Application sample: Record Voltage / Current input by W-8xx7 every 20 ms for 1 to 10 minutes. Then send this record file by email.

This sample applies in one 3-slot or 7-slot Wincon-8xx7 with one i-8024 in its slot No.2 and one i-8017H in its slot No. 3. Then connect i-8024 's Ch.1 to Ch.4 voltage output to i-8017H 's Ch.1 to Ch.4 voltage input.
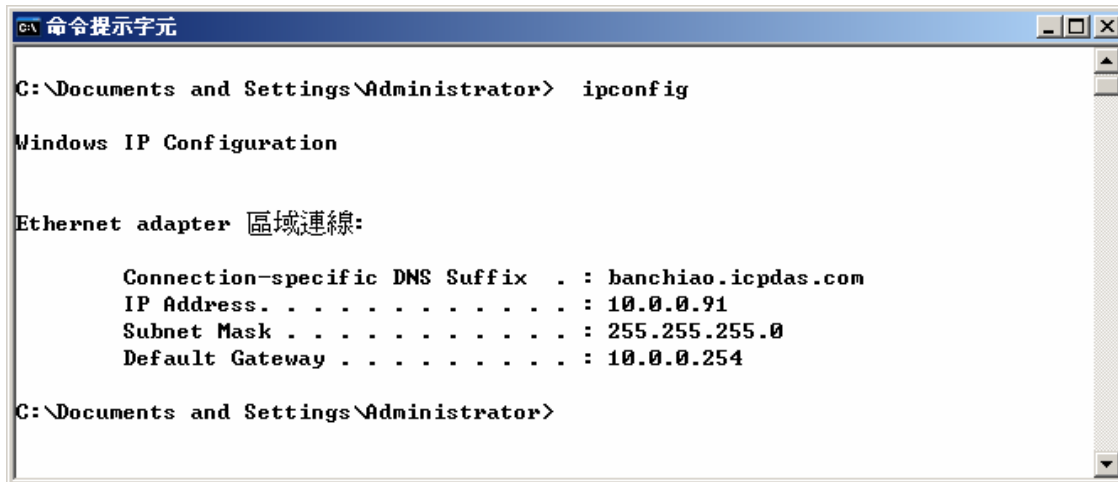
The i-8024 in this sample will generate 4 voltage output curves to i-8017H. This sample will record i-8017H 's Ch.1 to Ch.4 voltage inputs to a "User-allocated RAM memory" . It can record totally 1 to 10 minutes. When it is finished, these records are saved to a file, then Wincon-8xx7 will send it by Email.
The ISaGRAF demo program name is "Wdemo_66.pia ", please visit www.icpdas.com > FAQ > Software > ISaGRAF > 072 to download it.
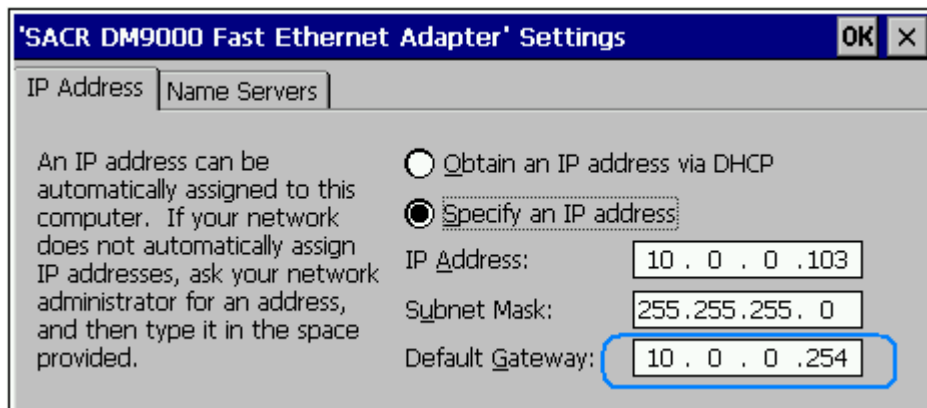
For more information about W-8xx7 sending email, please visit
     www.icpdas.com > FAQ > Software > ISaGRAF > 067.
For more information about "User-allocated RAM memory" and "File operation functions" , please visit
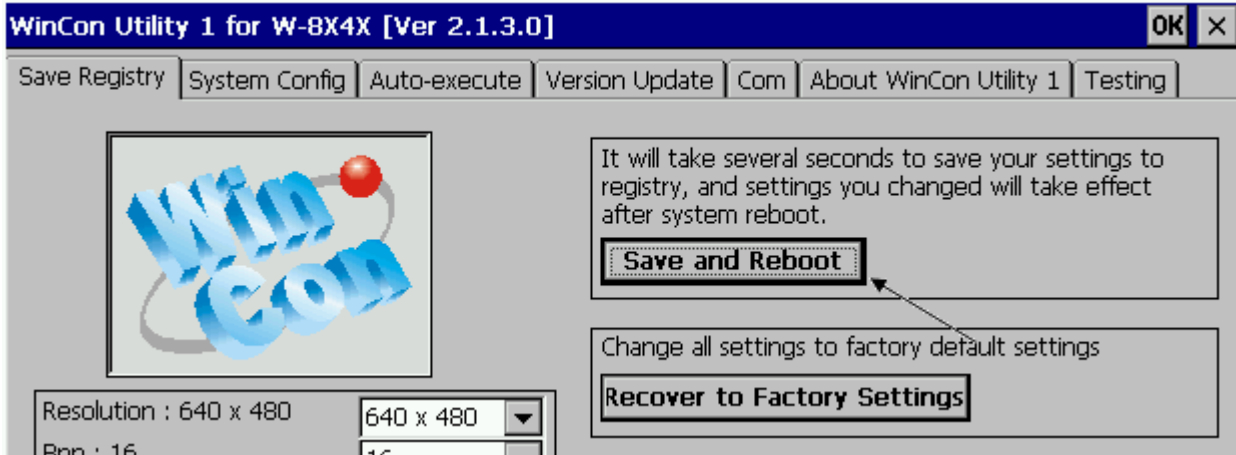   www.icpdas.com > FAQ > Software > ISaGRAF > 057   and   060

To send email correctly, please set proper Gateway IP in the controller's Ethernet port setting. Please type command "ipconfig" in a PC 's command prompt window at the same local network to get the Gateway IP setting as below. (Here is 10.0.0.254)
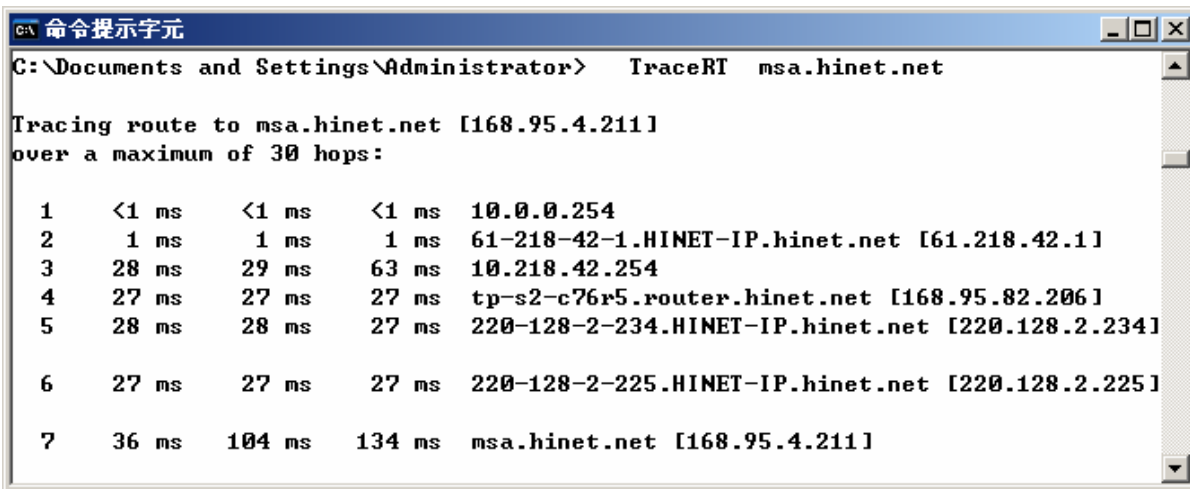

Then please fill-in this Gateway IP address to your wincon's Ethernet port setting (If controller model is W-8347/8747, you can enable two Ethernet ports, then you need to fill-in both with the same Gateway IP)

Then please run Wincon Utility – Save and Reboot to store the IP setting. It will automatically re-boot once.

The PC 's command prompt windows can also request the Mail server 's IP address (We need it in the ISaGRAF program). For example, to request IP of msa.hinet.net , please type command　TraceRT msa.hinet.net　as below (Here is 168.95.4.211)

Email demo download from www.icpdas.com – FAQ – Software – ISaGRAF – 072 is "Wdemo_66.pia" .

Please modify at least the below setting in the demo program to your own setting .

　　TMP := MAIL_SET(1 , 'chun@icpdas.com') ;　　　　　(* Receiver 1. please modify it *)

　　TMP := MAIL_SET(100 , 'go_mao@hotmail.com') ;　　(* Sender. please modify it *)

　　TMP := MAIL_SET(101 , '168.95.4.211') ;　　　　(* Mail server 1 's IP, please modify it *)

Then re-compile it and then download it to the W-8xx7 to run. The below windows will show up.

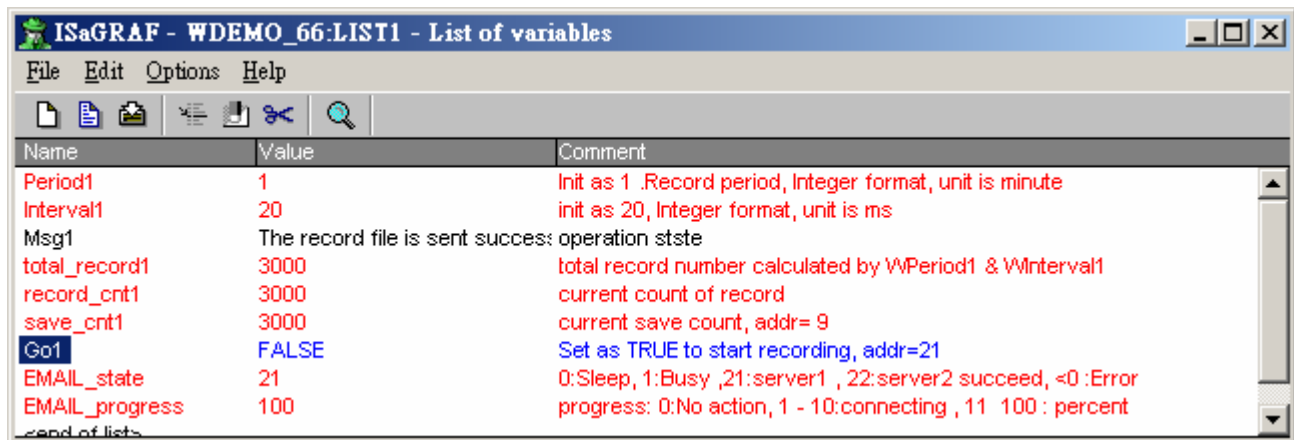"Period1" is the recording period, unit is minute, value can be 1 to 10.

"Interval1" is the recording interval, unit is ms (0.001 second), value can be 10 to 10000.

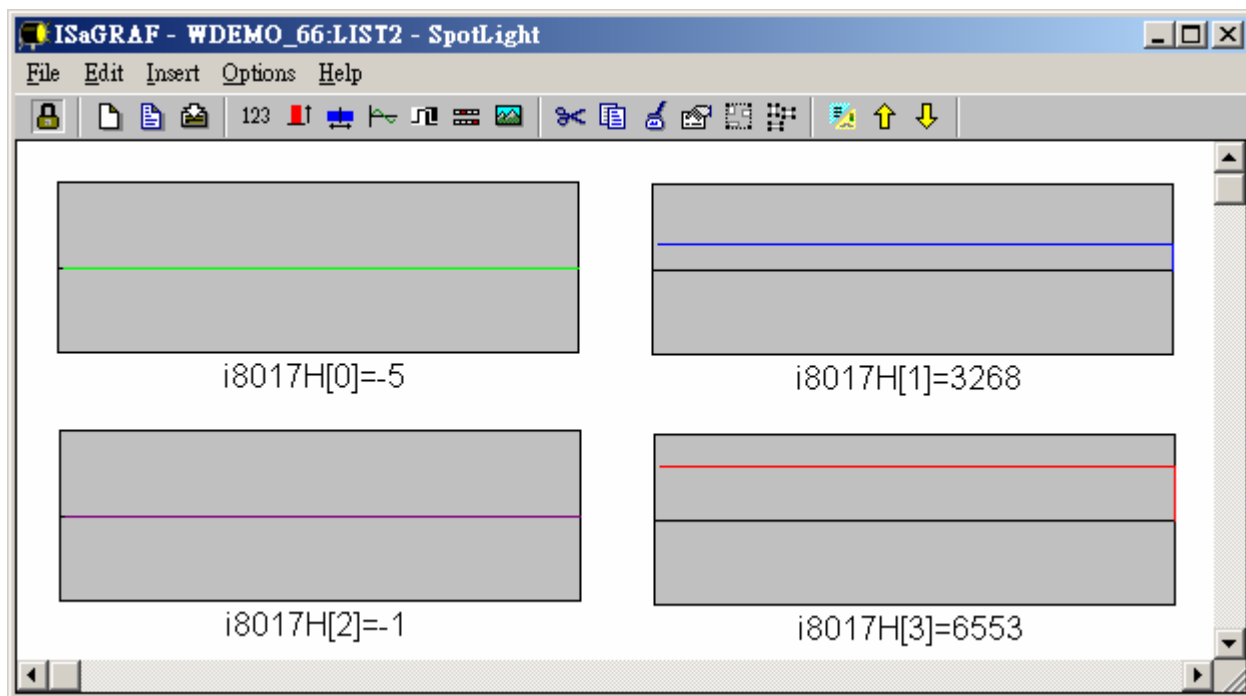"Total_record1" is the total record amount. It is calculated automatically by program.

"Record_cnt1" is the current finished record amount.

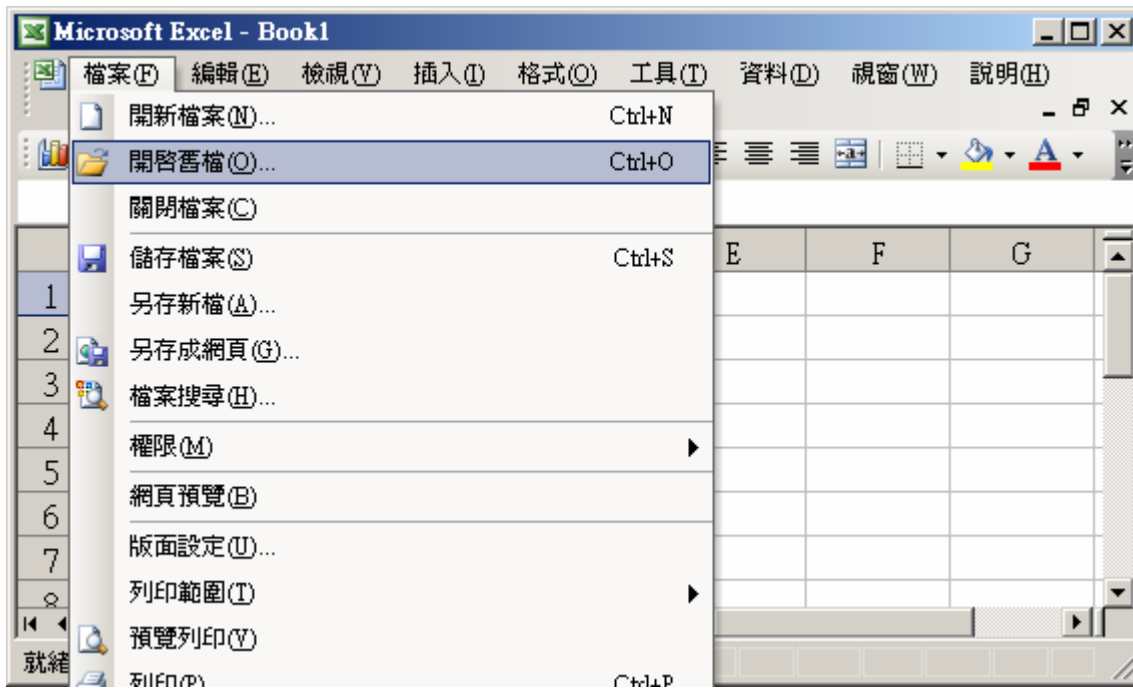"Save_cnt1" is the current saved record amount in the file after all records are finished.

Please set "Go1" as TRUE to start recording. If all records are finished, value of "record_cnt1" should reach value of "total_record1". Then it will start to save all records into a file. If saving file is finished, value of "save_cnt1" should reach value of "total_record1". Then W-8xx7 will send an email with this attached file. Few seconds later, value of "Email_state" will be 21 or 22 if succeed. However value of "Email_state" will be less than 0 if failed. When "Email_progress" reach value of 100, it means the email data is 100% sent.
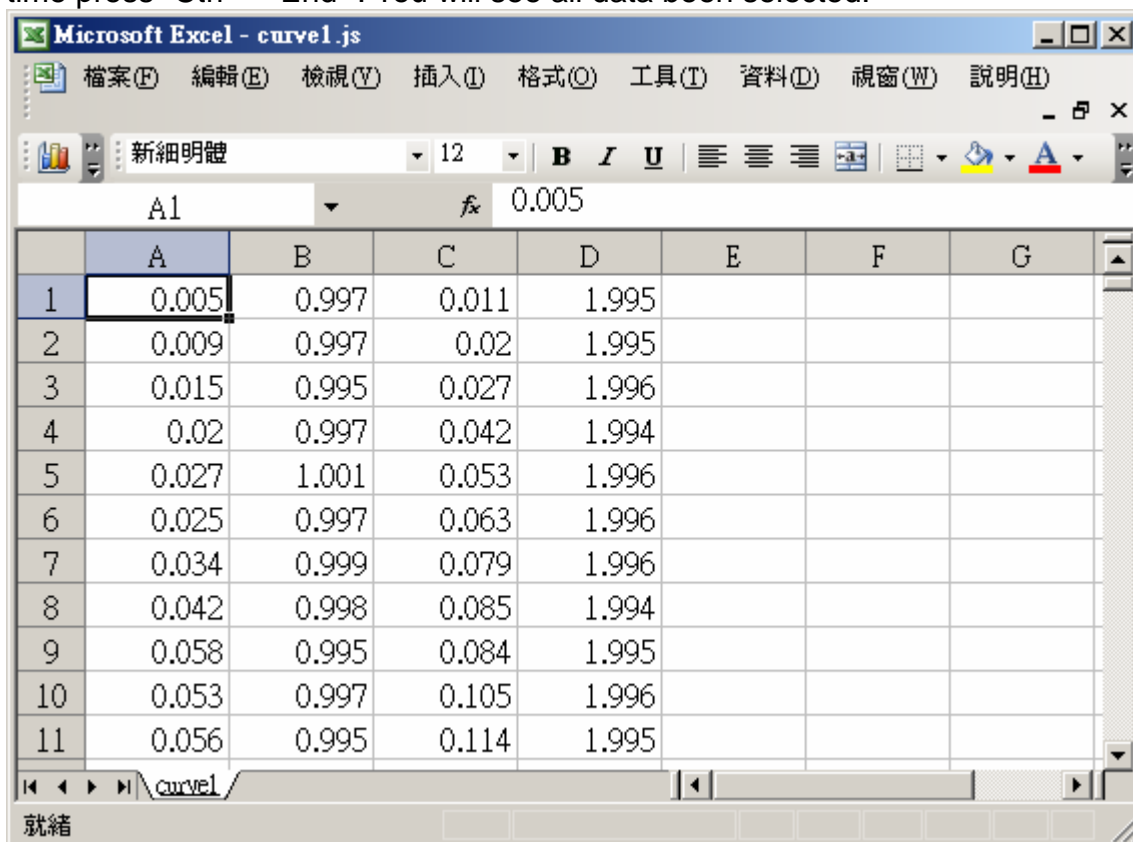
ISaGRAF - WDEMO_66:LIST1 - List of variables

File Edit Options Help

Name	Value	Comment
Period1	1	Init as 1 .Record period, Integer format, unit is minute
Interval1	20	init as 20, Integer format, unit is ms
Msg1	The record file is sent success	operation stste
total_record1	3000	total record number calculated by WPeriod1 & WInterval1
record_cnt1	3000	current count of record
save_cnt1	3000	current save count, addr= 9
Go1	FALSE	Set as TRUE to start recording, addr=21
EMAIL_state	21	0:Sleep, 1:Busy ,21:server1 , 22:server2 succeed, <0 :Error
EMAIL_progress	100	progress: 0:No action, 1 - 10:connecting , 11 100 : percent

end of list

ISaGRAF - WDEMO_66:LIST2 - SpotLight

File Edit Insert Options Help

i8017H[0]=-5

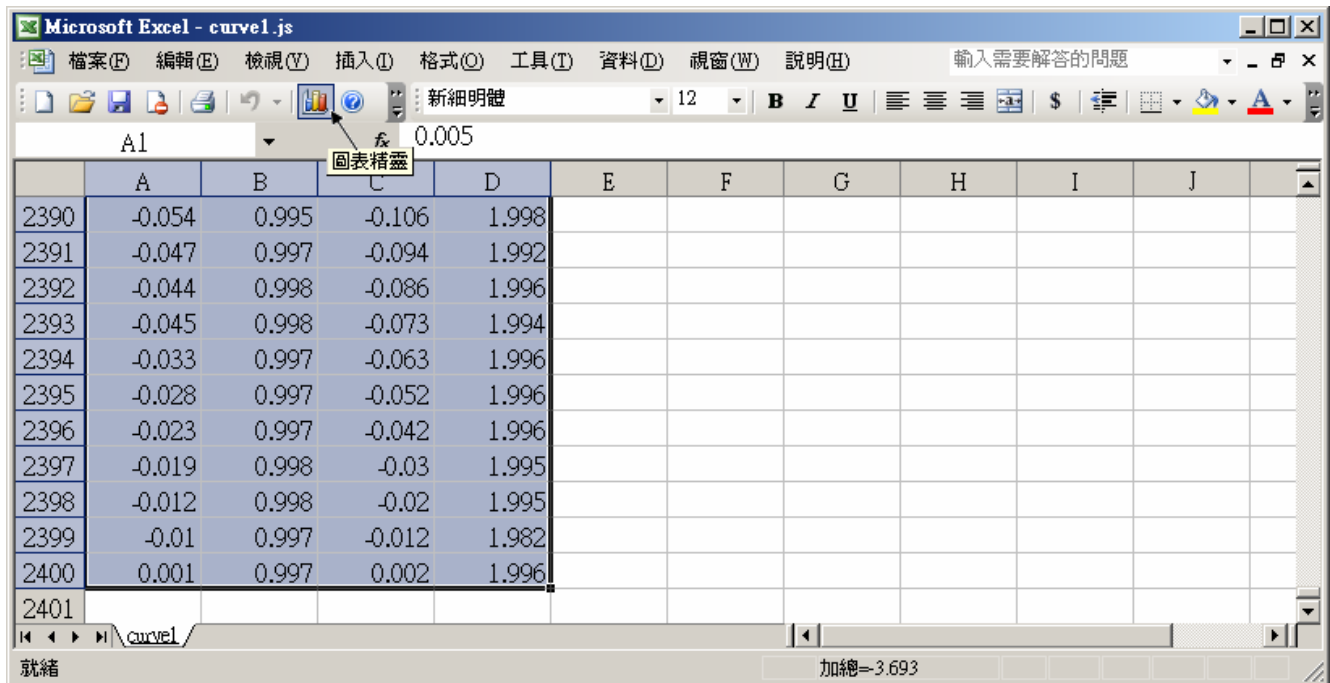i8017H[1]=3268

i8017H[2]=-1

i8017H[3]=6553

Then please receive this email by your PC. Then open this record file by M.S. Excel.
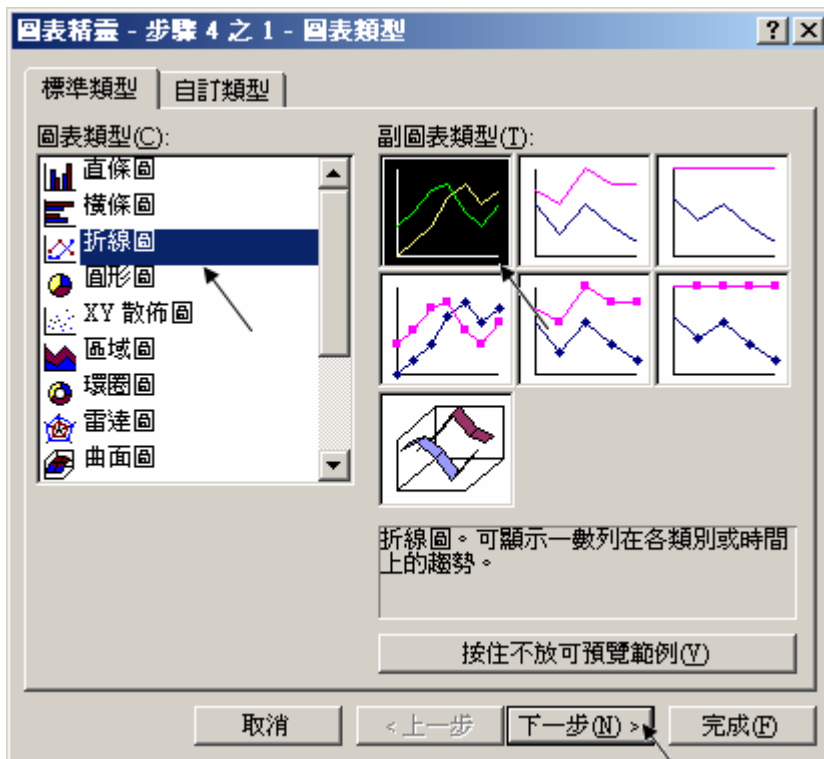

Please click on the first data at the left-top position. Then press and hold in "Shift" , and at the same time press "Ctrl" – "End" . You will see all data been selected.

Then click on

Please select the correct diagram on the left-hand side. And check the left-top type on the right-hand side. Then go Next .

By the procedure, you will get the trend curve as the below window. You can modify its size, or check at any trend line. If you move your mouse to point at some position at the trend line, the related data is shown.

Please save this trend curve diagram as a "Microsoft Office Excel (*.xls)" format. Then at any later time, you can open it to display the trend curve directly.