Table of contents

1.Sensor AID Introduction

Sensor AID is designed to diagnose and interacts with tire pressure sensor through wireless (radio frequency) communication to:

- Retrieve data from tire pressure sensor
- Verify the identity of each tire pressure sensor mounted on the wheels.
- Assist technicians in servicing CUB TPMS during relearning procedures.

NOTE

Sensor shall be diagnosed close to left or right antenna within degrees.

Sensor AID Introduction - Keypad Summary

Power On / Off

Navigate through measured and parameters by pressing up and down keys

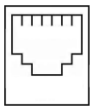
Enter key, press enter to select function or validate a parameter

The USB connection allows software update via CUB software

Low Bat ● Indicator will turn red when battery is low

Charge ● Indicator will turn orange when charging

Esc key, press to return to the previous menu without parameter validation



Connect to OBDII module by RJ11 cable

Sensor AID Introduction - Power On The Device

Press and hold the power key to power on the device

During power on, The device display the CUB logo and district. You can switch USA/EUR region in the setting page.

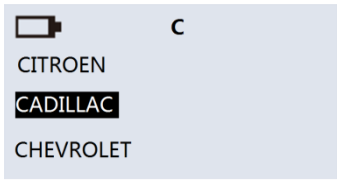
Software revision number follows after the CUB logo.

Now the device is at the maker selection menu.

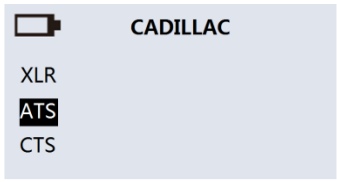
2. Diagnosing a sensor- Diagnose Sensor

Use arrow key to scroll up and down between makers.

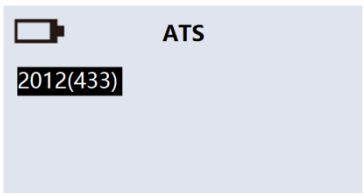
Maker selection:
Use the arrow key to browse alphabets of carmakers, press the "Enter" key to select.



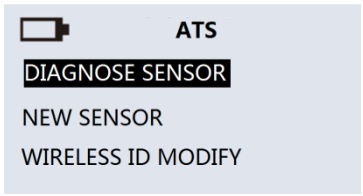
Maker selection:
Use the arrow key to browse automakers, press the "Enter" key to select.



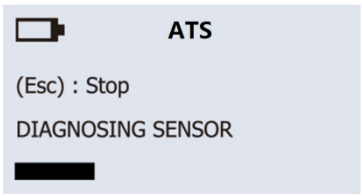
Model selection:
Use the arrow key to browse models, press the "Enter" key to select.



Year selection:
Use the arrow key to select year and press the "Enter" key to select.



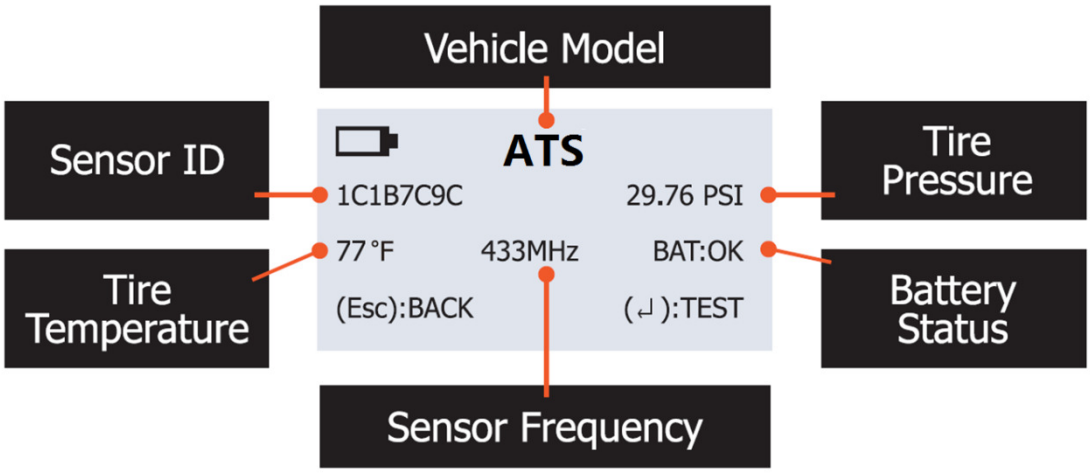
Function selection:
Use the arrow key to select DIAGNOSE SENSOR and press the "Enter" key to diagnose.



Diagnosing Sensor:
Sensor AID will now activate the sensor. Sensor respond time may vary depending on sensor type and brand. Sensor AID will beep after receiving sensor information.

Diagnosing a Sensor- Results Description

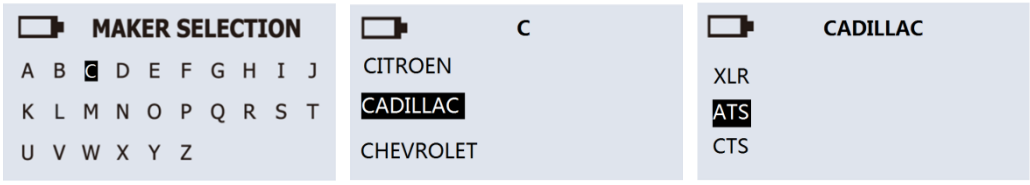
The picture below is an example of sensor data communication result



NOTE The Sensor AID will identify the sensor information that is transmitted. Not all sensors transmit every piece of information shown.

3. New Sensor- Duplicate an O.E sensor

This function is designed for you to bypass OBDII and automatically duplicate an O.E sensor.



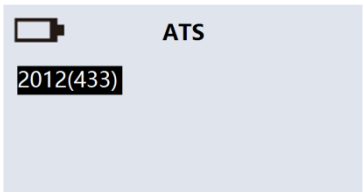
Maker selection:
Use the arrow key to browse through alphabets, and press the "Enter" key to select.

Maker selection:
Use the arrow key to browse through automakers, and press the "Enter" key to select.

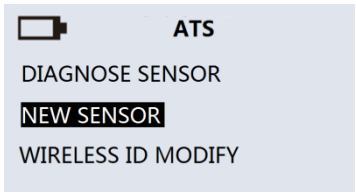
Model selection:
Use the arrow key to browse models, and press the "Enter" key to select.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

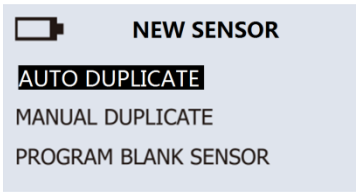
This function is designed for you to bypass OBDII and automatically duplicate an O.E sensor.



Year selection:
Use the arrow key to select year and press the “Enter” key to select.



Function selection:
Use the arrow key to select NEW SENSOR and press the “Enter” key to next.

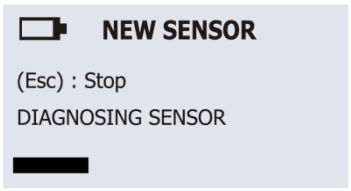


Function selection:
Use the arrow key to select AUTO DUPLICATE and press the “Enter” key to select.

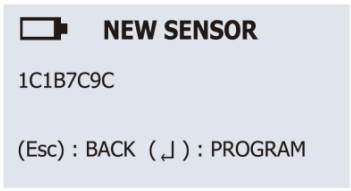
NOTE Duplicate and Program function will only work with CUB’s Sensor-AID and Uni-sensor.

3.1 Auto Duplicate- Auto Duplicate an O.E sensor

This function is designed for you to bypass OBDII and automatically duplicate an O.E sensor.

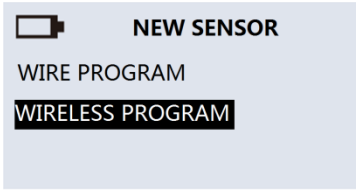


Search ID Process:
Sensor AID will now search the sensor ID. Sensor respond time may vary depending on sensor type and brand. Sensor AID will beep after receiving sensor information.

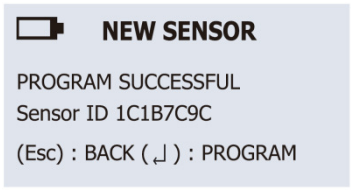


Duplicate Sensor:
Sensor AID will display the O.E sensor ID, press the “Enter” key to program Uni-sensor.
Note:
Once you get the sensor ID, press Enter key directly to program the new sensor. If you press ESC key, the sensor ID will be erased, you need to diagnose again.

Wire Program:
Choose this function to program the sensor by wire. Put a Cub uni-sensor in the cradle and click Enter key to begin the programming.



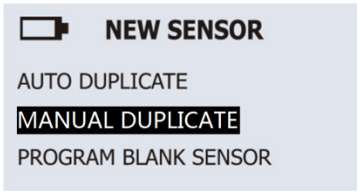
Wireless Program:
Choose this function to program the sensor by wireless. Place a Cub wireless uni-sensor near the Sensor-AID and click Enter key to begin the programming.



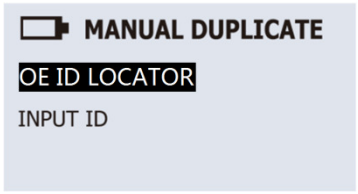
Duplicate Complete:
Sensor AID will now duplicate the sensor for you, following by Erasing Flash, Program sensor and Verifying. You will hear 2 short beeps when the sensor is duplicated.
Note:
Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

3.2 Manual Duplicate - Manual Duplicate an O.E sensor

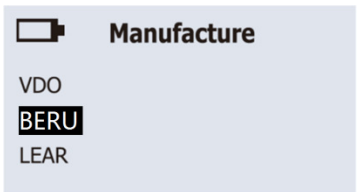
This function is designed for you to bypass OBDII and manually duplicate an O.E Sensor.



Function selection:
Use the arrow key to select MANUAL DUPLICATE and press the "Enter" key ↵ to select.



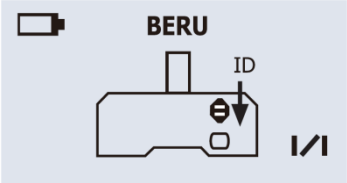
O.E ID Locator:
Use the O.E ID Locator to help find the Sensor ID on a dead O.E sensor. Press the "Enter" key ↵ to select.



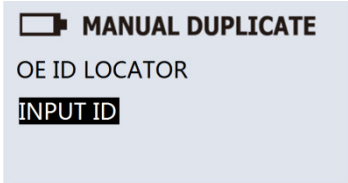
Manufacture Selection:
Use the arrow key to select the manufacturer of the O.E sensor. Press the "Enter" key ↵ to select.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

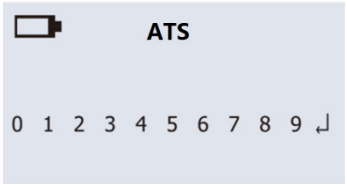
This function is designed for you to bypass OBDII and manually duplicate an O.E Sensor.



ID Locator:
This will show you where the ID is located. Some manufacturer may have more than one type of sensors. Use the arrow key to browse, to get back by press the ESC key .



Input ID:
Use the Input ID function will allow you to input the ID from O.E Sensor to program the Uni-sensor, press the "Enter" key to select.

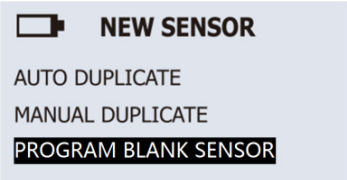


Input Sensor ID:
Use the arrow key to browse, Press the "Enter" key to enter the ID.
Please check if O.E sensor ID is Hexadecimal (0~9+A~F) or Decimal (0~9) to select correct mode in Manual Duplicate.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

3.3 Program Blank Sensor- Programming a blank sensor

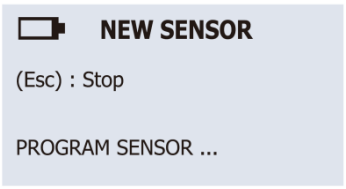
This function is designed for you to program a blank sensor to O.E. format for vehicle with auto-relearn function.



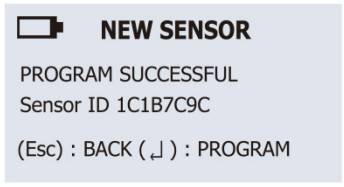
Function selection:
Use the arrow key to select PROGRAM BLANK SENSOR and press the "Enter" key to select.
Note:
Make sure the correct sensor is inserted in the cradle.

Wire Program:
Choose this function to program the sensor by wire. Put a Cub uni-sensor in the cradle and click Enter key to begin the programming.

Wireless Program:
Choose this function to program the sensor by wireless. Place a Cub wireless uni-sensor near the Sensor-AID and click Enter key to begin the programming.



Program Blank Sensor: Sensor AID will now program the sensor for you, following by Erasing Flash, Program sensor and Verifying.



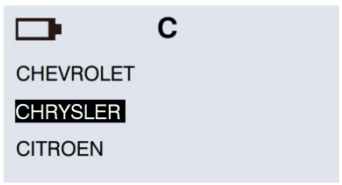
Program complete: When the program process is complete, you will hear 2 short beeps when the sensor is programmed.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

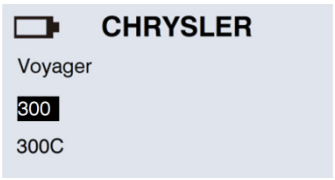
4. Wireless ID/RL Modify – Copy and Modify a sensor

This function is designed for you to bypass OBDII and wireless copy or modify an O.E sensor.

Maker selection: Use the arrow key to browse through alphabets, and press the "Enter" key to select.



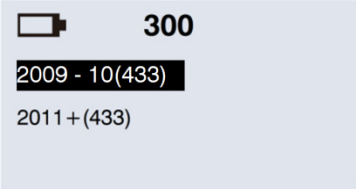
Maker selection: Use the arrow key to browse through automakers, and press the "Enter" key to select.



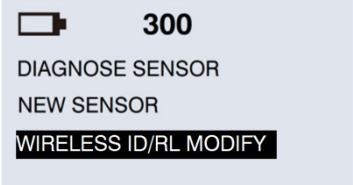
Model selection: Use the arrow key to browse models, and press the "Enter" key to select.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

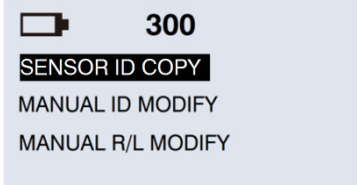
This function is designed for you to bypass OBDII and automatically Copy an O.E Sensor.



Year selection:
Use the arrow key to select year and press the “Enter” key to select.



Function selection:
Use the arrow key to select WIRELESS ID/RL MODIFY and press the “Enter” key to next.

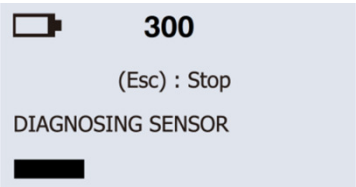


Function selection:
Use the arrow key to select SENSOR ID COPY and press the “Enter” key to scan.

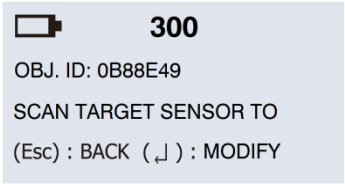
NOTE Duplicate and Program function will only work with CUB’s Sensor-AID and Uni-sensor.

4.1 Sensor ID Copy – Wireless Sensor ID Copy

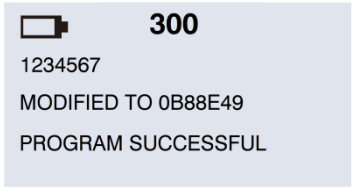
This function is designed for you to bypass OBDII and wireless copy an O.E Sensor.



Scan object’s ID:
To placing Sensor AID close to the O.E or object sensor. Press the “Enter” key to diagnose the sensor ID.



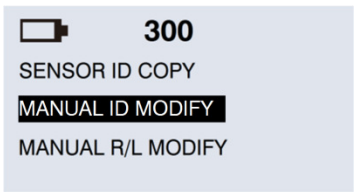
Copy ID to Sensor:
Sensor AID will display the O.E sensor ID, To placing the target sensor near the Sensor AID, press the “Enter” key to copy this ID into the target sensor.
Note:
The target sensor should have the same protocol with O.E sensor. Once you get the sensor ID, press Enter key directly to copy the target sensor. If you press ESC key, the sensor ID will be erased, you need to diagnose again.



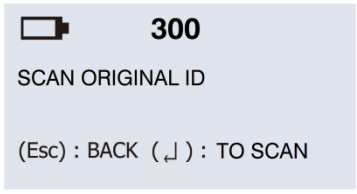
Modify Complete:
Sensor AID will now modify the target sensor for you. You will hear 2 short beeps when the sensor is modified.

4.2 Manual ID Modify – Manual Modify a Target sensor

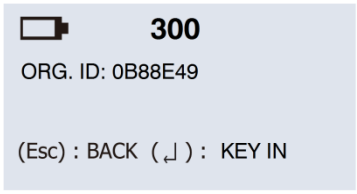
This function is designed for you to bypass OBDII and wireless modification a target Sensor.



Function selection:
Use the arrow key to select MANUAL ID MODIFY and press the "Enter" key to select.

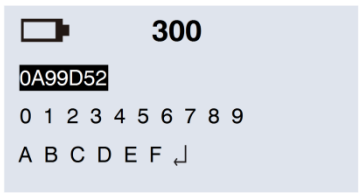


Check Original ID:
To place the target sensor close to Sensor AID and press the "Enter" key to scan the original ID number to make sure this target sensor is correct what you want to modify.



Scan Complete:
Sensor AID will now show the target sensor ID. You will hear 2 short beeps when the sensor is scanned. Press the "Enter" key to key in.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.



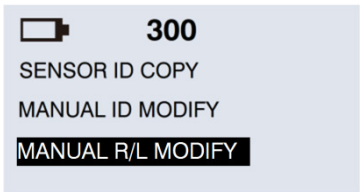
Input Sensor ID:
Use the arrow key to browse, Press the "Enter" key to enter the ID.

Modify Complete:
Sensor AID will now modify the target sensor for you. You will hear 2 short beeps when the sensor is modified.

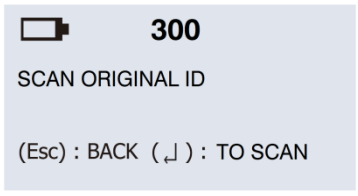
NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

4.3 Manual R/L Modify – Manual Modify a Target sensor

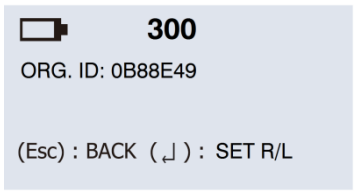
This function is designed for you to wireless modify the wheel right/left position on the target sensor.



Function selection:
Use the arrow key to select MANUAL R/L MODIFY and press the "Enter" key to select.

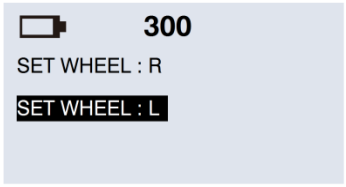


Check Original ID:
To place the target sensor close to Sensor AID and press the "Enter" key to scan the original ID number to make sure this target sensor is correct what you want to modify.

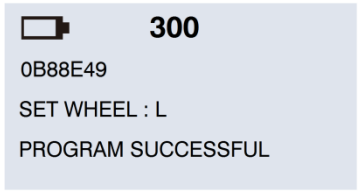


Scan Complete:
Sensor AID will now show the target sensor ID. You will hear 2 short beeps when the sensor is scanned. Press the "Enter" key to set R/L.

NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.



R/L wheel selection:
Use the arrow key to select R/L, press the "Enter" key to modify.

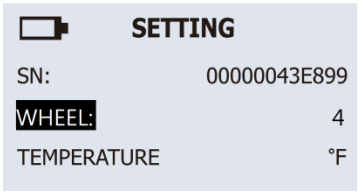


Modify Complete:
Sensor AID will now modify the target sensor for you. You will hear 2 short beeps when the sensor is modified.

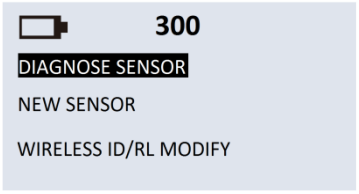
NOTE Duplicate and Program function will only work with CUB's Sensor-AID and Uni-sensor.

5.ID to PC – Save ID information to PC

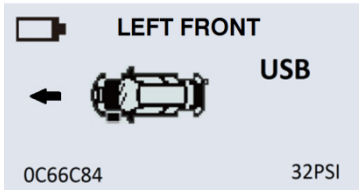
This function is designed for you to save 4 wheels ID to your PC.



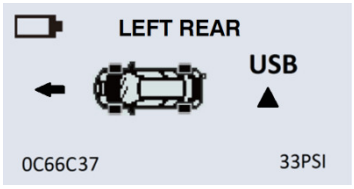
WHEEL Number:
ID to PC function is only work with 4 wheels diagnose. Please set the wheel number to be 4 in the setting page first.



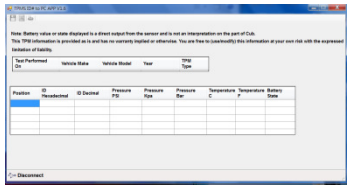
Function selection:
Use the arrow key to select DIAGNOSE SENSOR and press the "Enter" key to diagnose.



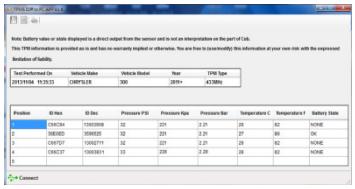
Scan 4 wheels ID:
4 wheels diagram will show on the screen, Please use the arrow key to select the wheel location, and press the "Enter" key to diagnose.



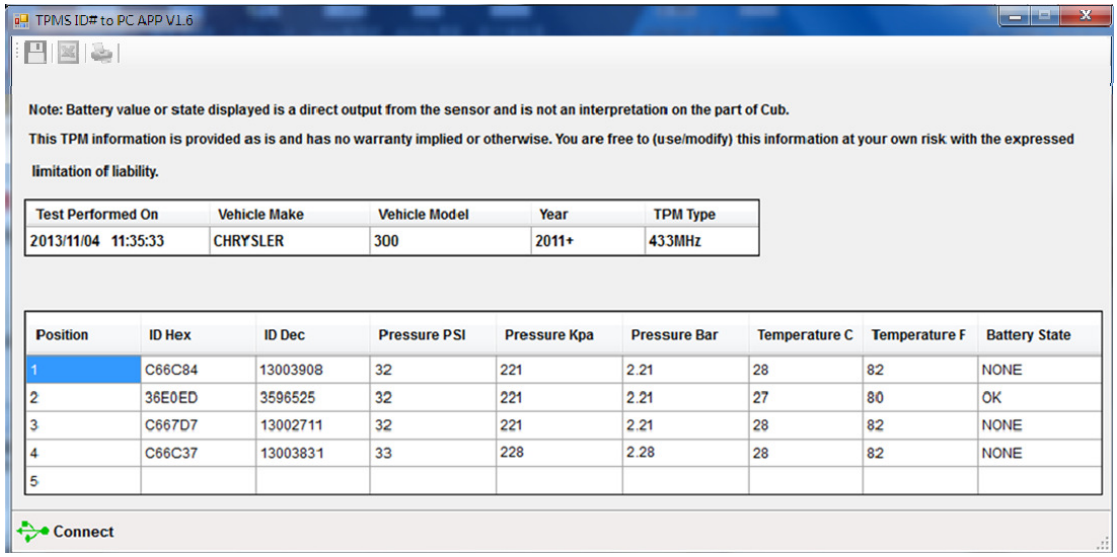
Ready to Connect PC:
When complete 4 wheels ID scanning, then ready to connect to PC for saving the data.



Connect to PC:
Executing the "TPMS ID# to PC APP V1.6" in your PC, and then connect the Tool to your PC via USB cable.



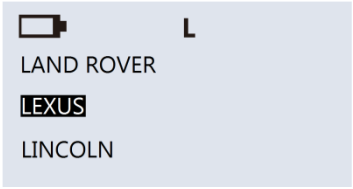
Save the ID data:
After 1 second, the 4 ID data will be uploaded to this APP. And then you can save this data by clicking the icon in the left upper corner. The file format is txt file.



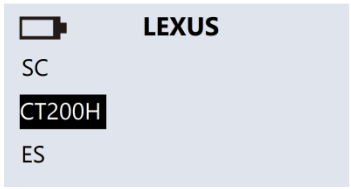
6. OBDII – Wheels ID Read/Write by OBDII module

This function is designed for you to write or read 4 wheels ID by OBDII module.

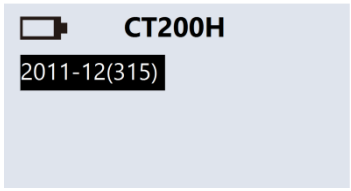
Maker selection :
Use the arrow key to browse alphabets of carmakers, press the "Enter" key to select.



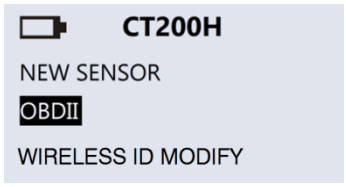
Maker selection:
Use the arrow key to browse automaker, press the "Enter" key to select.



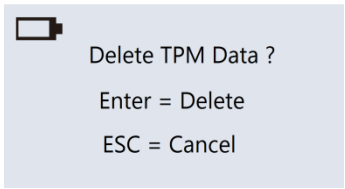
Model selection:
Use the arrow key to browse models, press the "Enter" key to select.



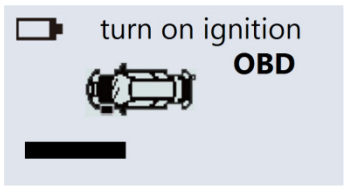
Year selection:
Use the arrow key to select year, and press the "Enter" key to select.



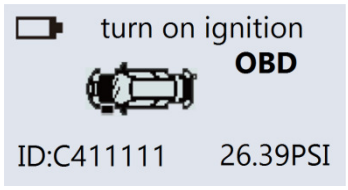
Function selection:
Use the arrow key to select OBDII, and press the "Enter" key to select.



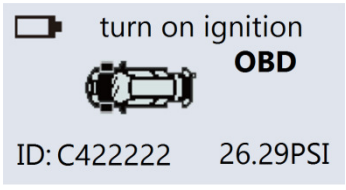
Data selection:
This screen will pop up only if tool has stored previous TPMS data. Press the Enter key to delete previous stored TPMS data. Press the ESC key to keep previous stored TPMS data.

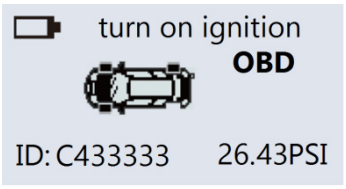


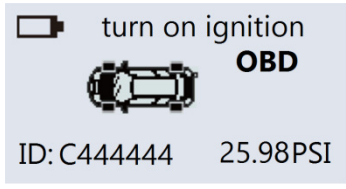
Scan sensor ID:
Start diagnose sensor, starting from LF, RF, RR and LR. Press the "Enter" key to start diagnose.
* The flashing tire indicator is the tire position.



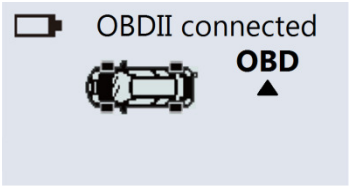
Obtain 4 sensor ID:
Now you will obtain 4 to 5 sensor IDs (FL, FR, RR, RL and/or spare tires) from the process of scanning.

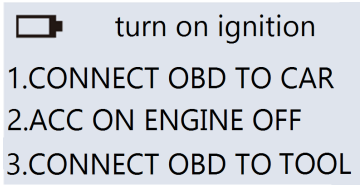


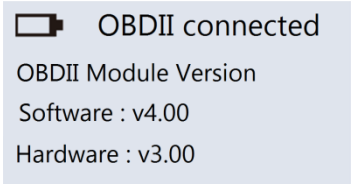




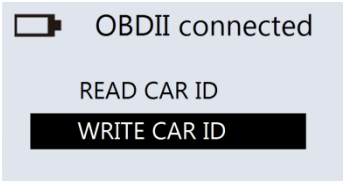
OBDII – Wheels ID Read/Write by OBDII module

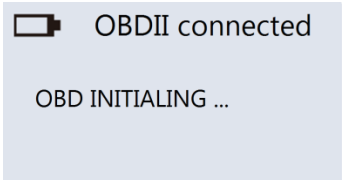


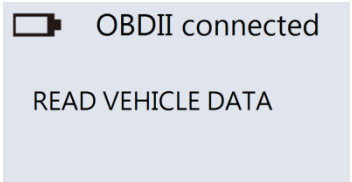




OBDII connection:
Insert OBDII Module into the OBDII connector of the vehicle and connect to Sensor AID by RJ11 cable. Turn ACC/ ignition on. The following screen will display.

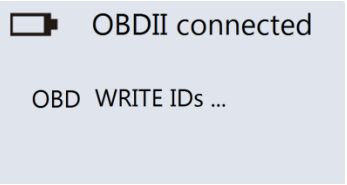


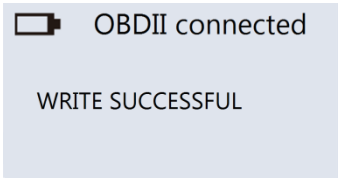




Write car ID:
Use the arrow key to select WRITE CAR ID and press the “Enter” key to select.

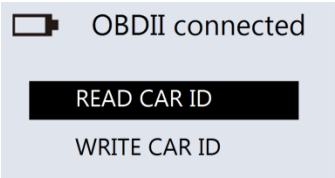
Write car ID process:
CUB OBDII module will write the sensor IDs to ECU. The respond time from the vehicle may vary depending on MMY. Sensor AID will beep after receiving sensor information.



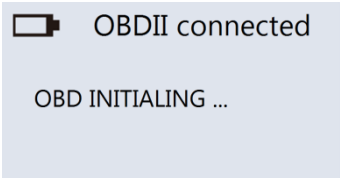


Write car ID complete:
After sensor AID successfully over write the sensor ID to the ECU, you will hear 2 short beeps.

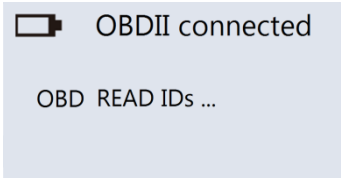
OBDII – Wheels ID Read/Write by OBDII module

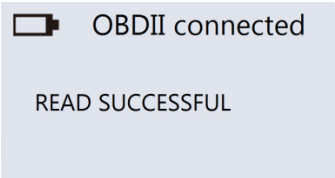


Read car ID:
Use the arrow key to select READ CAR ID and press the “Enter” key to select.



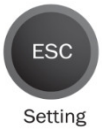
Read car ID process:
CUB OBDII module will communicate with the vehicle to recognize the sensor ID. The respond time from the vehicle may vary depending on MMY. Sensor AID will beep after receiving sensor information.



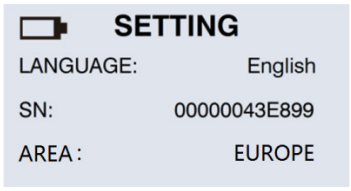


READ car ID complete:
After sensor AID successfully extract the IDs from the ECU, you will hear 2 short beeps.

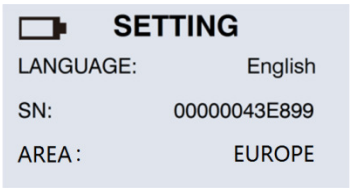
7. Sensor AID Settings – Device Setting



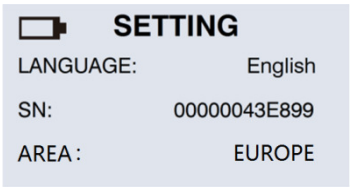
Press ESC to go in to setting at maker selection menu



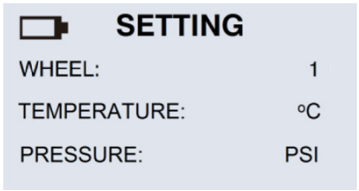
Language:
Use the “Enter” key to choose the language you prefer.



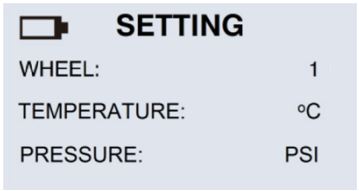
Device S/N:
The device serial number is for you to update the device’s firmware via CD or internet.
Note: All the update firmware is synchronous to the device’s serial number.



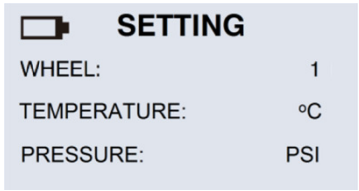
Area:
Use the “Enter” key to choose the EUR/USA region.



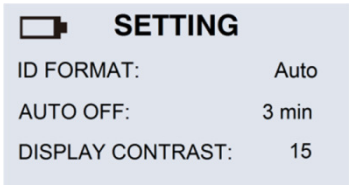
Wheel number:
Only scan one sensor, please select 1. Scan 4 wheels sensors, please select 4.
Note: The ID to PC function is available for wheel 4 only.



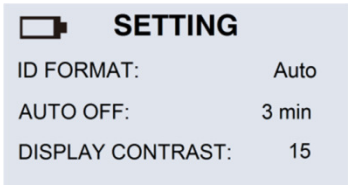
Temperature:
Use the “Enter” key to choose between Fahrenheit and Celsius.



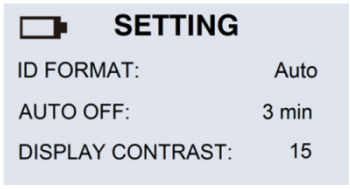
Pressure:
Use the “Enter” key to choose between PSI and kPa.



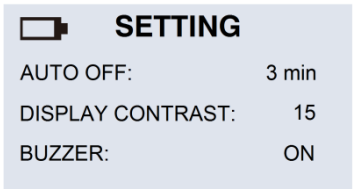
ID Format:
Change the ID format between decimal and hexadecimal with the "Enter" key
Note: The present setting is AUTO that automatically change format based on input.



Auto off:
User can adjust how quickly the tool will turn off after a period of non-use. This feature can also be disabled. Press the "Enter" key to select desired auto off time.



Display contrast:
User can adjust the contrast of display. Press the "Enter" key to highlight and use the arrows to adjust between 01 to 30.

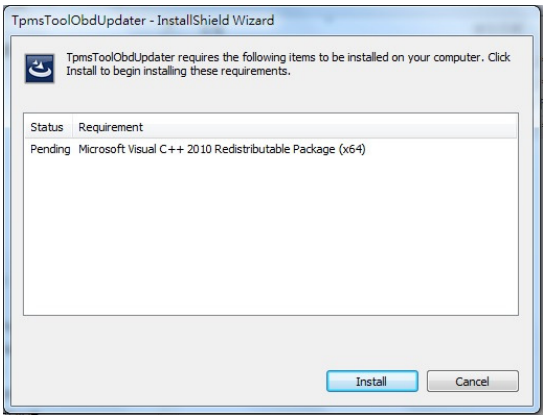


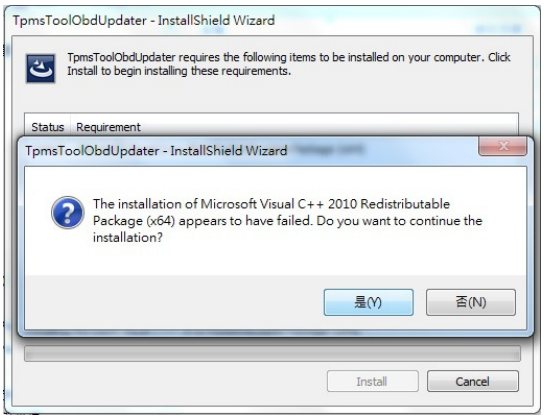
Buzzer:
User can adjust the device to beep after receiving tire sensor information. Press the "Enter" key to buzzer and use the arrows to adjust between on and off.

Press ESC again to go back to maker selection.

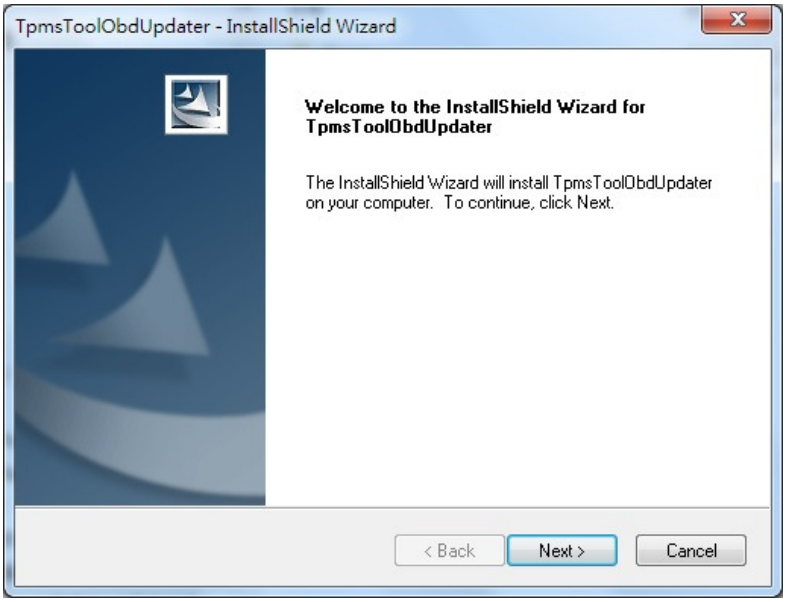
8. Software Update – Software Installation

1. Insert the CD, supplied with instrument, into the PC drive and click on the CUB icon to start the installation.
2. The following screens will appear. Click “Install” and “Yes”





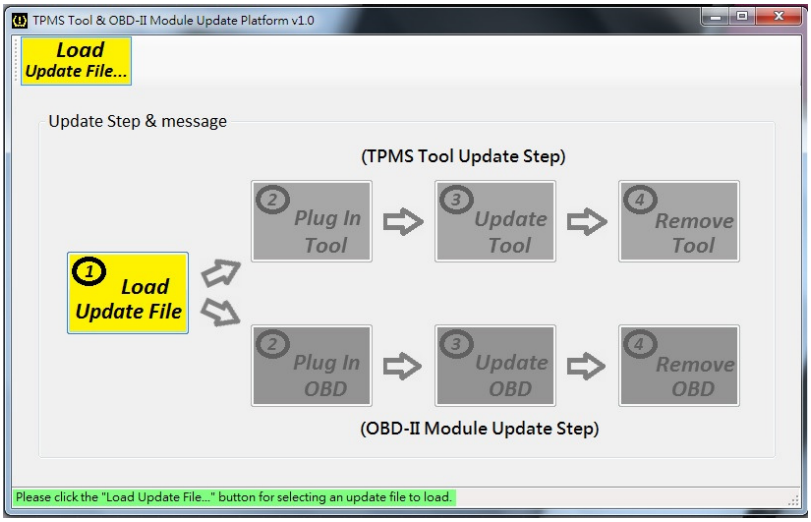
3. The following window will appear, Please click “Next”



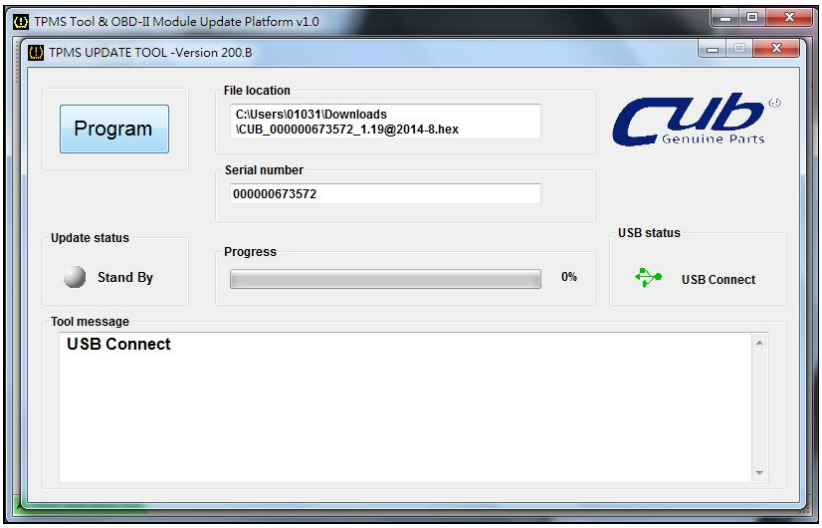
NOTE
Please read the license agreement carefully, and select “I accept the terms in the license agreement” and click “Next” to complete the software installation.

Software Update – Device Software Update

1. Connect the USB cable from Sensor AID to the PC, Click on the CUB TPMS update icon to start the program.
2. The following screen appear. This program will auto recognized the Tool and OBD module to proceed the update processes. Please click “Load Update File” to select the latest firmware file.

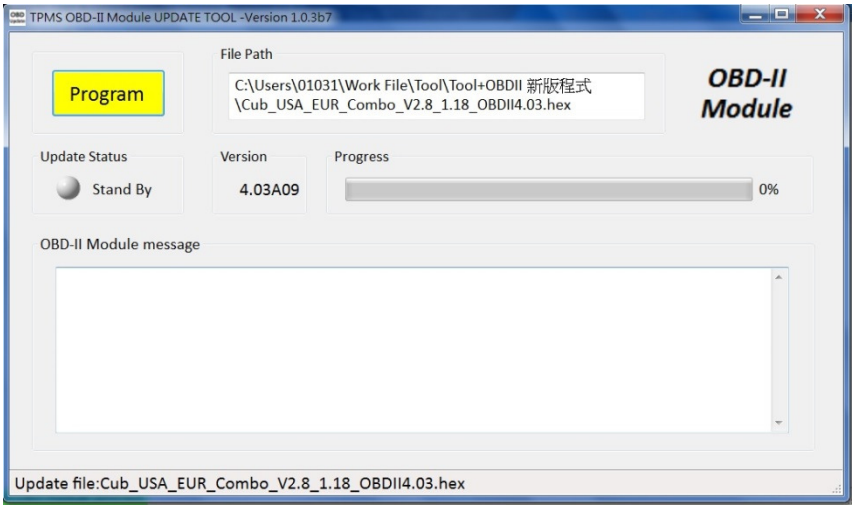


3. When you plug the Sensor-AID tool via USB cable, power on the power, the following screen will pop up. Click Program to start the update process



NOTE Every device has it's unique license number, the software must match the license number for update.

4. When you plug the OBDII module, the following update screen will pop up. Click Program to start the update process.



9. Warranty – Device Warranty

CUB autoparts products are guaranteed from material defects for 365 days after the date of purchase. If the product fails under normal circumstances within the first year, CUB autoparts will repair or replace the product. Product will not be replaced or repaired if damaged from misuse or incorrect application. To obtain repair or replacement of the product under warranty, contact local distributor. Proof of purchase and date of purchase is required to validate the warranty claim.

CUB autoparts is not liable for any direct or consequential loss or property damage arising from use of product.

NOTE Warranty does not cover tire valves or screws for tire valves. The tire valves and screws need to be replaced when rotating tires, changing tires or changing the TPMS sensors. If installing/reinstalling a TPMS sensor, new valves and screws should be used.

Warning: Only use CUB autoparts replacement parts. Using other brands will not allow the system to work and will void the warranty.

Caution

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.

SWITCH ON SAFELY

Do not switch the device on when wireless use is prohibited or when it may cause interference or danger.

SWITCH OFF WHEN REFUELLING

Do not use the device at a refueling point. Do not use near fuel or chemicals.

SWITCH OFF NEAR BLASTING

Fellow any restrictions, Do not use the device where blasting is in progress.

INTERFERENCE

All wireless devices may be susceptible to interference, which could affect performance.

USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.

CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.

WATER·RESISTANCE

The device is not water-resistant. Keep it dry.

QUALIFIED SERVICE

Only qualified personnel may install or repair this device.

ENHANCEMENTS AND SATTERIES

Use only approved enhancements and batteries. Do not connect incompatible products. The battery needs to be charged to full for the first usage.

Do not dispose of batteries in a fire as they may explode. Batteries may also explode if damaged. Dispose of batteries according to local regulations. Please recycle when possible. Do not dispose as household waste.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC Statement

The requirement is specified in RSS-GEN Section 5.3. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CE Compliance Notice

All CE marked CUB sensor products are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformance will be provided upon request.

CE

Disposal of Waste Electrical & Electronic Equipment

This mark on a product and/or accompanying documents indicates that this product complies with the EU Directive 2002/96/EC and that when it is to be disposed of, it must be treated as Waste Electrical & Electronic Equipment (WEEE).

CUB Genuine Parts CUB ELECPARTS INC

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To obtain repair or replacement of the product under warranty, or general inquiries, assistance, please refer to CUB information card to contact our local distributor.