

Manual of SAS

(SW Version 1.40, Manual Version 1004)



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Step1 - Set Base Speed

1. Click the Up/Down Arrow button at right side of Base Speed or typing the speed number into the box at the left side of Arrow button
2. Select Msgid of Above Base Speed through the dropped List box, then the selected msgid (page) will be displayed on the preview window below.

Step2 - Set Posted speed

1. Click the Up/Down Arrow button at right side of Posted Speed or typing the speed number into the box at the left side of Arrow button
2. Select Msgid of Above Posted Speed through the dropped List box, then the selected msgid (page) will be displayed on the preview window below.

Step3- Set Over Speed

1. Click the Up/Down Arrow button at right side of Over Speed or typing the speed number into the box at the left side of Arrow button
2. Select Msgid of Above Over Speed through the dropped List box, then the selected msgid (page) will be displayed on the preview window.

Step 4 - Click "Start" to update SAS Msg settings

Display msg conditions

Condition 1: Speed < **Base Speed**

Blank screen and turn off DC-DC

Condition 2: **Base Speed** < Speed <= **Posted speed**

Display page for Above Base Speed + Speed Value.

Condition 3: **Posted speed** < Speed <= **Over Speed**

Display page for Above Posted + Speed Value, and Two LED Lamps flashing

Condition 4: **Over Speed** < Speed

Display page for Above Over Speed, Message flashing and Two LED Lamps flashing, NO speed value display.

Blank screen and turn off DC-DC

Condition 2: **Base Speed** < Speed <= **Posted speed**

Display page for Above Base Speed + Speed Value.

Condition 3: **Posted speed** < Speed <= **Over Speed**

Display page for Above Posted + Speed Value, and Two LED Lamps flashing

Condition 4: **Over Speed** < Speed

Display page for Above Over Speed, Message flashing and Two LED Lamps flashing, NO speed value display.

5. Other commands:

1. Display current settings of keypad

Press "D", LCD will display the current SAS message settings inside of keypad,

Note: These settings are only on the keypad, it would not be stored into the ECM. When system start, these settings are all 0. To get the SAS setting, see next command: Get and Display Current Settings from ECM.



SAS message settings after editing



System start, no SAS has been edited on Keypad

2. Get and Display Current Settings from ECM

Press "D", then Press "E", Keypad will get current SAS message settings from ECM and display them on the LCD screen



3. Display Voltage

Press "D", then Press "P", LCD will display the current voltage, Press "D" again then go to Posted Speed menu



4. Display Date and Time

Press "D", then Press "B", LCD will display the current Date, Time and Version of SAS ECM.

Press "B" again then go to Base Speed menu



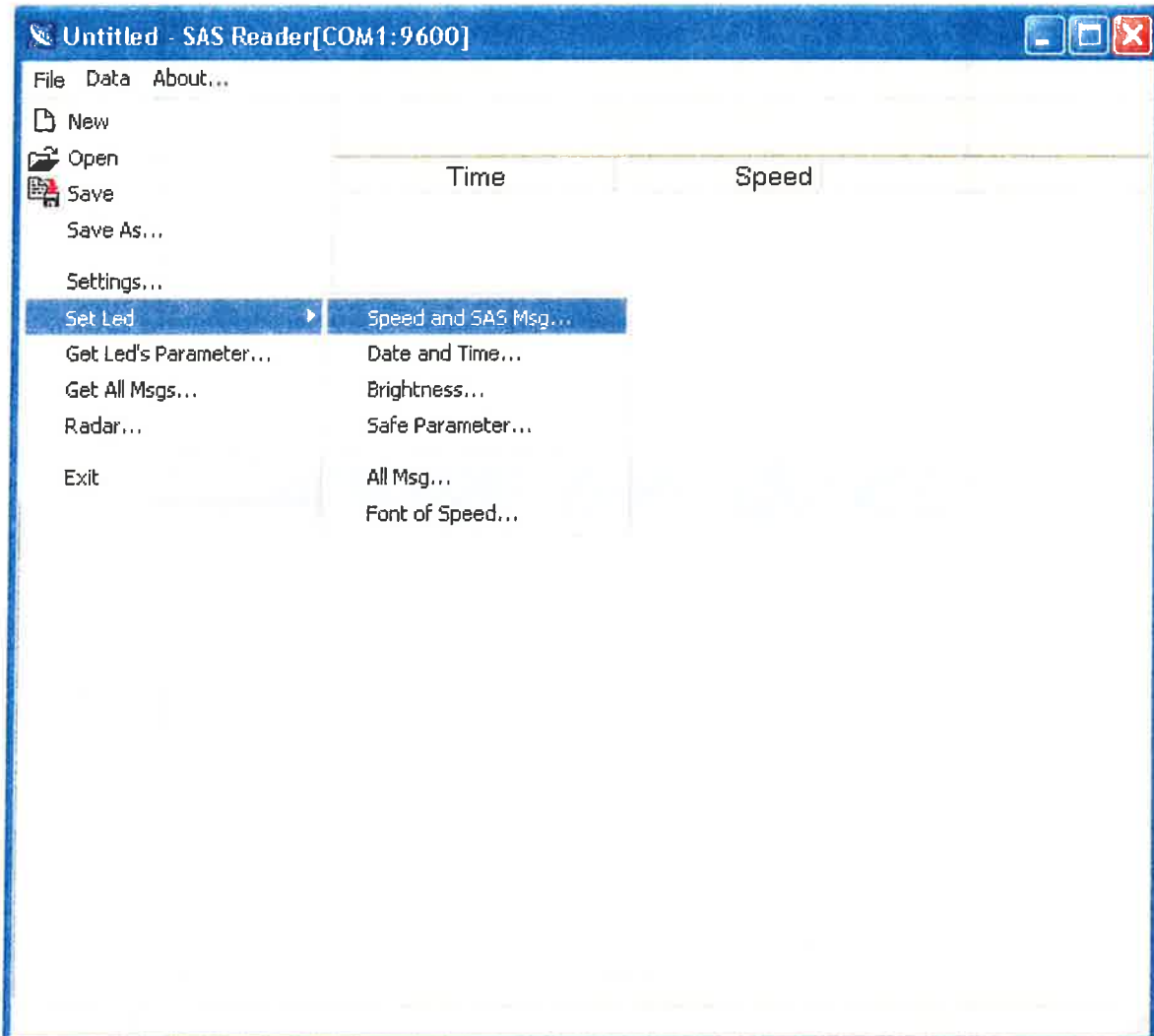
5. Set SAS Settings

Press "D", then Press "S", Keypad will send current SAS message settings from keypad to ECM, then it will display "set ok" on the LCD screen if update ECM successfully. Meanwhile LED screen will display the 3 pages of the SAS msg, then system will start SAS function with new speed and page settings.



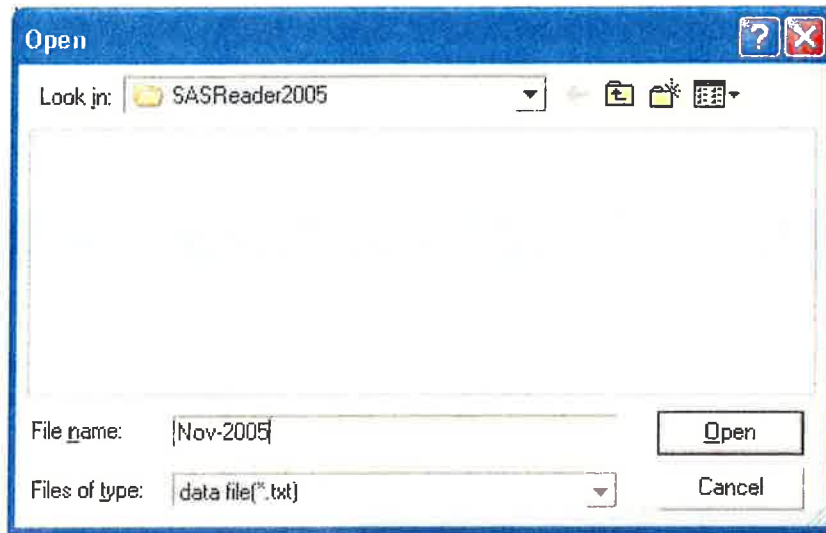
C. SASReader2005

User Menu – File

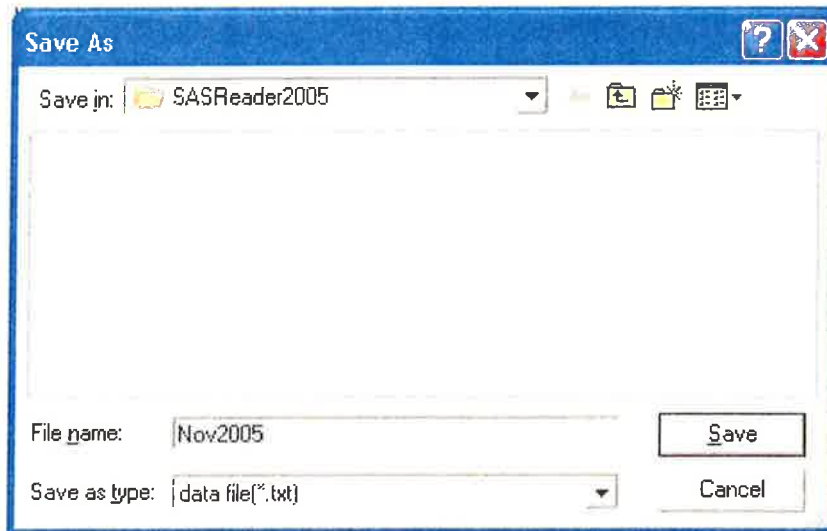


1. Open file
2. Save file
3. Settings...
4. Set Led
 - a. Speed and SAS Msg...
 - b. Date and Time...
 - c. Brightness...
 - d. Safe Parameter...
 - e. All Msg...
 - f. Font of Speed...
5. Get Led's Parameter...
6. Get All Msgs...
7. Radar... (This item has been canceled from v1.40 by default menu settings)

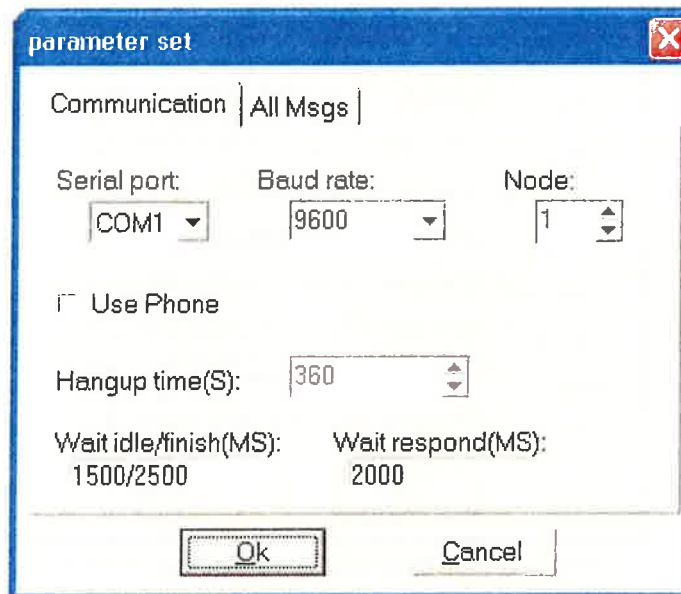
1. Open file



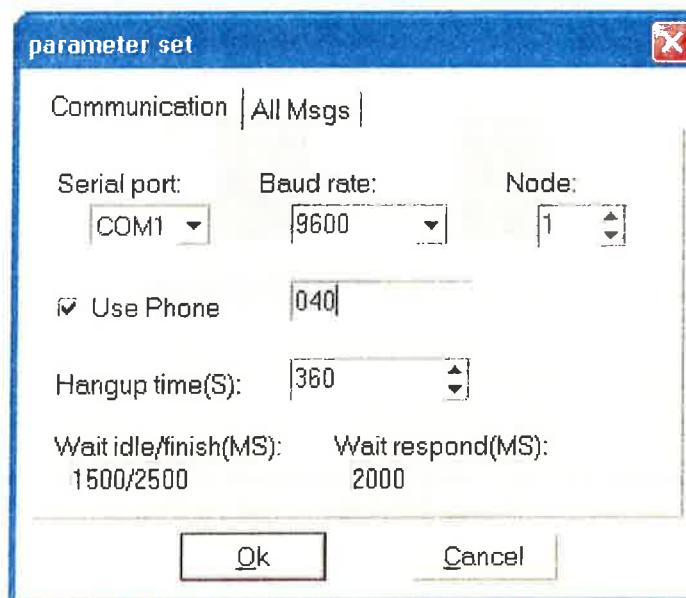
2. Save file



3. Settings...

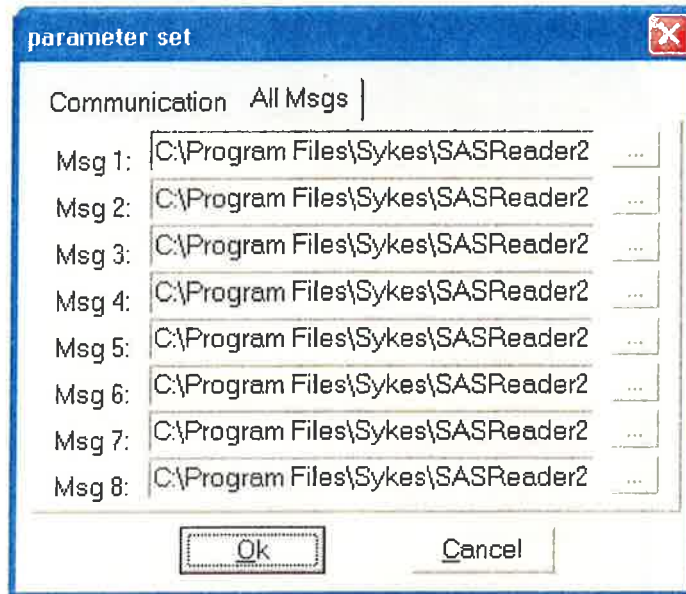


Communication Settings

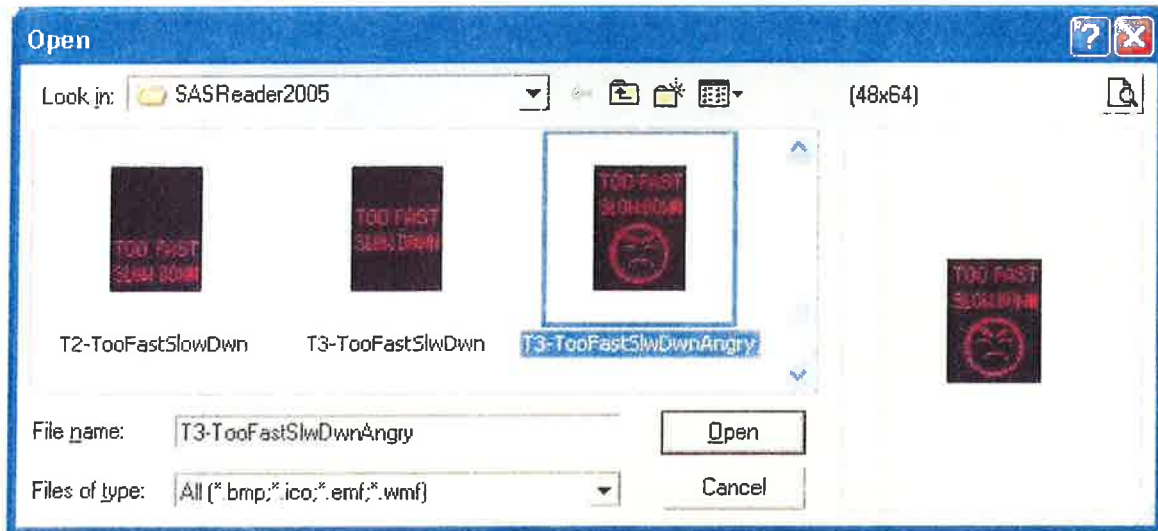


Type your phone number

* Note: Hangup time (s) is a variable time period for GSM communication been turned off after waiting for the same amount of time if there is no any operation. The unit is second and max value is 3600 seconds. Above image is 360 seconds.



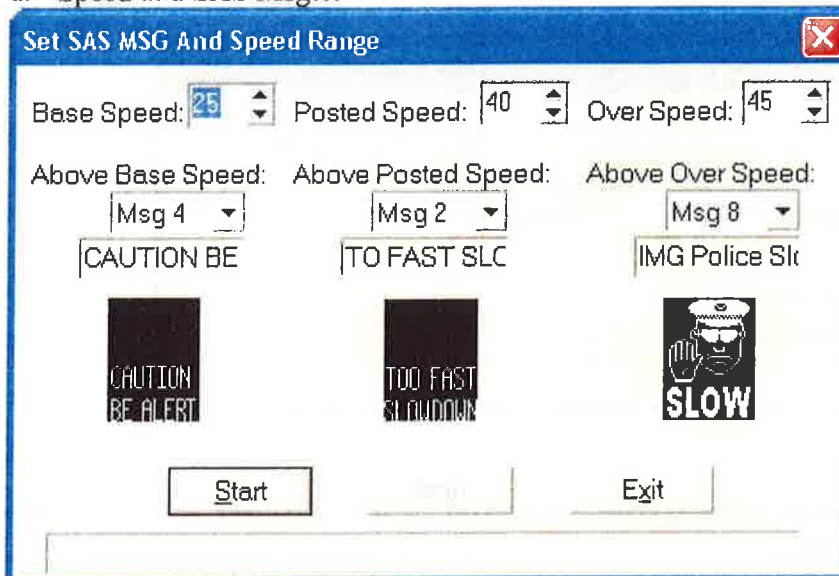
Select 8 messages will be stored into SAS ECM



Assign Message to related Msg id

4. Set Led

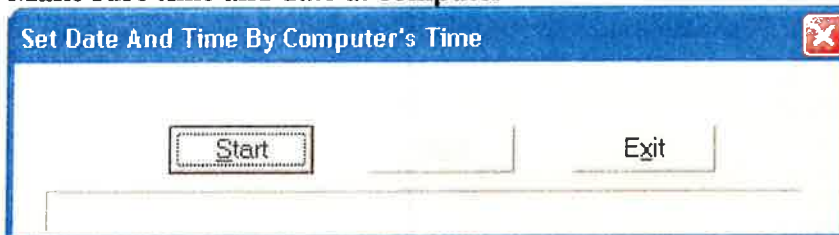
a. Speed and SAS Msg...



Click "Start" to update the SAS msg settings

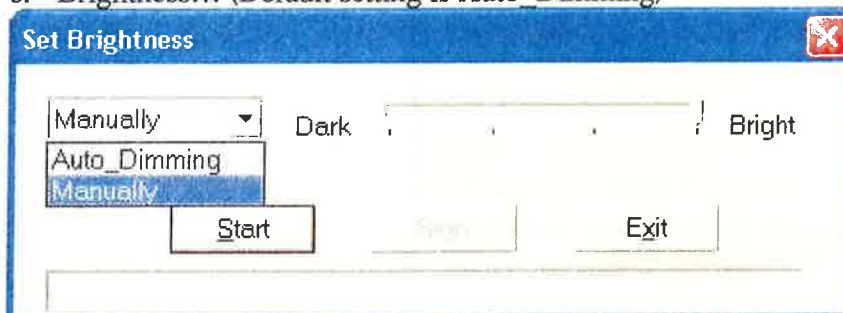
b. Date and Time...

Make sure time and date at computer is correct first

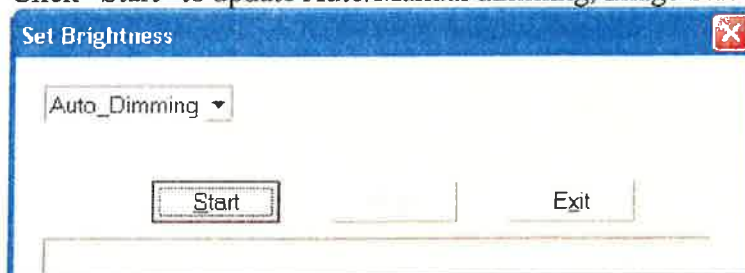


Click "Start" to update Date and Time

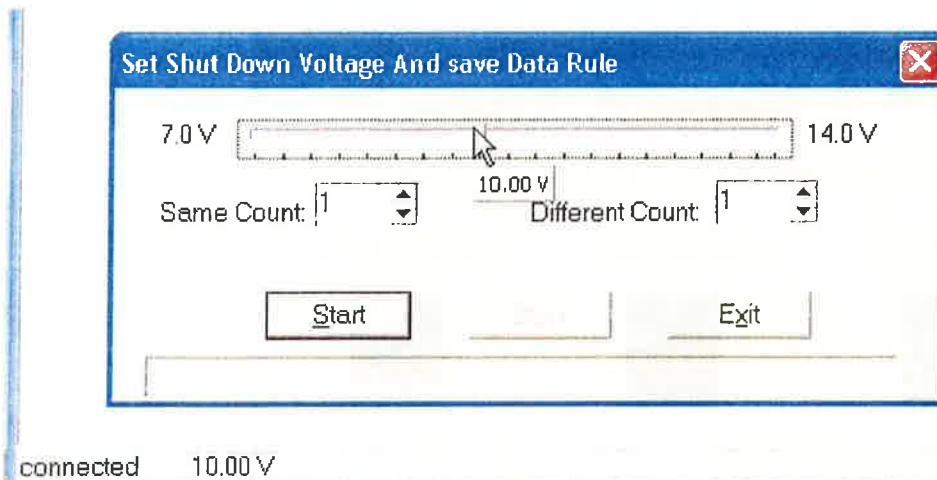
c. Brightness... (Default setting is Auto_Dimming)



Click "Start" to update Auto/Manual dimming, image below is auto_dimming

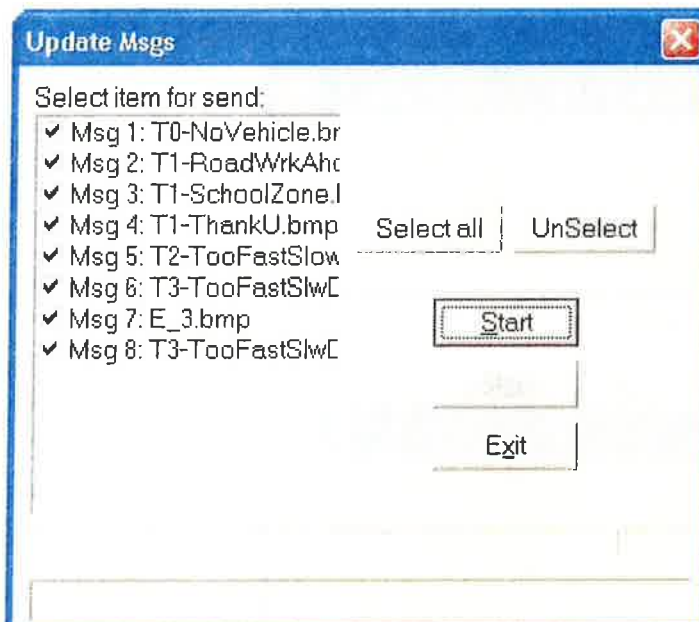


d. Safe Parameter... (Default alarm voltage setting is 10.00v)



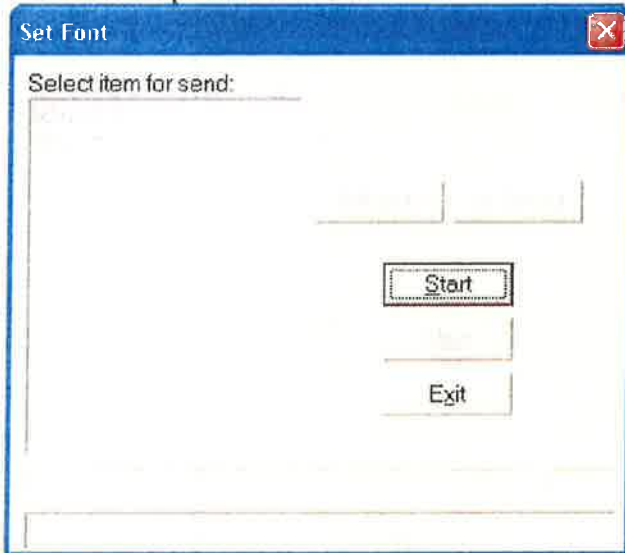
Click "Start" to update the alarm voltage and turn off DC-DC and blank screen to save power and the data collection ratio.

e. All Msg...



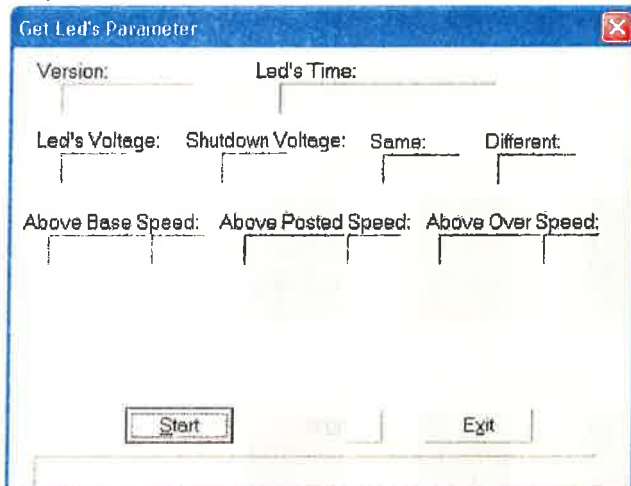
Click "Start" to update all assigned msgs

f. Font of Speed...Numeric

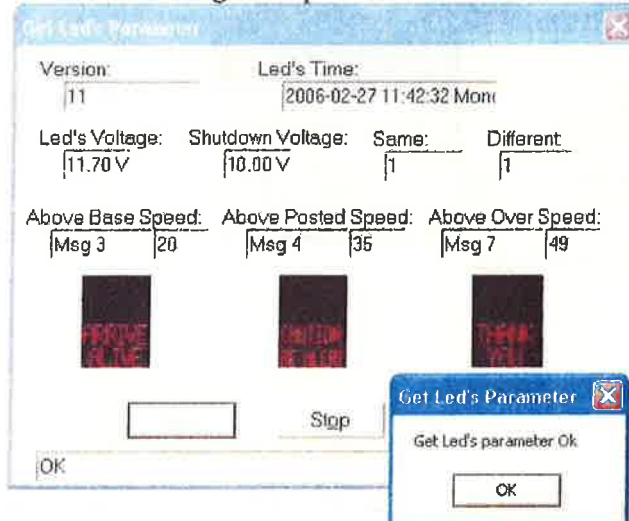


Click "Start" to update the font of SAS speed

5. Get Led's Parameter...

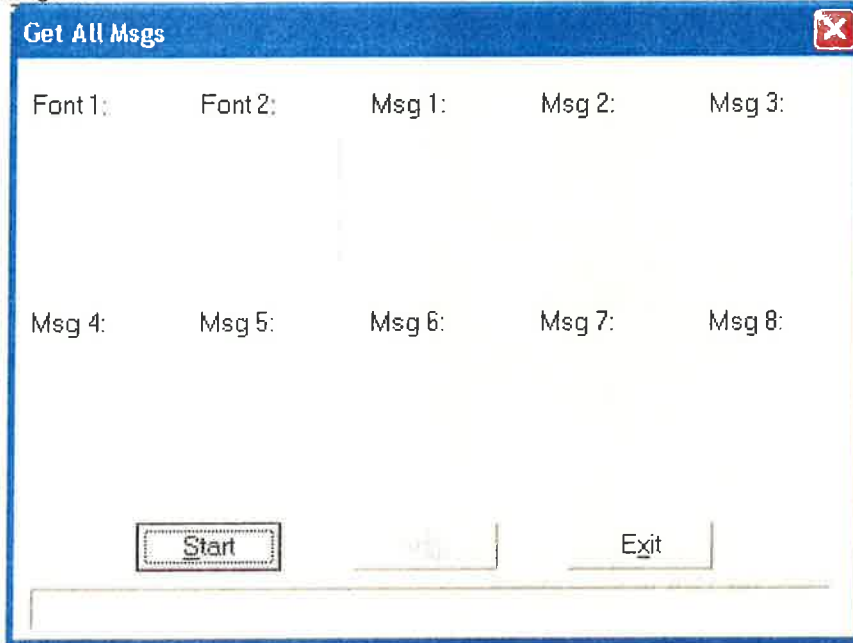


Click "Start" to get the parameters and status from ECM



Getting the parameters from sign successfully

6. Get All Msgs...



Click "Start" to get all the pages(msgs) and Fonts from Sign



Getting the pages(msgs) from sign successfully

7. Radar... (The image below is the default settings of Radar) – (This item has been canceled from v1.40 by default menu settings)

Set Radar Parameter

lowest speed: 15 highest speed: 200
unit: km/h sensitivity: 11
cos1: 0 cos2: 0
object detect: approach
object hold time: 2

Start Exit

Click “Start” to update the radar parameters

Refer to general settings of Radar (from Radar configure software SI2D)

SI2D - Rev. 23

Serial Number: 210469

Speed Setup:
 MPH KPH

Sensitivity Value: 9 Update 1 times per second.
Min Max Min Max

Override Update Rate with updates every 18 1/10 seconds.

Data Hold Time: 2 Zero Report in Continuous Mode
Low Speed Cutoff: 15 Cos Correction 1: 0
High Speed Cut Off: 200 Cos Correction 2: 0

Report: All Targets Approach Targets Recede Targets

Baud Rate: 19200 9600 2400 1200

Direction Report ASCII[+ - ?] for Towards Away Unknown

TX String:
[8n1 ASCII <D>[SSS.]<CR>

Poll String:
[8n1 ASCII [“P”]<CR>

OK

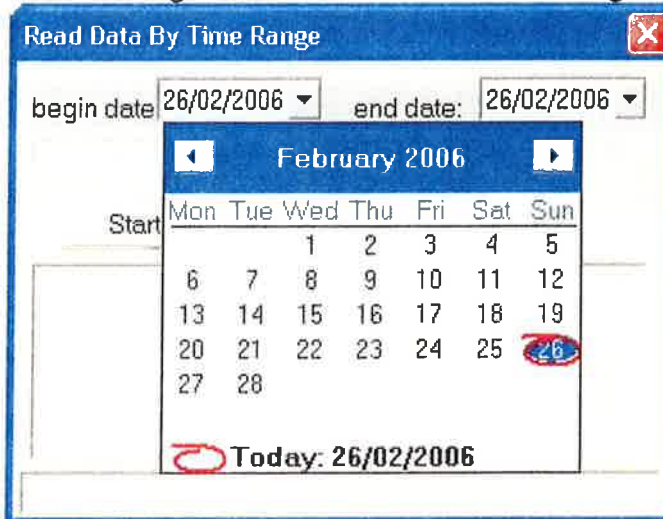
User Menu – Data



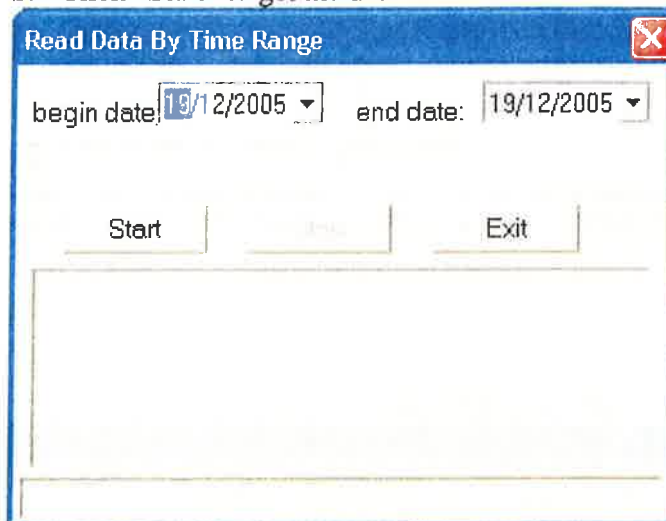
1. Read data...
2. Clear data...
3. Statistics...

1. Read data...

a. Select begin date and end date of data reading



b. Click "Start" to get the data from ECM



2. Clear data...



Click "Start" to clear all the data in the ECM

3. Statistics...

A. Without 0 value displayed

Time	High Speed	<20	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	>=110
2006-02-20 15:10	65	0	0	0	0	1	4	0	0	0	0	0
2006-02-20 15:15	56	0	0	0	0	1	0	0	0	0	0	0
2006-02-21 15:00	54	0	0	1	5	2	0	0	0	0	0	0
2006-02-21 15:05	68	0	0	0	0	4	2	0	0	0	0	0
2006-02-21 15:10	62	0	0	1	2	0	3	0	0	0	0	0
2006-02-21 15:15	55	0	0	0	4	3	0	0	0	0	0	0
2006-02-21 15:20	58	0	0	0	1	2	0	0	0	0	0	0
2006-02-21 15:25	53	0	0	0	3	2	0	0	0	0	0	0
2006-02-21 15:30	61	0	0	0	0	1	1	0	0	0	0	0
2006-02-21 15:35	70	0	0	0	2	6	0	1	0	0	0	0
2006-02-21 15:40	54	0	0	1	0	2	0	0	0	0	0	0
2006-02-21 15:45	50	0	0	0	0	2	0	0	0	0	0	0
2006-02-21 15:50	60	0	0	0	1	2	1	0	0	0	0	0
2006-02-21 16:00	61	0	0	0	2	2	1	0	0	0	0	0
2006-02-21 16:05	60	0	0	0	0	6	1	0	0	0	0	0
2006-02-21 16:10	55	0	0	0	1	1	0	0	0	0	0	0
2006-02-21 16:15	62	0	0	0	0	0	1	0	0	0	0	0
2006-02-22 14:45	48	0	0	0	4	0	0	0	0	0	0	0
2006-02-22 14:50	56	0	0	0	1	4	0	0	0	0	0	0
2006-02-22 14:55	53	0	0	0	1	4	0	0	0	0	0	0
2006-02-22 15:00	61	0	0	0	0	1	1	0	0	0	0	0
2006-02-22 15:05	47	0	0	0	1	0	0	0	0	0	0	0
2006-02-23 15:15	60	0	0	0	0	2	3	0	0	0	0	0

Show the statistic result (No 0 value if in the certain time period there is only 0 record) of data and print the result

B. With 0 value displayed

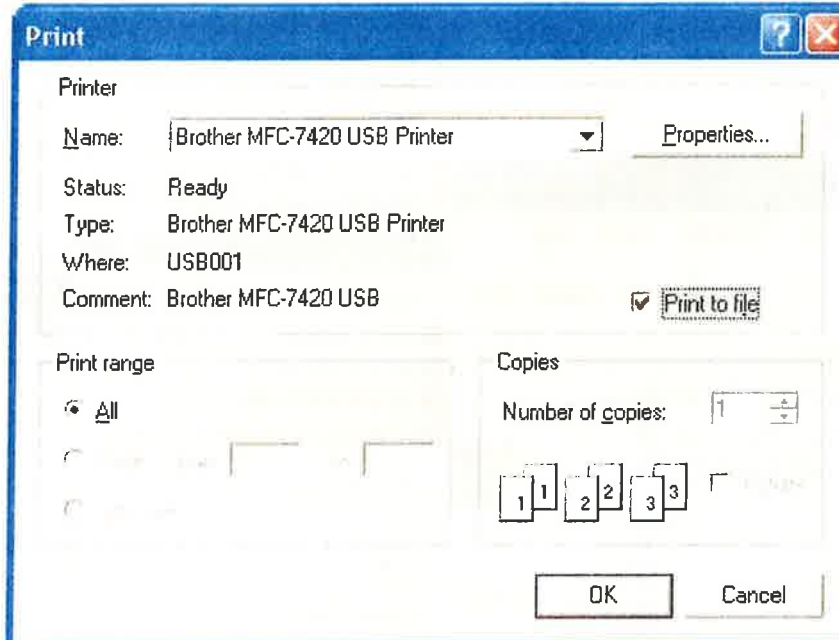
Tick the box in front of "Show "0" value", then it will display as below

Time	High Speed	<20	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	>=110
2006-02-20 15:10	65	0	0	0	0	1	4	0	0	0	0	0
2006-02-20 15:15	56	0	0	0	0	1	0	0	0	0	0	0
2006-02-20 15:20	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:25	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:30	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:35	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:40	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:45	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:50	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 15:55	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:00	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:05	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:10	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:15	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:20	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:25	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:30	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:35	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:40	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:45	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:50	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 16:55	0	0	0	0	0	0	0	0	0	0	0	0
2006-02-20 17:00	0	0	0	0	0	0	0	0	0	0	0	0

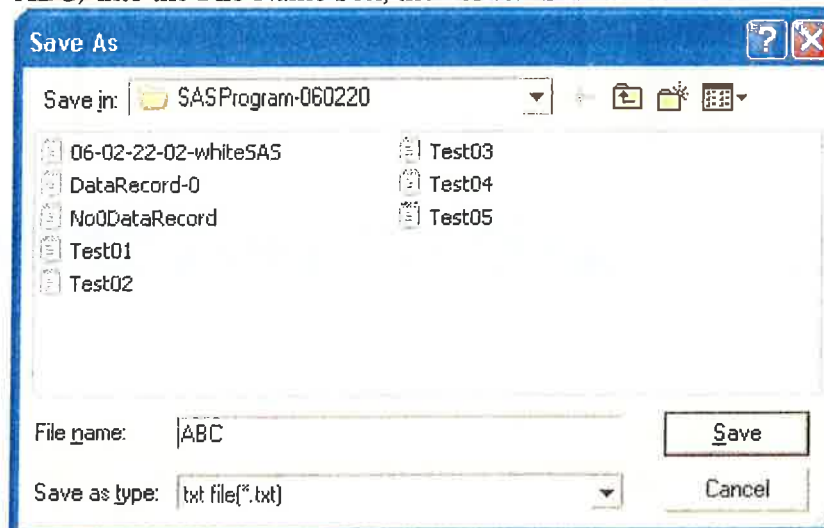
Show the statistic result (with 0 value) of data and print the result.

C. Export the statistics

1. Click "Print" button, then the following window pop out. Tick the option "Print to file", then Click "OK",



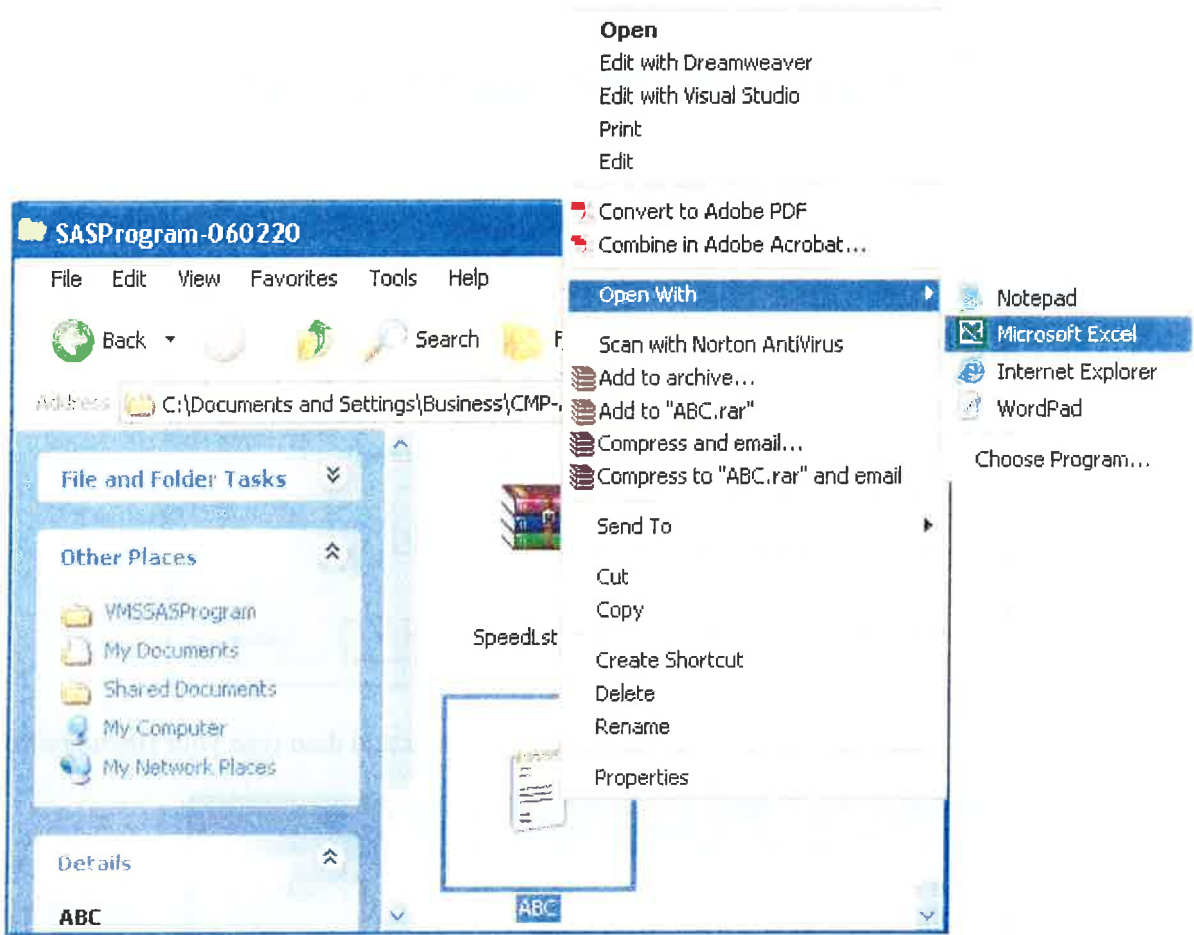
2. The following window pop out, select the folder and then type your file name (sample one is ABC) into the File Name box, then click "Save"



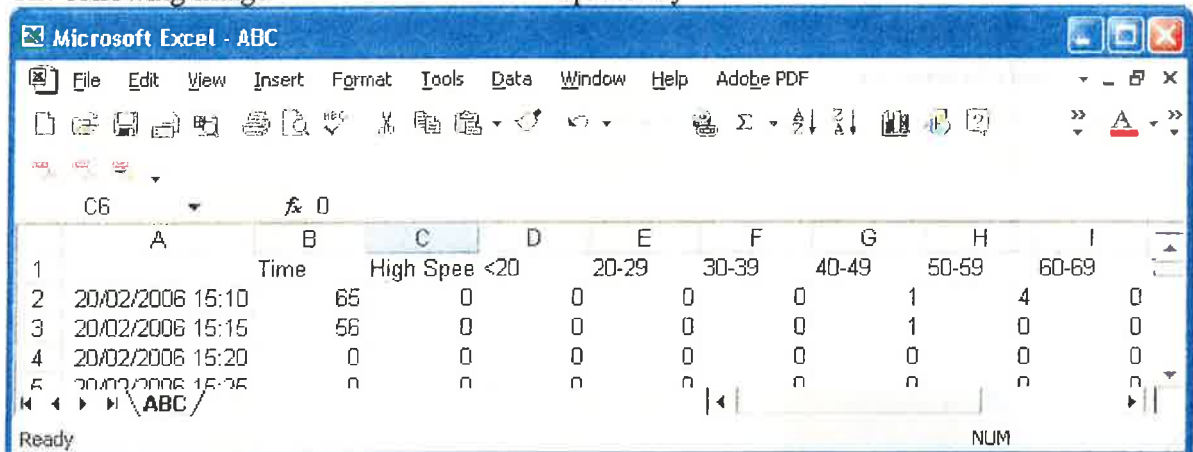
3. Save successfully as ABC.txt



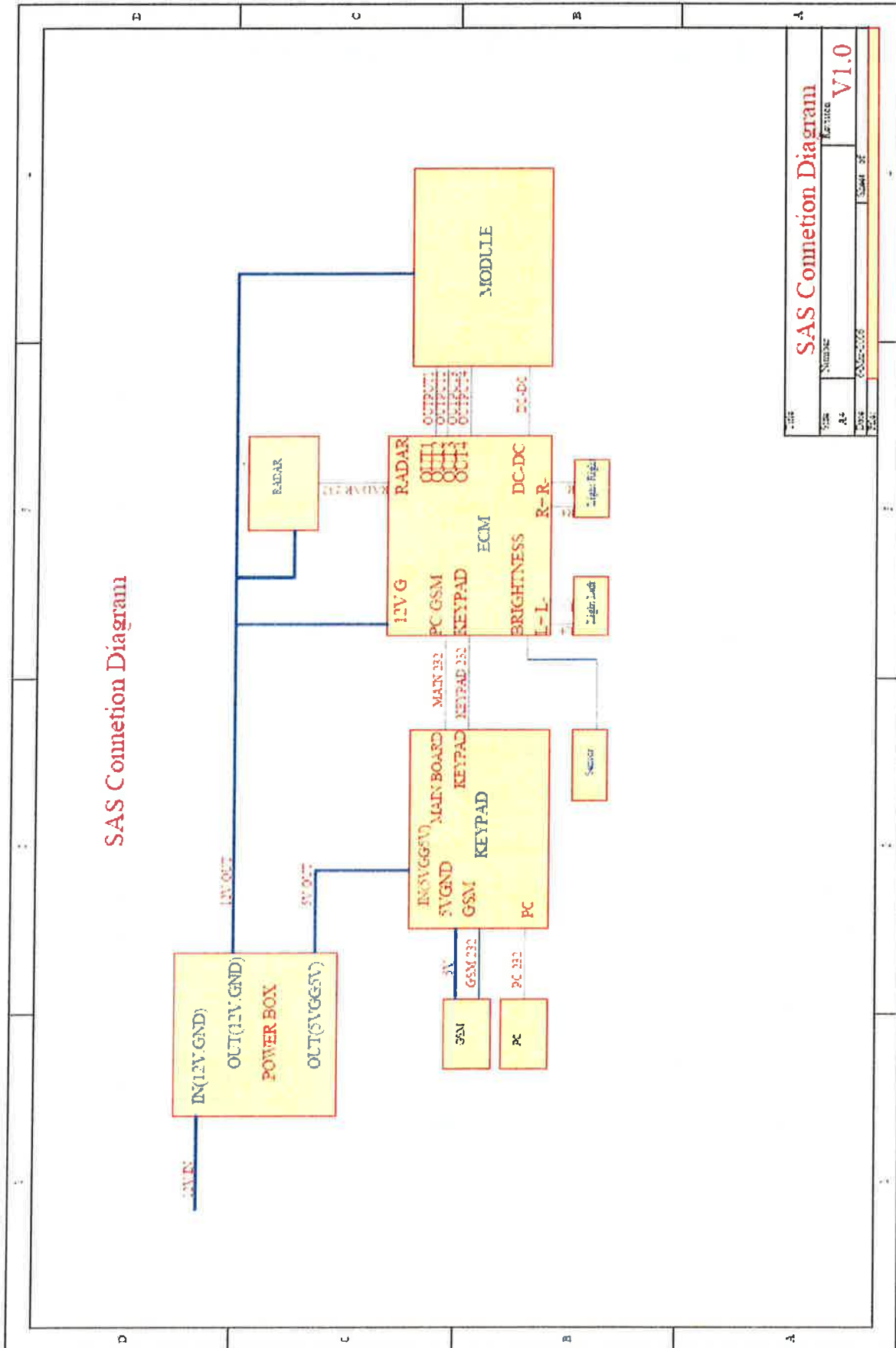
- Open ABC.txt by any third party program such as Excel.
Move cursor on the top of the selected file icon (Sample is ABC.txt) and then click right button of mouse as followed the procedure as below. Then click "Microsoft Excel".



The following image shows that ABC.txt is opened by Microsoft Excel



Appendix 1. SAS Schematic Diagram



Appendix 2: SAS Radar settings

Configuration Settings

SI2D - Rev. 23

Serial Number:

Speed Setup:

MPH KPH

Sensitivity Value: Update times per second.

Override Update Rate with updates every 1/10 seconds.

Data Hold Time: Zero Report in Continuous Mode

Low Speed Cutoff: Cos Correction 1:

High Speed Cut Off: Cos Correction 2:

Report: All Targets Approach Targets Recede Targets

Baud Rate: 19200 9600 2400 1200

Direction Report ASCII[+ - ?] for Towards Away Unknown

TX String:

Poll String: