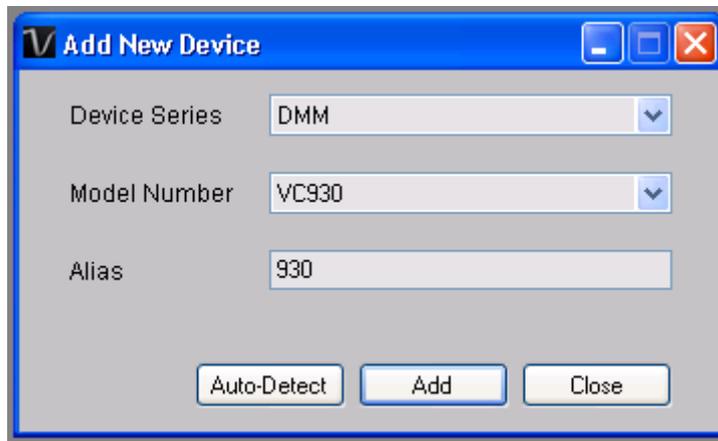
VC930 / VC950 are DMM devices which measure a number of different measurements.

6.20.1 Add new VC930 / VC950

When Voltsoft detected a new VC930 / VC950 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

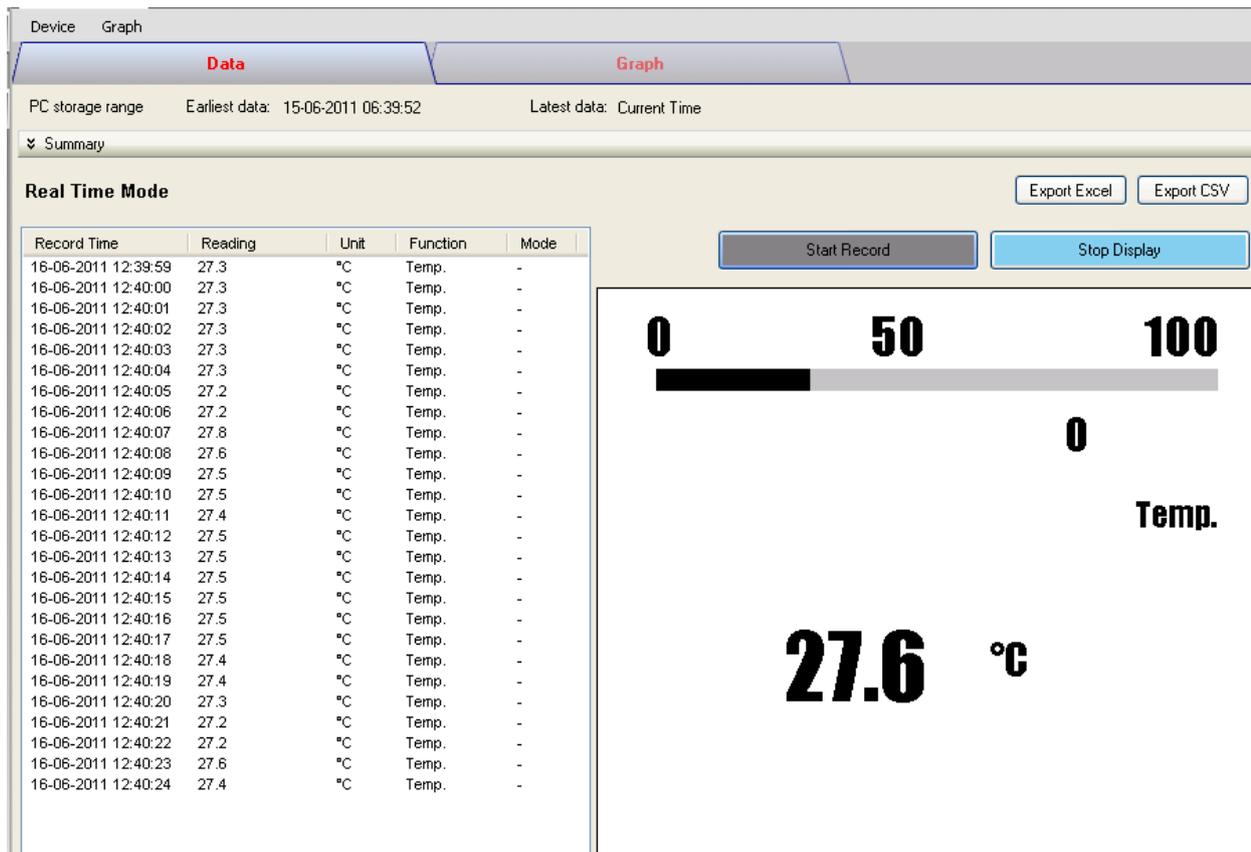


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.20.2 Remove VC930 / VC950

To remove VC930 / VC950, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

6.20.3 VC930 / VC950 – Device Control Panel

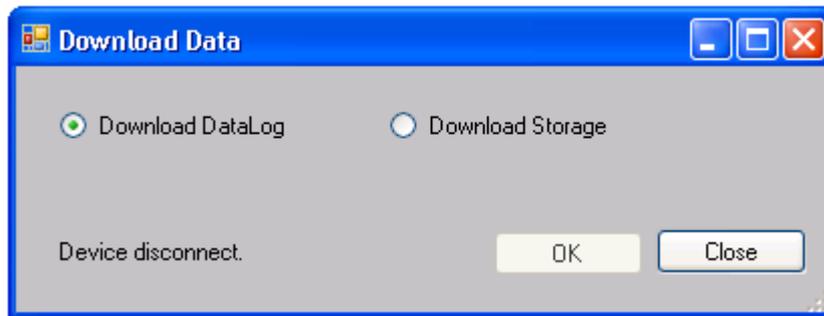


The VC930 / VC950 Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC930 / VC950.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.

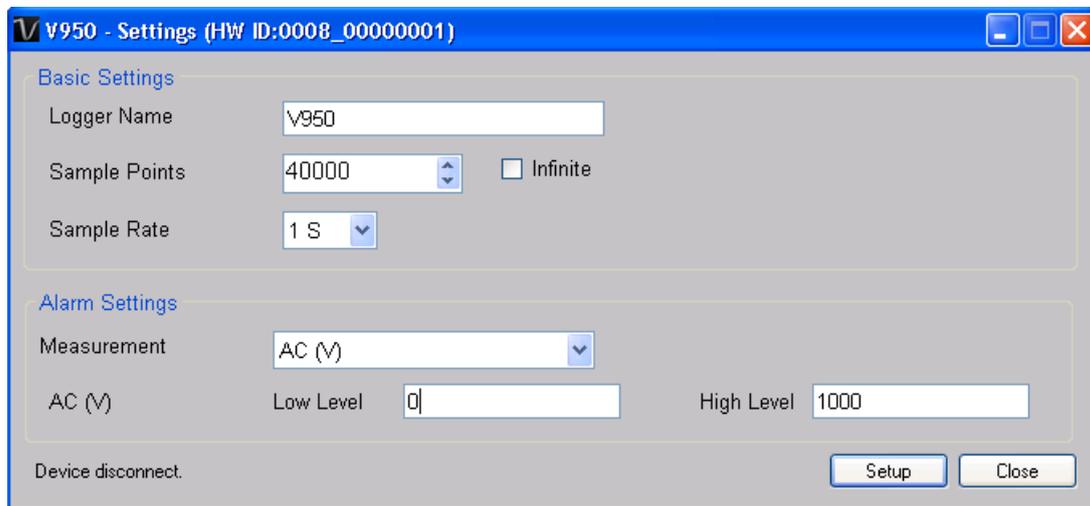
6.20.4 VC930 / VC950 - Download Data

This module allows user to download the data from VC930 / VC950.



Click "OK" button to stop the recording and start downloading.

6.20.5 VC930 / VC950 – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stopped the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Alarm Settings*	Select the measurement column and alarm level.
6	Setup Button	Save changes.
7	Close Button	Close this interface.

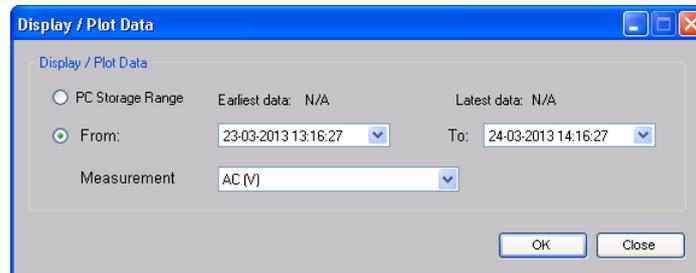
* Note: The alarm can be configured in the following measurement ranges:

Unit	Function	Mode	Unit	Function	Mode
V	AC	-	%	mA AC	<input type="checkbox"/> %
V	DC	-	%	mA DC	<input type="checkbox"/> %
V	AC+DC	-	%	mA AC+DC	<input type="checkbox"/> %
V	AC	<input type="checkbox"/>	A	AC	-
V	DC	<input type="checkbox"/>	A	DC	-

V	AC+DC	<input type="checkbox"/>	A	AC+DC	-
%	V AC	<input type="checkbox"/> %	A	AC	<input type="checkbox"/>
%	V DC	<input type="checkbox"/> %	A	DC	<input type="checkbox"/>
%	V AC+DC	<input type="checkbox"/> %	A	AC+DC	<input type="checkbox"/>
mV	AC	-	%	A AC	<input type="checkbox"/> %
mV	DC	-	%	A DC	<input type="checkbox"/> %
mV	AC+DC	-	%	A AC+DC	<input type="checkbox"/> %
mV	AC	<input type="checkbox"/>	oC	Temp.	-
mV	DC	<input type="checkbox"/>	oC	Temp.	<input type="checkbox"/>
mV	AC+DC	<input type="checkbox"/>	oC	Temp.	<input type="checkbox"/> %
%	mV AC	<input type="checkbox"/> %	oF	Temp.	-
%	mV DC	<input type="checkbox"/> %	oF	Temp.	<input type="checkbox"/>
%	mV AC+DC	<input type="checkbox"/> %	oF	Temp.	<input type="checkbox"/> %
mA	AC	-			
mA	DC	-			
mA	AC+DC	-			
mA	AC	<input type="checkbox"/>			
mA	DC	<input type="checkbox"/>			
mA	AC+DC	<input type="checkbox"/>			

6.20.6 VC930 / VC950 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

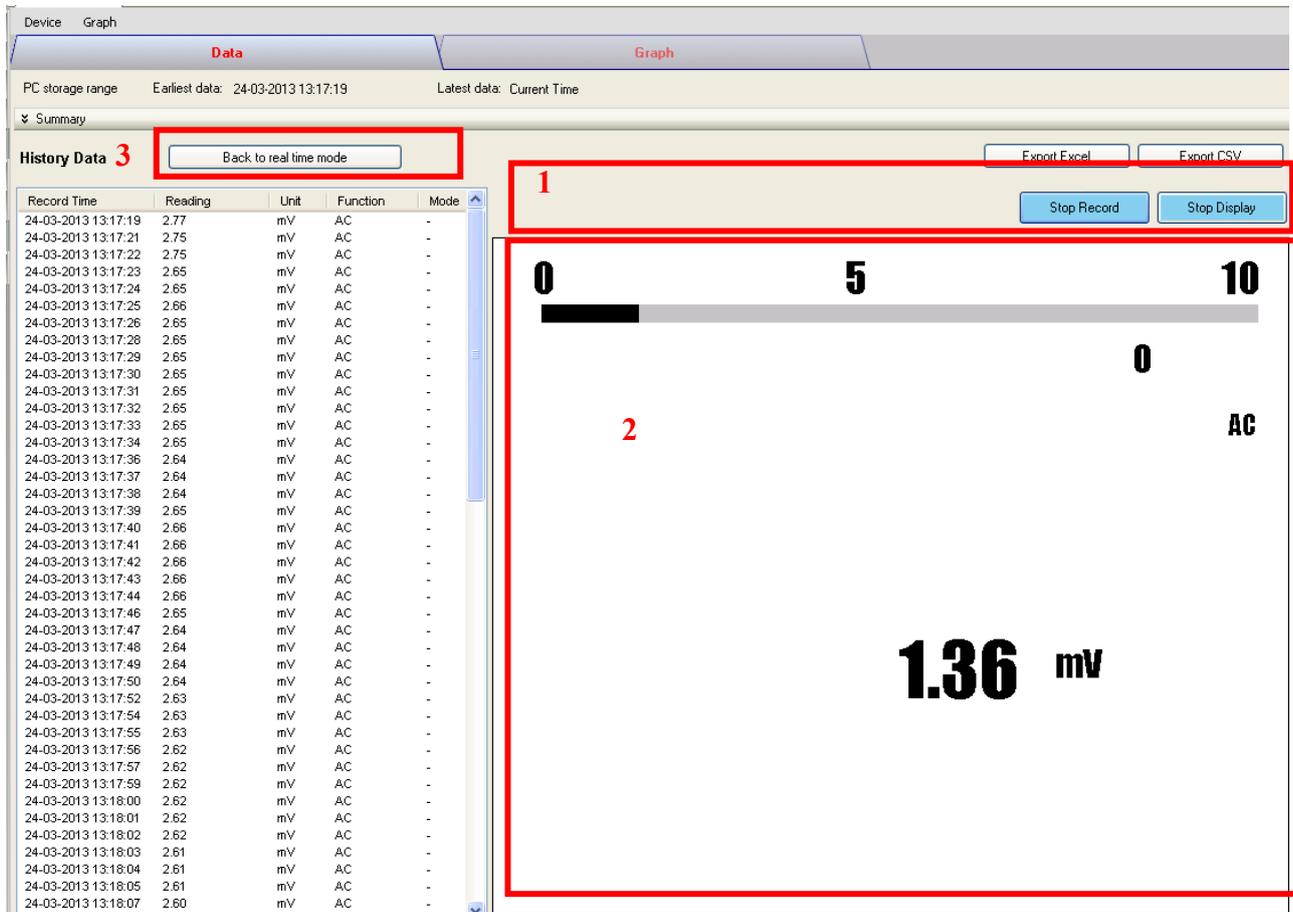


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

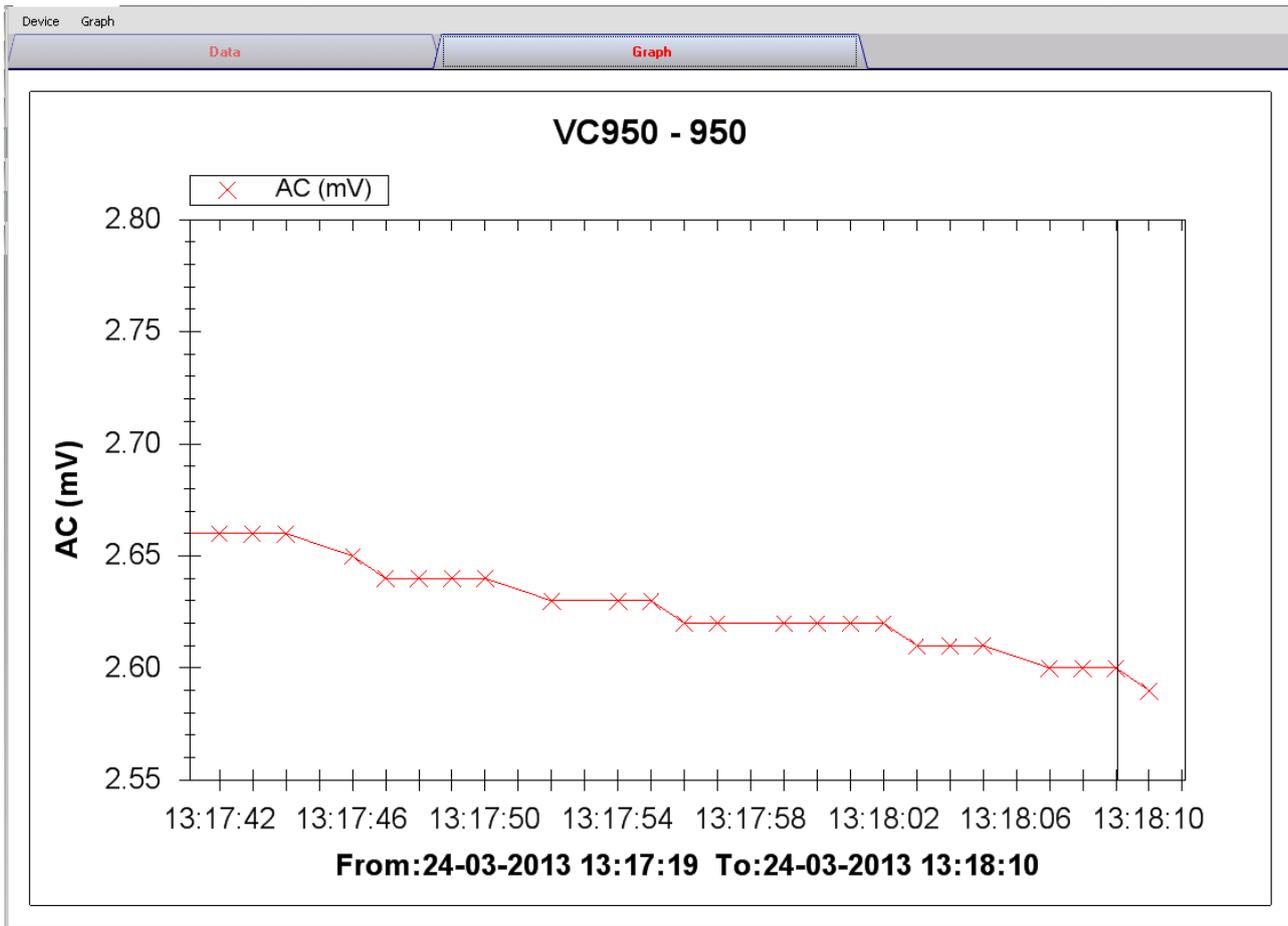
6.20.7 VC930 / VC950 – Data View

VC930 / VC950 contains many different measurements, you will need to specify which measurement (and unit) to download in "Display / Plot data" dialog.



1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B.</p> <p>i) If the device is in record mode this means it is also in display mode.</p> <p>ii) Stopping the display mode will also stop the record mode.</p>
2	Display Area	Display the measured value.
3	Back to real time mode	<p>This button will display when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to display real-time data.</p>

6.20.8 VC930 / VC950 – Graph View



Our graph supports the following operations

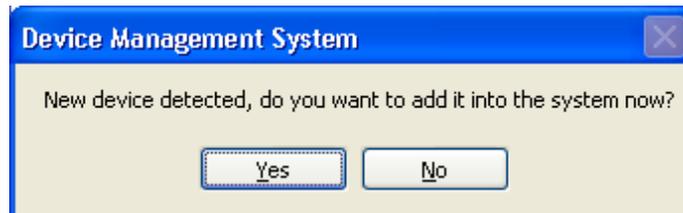
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.21 VC880 / VC650BT

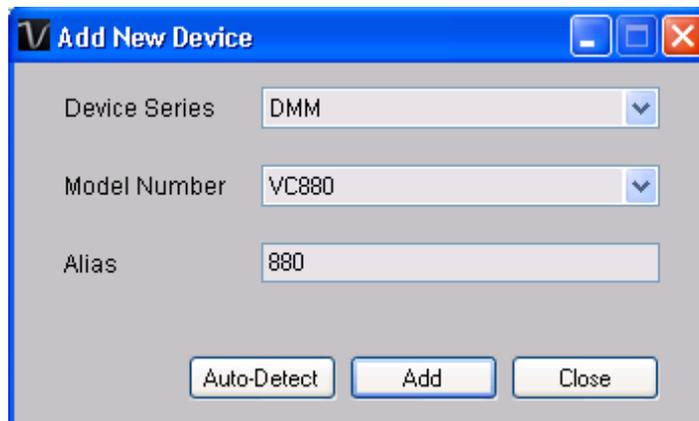
VC880 / VC650BT are DMM devices which measure a number of different measurements.

6.21.1 Add new VC880 / VC650BT

To add VC880 / VC650BT to Voltsoft, first connect the device to PC via USB port, press "REL / PC" button on the device until the PC icon appear. When Voltsoft detected a new VC880 / VC650BT attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

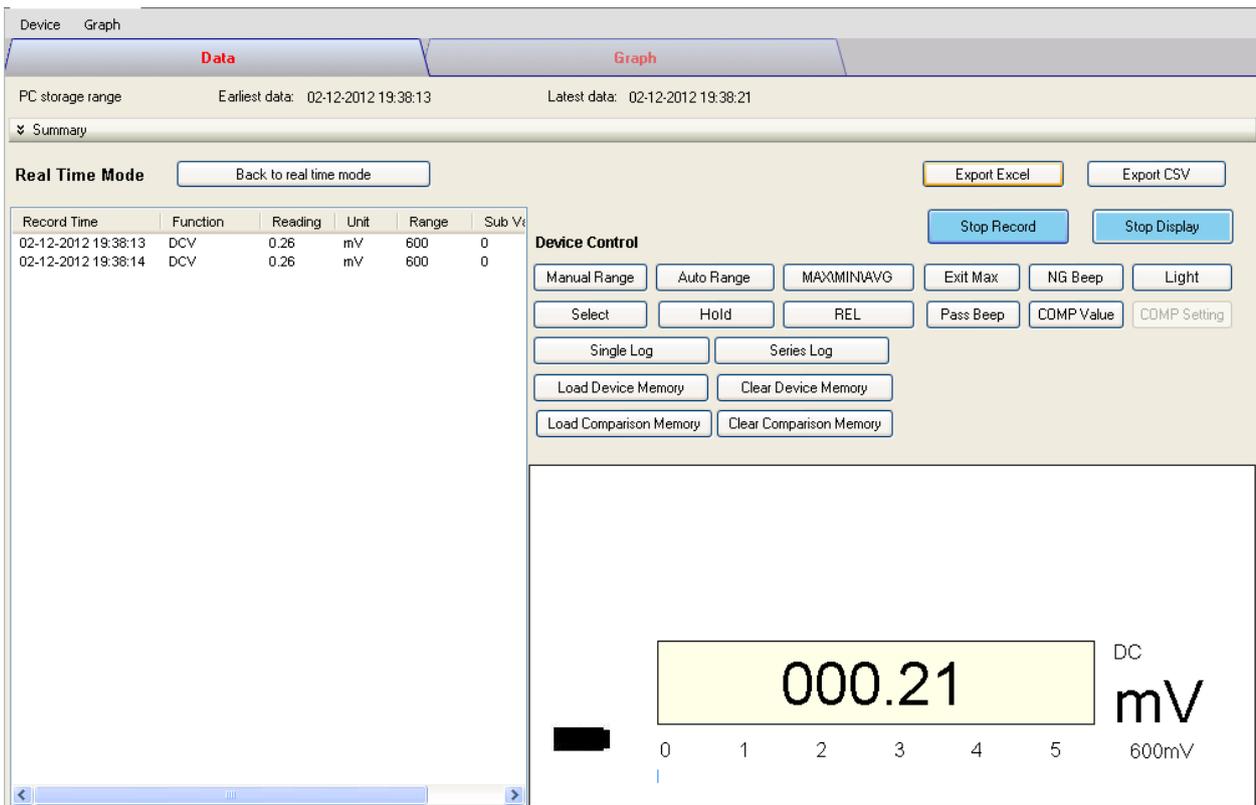


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

6.21.2 Remove VC880 / VC650BT

To remove VC880 / VC650BT, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

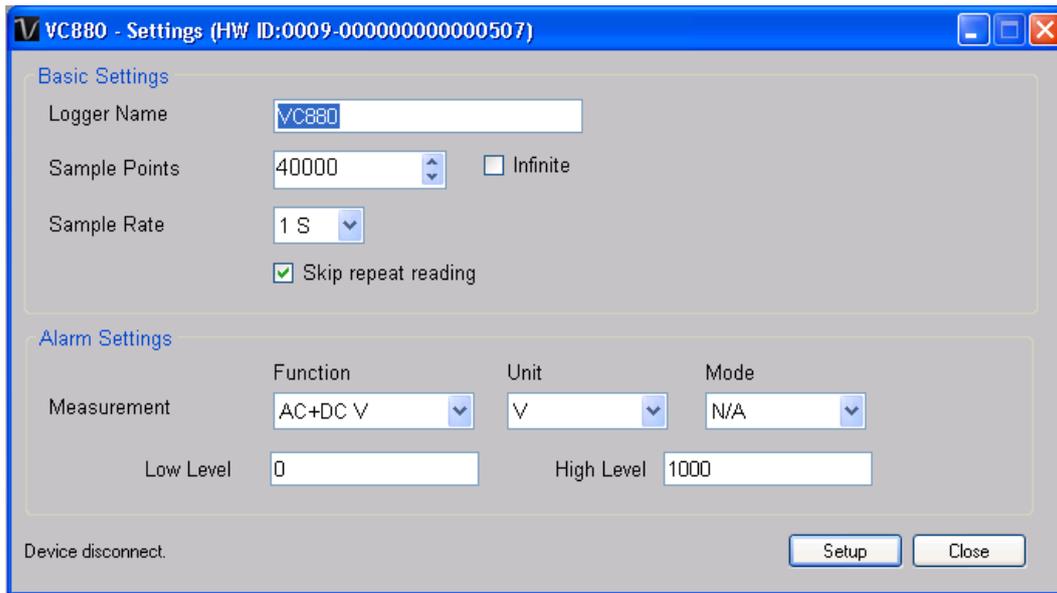
6.21.3 VC880 / VC650BT – Device Control Panel



The VC880 / VC650BT Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC880 / VC650BT.
2	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
3	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

6.21.4 VC880 / VC650BT – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stops the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Skip repeat reading	System will not record a duplicate reading if this option was checked.
6	Alarm Settings*	Select the measurement column and alarm level.
7	Setup Button	Save changes.
8	Close Button	Close this interface.

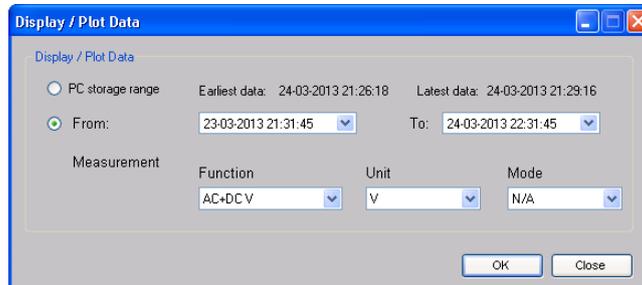
* Note: The alarm can be configured in the following measurement ranges:

Function	Unit	Mode
AC+DC V	V	N/A
AC+DC V	V	Δ
ACV	V	N/A
ACV	V	Δ
DCV	V	N/A
DCV	V	Δ
DCV	mV	N/A
DCV	mV	Δ
ACA	μA	N/A
ACA	A	N/A
ACA	mA	N/A
ACA	μA	Δ
ACA	A	Δ
ACA	mA	Δ
Continuity	Ω	N/A

Diode	V	N/A
Duty Cycle	%	N/A
DCA	μA	N/A
DCA	A	N/A
DCA	mA	N/A
DCA	μA	Δ
DCA	A	Δ
DCA	mA	Δ
Capacity	μF	N/A
Capacity	mF	N/A
Capacity	nF	N/A
Capacity	μF	Δ
Capacity	mF	Δ
Capacity	nF	Δ
Freq	Hz	N/A
Freq	kHz	N/A
Freq	MHz	N/A
Impedance	Ω	N/A
Impedance	kΩ	N/A
Impedance	MΩ	N/A
Temperature	°C	N/A
Temperature	°F	N/A
ACV Low-pass	V	N/A

6.21.5 VC880 / VC650BT – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

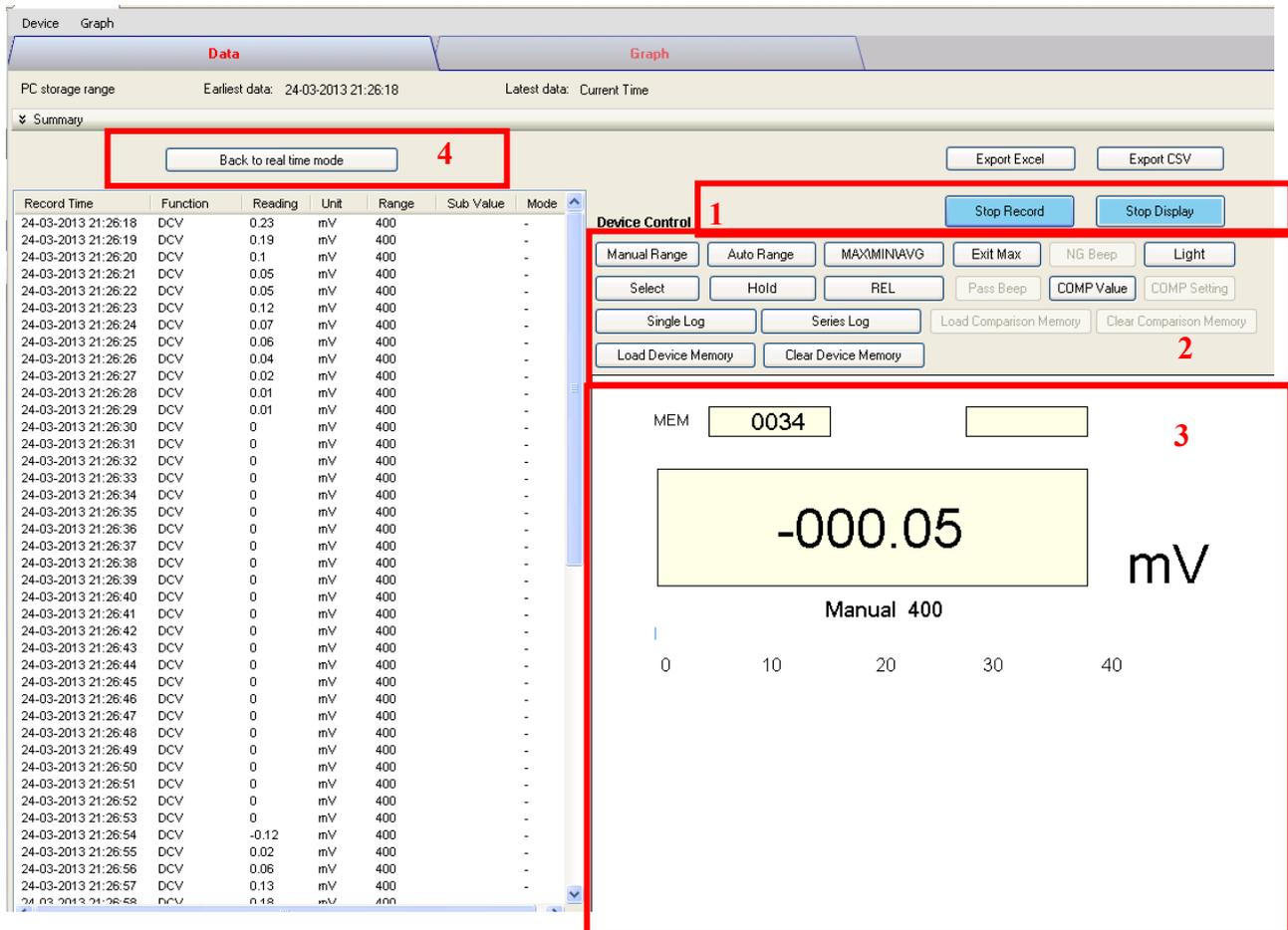


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.21.6 VC880 / VC650BT – Data View

VC880 / VC650BT contains many different measurements, you will need to specify which measurement (and unit) to download in "Display / Plot data" dialog.

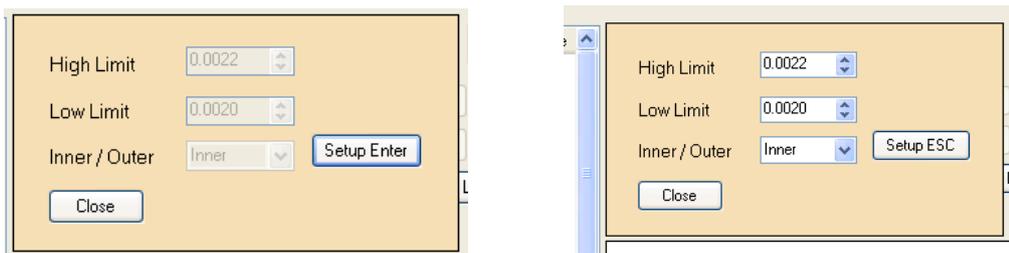


1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B. i) If the device is in record mode this means it is also in display mode. ii) Stopping the display mode will also stop the record mode.</p>
2	Command Button	Refer to below section.
3	Display Area	Display the measured value.
4	Back to real time mode	<p>This button will display when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to displaying real-time data.</p>

Command Button

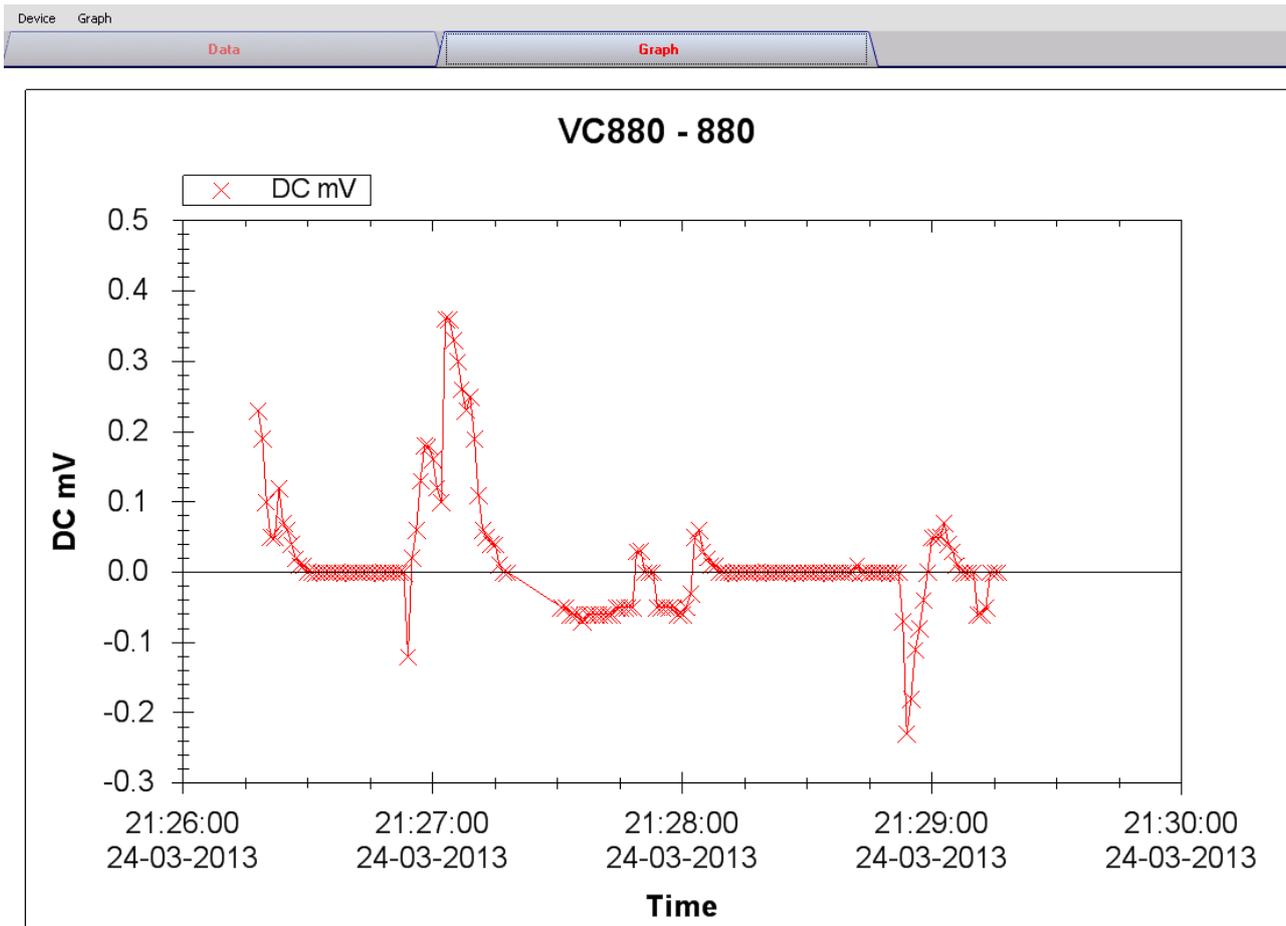
Manual Range	Click to send commands to make device entering the manual range.
Auto Range	Click to send commands to make device entering the auto range.
MAX / MIN / AVG	Click to send commands to enable maximum, minimum, average function.
Exit Max	Click to send commands to exit maximum, minimum, average function.
NG Beep	In the COMP VALUE mode, if failed, click button to turn the alarm on/off.
Light	Click to send commands to enable device backlight function, and then click the exit functions.
Select	Click to send commands to enable device function selection.
Hold	Click to send commands to enable device to maintain the function, and then click to exit maintain function.
REL	Click to send commands to enable the relative value function; then click to exit the function.
Pass Beep	In the COMP VALUE mode, if passed, click button to turn the alarm on/off.
COMP Value	Enter / Leave COMP value mode.
COMP Setting	Pop up Data Comparison dialog.
Single Log	Click to send commands to enable device to store a single data.
Series Log	Click to send commands to enable device to continuously store data, and then click to exit the function.
Load Comparison Memory	Click to send commands to send out the comparison data stored by device.
Clear Comparison Memory	Clear the comparison data in device.
Load Device Memory	Click to send commands to send out the no comparison data stored by device.
Clear Device Memory	Clear the no comparison data in device.

Data Comparison dialog



Setup Enter : When button is pressed, the upper/lower limit and the mode can be modified; when button is up, the settings will be sent and saved in the device.

6.21.7 VC880 / VC650BT – Graph View



Our graph supports the following operations

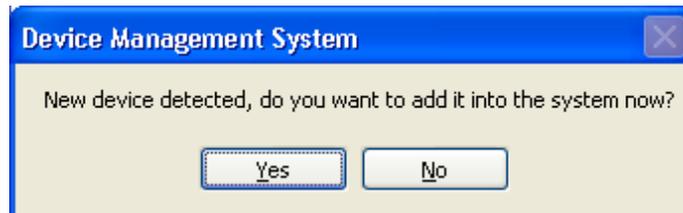
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.22 VC890

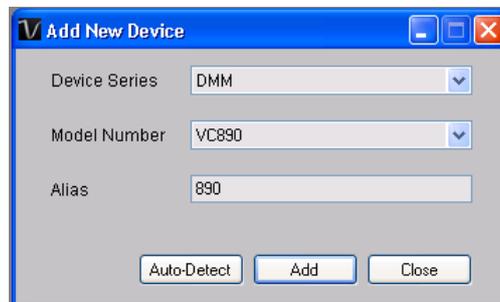
VC890 is a DMM device which measures a number of different measurements.

6.22.1 Add new VC890

To add VC890 to Voltsoft, first connect the device to PC via USB port, press "REL / PC" button on the device until the PC icon appears. When Voltsoft detected a new VC890 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

6.22.2 Remove VC890

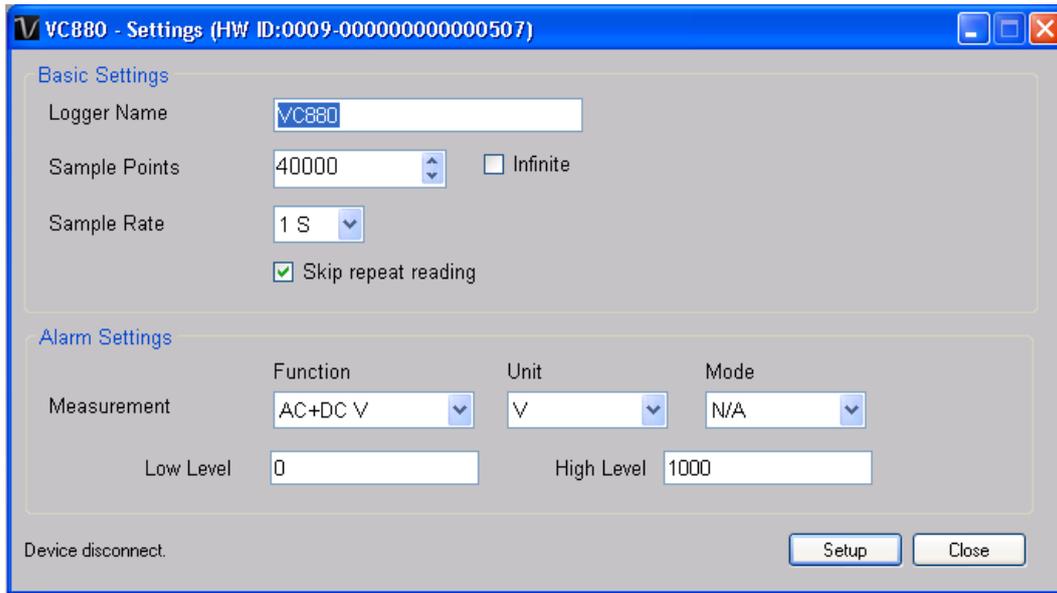
To remove VC890, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

6.22.3 VC890 – Device Control Panel

The VC890 Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC890.
2	Device -> Device Settings	Launch extra setting page of VC890.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.

6.22.4 VC890 – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stopped the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Skip repeat reading	System will not record a duplicate reading if this option was checked.
6	Alarm Settings*	Select the measurement column and alarm level.
7	Setup Button	Save changes.
8	Close Button	Close this interface.

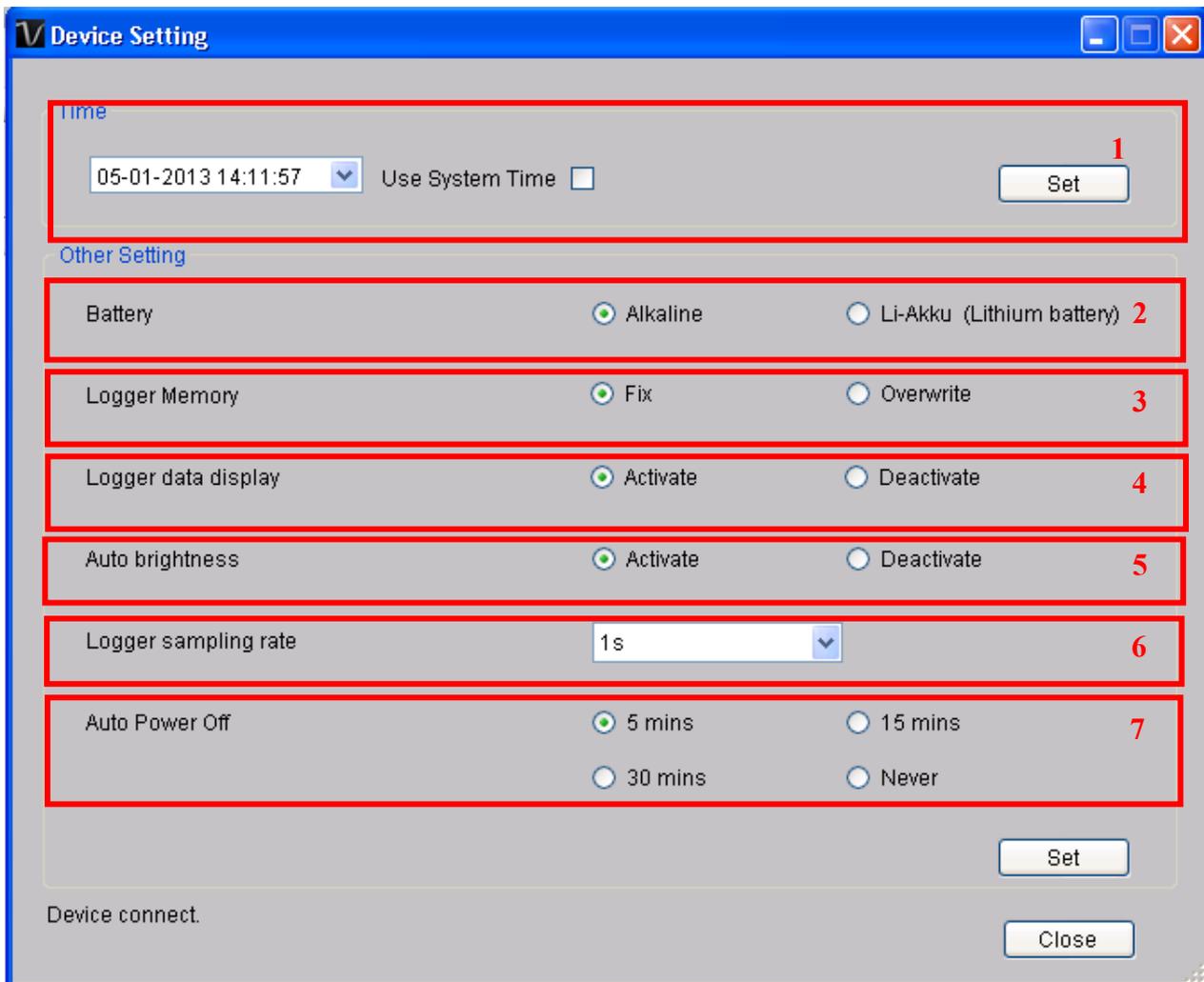
* Note: The alarm can be configured in the following measurement ranges:

Function	Unit	Mode
AC+DC V	V	N/A
AC+DC V	V	Δ
ACV	V	N/A
ACV	V	Δ
DCV	V	N/A
DCV	V	Δ
DCV	mV	N/A
DCV	mV	Δ
ACA	μA	N/A
ACA	A	N/A
ACA	mA	N/A
ACA	μA	Δ
ACA	A	Δ
ACA	mA	Δ
Continuity	Ω	N/A

Diode	V	N/A
Duty Cycle	%	N/A
DCA	μA	N/A
DCA	A	N/A
DCA	mA	N/A
DCA	μA	Δ
DCA	A	Δ
DCA	mA	Δ
Capacity	μF	N/A
Capacity	mF	N/A
Capacity	nF	N/A
Capacity	μF	Δ
Capacity	mF	Δ
Capacity	nF	Δ
Freq	Hz	N/A
Freq	kHz	N/A
Freq	MHz	N/A
Impedance	Ω	N/A
Impedance	kΩ	N/A
Impedance	MΩ	N/A
Temperature	°C	N/A
Temperature	°F	N/A
ACV Low-pass	V	N/A

6.22.5 VC890 – Device Setting

Extra settings are available for VC890, the user can launch them via Device -> Device Setting.



1	Time	Configure the device date time value. The user can specify a defined time or use the system date time.
2	Battery	Configure the device current using Alkaline or Lithium battery.
3	Logger Memory	Configure logger memory to be fixed or overwritten when full.
4	Logger data display	Configure the battery saving mode to activate or not during data logging.
5	Auto brightness	Configure the battery saving mode to activate or not during normal operation.
6	Logger sample rate	Configure logger sample rate.
7	Auto Power Off	Configure the auto power option

6.22.6 VC890 - Download Data

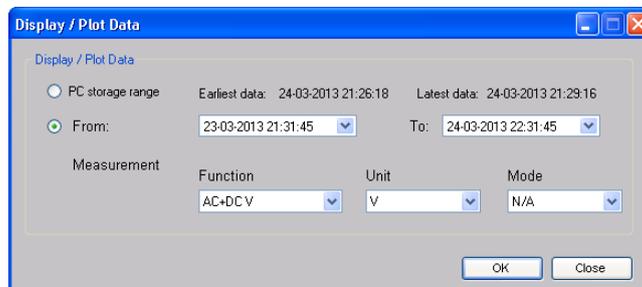
This module allows user to download the storage data from VC890.



Click "OK" button to stop the recording and start downloading.

6.22.7 VC890 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

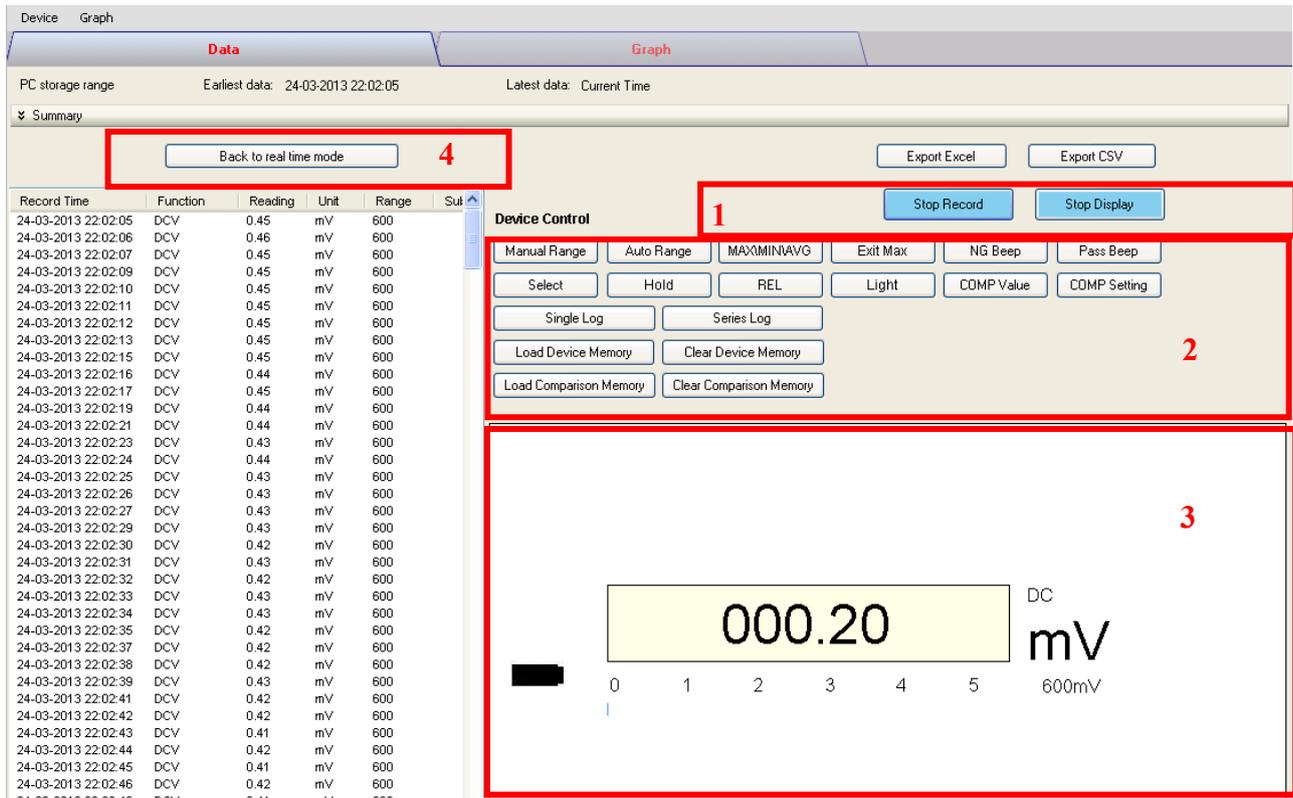


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

6.22.8 VC890 – Data View

VC890 contains many different measurements, you will need to specify which measurement (and unit) to download in “Display / Plot data” dialog.



1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B.</p> <ul style="list-style-type: none"> i) If the device is in record mode this means it is also in display mode. ii) Stopping the display mode will also stop the record mode.
2	Command Button	Refer to below section.
3	Display Area	Display the measured value.
4	Back to real time mode	<p>This button will be displayed when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to displaying real-time data.</p>

Command Button

Manual Range

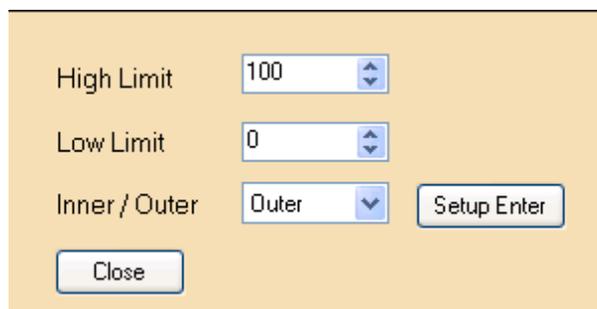
Click to send commands to make device entering the manual range.

Auto Range

Click to send commands to make device entering the

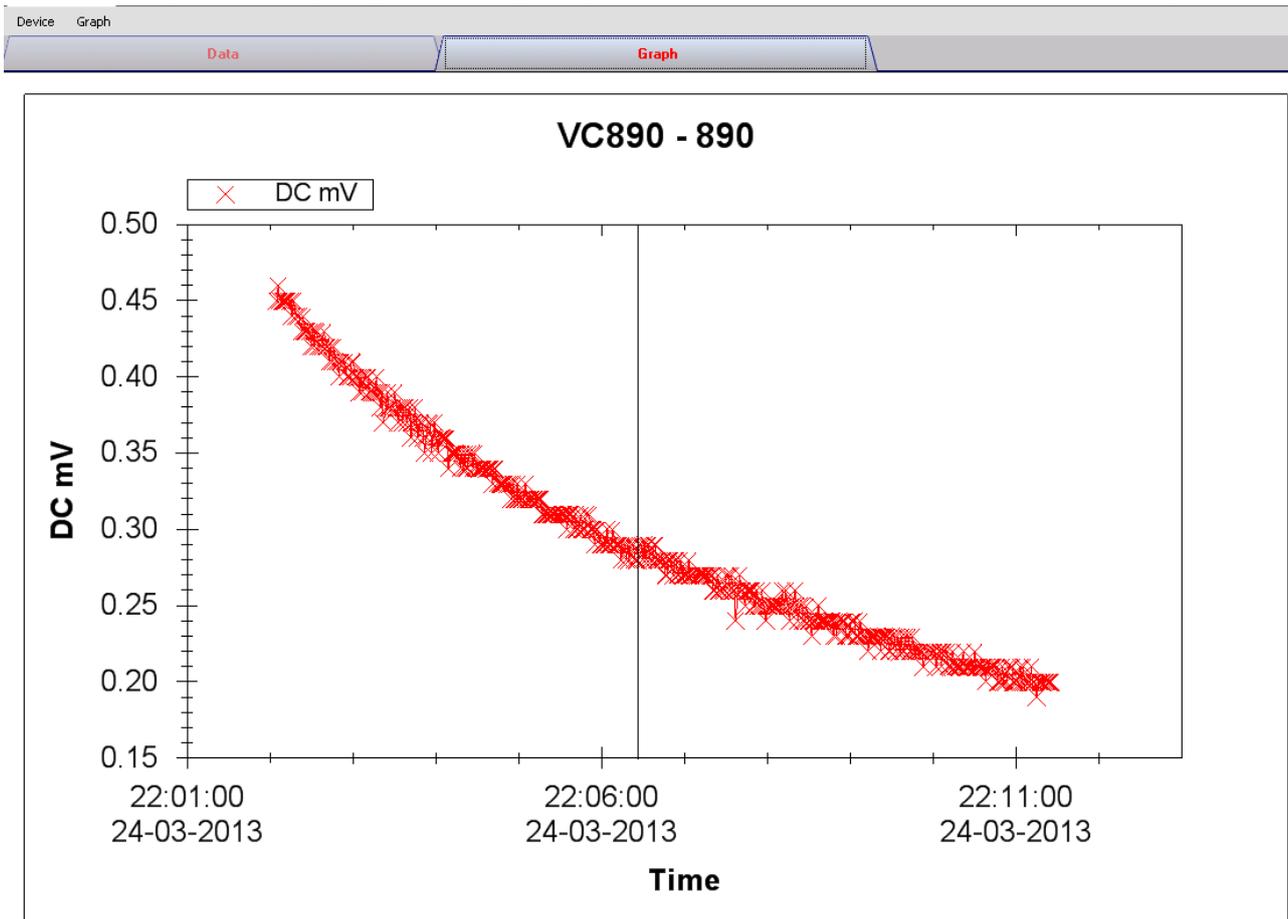
	auto range.
MAX / MIN / AVG	Click to send commands to enable maximum, minimum, average function.
Exit Max	Click to send commands to exit maximum, minimum, average function.
NG Beep	In the COMP VALUE mode, if failed, click button to turn the alarm on/off.
Light	Click to send commands to enable device backlight function, and then click the exit functions.
Select	Click to send commands to enable device function selection.
Hold	Click to send commands to enable device to maintain the function, and then click to exit maintain function.
REL	Click to send commands to enable the relative value function; then click to exit the function.
Pass Beep	In the COMP VALUE mode, if passed, click button to turn the alarm on/off.
COMP Value	Enter / Leave COMP value mode.
COMP Setting	Pop up Data Comparison dialog.
Single Log	Click to send commands to enable device to store a single data.
Series Log	Click to send commands to enable device to continuously store data, and then click to exit the function.
Load Comparison Memory	Click to send commands to send out the comparison data stored by device.
Clear Comparison Memory	Clear the comparison data in device.
Load Device Memory	Click to send commands to send out the no comparison data stored by device.
Clear Device Memory	Clear the no comparison data in device.

Data Comparison dialog



Setup Enter : When button is pressed, the settings will be sent and saved in the device.

6.22.9 VC890 – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.23 EL4000

EL4000 is a data logger which measures the power consumption of different electronic devices.

6.23.1 Add new EL4000

As EL4000 will not be physically connected to computer, therefore, to create a new EL4000 in Voltsoft, user is required to select Device Management->Add New Device in menu.

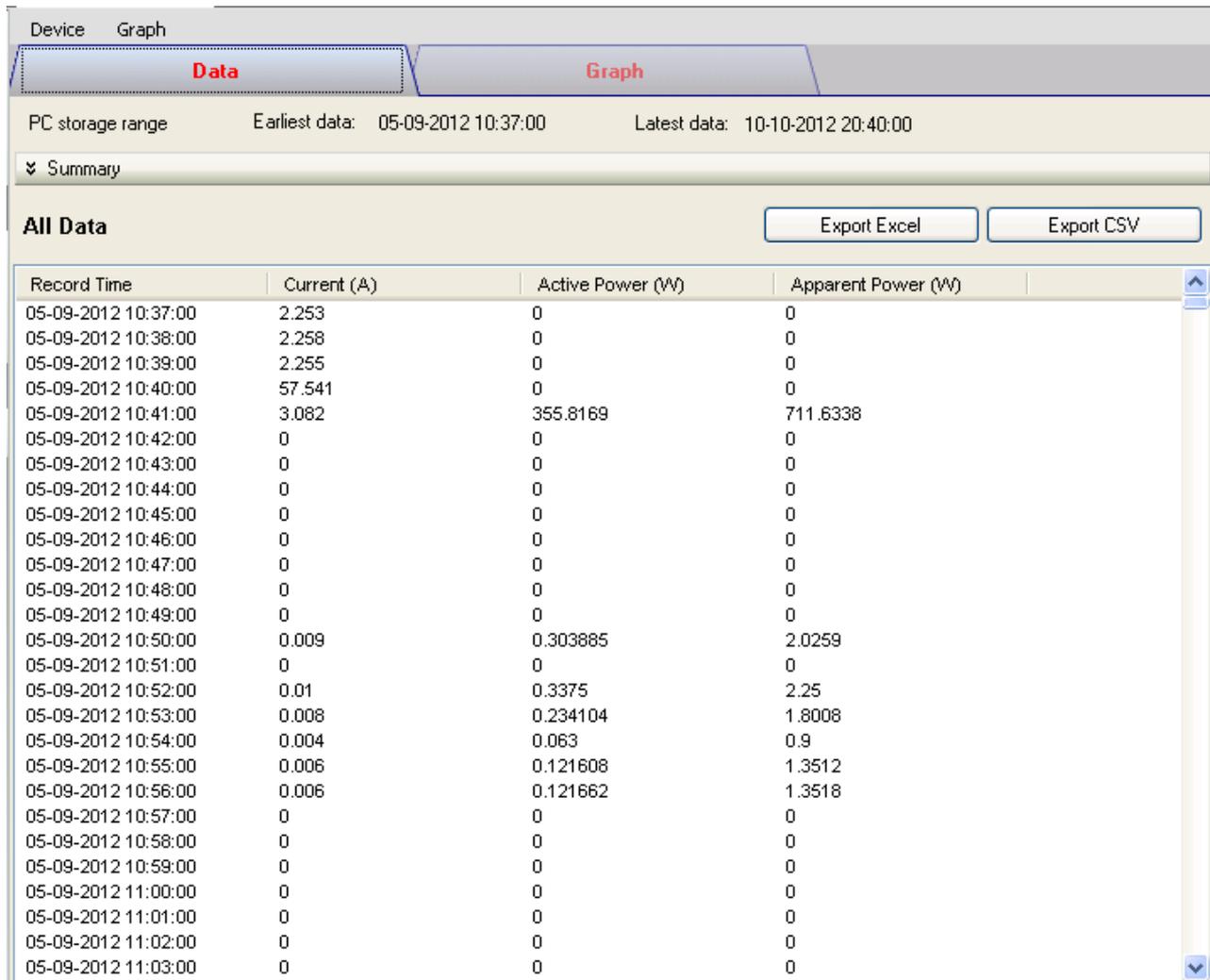


Select "EL4000" in device series, "EL4000" in model number, enter a unique device alias and click the "Add" button.

6.23.2 Remove EL4000

To remove EL4000, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

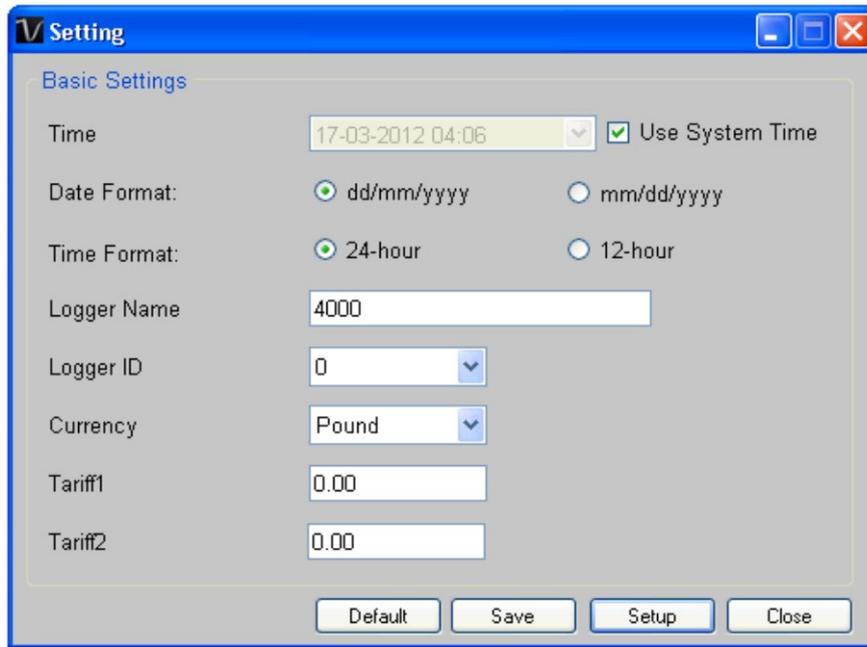
6.23.3 EL4000 – Device Control Panel



The EL4000 Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of EL4000.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

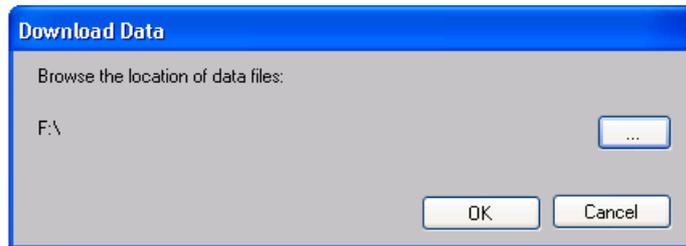
6.23.4 EL4000 – Settings



1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Date Format	Select either dd/mm/yyyy or mm/dd/yyyy
3	Time Format	Select either 24 / 12 hour format.
4	Logger Name	Input the unique alias for that device.
5	Logger ID	Select logger ID, from 0 – 9.
6	Currency	Select the currency, for calculation.
7	Tariff 1	Price for Period 1
8	Tariff 2	Price for Period 2
9	Default	Restore the default value
10	Save Button	Save setting changes
11	Setup Button	Save changes and export the configuration file.
12	Close Button	Close this interface.

6.23.5 EL4000 - Download Data

This module allows user to download the storage data from EL4000.

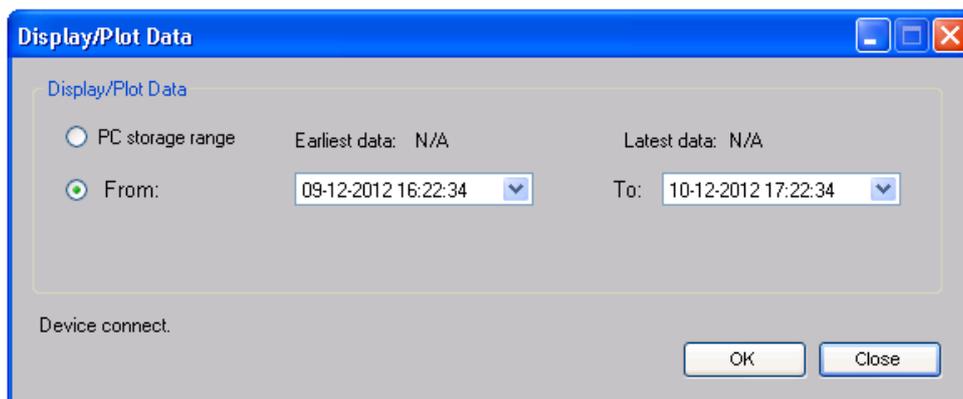


To download data, click "...", select the location of data files, and then click the "Download" button to start downloading.

Please note that the logger ID of the data file must be the same of the logger ID configured in setting, otherwise download will not be allowed.

6.23.6 EL4000 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria.

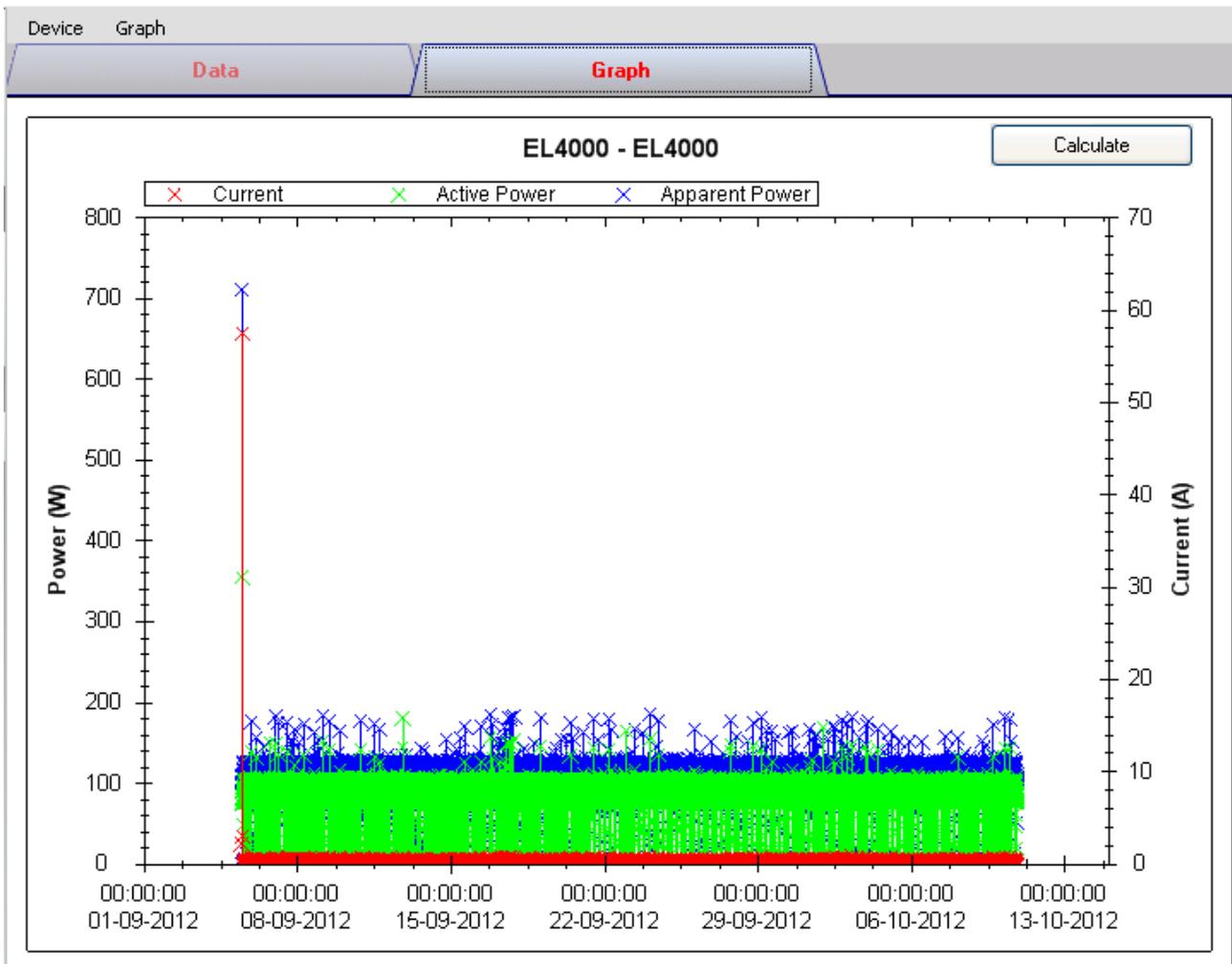
6.23.7 EL4000 – Data View

EL4000 contains three measurements (Current, Active Power and Apparent Power),

Record Time	Current (A)	Active Power (W)	Apparent Power (W)
05-09-2012 10:37:00	2.253	0	0
05-09-2012 10:38:00	2.258	0	0
05-09-2012 10:39:00	2.255	0	0
05-09-2012 10:40:00	57.541	0	0
05-09-2012 10:41:00	3.082	355.8169	711.6338
05-09-2012 10:42:00	0	0	0
05-09-2012 10:43:00	0	0	0
05-09-2012 10:44:00	0	0	0
05-09-2012 10:45:00	0	0	0
05-09-2012 10:46:00	0	0	0
05-09-2012 10:47:00	0	0	0
05-09-2012 10:48:00	0	0	0
05-09-2012 10:49:00	0	0	0
05-09-2012 10:50:00	0.009	0.303885	2.0259
05-09-2012 10:51:00	0	0	0
05-09-2012 10:52:00	0.01	0.3375	2.25
05-09-2012 10:53:00	0.008	0.234104	1.8008
05-09-2012 10:54:00	0.004	0.063	0.9
05-09-2012 10:55:00	0.006	0.121608	1.3512
05-09-2012 10:56:00	0.006	0.121662	1.3518
05-09-2012 10:57:00	0	0	0
05-09-2012 10:58:00	0	0	0
05-09-2012 10:59:00	0	0	0
05-09-2012 11:00:00	0	0	0
05-09-2012 11:01:00	0	0	0
05-09-2012 11:02:00	0	0	0
05-09-2012 11:03:00	0	0	0

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.23.8 EL4000 – Graph View

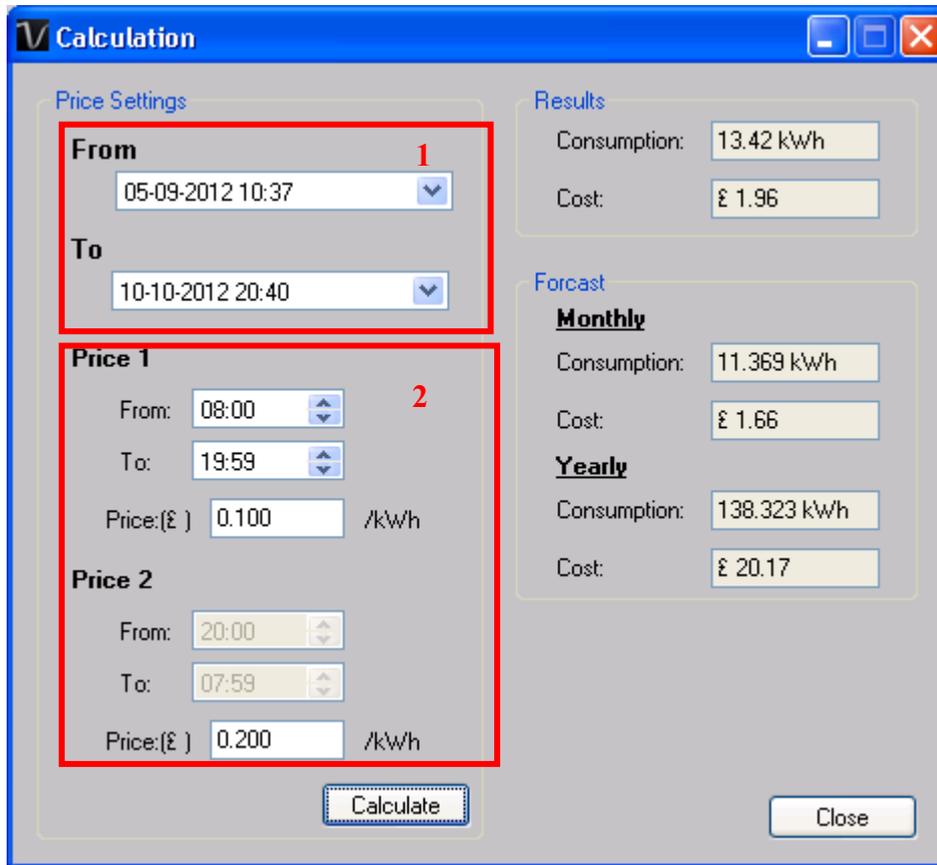


Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.23.9 EL4000 – Calculate

User can calculate the price for power consumption by using this module.



1	From / To	Define the record period
2	Price 1 / Price 2	Unit price for different time period

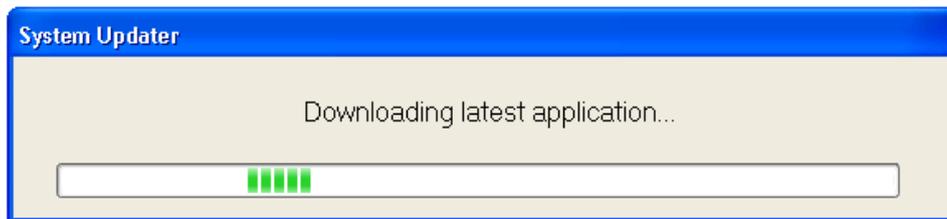
Click the "Calculate" button to calculate the price.

7 Auto Upgrade

Voltsoft will perform version checking every time when it starts up, and if there is a new version available, the following dialog box will be displayed:



User can click "Yes" to perform an upgrade or "No" to skip the upgrade. In order to enjoy the new features of Voltsoft, it is highly recommended to perform the upgrade.



The system will continue to launch once the upgrade is completed.

8 Appendix

8.1 *Real-Time device list*

Only the following devices will have real-time features:

Family	Model Number
Data Logger	DL131G
	DL161S
	SL400
DMM	VC 930 / VC950
DMM	VC 880 / VC650BT / VC890

Remarks: The speed of data logging (i.e. sample rate) much depends on the capacity of your computer and its performance will be affected when 2 or more sets of real-time devices are running at the same time.