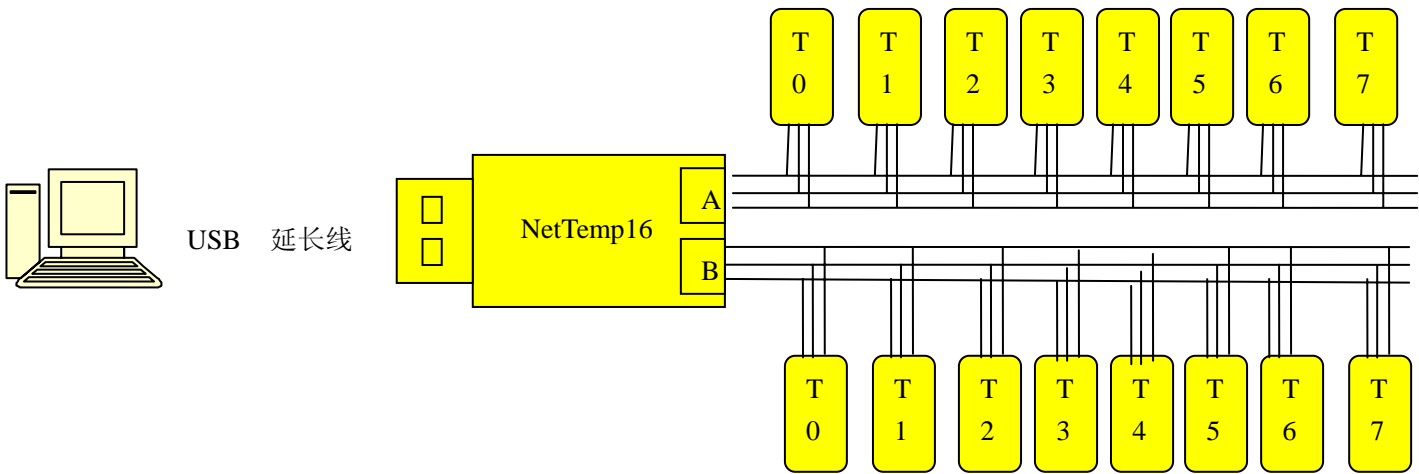


Operating Instruction of NetTemp16

Thank you for purchasing the NetTemp16 net temperature measuring system. Please read through the using instruction to know how to operate the device and to protect it.

1. Description

The NetTemp16 system has two channels and each one can connect at most 8 pieces of Tx sensors, and the length of the cable can most extend to 300 meter. The maximum length depends on the disturber of the environment. This system can be used to measure multi-point temperature in storage, cold storage, factory, office and so on. It is controlled by a computer to count and manage the data. The software can auto accomplish counting the data and create the curve , save the data to files, analyze the mix, min and the average of the records and so on. See the topological graph below:



2 Name ig Specification

(1) Packaging content:

配件名称 Amount TYPE	NetTemp16 Transducer	5m Extending Cables	3.5mm Cable Separated ware	3. 5mm Tx Sensor	USB Extending Cable	CD	USB HUB	Operating instruction	Others
NetTemp16_2	1pcs	2pcs	0	2pcs	-	1	-	1	
NetTemp16_4	1pcs	4pcs	4pcs	4pcs	-	1	-	1	
NetTemp16_8	1pcs	8pcs	6pcs	8pcs	-	1	-	1	
NetTemp16_16	1pcs	16pcs	14pcs	16pcs	-	1	-	1	

(2) Pictures of components



Pic 1 The NetTemp16 transducer metal shell



Pic 2 The sensores with



Pic 3 Type Y cable separated ware separated ware



Pic 4 Type T cable



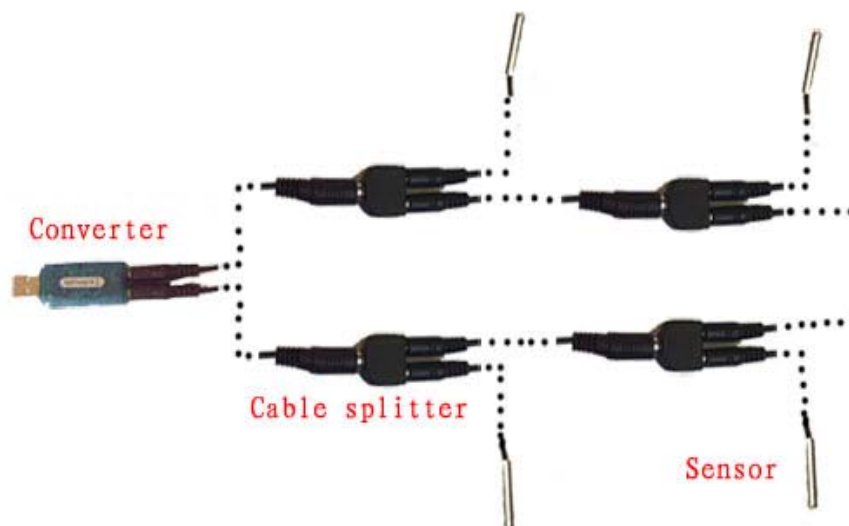
Pic 5 Type A USB HUB



Pic 6 Type B USB HUB



Pic 7 Audio-socket cable (5m)
(3) Entity connecting



Picture 8 Entity connecting

3. Function & Feature

- a) Range of measuring: -40~+120 C; -40~+248F;
- b) Resolution rate: 0.06C
- c) Precision:< 1.5C;
- d) Collecting speed:500m/s
- e) Electricity:< 10 mA; Voltage: 3~6V

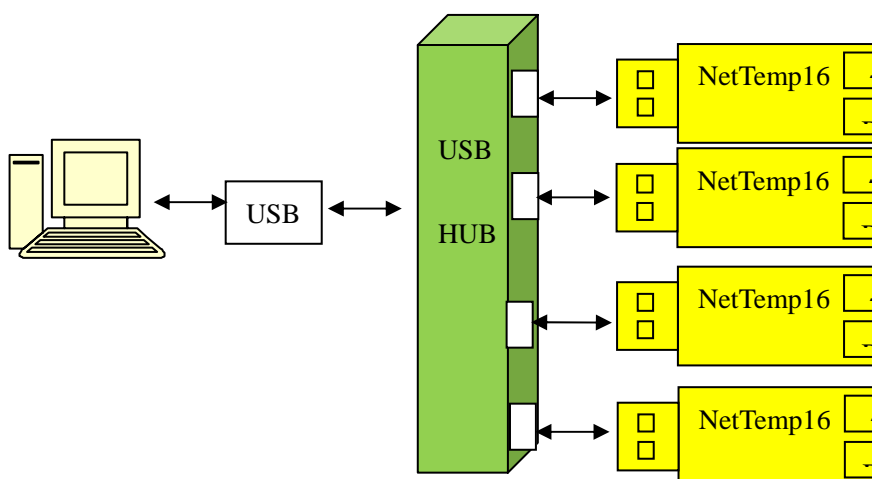
4. Function & Operating Instruction

a. Components connecting and extending

NetTemp16 has two normative audio-sockets of 3.5mm dia., channel A and channel B. Each channel connects with the sensors by a bus, which is made up of three signal cables, and each channel can connect at most 8 sensors. That is to say a NetTemp16 device can make up a net of 16 points at most.. If your system needs to measure more than 16 points as a large warehouse, you can connect more NetTemp devices to the computer. If there is not enough USB port you can use the USB HUB to enlarge it. See the picture showing below.

The longest length of the cables of each channel can be 300 meters. The largest distance depends on the quality of the cables, the molestation of electromagnetism in the environment and other factors. And if the records are tally with the validatory temperature, you can continue to extend the length of the cable.

We suggest you to use the screen cables to make up the net, and the diameter of the cable should be wide as possible, that the signal can be more steady.



b. Special sensor of the net temperature testing

The number of the sensor can't be same in the same channel of the net, otherwise the system will failure to identify them. The number of the sensor is assent to be T0,T1,T2,T3,T4,T5,T6,T7. When the system identifies the sensors connected in the channel, it will show the numbers of them automatically. Then the user can easily identify the number and the point.

The standard length of the cable of the Tx (from T0 to T7) is 1~5 meters. And if you need a special length you can book it from us. The shell of the sensors is protected from water and can be put into water or a wet environment. But note that if put it in a caustic environment, the metal shell may be cankered. You can brush some antirust on the face of it or do something else to protect it from canker.

c. Software and hardware installing

1) Software installing

You can set up the program of the CD or to download it from our website:

a) Install the USB driver

b) Install dotnetfx.exe, if your computer system is Vista, may be you don't need to install this process. Dotnetfx.exe is framework 2.0 of Microsoft, you can download it from the website of Microsoft;

c) Decompress NetTemp16.rar to you computer, and running NetTemp16\NetTemp16.exe.

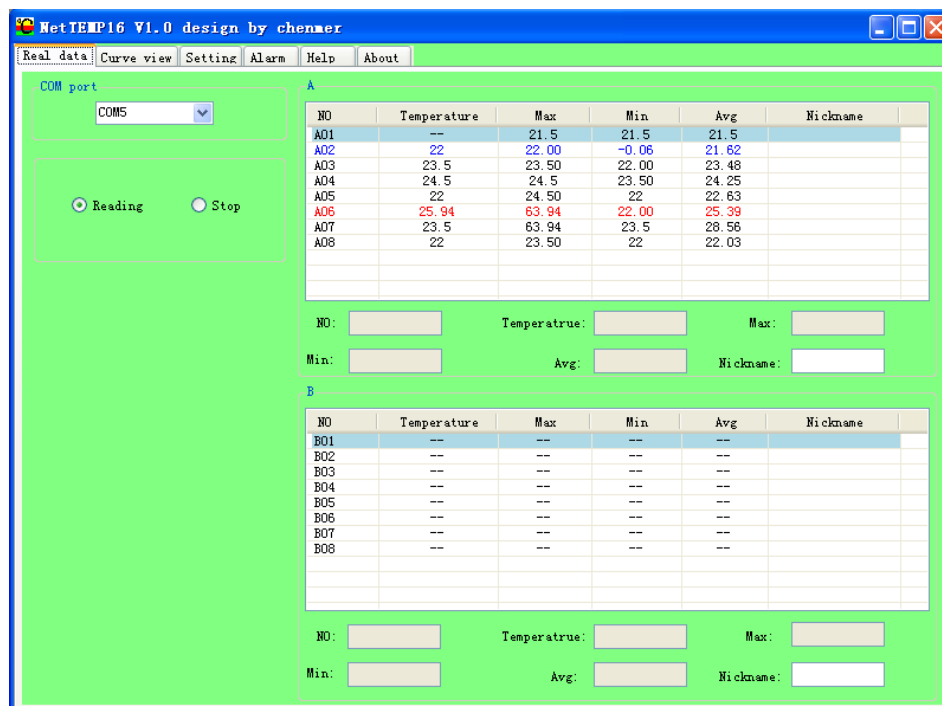
2) Hardware installing

Plug you device to the USB port to connect it to your computer. If it is plugged correctly, you can see the red LED is turned on. Then add the sensors to the device according to your need.

d. Using instruction

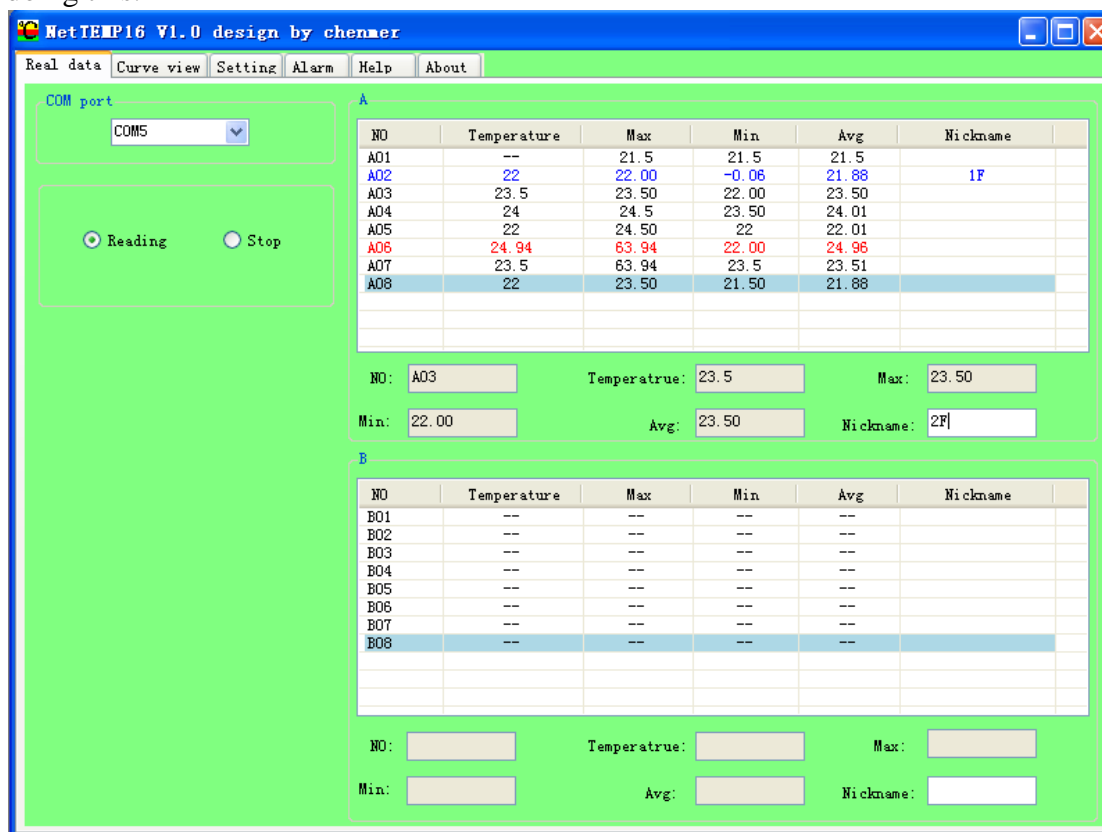
1) Real data

Connect the device to you PC and running the NetTemp16.exe, and click the real data to see the data form. You can see the COM port number showing on the window. And the data form includes the max, min, average of the temperature. The system can identify the sensor exist on the channel and show the reading records on the data form. If there is no data shows, may be the sensor is not exist or there is something wrong with it. And the system can show the highest and the lowest temperature about the 8 sensor in a same channel. The highest records are red, and the lowest is blue. See the picture showing below:



Picture 9 Real data

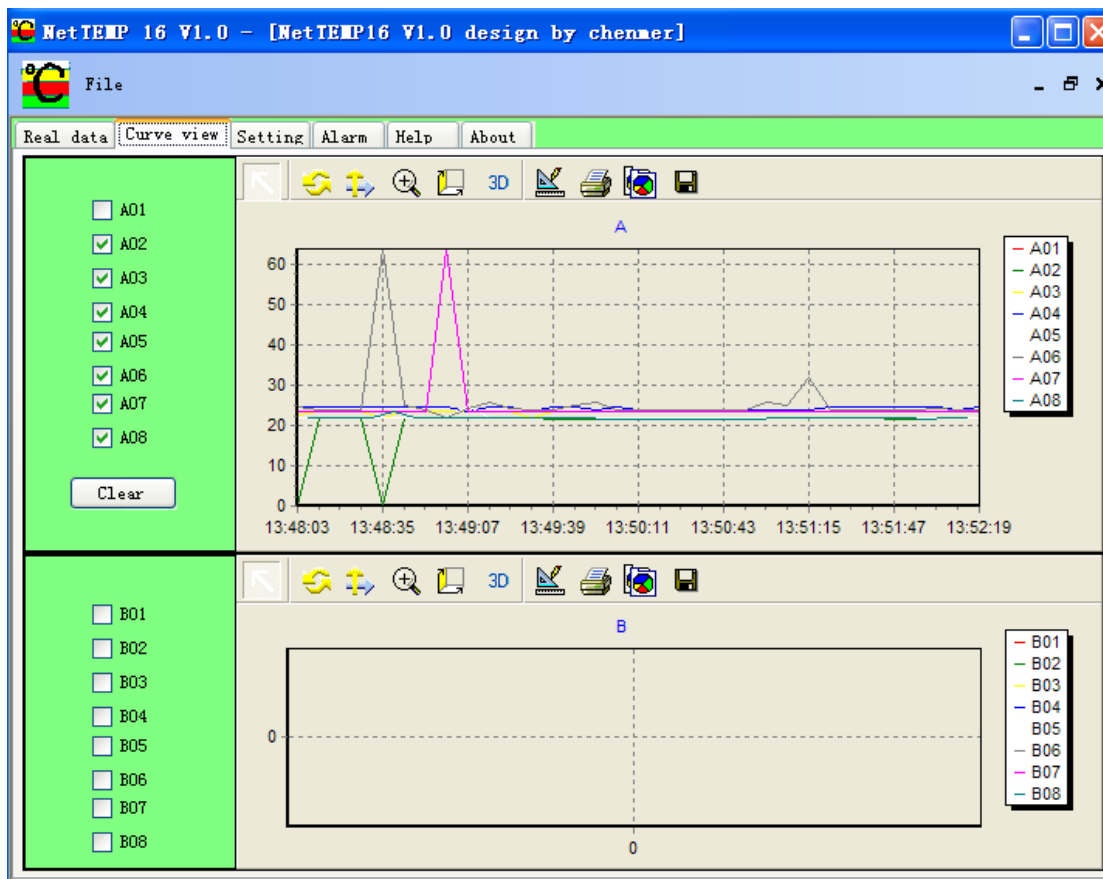
Though the system has a name for each sensor, users can set another name to help to identify the sensor and the testing place. For example, the A02 sensor is testing the temperature in the first floor of the storage, you can click the A02 on the data form, then the information of this sensor will show on the table below the data form, and you can key in a new Nickname "1F" for the sensor A02. When you move the mouse away, you can see the Nickname will show on the data form. You can set Nickname for other sensor as doing this.



Picture 10 Set nickname

2) Curve view

Click the “Curve view” option to see the curve graph of the data. There are two channels of this device A and B, and the curve graph is also has two form for these two channel. The channel A is showing on the first form. There are 8 colors for the 8 sensors of the channel. The system will check the sensors and show the curve of the records. You can see the small table on the left, if the sensor is not exists the table will not be select, and you can select it by click on it. But if you don’t want it to show all of the sensors, you can click to delete any one of it. Or click the button “cleat” to delete them all first, then select the one you want to see.



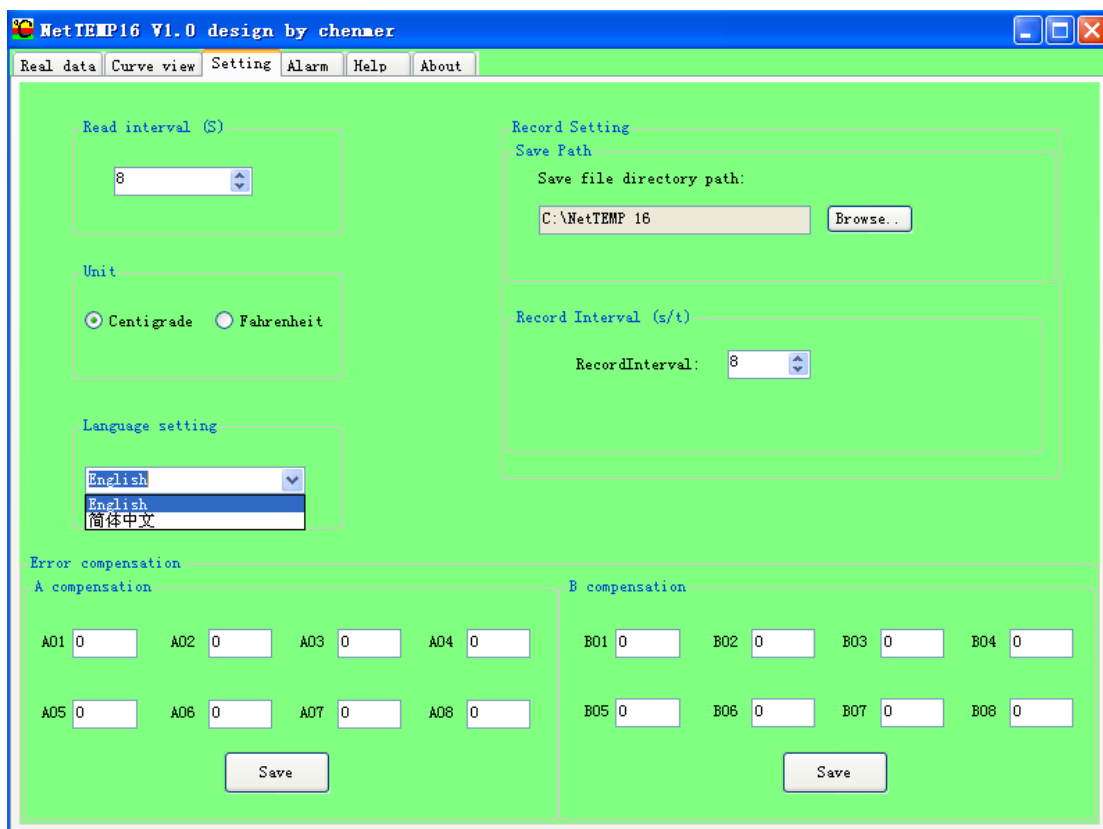
Picture 11 Curve view

The function button is the same as the other thermometer. It can move, change, print and save the curve graph.

3) Setting

On the setting option, you can transfer the language and the measuring unit, and the reading and record interval. **Note**, the number of the interval must be the multiple of 8, if not, the system will not work according your setting. The system will save the data to your PC, you can click the button “Browse” to change the file.

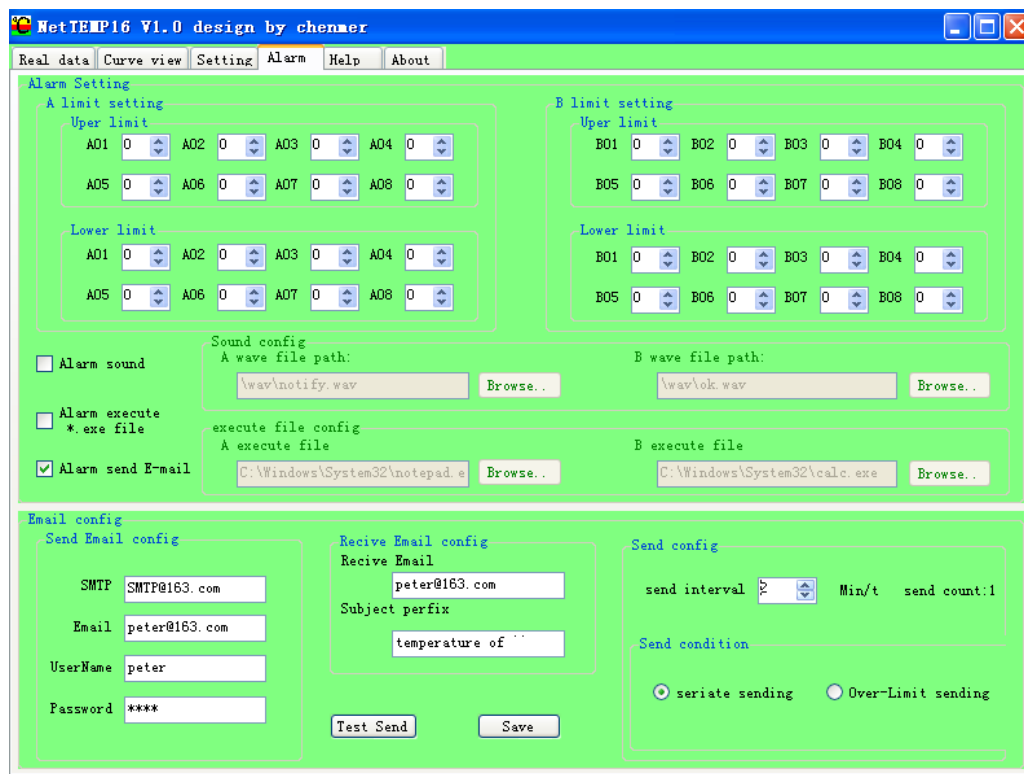
And the table on the below is for you to calibrate the temperature of the sensor.



Picture 12 Setting

4) Alarm

In the “Alarm” option, you can set the upper and lower limit of the 16 sensors. And you can see there are three modes to alarm the limit temperature, you can choose one of the three or choose them all. The first is alarm sound. Select the table and set the type of the alarm sound for both of the channel. Then if there is a record exceeds the limit, the system will sound as your setting.



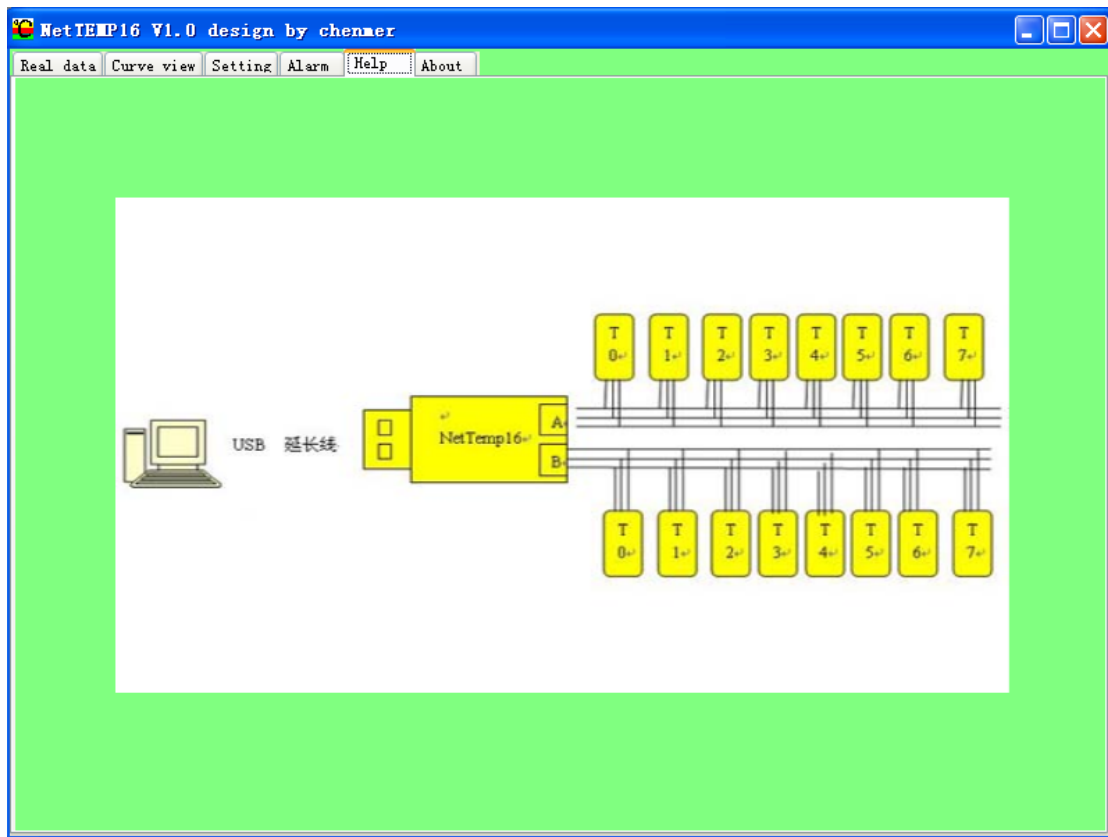
Picture 13 Alarm

The second is execute *.exe file. If you select this mode, when then the temperature exceed the limit, the system will open the file according to you setting to remind you.

The third is sending email. To send an email to your mailbox, you must set the basic information like SMTP, the mail address first. And you must choose one sending condition whether to send continuously or only send when the temperature exceeds the limit.

5) Help and about

On the “Help” and “About” you can see the topological graph of the system and the vision of the software.



Picture 14 Help