

# **YH-305DB Host computer software instruction manual**

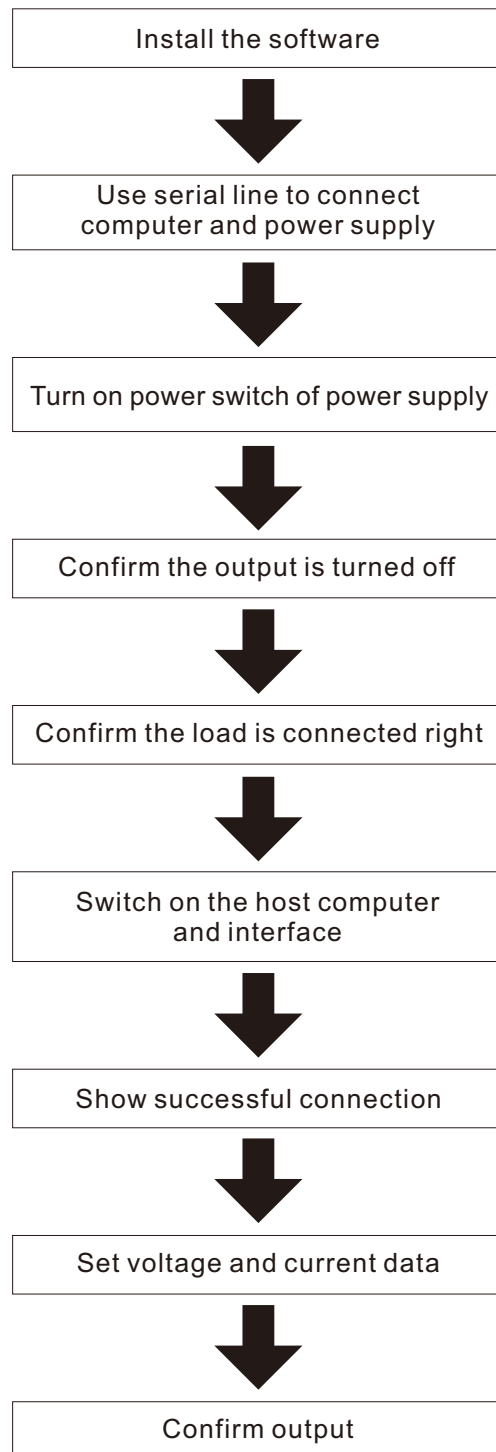
YH-305DB Digital program control power supply (Hereinafter referred to as) can connect with computer through serial port, In control room, computer can detect and control power equipment operation through control interface, about 0~20meters, if the computer can be Net Remote Control, there is no distance limit.

YH-305DB Host computer software system requirements:

Operating system: Windows XP, Windows 7

Display resolution: Automatic recognition resolution (800\*600~1440\*900 Pass the test)

## I. Host computer operate procedure, as figure 1-1



## II. Host computer software install introduce :

1. Please download it from our official website, After decompression, there are two folders, there are three files in interface folder, as figure 1



Figure 1

2. Double-Click setup. exe, enter the installation interface, as figure 2:



Figure 2

3. Click 'OK', if you want to change installation directory, please click "Change directories" then click install, as figure 3

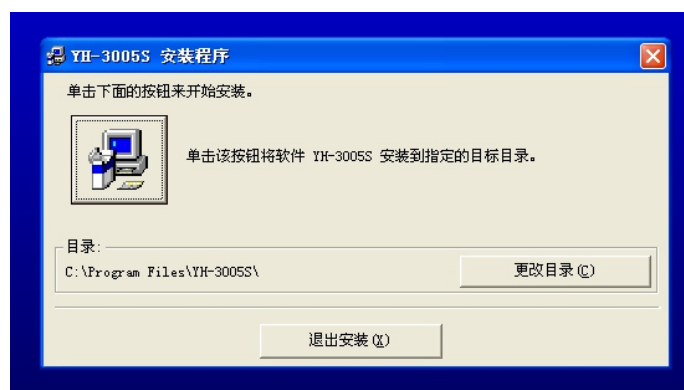


Figure 3

4. Enter interface as figure 4, click continue.

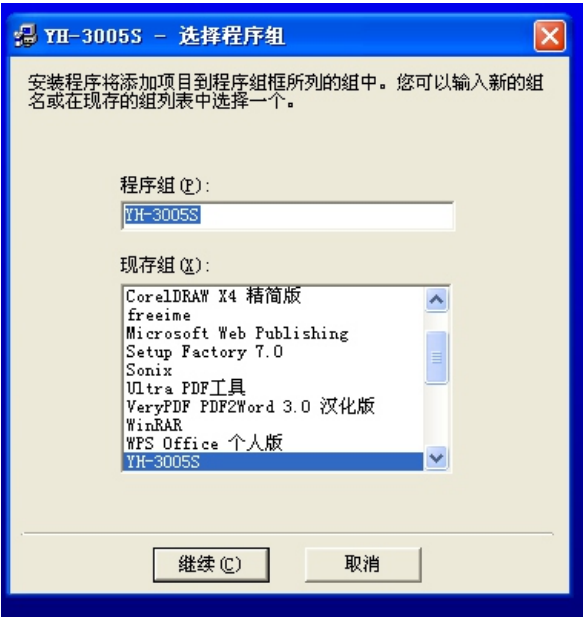


Figure 4

5. Enter interface as figure 5, wait for some time:

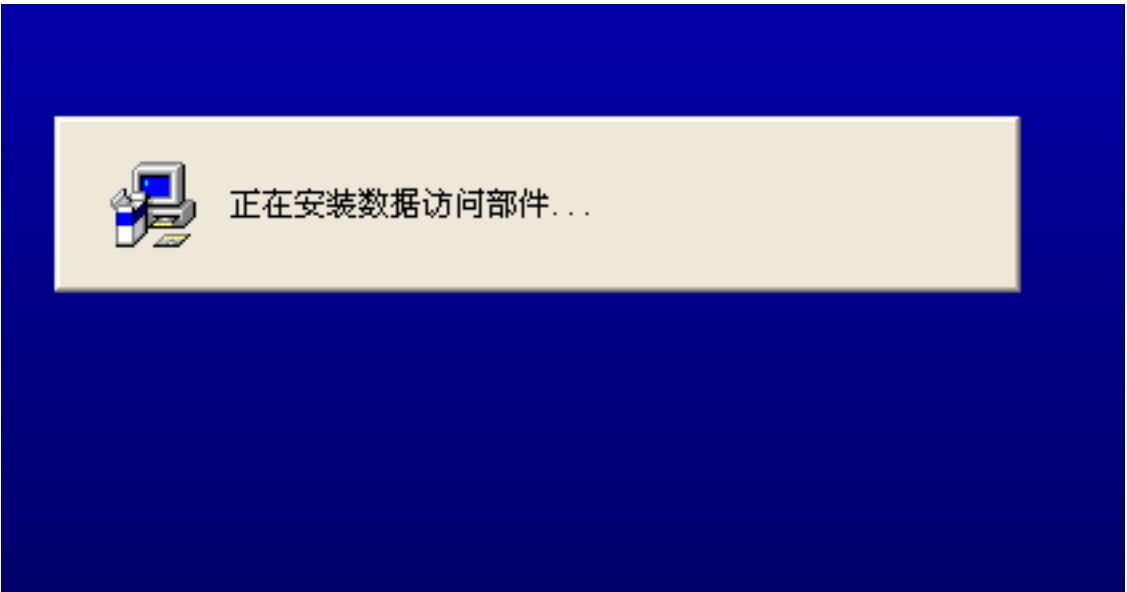


Figure 5

6. Enter installation procedure as figure 6, wait for some time:



Figure 6

7. Show successful installation, click 'OK', as figure 7. interface software installation finished and automatically exit the program.



Figure 7

### III. Serial port connection and drive installation:

Serial port connection types: USB and Rs232, USB connection need install drive FT232RL, this drive is in usbdrive folder. RS232 connection is no need drive.

#### 1. USB hardware connection and USB serial converter drive installation:

USB hardware connection:

One end of USB connection cable is square mouth, other is flat mouth. Square mouth is inserted in the rear panel of the power supply, flat mouth is inserted in anyone of the computer USB interface, as figure 8.

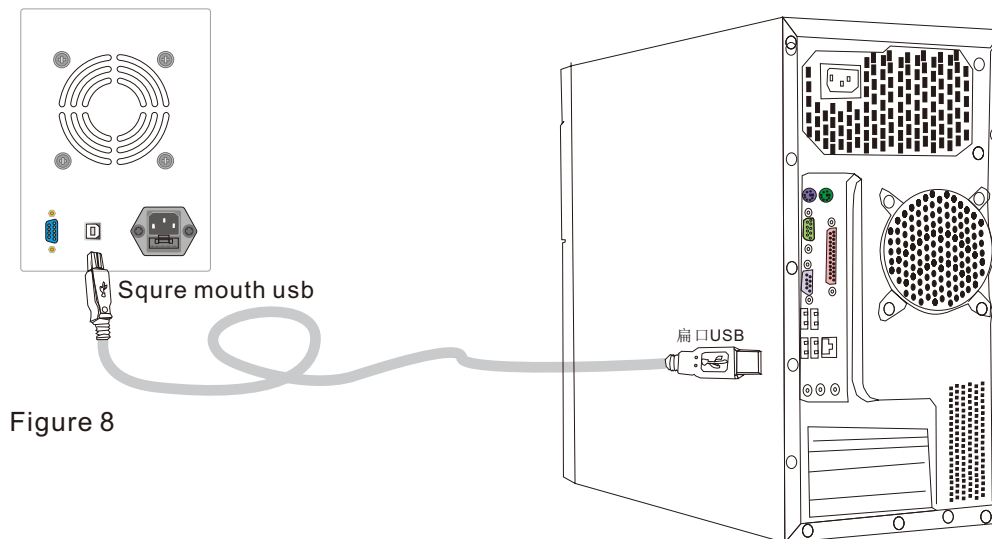


Figure 8

USB serial converter drive installation:

After connecting USB cable and switch on computer, turn on the power of power supply. System will show find new disk device and display interface to install drive. As figure 9:

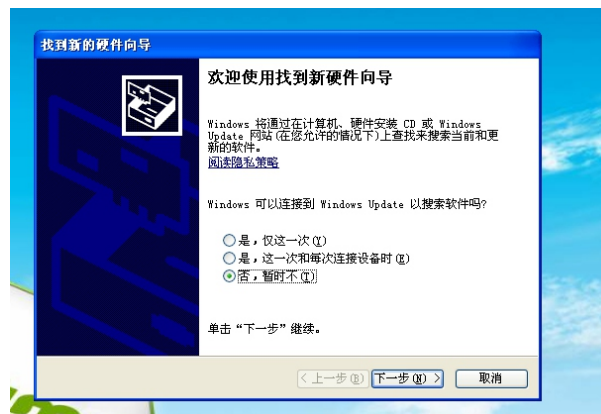


Figure 9

Choose as figure show, click next step, enter interface as figure 10:

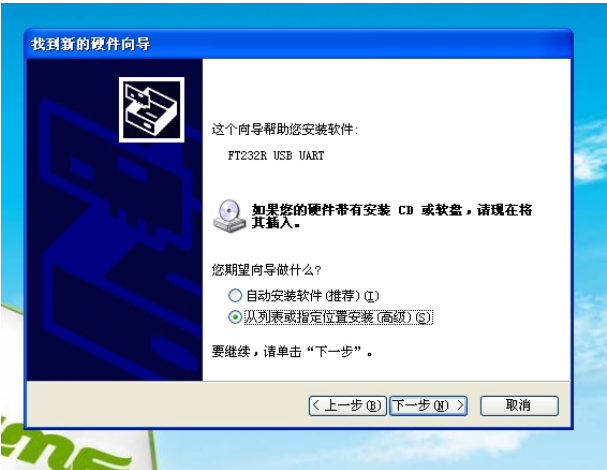


Figure 10

Choose as figure show, click next step, enter interface as figure 11:

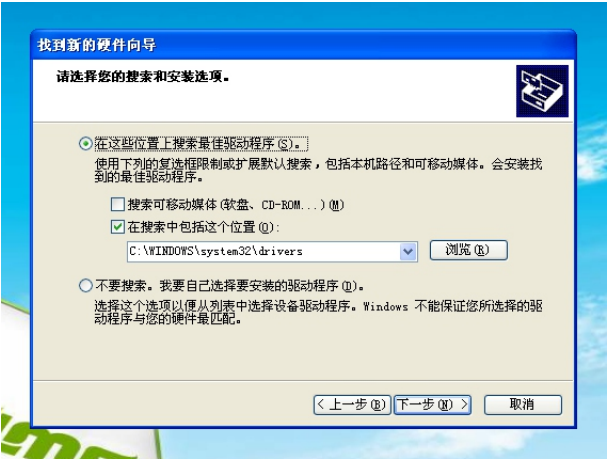


Figure 11

Choose as figure show, click browse button, choose folder "usbdrive" as figure 12

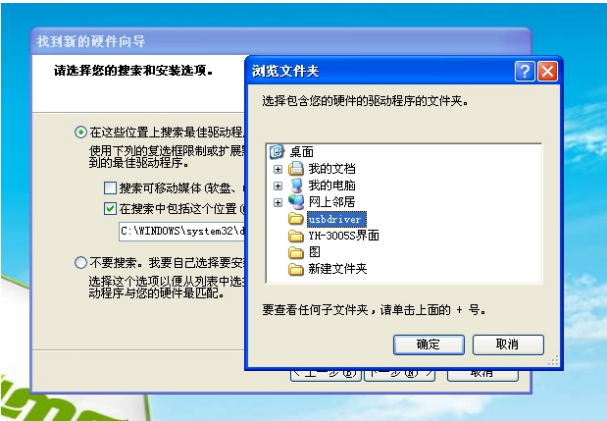


Figure 12

Choose folder “usbdrive” click OK, return to figure 13 interface, but the way has been changed into “usbdrive”, as figure 13, click next step.

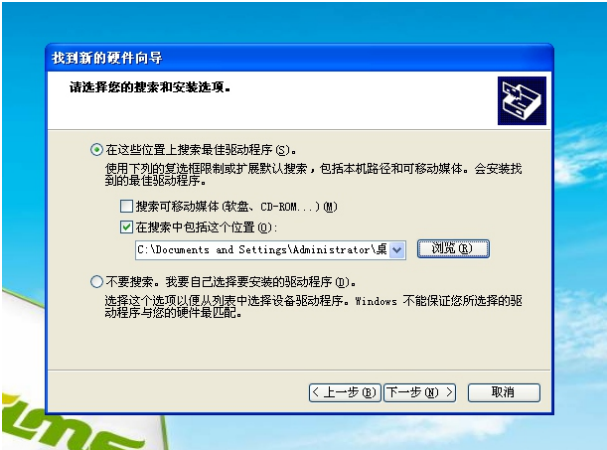


Figure 13

Show as figure 14, tips installing, wait for a while.

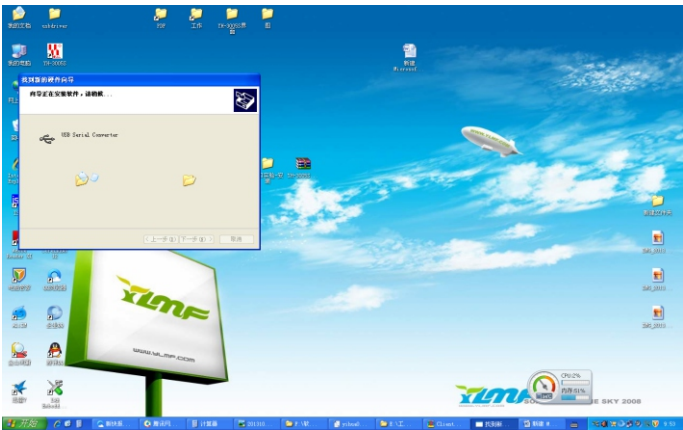


Figure 14

Show “USB Serial Converter” install finished, click finished button, as figure 15

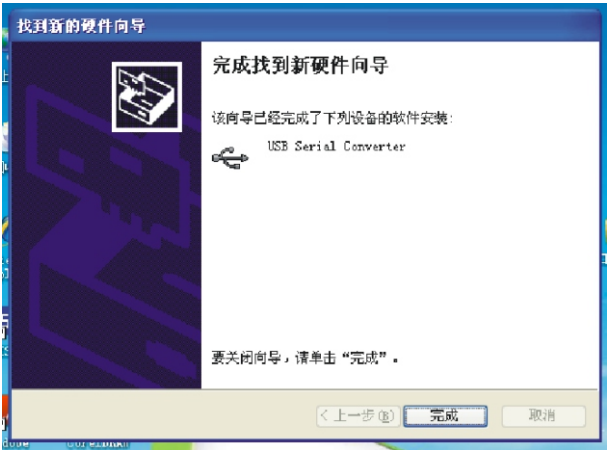


Figure 15



The lower right corner of desktop will show install “USB Serial Port” as figure 16



Figure 16

Next will show as figure 17, please repeat operate from figure 9 to 17 one more time.  
Show installing as figure 17, wait for a while.



Figure 17

Show “USB Serial Port” finished install, click finished button, as figure 18

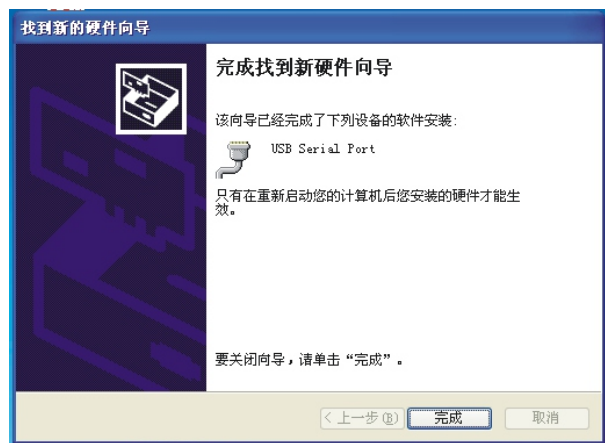


Figure 18

So far, USB drive is installed.

## 2. RS232 interface:

Use DB9 serial port connect host computer and power supply Rs232 Interface. As figure 19, Rs232 interface is no need drive.

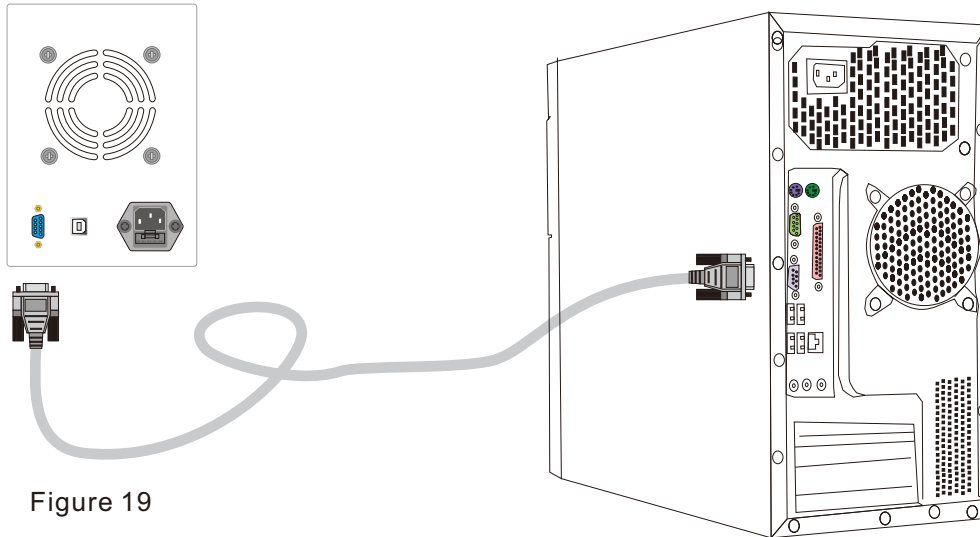


Figure 19

After Serial port cable connected, switch on the power of power supply, disconnect output (original is switched off), the load is connected right (connect output test, disconnect output when it be normal, to ensure power supply and the load can operate normally) wait for the successful connection between the host computer and power supply.

## IV. Host computer interface instruction manual:

### 1. Two methods to start host computer interface:

A. start ➡ all program ➡ YH-3005S group ➡  YH-3005S, as figure 20:

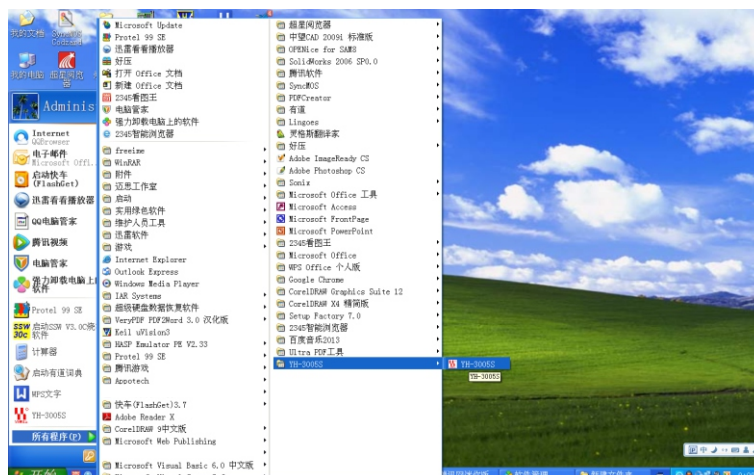



Figure 20

- B. Start ➡ all program ➡ YH-3005S group ➡  YH-3005S ➡ Right-click ➡ send to desktop shortcut ➡ as figure 21  
Next time you use it, can double click.

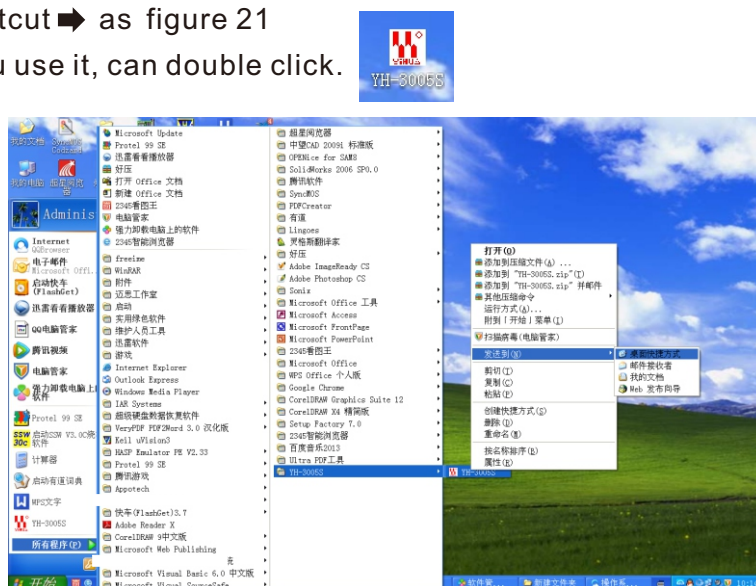


Figure 21

## 2. The whole interface as figure 22.

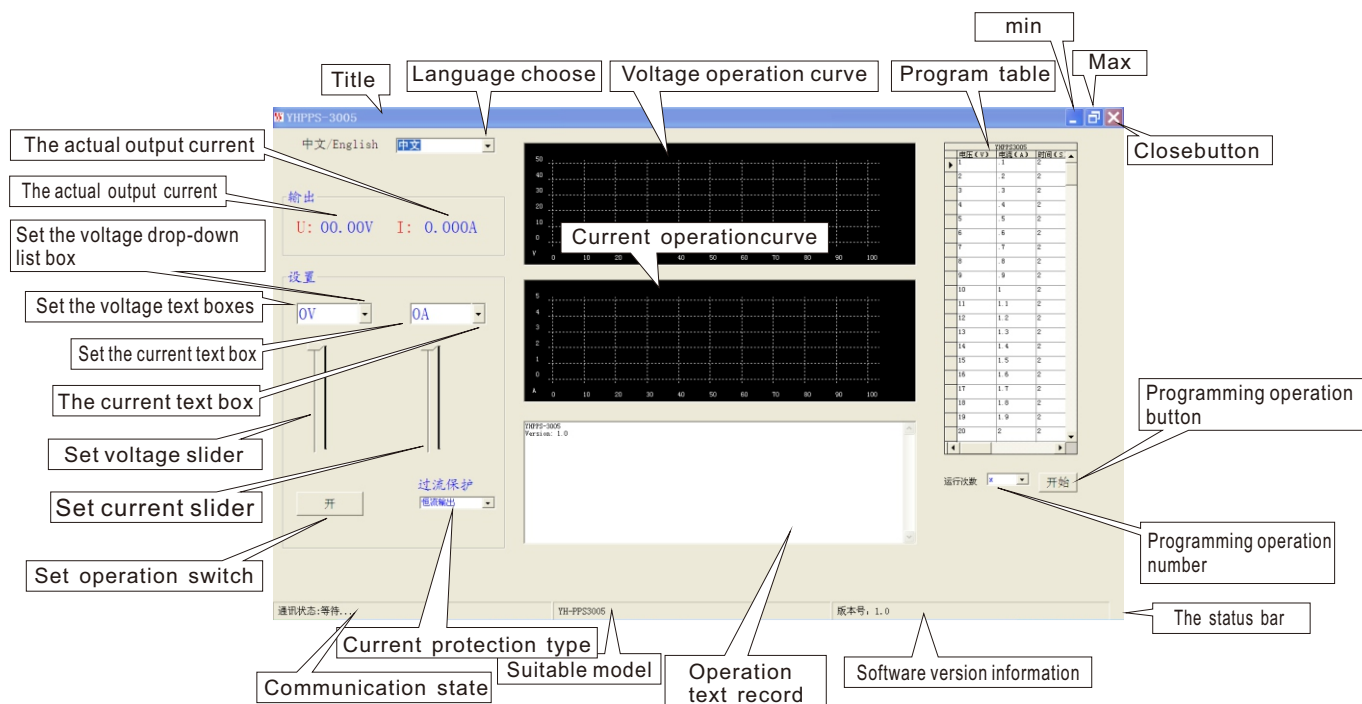
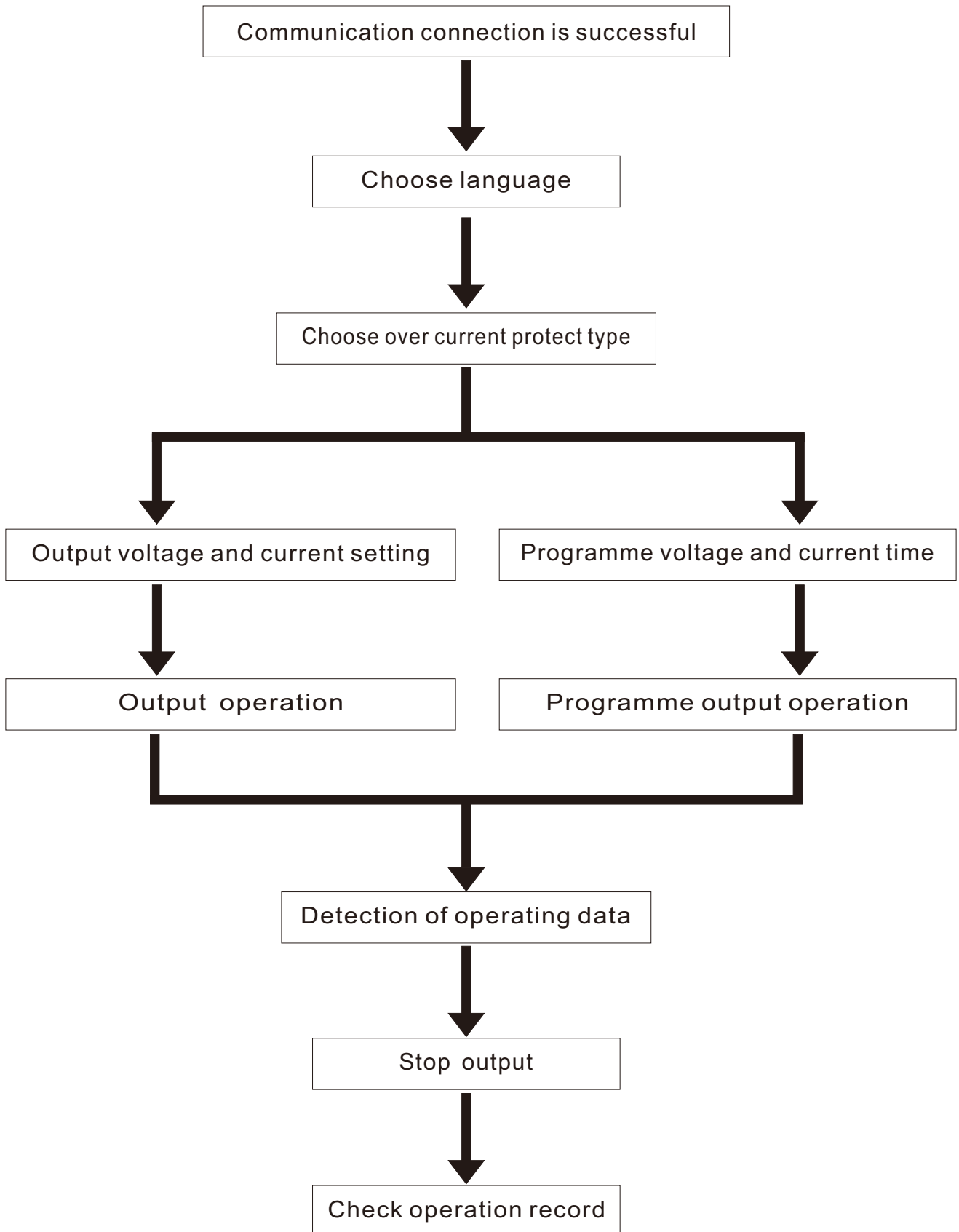


Figure 22

## Use step of interface



### 3. Communication connection

#### Automatic port scanning:

After open the interface, software will scan cycle COM1~COM15 usable port, send identification code and data to power supply. When receive response signal, will lock port, enter normal work mode, in normal work mode if can not detect signal for long time, begin to automatic port scan.

#### Communication state:

When performing the port scanning program automatically, shows “wait”, “operation” and “ON/OFF” button would not response. When receive right response signal of power supply, shows “successful connection” as figure 23 “operation” and “ON/OFF” button would response.

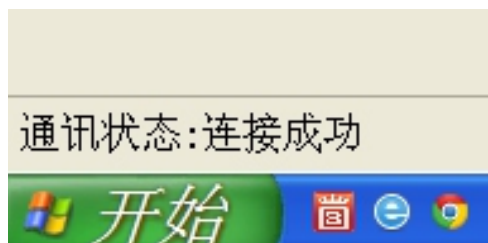


Figure 23

Normally, it will cost 2~7 seconds to connect, if failure to connect over 3 minutes, please check ground wire is normal (if the quality of connect cable is very poor, data lost or unable to connect), USB drive, computer's port (The test can be involved in other port or Check the device manager port, as figure 24) and the port of power supply whether to be good.

When power supply serial port line is connected ,it would appear this port, unplug serial port line ,this port will disappear.

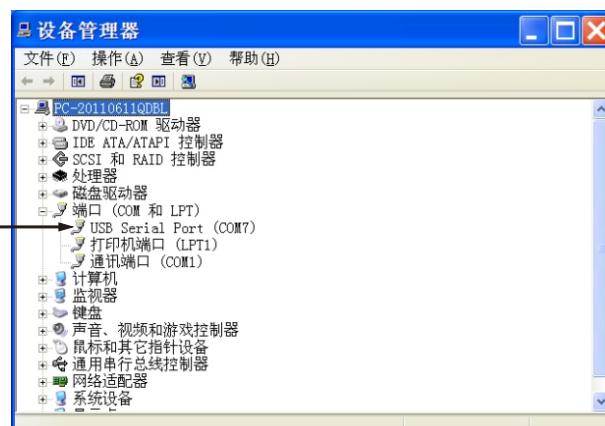


Figure 24

**4. Choose language:**

Chinese / English list choose, as figure 25

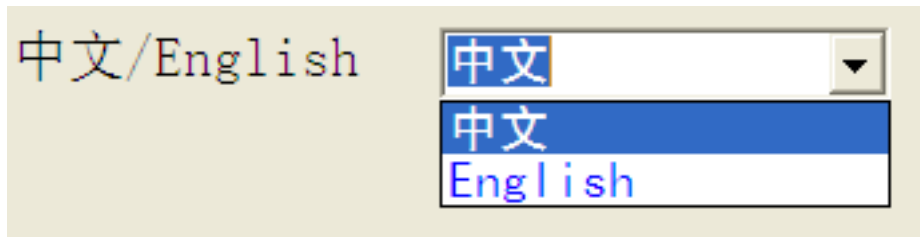


Figure 25

**5. Current protection type:**

Constant current output/over current shutoff list choose ,as figure 26

When Current protection is set to constant, Output power to set the current largest effective protection power equipment damage due to the load is too small.

When Current protection is set to over current shutoff, The power output current reaches the set current Output power device will automatically cut off power supply, effective protect power equipment and load, do not set too low current (lower than 20mA), to avoid protecting when charging.

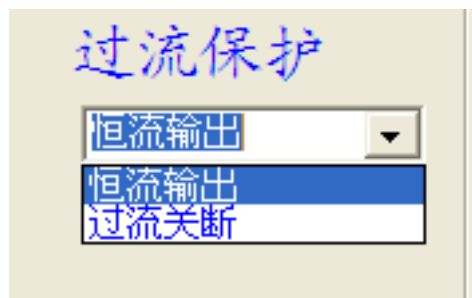


Figure 26

## 6. Voltage and current Output set:

Three method to set Voltage and current :The text box input, Drop-down list box, The slider. When with load equipment and power supply for the output state, Be careful to adjust voltage and current, can't beyond the scope of load setting safety voltage and current, you'd better confirm set the voltage and current data, and then connect output load.

### Voltage setting method:

- A. The text box input: Enter no more than 31 of four positive number, Two integers+decimal point+Two decimal places

For example, "10.00" or "10.00V", later, set voltage 10.00V

When the input data format is not correct, Prompt error message, as figure 27, press OK, The input is invalid.

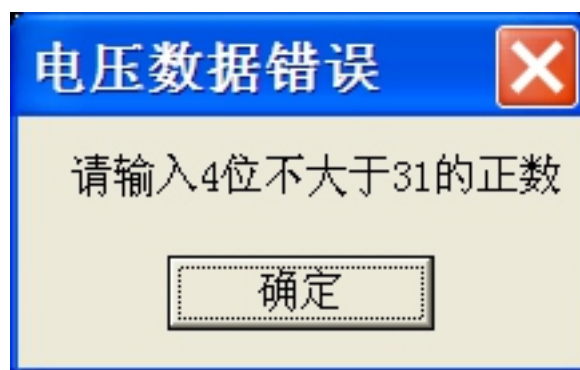


Figure 27

- B. Drop-down list box: Click the voltage list box arrow, then click the voltage you need, as figure 28

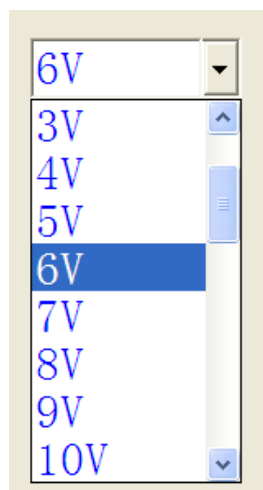


Figure 28

C. set voltage slider input: Hold the sliding handle the position of need data as figure 29

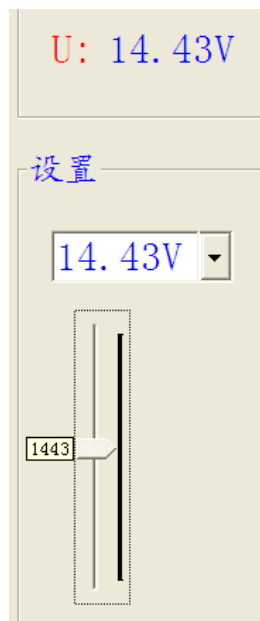


Figure 29

#### Current setting methods:

- A. The text box input: Enter no more than 5. 1 of four positive number, One integer+decimal point+three decimal places  
For example, "1.000" or "1.000A", later, set current 1. 000A  
When the input data format is not correct, Prompt error message, as figure 30:  
press OK, The input is invalid.

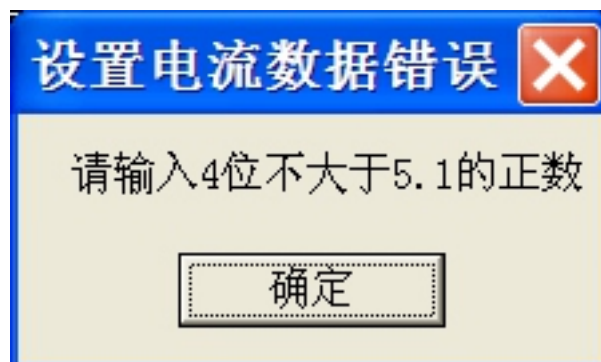


Figure 30



- B. Drop-down list box: Click the Current list box arrow, then click the Current you need, as figure 31

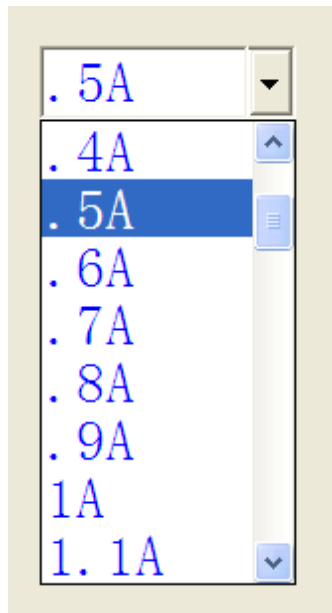


Figure 31

- C. Set Current slider input: Hold the sliding handle the position of need data, as figure 32

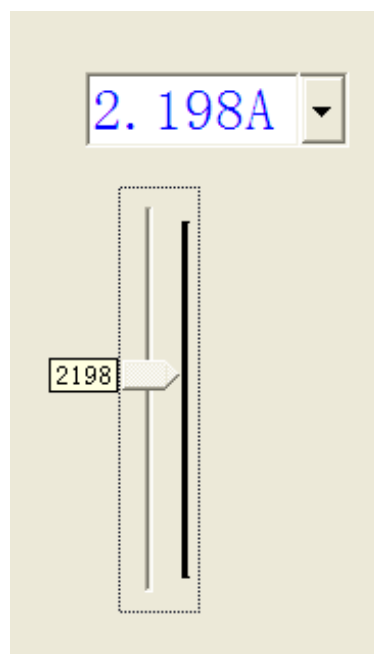


Figure 32

## 7. Output button:

Click output button, if output state is “on” (the button is green, as figure 33) then Close the output, if output state is “OFF” (the button is grey), then open the output.



Figure 33

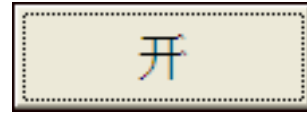


Figure 34

## 8. The output operation monitoring:

- A. Output terminal voltage current real-time display of power supply, as figure 35  
The comes back real-time display terminal voltage and current data. To monitor the supply situation of load at any time.

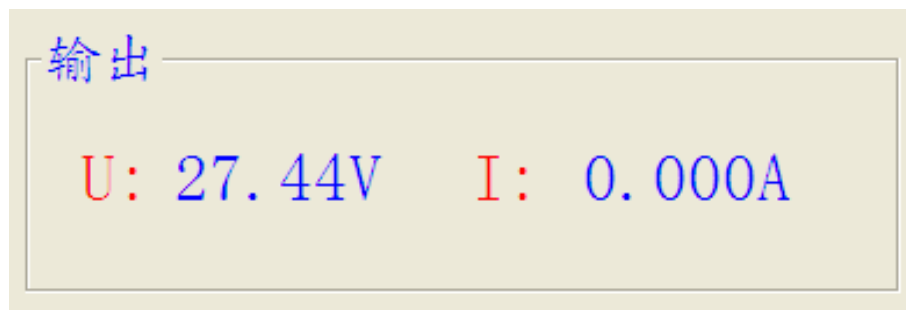


Figure 35

- B. Voltage operating curve, as figure 36:  
When output state is “ON”, the curve graph of voltage data and time.

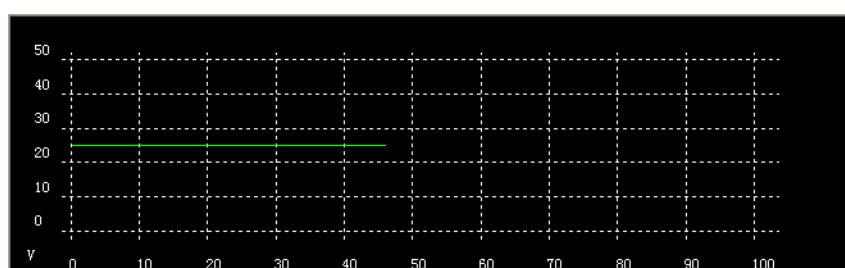


Figure 36

C. Current operating curve, as figure 37:

When output state is “ON”, the curve graph of Current data and time.

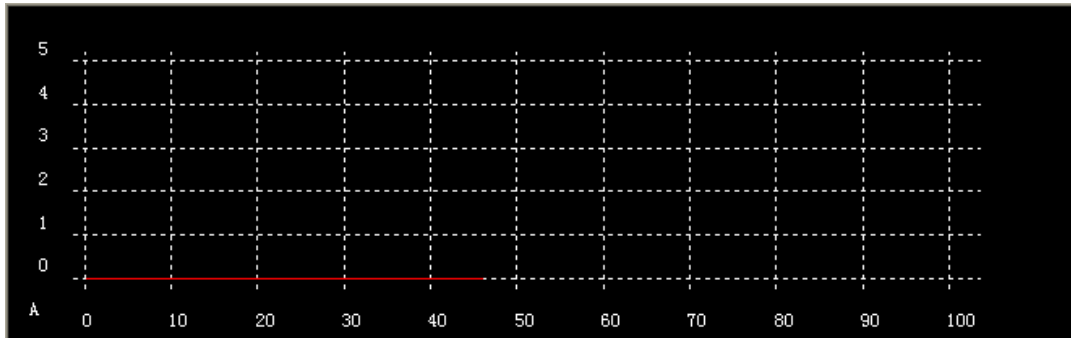


Figure 37

Voltage and current operating data text log files

When output state is ‘ON’, real-time display voltage and current data; when output is OFF, save the files in host computer where you installed. The last line of the file is the save path.

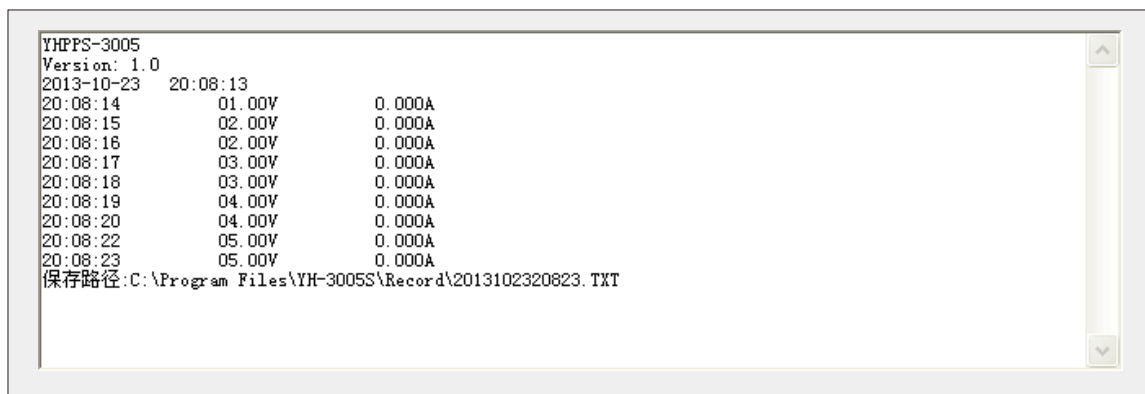


Figure 38

# 9. Programme operation



Interface form editor  
After editing interface form, will be automatically saved

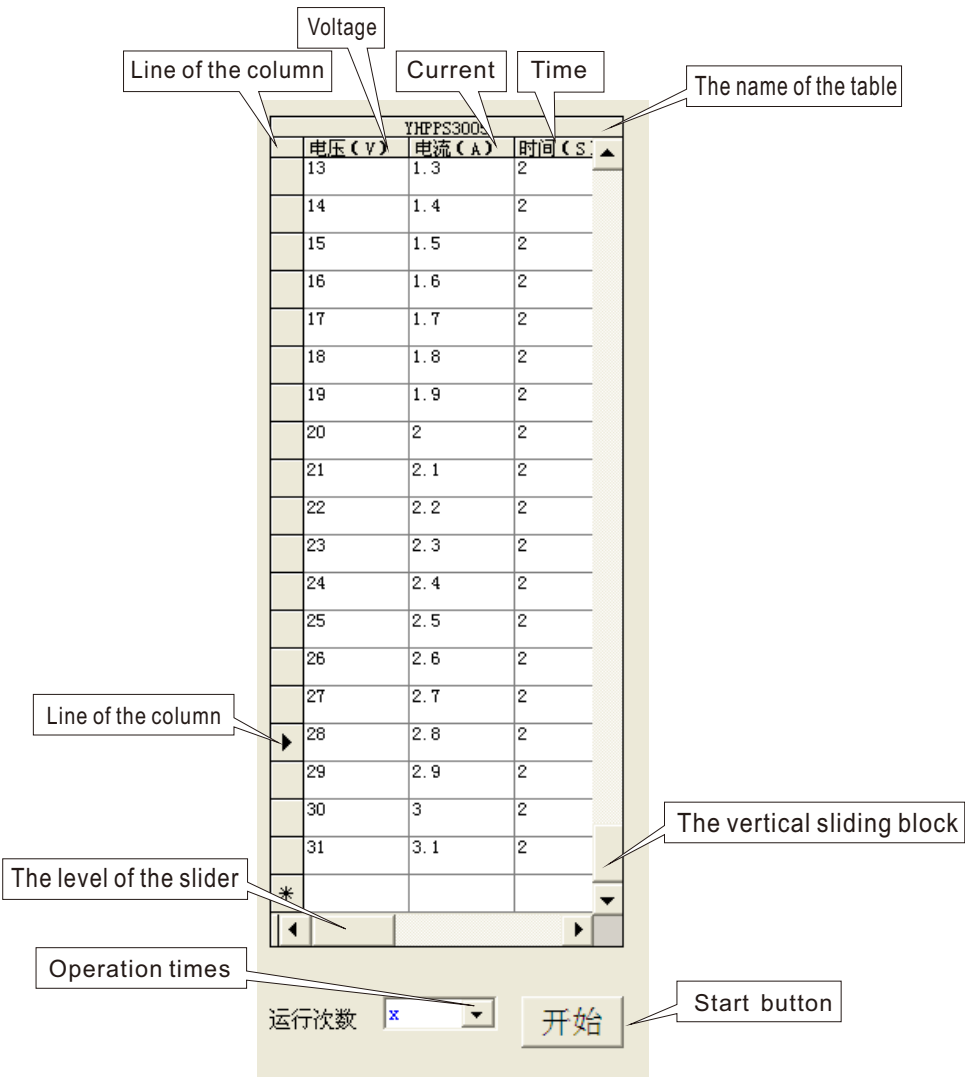


Figure 39

- A. Delete row  
Click to output a line with the column, Line mark to the bank and the entire line is selected.  
Click the delete button. ("Delete") as figure40.

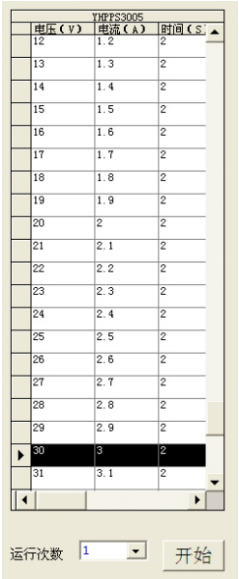


Figure 40

- B. Add row:  
The last row of the table is blank, when need to add one row, input data in the blank line.  
If need to add several lines, click the last line of the colum, it will automatically add one blank line .as figure 41

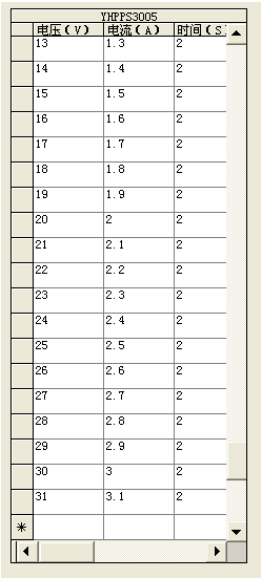


Figure 41

C. Editor the voltage cell :

Click the voltage cell you need to editor, modify it to the voltage data you need, as figure 42. But the data format must be right: Nomore than31 positive number, The integer should be no more than 2, The decimal should be no more than 2

For example:

YHPFS3005			
	电压 (V)	电流 (A)	时间 (S)
1	.1	.1	2
2	22.22	.2	2
3	.3	.3	2
4	.4	.4	2
5	.5	.5	2
6	.6	.6	2
7	.7	.7	2
8	.8	.8	2
9	.9	.9	2
10	1	1	2
11	1.1	1.1	2
12	1.2	1.2	2
13	1.3	1.3	2
14	1.4	1.4	2
15	1.5	1.5	2
16	1.6	1.6	2
17	1.7	1.7	2
18	1.8	1.8	2
19	1.9	1.9	2
20	2	2	2

Figure 42

If the data format is not correct, there will appear error when programme, as figure 43

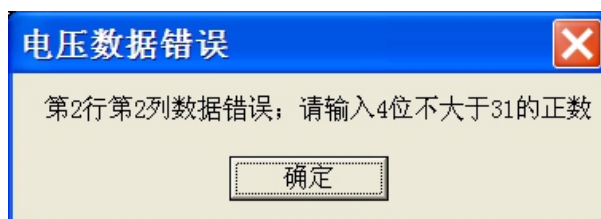


Figure 43

D. Editor the current cell:

Click the current cell you need to editor, modify it to the current data you need, as figure 44. But the data format must be right: nomore than5.1 positive number, The integer should be no more than 1,The decimal should be no more than 3

For example:

YHPFS3005			
	电压 (V)	电流 (A)	时间 (S)
1		.1	2
2		2.222	2
3		.3	2
4		.4	2
5		.5	2
6		.6	2
7		.7	2
8		.8	2
9		.9	2
10		1	2
11		1.1	2
12		1.2	2
13		1.3	2
14		1.4	2
15		1.5	2
16		1.6	2
17		1.7	2
18		1.8	2
19		1.9	2
20		2	2

Figure 44

If the data format is not correct, there will appear error when programme, as figure 45

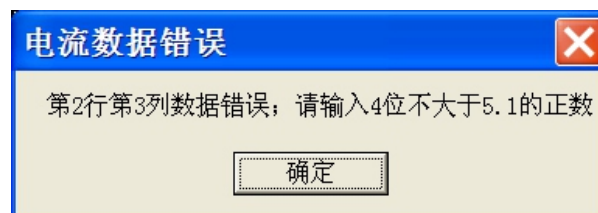


Figure 45

E. Editor the time cell:

Click the time cell you need to editor, modify it to the current data you need, as figure 46.  
But the data format must be right: Nomore than32767 positive number.

YHPFS3005			
	电压 (V)	电流 (A)	时间 (S)
▶ 1	.1	.1	10
2	.2	.2	2
3	.3	.3	2
4	.4	.4	2
5	.5	.5	2
6	.6	.6	2
7	.7	.7	2
8	.8	.8	2
9	.9	.9	2
10	1	1	2
11	1.1	1.1	2
12	1.2	1.2	2
13	1.3	1.3	2
14	1.4	1.4	2
15	1.5	1.5	2
16	1.6	1.6	2
17	1.7	1.7	2
18	1.8	1.8	2
19	1.9	1.9	2
20	2	2	2

Figure 46

If the data format is not correct, there will be overflow error when programme. As figure 47.



Figure 47



## Use Office Access software form editor:

If your computer have installed Microsoft Office Access 2003/2007 software, use it to editor form, there are simple methods introduction following.

1. Find the install path of YH-3005S interface software. Nomally, "C:\Program Files\YH-3005S" (The path specified during installation), there are "db1.mdb" file, as figure 48, copy this file.

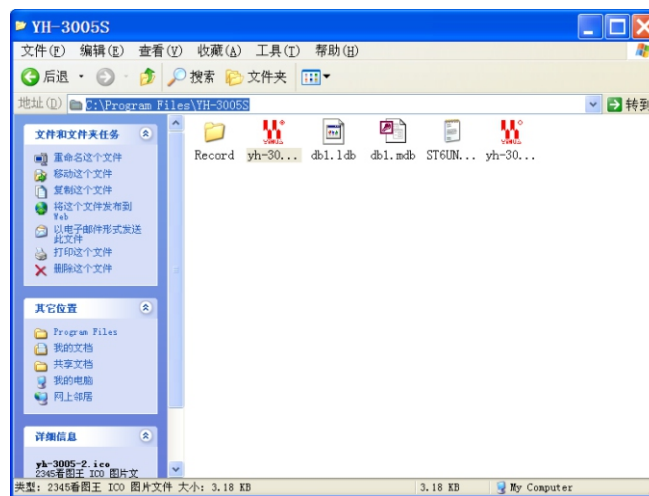


Figure 48

2. Create a new folder, copy the file to this new folder. As figure 49. DO not modify the file name, So next time when using this table, copy out directly cover as shown in figure 37 "db1. MDB files in the folder.

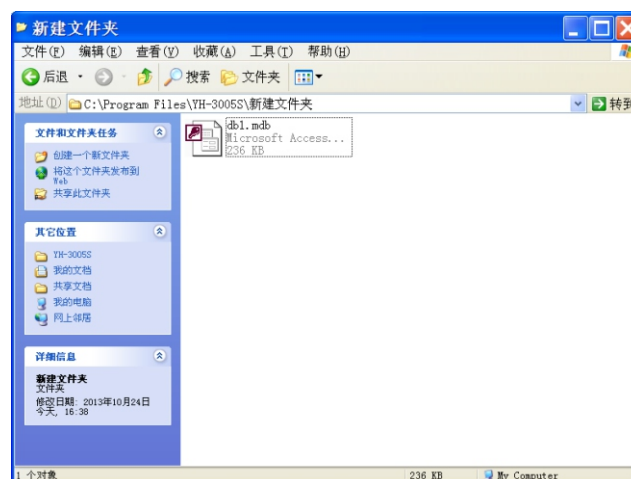



Figure 49

- Double-click the file “db1.mdb”, start Microsoft Office Access software, as figure 50.  
Double-click 

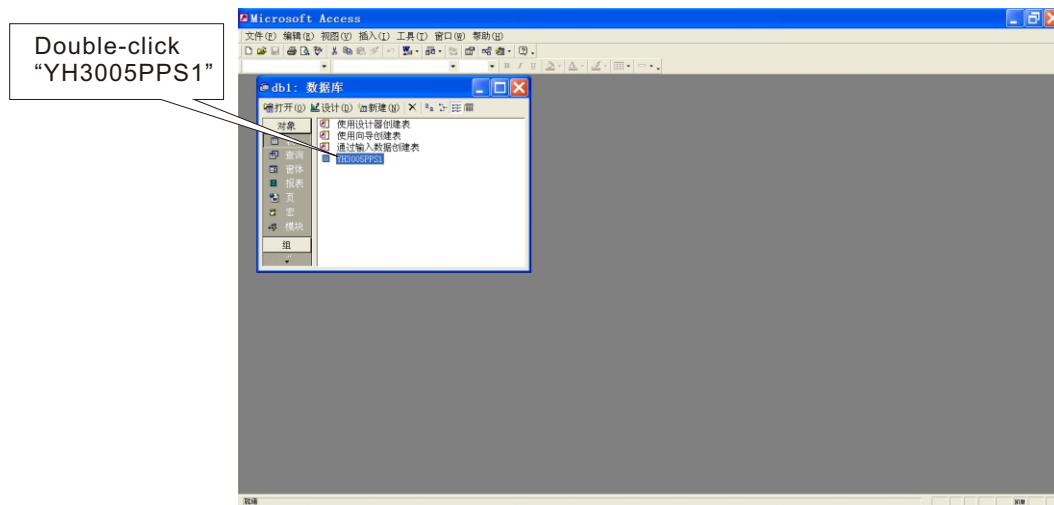


Figure 50

- Open the table to editor, as figure 51.

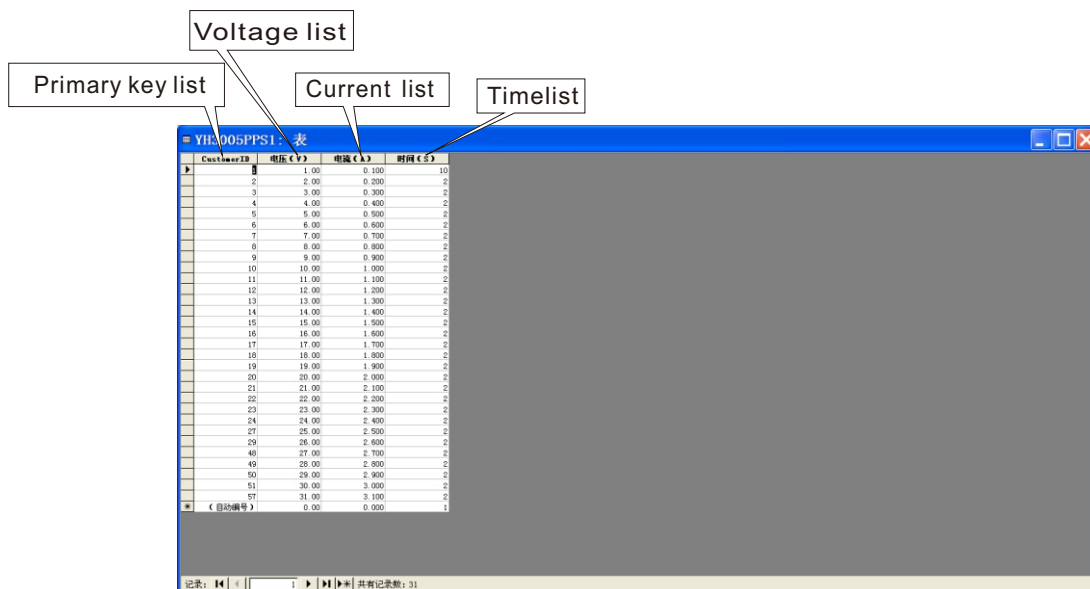


Figure 51

### Pay attention:

- Primary key columns are used when call and update the database interface software, don't show in the interface, but must be in ascending order, cannot be empty.
- Other column format is the same with “edit interface form”.
- Can't delete, insert, modify headers and properties (such as delete, modify column); Only can edit, cell line.
- Do not modify the name of database and form.

5. After editor, save and close the form and database, quit Microsoft Office Access.  
As figure 52, 53

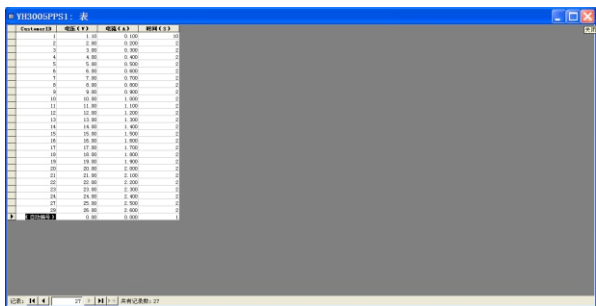


Figure 52

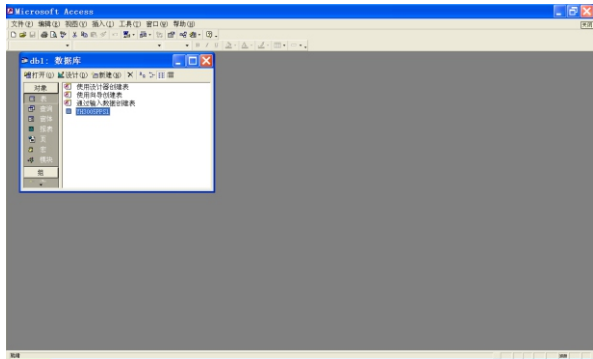


Figure 53

Can put the different usage of table files into different folders. Copy watch out when using replace as shown in figure 34 folder “db1. MDB table” file.

**Set the operation times:**

Click the operation times Drop-down list box.

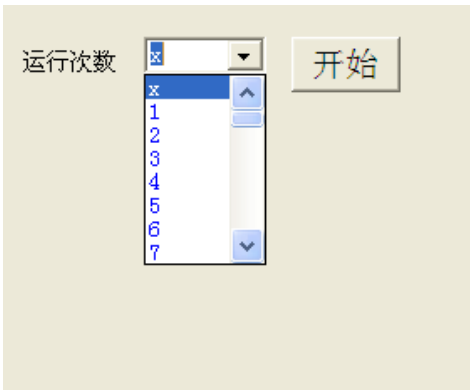


Figure 54

**Programme operation:**

Click operation button, start control/stop operation. Ramme operation, as figure 55

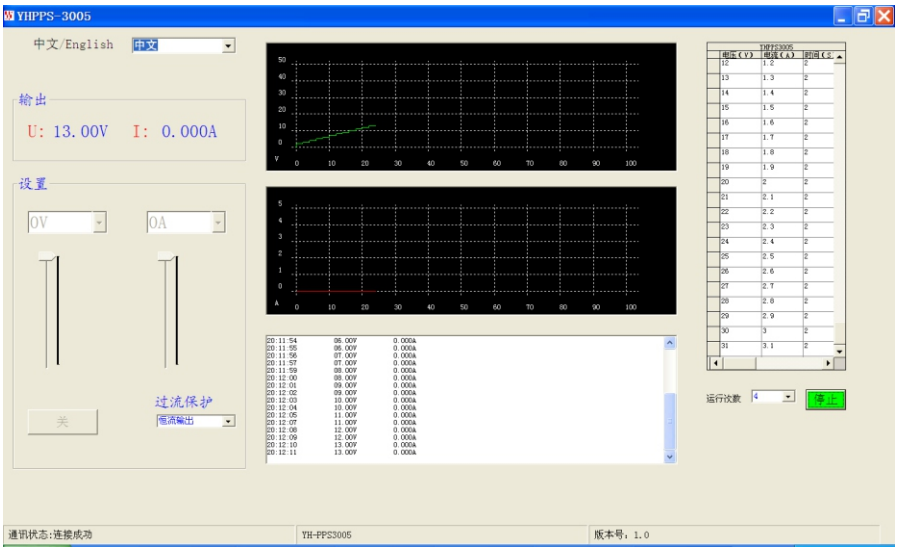


Figure 55

When programme operating, setting box and form is banned for \operation, until stop operation.