AP900 Service Tool User Guide   Prepared by: Vos

Version: 1.1   Date :   2009/8/17

Project name:	
AP900 Service Tool	
Document name:	
AP900 Service Tool User Guide	
Prepare by :	
VOS NV (vos@vos.be)	
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2010/12/01	
Summary:	

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Revision History

Revision	Description	Memo
1.0	Original	2009/04/23
2.0	Update the service tool function description	2009/07/21
2.1	Add buzzer option description	2009/08/17

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1. Installation

Click setup.exe to install AP900Service
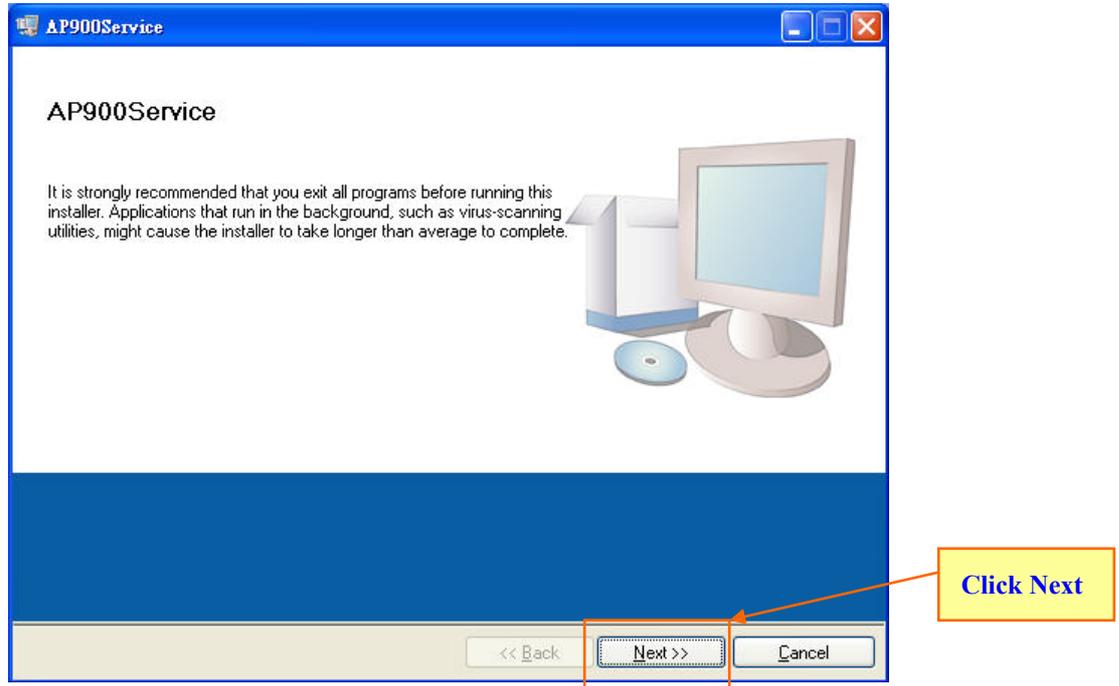
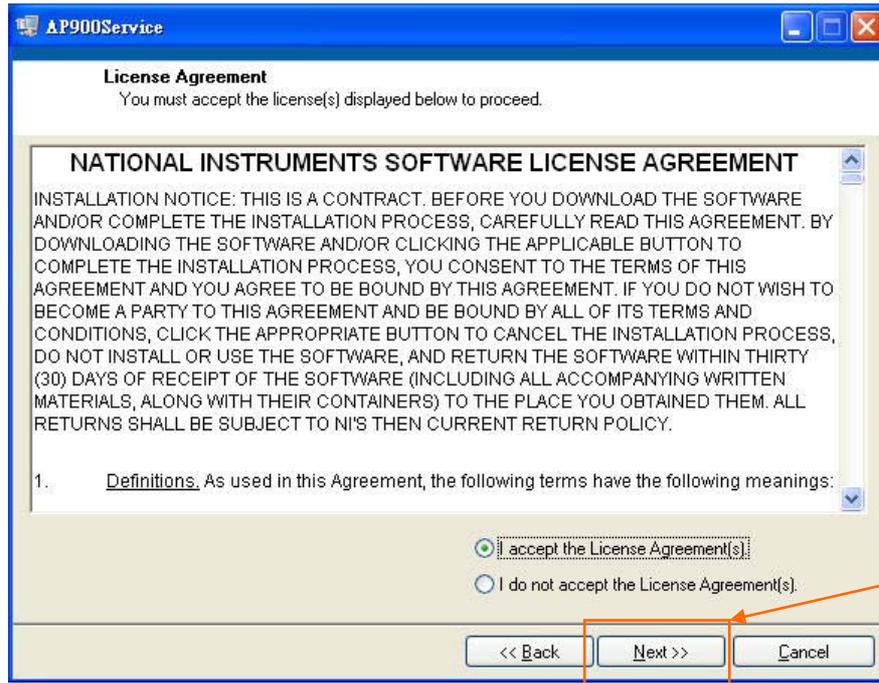Fig 1 – installation start
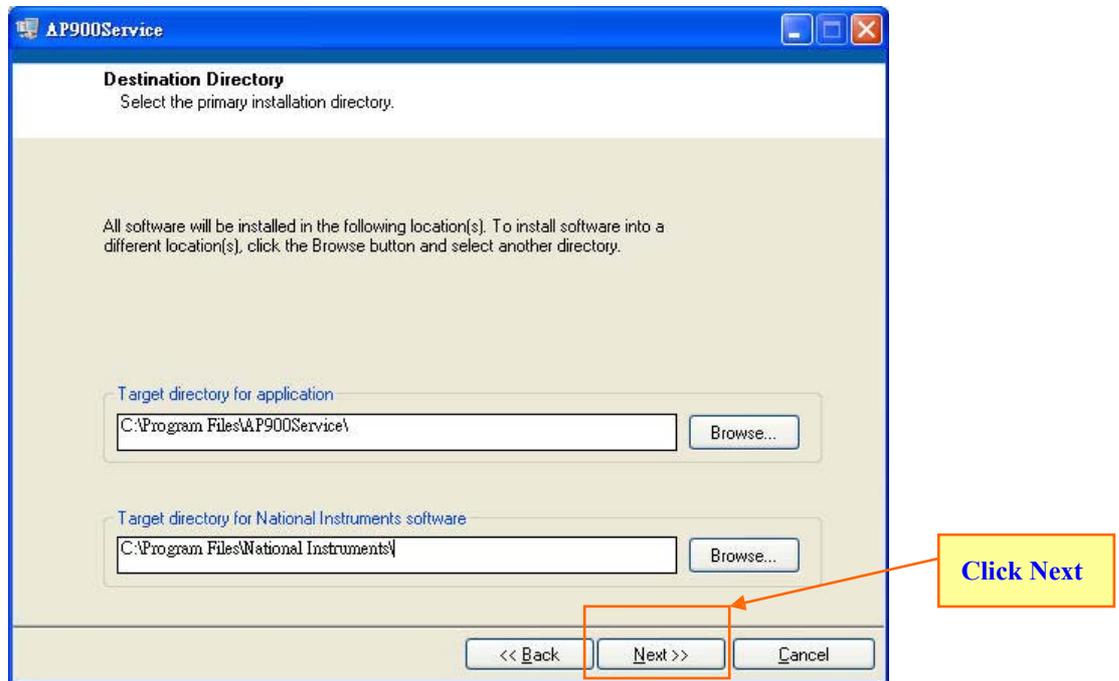
Fig 2 – application directory

Fig 3 – license agreement
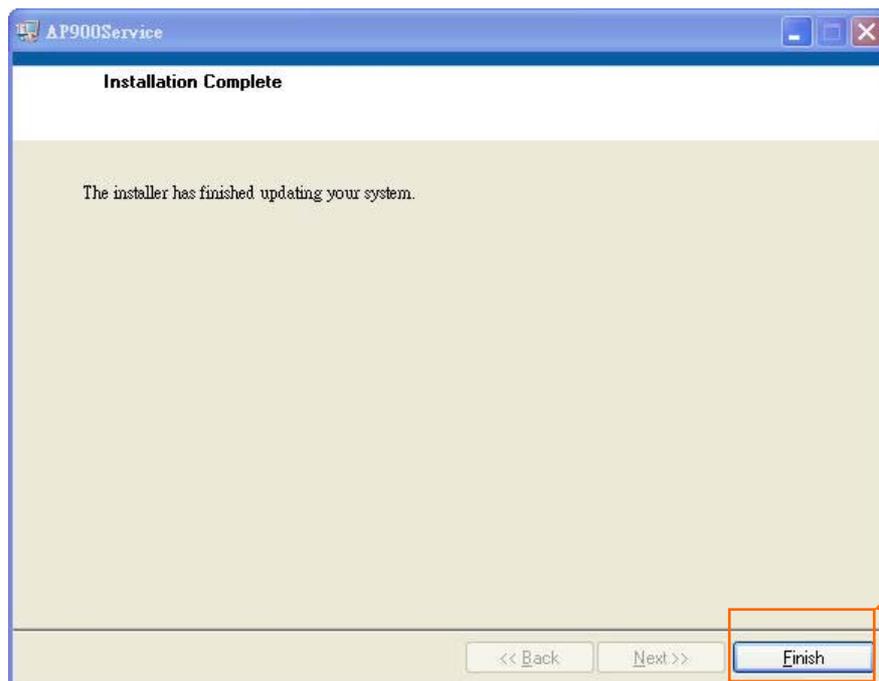
Fig 4 – installation finish

Copy AP900,AP900C folder and AP820Service.uir and AP900Service.exe to the subfolder -> C:\Program Files\AP900Service

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2. AP900Service interface

The AP900 interface is shown in Fig 5.

z   Product information:

Present the product name and product function.

z   Close service tool:

Close service tool directly.

z   Speed limit value:

Fixed limit – maximum speed limit value under speed limit mode.

Limit 1/Limit 2/Limit3 – memory for variable speed limit control under speed limit mode.

z   Operation result message:

Present the operation result.

z   Pedal line information:

Present the pedal voltage relationship.
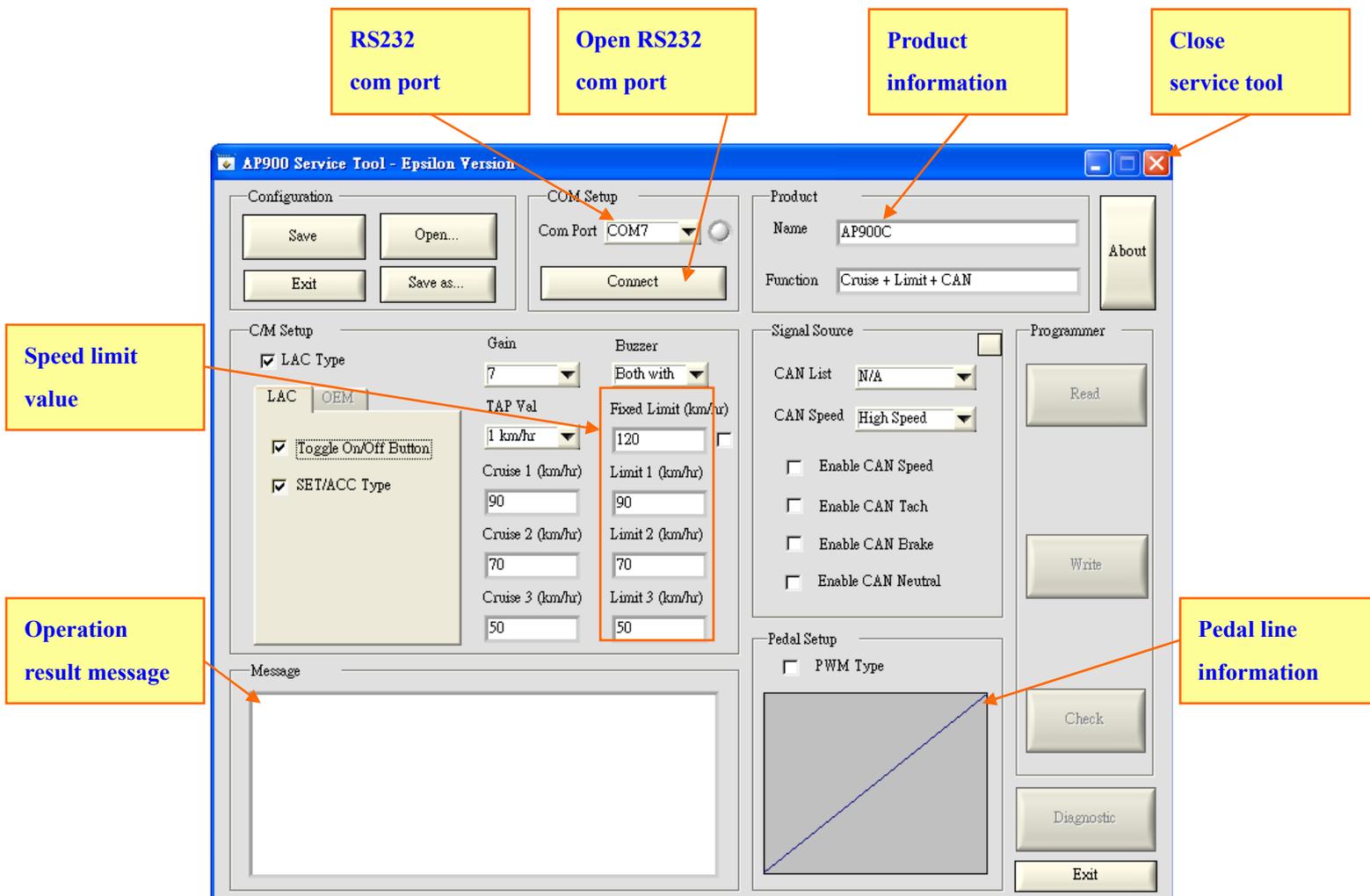
Fig 5 – AP900Service Interface

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3. Use RS232 line to connect with AP900

Fig 6 – AP900 installation

Fig 7 – Connection

Provide power to the AP900 EM by switching key to ignition position.

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4. Programming operation flow

Execute the AP900Service.exe in "C:\Program Files\AP900Service\AP900Service.exe".

Step 1 – Select the RS232 com port according to the computer com port setting.
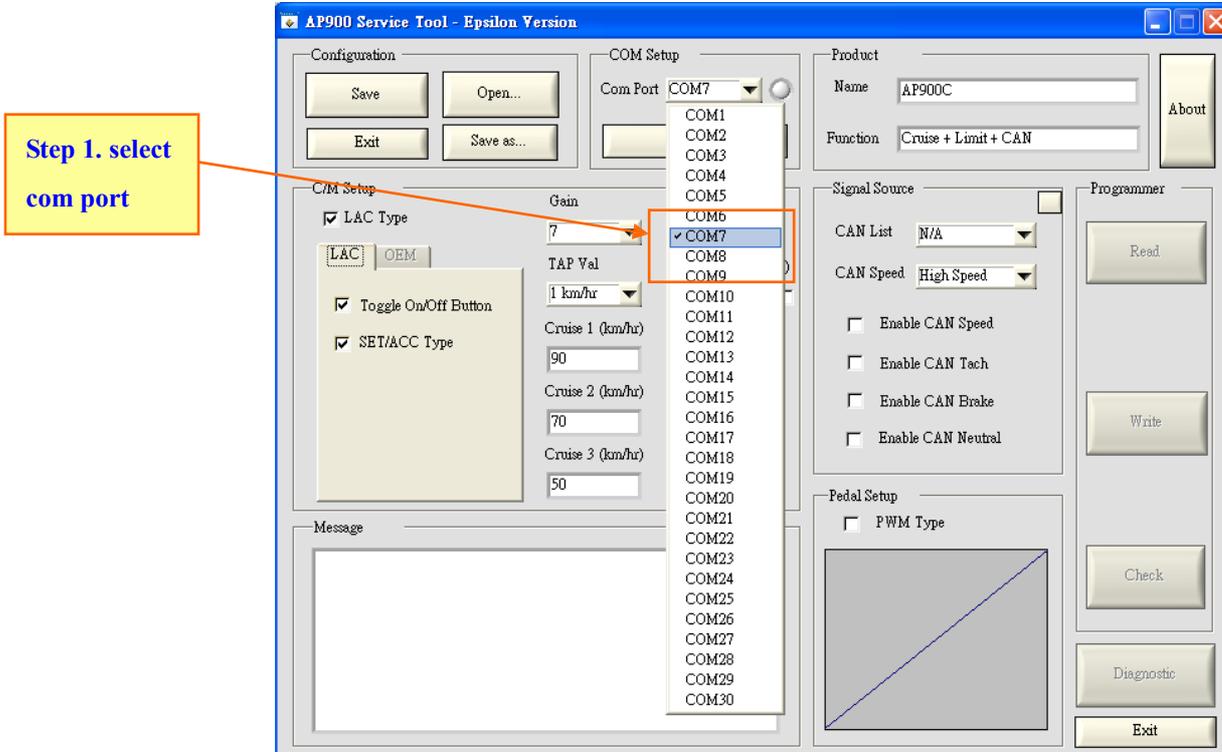
Fig 8 – select com port

Step 2 – Click the connect button to open the RS232 com port.

The configuration from AP900 will automatically be uploaded to the Service Tool while the Connect button is clicked.
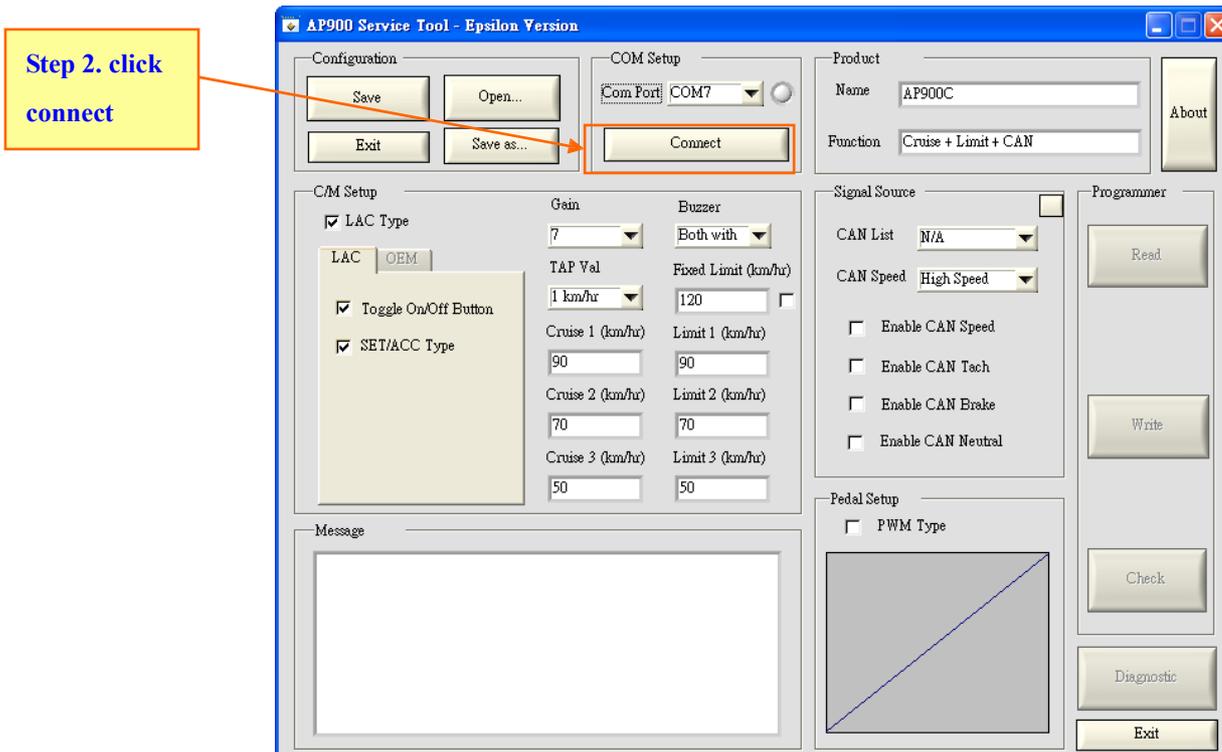
Fig 9 – click connect

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Step 3 – Select c/m type:

      If operate AP900 by LAC type (such as CM7, CM19R,CM35…), check

      the box. If operate AP900 by OEM type command module, not check the

      box.
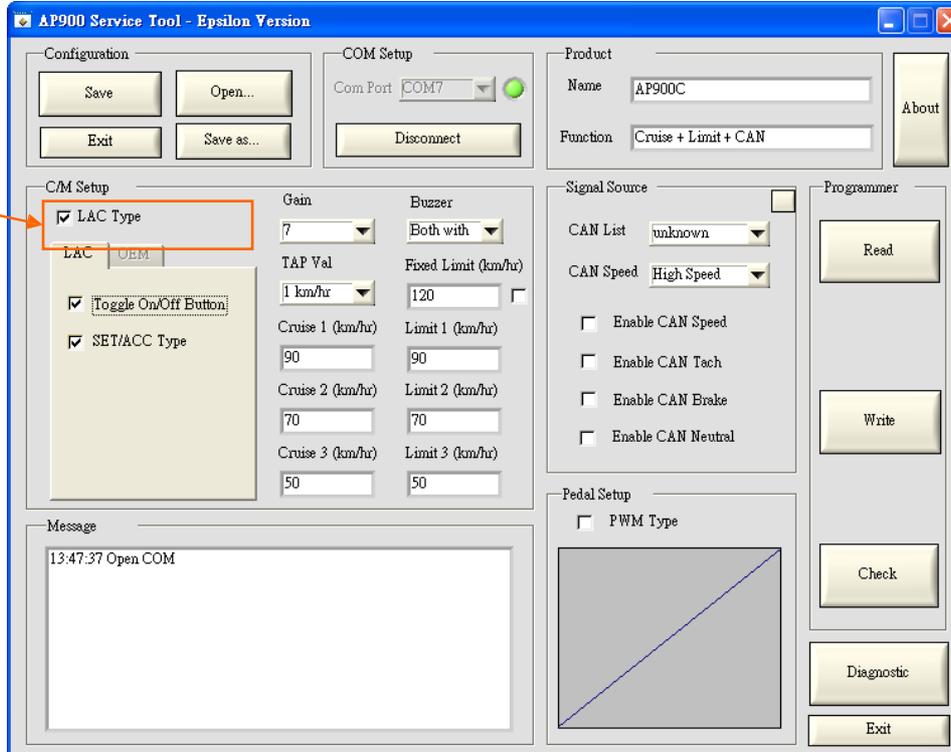
Fig 10 – click LAC type

Step 4 – Select toggle on/off button & SET/ACC type

      If use toggle on/off button, check the toggle on/off button box.

      If use SET/ACC command module, check the SET/ACC type box.
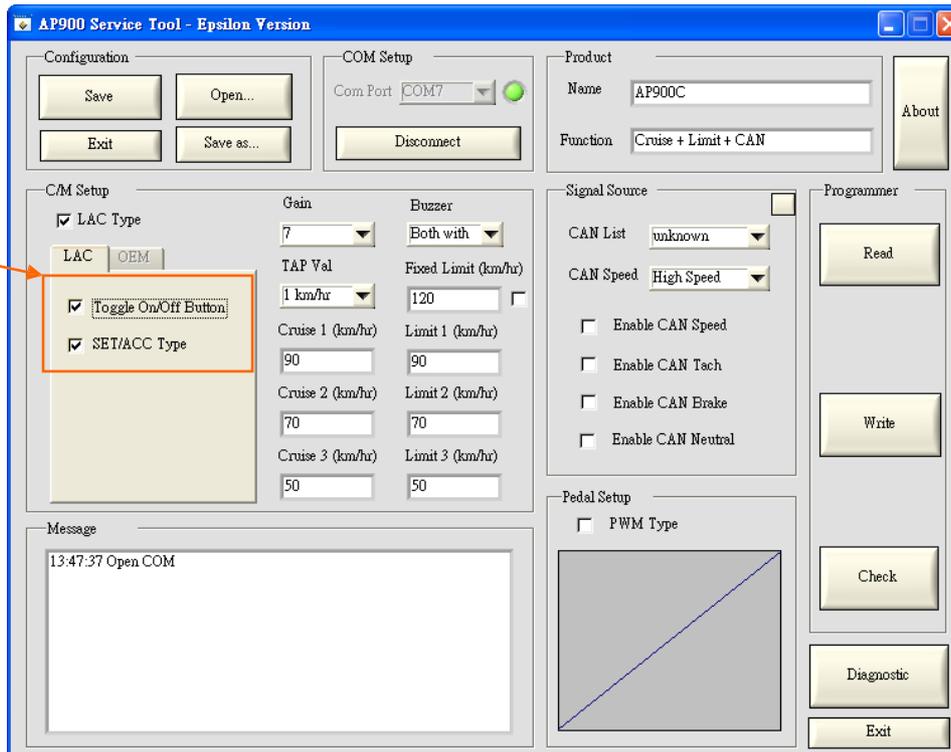
Fig 11 – select toggle on/off button & SET/ACC type

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Step 5 – Select gain

Not recommend to change the gain.

The higher the gain is, the faster the vehicle acceleration speed.
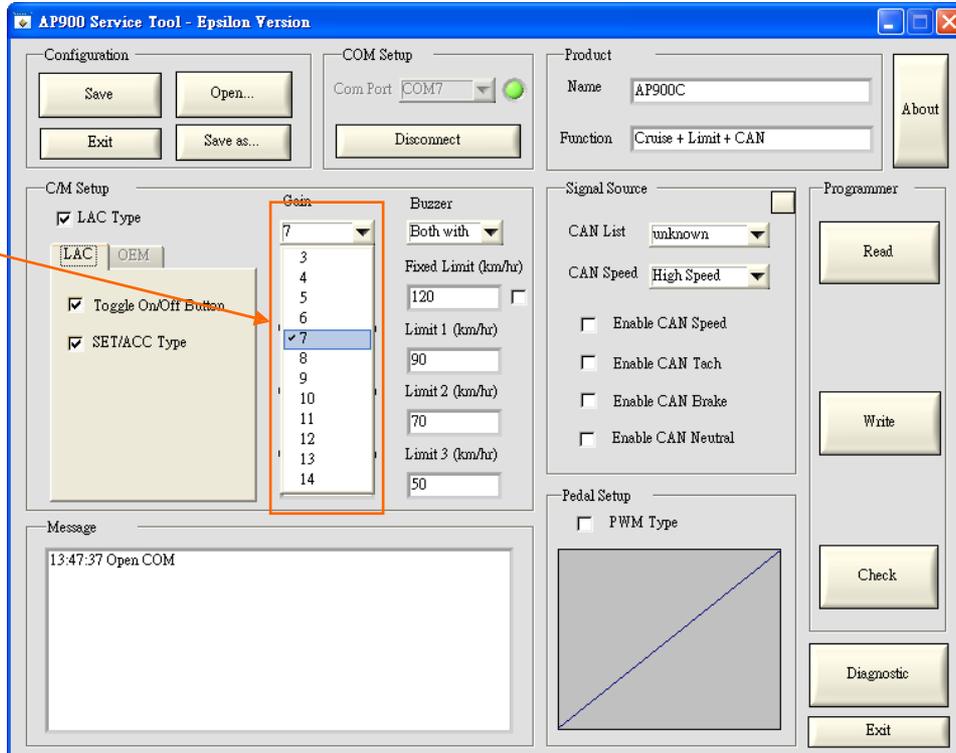
Fig 12 – select gain

Step 6 – Select buzzer option

Cruise Buzzer – 3 hi tone beeps while cruise control is turned on by ONOFF key pressed for less than 2sec.

Limit Buzzer – 2 hi tone beeps while variable speed limit is turned on by ONOFF key pressed for more than 2sec.
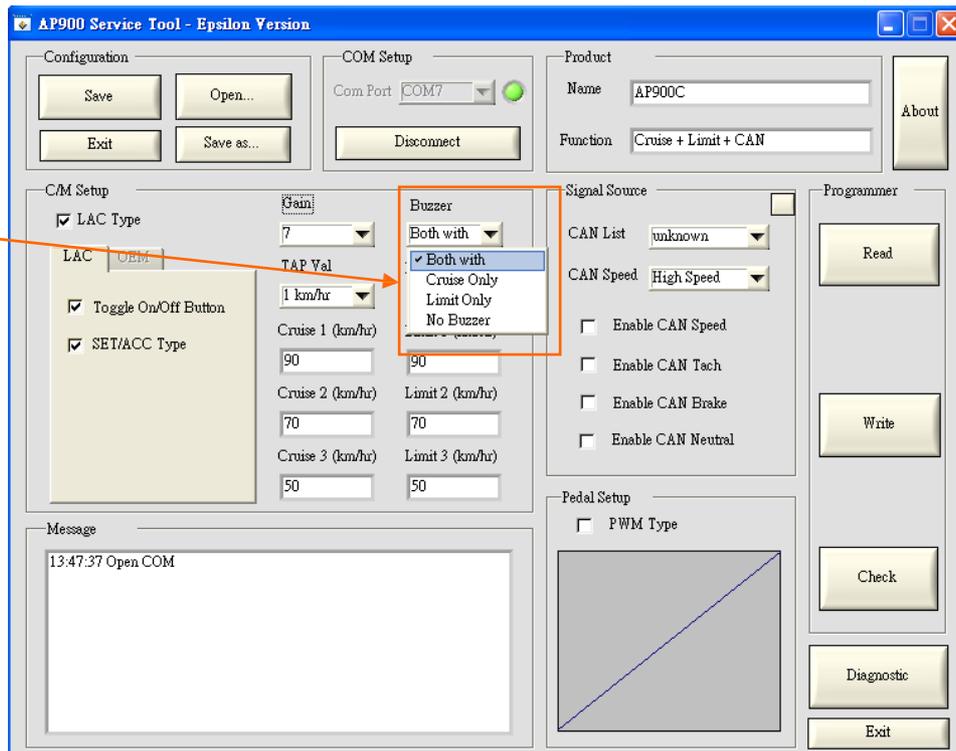
Fig 13 – select buzzer option

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Step 7 – Select tap val

Tap val is the value to add/subtract how many km/hr to/from expect speed limit value for each tap up/down.
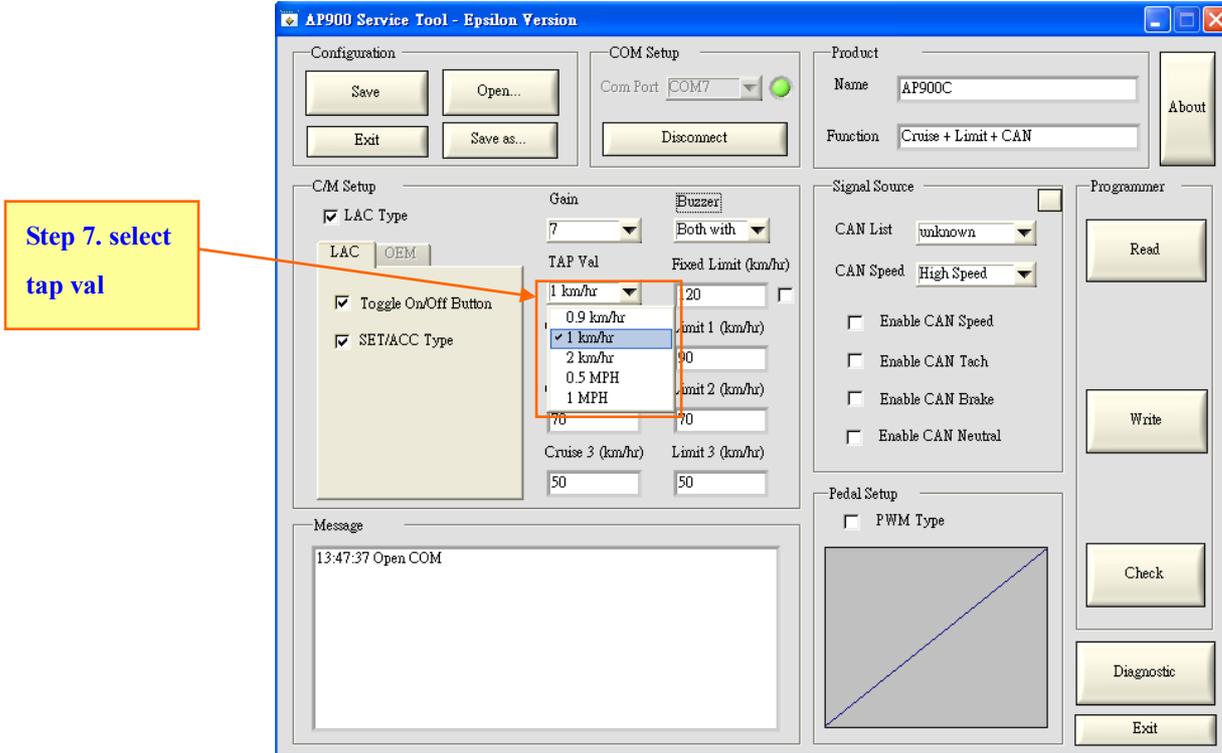
Fig 14 – select tap val

Step 8 – Input fixed speed limit value
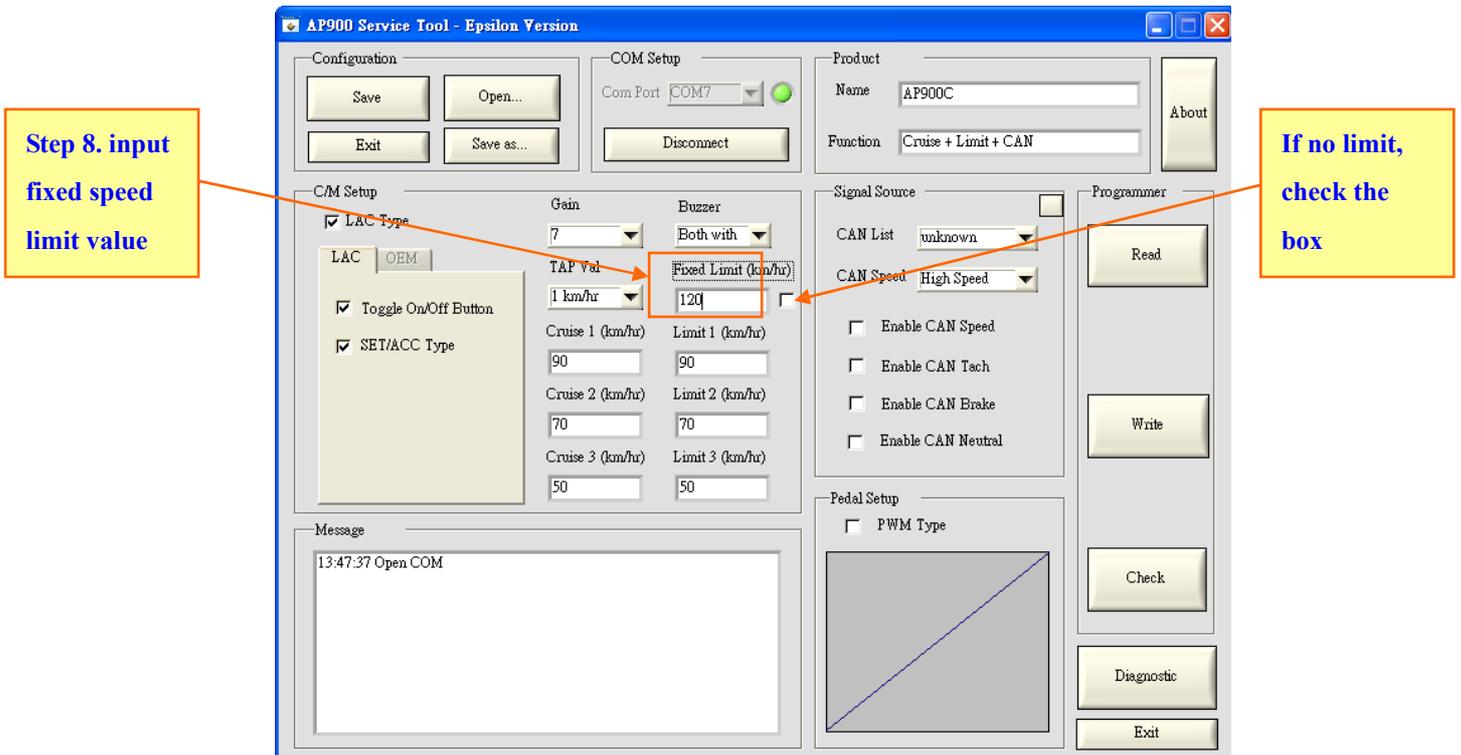
Value range is between 80km/hr to 150km/hr or no limit.

Fig 15 – input fixed speed limit value

Step 9 – Input memory speed cruise and limit value

      Cruise value range is between 40km/hr to 240km/hr.

      Limit value range is between 40km/hr to 180km/hr.
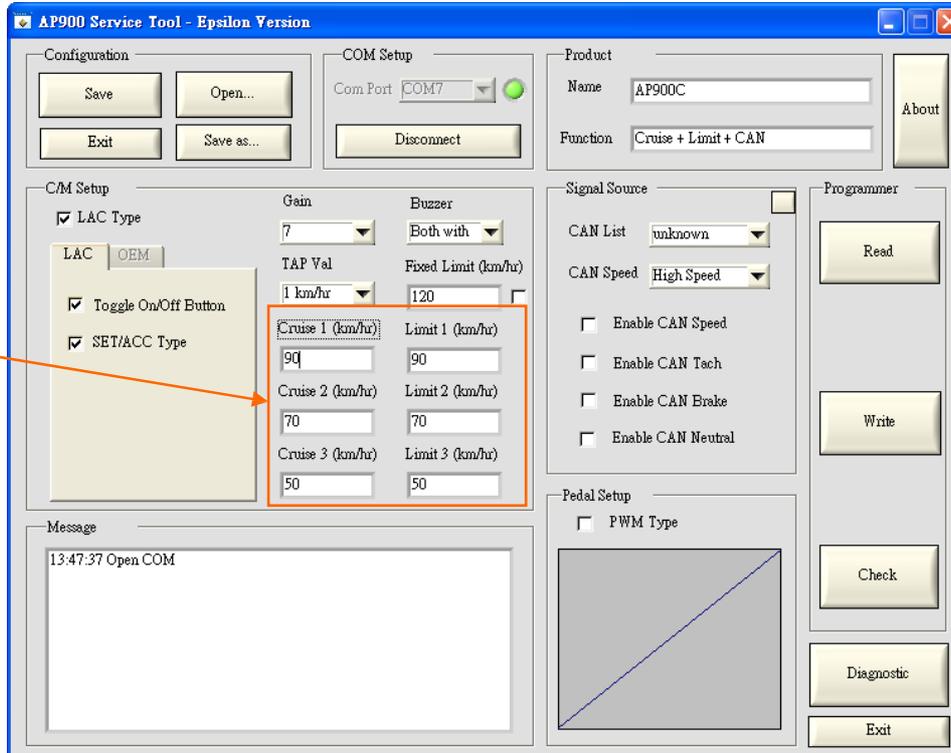
Fig 16 – input memory speed limit value

Step 10 – Click write button to write the configuration to AP900.

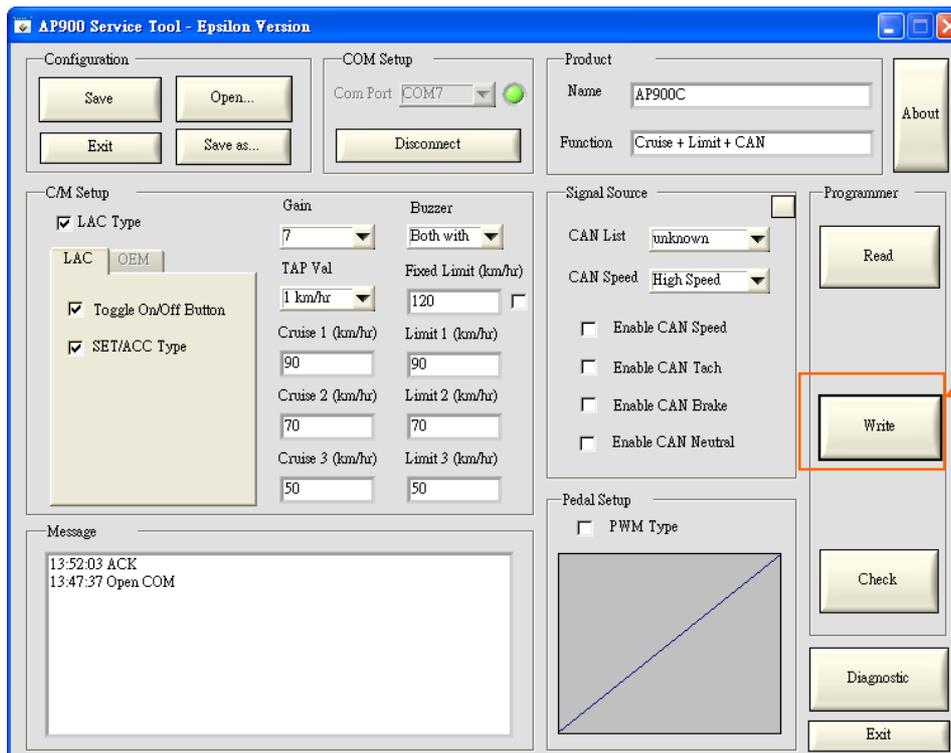   If programming is completed , message returns "ACK".

Fig 17 – click write button

Step 11 – Click check button to check the configuration of AP900.

   If pogramming is correct, message returns "Verify OK".
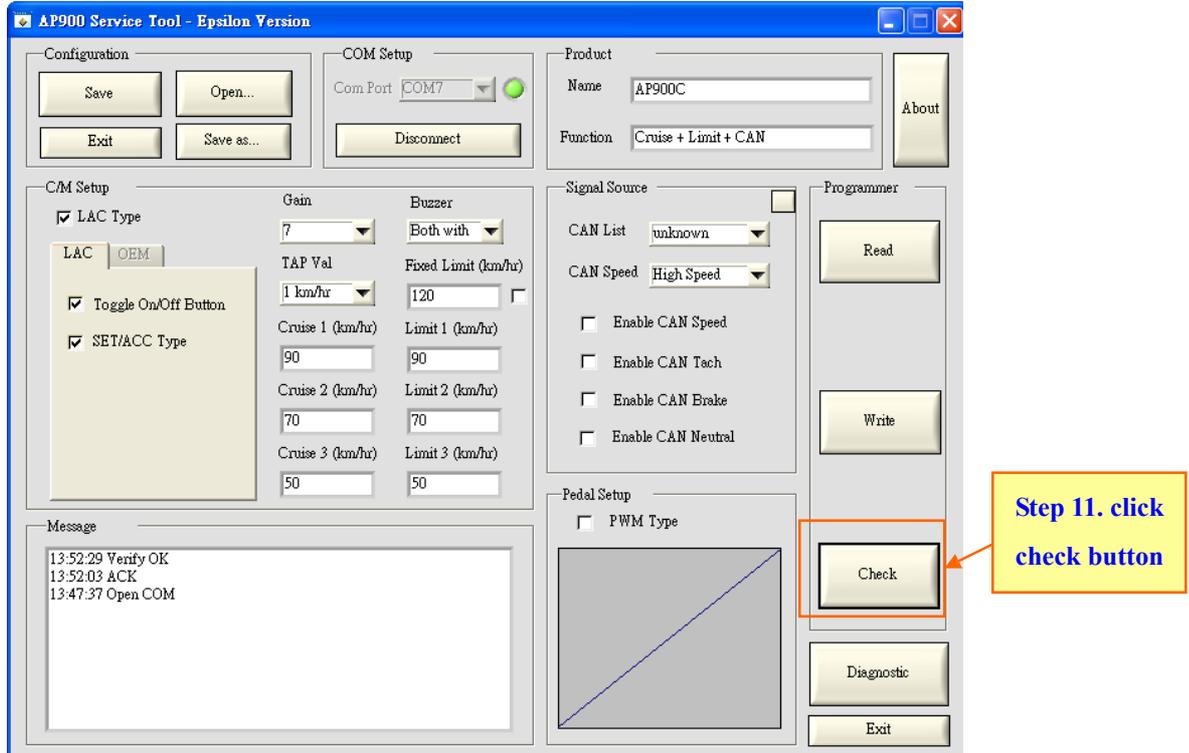
Fig 18 – click check button

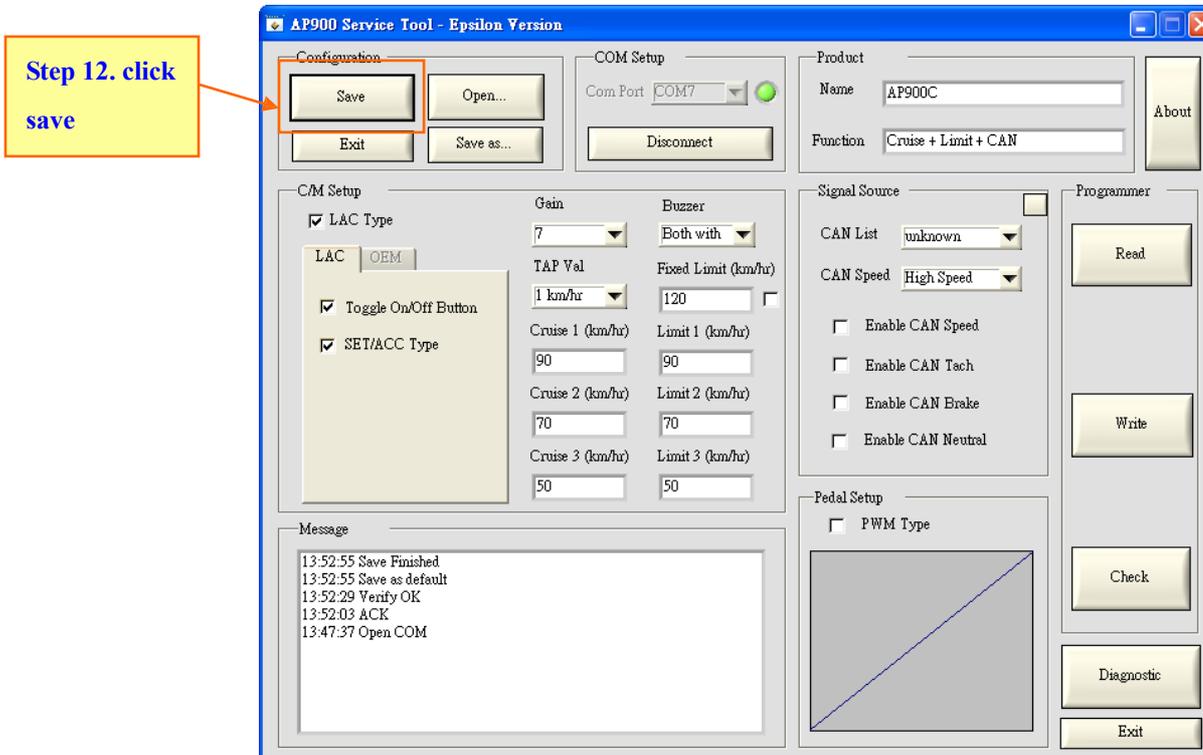Step 12 – click save button to save current configuration as default file.

Fig 19 – click save button

Step 13 – click save as… button to save current configuration as self-defined name file.
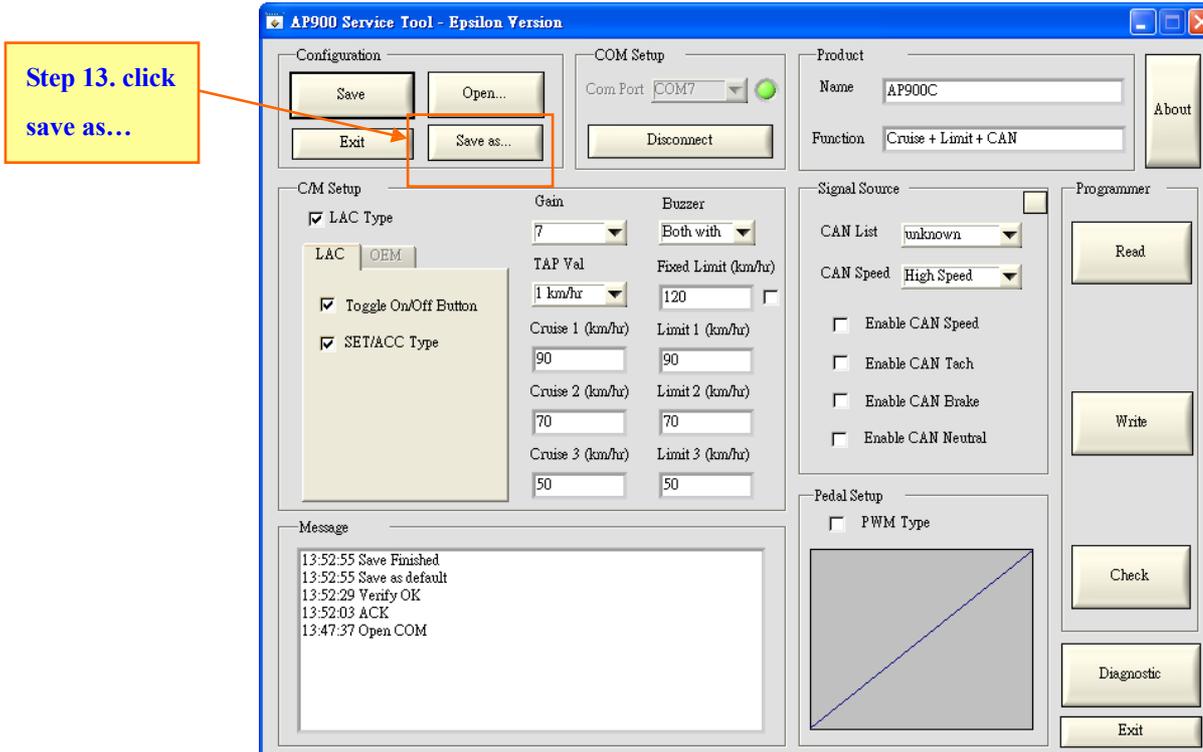
Fig 20 – click save as… button
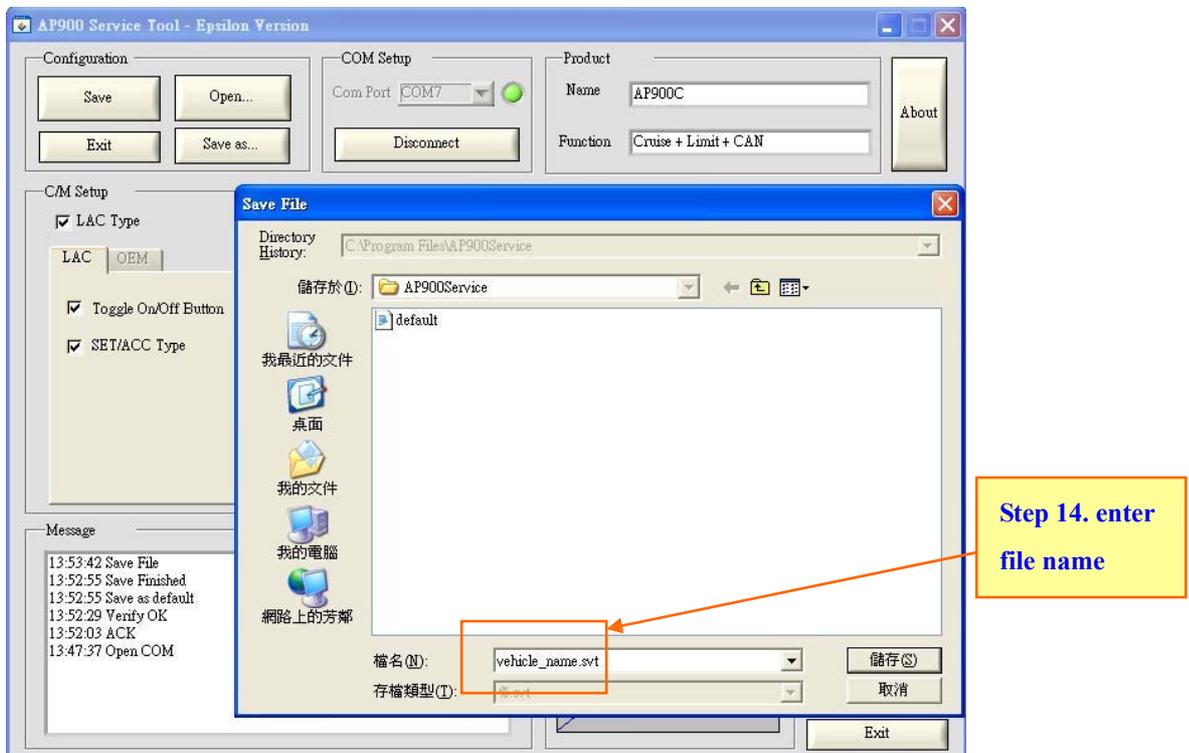
Step 14 – enter file name, then click save.

Fig 21 – enter file name

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Step 15 – click open… button to open current configuration file.
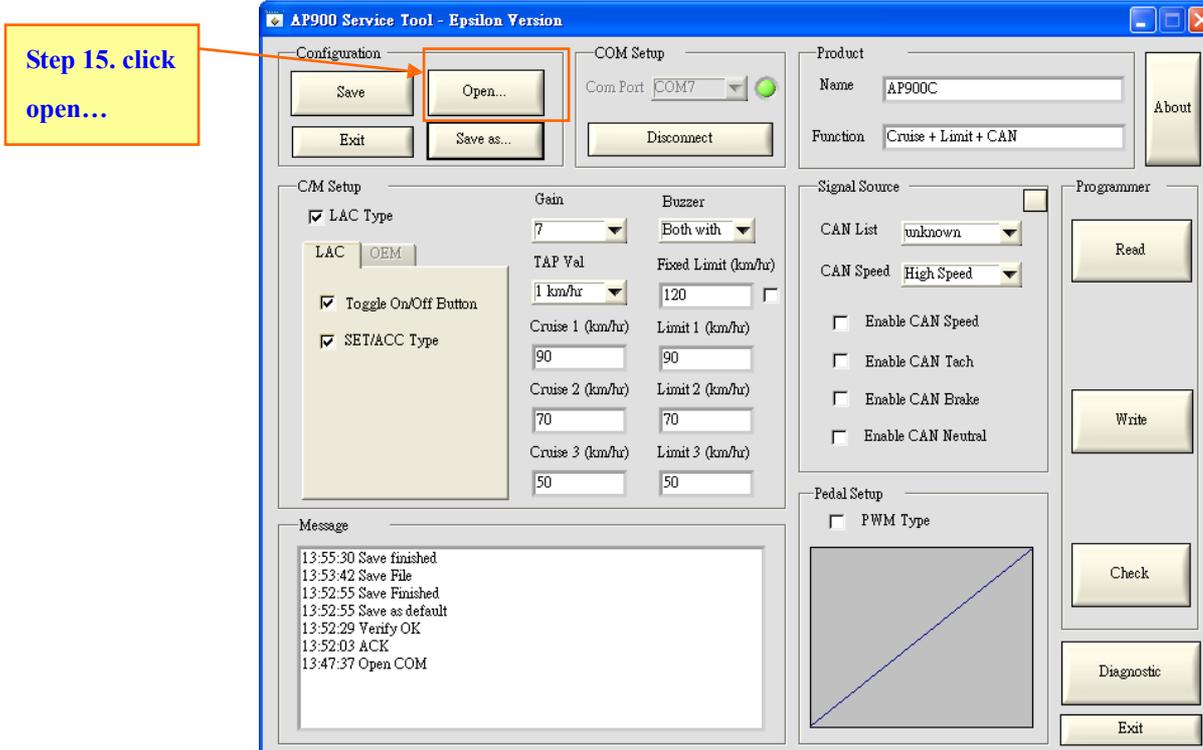
Fig 22 – click open…

Step 16 – select file, then click add button.

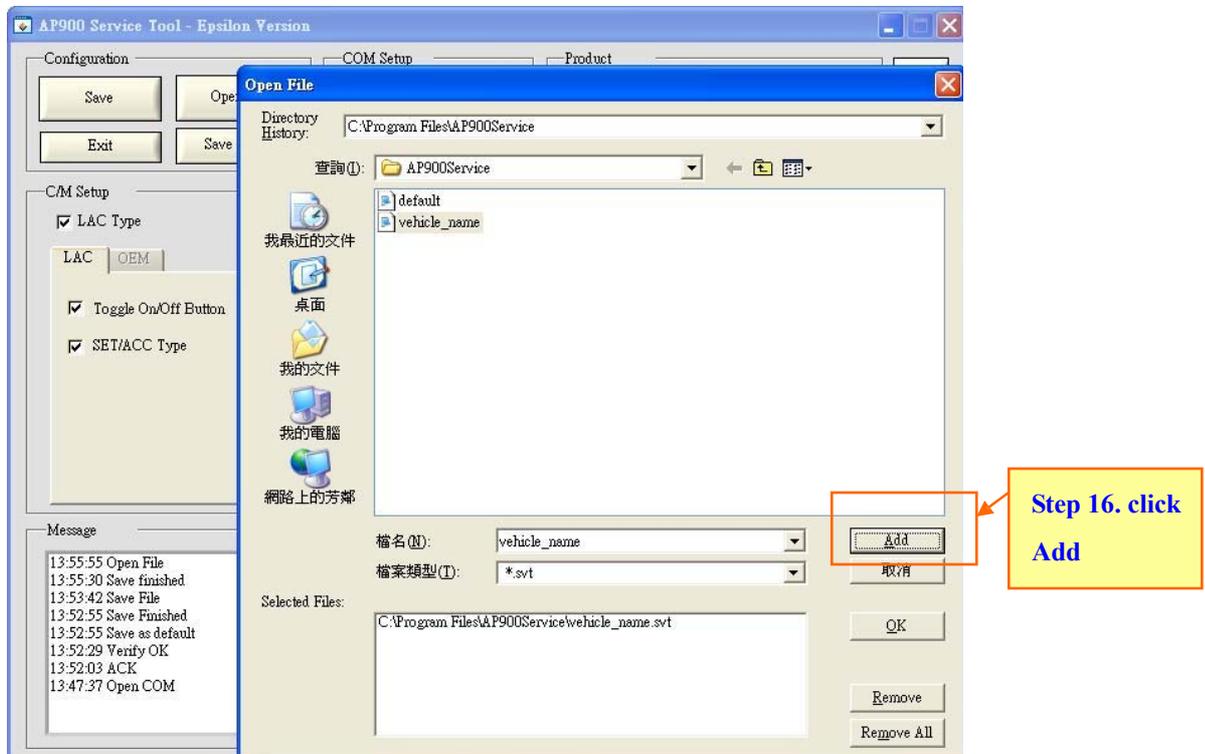Fig 23 – click save as… button

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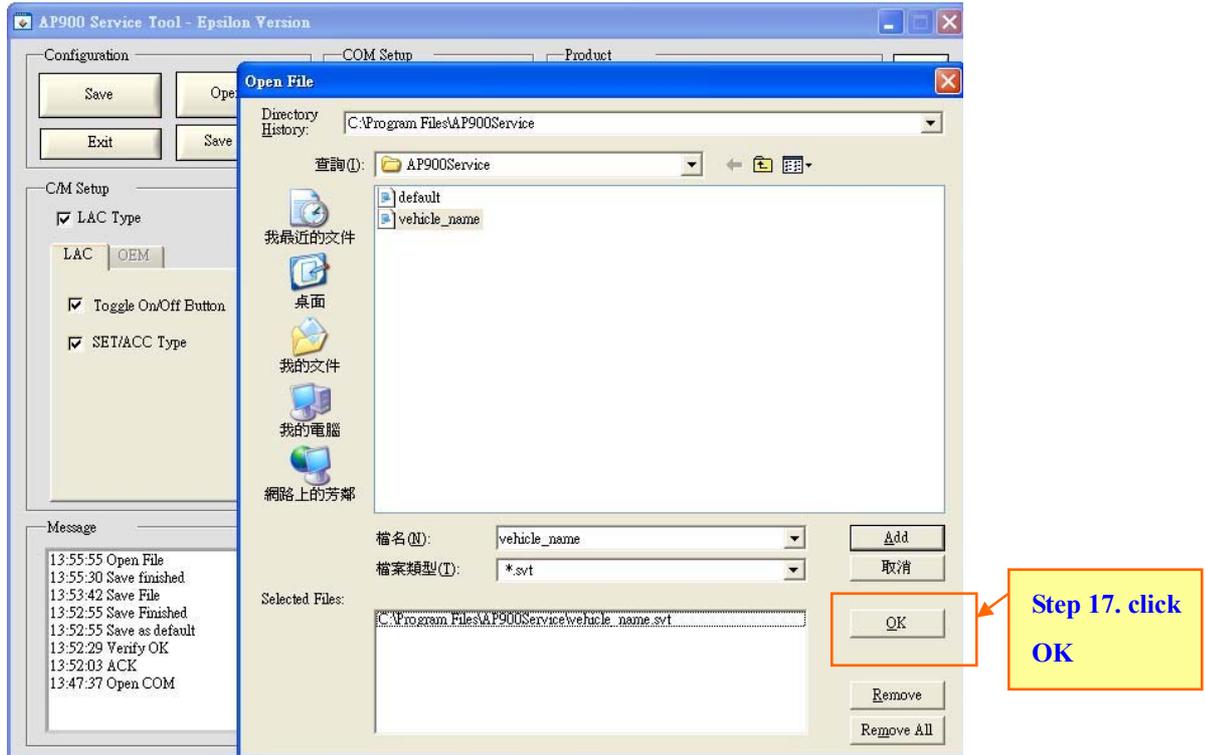
Step 17 – click OK button.

Fig 24 – click save as… button

Step 18 – Click Read button to read the configuration of AP900.

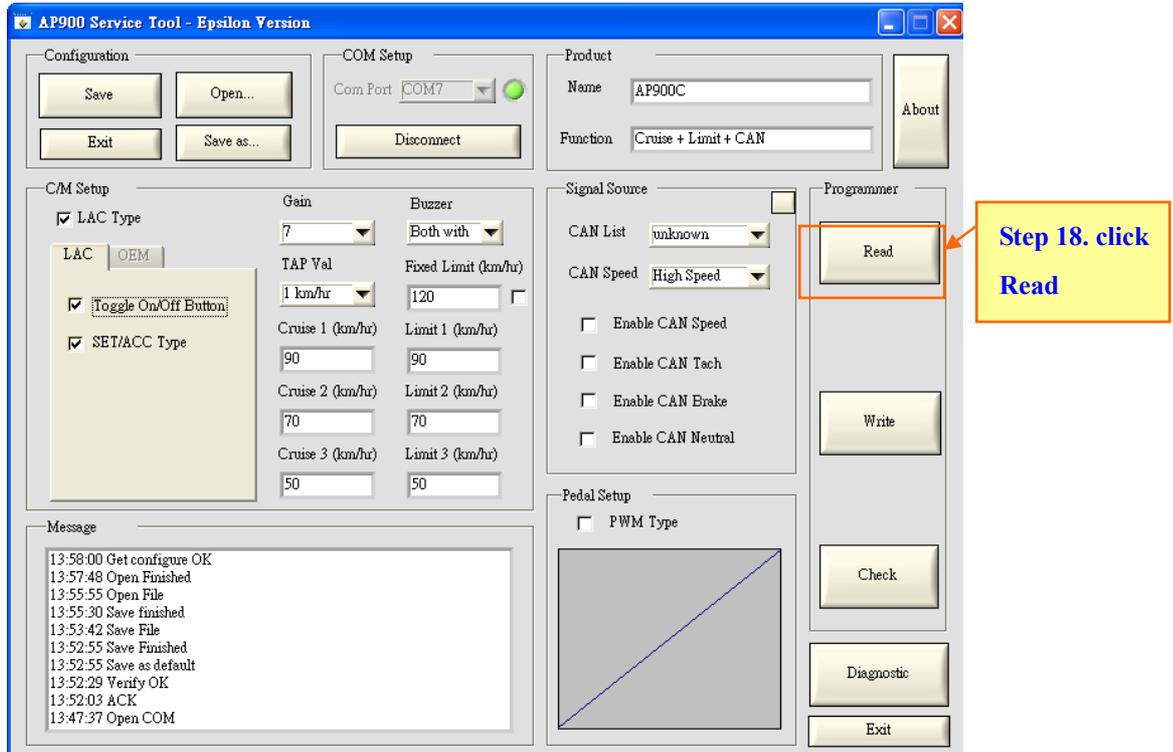If configuration of AP900 is read successfully, message returns "Get configure OK".

Fig 25 – click read button

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5. Diagnostic

Used to check the connection situation about command module, speed sensor, tach sensor, brake pedal and throttle pedal.

SPEED – the current speed in AP900.

TACH – the current rpm in AP900.

PEDAL – the current pedal position in AP900.

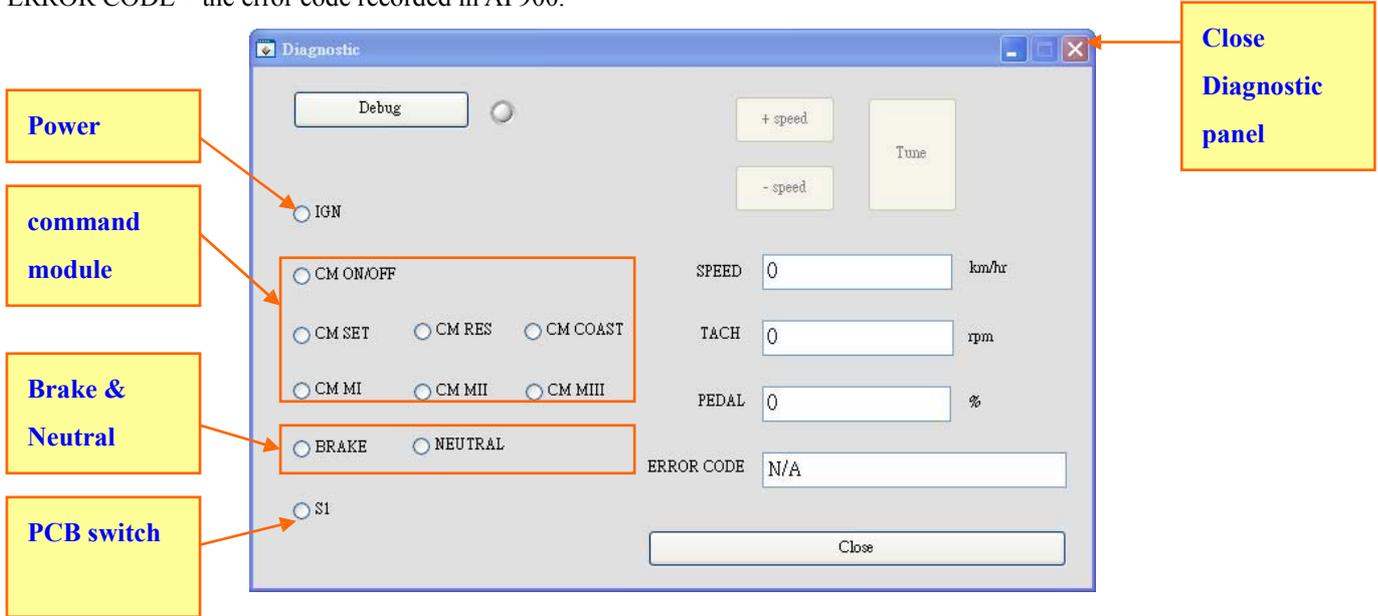ERROR CODE – the error code recorded in AP900.

Fig 26 – Diagnostic interface

5.1 Diagnostic operation flow

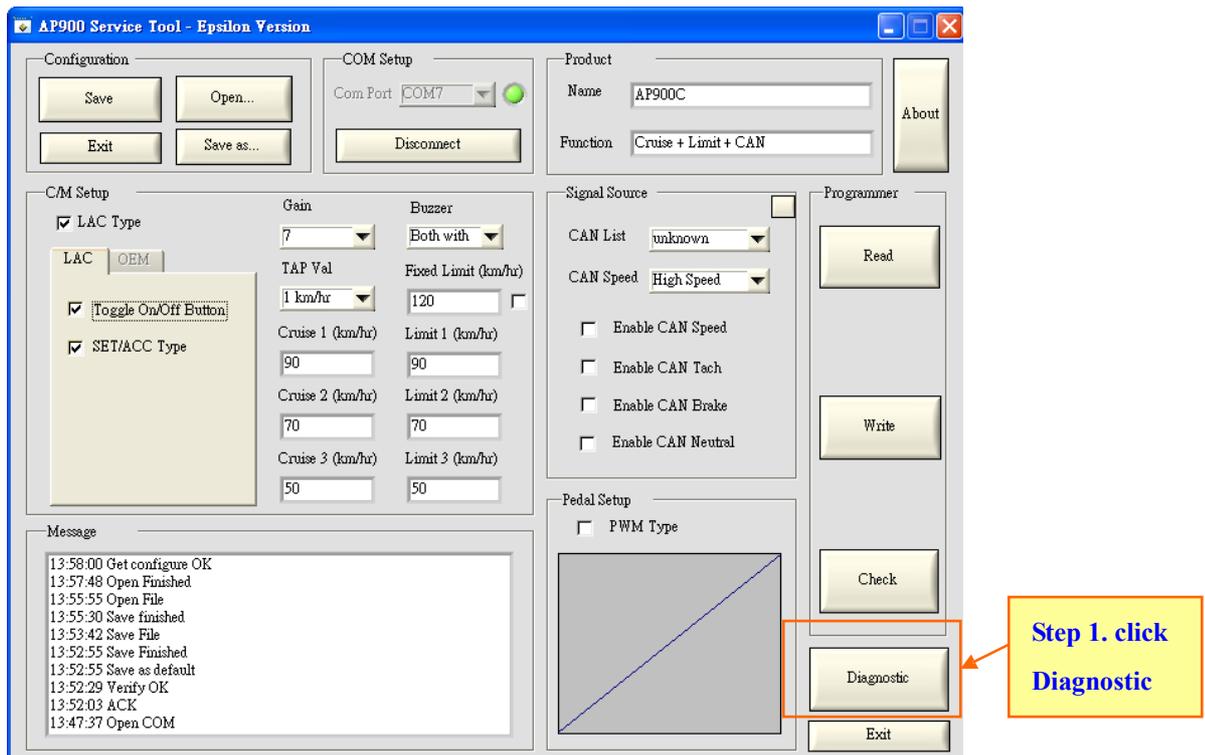Step 1 – Click Diagnostic button to open the diagnostic interface.

Fig 27 – click Diagnostic button

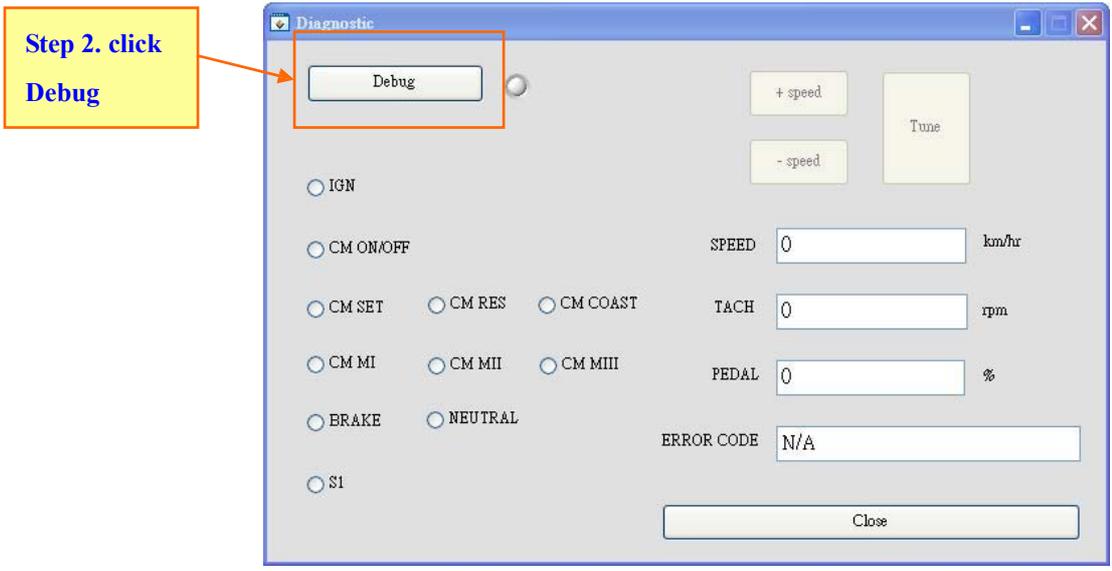Step 2 – Click Debug button to enable the diagnostic function.

Fig 28 – Click Debug button

If diagnostic function is enabled successfully, the green led will light up. See the Fig 28 shown below.

Step 3 – Operate the command module to check if connection is well. If AP900 received the command module signal

correctly, the corresponding green point will appear on the diagnostic panel.

In the same time, if speed, tach and pedal signals are inputted, the corresponding information will be shown on the
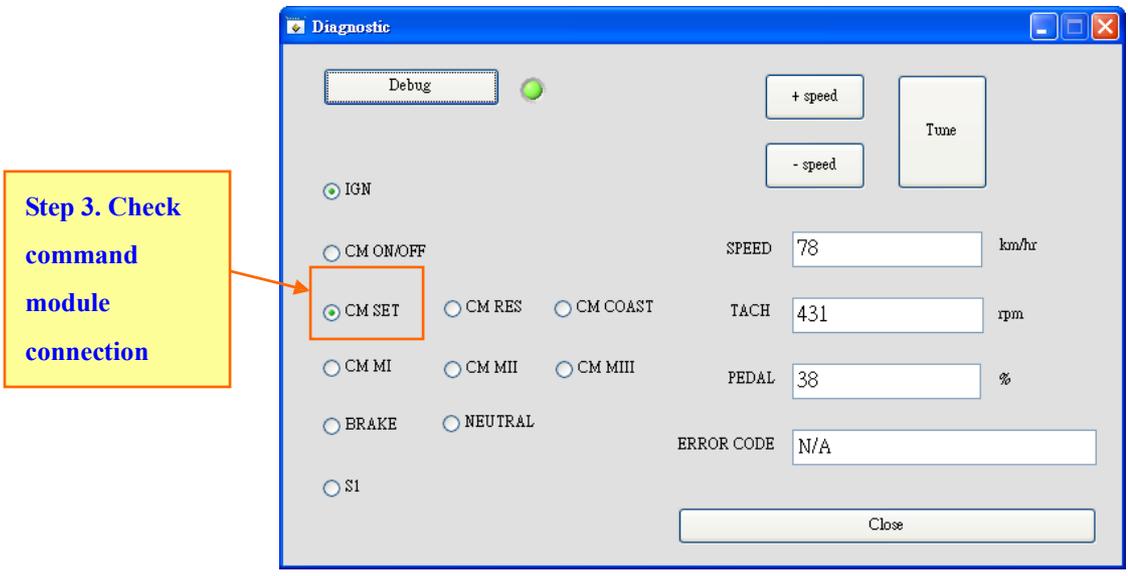
diagnostic panel.

Fig 29 – input information

5.2 Speed signal correction operation flow

For the real line or CAN speed signal, if the speed value is not correct enough, the adjustment button can be used to do the correction. For example, the current speed is 78km/hr.
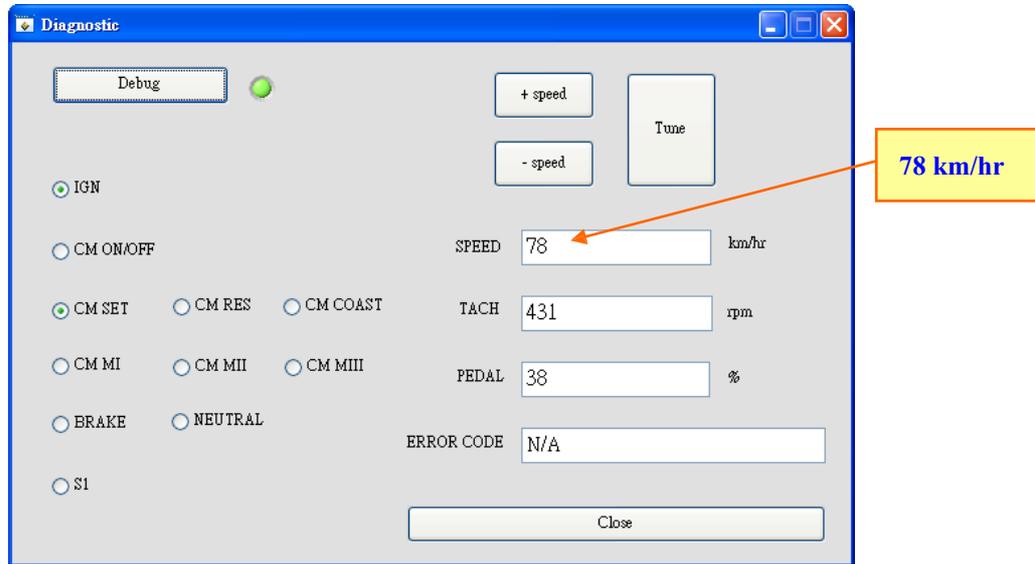

Fig 30 – speed 78 km/hr

Step 1 – Click +speed/-speed button to let the speed match the meter speed.

Step 2 – Click Tune button to record the correct speed.
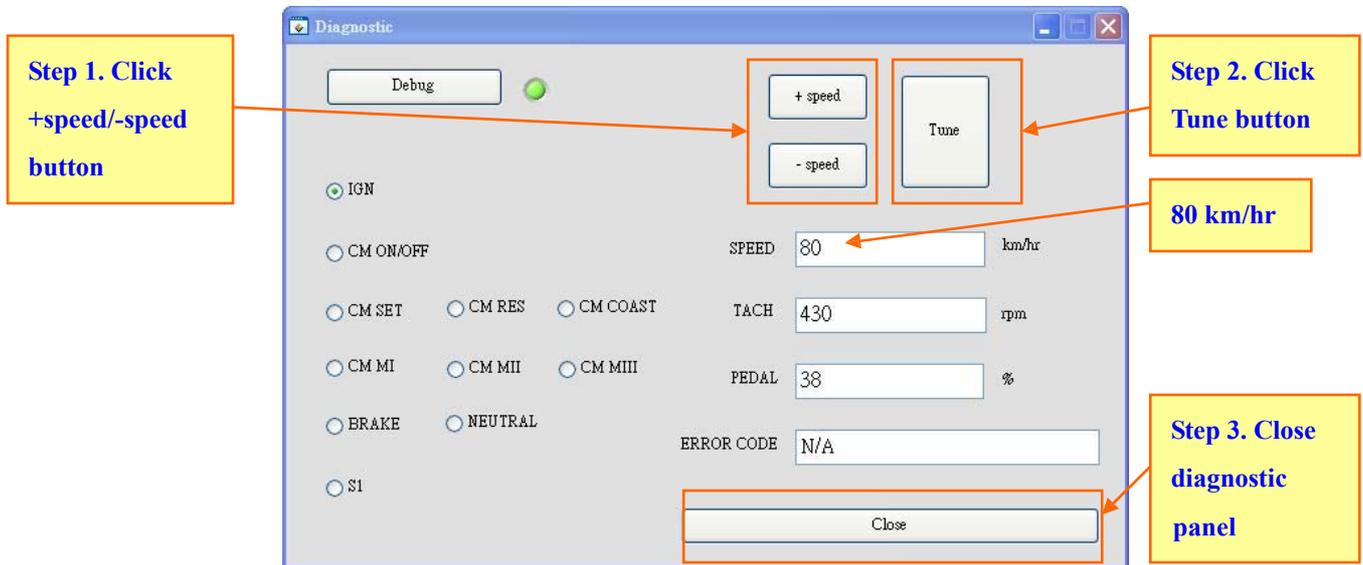
Step 3 – Click Close button to close diagnostic panel.

Fig 31 – click +speed/-speed and tune button

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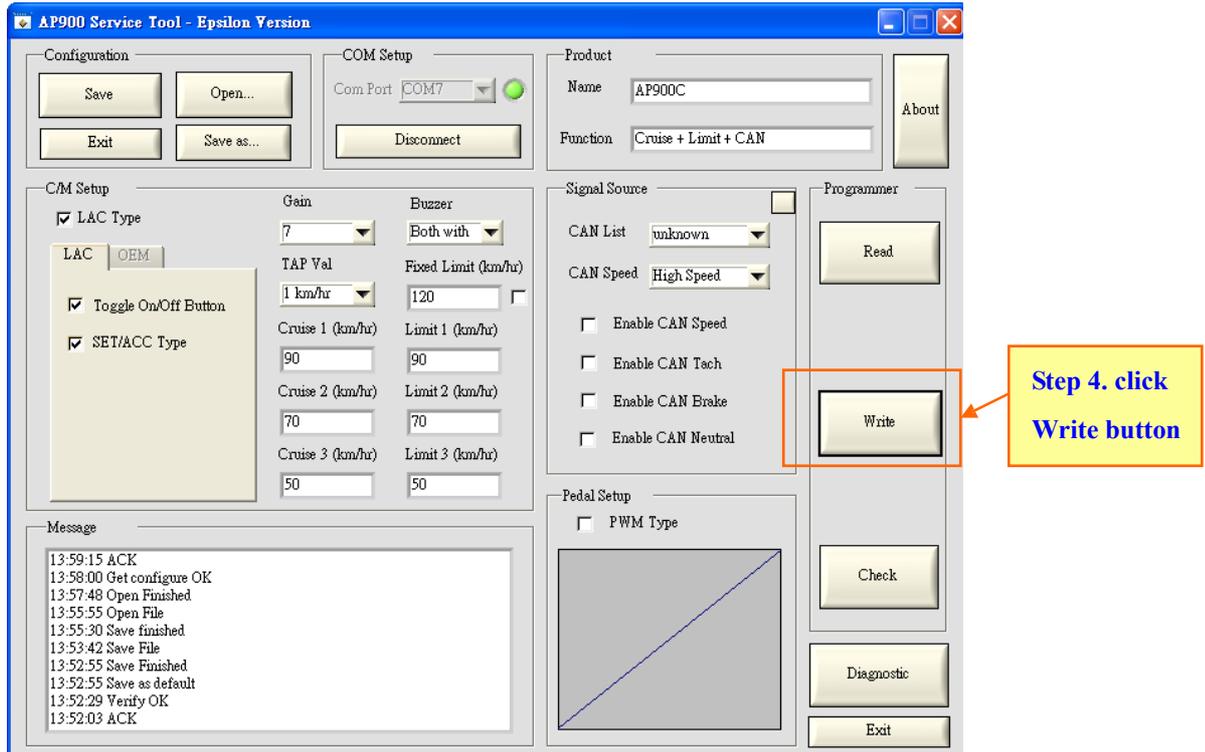Step 4 – Click Write button to program.

Fig 32 – click Write button

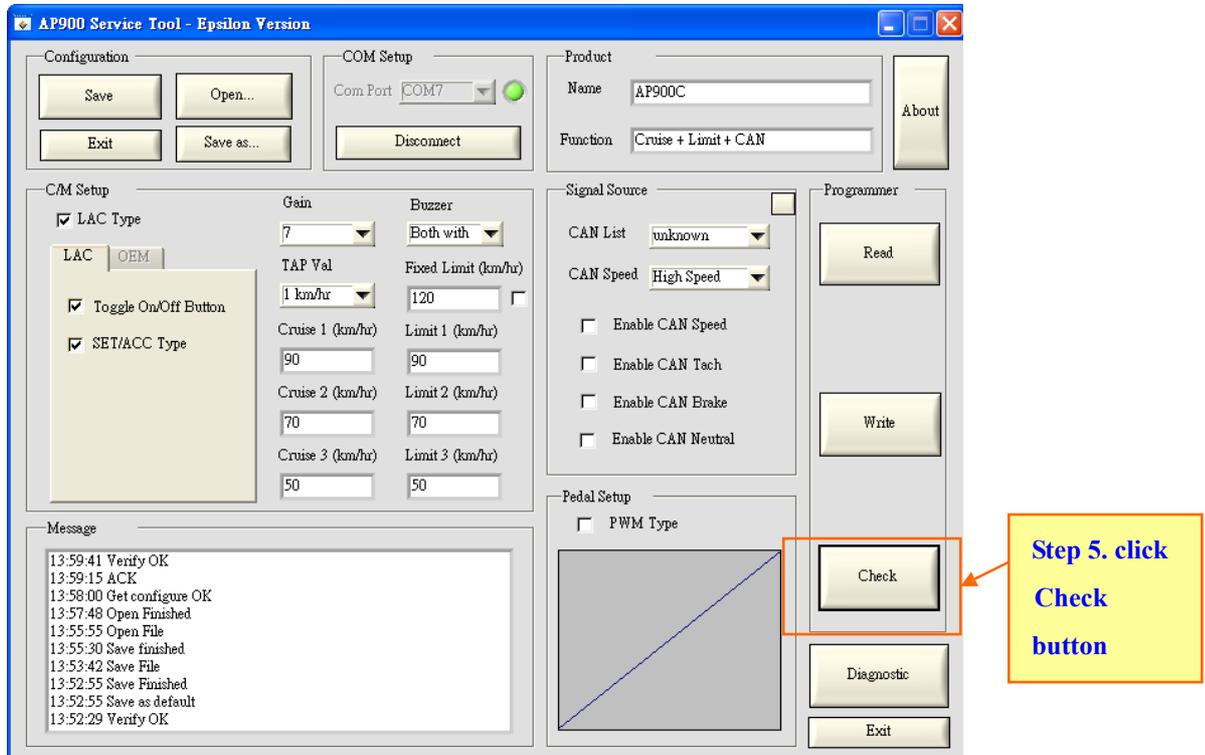Step 5 – Click Check button to verify.

Fig 33 – click Check button

Then, the AP900 configuration will be updated, and the current speed in AP900 will be 80km/hr.

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