

# **Data Management Software Installation and User Guide**

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## Data Management Software Installation and User Guide

### 1. Introduction

Data management software is our latest generation products which developed to support the analysis of the data loggers. Fully considered of user's habits, simple operation, and many humanized design concept was introduced to the program during the design. At the same time, Very powerful data analysis, data logger can conduct in-depth and detailed analysis processing, and provides many type of ports, user can export the data to Microsoft Excel、Word、Text、PDF and other forms.

This software can be used with RC-4、RC-4HA、RC-4HC、RC-5.

### 2. Operating environment requirements

- 1、 **Operating system:** Windows XP SP3、Windows 7、Windows 8.
- 2、 **Hardware:** P3 1GHZ / 256M Memory / 1G  
**Communication Interface:** USB interface or RS-232 interface.
- 3、 **Monitor:** Display (graphics) resolution at least 1024 × 768.

### 3 、 Install the USB drivers.

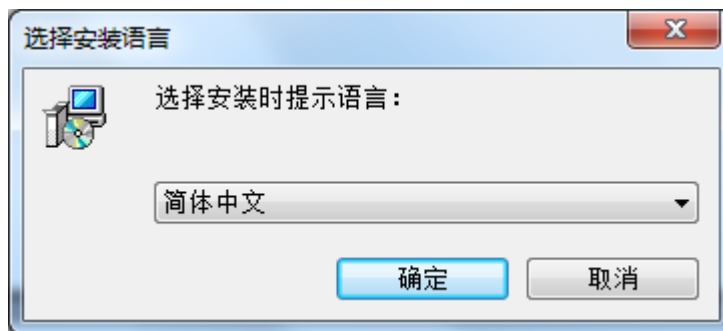
Driver integration and installation procedures, when you install the program, it will automatically install the driver, without requiring the user to install. Driver is installed by default to the installation directory. After the user connect the USB cable to connect the recorder to a computer, the user can find the "Port" in the "Device Manager—> “Silicon Labs CP210x USB to UART Bridge” (RC-4) 或 “USB-SERIAL CH349” (RC-5).

Please instruments supporting a special USB cable connected number logger and PC, do not extend the USB cable.

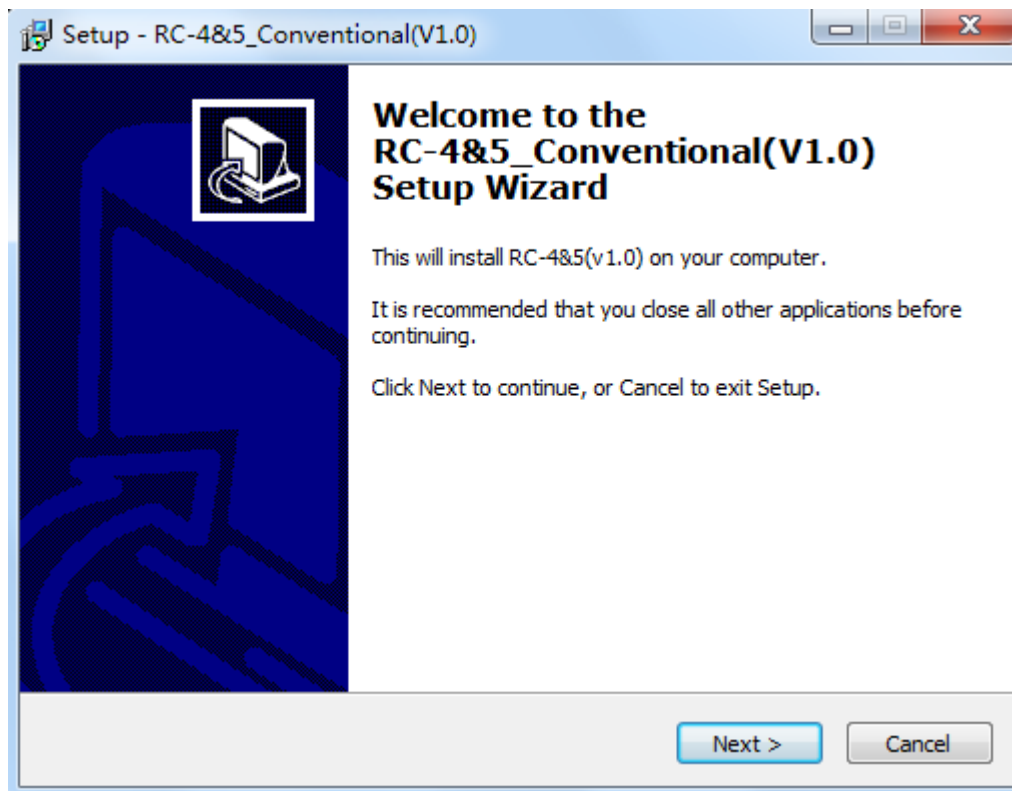
### 4 、 Details of the installation process

4.1、 Step One: Insert the software CD into the computer CD-ROM drive (CD-ROM/DVD-ROM), and open the file

Browser (and) into the CD-ROM directory, you can see that there are RC-4H\_Conventional file or RC-5\_Conventional directory. Run the file, the installation interface appears as shown in Figure below:



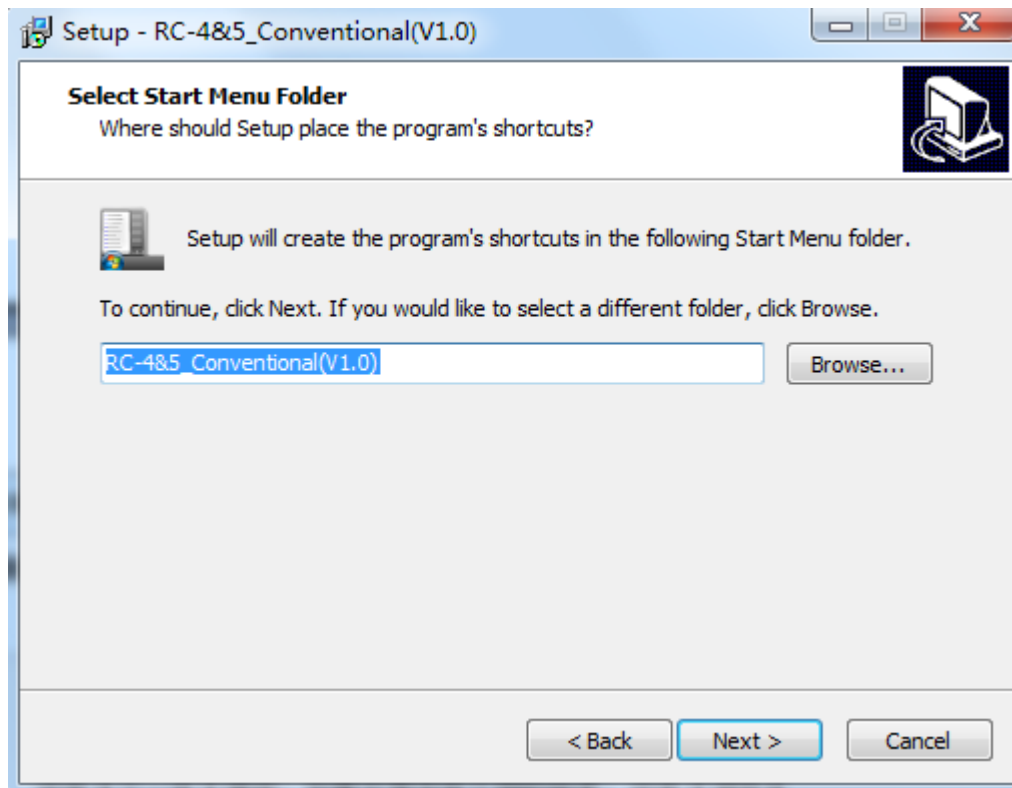
**4.2、 Step two: Select the language you want to install, click "OK." The following screen appears:**



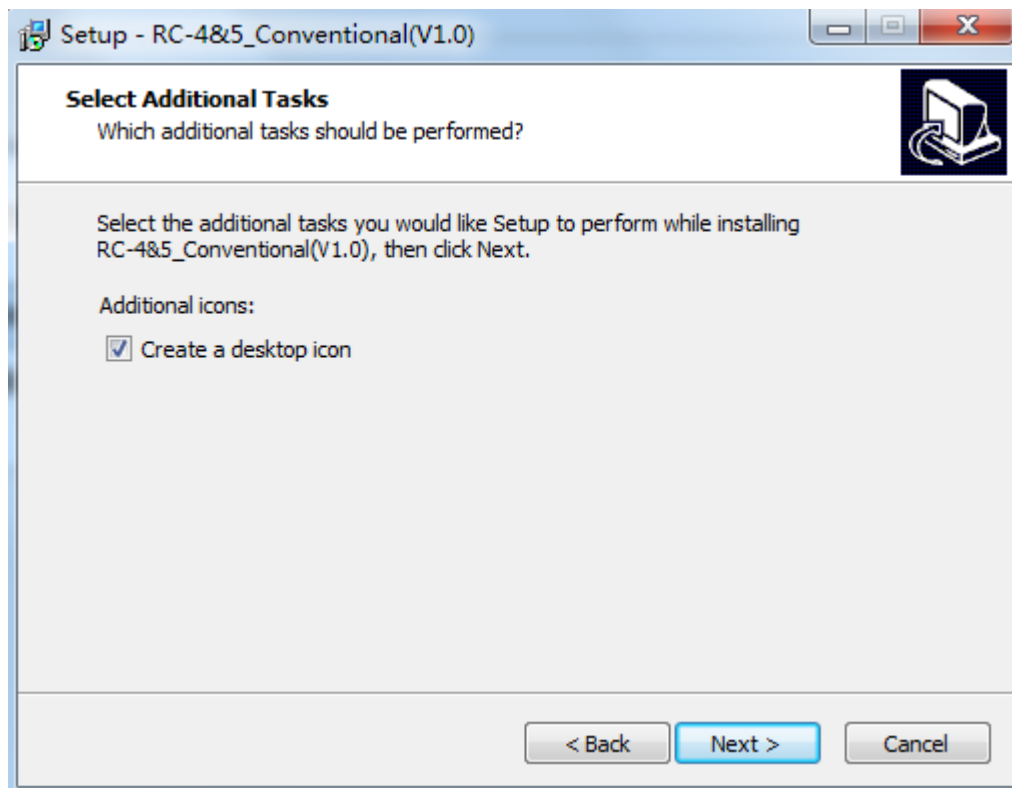
**4.3、 Click "Next", the installation directory selection screen appears:**

Please select the installation directory. Recommended to install a non-system partition on a computer inside. After selecting the directory, click "Next" to enter the Start Menu folder selection screen

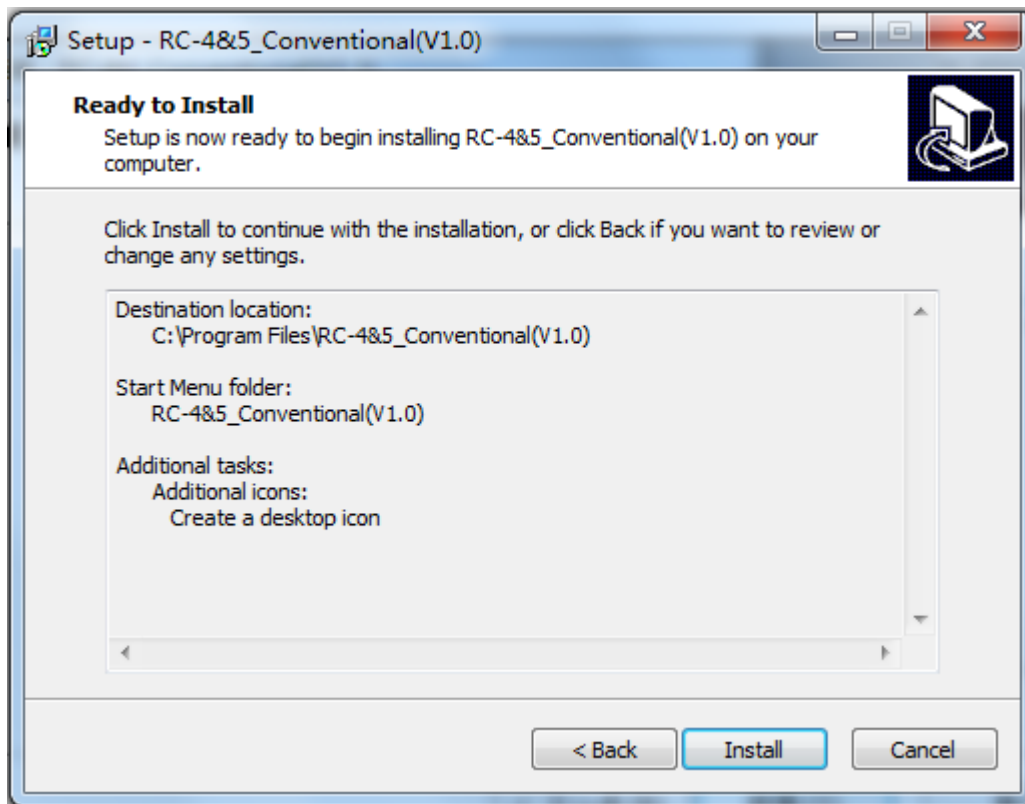
#### 4.4、 Click "Next" to add to the Start Menu:



#### 4.5、 Click "Next" to enter the Select Additional Tasks page:



4.6、 Click "Install" to install the program starts to copy the software to your computer analysis. The installation process is shown below :

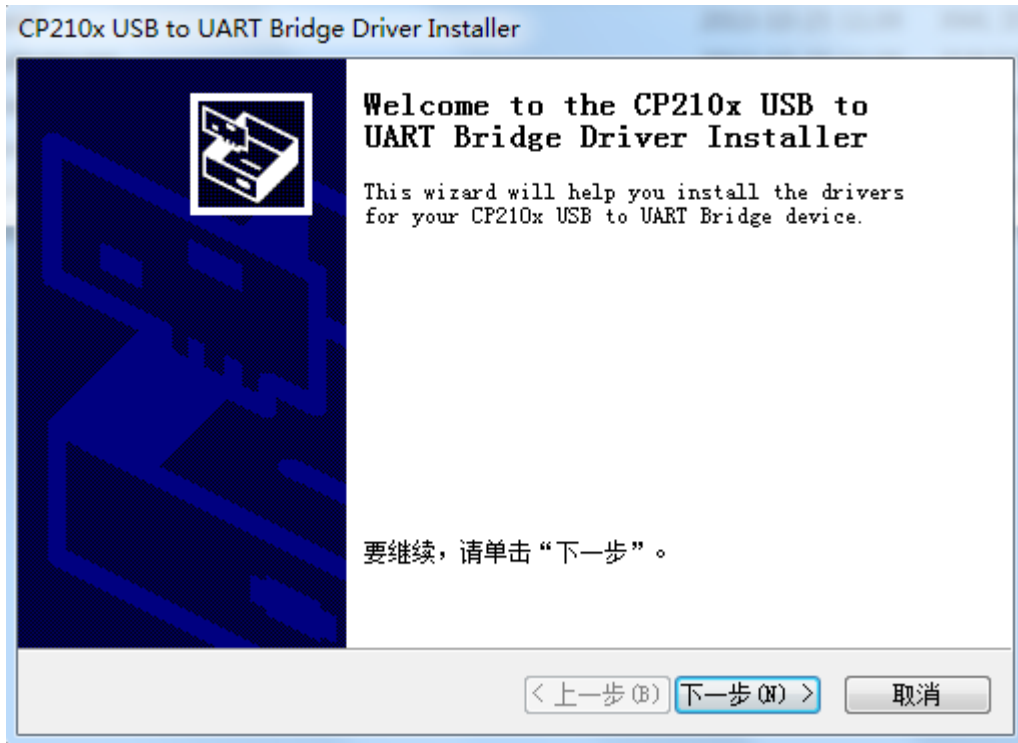


4.7、 During installation. NET Framework 4, an embedded database, USB drivers and other operating components will be installed.

. NET Framework 4 installation interface as follows:



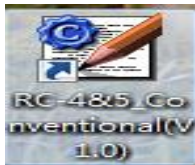
CP210X USB drive as shown below



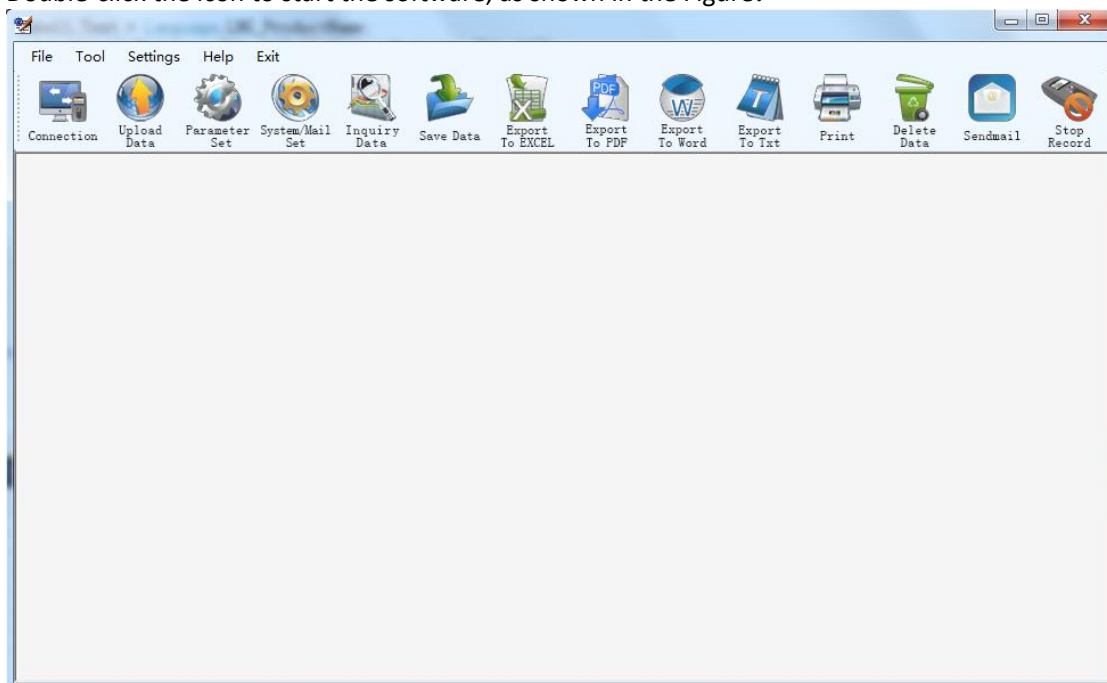
Click Next until the installation is successful.

## 5、 Use Introduction

5.1、 After installing the logger analysis software, you can find the software shortcut icon on the desktop:



Double-click the icon to start the software, as shown in the Figure:



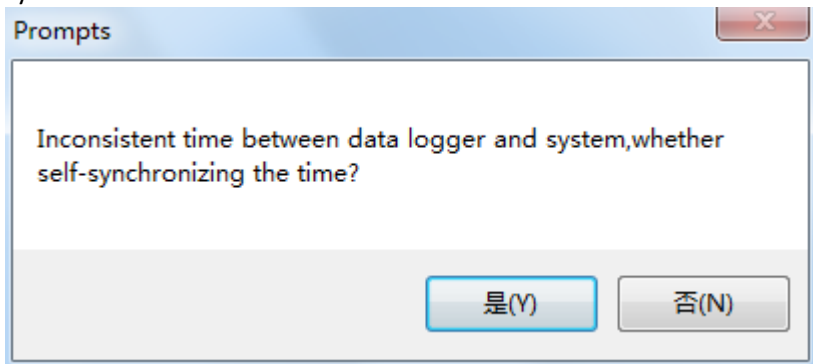


**5.2、Connectivity:**

Connect the recorder and read the logger parameters and display parameters details.

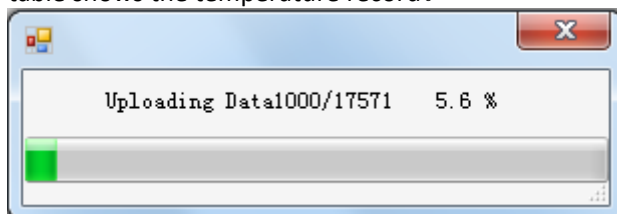
<b>Work Status</b> Model: RC-5 Total Space: 32000 Recorded Count: 17564 Work Status: Start Start Time: 2014-01-07 15:59:12 Last Online Time: 2014-01-07 16:11:07 Expected Stop Time: 2014-01-11 17:45:41 Actual Stop Time: Not stopped		<b>Record Property</b> Record Interval: 00:00:11 H:M:S Record Time Length: 4D1H46M40S Delay Time: 0.0 H Station No.: 255 Stop by button_press: Permit Alarm Setting: [Dropdown] Tone Set: [Dropdown] Temperature Unit: °C TemperatureUpper Limit: 20.0 °C TemperatureLower Limit: 1.0 °C TemperatureCalibration: -1.2 °C HumidityUpper Limit: [Input] %RH HumidityLower Limit: [Input] %RH HumidityCalibration: [Input] %RH		<b>Clock</b> 2014-01-14 16:07:29 [Set Clock Of Data Logger] <b>Number</b> 001 Maximum input characters or numbers 10 [Set Numbers] <b>User Information</b> [Text Area] Maximum Input Characters 100 [Set User Information]	
--	--	---	--	--	--

When connected, if found time and system time recorder will prompt the user whether different synchronous clock.



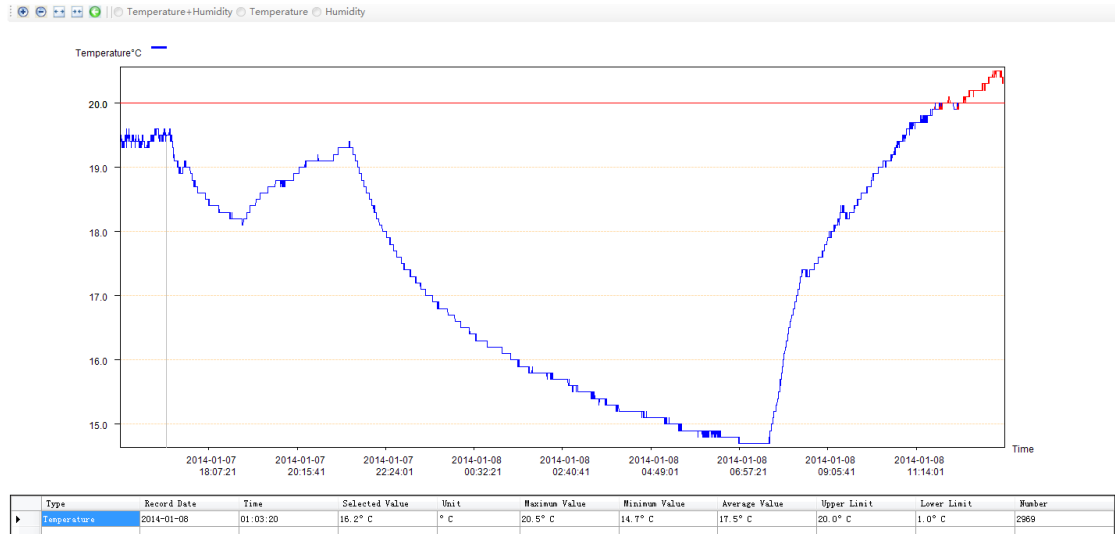
**5.3、Upload button:**

The temperature logger records saved to your computer in order curve, in the form of a data table shows the temperature record.



**5.3.1 Graph**





Curve graph description:

- Blue curve represents the curve obtained from the normal data
- Red curve represents the data exceeds the alarm upper and lower limit
- Green curve represents there are failures or abnormal record data
- X-coordinate-----TIME,
- Y- coordinate ----- Temperature

Curve graph toolbar description:

- X-axis tension
- X-axis contraction
- curves zoom out
- curves zoom in
- restore to the original image
- Temperature+Humidity — Draw temperature and humidity (RC-4HA/RC-4HC)curve
- Temperature — Draw temperature curve
- Humidity — Draw humidity curve (RC-4HA/RC-4HC)

Note:

- Drag the left mouse to move the curve
- Use the right mouse to click the curve, there will appear/disappear a vertical line which moves along with the mouse
- When move the mouse in the graph, the data shown in the below data table will be refreshed and be the recorded data which the mouse points.



### 5.3.4 Data Query

Data Name

Search Start Time

Search End Time

TemperatureInquiry

Temperature Upper Limit ° C

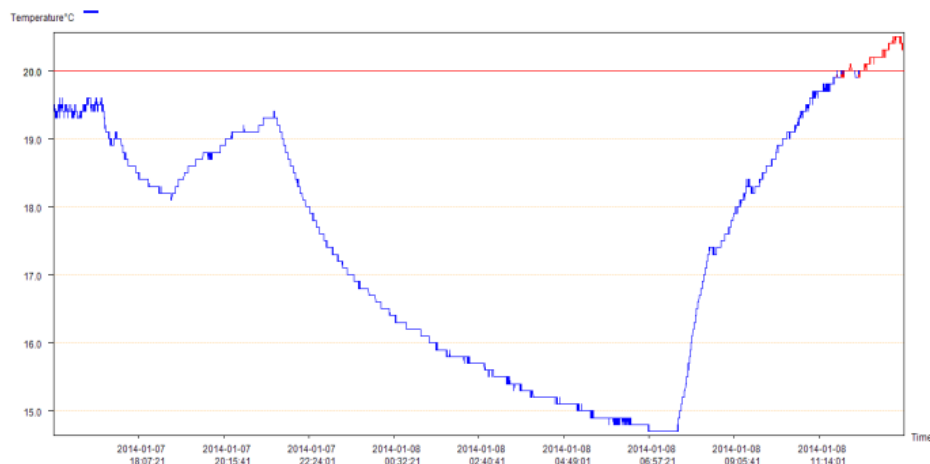
Temperature Lower Limit ° C

**Data Name**——Database name list data file is stored.  
 Select the appropriate name of the system will automatically display the relevant data.  
 This feature is only after the "Query Data" is available when "Upload Data" disabled.

- Check real time - real time according to the time of the query.
- The upper temperature limit - according to the temperature range query data.
- The lower temperature limit - according to the temperature range query data..
- The upper humidity limit - according to the temperature range query data.  
 (Only RC-4HA、RC-4HC have this function)
- The lower humidity limit - according to the temperature range query data..  
 (Only RC-4HA、RC-4HC have this function)

### 5.3.5 Data Report

RC-5Data Logger			
		2014-01-14 16:11:23	
Number	001	User Information	afbdsafdsafasdfsasdfsasdfsafbd safdsafasdfsasdfsasdfsafbd safasdfsasdfsasdfsafbdsafdsaf sdfasdfsasdfsafbd
Delay Time	0.0 H	Interval	0:0:11 H:M:S
Data Sum	7000	Temperature Unit	° C
Start Time	2014-01-07 15:59:12	End Time	2014-01-08 13:22:21
TemperatureMaximum Value	20.5° C	TemperatureMinimum Value	14.7° C
TemperatureAlarm Upper Limit	20.0° C	TemperatureAlarm Lower Limit	1.0° C
TemperatureAverage	17.5° C		



Display statistical reports can be printed.



### 5.4、Parameter setting interface button

Enter the parameter setting interface, set the recorder parameters

<b>Work Status</b> Model: RC-5 Total Space: 32000 Recorded Count: 17588 Work Status: Start Start Time: 2014-01-07 15:59:12 Last Online Time: 2014-01-14 16:07:57 Expected Stop Time: 2014-01-11 17:45:41 Actual Stop Time: Not stopped		<b>Record Property</b> Record Interval: 00:00:11 (H:M:S) Record Time Length: 4D1H46M40S Delay Time: 0.0 (H) Station No.: 255 Stop by button_press: Permit Alarm Setting: [Dropdown] Tone Set: [Dropdown] Temperature Unit: °C TemperatureUpper Limit: 20.0 °C TemperatureLower Limit: 1.0 °C TemperatureCalibration: -1.2 °C HumidityUpper Limit: [Input] %RH HumidityLower Limit: [Input] %RH HumidityCalibration: [Input] %RH		<b>Clock</b> 2014-01-14 16:11:48 [Set Clock Of Data Logger] <b>Number</b> 001 Maximum input characters or numbers 10 [Set Numbers] <b>User Information</b> [Text Area] Maximum Input Characters 100 [Set User Information]	
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Clicking "Save" will clear all data of Data Logger

#### 5.4.1 Work status bar

<b>Work Status</b>	
Model	RC-5
Total Space	32000
Recorded Count	17774
Work Status	Start
Start Time	2014-01-07 15:59:12
Last Online Time	2014-01-14 16:11:47
Expected Stop Time	2014-01-11 17:45:41
Actual Stop Time	Not stopped

Model No.-- Data logger Model. No.

**Total capacity**--total data storage capacity

**Record Count** -- the number of recorded data.

**Working status** -- description of current working status of data logger

**Start time**—the time to start recording(if data logger is not started,display “not started” )

**Last online time** - - the last data logger on-line time with the computer.

**Estimated stop time**—stop time calculated according to the set property of data logger (if data logger is not started, display “not started” )

**Actual stop time**—the actual stop time of data logger (if data logger is not stopped, display “not stopped” )

## 5.4.2 Logger's Property

Record Property		
Record Interval	<input type="text" value="00:00:11"/>	H:M:S
Record Time Length	<input type="text" value="4D1H46M40S"/>	
Delay Time	<input type="text" value="0.0"/>	H
Station No.	<input type="text" value="255"/>	
Stop by button_press	<input type="text" value="Permit"/>	
Alarm Setting	<input type="text"/>	
Tone Set	<input type="text"/>	
Temperature Unit	<input type="text" value="° C"/>	
TemperatureUpper Limit	<input type="text" value="20.0"/>	° C
TemperatureLower Limit	<input type="text" value="1.0"/>	° C
TemperatureCalibration	<input type="text" value="-1.2"/>	° C
HumidityUpper Limit	<input type="text"/>	%RH
HumidityLower Limit	<input type="text"/>	%RH
HumidityCalibration	<input type="text"/>	%RH

**record interval**--time length between two records.(Note: record interval range is from 10S to 24H .)

**Record time length**--the maximum record time

**Start delay time** - - record delay from the time of pressing the button to the time of starting record.

**Station No.**--the station No. set for the data logger (Note: the station No. valid range is 0—255)

**Stop by pressing button**—set whether it is permitted to stop recording by press the button.

Alarm set—Alarm sound setting when exceeds the limit.

Warning tone set---Set the warning tone of data logger

Temperature unit - Select Fahrenheit or Celsius.

Temperature Upper limit—Temperature alarm upper limit set by user

Temperature Lower—Temperature alarm lower limit set by user

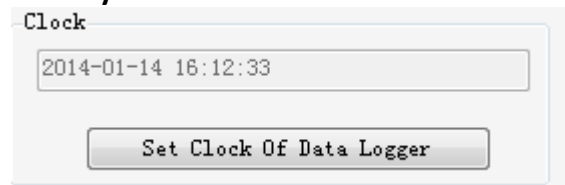
Temperature calibration - calibrate the temperature error of data logger.

Humidity Upper limit—Humidity alarm upper limit set by user (Only RC-4HA、RC-4HC have this function)

Humidity Lower—Humidity alarm lower limit set by user (Only RC-4HA、RC-4HC have this function)

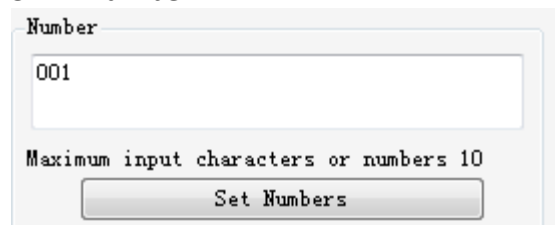
Humidity calibration - calibrate the Humidity error of data logger. (Only RC-4HA、RC-4HC have this function)

### 5.4.3 Synchronous Clock



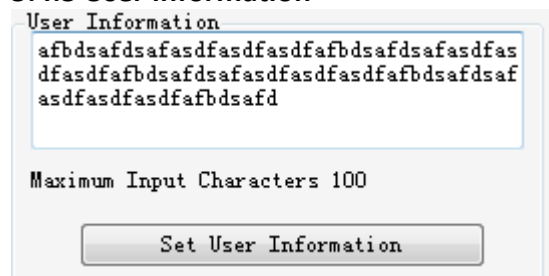
Data logger Clock - Display and set the current time of data logger.

### 5.4.4 Number



Data logger Number – Display and set the number of data logger (Note: only allow letters and numbers, maximum length ten digits)

### 5.4.5 User Information



User Information: display and set user information (Note: 100 characters or 50 Chinese characters, each Chinese character occupies two characters)

### 5.4.6 Save and exit

Clicking "Save" will clear all data of Data Logger

Save  
Parameter

Exit

Parameters saving--- save the property value to the data logger. (Note: the parameters saving will clear the data in the data logger, please save the data in advance.)



## 5.5、 System mail settings

### 5.5.1 System mail settings

SystemSet EmailParameterSet

Auto Upload

Self-synchronizing Data

Save  
Parameter

**Auto upload data** – after software detects the data recorder, set it to automatically upload the data of the data recorder.

**Auto clock Synchronization** – During data logger connects with PC, it will automatically set the data logger time to be the system time.

### 5.5.2 Email Settings

SMTP	<input type="text" value="smtp.sina.com"/>	sender's SMTP. eg:smtp.sina.com
Sender's Email	<input type="text" value="luqiao1983@sina.com"/>	
Email Password	<input type="password" value="*****"/>	
Reenter	<input type="text"/>	
Email Topic		
Define	<input type="text" value="1234567890123456789012345678901234567890123456789012345678901234567890"/>	
choose	<input checked="" type="checkbox"/> Time <input checked="" type="checkbox"/> User Information	
Attachment		
	<input checked="" type="checkbox"/> WORD <input checked="" type="checkbox"/> EXCEL <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> TEXT	
Receiver Email Address		
	<input checked="" type="checkbox"/> luqiao1983@126.com	<input type="button" value="Add"/>
		<input type="button" value="Delete"/>
<input type="button" value="Save"/> <input type="button" value="Send Test Mail"/>		

**SMTP** – set the sender's SMTP server address. **(Note: it must be filled)**

**Sender mailbox** - sender's email address

**Sender mailbox** - sender's email address.

**Email password** - the sender's mailbox password.

**Re-enter** - re-enter the sender's mailbox password

**Mail subject (custom)** - user enters the subject of the mail. **Mail subject (selection)** - user selects the attached subject of mail.

**E-mail attachments** - mail attachments to be added.

**Recipient's address (add)** - Add the address of the recipient's mailbox. **(Note: you can add multiple recipients address, but it can be set up to three recipients for each time)**

**Recipient's address (Delete)** - delete the recipient email address.

**Save mail setting** - save the mail parameter and it will send mails directly according to the setting parameters interface.

**Send test mails**--- send a test email without attachment.



## 5.6、 Query historical data

Query the database stored in the temperature record. And displays the data in graphs ,data tables and report forms.

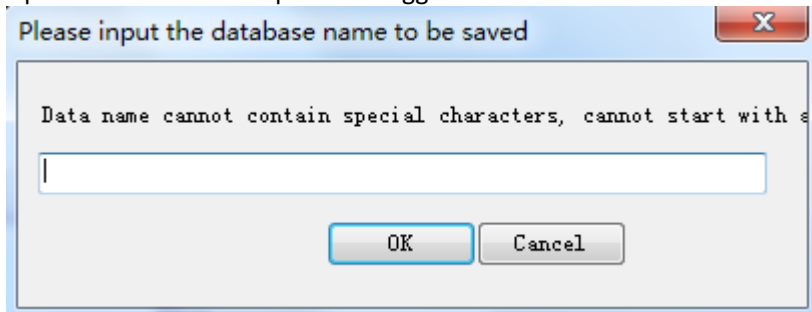
Details referring to 3.3-3.5





### 5.7、 Storing data

Uploaded from the temperature logger records saved to the database



### 5.8、 Export data to EXCEL



### 5.9、 Export data to PDF



### 5.10、 Export data to WORD



### 5.11、 Export data to TXT



### 5.12、 Print

Print data or report



### 5.13、 Delete

Delete the existing data from the database



### 5.14、 Email

Sending data to the set Email



### 5.15、 Stop recording

Data logger stops recording.