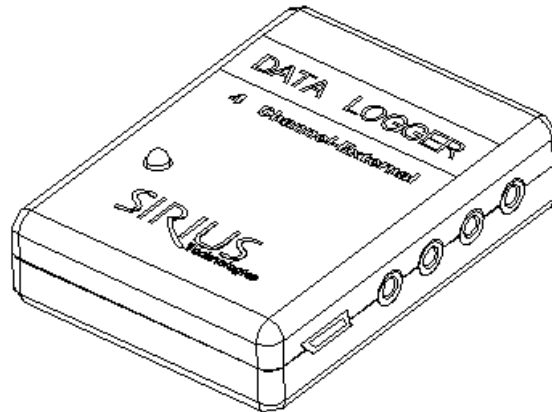


Sirius Technologies ST303U Datalogger
User Manual V1.0

ST303U ***4-Channel*** ***Signal Processing*** ***USB***

Datalogger



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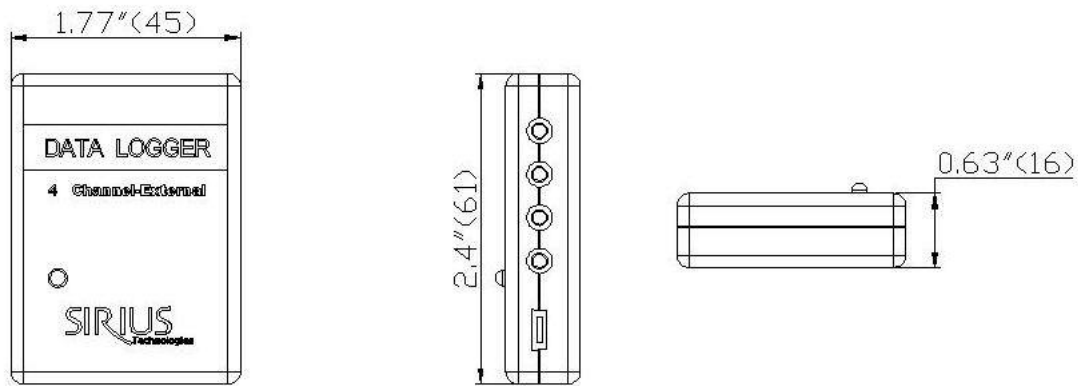
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1. Specifications & Dimension

1.1.- Dimension

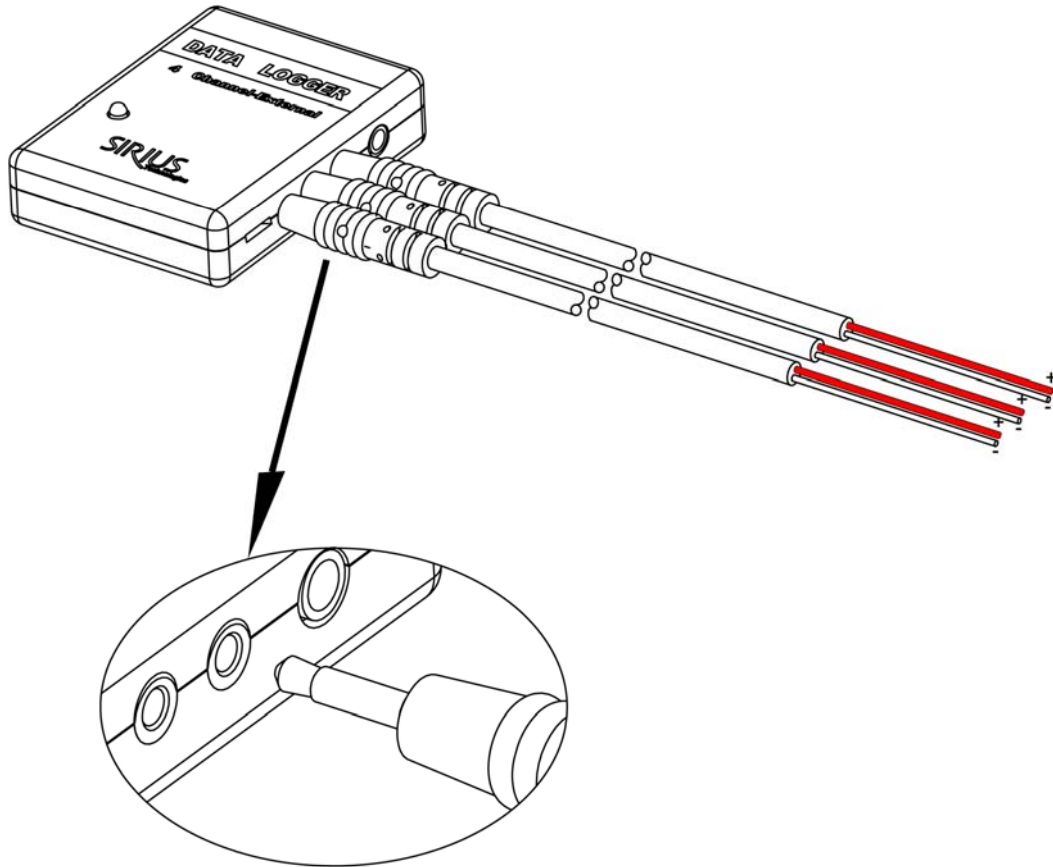


1.2.- Specifications

Model #	ST303
Type	4-Channel Signal Processing
Channels	4
Range	-20°C to 70°C
Temp. Accuracy	±0.7°C at 21°C
Resolution	12 Bits
Memory	128K
Interface	USB
# of reading	30,000
Sensor Connection	External
Temperature Sensor	Thermistor-(-20C to 70C)
Voltage Sensor	0-10 DCV
Current Sensor	4-20mA

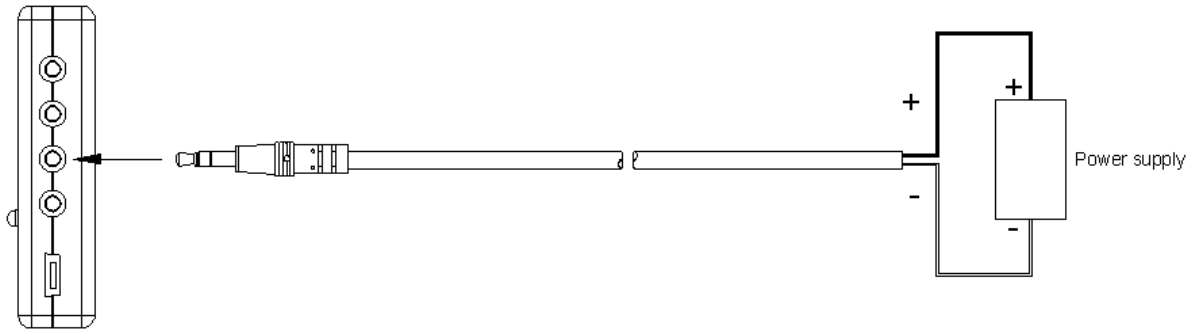
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1.3.- Typical 4-Channel Connection

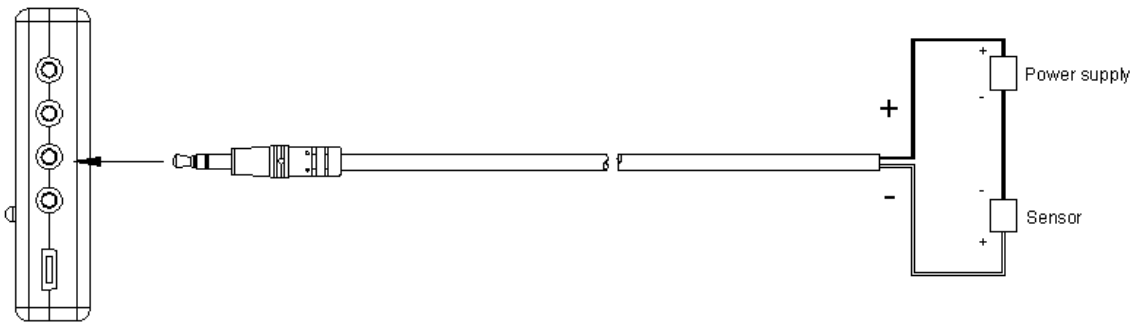


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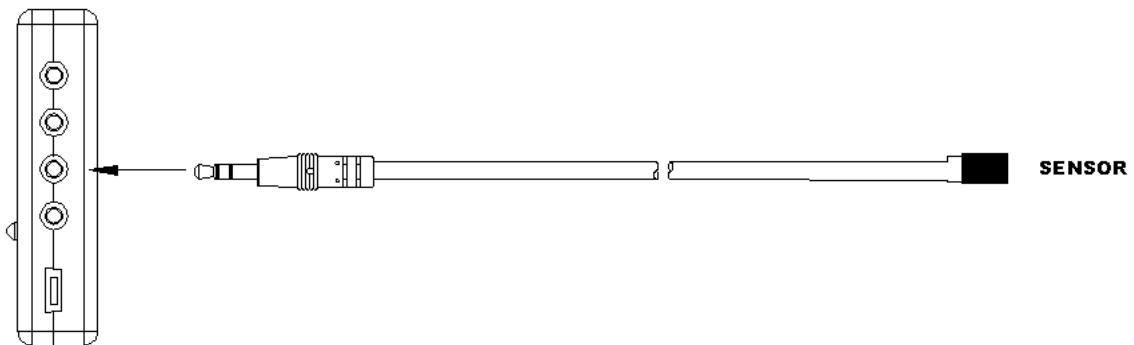
1.4-Voltage Connection



1.5.- Current Connection

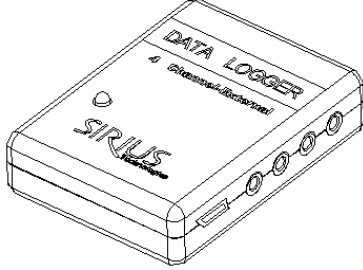

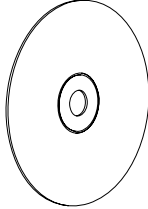
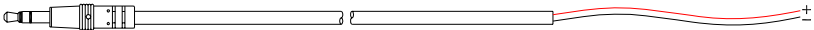
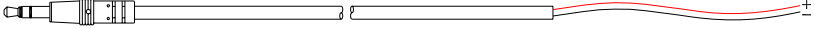
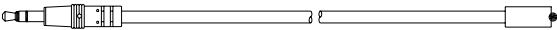


1.6.- Temperature Sensor Connection



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2. Datalogger Content

Model#	Description	Item
ST303U	Datalogger	
USB	USB Cable	
SF300	Installation Disk	
S1	0-10V Voltage Cable	
S3	4-20mA Cable	
S4	Temperature Cable	

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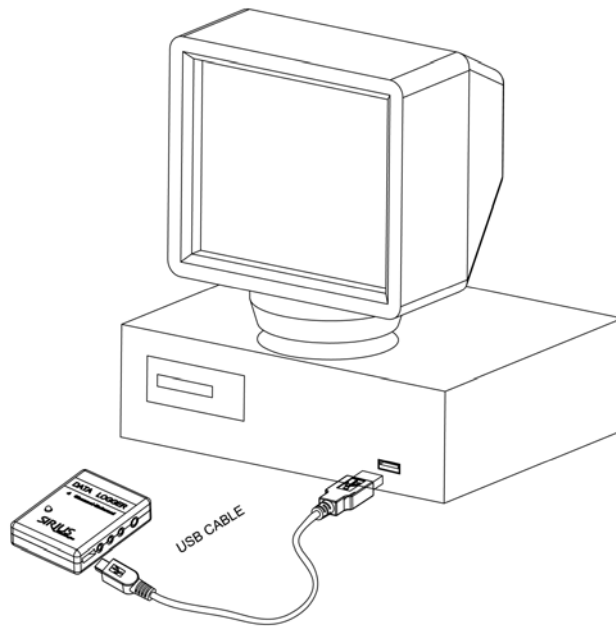
3. Installation Requirements:

- Minimum system requirements for the software
 - Pentium III - 500 MHz processor or equivalent with 128 Megabytes of RAM.
- Optimal Performance
 - Pentium 4 or higher
- Operating System -Windows XP

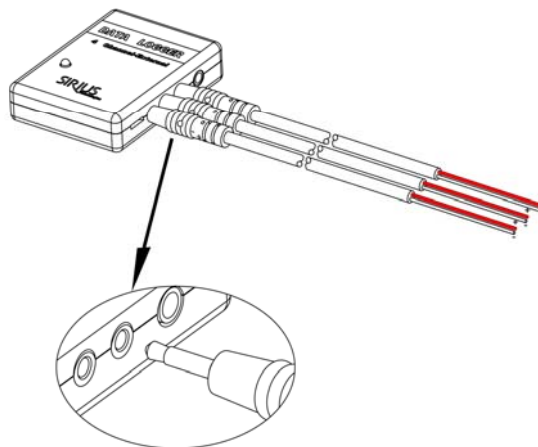
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4. Hardware Setup

- Connect one end of the cable to the datalogger.
- Connect the USB end of the cable to the computer.



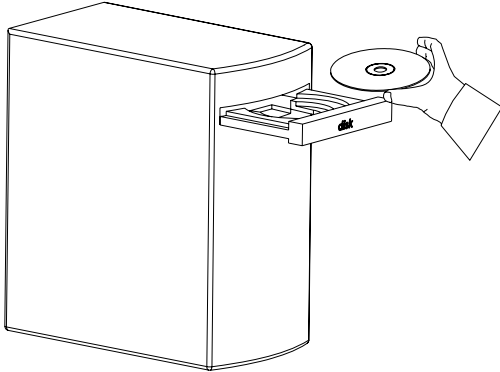
- Sensor cable connection.



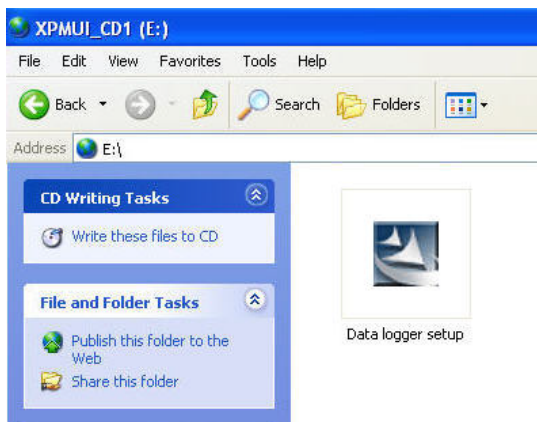
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5. Software Installation

- Insert the CD into the disk drive.

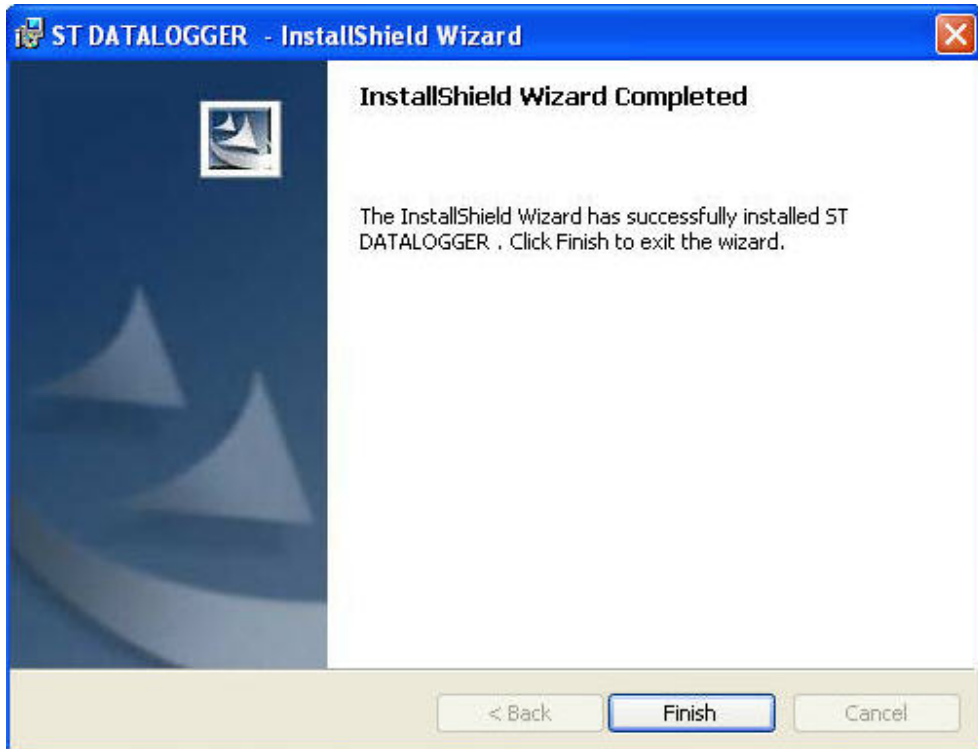


- Click on **Datalogger setup** to start installation.



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- C. Follow the Installation Shield Wizard and click Finish to complete installation.



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6. Datalogger Setup

6.1.- Setup the datalogger from PC.

From Window XP:

Click on **All programs**,

Click on **Siriustech**,

Click on **ST DATALOGGER**,

Click on **ST Datalogger** to start program.

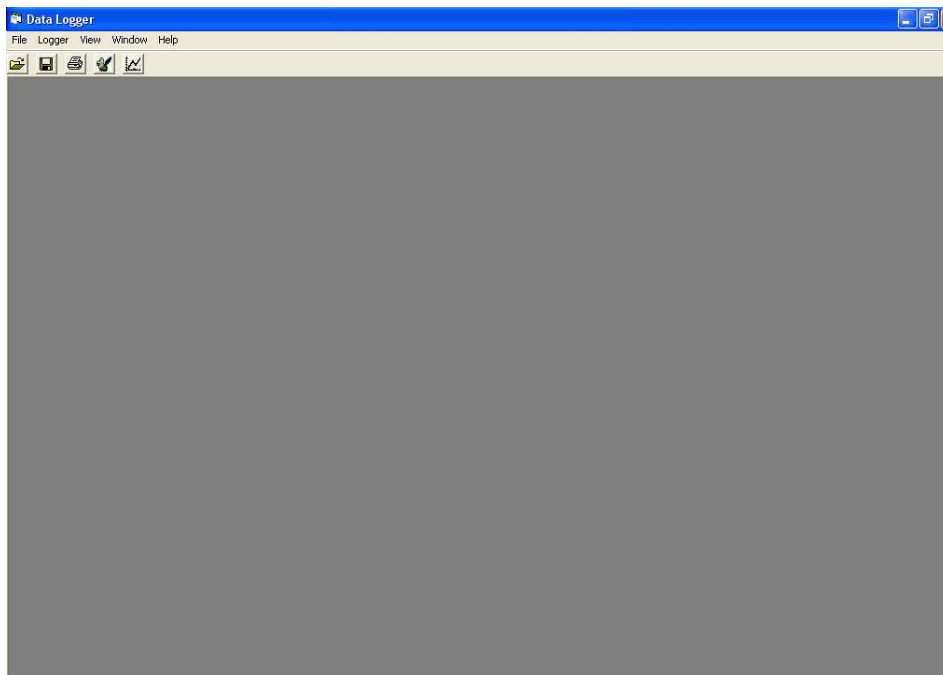


Figure 6.1- ST301 Datalogger software main menu.

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Click on **Logger**, click on **Setup** to enter the setup screen.



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6.2. Setup Menu

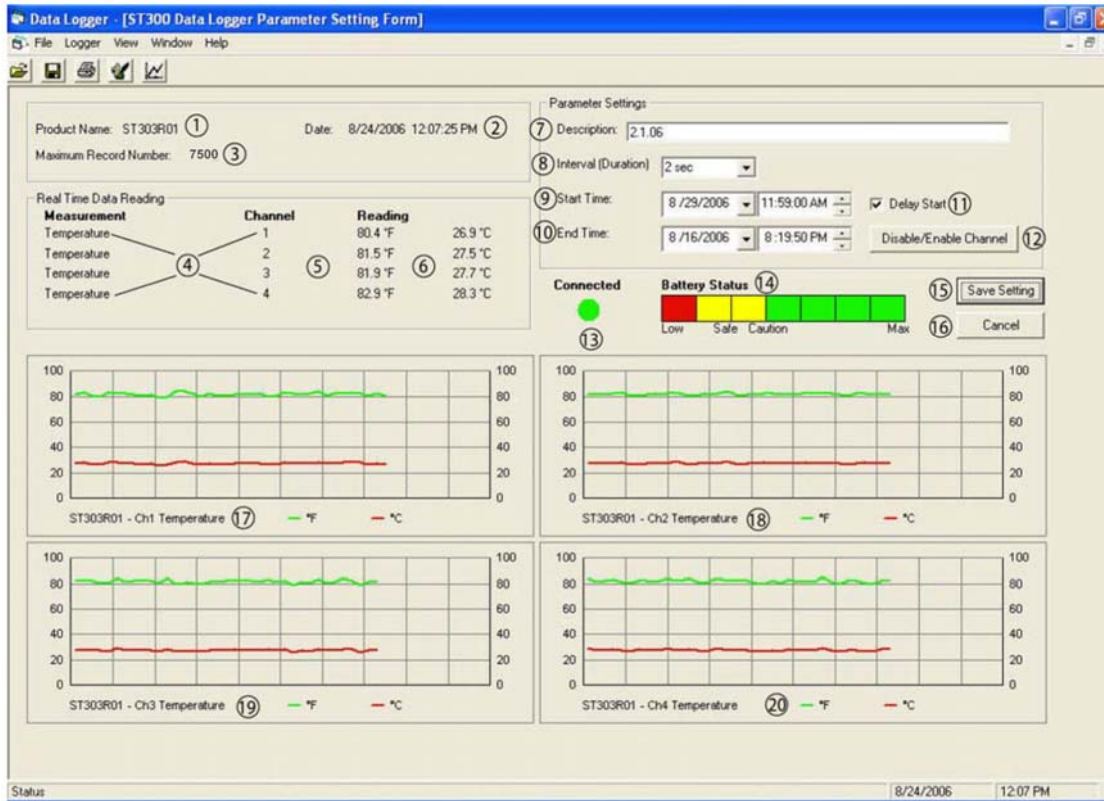


Figure 6.2- Setup Menu

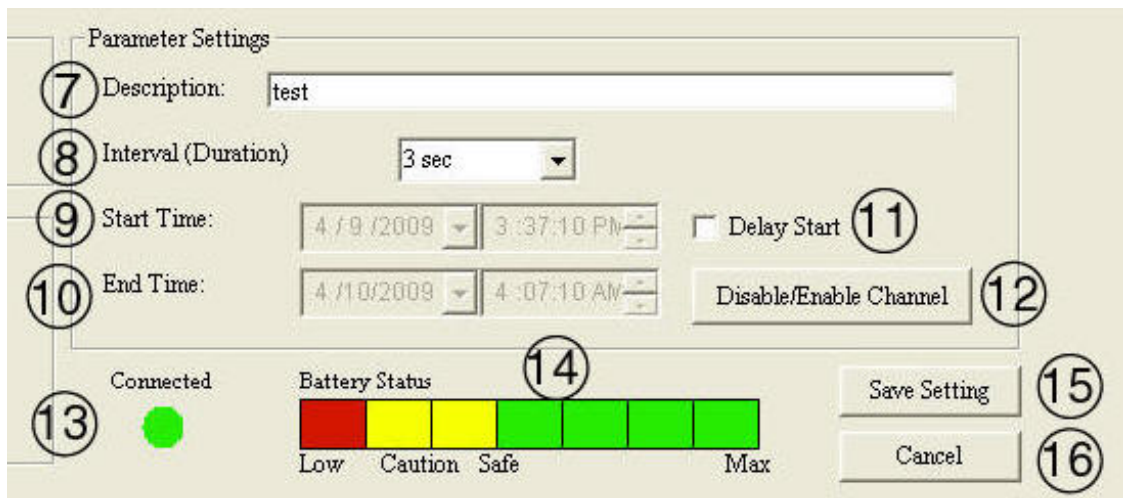
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Setup Menu

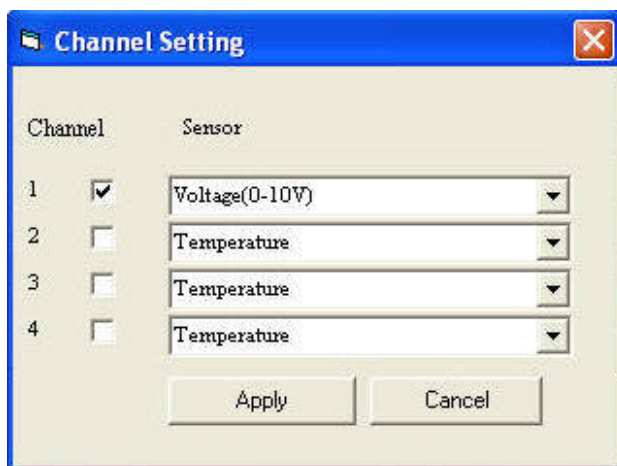
#	Item	Description
1.	Product Name	Program will identify model # connected to the USB port
2.	Date	Current Date and Time
3.	Maximum Record number	Maximum number of records can be store in one datalogger
4.	Channel 1-4	Channel 1 to 4 display
5.	Temperature(F)	Current real time temperature reading in F
6.	Temperature(C)	Current real time temperature reading in C
7.	Description	Type in description for the datalogger. The description will be saved in the datalogger memory.
8.	Interval(Duration)	Select sampling interval Second(1/2/3/4/5/6/7/8/9/10/15/30/45) Minute(1/5/10/20/30) Hour(1,2,8)
9.	Start Time	Select Start Date
10.	End Time	Select End Date
11.	Delay Start	Check to enter Start Date
12.	Disable/Enable Channel	Select to enable or disable channel 1-4
13.	Connect	Connection Status: Green-Connected Red-Disconnect
14.	Battery Status	Battery Status Indicator
15.	Save Setting	Click to save the setting
16.	Cancel	Cancel and exit the menu
17.	Ch1 Real Time	Channel 1 real-time display
18.	Ch2 Real Time	Channel 2 real-time display
19.	Ch3 Real Time	Channel 3 real-time display
20.	Ch4 Real Time	Channel 4 real-time display

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6.3.- Starting the datalogger



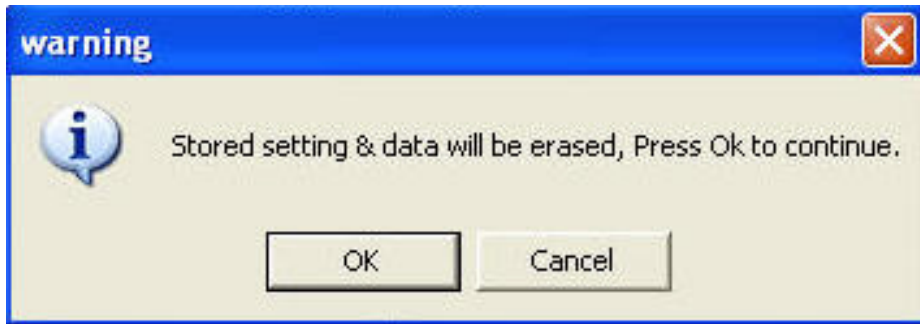
- 7. Enter Description
- 8. Select time interval
- 12. Disable/Enable Channel



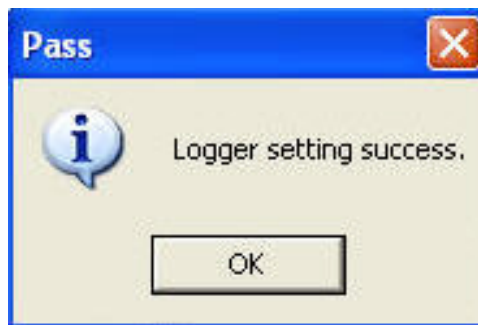
- 15. Click Save Setting

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- Click OK to continue



- Setting saved.

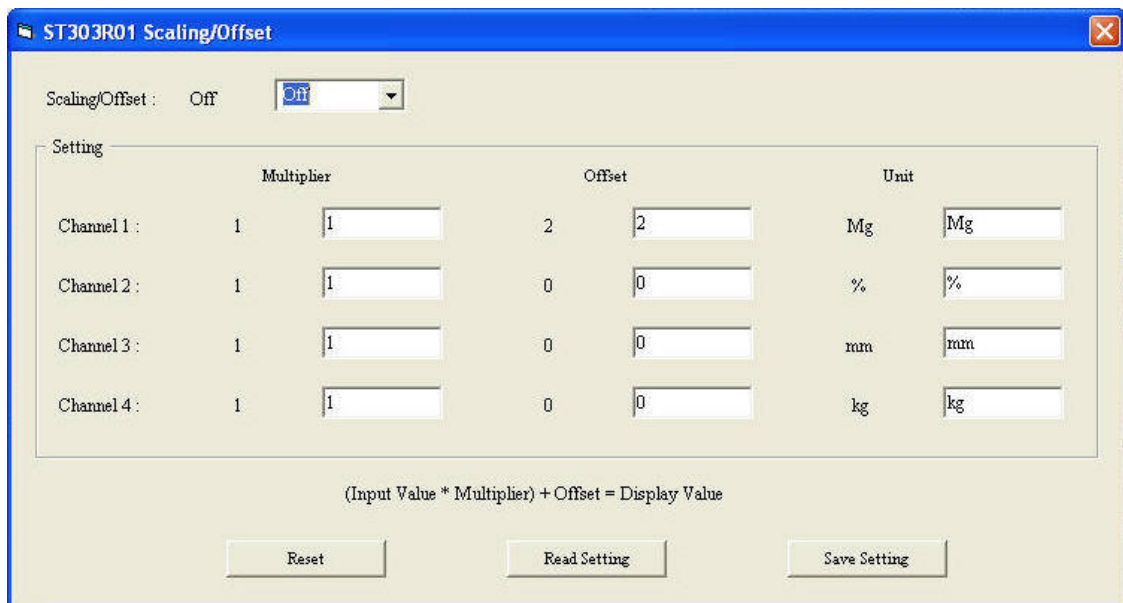
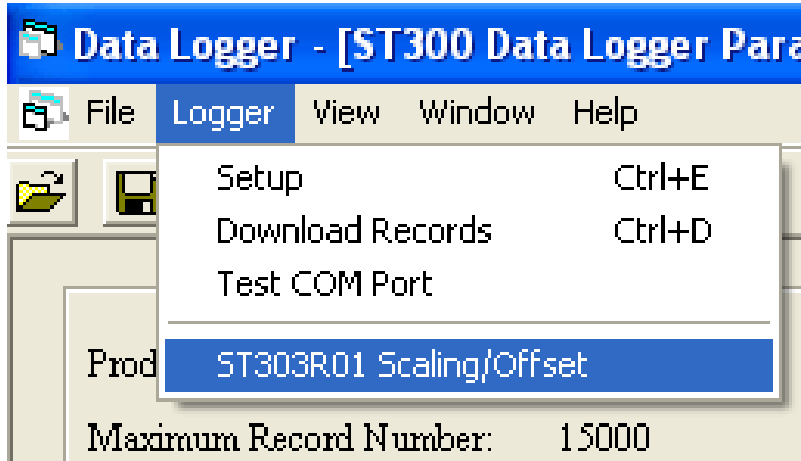


- Remove USB to start the datalogger.

Red LED lamp indicates the datalogger is in working mode.

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6.4.- SCALING AND OFFSET



User can use Multiplier and Offset functions to convert reading into other unit of measurement.

Formula- (Input Value X* Multiplier) + Offset= Value(Unit)

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Ex).

- Input Value=0.1V
- Multiplier=100
- Offset=0
- Unit=dB
- (Input Value X* Multiplier)+Offset=Display Value(Unit)
(0.1V * 100)+ 0 = 10 (dB)
- $0.1V * 100 + 0 = 10dB$

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7. Datalogger Data Download



A. Click on the icon to start the **Download** menu.

or

Click on **Logger**, Click **Download Records** to start the Download menu.



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7.1.-The software will establish the connection between PC and the datalogger.

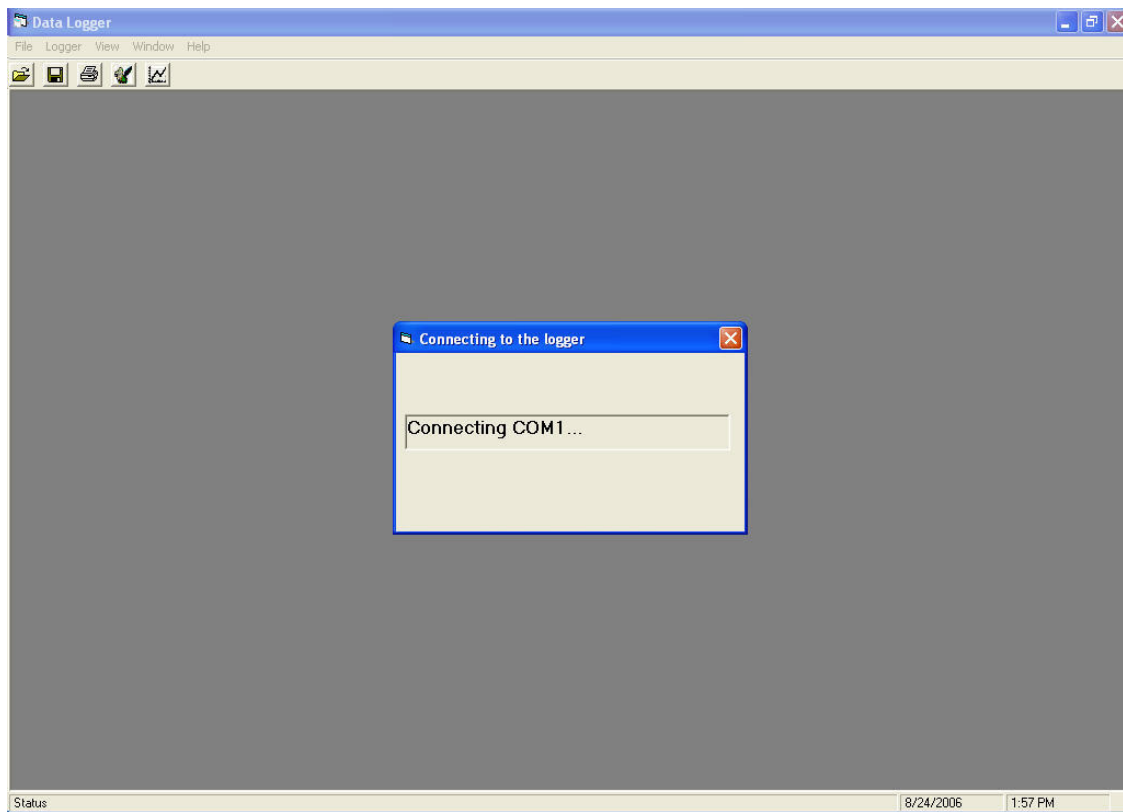


Figure 7.1.- Establishing Connection

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7.2.- Datalogger Found.

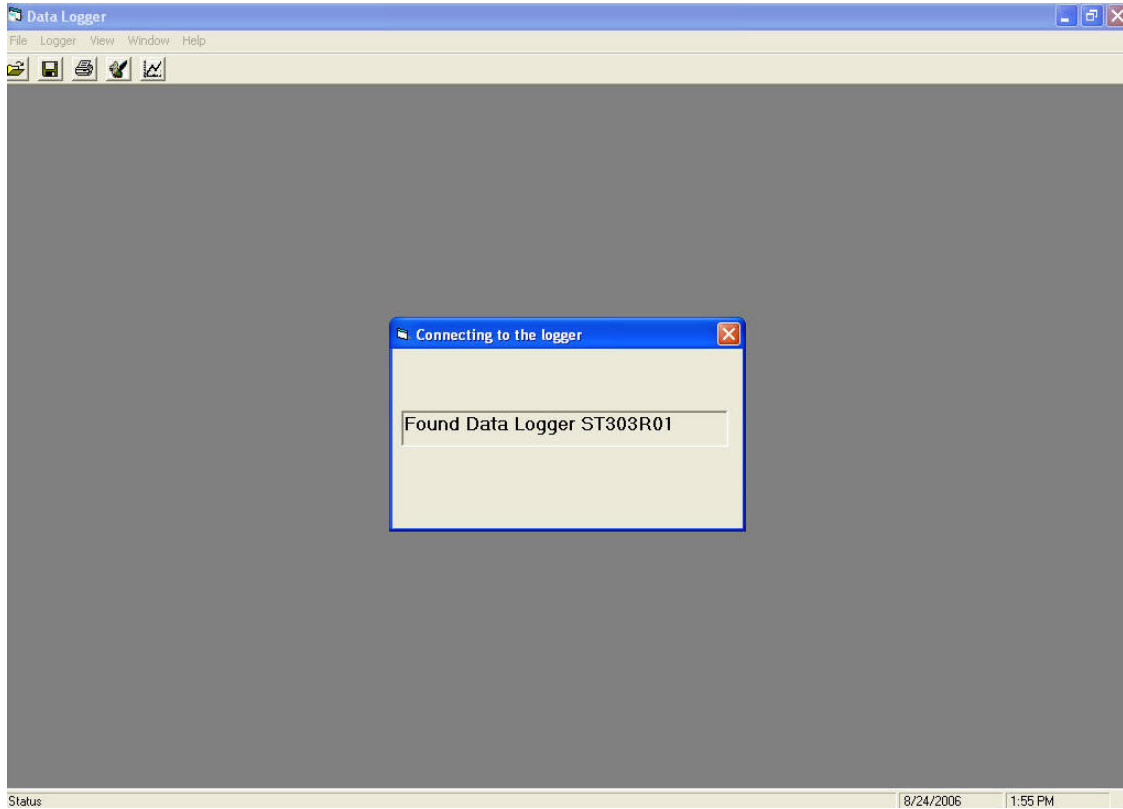


Figure 7.2.- Datalogger Found.

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7.3.- Download all the records.

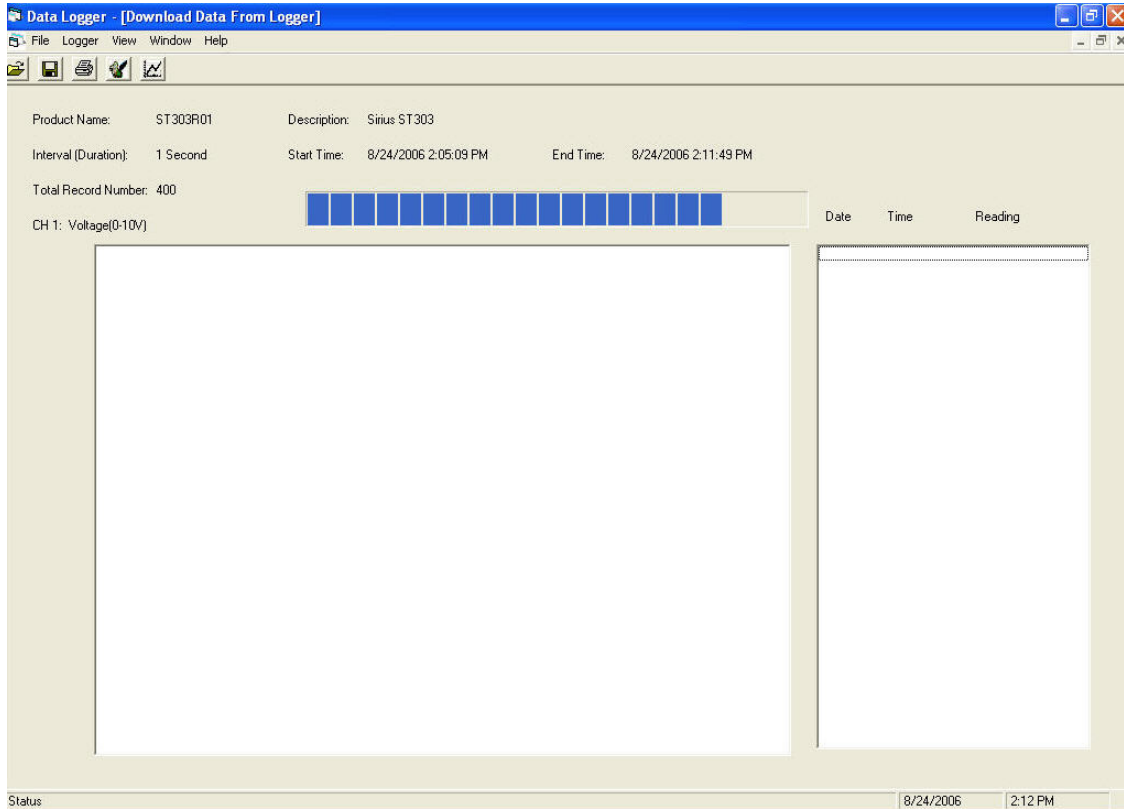


Figure 7.3.- Downloading Record

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7.4. Click Save to save the data file in .adc format. Data can be exported in .txt or Excel format.

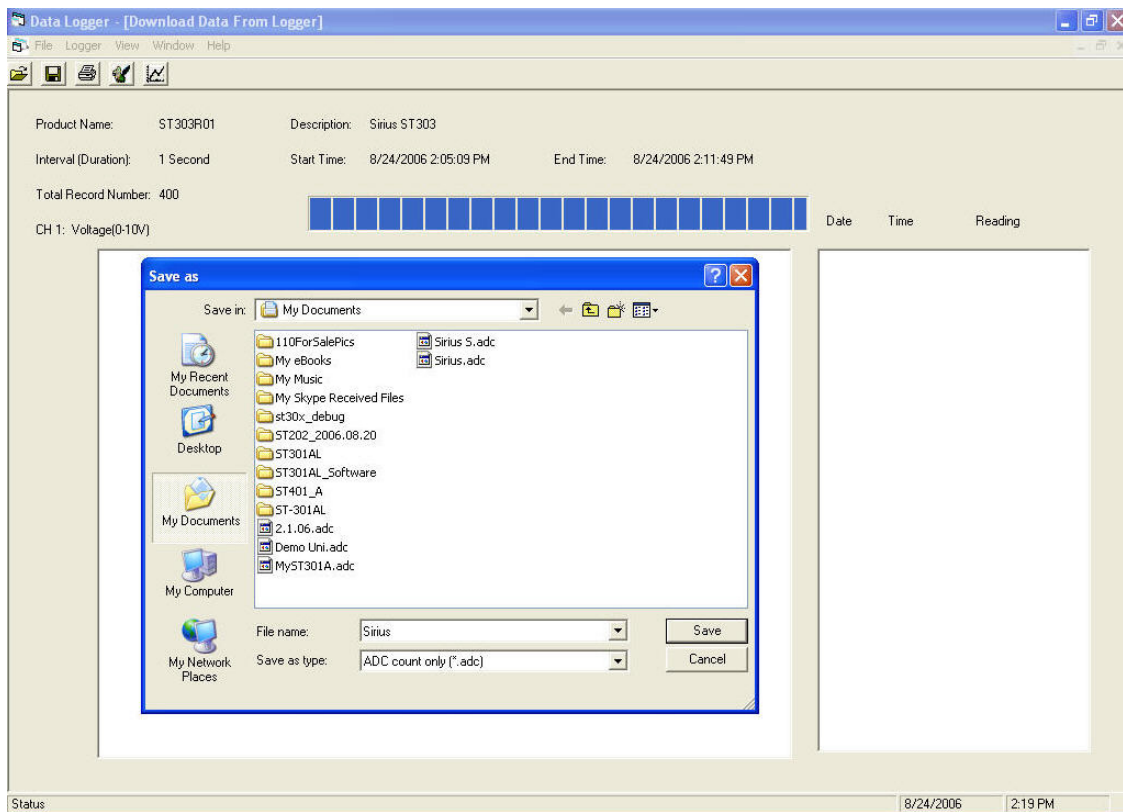


Figure 7.4.- Enter .adc file name

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7.5. After the .adc file is saved, the retrieved data will be display in both the graphic and data format for viewing. Click on the any data record set (A), will correspond to the exact point on the graphic(B).

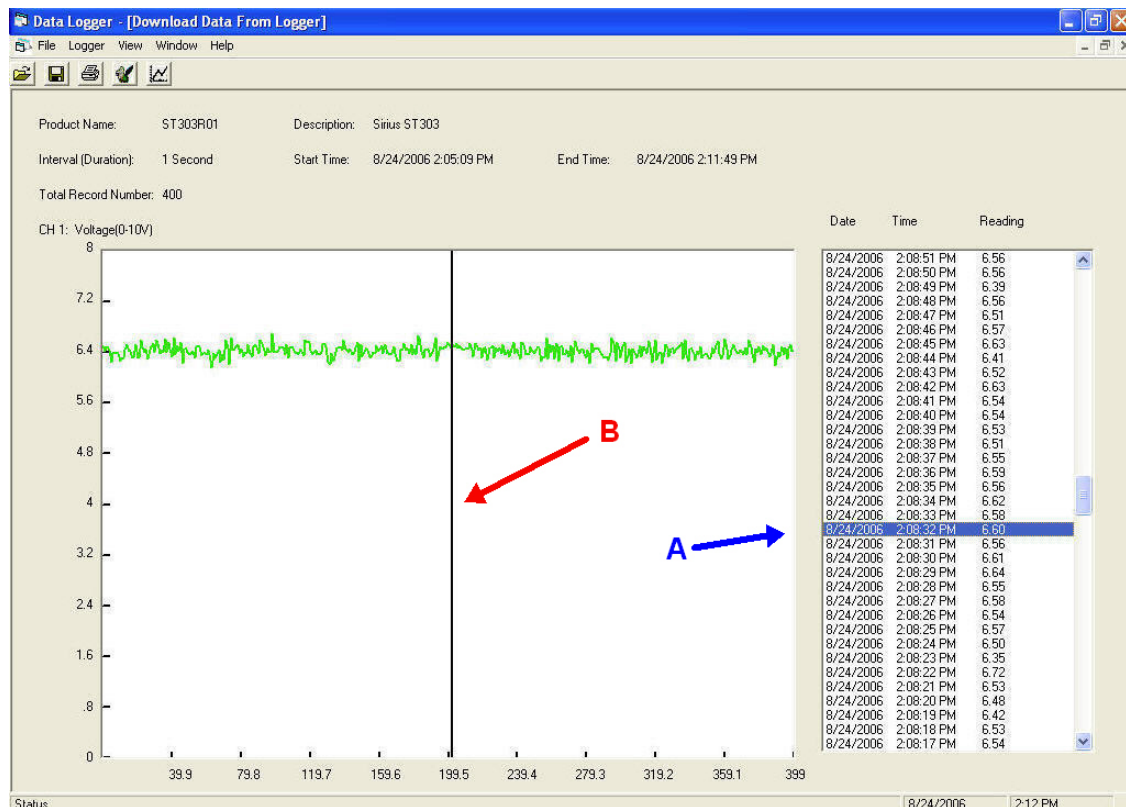


Figure 7.5.

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7.6. Channel Selection

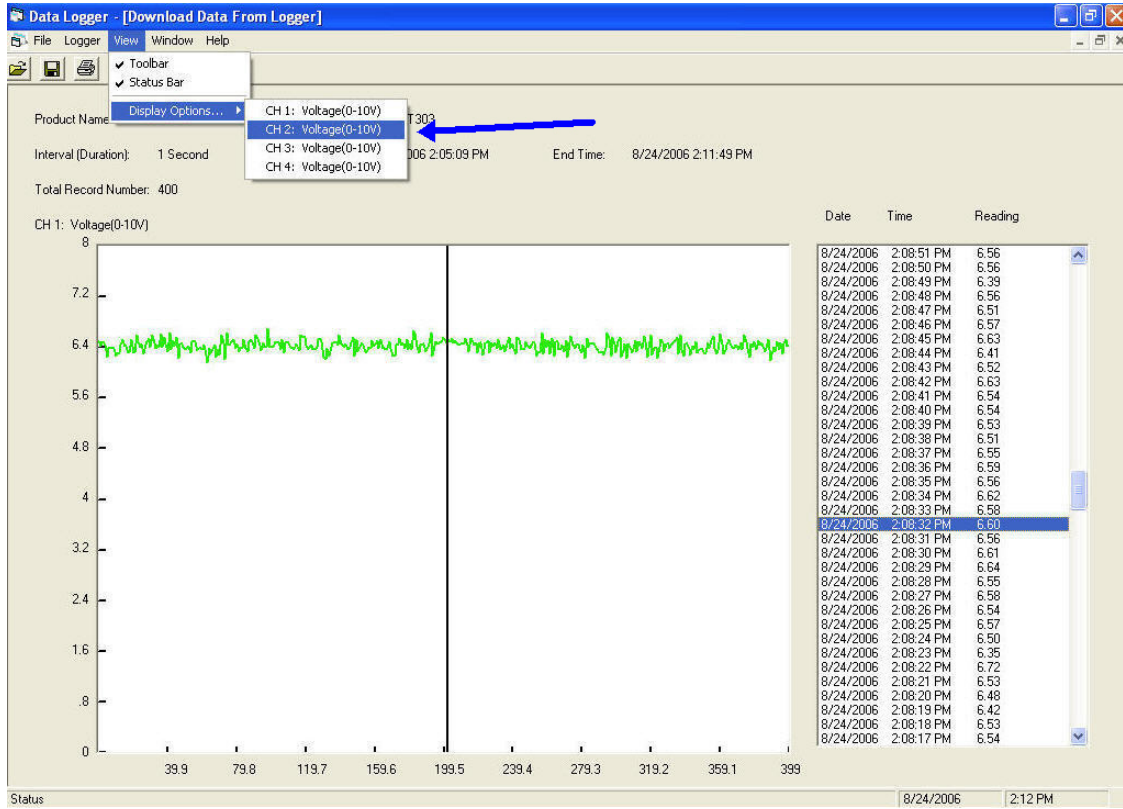


Figure 7.G.

Click on View, Click on Display Options to select Channel 1-4 to display on the screen.

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8. Using Other Software Functions

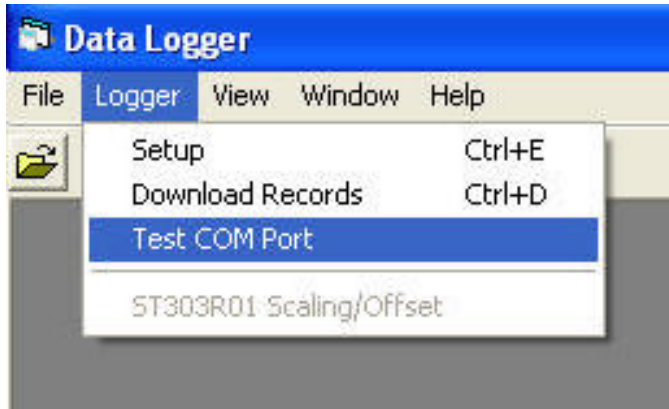
8.1.-FILE

1. Open
-Click on **Open** to open the file in .adc format.
2. Export Data to Excel File
-.adc format file can be saved in Excel format for editing.
3. Print-
-The display data set can be send to the printer by click on the **Print** command.
4. Exit
- Click on **Exit** the ST303 datalogger program.

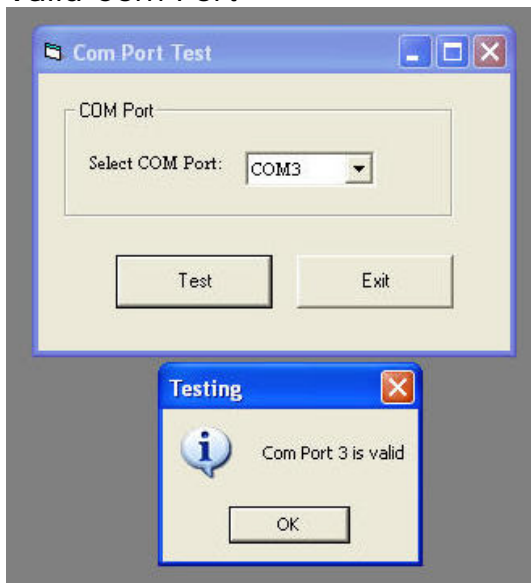
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8.2.-Test COM Port

Click on **Logger**, click on **Test COM** port to test the validity of the communication port.



Valid Com Port



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9. Warranty

Sirius Technologies, Inc. equipment is warranted for a period of twelve (12) months from the date of purchase to be free of defects in material or workmanship. This warranty does not apply to damage resulting from accident, alteration, abuse, loss of parts or repair by other than Sirius Technologies, Inc. The equipment will be repaired or replaced, at our option, without charge to the owner for parts or labor incurred in such repair. This warranty shall not apply unless the equipment is returned for our examination with all transportation charges prepaid to:

Sirius Technologies, Inc.
418-B Cloverleaf Drive
Baldwin Park, CA 91706
U.S.A.

Tel: 626-934-0100
Fax: 626-924-0161