

iCarsoft

User's Manual

For TPMS V800

Multi-system Car Diagnostic Tool series



PROFESSIONAL . FAST . SMART . POWERFUL

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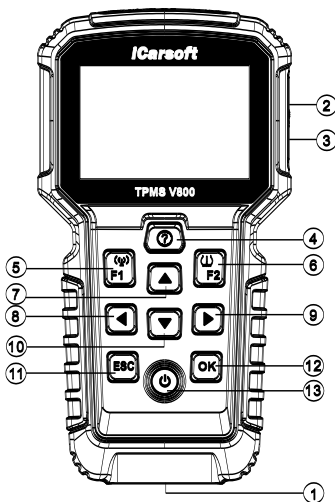
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A0-2024.03

Multi-system Car Diagnostic Tool series

1 Product Descriptions






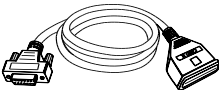


Serial Number	Button Name	Description
①	OBDII Connector	Connects the scan tool to the vehicle's Data Link Connector via OBDII Cable
②	Data Cable Connector	Connects the scan tool for power supply and update the software if needed.
③	Storage Card Slot	Holds the system of the scan tool.
④	❓ button	Shows help information for test results or user operation.

⑤	 F1 button	In case of special use or quick trigger sensor
⑥	 F2 button	In case of special use or quickly enter TPM Program
⑦	UP button	Moves cursor up for selection
⑧	LEFT button	Moves cursor left for selection
⑨	RIGHT button	Moves cursor right for selection
⑩	DOWN button	Moves cursor down for selection
⑪	ESC button	Exit the current page or return to the previous page
⑫	OK button	Confirm and go to the next page
⑬	 button	Long press to turn on or power off

2 Specifications

Item	Description
Display	3.5" TFT LCD, With 480*320 Pixels
Operation Temperature	0°C~50°C(32°F~122°F)
Storage Temperature	-20°C~70°C(-4°F~158°F)
Operating Voltage	9-18V
Operating Current	150mA@12V(Typical)
Power Consumption	1.8W(Typical)
Dimension(LxWxH)	209.4mm X 112mm X 35mm (8.24inch X 4.4inch X 1.38inch)
Weight	≈400g

3 Accessories Included

	<p>User's manual</p> <p>Instruction on tool operations</p>
	<p>USB External Power Adapter</p> <p>Connect the device to an external DC power port and USB cable for charging</p>
	<p>Data Cable</p> <p>Allows easy update via a PC and internet connection</p>
	<p>OBDII Main Cable</p> <p>Connects tools with Vehicle to use</p>
	<p>Storage Card</p> <p>Download Vehicle program</p>
	<p>TF Card reader</p> <p>Used with TF card</p>

Note:

- 1、 Before connecting the main cable to your vehicle, please connect the cable to the unit first and tighten the screws.
- 2、 When the device battery is low, a low battery icon will be displayed in the icon menu or title bar. The user needs to use an adapter to charge the device. During the charging process, the device will not display the battery icon. When the device is fully charged, a charging completion icon will be displayed in the corresponding location.
- 3、 When there is no power to the device's USB and mains cables,

the device will automatically shut down if there is no operation for 5 minutes.

4 Product Features

- 1) iCarsoft Multi-system Car Diagnostic tool TPMS V800 can do it all-reads and clears trouble codes on all the systems such as engine ,transmission, ABS ,airbag, etc. The equipment provides TPM Program function to meet customer's replacement of sensors.
- 2) Support OBDII / EOBD Ten Modes of Operation.
- 3) Read Live Data.
- 4) Full ECU Diagnosis.
- 5) Applies to the single Brand of all Models equipped with OBDII-16DLC.
- 6) Easy To Use with Silicone Keys.
- 7) Auto identify technology can automatically identify model and year information in no time.
- 8) Actuation Test / Bi-directory Test is used to access vehicle-specific subsystem and component tests.
- 9) Basic Setting means reset some basic parameter settings for each control module, especially some parts / sensors, etc.
- 10) Adaption, this function allows you to perform adaptive learning / reset / calibration and other functions for each control module, and also includes some important module data for parameter adjustment.
- 11) Support Freeze Frame of Fault Code functions.
- 12) This device provides 9 service functions: Oil Light / Service Reset, Electronic Parking Brake (EPB) system maintenance, Battery Management System (BMS), Diesel Particulate Filter (DPF), Electronic Throttle Control system (ETC), Steering Angle Sensor (SAS), ABS Bleeding (BLD), Injector Coding (INJ) and the TPMS service.
- 13) TPM Program: When the car's tire pressure sensor is damaged or the battery is exhausted, use this function to replace the sensor.
- 14) Original sensor information: This function displays the tire pressure sensor model information configured by the vehicle

manufacturer, including supplier, frequency, part number, etc.

- 15) Activate Programmed Sensors: This function activates the programmed tire pressure sensors and displays related parameters such as ID, pressure, temperature, and battery status.
- 16) Check TS-sensor: This function is used to check the iCarsoft sensor status and display related parameters like ID, frequency, software version, and battery status.
- 17) Programming TS-sensor: This function is used to program the iCarsoft sensor. Four programming methods are provided:
- 18) Automatic Relearn guide: After replacing the tire pressure sensor, follow the vehicle manufacturer's instructions to perform a simple road test self-learning process.
- 19) Diagnose by OBD: In specific situations, diagnostic functions may be required when replacing tire pressure sensors.
- 20) The Print Data function allows you printing out diagnostic data recorded by the scan tool or customized test reports.
- 21) Battery test allows you getting the voltage of battery with OBD port by the scan tool when the engine starts.
- 22) DTC Library to lookup when user is operating this tool.
- 23) Upgrade Via PC.
- 24) Multi-language: English, Deutsch, French, Dutch, Spanish, Czech, Swedish, Russian, Hungarian, Norwegian, Portuguese, Italian, Polish, Danish and Finnish.

Note:

Certain functions may be limited from the vehicle manufacturer due to the requirement of a special factory access code.

This scan tool covers over 20 years of models, so some functions may not be available on all years / models.

5 Vehicle Coverage

iCarsoft Multi-system Car Diagnostic Tool TPMS V800 is a Professional and powerful vehicle fault diagnosis tool developed by iCarsoft Technology Inc. With a 3.5" TFT LCD and unique diagnostic software, it features full ECU diagnosis of single vehicle brand and test modes mainly include: CANBUS, ISO9141, KWP2000, and J1850 etc . It enables technicians to accurately diagnose complex problems. TPMS V800 is Multiple Choice of

6 Operation

Welcome to using the scan tool of icarsoft, you should do something before using the scan tool.

- At first, please check production list such as scan tool and accessories already when you open the package, read the user's manual and connect the OBDII cable to scan tool.
- There are two ways to provide power the scan tool, one way is using data cable external 5V power adapter or USB port, another way is using OBDII Cable connection to the vehicle's Data Link Connector.
- Don't open the scan tool in a rainy environment or in the absence of training. Don't soak the scan tool as the keypad and port are not waterproof, also no solvents such as alcohol are allowed to clean the keypad or display.
- You can set the language, Unit of Measure and Buzzer your wanted when the scan tool connected power.
- Make sure the ignition is ON when you connected the scan tool already.



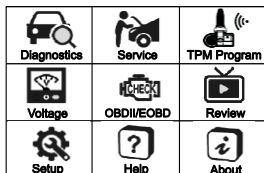
Warning:

For vehicles manufactured by different vendors, it is possible that it has different diagnostic menus. For details, please follow the instructions on the screen to proceed. Some functions need to be used under the guidance of professional technicians.

6.1 Diagnose

This function is specially designed to diagnose electronic control system of single vehicle model connected the scan tool already.

The diagnostic application connects data to the electronic control system of the test vehicle used for vehicle diagnostics. The application performs function tests to retrieve vehicle diagnostic information such as fault and event codes and real-time data for various vehicle control systems such as engine, transmission and ABS.



6.1.1 Vehicle identification

When the device is connected to the vehicle, there are two ways to enter the diagnostic system:

1. Auto identify or VIN identify
2. Vehicle select

Note:

“Auto identify” or “VIN identify” will be displayed on the interface, depending on the vehicle type.

Jaguar	1/2
Vin identify	
Vehicle Select	

6.1.1.1 Auto identify

By reading the vehicle specific information (including VIN identify), the vehicle identification can be carried out quickly.

6.1.1.2 VIN identify

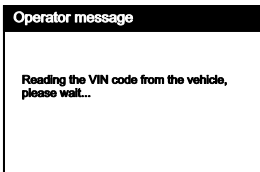
The “VIN identify” can automatically parse the car model, eliminating the cumbersome program manually input by the user.

The device diagnostic system has the latest automatic identification function based on the vehicle identification number. It stores all the diagnosable electronic control units of Scan on the vehicle and performs the diagnosis on the selected system. Perform automatic VIN recognition. For some vehicles that do not support the automatic vehicle identification number scanning function, the diagnostic tool allows you to manually enter the vehicle identification number. Recognize the VIN first. If the VIN cannot be recognized, you need to enter it manually.

● Automatic VIN identification

To perform Auto VIN identification

1. Click the Diagnostics application button from the device's Job Menu. The Vehicle Menu displays.
2. Click the vehicle manufacturer button to go to the next level menu.
3. Select VIN identify. Once the test vehicle is successfully identified, the screen will show the Vehicle Identification, then tap OK to enter the diagnosis.



Vehicle Information 1/12	
VIN	***BB3BG0HG409***
Brand	Jaguar
Type	XE
Model	X760
Year	2017
[F1]-OK	

● Manual VIN input

To perform Manual VIN input

1. Perform the first 2 steps of automatic VIN identification.
2. If the automatic VIN matching is not successful, or if the VIN does not match, a VIN input box will pop up, manually input the VIN.

Operator message

Please input the VIN code(17-digit):

3A23C4H3132

1	2	3	4	5	6	7	8	9	0
A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z				

[F1]-OK [F2]-Cancel

6.1.1.3 Vehicle Select

When the vehicle cannot be retrieved automatically through the ECU of the vehicle, or the specific VIN is unknown, you can manually select the vehicle. Or in some cases, when the user selects vehicle selection rather than vehicle VIN scanning, the system will provide the option of vehicle selection, and the user can select the vehicle model, model year, etc. according to his own model.

To perform vehicle selection:

- 1) Click the diagnostic application button in the device's job menu. Vehicle menu display.
- 2) Select the brand of the test vehicle.
- 3) Choose the "vehicle selection" option to make a series of selections according to the on-screen prompts, select the correct vehicle model, model year, etc.

- 4) Select step by step according to the screen prompts, and finally enter the list of diagnosis modes.
- 5) The user performs various operations by selecting the diagnostic mode.

6.1.2 Diagnostic mode

The scan tool provides three diagnostic modes for users to choose: Auto Scan, Control Unit and Service as shown in the figure below.

Diagnosis Mode	1/3
Auto Scan	
Control Unit	
Service	

Auto Scan	1/5
01 Engine Control Module 1	Fault (5)
15 Airbag	PASS
25 Immobilizer	Fitted
42 Door Electronics Driver Side	Unknown
46 Central Module Comfort System	Scanning...
[F1]-Pause	[F2]-Quick Erase

1) Auto scan

The Auto Scan function performs a comprehensive scanning of the ECUs in the vehicle's system to locate and retrieve DTCs. Enter Auto Scan, the system will scan your vehicle's system for you. At the same time, the fault information of each unit is detected to show the list and fault status.

Left side --- Show vehicle control unit number and system name.

Right side --- Show vehicle control unit status.

- ◆ Fault | 5 : Indicates that the fault code is detected; 5 represents the number of faults detected.
- ◆ Pass : Indicates that the vehicle is equipped with this system and has no fault code.
- ◆ Fitted : Indicates that the vehicle is equipped with this system.
- ◆ Not Fitted : Indicates that it is detected that the vehicle is not equipped with this system.
- ◆ Unknown : Indicates that it is detected that it is unknown whether the vehicle is equipped with this system.

- ◆ **Scanning** : Indicates that the device is scanning the vehicle system.

[Quick Erase] --- Press this button to quickly clear the fault code.

[Pause] / [Continue] --- Press this button to pause or continue scanning.

2) Control Unit

This option allows you to manually locate the desired control system. According to the menu driven program, the user manually selects the specified control unit that he wants to detect, skips the whole vehicle scanning, and directly carries out the diagnosis of the specified system.

3) Service

The car diagnostic tool provides an entry from the diagnostic mode to the service function. You can easily select the service function from the diagnosis mode, without returning to the service menu for selection. For different models, the service functions are different. Select this option to perform regular maintenance, such as reset oil service lamp and calibrating different systems.

6.1.3 Diagnostic operation

The main function menu options of different vehicles will vary slightly, and the main function menu usually includes the following options:

1. **Module Information** --- Read complete electronic system module information.
2. **Read fault code** --- This function reads and displays the fault codes retrieved from the vehicle control system.
3. **Clear fault memory** --- Use this function to clear the original fault code after reading the vehicle fault code and completing the repair.
4. **View data** --- When this function is selected, the data list of the selected module will be displayed on the screen.
5. **Actuation Test** --- This function provides access to vehicle specific subsystem tests and component tests.
6. **Basic settings** --- Basic Setting means reset some basic parameter settings for each control module, especially some parts / sensors, etc.

7. **Adaptation** --- this function allows you to perform adaptive learning / reset / calibration and other functions for each control module, and also includes some important module data for parameter adjustment.

Function list	1/7
Module Information	
Read Fault Code	
Clear Fault Memory	
View Data	
Actuation Function	
Basic Settings	

Function list	7/7
Adaptation	

Note:

The function list will vary according to different models, and the actual products shall prevail.

➤ **To perform diagnostic functions:**

- 1) Select "Diagnostic" icon.
- 2) Select Vehicle Manufacturer. And select the version.
- 3) Select vehicle selection and select vehicle model, model year, etc. according to the on-screen prompts.
- 4) Select the diagnosis mode and guide the selection through the menu of any diagnosis mode to locate the required test system.
- 5) Select the test to be performed on the function list.

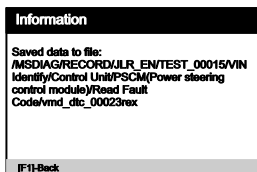
- **Module Information** --- Read full electronic system module information, such as VIN, part number, version, supplier, production date of ECU, Also you can save these data by press **[REC]**.

Module Information	1/10
Active Network Configuration Number	H737
ECU Assembly Number	H8A3-1bhd5-AG
ECU Calibration Data 01 Number	H8A3-14C085-AG
ECU Core Assembly Number	GX73-14C235-CC
ECU Delivery Assembly Number	GX73-14D618-CE
[F1]-ESC	[ENT]-REC

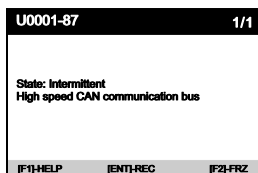
- **Read fault code** --- This function reads and displays the fault codes retrieved from the vehicle control system. Read the fault code of all electronic system module, display the fault status and description code. In addition, you can press **[REC]** to save the fault information. The "read fault code" interface varies according to the test vehicles, and some vehicles can

also read frozen frame data.

- a) After press the **[REC]** button, the screen will display the recorded data storage path, and the recorded fault code information can be read on the computer. as shown in the figure below.

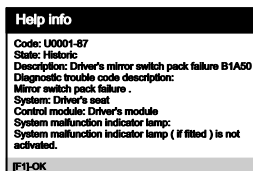
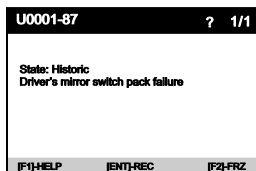


- b) Press the **[FRZ]** button to view the frozen frame information of fault code, as shown in the figure below.

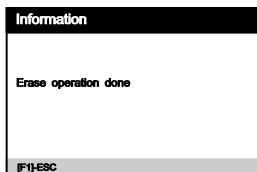
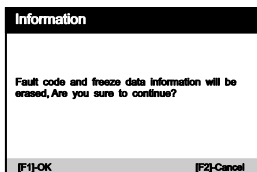


Operator message		1/16
Global real time	7579266.69	S
Total distance	36646	km
Main engine control module voltage supply	14.25	V
External temperature	35	°C
Power mode-power mode	Running	
[F1]-OK		

- c) Press the **[HELP]** button to read the help information. as shown in the figure below.



- **Clear fault memory** – After reading the vehicle fault code and completing the repair, this function can be used to clear the original fault code. Before clearing the fault code, make sure the vehicle engine is off and the ignition key is in the on (run) position. Erase full electronic system module fault code and diagnostic related freeze frame information.



➤ How to clear the fault code:

- 1) Select the **[Clear fault code]** on the "function menu"
- 2) At this time, a warning message will appear on the screen, indicating that the fault code and frozen data information will be cleared.
 - a) Select **[OK]** to continue. After the operation is successful, an interface will be displayed on the screen.
 - b) Select **[Cancel]** to exit.
- 3) Re-enter the **[Read fault code]** function to retrieve the fault code to ensure the successful code clearing operation.

- **View data** –When this function is selected, a list of data for the selected module is displayed on the screen. The options available for different vehicle control modules will vary. These parameters are displayed in the order sent by the electronic control module, so there will be differences between different vehicles. Read full electronic system module live data by text value or waveform. Also you can save these data by press **[REC]**.

View Data		1/38
[]	001-1, Speed Sensor-Front Left(G47)	
[]	001-2, Speed Sensor-Front Right(G45)	
[]	001-3, Speed Sensor-Rear Left(G46)	
[]	001-4, Speed Sensor-Rear Right(G44)	
[]	002-4, Parking Brake	
[F1]-DONE		[F2]-ALL

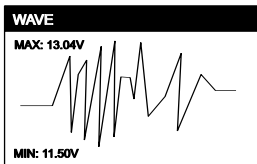
Type 1

View Data		1/35
Driver Airbag Igniter		
Passenger Airbag Igniter		
Driver Thorax Airbag Igniter		
Front Passenger Side Airbag Igniter		
Driver Head Curtain Airbag Igniter		
Front Passenger Head Curtain Airbag Igniter		

Type 2

When there is **[W]** in the upper right corner of the data stream, select **[WAVE]** to display the waveform, as shown in the following figure:

Live Data		W	1/1
Voltage	16 Unsigned 1000	12.012V	
IF1-WAVE		IEN1-REC	



- **Actuation Test** --- The "Actuation Test" function accesses vehicle specific subsystem tests and performs component tests. The available test functions vary according to the manufacturer, year and model, and the menu will only show the available test options.

When performing the actuation test, the tester inputs the command to the ECU to drive the actuator. This test can monitor the operation of the actuator by reading the ECU data of the engine. For example, by repeatedly switching the two working states of the solenoid valve, relay and switch, it can determine whether the system or components are working normally, and execute the command of the switch on the door or window.

- Left / Right turn signals

Through the left / right turn signal action test item, you can control the left and right turn signal flashing to test whether the turn signal works normally.

To perform signal turn signal lamp action test (take left turn signal lamp as an example):

- 1) Enter the action test and select left turn signals.
- 2) At this time, the signal indicator is not running.

Selective Actuation Test	9/34
Heated Mirrors Driver (Z4)&Passenger Side (Z5)	
Indicator Lamp For Central Locking Safe (K133)	
Left Turn Signals	
Right Turn Signals	
Heated Rear Window (Z1)	
Shift Selector Locking (N110)	

Actuation test		1/2
Left Turn Signals	Not Running	
Press START to perform test		
<p>[F1]-Start</p>		

- 3) Press the [Start] button to execute the action.

Actuation test		1/3
Left Turn Signals	Running	
Press STOP to end test		
Information	OK	
[F1]-Stop		

- 4) At this time, the signal indicator is running, indicating that the action is being executed. Press the [stop] button to stop.
- Window regulator front / rear left / right: down / up
Through the window regulator action test item, you can control the whole vehicle window up and down to test whether the window up and down works normally.
 - Windshield wiper motor (V) stage 1 / 2
Through the action test item of windshield wiper motor, the wiper can be controlled to work at 1 / 2 gear to test whether the wiper motor works normally
- **Basic settings** --- Basic Setting means reset some basic parameter settings for each control module, especially some parts / sensors, etc.

Option	1/9
001_BrakeSystem Bleeding	
025_Hydraulic Unit Intake Valve Adjustment	
026_Hydraulic Unit Disconnecting Valve Adjustment	
042_Tire Pressure Monitoring System (TPMS)Reset	
060_AdjustmentOf Steering Angle Sensor (G85)	
063_Adjustment Of Lateral Acceleration (G200)	

Option	7/9
066_AdjustmentOf Brake Pressure Sensor (G201)	
069_Adjustment Of Longitudinal Acceleration (G251)	
093_Activate ESP System /FunctionTest	

Focus on the following three functions:

➤ Sliding Roof Basic Setting

After the maintenance of the skylight, it is necessary to use the basic setting to re match and learn the stop point value of the automatic skylight at each position.


To Preform Sliding Roof Basic Setting:

- 1) Sliding roof basic setting is required after the maintenance of the sunroof, access basic settings, select Sliding Roof Basic Setting.

Function list	6/7
Module Information	
Read Fault Code	
Clear Fault Memory	
View Data	
Actuation Function	
Basic Settings	


Option	1/2
001 ,Sliding Roof Basic Setting	
003 ,Roof Shades Basic Setting	


- 2) The basic settings of the sliding roof is closed.
Press the help button to display help information.

Basic Settings	1/4
001 ,Sliding Roof Basic Setting	OFF
It's necessary to read and understand the function help information before	
001-1,Basic Setting-Status	Continue With
Information	Basic
Information	Settings
[F1]-Help	[F2]-ON


Basic Settings
This Basic Setting Has To Be Performed PRIOR To Learning The Roof Shades. Make Sure The Sliding Roof Can Open /close Without Any Interference!
[F1]-OK

- 3) Press the [Help] button to display a prompt message as above.
4) Then press the [ON] button to rematch and learn the stop point value of the automatic sunroof at each position.

Basic Settings	1/4
001 ,Sliding Roof Basic Setting	OFF
It's necessary to read and understand the function help information before	
001-1,Basic Setting-Status	Continue With
Information	Basic
Information	Settings
[F1]-Help	[F2]-ON

Basic Settings	1/4
001 ,Sliding Roof Basic Setting	ON
It's necessary to read and understand the function help information before	
001-1,Basic Setting-Status	Continue With
Information	Basic
Information	Settings
[F1]-Help	[F2]-OFF

- 5) At this time, various actions of the sunroof will be executed. The status on the screen changes to "ON".

Note: marked  means that the information here is pressed [?] button to see all information.

➤ Activate ESP System / Function Test

After the ABS / ESP has been overhauled or replaced, it

is necessary to carry out the function test to activate the ABS / ESP system, and at the same time, it is necessary to complete the matching of ABS / ESP module according to the test procedure.

➤ **Brake System Bleeding**

When replacing the ABS computer or when the ABS brake oil runs out, you need to perform this basic adjustment to empty the air in the brake fluid to ensure the safe and effective operation of the ABS system.

- **Adaptation** --- This function allows you to perform adaptive learning / reset / calibration and other functions for each control module, and also includes some important module data for parameter adjustment.

Focus on the following three functions:

➤ **Central Locking: Auto-Lock**

This setting allows you enable / disable the driving automatic locking function according to your personal preference (when the vehicle speed is greater than 15 km/h, all doors will be locked automatically).

To preform Central Locking: Auto-Lock:

- 1) Access "Adaptation", select "Central Locking: Auto-Lock".

Option	4/25
000, Clear Learned Values	
001, Remote Control Adaptation	
003, Central Locking :Auto-Unlock	
004, Central Locking :Auto-Lock	
006, Central Locking :Selective (Single)DoorLocking	
007, Central Locking :Auto-Lock /Unlock For Rear Lid	

Information
Central Locking :Auto-Lock The Doors Will Lock Automatically When The Vehicle Reaches a Speed Of 15 km /h Or 10 Mph . Range :0 =OFF/1=ON
[F1]-OK

- 2) Read the information on the screen: when the speed reaches 15 km/h, the doors will lock automatically. 0 is off, 1 is on.

Adaptation	1/3
004 .Central Locking :Auto-Lock	
ECU stored value	0
Input value	
[F1]-Input [F2]-Save	

Operator Message

Current ECU stored value:0
Please input an available adaptation
value(0-65535)

1

0	1	2	3
4	5	6	7
8	9	A	B
C	D	E	F

[F1]-OK [F2]-Cancel

- 3) Input "1", and press the button [Save]. The status on the screen changes to "Success".

Adaptation 1/3	
004 .Central Locking :Auto-Lock	
ECU stored value	0
Input value	1
[F1]-Input	[F2]-Save

Adaptation 1/3	
004 .Central Locking :Auto-Lock	Success
ECU stored value	1
Input value	1
[F1]-Input	[F2]-Save

➤ Remote Control Adaptation

After clearing all the learned remote control information data (generally, remote key will be invalid), it is necessary to use this function to restore the key remote control function.

➤ Central Locking: Audible Locking / Unlocking Confirmation

This setting allows you enable / disable the horn sound feedback when the vehicle is locked / unlocked.

6.2 Service functions

iCarsoft TPMS V800 Multi-system Car Diagnostic Tool Series provide Oil Reset, EPB, BMS, DPF, ETC, SAS, Bleeding, Injector and more service functions for most modern vehicles on the road today. Select Service function from Main menu to access these special functions. Whether the vehicle has service function depends on the vehicle brand.

Select the "Service" function to quickly access the vehicle system and match various special functions. A typical maintenance operation interface contains a series of menu guided execution commands. Select the appropriate operation options according to the on-screen instructions, input the correct values or data, and carry out various necessary operations. By completing these operations, the system will guide the user to complete various operation procedures for vehicle maintenance and repair.

➤ Oil Reset

Select Oil Reset icon in the Main Screen and wait for the vehicle manufacturer screen. Choose the correct vehicle make.

Different vehicles may have different methods to do the oil maintenance, generally, oil change is required whenever oil lamp

is on and the recommended maintenance period is reached. The Oil Reset function can reset the maintenance period and distance and turn off the lamp when you really change the oil.

➤ **Electronic Parking Brake (EPB)**

Electronic Parking Brake (EPB) system maintenance, deactivates and reactivates the EPB system for replacement and initialization

➤ **Battery Management System (BMS)**

Battery Management System (BMS), registers new battery to the BMS while battery replacement

If the vehicle has replaced the battery and needs to replace the battery, this program will reset the stored internal battery monitoring data.

➤ **Diesel Particulate Filter (DPF)**

Diesel Particulate Filter (DPF) regeneration control system, requests the DPF regeneration process while DPF blockage and turn off the DPF indicator

➤ **Steering Angle Sensor (SAS)**

SAS: Steering Angle Sensor (SAS) calibration, calibrates the steering wheel to straight ahead, or recalibrates SAS while steering part replacement.

If the steering column or instrument cluster is replaced or the instrument cluster software is updated, a body system steering column calibration is required.

➤ **Electronic Throttle Control (ETC)**

Electronic Throttle Control system (ETC), relearns the throttle valve control value while clear or replace the throttle valve.

➤ **ABS Bleeding**

When the ABS contains air, or the ABS computer / ABS pump / brake master cylinder / brake cylinder / brake line / brake fluid is replaced, the ABS bleeding function must be performed to bleed the brake system to restore ABS brake sensitivity.

➤ **Injector**

When individual injectors are renewed, the injector control module requires the new configuration values for the injector to perform correctly. Write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder so as to more accurately control or correct cylinder injection quantity. After the ECU or injector is replaced, injector code of each cylinder must be confirmed or re-coded so that the cylinder can better identify injectors to accurately control fuel injection.

If the vehicle has replaced the fuel injector, in order to ensure the normal operation of the fuel injector, you need to carry out this operation to replace the fuel injector code.

➤ **Tire Pressure Monitor System (TPMS)**

The TPMS service function include displaying sensor IDs from the vehicle's ECU, inputting TPMS sensor replacement IDs and testing sensors.

- Tire pressure sensor replacement:

During this application the wheel unit 8-bits identifications will need to be entered using the screens provided. The sensor identifications can be accessed by reading directly from the wheel unit or by using the identification reading tool. On completion, a specific road test will be required followed by the tire pressure monitor system confirmation application.

6.3 TPM Program

When replacing the tire pressure sensor on a vehicle, this function needs to be used. The actual application scenarios of this function are divided into the following two cases:

- The ID of the original sensor to be replaced is known:
 - 1) Obtain the ID of the original sensor to be replaced.
 - a) Activate the tire pressure sensor to obtain the sensor ID.
 - b) Disassemble the original sensor to be replaced and check the 8-digit ID on the sensor body.
 - c) Read the sensor ID recorded in the tire pressure monitor module through the tire pressure diagnostic function.
 - 2) Use the tire pressure programming function to write the known sensor ID into the new iCarsoft sensor.

- 3) Equip the newly programmed sensor onto the vehicle's tires.
 - 4) Conduct a road test following the learning process set by the vehicle manufacturer (non-essential).
- The ID of the original sensor to be replaced is unknown:
- 1) Create a new sensor ID.
 - a) Create a new sensor ID through manual input.
 - b) Create a new sensor ID through an automatic random method.
 - 2) Write the newly created sensor ID into the new iCarsoft sensor using the tire pressure programming function.
 - 3) Write the newly created sensor ID into the tire pressure monitor module using the tire pressure diagnostic function.
 - 4) Equip the newly programmed sensor onto the vehicle's tires.
 - 5) Conduct a road test following the learning process set by the vehicle manufacturer (non-essential).
 - 6) Clear tire pressure monitor module fault codes using the tire pressure diagnostic function (non-essential).
- (Take JAGUAR as an example).

1、Select the desired car model from the car model icon to enter, and select the corresponding car model step by step according to the on-screen prompts.

JAGUAR	1/17
E-Pace	
F-Pace	
F-Type	
I-Pace	
RD-7	
S-Type	

TPMS
TPMS Tire position description: LF=Left Front RF=Right Front RR= Right Rear LR=Left Rear Note of operation: 1. Make sure the target sensor is in the detection range,(within 10 cm / 4 inch) 2. Make sure the other sensors are not in the detection
[F1]-OK

2、Work step by step until the screen appears for the specific tire pressure function. As shown below.

TPMS	1/6
Original Sensor Information	
Activate Programmed Sensors	
Check TS-Sensor	
Programming TS-Sensor	
Automatic Relearn Guide	
Diagnose By OBD	

6.3.1 Original Sensor Information


This function displays the tire pressure sensor model information configured by the vehicle manufacturer, including supplier, frequency, part number, etc.

Original Sensor Information		1/4
Supplier	Continental	
Frequency	433MHz	
Part Number	GX631A159AA	
Print Number	S180052076A	
[F1]-ESC		

6.3.2 Activate Programmed Sensors

This function activates the programmed tire pressure sensors and displays related parameters such as ID, pressure, temperature, and battery status.

TPMS	2/6
Original Sensor Information	
Activate Programmed Sensors	
Check TS-Sensor	
Programming TS-Sensor	
Automatic Relearn Guide	
Diagnose By OBD	

Activate Programmed Sensors	
ID:078B6632 PRE:0(kPa) TEM:25(°C) BAT.:OK	
	
[F1]-Trigger	[F2]-Clear

6.3.3 Check TS-Sensor

This function is used to check the iCarsoft sensor status and display related parameters like ID, frequency, software version, and battery status.

TPMS	3/6
Original Sensor Information	
Activate Programmed Sensors	
Check TS-Sensor	
Programming TS-Sensor	
Automatic Relearn Guide	
Diagnose By OBD	

Check TS-Sensor	1/4
ID	0F7B08E4
Frequency	433MHz
Software	V0.03
Power	OK
[F1]-Trigger	


6.3.4 Programming TS-Sensor


This function is used to program the iCarsoft sensor. Four programming methods are provided:

TPMS	4/6
Original Sensor Information	
Activate Programmed Sensors	
Check TS-Sensor	
Programming TS-Sensor	
Automatic Relearn Guide	
Diagnose By OBD	

Programming TS-Sensor	1/4
Copy By Activate	
Copy By OBD	
Copy By Input	
Auto Create	

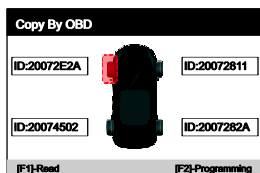
- 1) **Copy by Activate:** By activating the original sensor, retrieve the sensor ID, and then program the obtained sensor ID into the iCarsoft sensor. Before programming the sensor, press [F1] to activate and obtain information from the original vehicle sensor. After the acquisition is completed, press [F2] to program until loading is complete.

Copy By Activate
<div> <div>ID:078B6632 PRE:0(kPa) TEM:27(°C) BAT.:OK</div>  </div>
[F1]-Trigger [F2]-Programming

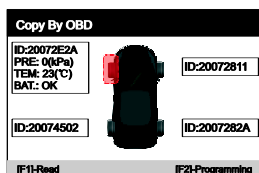
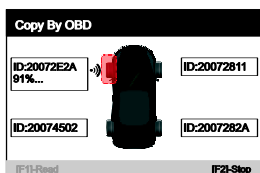
Copy By Activate
<div> <div>ID:078B6632 PRE:0(kPa) TEM:27(°C) BAT.:OK 81%...</div>  </div>
[F1]-Trigger [F2]-Stop

- 2) **Copy by OBD:** By reading the sensor ID information recorded in the vehicle's ECU via OBD, program the obtained sensor ID into the iCarsoft sensor.
 - a) Select the "Copy by OBD" option, Press [F1], the

system will read the sensor ID from the tire pressure monitor module ECU. Press [F2] to program.

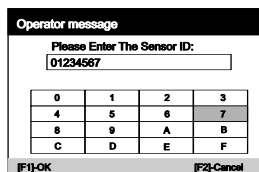
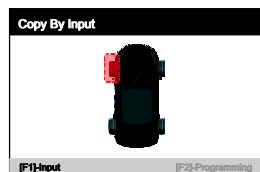


b) The programming process requires a certain amount of time to wait for loading to complete and programming to complete.

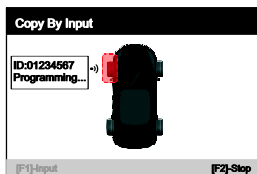
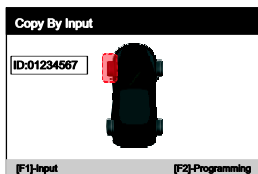


3) **Copy by Input:** By manually inputting the sensor ID information, program the inputted sensor ID into the iCarsoft sensor.

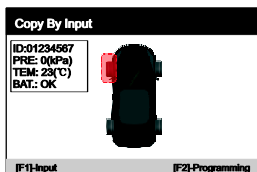
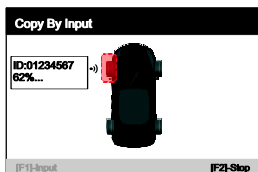
a) Select the “Copy by Input” option, press [F1] to display the input box, enter the 8-digit sensor ID, and press OK to enter the next step.



b) As shown in the figure, the ID number is displayed, and press [F2] to program.



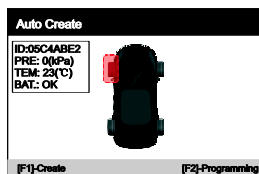
c) Wait for the programming to be completed, as shown in the figure below.



- 4) **Auto Create:** By automatically generating a sensor ID, program the created sensor ID into the iCarsoft sensor.
- a) Select the "Auto Create" option, the system automatically creates a sensor ID after pressing [F1], press [F2] to program.



b) Wait for system programming to be completed.



Note: When activating, checking, and programming sensors, sensors need to be separated by a certain distance to avoid interference and unsuccessful operations.

6.3.5 Automatic Relearn Guide

After replacing the tire pressure sensor, follow the vehicle manufacturer's instructions to perform a simple road test self-learning process.

TPMS	5/6
Original Sensor Information	
Activate Programmed Sensors	
Check TS-Sensor	
Programming TS-Sensor	
Automatic Relearn Guide	
Diagnose By OBD	

Automatic Relearn Guide
Relearn Procedure: 1. Install the tire pressure sensor correctly 2. Inflate all tires to their nominal value according to the tire label (usually located on the door jamb). 3. Stop for 20 minutes, then drive at 16-64 mph for at least 10 minutes. The tire pressure system will automatically learn the tire pressure sensor, all tire pressure warnings will disappear, and the tire pressure value will be displayed (if supported).
[F1]-OK

6.3.6 Diagnose By OBD

In specific situations, diagnostic functions may be required when replacing tire pressure sensors.

This process contains 5 modes. Select this function, a prompt message will appear on the screen, press [F1] to confirm and go to the next step.

Diagnose By OBD
Notes: Please connect the diagnostic device to the OBD connector and then start your diagnostics!
[F1]-OK

Diagnose By OBD	1/5
OBD Relearn Guide	
Read Sensor ID	
Write Sensor ID	
Read Module Fault Code	
Clear Module Fault Code	


- 1) **OBD Relearn Guide:** After writing the new tire pressure sensor ID to the tire pressure monitor module ECU, follow a specified process for module self-learning.

Diagnose By OBD	1/5
OBD Relearn Guide	
Read Sensor ID	
Write Sensor ID	
Read Module Fault Code	
Clear Module Fault Code	

OBD Relearn Guide
Use the TPMS tool to relearn new sensor IDs. Relearn Procedure: 1.Set the vehicle gear to P gear and pull up the handbrake. Properly install tire pressure sensor. 2.Ensure all tires are inflated to the pressure listed on the tire placard. Let it stand for 5 minutes.(Placard located in the door jam of your vehicle.) 3.Activate each sensor with the TPMS tool in the following order:(LF,RF,RR,LR).
[F1]-OK


- 2) **Read Sensor ID:** Read the tire pressure sensor ID from the tire pressure monitor module ECU, as shown below, press [F1] to read.

Diagnose By OBD	2/5
OBD Relearn Guide	
Read Sensor ID	
Write Sensor ID	
Read Module Fault Code	
Clear Module Fault Code	

Read Sensor ID
<div> <div>ID:20072E2A</div> <div>ID:20072811</div> <div>ID:20074502</div> <div>ID:2007282A</div> </div> 
[F1]-Read

- 3) **Write Sensor ID:** Write the new tire pressure sensor ID to the tire pressure monitor module ECU. Press [F1] to activate the sensor to obtain the ID, press [F2] to write the tire pressure monitor module ECU.

Diagnose By OBD	3/5
OBD Relearn Guide	
Read Sensor ID	
Write Sensor ID	
Read Module Fault Code	
Clear Module Fault Code	

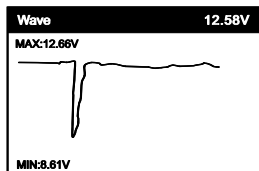
Write Sensor ID	
<div><div>ID:03F38AF0 PRE: 0(kPa) TEM: 28(°C) BAT.:OK Success!!!</div></div>	
[F1]-Trigger	[F2]-Write

- 4) **Read Module Fault Code:** Read relevant fault information from the tire pressure monitor module ECU.
- 5) **Clear Module Fault Code:** Clear fault information recorded in the tire pressure monitor module ECU.

6.4 Battery Voltage Test

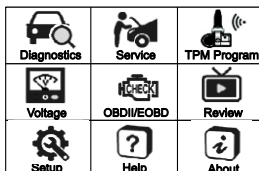
On battery voltage page, it shows the voltage of Data Link Connector (DLC), which is approximately the vehicle battery's status. Especially, it can observe the voltage while engine start.

Battery(DLC)		?	↗
Battery(DLC) Voltage	0.07		
Min from this test	0.00		
Max from this test	0.22		
[F1]-BACK		[F2]-Wave	



6.5 OBDII / EOBD

User cursor button to select the OBDII / EOBD icon from the main screen, press OK. On Monitor Overview, press OK to the Diagnostic Menu. It supports all 10 modes of OBDII / EOBD, such as read current fault code, read pending fault code, read permanent fault code, erase fault code, read live data, read freeze frame, read vehicle information, read IM readiness, read oxygen sensor data, read on-board monitor data and trigger evaporation system leakage test.



Diagnostic Menu	1/9
Read Codes	
Erase Codes	
I/M Readiness	
Live Data	
Freeze Frame	
Vehicle Information	

Monitor Overview	
MIL Status	OFF
Codes Found	0
Monitor Completed	5
Monitor Not Completed	2
Monitor Not Supported	0
Ignition Type	Spark
Protocol Type	CAN

6.6 Review and Report

Use the cursor button to select the Review icon from the main screen, press OK to review data. The saved data also can

Review	1/5
JAGUAR_EN	
VOLVO_EN	
CITROEN_EN	
HYUNDAI_EN	
OBD_EN	

be uploaded to PC by data cable and create report document on PC.

6.7 Setup

6.7.1 Language

Use cursor button to select Setup icon on the main screen, press OK. Select Language and press OK to set the language.

Tool Setup
Language
Unit of Measure
Buzzer
LOG
Clear Data
Factory Data Reset

Language	1/15
<input checked="" type="radio"/>	English
<input type="radio"/>	Deutsch
<input type="radio"/>	Nederlands
<input type="radio"/>	Français
<input type="radio"/>	Español

6.7.2 Unit of Measure

On Tool Setup, use DOWN button to select Unit of Measure and press OK, where you can choose Metric or Imperial.

6.7.3 Buzzer

On Tool Setup, use DOWN button to select Buzzer and press OK, where you can turn the buzzer ON or OFF.

6.7.4 LOG

On Tool Setup, use DOWN button to select Log and press OK, where you can turn the Log ON or OFF.

Set to ON, the log function is enable. RECORD function will be disable. The log function will be disable after reboot.

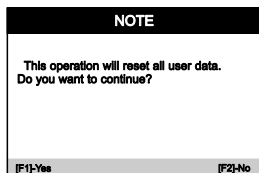
The log function is used to feed-back data to manufacturer, the log file will be saved to the path MSDIAG / LOG / on memory card.

6.7.5 Clear Data

On Tool Setup, use Down button to select clear data and press OK. You can clear the saved logs or clear the saved records.

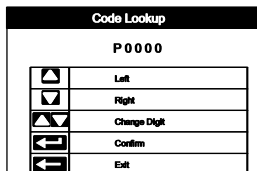
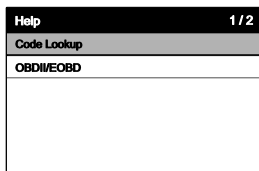
6.7.6 Factory Data Reset

On Tool Setup, use Down button to select Factory Data Reset and press OK, where you can get a note "This operation will reset all user data. Do you want to continue". You can choose yes or no.

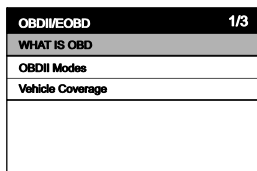
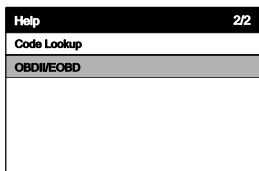


6.8 Help

Use cursor button to select Help icon on the main screen, This function has two options, the option "Code Lookup", to find fault codes.

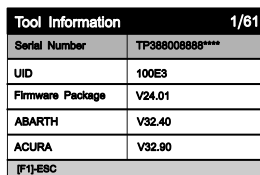


Select "OBDII/EODB" and press OK to display OBD related help information.



6.9 About

Use cursor button to select About icon on the main screen, press OK. On the Tool Information page, there are serial number, UID, hardware version and vehicle software etc..



7 Warranty

7.1 Limited One Year Warranty

iCarsoft warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one year from the date of the original purchase, subject to the following terms and conditions:

- 1) The sole responsibility of iCarsoft under the warranty is limited to either the repair or, at the option of iCarsoft, replacement of the Diagnostic Tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
- 2) This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the manufacturer's Service Center.
- 3) iCarsoft shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the Diagnostic Tool. Some states don't allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

7.2 Service Procedures

If you have any questions, please contact your local store, distributor or visit our website www.icarsoft.us / www.icarsoft.com .If it becomes necessary to return the Diagnostic Tool for repair, contact your local distributor for more information.

8 Software Update & Data Print

Software Update allows you to update the scanner's software through a PC / laptop (With Windows Operation System). Pls prepare a computer that can access to the Internet and connect the scanner to the computer via data cable. And then install the iCarsoft_MSdiag_PCClientKits and run it.

The data print function allows you to print out the DTC data, Module Information, Live Data and VIN recorded by the scanner when connecting the scanner to a PC / laptop with data cable supplied.

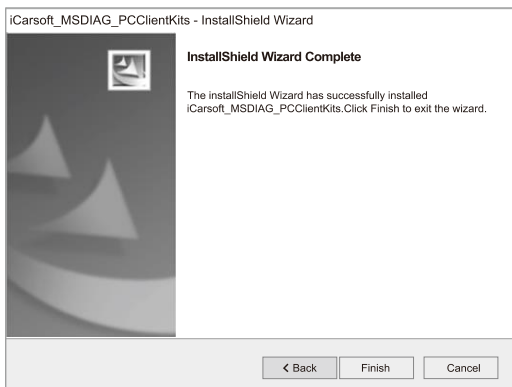
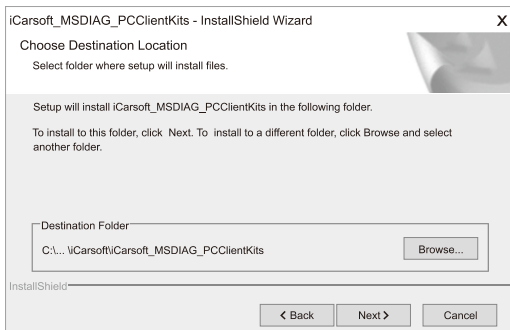
Note:

The Software Update and Data Print functions share with the same

application which named iCarsoft_MSDIAG_PCClientKits.

8.1 Update Procedures:

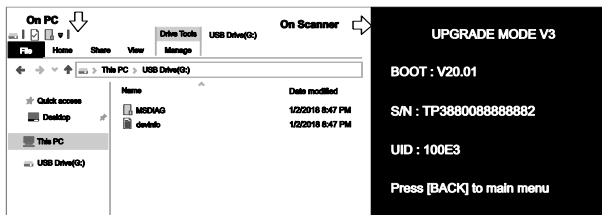
- 1) Download the iCarsoft_MSDIAG_PCClientKits.exe package from <http://www.icarsoft.us> or from your dealer.
- 2) Run the installation package, just click [Next] button all the way, and finish the installation.



3) Connect PC / Laptop

Connect the scanner to PC via data cable (if you have a TF

card reader, you can also update via TF card reader), PC will recognize one more removable U-disc.



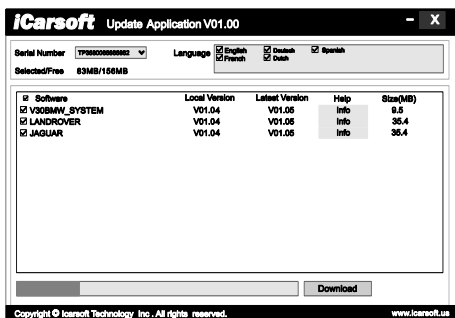
4) Start application

Run the application iCarsoft_MSDIAG_PCClientkits on your PC, the application will recognize the scanner by SN.



5) Upgrade

Press Download button to start software upgrade, when the update process is completed, it will come up with an update successful message.



8.2 Data Print Procedures:

1) Save data

User can press [RECORD] button to save the diagnosis data such as Module Information, Live Data, Fault, Data, Freeze Frame and Vehicle Information etc., the data will be saved as *.rex file on the TF memory card, these files can be used to create diagnosis report by the application iCarsoft_MSdiag_PCClientKits.

2) Supposed the application iCarsoft_MSdiag_PCClientKits has already being installed correctly, If NOT, please refer to above "Update Procedures".

3) Launch Report-Printers

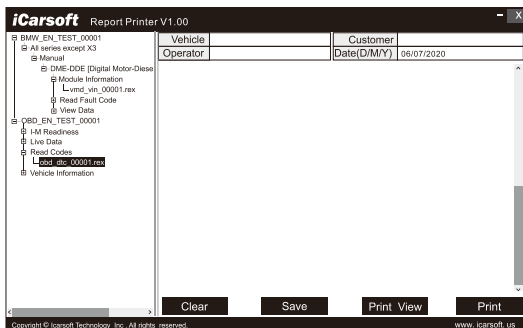
Press the button [Report Printer] to launch Report-Printer center.



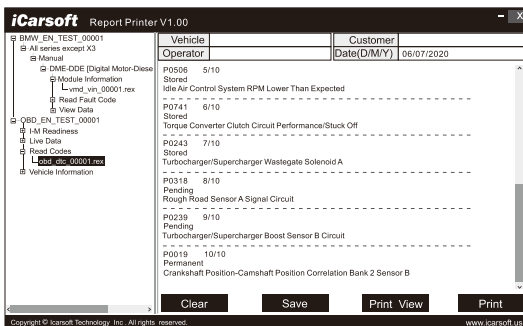
4) Select files

BMW_EN_TEST_0001 shows all recorded data with BMW Diagnosis Software.

OBD_EN_TEST_0001 shows all recorded data with OBD Diagnosis Software.



Click the *.rex to add the data to edit box



[CLEAR] button to clear all data in the edit area.

[SAVE] button to save all data in the edit area as a text file.

[PREVIEW] button for printer-preview.

[PRINT] button to print all data in the edit area.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: 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 or more 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.

RF WARNING STATEMENT

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

iCarsoft Technology Inc.

www.icarsoft.us

www.icarsoft.com

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