

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

2014-1-6

# Contents

<b>1 Introduction.....</b>	<b>3</b>
<b>2 Operating environment requirements.....</b>	<b>3</b>
<b>3 Install the USB drivers.....</b>	<b>3</b>
<b>4 Details of the installation process.....</b>	<b>3</b>
4.1 Running the Setup.....	3
4.2 Select the installation language.....	4
4.3 Select the installation. Interface .....	4
4.4 Adding the Start menu.....	5
4.5 Add additional tasks.....	5
4.6 <i>Start the installation</i> .....	6
4.7 <i>Install other operating components</i> .....	6
<b>5 Use Introduction. ....</b>	<b>7</b>
5.1 The main interface.....	7
5.2 Connect button.....	8
5.3 Upload button. ....	8
5.4 Parameter Settings button.....	12
5.5 System Settings button . . . . .	15
5.6 <i>Query button</i> ... ..	16
5.7 <i>Save button</i> ... ..	17
5.8 <i>Export to EXCEL button</i> ... ..	17
5.9 <i>Export to PDF button</i> .. ..	17
5.10 <i>Export to WORD button</i> ... ..	17
5.11 <i>Export to TXT button</i> .. ..	17
5.12 <i>Print button</i> ... ..	17
5.13 <i>Delete button</i> ... ..	17
5.14 <i>Email button</i> ... ..	17
5.15 <i>Stop button</i> .. ..	18

## Data Management Software Installation and User Guide

### 1. Introduction

Data management software is our latest generation products witch 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.

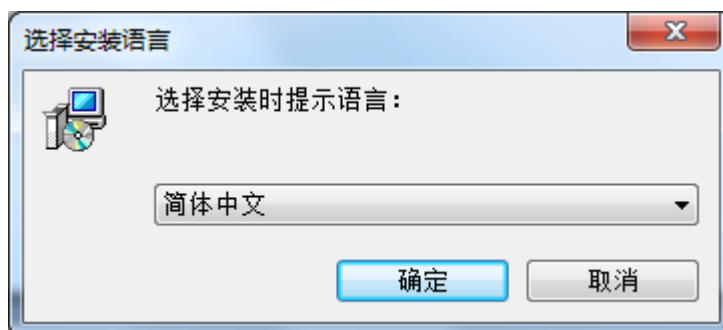
### 3 、 Install the USB drivers.

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.

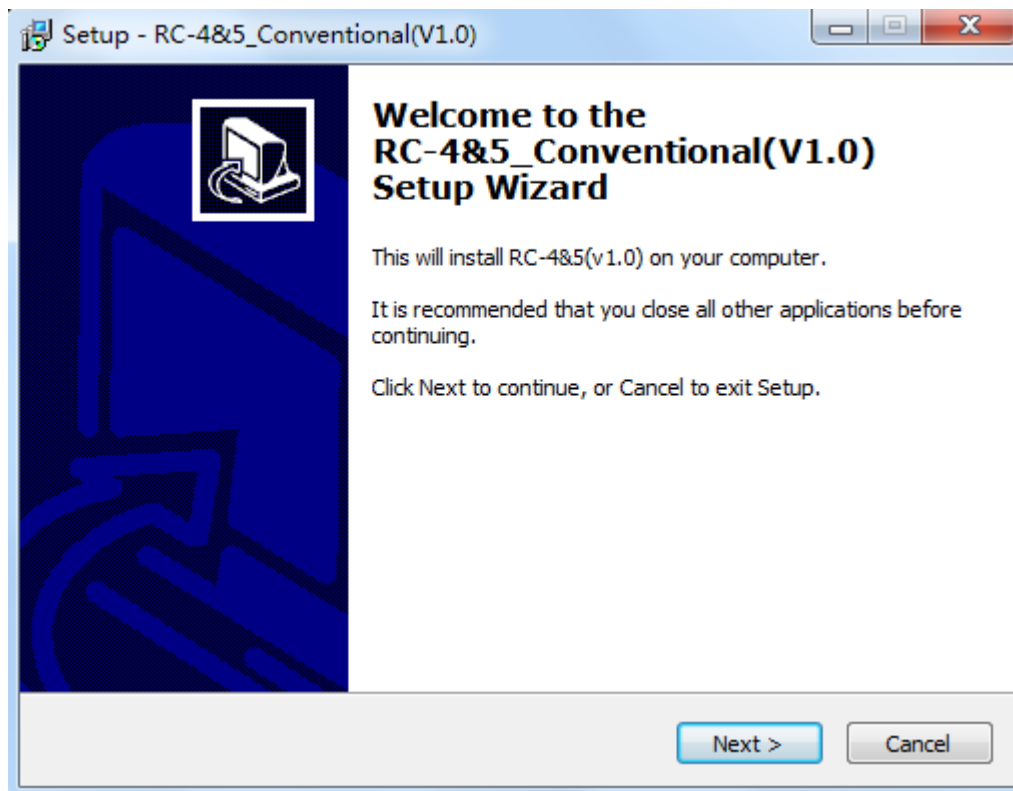
### 4 、 Details of the installation process

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:



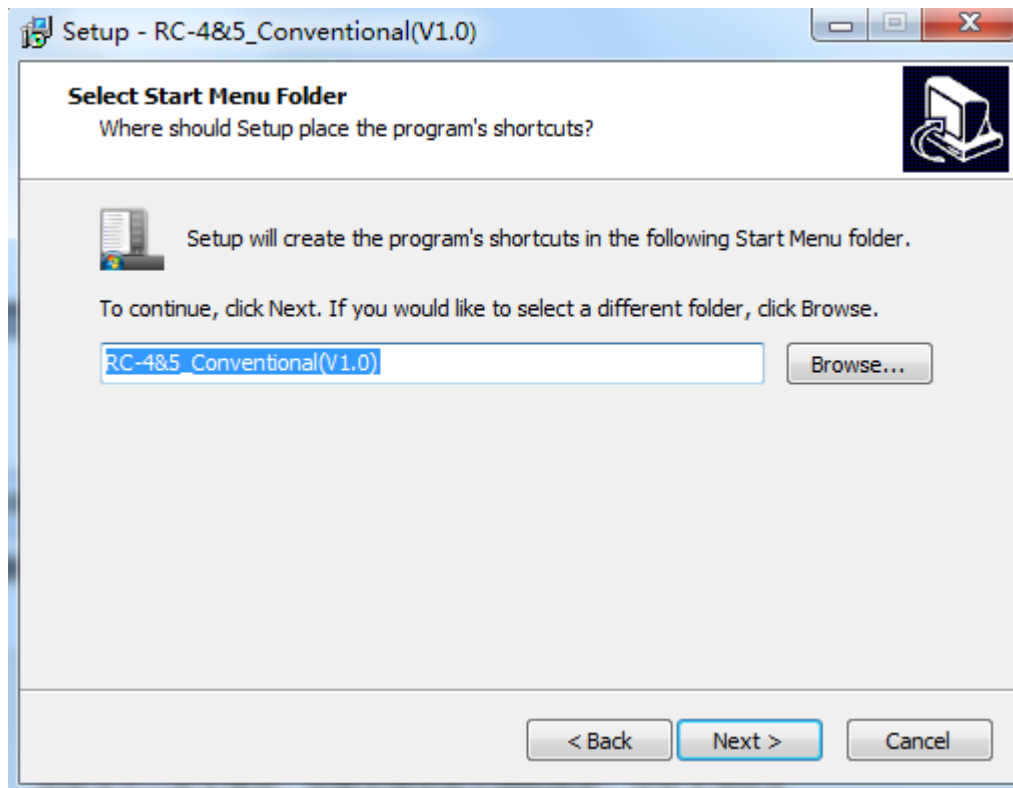
**4.2、 Step two: Select the language you want to install, click "OK." The following screen appears:**



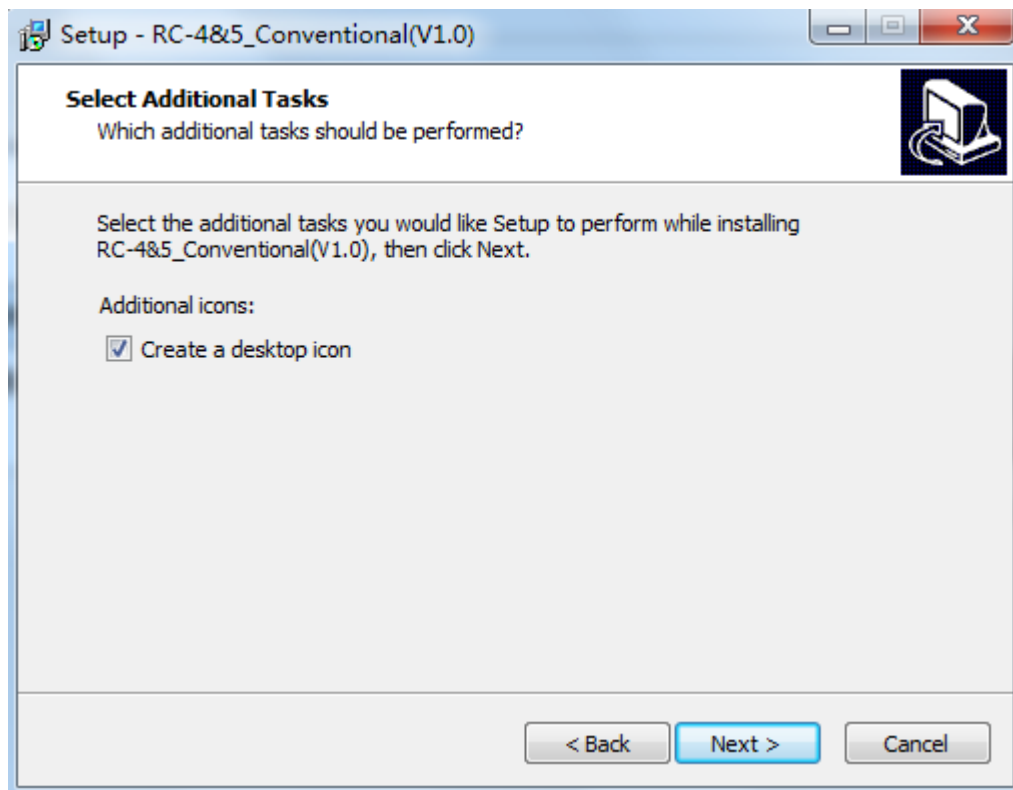
**4.3、 Click "Next", the installation directory selection screen appears:**

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

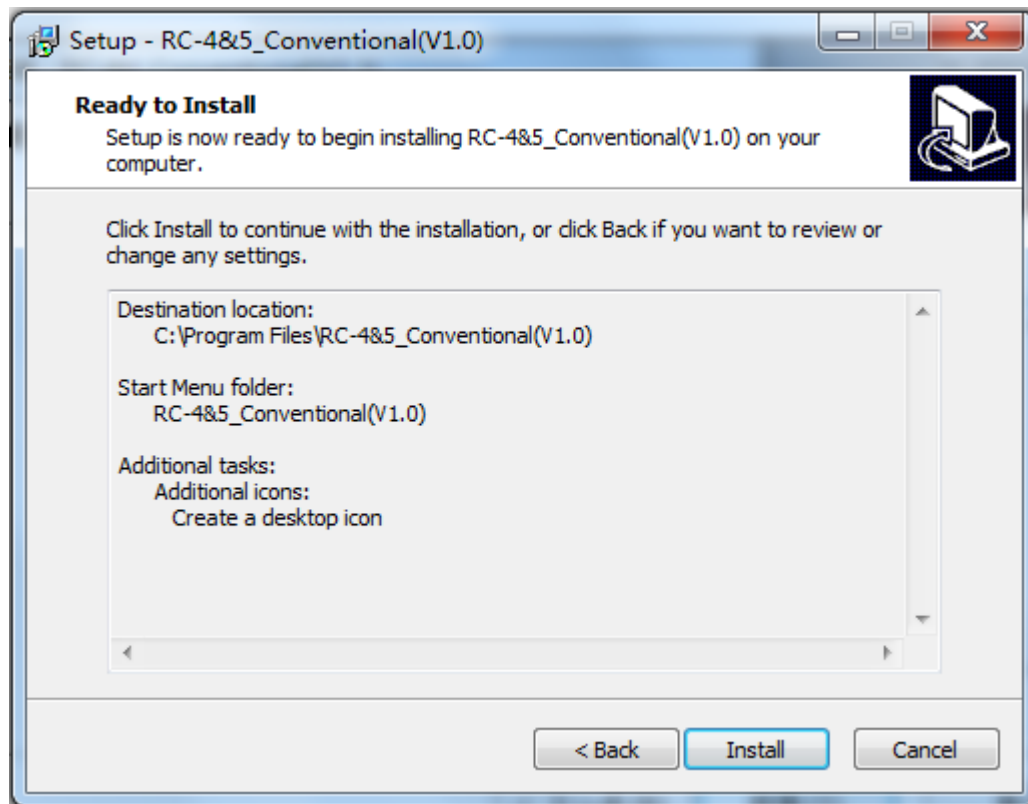
#### 4.4、Click "Next" to add to the Start Menu:



#### 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



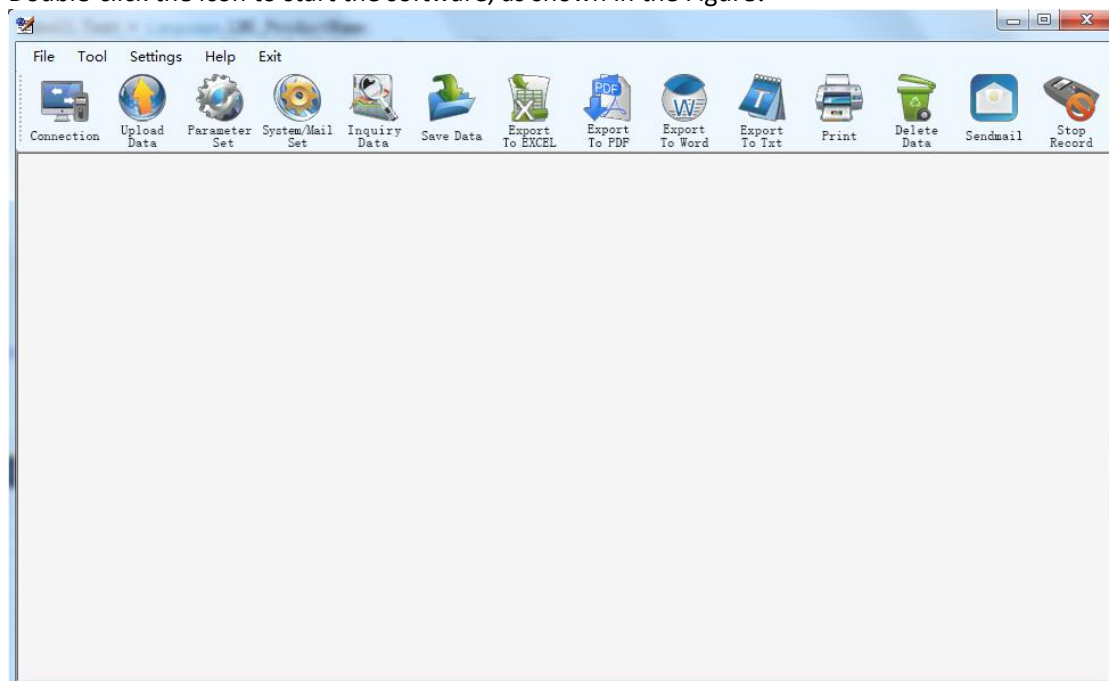
Click Next until the installation is successful.

## 5、 Use Introduction

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

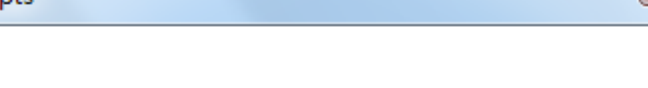


Double-click the icon to start the software, as shown in the Figure:





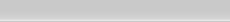
Connect the recorder and read the logger parameters and display parameters details.

[illegible]

Prompts

Inconsistent time between data logger and system, whether self-synchronizing the time?

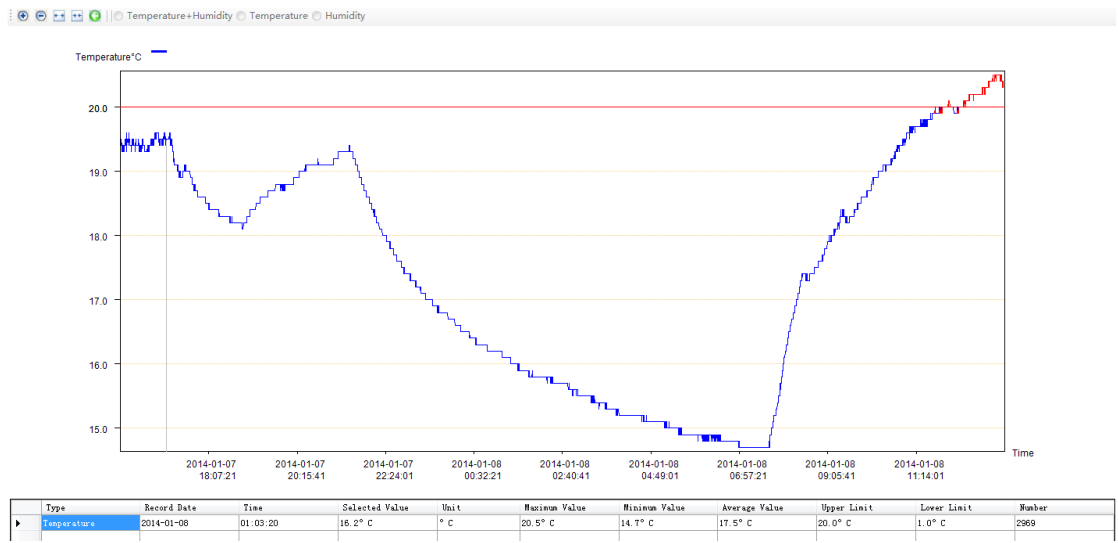
是(Y) 否(N)



A screenshot of a Windows XP window titled "Uploading Data1000/17571". The window has a standard Windows XP title bar with a close button (X) in the top right corner. The main content area shows the text "Uploading Data1000/17571" followed by "5.6 %". Below the text is a progress bar that is approximately 5.6% full, indicated by a green segment on the left. The window is set against a black background.

## 8





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.

### 5.3.2 Data record list

	Number	Time	Temperature° C
▶	1	2014-01-07 15:59:12	19.6
	2	2014-01-07 15:59:23	19.6
	3	2014-01-07 15:59:34	19.5
	4	2014-01-07 15:59:45	19.4
	5	2014-01-07 15:59:56	19.4
	6	2014-01-07 16:00:07	19.4
	7	2014-01-07 16:00:18	19.4
	8	2014-01-07 16:00:29	19.5
	9	2014-01-07 16:00:40	19.5
	10	2014-01-07 16:00:51	19.4
	11	2014-01-07 16:01:02	19.3
	12	2014-01-07 16:01:13	19.3
	13	2014-01-07 16:01:24	19.4
	14	2014-01-07 16:01:35	19.4
	15	2014-01-07 16:01:46	19.3
	16	2014-01-07 16:01:57	19.4

Display uploaded, or inquired data record

Temperature which exceeds the upper/lower limit display in red font.

Only RC-4HA、RC-4HC will show the humidity data.

### 5.3.3 Ordinary item

User Information	
Number	Interval
001	0:0:11 H:M:S
Delay Time	Data Sum
0.0 H	7000
Start Time	End Time
2014-01-07 15:59:12 ▼	2014-01-08 13:22:21 ▼
TemperatureAlarm Upper Limit	TemperatureAlarm Lower Limit
20.0° C	1.0° C
TemperatureMaximum	TemperatureMinimum
20.5° C	14.7° C
TemperatureAverage	
17.5° C	

Display the ordinary property information of data logger

Only RC-4HA、RC-4HC will show the humidity property.

5.3.4 Data Query

Data Name

Search Start Time

2014-01-07 15:59:12

Search End Time

2014-01-08 13:22:21

☒ TemperatureInquiry

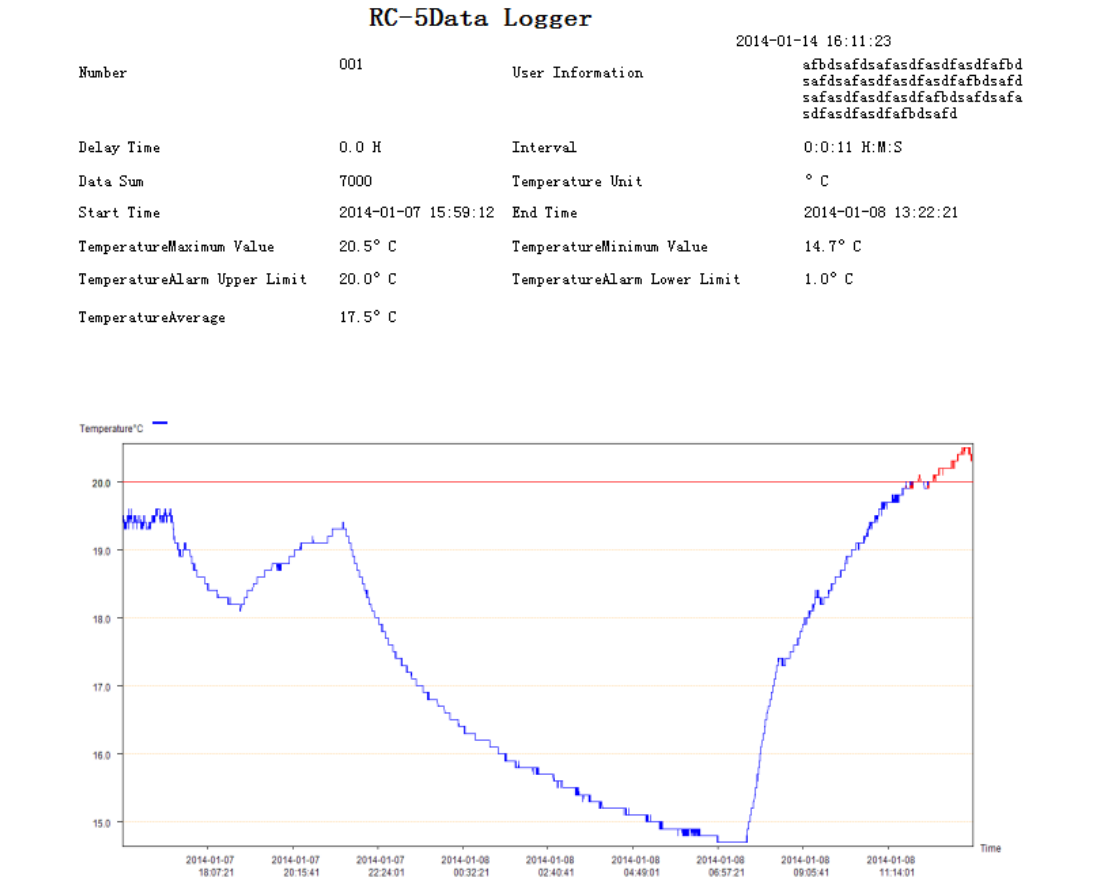
Temperature Upper Limit° C

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



Display statistical reports can be printed.



5.4、Parameter setting interface button

Enter the parameter setting interface, set the recorder parameters

Work Status

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

Record Property

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

Tone Set

Temperature Unit

° C

TemperatureUpper Limit

20.0

° C

TemperatureLower Limit

1.0

° C

TemperatureCalibration

-1.2

° C

HumidityUpper Limit

%RH

HumidityLower Limit

%RH

HumidityCalibration

%RH

Clock

2014-01-14 16:11:48

Set Clock Of Data Logger

Number

001

Maximum input characters or numbers 10

Set Numbers

User Information

afbdafdsafasfdafsdafsdafbdafdsafdsafasfdas  
dfasdfafbdafdsafasfdafsdafsdafbdafdsafaf  
asdfasfdafbdafdsaf

Maximum Input Characters 100

Set User Information

Clicking "Save" will clear all  
data of Data Logger

Save  
Parameter

Exit

5.4.1 Work status bar

Work Status

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.

12

**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

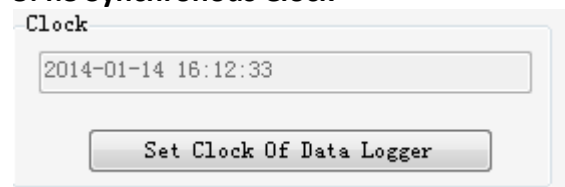
Temperature calibration - calibrate the temperature error of data logger.

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)

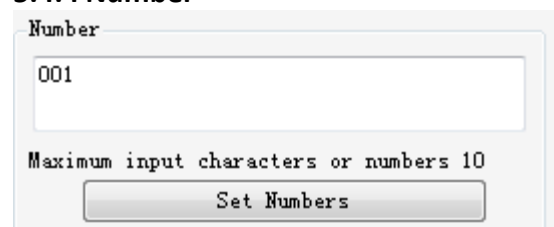
Humidity calibration - calibrate the Humidity error of data logger. (Only RC-4HA、RC-4HC have this function)

### 5.4.3 Synchronous Clock



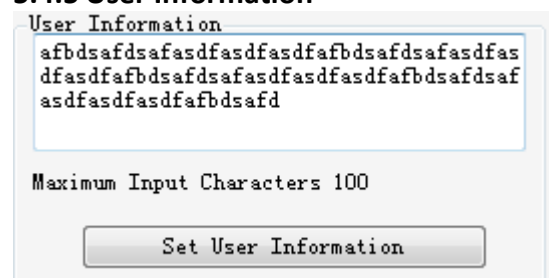
Data logger Clock - Display and set the current time of data logger.

### 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)

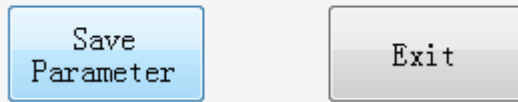
### 5.4.5 User Information



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

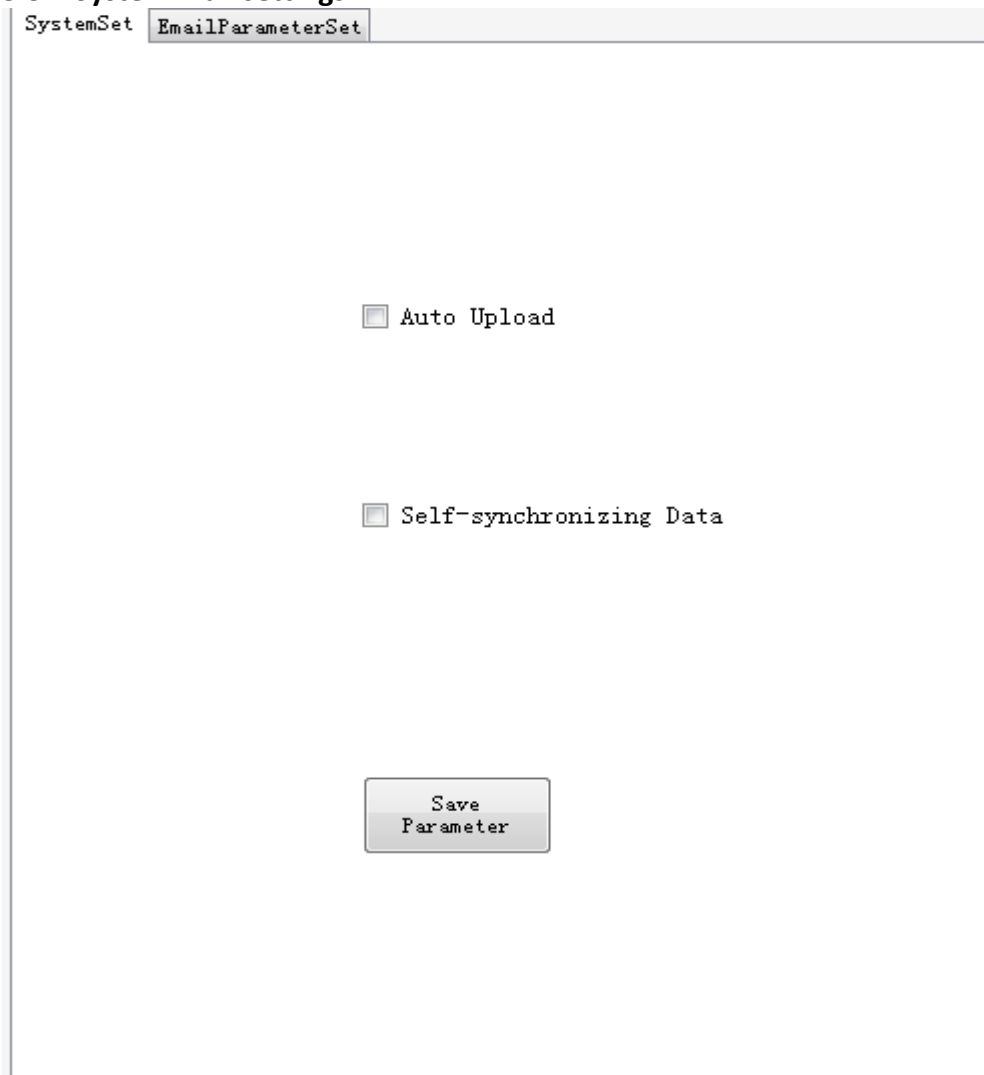


**Parameters saving**--- save the property value to the data logger. (Note: the parameters saving will clear the data in the data logger, please save the data in advance.)



## 5.5、System mail settings

### 5.5.1 System mail settings



**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="12345678901234567890123456789012345678"/>	
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.

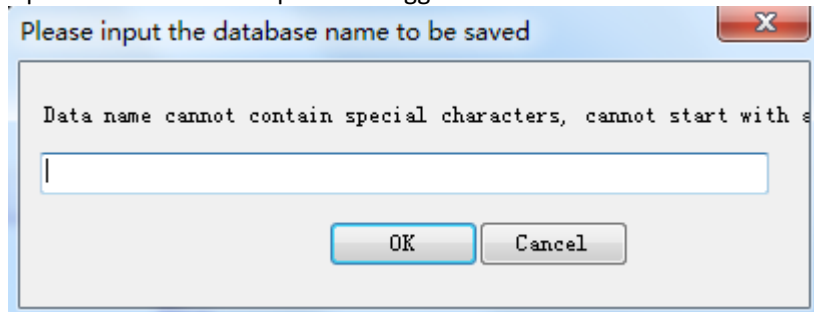
Details referring to 3.3-3.5





### 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.