



EZ Data Logger Quick Start Manual

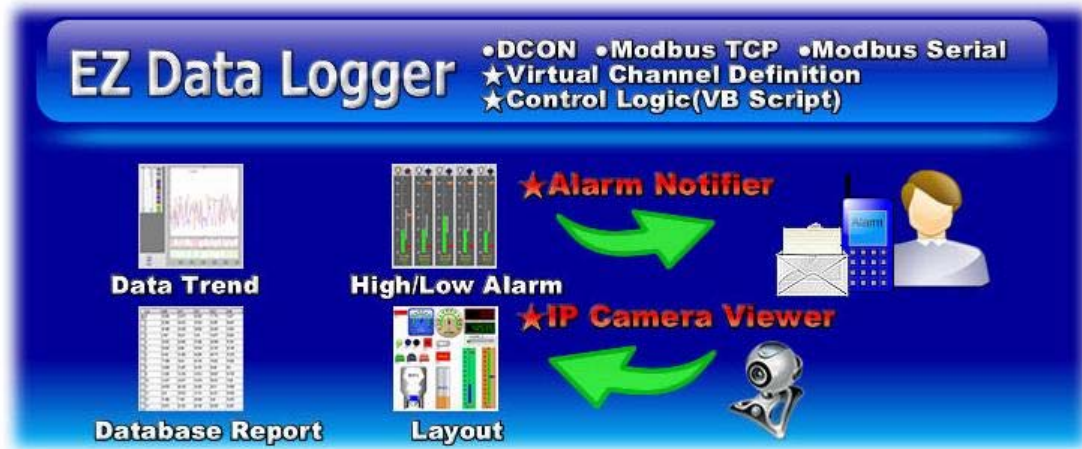
Download location:

http://www.icpdas.com/products/Software/ez_data_logger/ez_data_logger.html

Training Demo:

<http://www.icpdas-usa.com/ezdatalogger.php>

<http://www.icpdas-usa.com/EZData.php>



Version 4.2.3 (last updated at 2009/11/20)

[Free Download](#)

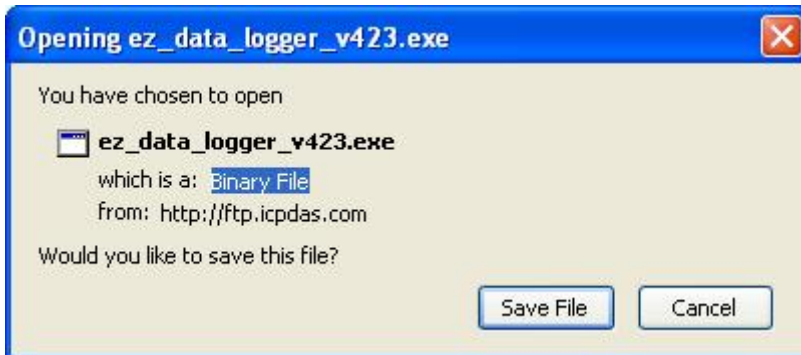
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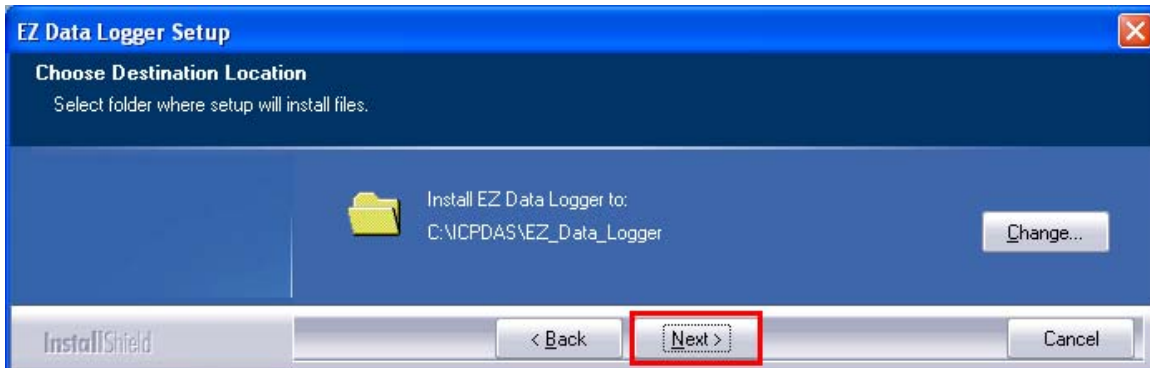
[Revision History](#)

Click on **Free Download** which would open a new window with the following files. Download the "ez_data_logger_v423.exe" file.

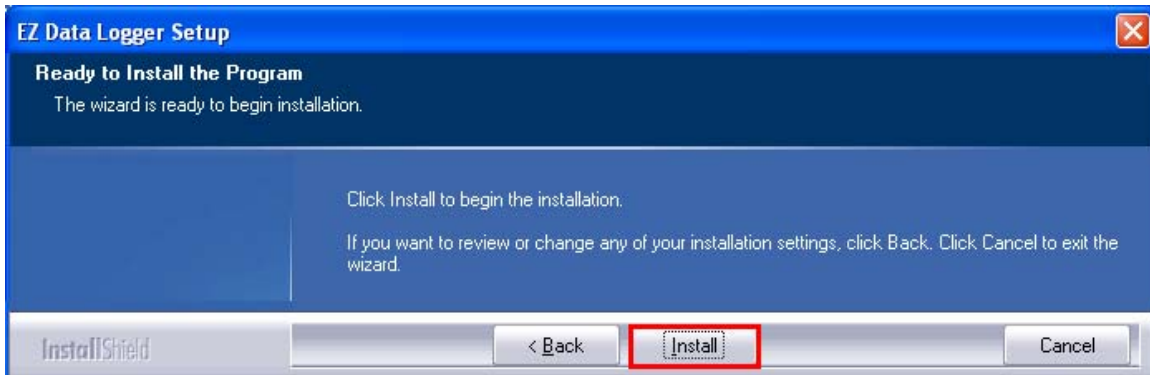
<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
Parent Directory		-	
ez data logger v423.exe	27-Nov-2009 17:10	19M	
ezdatalogger big5.chm	26-Nov-2009 11:39	1.3M	
ezdatalogger eng.chm	26-Nov-2009 11:39	1.4M	
ezdatalogger gb.chm	26-Nov-2009 11:39	1.3M	
version 423.txt	26-Nov-2009 11:39	12K	



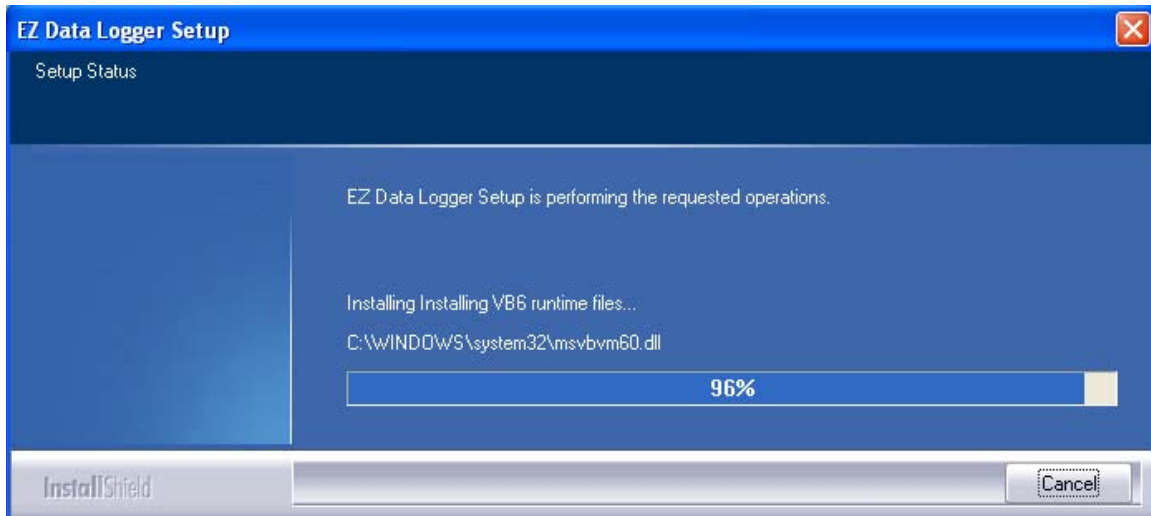
Click on **“Save File”** and then Run the **“ez_data_logger_v423.exe”** file and follow the commands on the screen



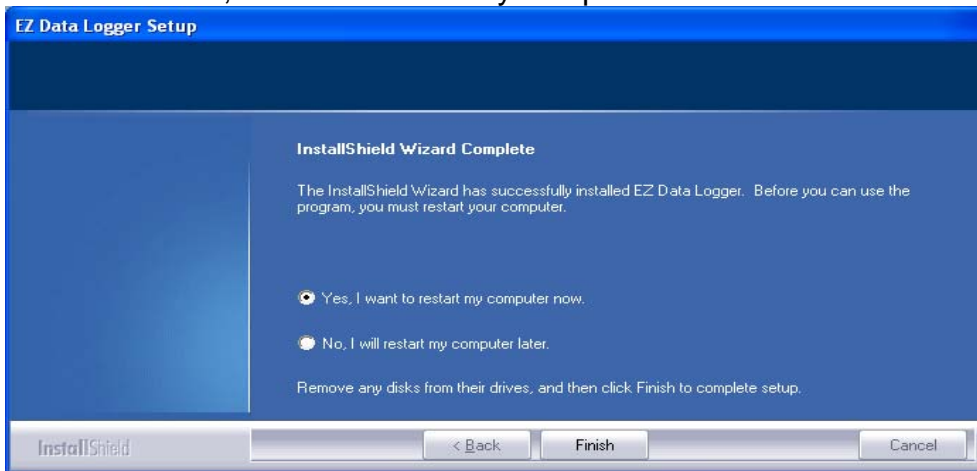
Click **“Next”**



Click **“Install”** and complete the setup of EZ Data Logger software.



Select the “Yes, I want to restart my computer now”



Some useful tips regarding EZ Data Logger:

Set up “System Configuration” for data collection

- Click “System Config” button to see the following window. This window helps you set the data collection rate, display format, database file path.
- Click “Save” and then “Exit” once all configurations are done.



Oscilloscope Config

Display Mode Numeric Date/Time

Sampling Time(sec)

Graph XAxis(Minute)

Display Buffer Size

Data Format

Auto start when excute

Alarm Audio

Data Log Config

Save Interval(sec)

Record Time(Hour)

Database File Path

Delete a Channel:

- In "Workgroup Setting" the AI, AO, DI and DO channels are displayed on the extreme right.
- Click the + sign next to the "DO channel" that can be expanded.
- Right click on a single channel and click "Delete"



Fig. 1

Note: It is necessary to individually delete each channel. Once all the channels are deleted the "channel window" would look as Fig 2.

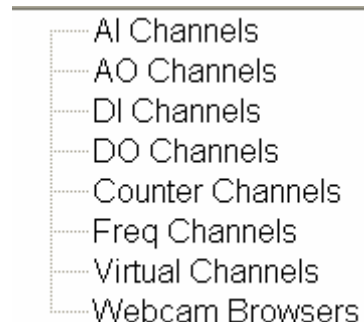


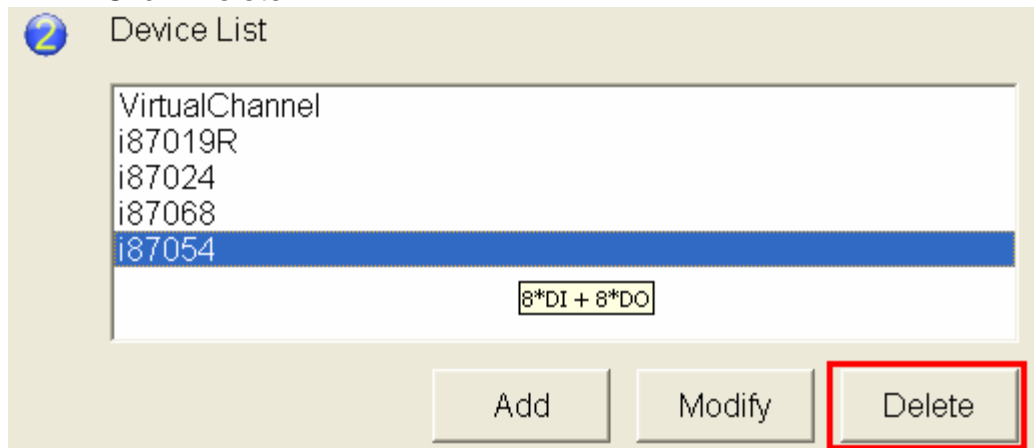
Fig 2.



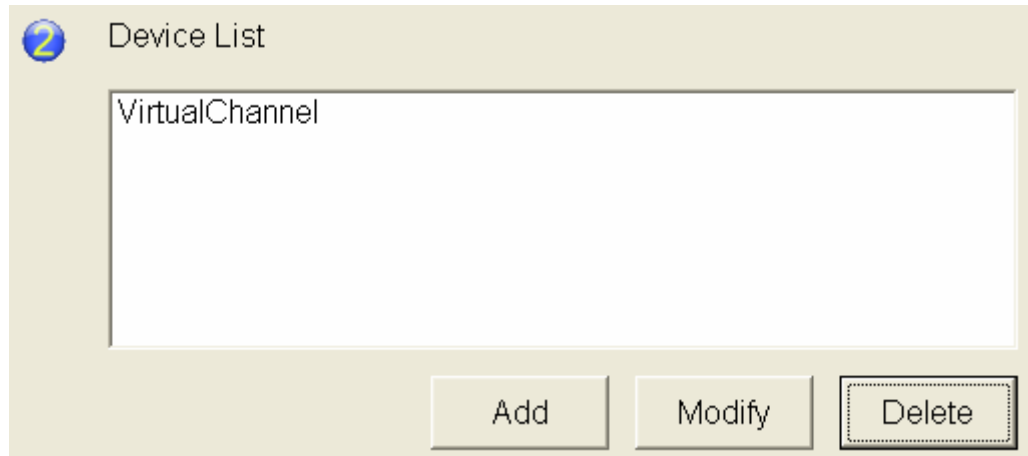
Delete Device:

Check if all the channels from the channel window are deleted. Once this is confirmed the following steps can be used to delete the device from the list.

- Select the device that needs to be deleted from the “Device List” on the “Workgroup Setting” window.
- Click “Delete”



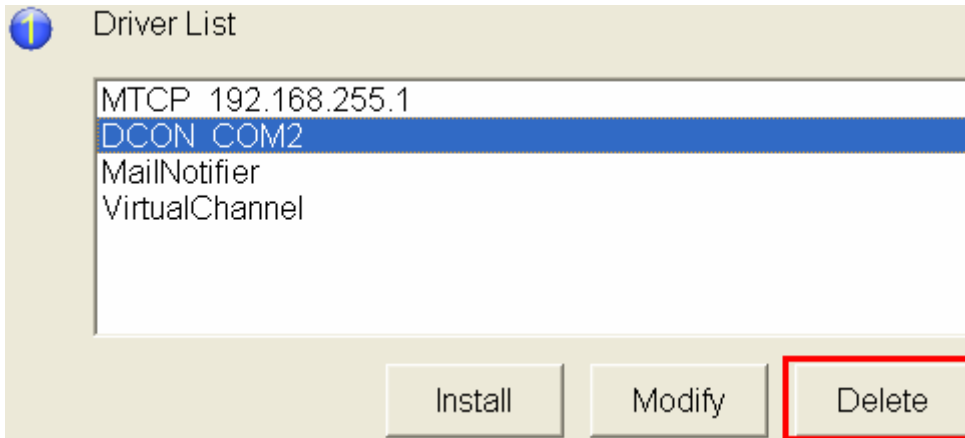
Once all the devices are deleted the “device list” should look as below.



Delete DCON driver:

Make sure all the devices from the device list are deleted.

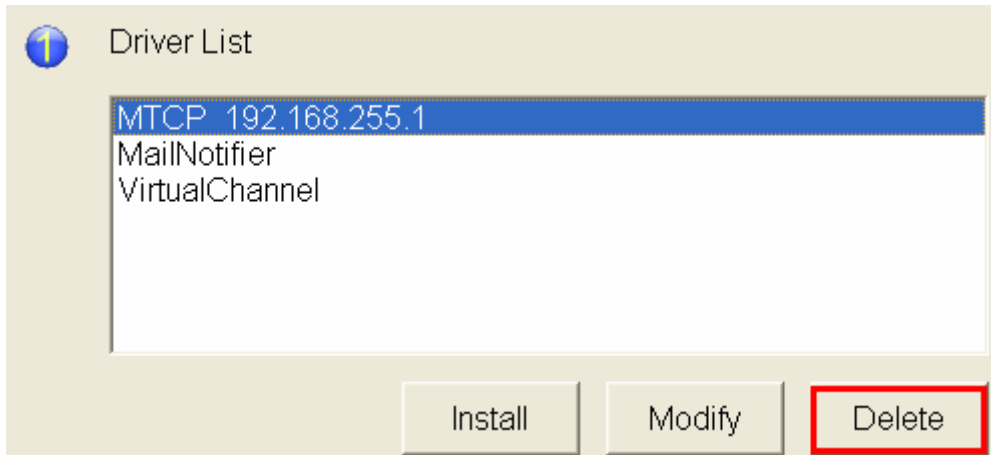
- Select the DCON driver that needs to be deleted.
- Click “Delete”



Delete MTCP driver:

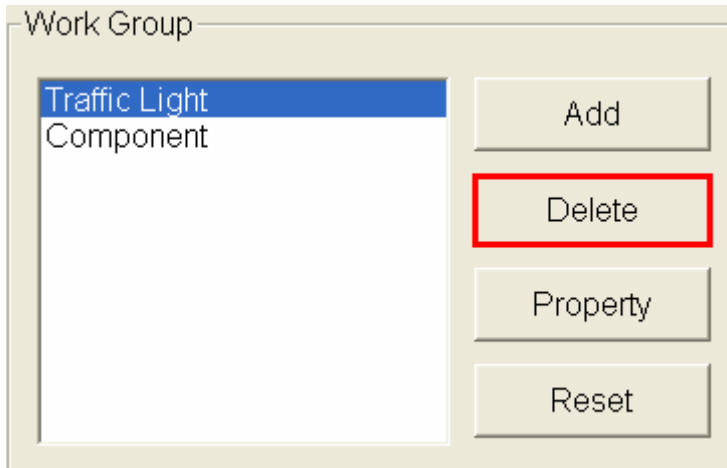
Make sure all the devices from the device list are deleted.

- Select the MTCP driver that needs to be deleted.
- Click "Delete"



Delete a component:

- Select the component named "Traffic Light"
- Click "Delete"

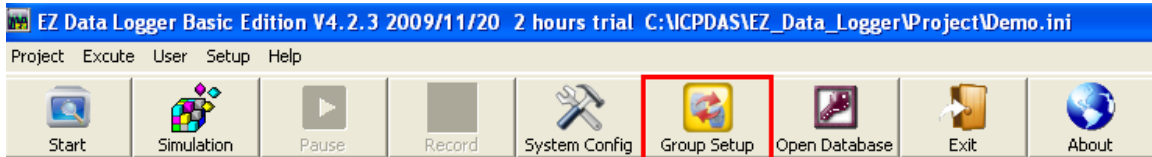


**Example 1: Configure I-7000 module with EZ Data Logger.
We would be using I-7016 module in our example.**

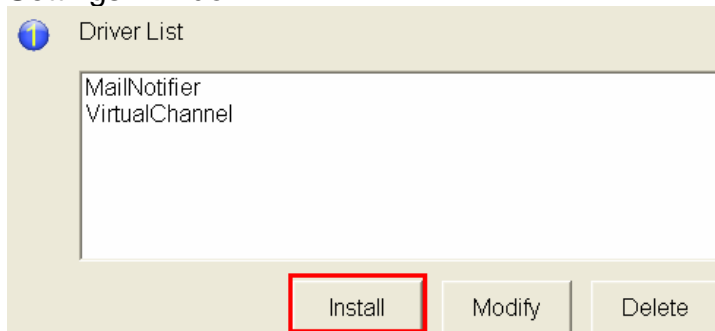
Please check the following things before Step 1:

1. Power ON the I-7000 module
2. Find the COM port number of the PC where the I-7000 module is connected.
3. Make a note of COM port, Address, BaudRate, Checksum for the I-7000 module.

Step 1: Install a DCON driver on a specific COM port

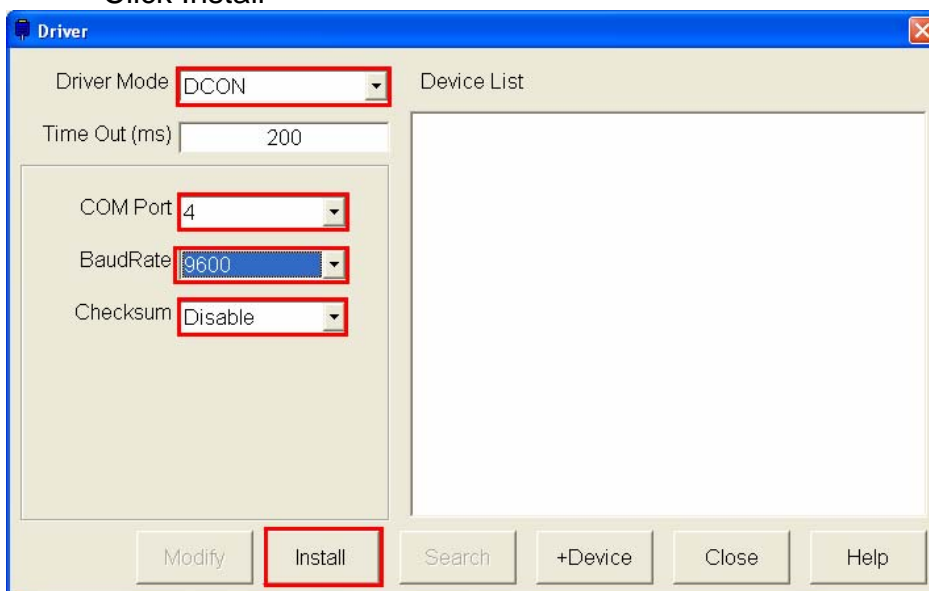


Click on "Group Setup" and click "Install" under the Driver List on the "Workgroup Settings" window.

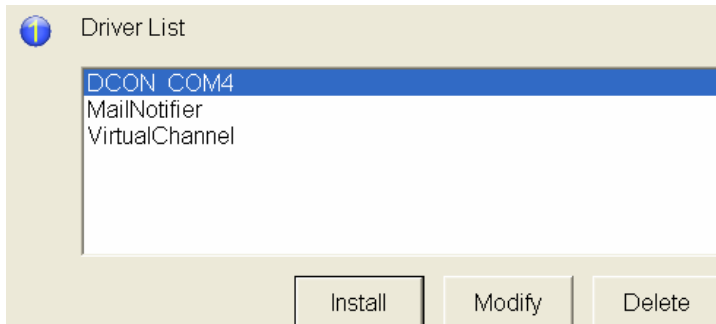


Enter the following information correctly.

- Driver Mode: "DCON"
- COM Port as "what applies to your setup"
- Note: In our example we have I-7016 connected to the COM 4 of our PC, hence we select COM4.
- BaudRate and Checksum "This information can be found from DCON Utility". The factory default is 9600 and Disable for all I-7000 modules.
- Click Install

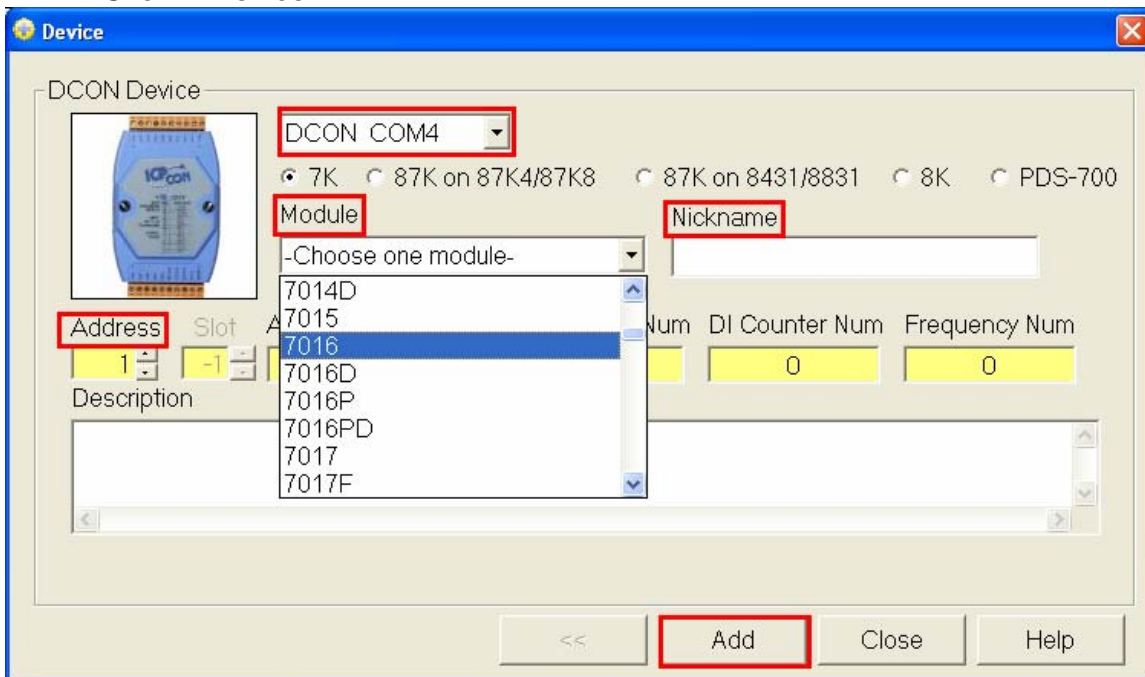


If the driver is installed correctly then it would show up in the "Driver list" as below.



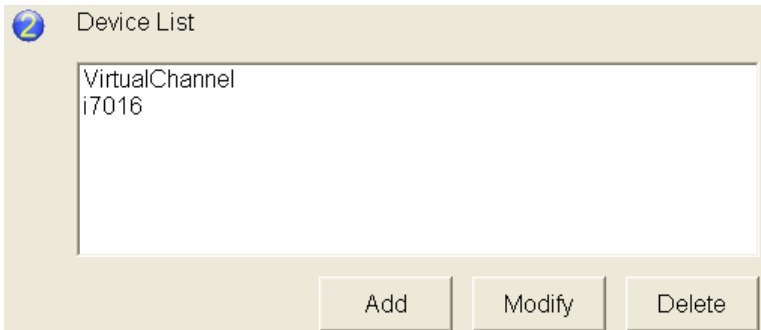
Step 2: Add a device (I-7000 module)

- Select the Driver "DCON COM4" from the "Driver List" and click "Modify"
- Click "+Device"

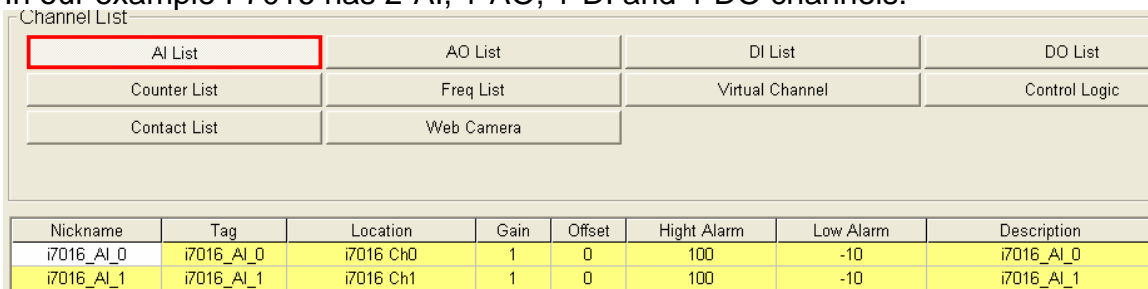


- On the Device window "DCON COM4" is selected automatically. This also indicates the DCON driver is correctly installed.
- Select the "Module" name from the drop down menu list.
- Enter a "Nickname" eg: i7016
- Enter the Address of the I-7000 module (found from DCON Utility).
- Click "Add"
- Close the "Device" and "Driver" window.

Check the device list to make sure that I-7000 module got added correctly.

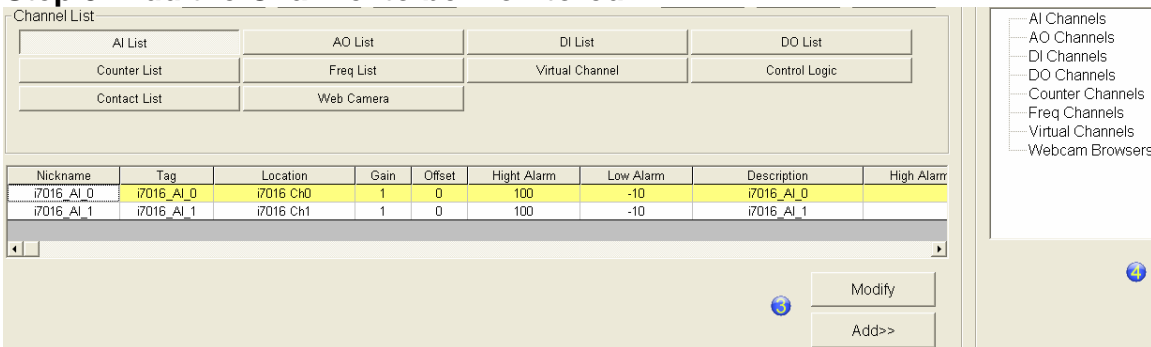


Also make sure all the AI, AO, DI and DO channels are present in the “Channel list”. The number and type of channels depends on the type of module used. In our example I-7016 has 2-AI, 1-AO, 1-DI and 4-DO channels.



In the above figure the “AI List” tab under Channel List is selected. Hence we see the two AI channels listed below.

Step 3: Add the Channel to be monitored



- Select the channel that needs to be added to the monitoring list.
- Click on “Add”
-

The “i7016_AI_0” gets added to the “AI channels” on the right side on the window. It is also possible to select a group of channels and add them.

After adding all the channels on the I-7016 we get the following figure.



Channel List

AI List	AO List	DI List	DO List
Counter List	Freq List	Virtual Channel	Control Logic
Contact List	Web Camera		

Nickname	Tag	Location	Description
i7016_DO_0	i7016_DO_0	i7016 Ch0	i7016_DO_0
i7016_DO_1	i7016_DO_1	i7016 Ch1	i7016_DO_1
i7016_DO_2	i7016_DO_2	i7016 Ch2	i7016_DO_2
i7016_DO_3	i7016_DO_3	i7016 Ch3	i7016_DO_3

- AI Channels
 - i7016_AI_0
 - i7016_AI_1
- AO Channels
 - i7016_AO_0
- DI Channels
 - i7016_DI_0
- DO Channels
 - i7016_DO_0
 - i7016_DO_1
 - i7016_DO_2
 - i7016_DO_3
- Counter Channels
- Freq Channels
- Virtual Channels
- Webcam Browsers

Step 4: Configure a specific “AI channel”

Double click the “AI channel” that needs to be configured.

Modify Channel

Nickname: i7016_AI_0
Tag: i7016_AI_0
Description: i7016_AI_0

Scaling
Gain: 1
Offset: 0

AI Value: 0
Display Value: 10
Point1: 0
Point2: 32767
Calculate

Alarm
High Alarm: 100
Low Alarm: -10
Contact to: None

Component Style: TextBox

Angular_Basic.ini
Angular_Circle_Golden.ini
Angular_Circle_Green.ini
Angular_Square_Blue.ini
Angular_Square_Gray.ini

123.456

Modify
Cancel
Editor

It is possible to scale the AI value, set a high and low alarm value, and change the tag names. Click “Modify” after making changes. Click “Home” to go to Main window

Step 5: Start Simulation



- Click the Start button on the “Main window” of EZ Data Logger



Observe the following changes on the “Main Window”

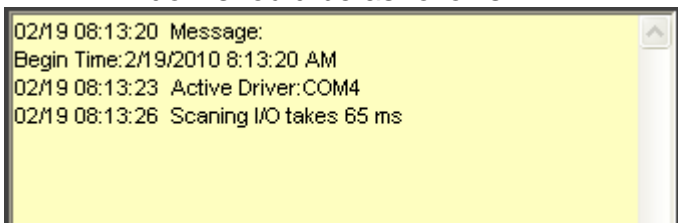
- Task bar changes as follows:



- Device state changes to green

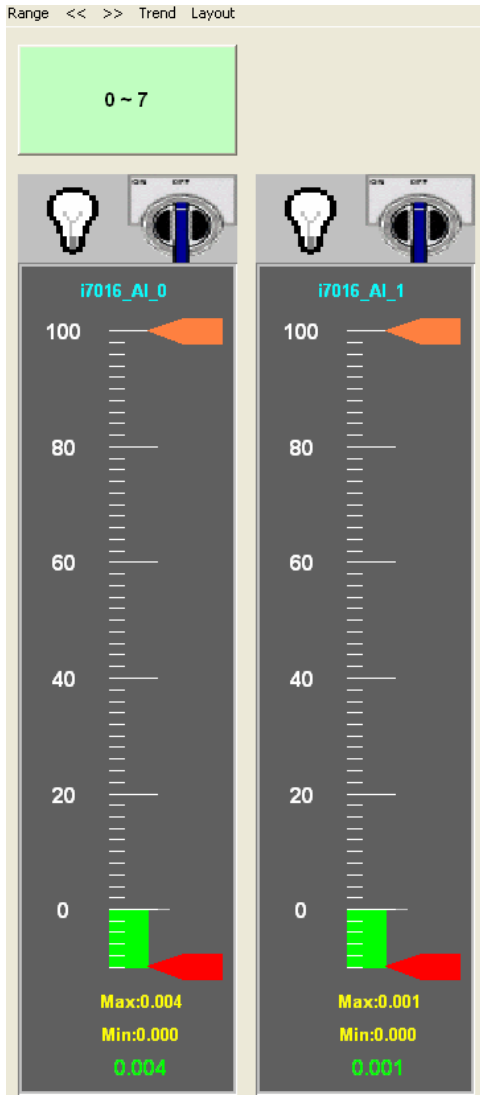


- If the device is configured correctly and has no errors then the message window should be as follows.

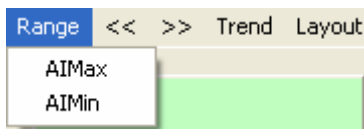


Step 6: Gauge Display

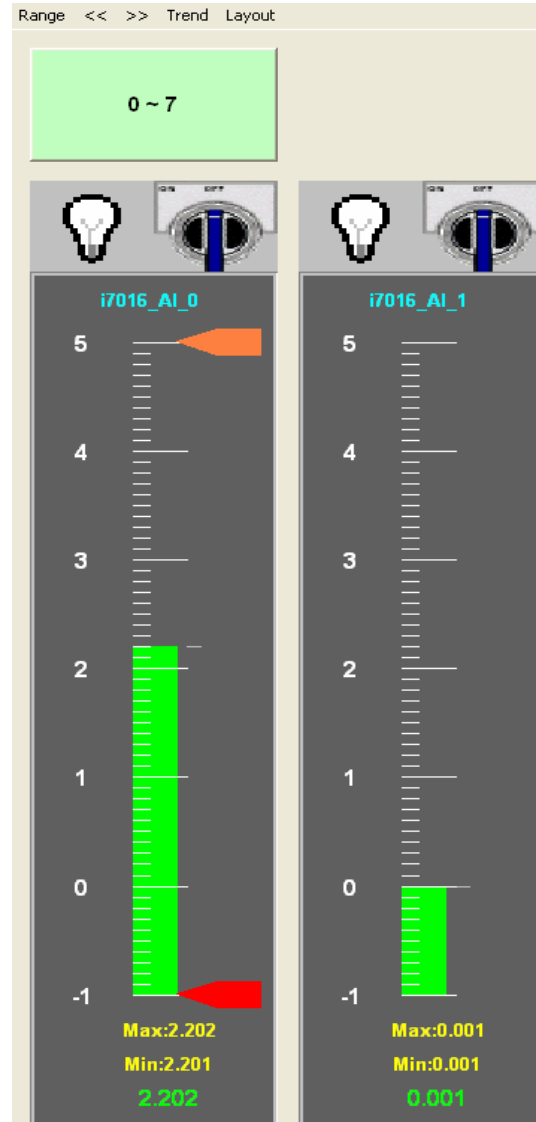
- Click on “Gauge” in the “Main Window”. The following window shows up.



- Set the "AI max" and "AI min" on the AI channel.
- Click on "Range" and either "AIMax" or "AI Min"



In our example we have set the AIMax= 5 and AIMin= -1

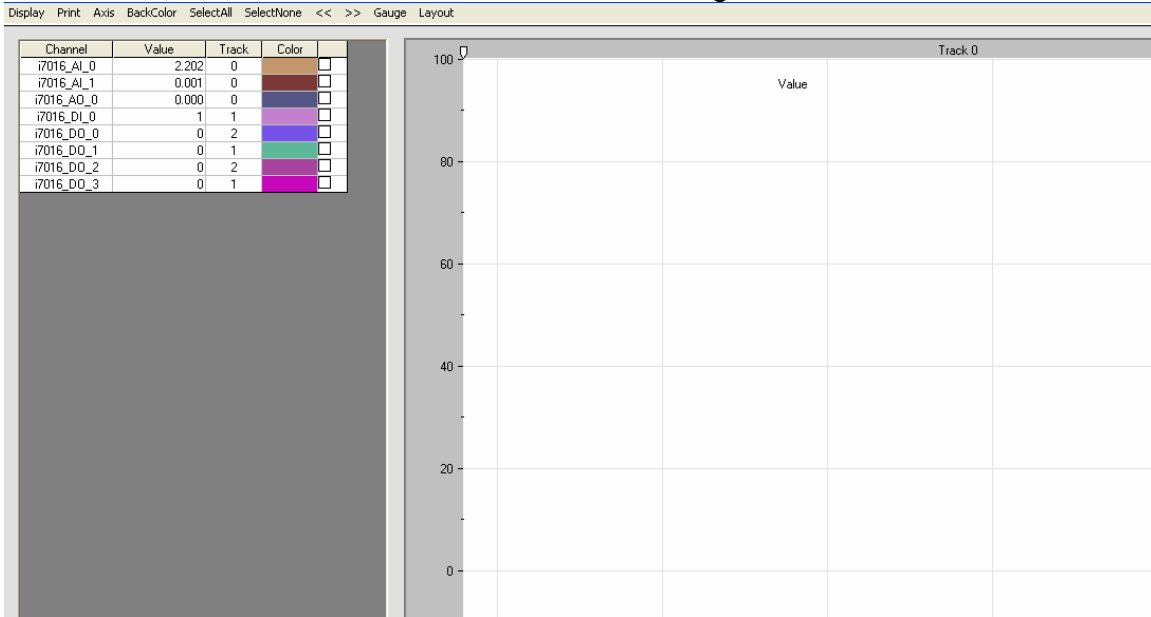


The green bar shows the actual value of the input on each of the channels.

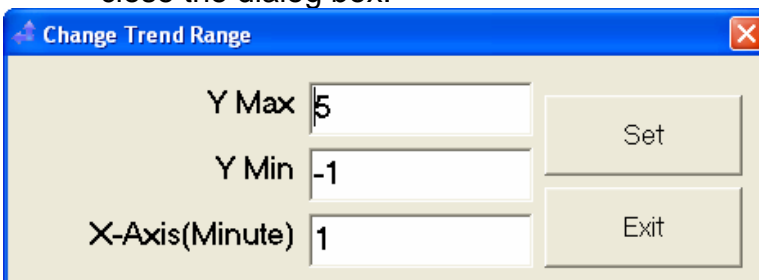


Step 7: Trend Display

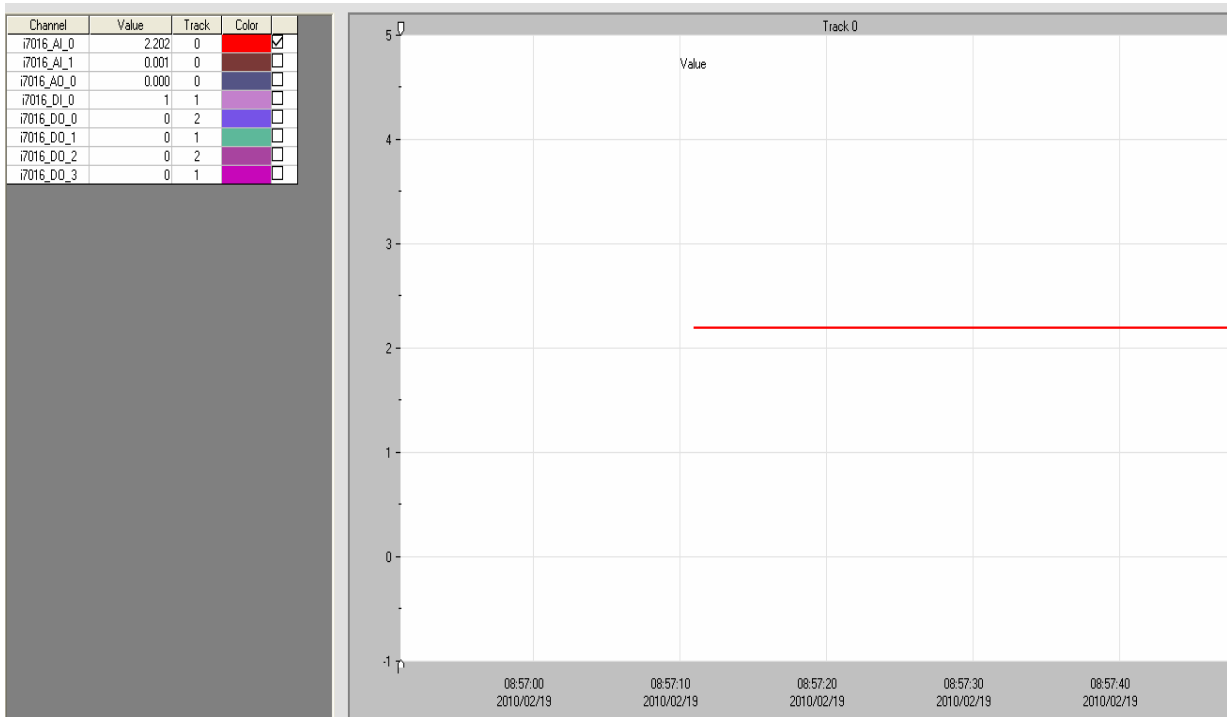
- Click on Trend from “Main window” or “Gauge window”



- Check mark the channel that you would like to trend.
- Click on “Axis” to set the values. Click on “Set” at the end. Click “Exit” to close the dialog box.



- Look at the following “Trend” with the changed settings.

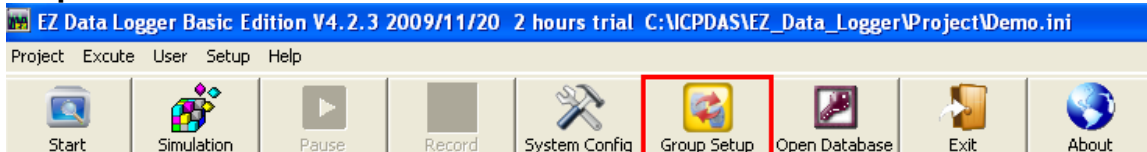


Example 2: Configure ET-7000 module with EZ Data Logger.
We would be using ET-7017 module in our example.

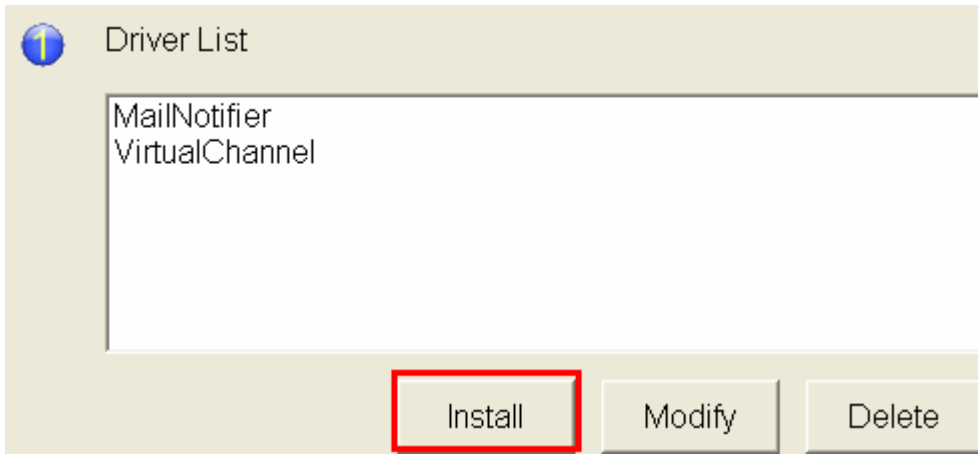
Please check the following things before Step 1:

1. Power ON the ET-7000 module
2. Set the IP address, Subnet Mask and Gateway for the ET-7000 module using the MiniOS7 Utility.
3. Make a note of the IP Address from MiniOS7 Utility.

Step 1: Install a Modbus TCP driver

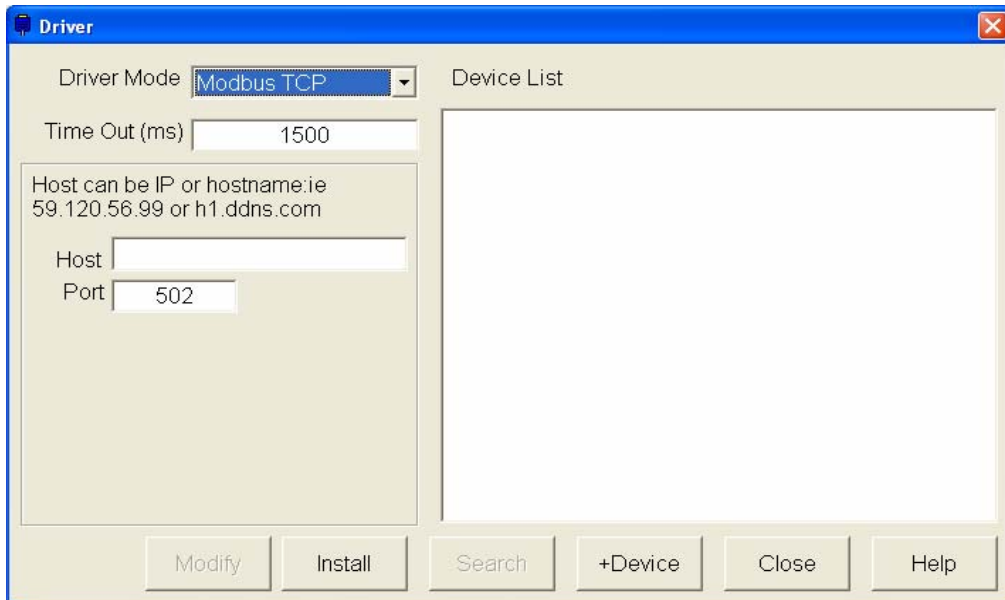


Click on "Group Setup" and click "Install" under the Driver List on the "Workgroup Settings" window.

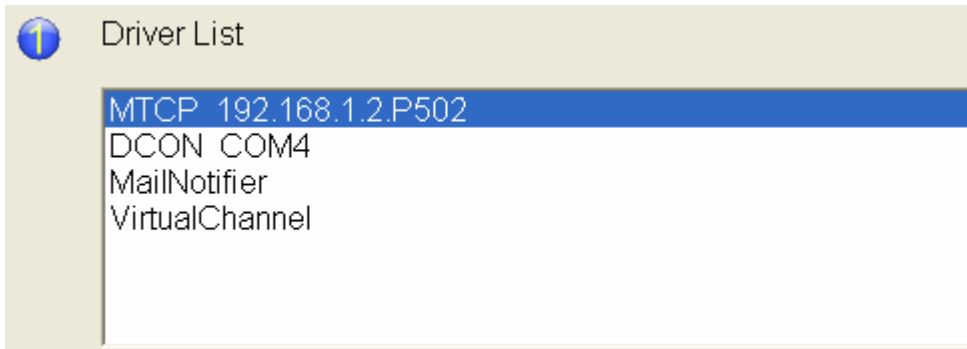


Enter the following information correctly.

- Driver Mode: "Modbus TCP"
- Time Out (ms) : 1500 (default)
- Host: IP Address of the ET-7000 module. In our example ET-7017 has a IP address 192.168.1.2
- Click Install

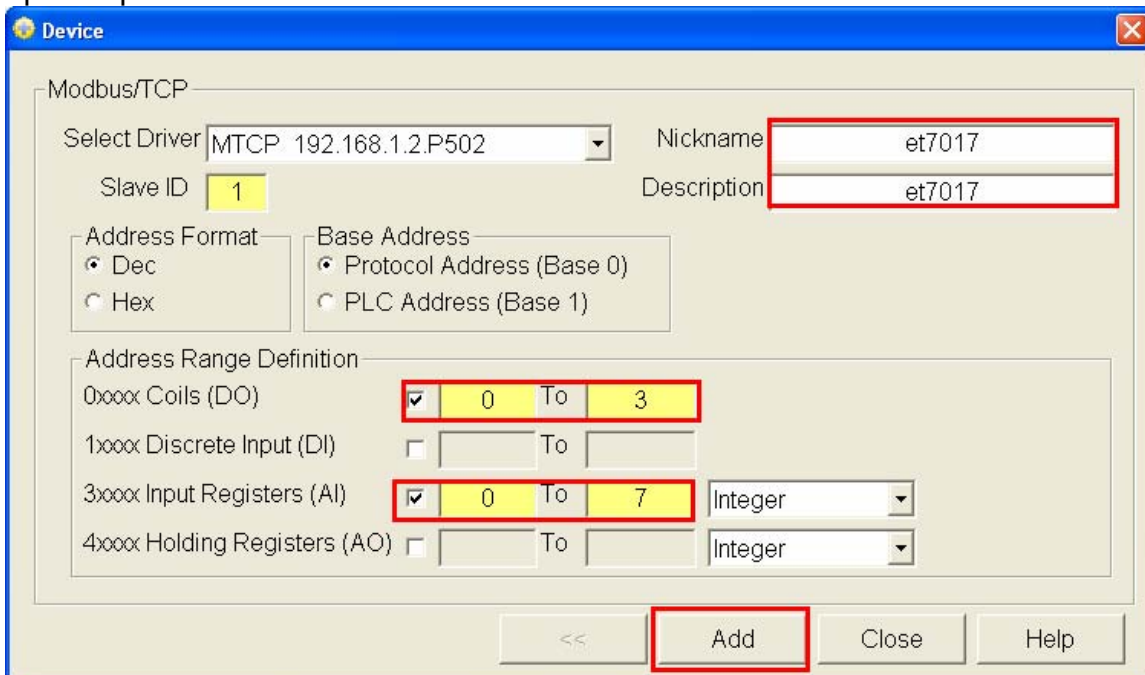


The driver should show up in the driver list as follows



Step 2: Add the ET-7000 module to device list

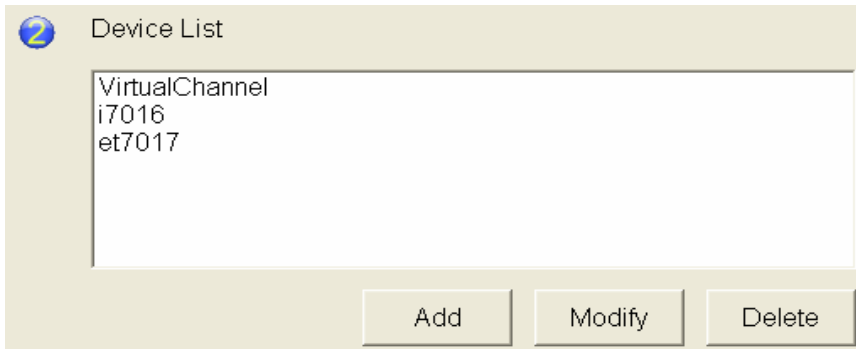
- Click on "+ Device" on the ModbusTCP driver window. The "device window" opens up as shown below.



Enter Nickname, description, number of DO,DI,AI and AO channels on the ET-7000 module.

In our example the ET-7017 has 4 DO channels and 8 AI channels.

- The "ET-7017" added into the device list as shown below.

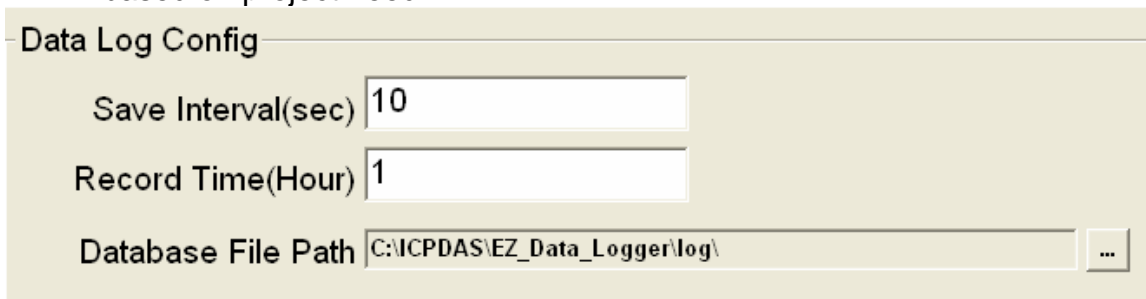


Step3 : Refer to the example 1 above for adding, modifying, monitoring a channel

Example 3: Exporting Database from EZ Data Logger

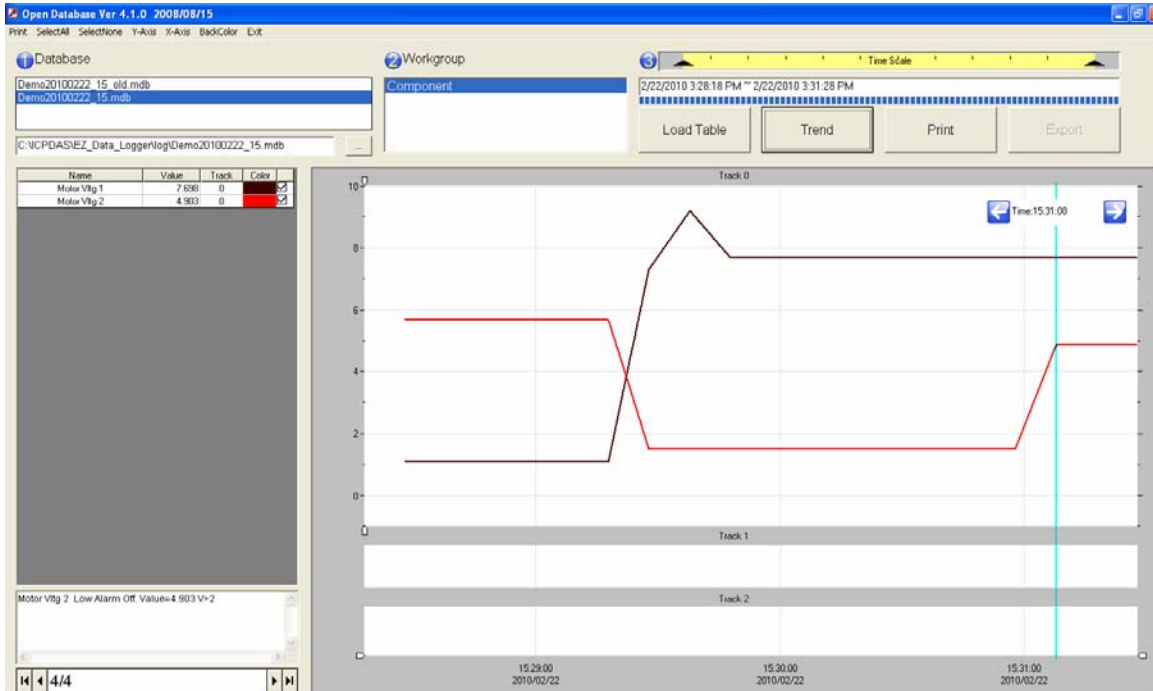
Step 1: Setup Data Collection parameters

- Enter the “System Configuration” window and set the following parameters based on project need.

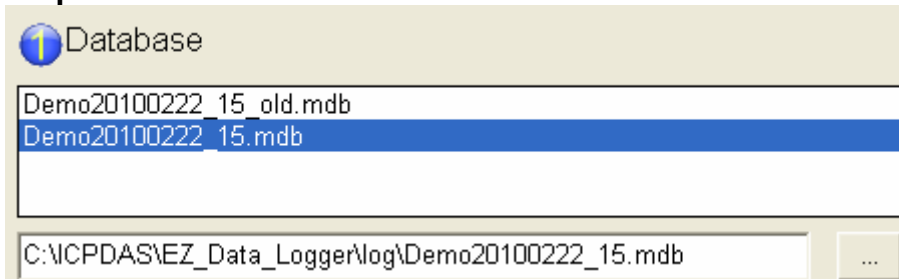


Note: Once you click “Start” in the “Main Window” the EZ Data Logger starts collecting and saving data to the above location. You can open the database only when the EZ Data Logger is not collecting data.

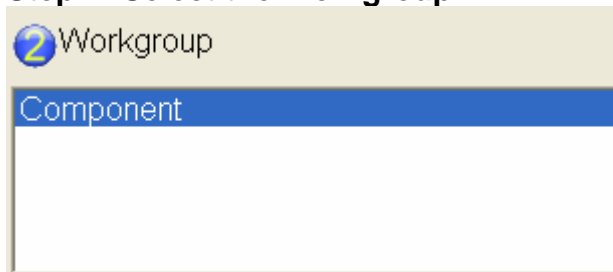
Step 2: Click on “Open Database” to see the following window



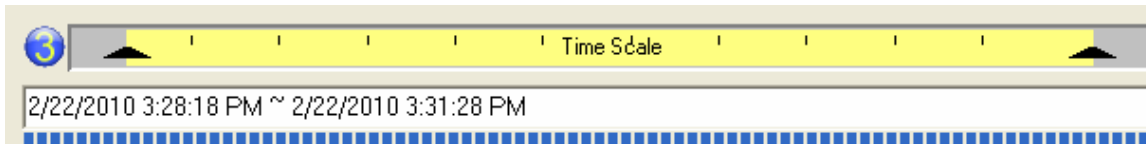
Step 3: Select the Database



Step 4: Select the Workgroup



Step 5: Select the timeline



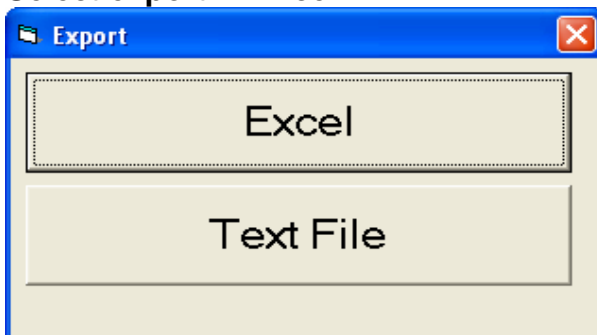
Step 6: Click “Load Table”

List	Motor Vltq 10	Motor Vltq 21	SamplingTime	AlarmLog
0	1.102	5.701	2/22/2010 3:28:18 PM	
1	1.102	5.701	2/22/2010 3:28:28 PM	
2	1.102	5.701	2/22/2010 3:28:38 PM	
3	1.102	5.701	2/22/2010 3:28:48 PM	
4	1.102	5.701	2/22/2010 3:28:58 PM	
5	1.102	5.701	2/22/2010 3:29:08 PM	
6	1.102	5.701	2/22/2010 3:29:18 PM	
7	7.312	1.498	2/22/2010 3:29:28 PM	Motor Vltg 2 Low Alarm
8	9.201	1.498	2/22/2010 3:29:38 PM	Motor Vltg 1 High Alarm
9	7.698	1.498	2/22/2010 3:29:48 PM	Motor Vltg 1 High Alarm
10	7.699	1.498	2/22/2010 3:29:58 PM	
11	7.699	1.498	2/22/2010 3:30:08 PM	
12	7.698	1.498	2/22/2010 3:30:18 PM	
13	7.698	1.498	2/22/2010 3:30:28 PM	
14	7.699	1.498	2/22/2010 3:30:38 PM	
15	7.698	1.498	2/22/2010 3:30:48 PM	
16	7.699	1.498	2/22/2010 3:30:58 PM	
17	7.698	4.903	2/22/2010 3:31:08 PM	Motor Vltg 2 Low Alarm
18	7.698	4.903	2/22/2010 3:31:18 PM	
19	7.699	4.903	2/22/2010 3:31:28 PM	

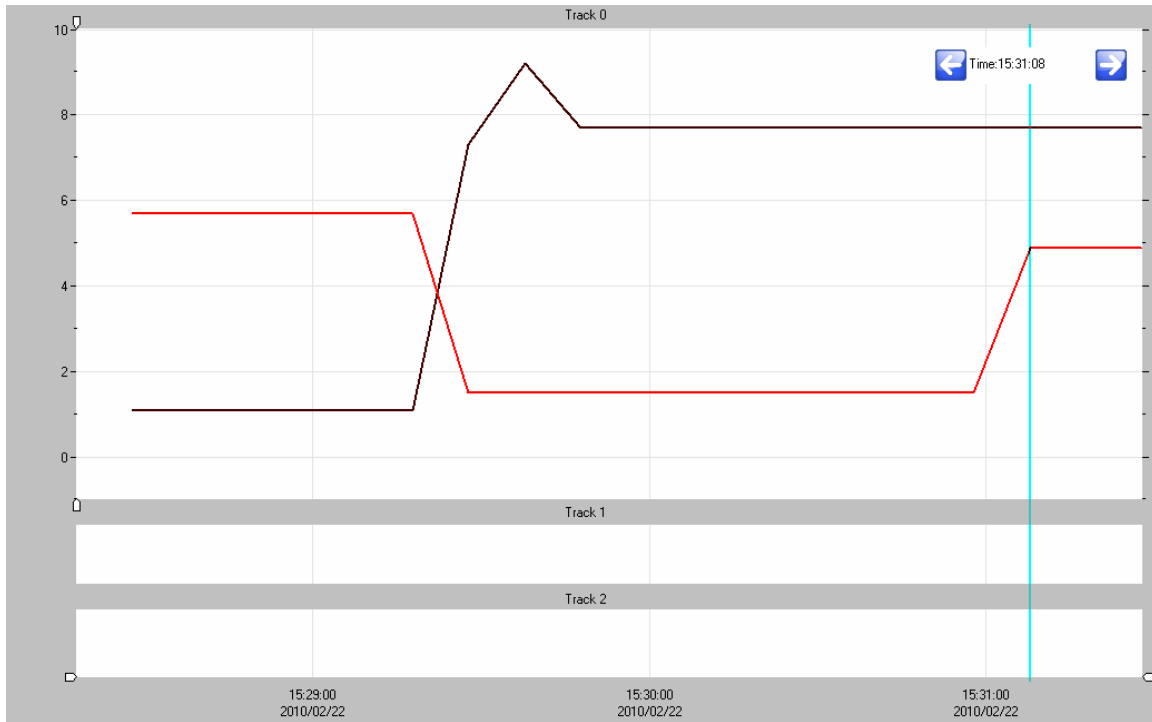
Step 7: Click “Export”



Select export in Excel



Step 8: Click “Load Trend”



Exported Database in Excel

	A	B	C	D	E
1	List	or Vltg 10	or Vltg 21	SamplingTime	AlarmLog
2	0	1.102	5.701	2010/02/22 15:28:18	
3	1	1.102	5.701	2010/02/22 15:28:28	
4	2	1.102	5.701	2010/02/22 15:28:38	
5	3	1.102	5.701	2010/02/22 15:28:48	
6	4	1.102	5.701	2010/02/22 15:28:58	
7	5	1.102	5.701	2010/02/22 15:29:08	
8	6	1.102	5.701	2010/02/22 15:29:18	
9	7	7.312	1.498	2010/02/22 15:29:28	Motor Vltg 2 Low Alarm. Value=1.498 V<2::
10	8	9.201	1.498	2010/02/22 15:29:38	Motor Vltg 1 High Alarm. Value=9.201 V>9::
11	9	7.698	1.498	2010/02/22 15:29:48	Motor Vltg 1 High Alarm off. Value=7.698 V<9::
12	10	7.699	1.498	2010/02/22 15:29:58	
13	11	7.699	1.498	2010/02/22 15:30:08	
14	12	7.698	1.498	2010/02/22 15:30:18	
15	13	7.698	1.498	2010/02/22 15:30:28	
16	14	7.699	1.498	2010/02/22 15:30:38	
17	15	7.698	1.498	2010/02/22 15:30:48	
18	16	7.699	1.498	2010/02/22 15:30:58	
19	17	7.698	4.903	2010/02/22 15:31:08	Motor Vltg 2 Low Alarm Off. Value=4.903 V>2::
20	18	7.698	4.903	2010/02/22 15:31:18	
21	19	7.699	4.903	2010/02/22 15:31:28	
22					