

OBD BOOK
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OBDII Auto Scanner
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6830
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General Notice

- Other product names used herein are for identification purposes only and may be trademarks of their respective owners. LAUNCH disclaims any and all rights in those marks.
- There is a possibility that this unit is inapplicable to some of the vehicle models or systems listed in the diagnosis section due to different countries, areas, and/or years. Do not hesitate to contact LAUNCH if you come across such questions. We are to help you solve the problem as soon as possible.

Disclaimer

- To take full advantage of the unit, you should be familiar with the engine.
- All information, illustrations, and specifications contained in this manual are based on the latest information available at the time of publication. The right is reserved to make change at any time without notice.

Precautions on Operation

- OBD BOOK is a precision instrument and should be protected from vibration and impact.
- If the unit does not run correctly or the screen is unstable when first turned on, disconnect it from the main lead and try again.
- Never use adapters or cables other than those supplied by LAUNCH with the unit.
- Make sure the DLC is always firmly inserted into the diagnostic socket.
- Never test electrical signals that exceed the limit of specifications.
- Test cannot be performed by the person who is driving the car.
- This unit should be used and stored in the following conditions:
Ambient temperature: 0 ~ +50
Relative humidity: <90%

Safety Precautions

- When an engine is running, it produces carbonmonoxide, a toxic and poisonous gas. To prevent serious injury or death from carbon monoxide poisoning, operate the vehicle **ONLY** in a well-ventilated area.
- To protect your eyes from propelled objects as well as hot or caustic liquids, always wear approved safety eye protection.
- When an engine is running, many parts (such as the coolant fan, pulleys, fan belt etc.) turn at high speed. To avoid serious injury, always be aware of moving parts. Keep a safe distance from these parts as well as other potentially moving objects.
- Engine parts become very hot when the engine is running. To prevent severe burns, avoid contact with hot engine parts.
- Before starting an engine for testing or trouble- shooting, make sure the parking brake is engaged. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). Block the drive wheels with suitable blocks.
- Connecting or disconnecting test equipment when the ignition is ON can damage test equipment and the vehicle's electronic components. Turn the

ignition OFF before connecting Code Reader to or disconnecting Code Reader from the vehicle's Data Link Connector (DLC).

Introduction

OBD BOOK is the fifth generation test tool, developed by LAUNCH, specially designed for car owners or DIYers. With an OBD BOOK during long trip, you may control the condition of vehicle electronic system at any time. At the base of function of the previous generations, OBD BOOK is designed with two big displays and five-button keypad, which makes it more convenient and faster to operate.

Features

- ◆ Two 160*160 screens with backlight for displaying information during testing (Upper screen displaying Readiness and Trouble Codes; lower screen displaying Function Menu);
- ◆ Display current of DTCs(manufacturer defined DTCs)
- ◆ Multilanguage operation (English, French and Spanish)
- ◆ Supporting CABNUS
- ◆ FREEZE FRAME function
- ◆ Read/clear DTCs manually
- ◆ Read dynamic datastream function
- ◆ Save and replay datastream/DTCs function
- ◆ Update online
- ◆ With battery(9V)

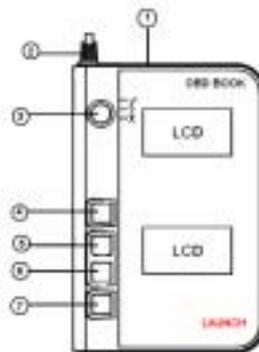
Outline of OBD BOOK



Figure 1-01

Figure 1-01 shows the main unit of OBD BOOK.
And USB update cable is enclosed.

Ports and Indicators



1	USB Port	To connect the unit and computer for updating.
2	Diagnostic Cable	To connect the unit and vehicle socket for diagnosis.
3	Power Key	Press it to turn the unit on when there is no socket for power (when using battery for power).
4	[←] Key	To return to the previous interface.
5	[↑] Key	To move the cursor to upper item in the menu.
6	[↓] Key	To move the cursor down in the menu.
7	[↵] Key	To confirm and execute this operation.

Main Unit Structure

Testing interface:

It is a 16PIN built-in male connector to connect with the diagnostic connector.

Screen:

Two 160×160 array high definition screens with back light for displaying all the information during testing.

Indicators:

The yellow, green, red indicators are used as visual aids to make it easier for the user to determine test condition.

Yellow indicator: it says that the communication is "OK" and the test is normal.

Green indicator: it says that it's not sure if DTCs occur.

Red indicator: it says that DTCs occur.

Functions

OBD BOOK can be used to diagnose all the vehicles with an OBD-II diagnostic socket, to analyze troubles, and to find out the cause and location of troubles quickly and accurately.

It supports four types of OBD-II protocols (SAE J1850 PWM, SAE J1850 VPW, ISO 9141-2 and KWP2000).

OBD II is the abbreviated form of On Board Diagnostics II. It is a set of standards for automobile communication protocol initiated by American Automobile Engineering Association (SAE) and authenticated by the Environment Protection Association (EPA) and California Resource Association (CARB). The American Government requires that after 1998, all EFI cars sold to the United States must be equipped with such a self-diagnosing system.

The development of OBD II has put an end to the inconvenience for car service caused by different DLCs, different fault codes and different diagnostic functions adopted by various automobile manufacturers. It provides the manufacturers of EFI cars with a unified test method, unified diagnostic mode, unified shape of DLCs and unified installing position. Therefore, with only one tester, the diagnosis can be performed on various models with an OBD II interface. OBD standard requires unified 16PIN DLC (data link connector) on a car.

Preparations

Connection

1. Find the diagnostic socket on the car. (The OBDII diagnostic socket is generally located under the dashboard on the driver side)
2. Connect the 16PIN built-in male connector to diagnostic socket on the car.

Power-on

There are three ways to turn the unit ON:

1. Press  at least two seconds to turn the unit ON (For equipped with battery and no connection with vehicle socket or PC). On the condition, the unit will display interface without backlight.
2. When the unit connects with vehicle socket, the unit will be ON. It will display the startup interface with backlight.
3. When the unit connects with PC via USB cable, the unit will be ON. It will display the startup interface with backlight.

Diagnosis

When the unit is powered up, the upper screen will display the interface as below:



Press [, the upper screen will display I/M Readiness Test item and Trouble Codes item automatically:

IM readiness Test			
● MIS	* FUE	● O2S	● EGR
Trouble codes			
P1021	P1031	P1000	

[●]: indicates the test completed at present.

[*]: indicates the test not completed at present.

[P]: indicates the DTC is pending.

The lower screen will enter the Main Menu as shown below:

Main Menu
▶ Diagnostic Codes
Data Stream
Special Tests
Code Lookup
Send Data to PC
Tool Setup

Available functions are as follows:

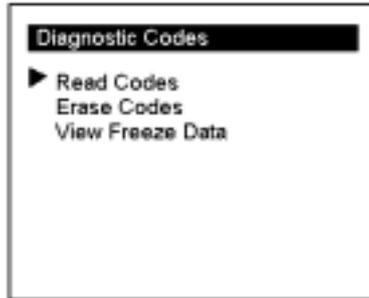
1. Diagnostic Codes
2. Data stream
3. Special Tests
4. Code Lookup

5. Send Data to PC
6. Tool Setup

Diagnostic Codes

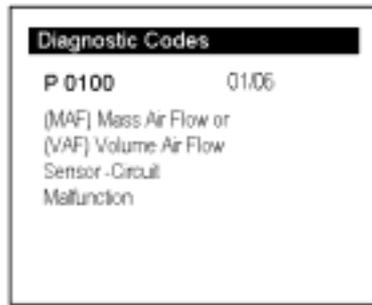
You can press [↑] [↓] key to scroll the screen to select the desired option function from menu.

Select [Diagnostic Codes] and press [←] and the lower screen will display the interface as shown below:



Use [↑] [↓] key to move the cursor (>) and select the desired function item.

Select [Read Codes] and press [←]. If some codes exist, the lower screen will display the codes as shown below:



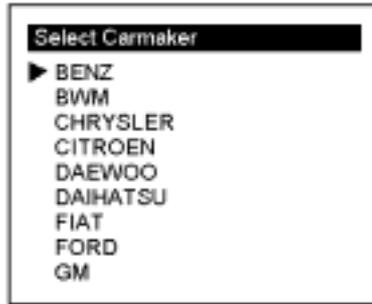
01/06 indicates that there are 6 codes totally, and now P0100 is the first code to display.

The screen will also show the content of the code below the number of code.

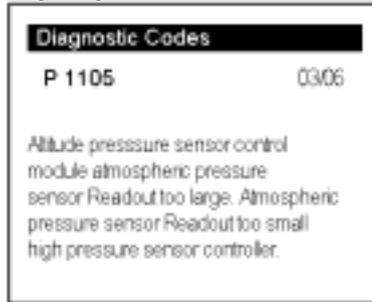
You can use [↓] key to view the next code. When there is a manufacturer defined code, it will display as below:



Press [←] to enter the next interface as shown below:



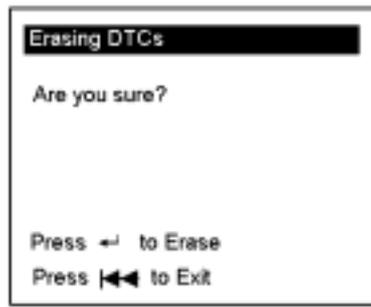
Now you can use [↑] [↓] key to move the cursor (>) to select the carmaker to which the code belong. We choose [BENZ] to view the define:



After viewing the manufacturer defined codes, you can press [↓] key to view the next codes.

After viewing all the codes, you can press [←] to return to the Diagnostic Codes Menu.

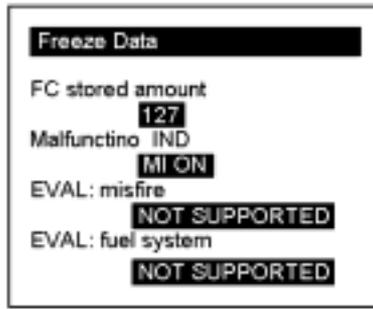
Select [Erase Codes], the lower screen will display the interface as shown below:



Press [←] to erase DTCs, and the screen will display the interface as shown below:



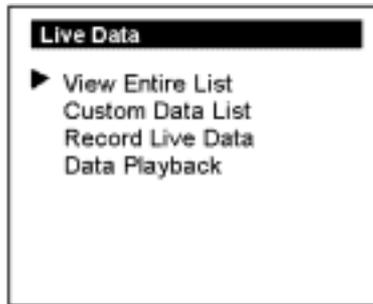
Select [View Freeze Data], the lower screen will display the interface as shown below:



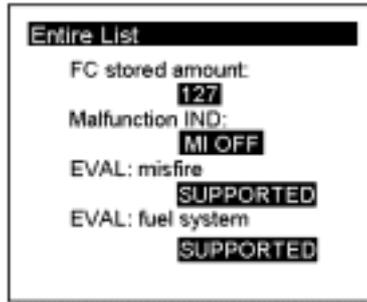
You can use [↑] [↓] key to move the cursor (>) for viewing.
Press [←] to return to the Diagnostic Codes Menu.

Data stream

Select [Data Stream] in the Main Menu and press [←] and the lower screen will display the interface as shown below:

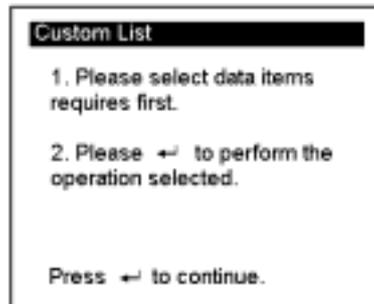


Select [View Entire List] and press [←] to enter the next interface:

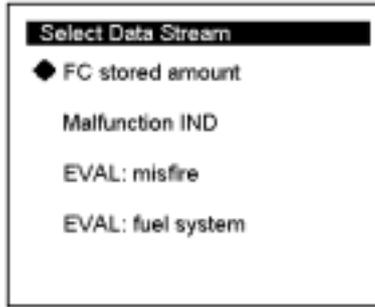


Press [←←] to return to the Live Data Menu.

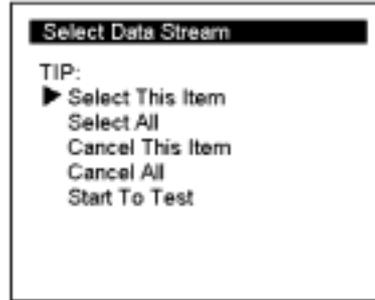
Select [Custom Data List] and press [←] to enter the next interface:



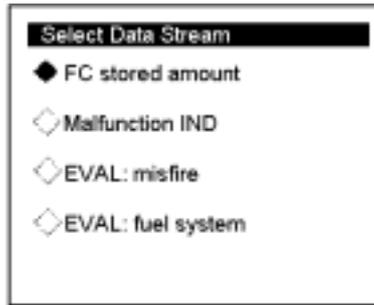
Press [←] to enter the next interface:



Press [] to enter the next interface as shown below.

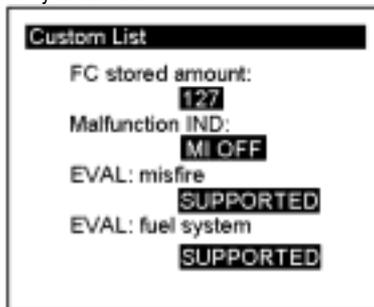


In this interface, you can select one item or all items by yourself. Here we choose [Select All], and press [] to enter the interface as shown below:



If there is a mark in front of the item, it indicates that the item is selected. For example, all the four items has marks before them as shown figure above, so the four items are selected.

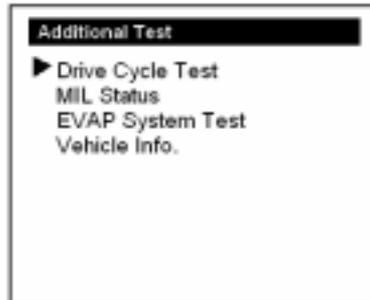
Press [←] to return the TIP Menu. You can use [↓] key to move the cursor (>) down to select [Start To Test], and press [←] to enter the next interface, the screen will show the items selected by customers.



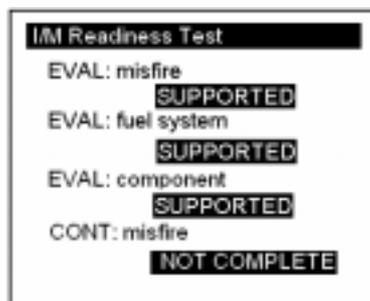
You can use [↑] [↓] key to move the cursor (>) for viewing.

Special Test

Select [Data Stream] in the Main Menu and press [↵] and the lower screen will display the interface as shown below:



Select [Drive Cycle Test]-[Since DTCs CLR], and the screen will display the interface as shown below:



Press [⏪] to return the Main Menu.

Code Lookup

Select [Code Lookup] in the Main Menu and press [↵] and the lower screen will

display the interface as shown below:



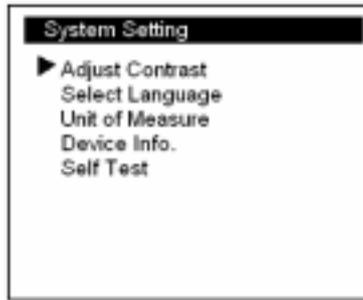
You can use [↑] [↓] key to change P letter. And press [←] move the cursor to right. And then press [↑] [↓] key to input number. After you input the code number, press [←] to view the definition of the code. After viewing the definition, press [↵] to return the Main Menu.

Send Data to PC

OBD Book provides Send Data to PC function. OBD Book can send the retrieved data to a client software on PC via BUS cable.

Tool Setup

Select [Tool Setup] in the Main Menu and press [←] and the lower screen will display the interface as shown below:



In the [Adjust Contrast] interface, you can adjust the contrast of screen. Press [↑] to raise contrast/brightness; press [↓] to reduce contrast/brightness.

In the [Select Language] interface, you can choose English, French or Spanish.

In the [Unit of Measure] interface, you can choose USA or Metric unit.

In the [Device Info.] interface, you can check Software Version, Hardware Version, Serial Number and Produce Date.

In the [Self Test] interface, you can do LCD Test, Memory Test, and Keyboard Test.

After all the operation is complete, Press [←] to return the Main Menu and end the test.

Note: All the figures shown above are just for demonstration and not actual ones.

Update

Except these functions described as above, OBD Book will provide update function via internet. The update software will be downloaded from Launch website. For the details, please refer to the relative part on the website (www.x431.com).

Appendix: About OBDII

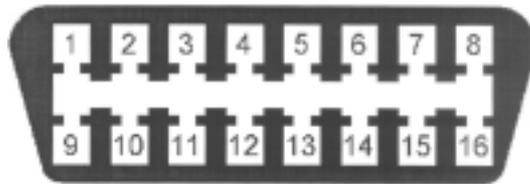
Does My Car Have OBDII?

All cars and light trucks built and sold in the United States after January 1, 1996 are required to be OBD II equipped. In general, this means all cars and light trucks since 1996; even those made in late 1995 are compliant to OBD II.

If your car is OBD II compliant, then:

- 1) There will be an OBD II connector as shown below, and
- 2) There will be a note or a sticker or nameplate under the hood: "OBD II compliant".

PIN Definitions



- Pin 2 - J1850 Bus+
- Pin 4 - Chassis Ground
- Pin 5 - Signal Ground
- Pin 6 - CAN High (J-2284)
- Pin 7 - ISO 9141-2 K Line
- Pin 10 - J1850 Bus
- Pin 14 - CAN Low (J-2284)
- Pin 15 - ISO 9141-2 L Line
- Pin 16 - Battery Power

Where Is the Socket Located?

The socket must be located within three feet of the driver and must not require any tools to be revealed. Look under the dash and behind ashtrays.

Warranty

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE LAUNCH PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

LAUNCH electronic product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user.

This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and LAUNCH shall not be liable for any consequential or incidental damages.

Final determination of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein.

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Order Information

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:

1. Quantity
2. Part number
3. Item description

Customer Service

If you have any questions on the operation of the unit, please contact us:

Tel: 86-755-84528431/84528822

E-mail: X431@cnlaunch.com

If your unit requires repair service, return it to the manufacturer with a copy of the sales receipt and a note describing the problem. If the unit is determined to be in warranty, it will be repaired or replaced at no charge. If the unit is determined to be out of warranty, it will be repaired for a nominal service charge plus return freight. Send the unit pre-paid to:

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LAUNCH TECH. CO., LTD.
Launch Industrial Park,
North of Wuhe Avenue,
Banxuegang, Bantian,
Longgang, Shenzhen, Guangdong
P.R.China, 518112