Creader Elite HD
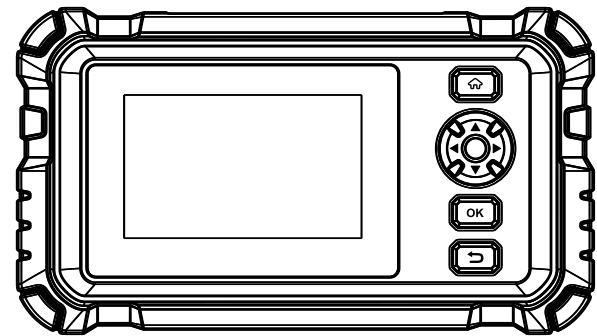
User Manual

LAUNCH

⚠ **WARNING**

Read this material before using this product.
Failure to do so can result in serious injury.

V1.00.000

07-25-2023

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- To take full advantage of the unit, you should be familiar with the engine.
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Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the tool, please read this user's manual first carefully and observe the following safety precautions at a minimum whenever working on a vehicle:

- There are no user serviceable parts. Have the device serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the device is maintained. Disassembling the

device will void the warranty right.

- Caution: This tool contains an internal Lithium Polymer battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, pierce or dispose of the battery in fire or water.
- This product is not a toy. Do not allow children to play with or near this item.
- Do not expose the device to rain or wet conditions.
- Do not place the device on any unstable surface.
- Never leave the device unattended during charging process. The device must be placed on a non-flammable surface during charging.
- Handle the device with care. If the device is dropped, check for breakage and any other conditions that my affect its operation.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust.
- Keep the tool dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the device when necessary.
- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could causepacemaker interference or pacemaker failure.
- Always perform automotive testing in a safe environment.
- Do not attempt to operate or observe the tool while driving a vehicle. Operating or observing the tool will cause driver distraction and could cause a fatal accident.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated work area: Exhaust gases are poisonous.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.

- Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.

- Put the transmission in P (for A/T) or N (for M/T) and make sure the parking brake is engaged.

- Keep a fire extinguisher suitable for gasoline/chemical/ electrical fires nearby.

- Don't connect or disconnect any test equipment while the ignition is on or the engine is running.

Compliance Information

FCCID: XUJCREHD

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.

The device has been evaluated to meet general RF exposure requirement. The highest reported SAR for stand-alone and simultaneous transmission exposure conditions are below the maximum value. End-users must be informed of the operating requirements for satisfying RF exposure compliance.

This device is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive 2014/53/EU. The RF frequencies can be used in Europe without restriction.

Table of Contents

1 Overview

1.1 Vehicle Coverage

This diagnostic tool is designed to work with OBD II/CAN, J1587, J1708 and J1939 compatible vehicles.

OBD II was installed in some 1994 and 1995 model year gasoline vehicles.

To verify if a 1994 or 1995 vehicle is OBD II compliant, check the following:

1. **Vehicle Emissions Control Information (VECI) Label**. It is located under the hood or by the radiator of most vehicles. If the vehicle is OBD II compliant, the label will designate **OBD II Certified**.
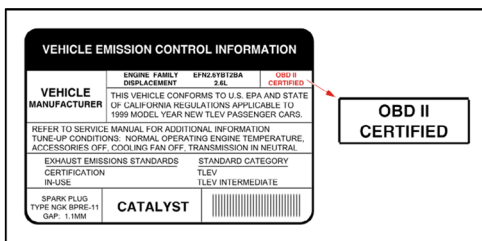
2. Government regulations mandate that all OBD II compliant vehicles **must** have a "common" 16-pin **Data Link Connector (DLC)**.
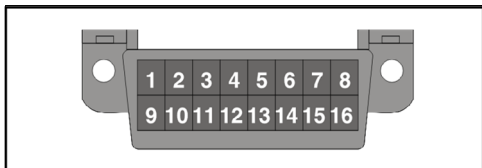
Note: Some 1994 and 1995 vehicles have 16-pin connectors but are not OBD II compliant. Only those vehicles with a Vehicle Emissions Control Label stating **OBD II Certified** are OBD II compliant.

1.2 OBD II On-Board Diagnostics

It is required by the EPA that all 1996 and newer vehicles sold in the United States be equipped with an OBD II computer system.

OBD II is an early warning system designed to monitor engine, transmission, and emissions control components by performing specific diagnostic tests.

When a fault condition is detected, the system captures important data and activates the "Check Engine" light.

If the light comes on, the vehicle might have a condition that wastes fuel, shortens engine life, or causes excessive air pollution. If the problem that caused the light to come on is addressed, for instance a loose gas cap is tightened, the light will go out.

If the light comes on and stays on, a minor engine fault condition is occurring and should be addressed as soon as possible.

If the light is blinking, a severe engine fault condition is occurring and should be addressed immediately.

The Code Reader connects to the vehicle's computer system and captures information that can help identify the fault condition.

1.3 OBD II Definitions

The following terms and their definitions are related to OBD II systems. Read and reference this list as needed to aid in the understanding of OBD II systems.

- **PCM: Powertrain Control Module**
  The OBD II terminology for the on-board computer that controls the engine and drive train.

- **DLC: Data Link Connector**
  The 16-pin connector on the vehicle that allows communication between the computer system and the diagnostic tool.

- **Drive Cycle**
  A set of driving procedures that, when met, provide the Enabling

Criteria for the I/M Monitors to run and complete their diagnostic tests.

- **Control Modules**
  Individual computers that operate and monitor different systems in the vehicle. Control Modules vary depending on manufacturer.

- **MIL: Malfunction Indicator Light**
  The vehicle's "Check Engine" warning light that activates when a DTC is stored.

- **DTC: Diagnostic Trouble Code**
  A code stored in the computer system's memory, which helps to identify the fault condition that is causing the MIL to activate.

- **Freeze Frame Data**
  Operating conditions that are stored when a DTC is stored.

- **PID - Parameter Identification Data**
  Data returned by the vehicle's control modules to the diagnostic tool.

1.4 I/M Monitors

Inspection and Maintenance diagnostic tests that the Control Modules perform on specific sub-systems of the vehicle. There are two types of Monitors:

- **Continuous:** Monitors that perform tests all the time while the engine is running.

- **Non-Continuous:** Monitors that require specific operating conditions to be met during a Drive Cycle in order for the Monitors to run their testing sequences.

1. Gasoline Engine Monitors

- **Continuous**

  MIS - Misfire

  FUEL - Fuel System

  CCM - Comprehensive Components

- **Non-Continuous**

CAT - Catalyst

HCAT - Heated Catalyst

EVAP - Evaporative System

AIR - Secondary Air System

O2S - Oxygen Sensors

HTR - Oxygen Sensor Heater

EGR - EGR System

2. Diesel Engine Monitors

• **Continuous**

MIS - Misfire

FUEL - Fuel System

CCM - Comprehensive Components

• **Non-Continuous**

HCCAT - NMHC Catalyst

NCAT - NOx Aftertreatment

BP - Boost Pressure System

EGS - Exhaust Gas Sensor

PM - PM Filter

EGR - EGR System

1.5 OBD II (DTCs) Diagnostic Trouble Codes

A DTC is a five digit alphanumeric identifier for a fault condition identified by the OBD II system. There are three types of DTCs:

1. **Pending** – when a fault condition is identified during a Drive Cycle, but does not meet enough criteria to activate the MIL.

2. **Stored** - A DTC is stored when a fault condition has occurred that meets enough criteria to activate the MIL.

3. **Permanent** - A stored DTC that can only be cleared by the OBD II

system, after repairs are made, and a set number of Driving Cycles have been completed.

- The 1st character is a **letter** (B, C, P or U). It identifies the **main system** where the fault occurred (Body, Chassis, Powertrain, or Network).

- The 2nd character is a **numeric digit** (0 thru 3). It identifies the **type** of code (Generic or Manufacturer-Specific).

  Note: Generic DTCs are codes that are used by all vehicle manufacturers. The standards for generic DTCs, as well as their definitions, are set by the Society of Automotive Engineers (SAE). Manufacturer-Specific DTCs are codes that are controlled by the vehicle manufacturers.

- The 3rd character is a letter or a **numeric digit** (0 thru 9, A thru F). It identifies the specific system or sub-system where the problem is located.

- The 4th and 5th characters are **letters** or **numeric digits** (0 thru 9, A thru F). They identify the section of the system that is malfunctioning.

DTC Example
P0201

Systems
P=Powertrain
B=Body
C=Chassis
U=Network

Identifies what section of the system is malfunctioning

Code Type

0 - Generic(SAE)
1 - Manufacturer Specific
2 - Generic ("P" Codes) and Manufacturer Specific ("B", "C" and "U" Codes)
3 - Includes both Generic and Manufacturer Specific Codes

Sub-systems
Identifies the system where the problem is located. "P" Code systems are listed below. "B", "C" and "U" Code system will vary.

0 - Fuel and air metering; Auxiliary emission controls
1 - Fuel and air metering
2 - Fuel and air metering (injector circuit malfunction only)
3 - Ignition system or misfire
4 - Auxiliary emission control system
5 - Vehicle speed control and idle control system
6 - Computer output circuits
7 - Transmission
8 - Transmission
9 - Transmission
A - Hybrid Propulsion
B - Hybrid Propulsion
C - Hybrid Propulsion

P0201 - Injector circuit malfunction, Cylinder 1

1.6 HD Protocols & Diagnostic Trouble Codes

1.6.1 HD Protocols

SAE J1708, SAE J1587 and SAE J1939 are automotive diagnostic protocol standard developed by the Society of Automotive Engineers (SAE).

SAE J1708

SAE J1708 is With respect to Open System Interconnection model (OSI), J1708 defines the physical layer. Common higher layer protocols that operate on top of J1708 are SAE J1587 and SAE J1922.

SAE J1587 is used for heavy-duty and most medium-duty vehicles built after 1985.

SAE J1708 is used for serial communications between ECUs on a heavy duty vehicle and also between a computer and the vehicle. It defines the physical layer with (OSI) Open System Interconnection model.

SAE J1587 and SAE J1922 are common higher layer protocols that operate on top of J1708.

J1587 protocol uses different diagnostic connectors. Individual OEMs used their own connectors until 1995.

- 6-pin Deutsch-connector was standard from 1996-2001.
- OEMs converted to 9-pin Deutsch in 2001.
- Some OEMs still use 6-pin Deutsch which has mostly been used for American made vehicles and some foreign.

SAE J1708 makes up physical and data link layers. SAE J1587 makes up transport and application layers with (OSI) Open System Interconnection model.

SAE J1587 is used in conjunction with SAE J1708 for automobile communication.

SAE J1939 may be considered the replacement for SAE J1708 and SAE J1587 specifications. It is a vehicle bus standard used for communication and diagnostics among vehicle components by the automotive and Heavy Duty Vehicle industry. With a different physical layer it is used between tractor and trailer and is specified in ISO 11992.

Adopted by diesel engine manufacturers, it can now be found in a range of diesel-powered applications, on and off-road vehicles, marine propulsion, power generation and industrial pumping.

Applications of J1939 now include off-highway, truck, bus and even some passenger car applications.

### 1.6.2 DTCs for J1587/J1708 and J1939

1. Protocols J1587/J1708:

• (SID) Subsystem Identifier – Indicates what function on the ECU has failed.

• (FMI) Failure Mode Indicator – Indicates in what way the function failed.

• (OC) Occurrence – Indicates the occurence times of fault codes.

2. Protocol J1939:

• (SPN) Suspect Parameter Number – Indicates what function on the ECU has failed.

• (FMI) Failure Mode Indicator – Indicates in what way the function failed.

• (OC) Occurence – Indicates the occurence times of fault codes.

2 Product Descriptions

2.1 Components & Controls
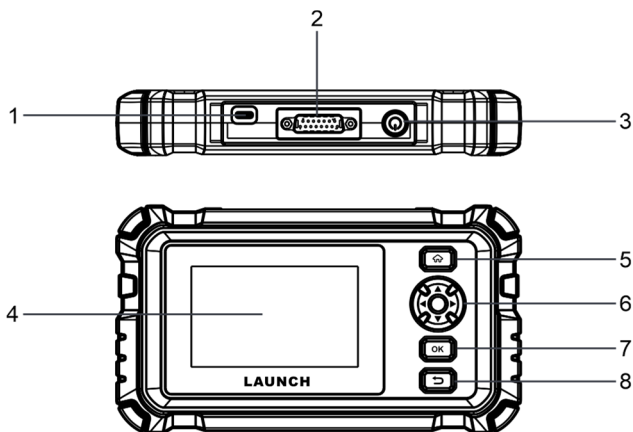
1. **Charging Port**

   Charge the tool.

2. **DB-15 Diagnostic Connector**

   Connect it to the vehicle's Data Link Connector (DLC) port.

3. **Power Button**

   Turn on/off the tool.

4. **Touch Screen**

   Indicates test results.

5. **HOME Button**

   Navigate to the Job Menu screen.

6. **SELECT button**

7. **OK button**

8. **BACK button**

Return to previous menu.

2.2 Technical Specifications

- Screen: 3.97" touch screen
- Operating system: Android
- CPU: 1.3GHz processor
- RAM: 2GB
- ROM: 16GB
- WiFi: 802.11b/g/n 2.4GHz
- OBDII input voltage range: 24V
- Power up via:
  - DC 5V charging cable & power adaptor or
  - Diagnostic cable through connection to vehicle's DLC
- Working temperature: 0 to 50°C (32 to 122 F°)
- Storage temperature: -20 to 70°C (-4 to 158 F°)

2.3 Accessories Checklist

For different product models, the accessories may vary. The following accessory items are for reference purpose only. For detailed accessories and parts, please consult from the seller or take the actual package box as standard.

1. Diagnostic tool x 1
2. Diagnostic cable x 1
3. CAT 9-PIN adaptor x 1
4. OBD 6-PIN adaptor x 1
5. Type II OBD 9-PIN adaptor x 1
6. User manual x 1
7. Quick start guide x 1

3 Initial Use

3.1 Charging

There are two charging methods available:

<u>Via Diagnostic Cable</u>: Insert the diagnostic cable into the vehicle's DLC port.

<u>Via Data Cable</u>: Plug one end of data cable (not included) into the charging port of the tool, and the other end to the PC.

When the tool is powered on, the screen will automatically light up.

Note: Attempting to charge the tool via OBD diagnostic port will consume vehicle's battery power. You are not recommended to charge the tool in this way except for OBD diagnosis operations.

3.2 Getting Started

If it is the first time you have used this tool, you need to make some system settings.

1. Power on the tool. The screen displays a welcome page. Tap "Start" to go to next step.

2. Choose the desired system language, and tap "Next".

3. Choose the desired time zone, and tap "Next" to enter the WLAN setup screen.

4. Slide the switch to ON, the system starts searching for all available wireless LANs. Choose the desired WLAN access point / network,

   • If the network you chose is open, you can connect directly.

   • If the selected network is encrypted, you have to enter the right security key (network password).

   Note: If you choose "Ignore" in WLAN setup, it will go into the date setting page. If the tool has been properly connected to the Internet, the system will automatically obtain the correct network date and time and navigate to step 5.

5. After the network connection is done, tap "Next Step" to configure

workshop information. Input the required information, and tap "Next Step" to go to next step.

Note: You are strongly recommended to fill in the valid email address. After you configured this option, the system will append it on the report every time a report is successfully generated.

6. Carefully read all terms and conditions of the user agreement, check the box before the "Agree to all the above terms", and tap "OK" to finish the sign-up process and navigate to Job Menu.

3.3 Job Menu

The main menu screen includes the following function modules:

|	
Diagnose	Configure it to operate as a professional diagnostic
HD OBD	This option presents a quick way to check for DTCs, isolate the cause of the illuminated Malfunction Indicator Lamp (MIL), check monitor status prior to emissions certification testing, verify repairs, and perform a number of other services that are emission-related.
Upgrade	Update vehicle diagnostic software and APK. Note: This function requires a stable network connection.
Reset	It offers coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement.
Settings	To manage data and make some system settings, including Network setup, Workshop information and Brightness etc.

4 Diagnose

4.1 Connection

1). Turn the ignition off.
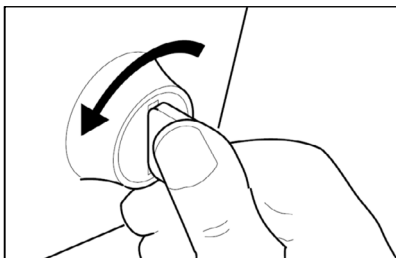
2). Locate the vehicle's Data Link Connector (DLC) port. The DLC is normally located in driver's cab (Refer to the vehicle's owner manual for location of DLC).

3). Plug the diagnostic cable into the DB-15 diagnostic connector on the tool, and then tighten the captive screws.

4). Select appropriate heavy duty vehicle adaptor for vehicle's DLC type.

    a) For standard OBD II DLC, plug the diagnostic cable into the vehicle's DLC port, and then tighten the captive screws.
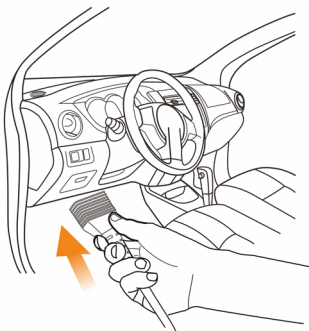
   b) For non-standard OBD II DLC, connect one end of the adaptor to the diagnostic cable, and the other end to the vehicle's DLC port.

Note: The adaptor is keyed and will only fit one way. If you have problems connecting the adaptor to the DLC, rotate the connector 180° and try again.

4). Turn the ignition on. Engine can be off or running.

Caution: Don't connect or disconnect any test equipment with the ignition on or engine running.

4.2 System Diagnostics

This function is specially designed to diagnose electronic control systems of single vehicle model.

Notes:

1. All software is updated periodically. It is recommended to update and install the latest software version for the best service, functions and experience.

2. Use and update of the diagnostic software pre-installed on the tool is free of charge for 2 years. If it expires, it will be disabled. In this case, user needs to renew the subscription via the specific Subscription Renewal Card.

4.2.1 Automatic System Scan

This function allows you to quickly access the electronic control systems of the vehicle via decoding the VIN, without manual step-by-step menu selection.

After connection, turn the ignition key on and the system enters auto-detect mode.
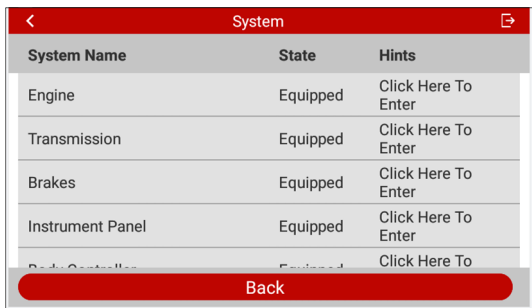
Note:

• Make sure the "Automatic detection on connect" in "Settings" is set as ON.

• A highly stable and solid network connection is recommended for successful VIN access.

A. Once the system successfully obtains the VIN (Vehicle Identification Number) information of the currently identified vehicle, it will continue scanning the vehicle systems. After the scanning is complete, it will automatically enter the system selection screen.

‹	System	⤴
System Name	**State**	**Hints**
Engine	Equipped	Click Here To Enter
Transmission	Equipped	Click Here To Enter
Brakes	Equipped	Click Here To Enter
Instrument Panel	Equipped	Click Here To Enter
Body Controller	Equipped	Click Here To
Back		

User can tap the desired system to start diagnosis.

B. If the tool failed to access the VIN information, it will automatically enter the scan mode selection screen. Tap "Manually select" to enter the Manual Diagnosis mode. Refer to Chapter 4.2.2 for details.
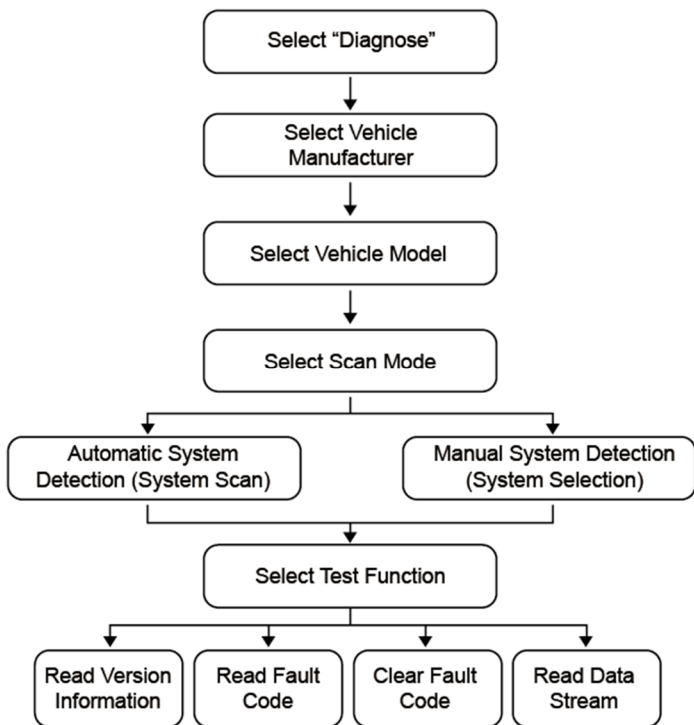
4.2.2 Manual Diagnosis

If the tool can not decode the VIN information, you can also perform vehicle diagnosis manually by executing menu-driven command step by step.

Notes:

• Before diagnosing, please make sure the corresponding vehicle manufacturer software has been installed in your tool.

• The diagnostic menu may vary by the vehicle's make, model and year.

Refer to the flowchart illustrated as below to diagnose a vehicle manually:

```
┌─────────────────────┐
│   Select "Diagnose" │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│   Select Vehicle    │
│   Manufacturer      │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│ Select Vehicle Model│
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│   Select Scan Mode  │
└─────────────────────┘
```

Automatic System Detection (System Scan)	Manual System Detection (System Selection)

```
┌─────────────────────┐
│ Select Test Function│
└─────────────────────┘
```

Read Version Information	Read Fault Code	Clear Fault Code	Read Data Stream

A. Version Information

This option can read the version information of system mode, vehicle VIN, software and ECU.

B. Read Fault Code

This function displays the detailed information of DTC records retrieved from the vehicle's control system.

Tap "Read Fault Code" on the test function selection screen, the screen willdisplay the diagnostic result.

Note: Retrieving and using DTCs for troubleshooting vehicle operation is   only one

part of an overall diagnostic strategy. Never replace a part based only on the DTC definition. Each DTC has a set of testing procedures, instructions and flow charts that must be followed to confirm cause of the problem. Refer to vehicle's service manual for detailed testing instructions.

Tap certain DTC item to view it details.

On-screen Buttons:

Back: Tap to return to the previous screen.

Search: Tap to search for more information about the current DTConline.

Report: To save the current data in text format. All diagnostic reports can be accessed from **Settings -> Data -> Diagnostic Report**.

C. Clear Fault Code

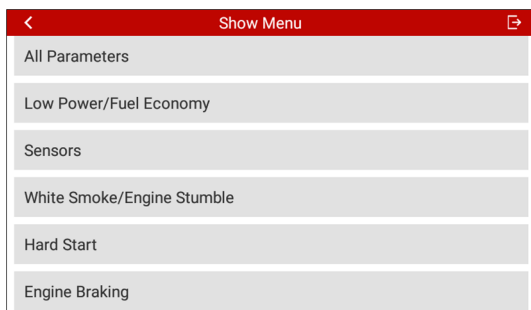After reading the retrieved codes from the vehicle and certain repairs

have been carried out, you can use this function to erase the codes from the vehicle. Before performing this function, please be sure the vehicle's ignition key is in the ON position with the engine off.

Notes:

1. If you plan to take the vehicle to a Service Center for repair, DO NOT erase the codes from the vehicle's computer. If data is erased, valuable information that might help the technician troubleshoot the problem will also be erased.

2. Clearing DTCs does not fix the problem(s) that caused the code(s) to be set. If proper repairs to correct the problem that caused the code(s) to be set are not made, the code(s) will appear again and the check engine light will illuminate as soon as the problem that cause the DTC to set manifests itself.
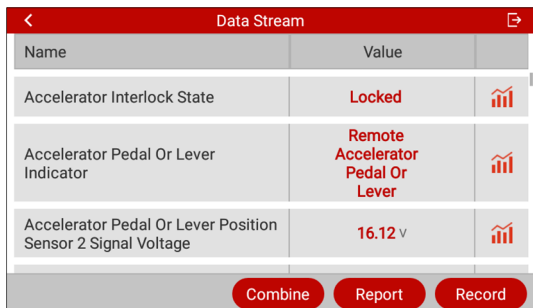
D. Read Data Stream

This option retrieves and displays live data and parameters from the vehicle's ECU.

‹	Show Menu	⇥
All Parameters		
Low Power/Fuel Economy		
Sensors		
White Smoke/Engine Stumble		
Hard Start		
Engine Braking		

After selecting the desired items, tap "OK" to enter the data stream reading page.
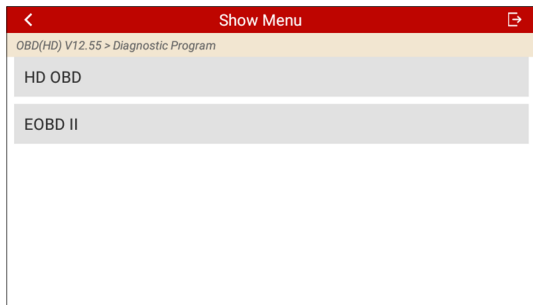
On-screen Buttons:

Combine: Tap to merge values in waveform for easier comparisons. Maximum 4 items can be selected at the same time.

Report: To save the current data in text format. All diagnostic reports can be accessed from "Settings" -> "Data" -> "Diagnostic Report".

Record: To save the current data in text format. All diagnostic reports can be accessed from "Settings" -> "Data" -> "Diagnostic Record".

4.3 OBD Diagnosis

4.3.1 HD OBD

This option allows you to diagnose the electronic control systems of heavy-duty vehicles supporting J1939 and J1708 protocols.

1. After the tool is properly connected to the vehicle's DLC, tap "HD OBD" to enter the following screen.

<	Show Menu	⮌
OBD(HD) V12.55 > HD OBD		
System Automatic Search		
System Manual Selection		

Tap "System Automatic Search" to scan which systems are equipped on the test vehicle automatically.

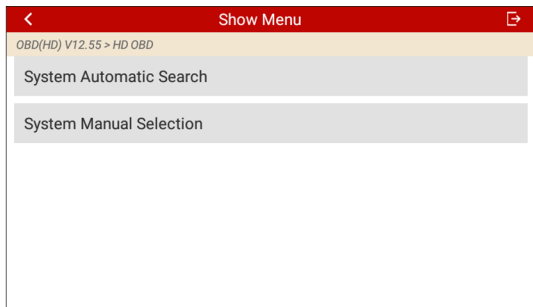Tap "System Manual Selection" to manually select the desired system to proceed.

2. Select the test system to enter the following screen.

<	Show Menu	⮌
OBD(HD) V12.55 > HD OBD > System Automatic Search>J1939 Body Controller		
System Information		
Read Diagnostic Trouble Code		
Clear Diagnostic Trouble Code		
Data Stream		
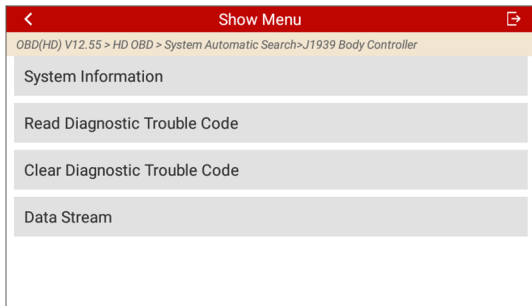
Note: The diagnostic menu may vary by the vehicle's make, model and year.

3. All diagnostic functions are similar to those on system diagnostics. No further descriptions will be given for it. Please refer to Chapter 4.2.2 for detailed operations.

4.3.2 EOBD II

This option presents a quick way to check for DTCs, isolate the cause of the illuminated Malfunction Indicator Lamp (MIL), check monitor status prior to emissions certification testing, verify repairs, and perform a number of other services that are emission-related.
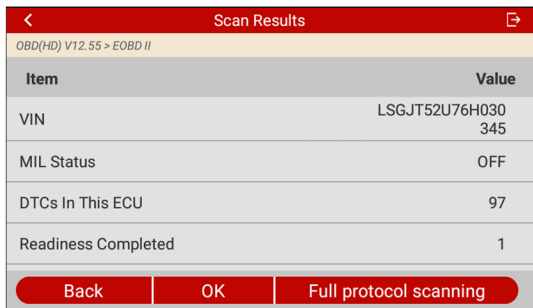
After the tool is properly connected to the vehicle's DLC, tap "EOBD II". The tool will automatically start a check of the vehicle's computer to determine which type of communication protocol it is using. When the tool identifies the computer's communication protocol, a communication link is established and then the screen will display the Monitor Status.

‹	Scan Results	⇥
OBD(HD) V12.55 > EOBD II		
Item		**Value**
VIN		LSGJT52U76H030 345
MIL Status		OFF
DTCs In This ECU		97
Readiness Completed		1
Back	OK	Full protocol scanning

Tap "OK" to enter the diagnostic test modes selection screen.

It mainly includes the following functions:

1. Read Codes

This function can identify which section of the emission control system has malfunctioned.

2. Erase Codes

This function erases the codes from the vehicle, after retrieving codes from the vehicle and certain repairs have been carried out.

Make sure the vehicle's ignition key is in the ON position with the engine off before the operation.

3. I/M Readiness

This function checks whether or not the various emissions-related systems on the vehicle are operating properly, and are ready for Inspection and Maintenance testing.

It can also be used to check the Monitor Run Status, and to confirm if the repair of a car fault has been performed correctly.

4. Data Stream

This function retrieves and displays live data and parameters from the vehicle's ECU.

5. View Freeze Frame

This function takes the snapshot of the operating conditions when an emission-related fault occurs.

Note: If DTCs were erased, Freeze Data may not be stored in vehicle memory depending on vehicle's make, model and year.

6. O2 sensor test

This function retrieves O2 sensor monitor test results of the most recently completed tests from the vehicle's on-board computer.

7. On-board monitor test

This function retrieves test results for emission-related powertrain components and systems that are not continuously monitored. The test's availability is determined by the vehicle manufacturer.

8. EVAP System Test

This function lets you initiate a leak test for the vehicle's EVAP system. Refer to the vehicle's service repair manual to determine the procedures necessary to stop the test.

9. Vehicle Info

This function retrieves a list of information (provided by the vehicle manufacturer) from the vehicle's on-board computer.

This information may include:

• **VIN** (Vehicle identification Number).

- **CID** (Calibration ID).
- **CVN** (Calibration Verification Number).

4.4 History

The History function provides direct access to the previously tested vehicles. Users can resume from the last operation, without starting from scratch.

Tap "History" on the Diagnose main menu screen, all diagnostic records will be listed on the screen in date sequence.

5 Reset

It offers coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement. Available tests vary by vehicle manufacturer, year, and model.

Due to continuing improvements, available service functions are subject to change without prior written notice. To enjoy more service functions, you are suggested to check for updates on a regular basis.

There are two methods to reset service lamp: Manual Reset or Auto Reset.

Auto Reset follows the principle of sending command from the tool to vehicle's ECU to do resetting. While using Manual Reset, users just follow the on- screen instructions to select appropriate execution options, enter correct data or values, and perform necessary actions, the system will guide you through the complete performance for various service operations.

5.1 DPF regeneration

This function can help remove PM (Particulate Matters) from the DPF filter by using combustion oxidation methods (such as high temperature heating combustion, fuel additive or catalyst reduce PM ignition combustion) to keep the performance of the filter stable.

It needs to be performed in the following cases:

- The exhaust back pressure sensor is replaced.
- The PM trap is removed or replaced.
- The fuel additive nozzle is removed or replaced.
- The catalytic oxidizer is removed or replaced.
- The DPF regeneration MIL is on and maintenance is performed.
- The DPF regeneration control module is replaced.

5.2 Urea drive (DEF)

This function can drive the urea pump to perform reverse pumping, compression, injection and other operations through the diagnostic scanner.

It needs to be performed in the following cases:

• After the urea pump maintenance is performed.

5.3 Maintenance reset

This function enables you to reset the oil service for the engine oil life system, which calculates an optimal oil life change interval depending on the vehicle driving conditions and weather events.

It needs to be performed in the following cases:

1. If the service lamp is on, run car diagnostics first for troubleshooting. After that, reset the driving mileage or driving time, so as to turn off the service lamp and enable a new driving cycle.
2. If the service lamp is not on, but you have changed the engine oil or electric appliances that monitor oil life, you need to reset the service lamp.

5.4 Injector coding

This function can write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder, so as to control or correct the cylinder injection quantity accurately.

It needs to be performed in the following cases:

• After the ECU or injector is replaced.

5.5 Speed limit reset

This function enables you to adjust or cancel the maximum vehicle speed limit.

It needs to be performed in the following cases:

• When engine is running abnormally or certain cylinder does not work.

5.6 Cylinder cut-off, compression test

This function can cut off certain cylinder when the engine is running to identify which one is working improperly. Users can judge whether certain cylinder is

normal or not by separately cutting off certain cylinder and checking the working status of the engine.

It needs to be performed in the following cases:

• When engine is running abnormally or certain cylinder does not work.

5.7 Clutch learning

This function can relearn clutch values to ensure normal operation of the clutch.

It needs to be performed in the following cases:

• After programming TCU, replacing gearbox or TCU.

6 Upgrade

This function allows you to update the diagnostic app and software. All software is updated periodically. It is recommended to update and install the latest software version for the best service, functions and experience.

1). Use and update of the diagnostic software pre-installed on the tool is free of charge forever.

2). Use and update of the diagnostic software purchased in the "Mall" is free of charge for one year. If the free period is due, user needs to renew the subscription. Refer to Chapter 6.2 for details on subscription renewal.

Note: This function requires a stable network connection.

6.1 Update Diagnostic Software & App

Tap "Upgrade" on the Job menu to enter the update center.

Tap "Update" to start downloading. It may take several minutes to finish it, please be patient to wait.

Once download is finished, the software packages will be installed automatically.

6.2 Renew Subscription

When the free period is due, the diagnostic software of the current version will be locked. To unlock it, user needs to renew the subscription.

Tap "Upgrade" on the Job menu to enter the update center.

All software that passed the expiry date is displayed in gray. Tap to select the desired diagnostic software and then tap "Renew".

Input the 24-digit pin code of Subscription Renewal Card (*need to buy it from the local dealer where you purchased the tool) and then tap "Submit" to finish the renewal. Now the latest diagnostic software is ready for use.

7 Settings

7.1 Units of measurement

This option can set the measurement unit. Metric System and English System are available.

7.2 Automatic detection on connect

This option enables you to determine whether to start an automatic VIN detection once the tool is properly connected to the vehicle's DLC.

7.3 Display/Brightness

This option allows you to set the standby time and screen brightness.

7.4 Sound

This option lets you adjust the volume and other sound settings.

7.5 Network

The built-in WLAN module allows you to update diagnostic software & APK, and send email on a wireless network.

7.6 Time Zone

This option allows you to set the system time zone.

7.7 Language

The tool supports multiple languages. You can use this option to set the preferred language.

7.8 Workshop information

This option allows you to add a personalized tag on the diagnostic reports.

7.9 Recovery

This option can reset this tool to the default factory setting.

Warning: Resetting may cause data loss. Before doing so, please be careful to perform this operation.

7.10 Clean Up

This option allows user to clear some cache files and free up the storage space. After clean up, the tool will reboot automatically.

7.11 Screen Capture

When set as ON, a floating screenshot icon will appear on the screen. Tap it to capture the current screen. All screenshots are saved under Settings -> Data -> Image.

7.12 About

This option displays the hardware configuration information of the tool and license agreement.

7.13 Data

7.13.1 Diagnostic Record

This module stores the running parameters or waveform graphs the user records.

7.13.2 Diagnostic Report

This module stores all diagnostic reports generated in the process of vehicle diagnosis.

7.13.3 DTC Library

This function helps you to get the details of the DTC, which will greatly help simplify the diagnostic process.

7.13.4 DLC (Data Link Connector) Location

This function helps you to find the location of the vehicle's DLC.

7.13.5 Image

This option allows you to view and manage all screenshots.

7.13.6 Feedback

This item allows you to send the feedback of your diagnostic problems to us for further analysis and troubleshooting.

7.13.7 Firmware Fix

Use this module to upgrade and fix diagnostic firmware. During fixing, please do not cut power or switch to other interfaces.

7.13.8 User Manual

The user manual is integrated on the tool for your easier check and reference.

8 FAQ

Here we list some frequently asked questions and answers related to this tool.

1. System halts when reading data stream. What is the reason?

It may be caused by a slackened connector. Please turn this tool off, firmly connect the connector, and switch it on again.

2. Screen of the tool flashes at engine ignition start.

Caused by electromagnetic disturbing, and this is normal phenomenon.

3. There is no response when communicating with on-board computer.

Please confirm the proper voltage of power supply and check if the throttle has been closed, the transmission is in the neutral position, and the water is in proper temperature.

4. What to do if the system fails to start system scanning?

Please check the following possible reasons:

• Whether the tool is properly connected to the vehicle's DLC port.

• Whether the "Automatic detection on Connect" switch is OFF. If yes, slide it to ON.

5. Why are there so many fault codes?

Usually, it's caused by poor connection or fault circuit grounding.

6. How to upgrade the system?

1. Switch the tool on and ensure a stable internet connection.

2. Tap "Settings" on the Job Menu, select "About" -> "Version", and tap "Detect the System Version" to enter the system upgrading page.

3. Follow the on-screen instructions step by step to finish the process. It may take several minutes depending on the internet speed, please be patient. After upgrade is successfully finished, the tool will automatically restart and enters the Job menu.

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.

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 local dealer, or contact LAUNCH TECH CO., LTD:

Tel: 86-755-25938674

E-mail: DOD@cnlaunch.com

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 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.
To assure continued compliance, any changes or modifications not expressly approved by the party. Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).
This equipment 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.

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

The SAR limit adopted by USA and Canada is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The highest SAR value reported to the Federal Communications Commission (FCC) the Industry Canada (IC) for this device type when it is tested for the properly worn on the body is under 1g 1.6W/Kg.

The device complies with the RF specifications when the device is used near your at a distance of 5mm from your body. Ensure that the device accessories such as a device case and a device holster are not composed of metal components. Keep your device 5mm away from your body to meet the requirement earlier mentioned.

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 5 mm must be maintained between the user's body and the product, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

Statement: LAUNCH reserves the rights to make any change to this manual without notice. We have tried our best to make the descriptions and illustrations in the manual as accurate as possible, and defects are inevitable, if you have any question, please contact local dealer or LAUNCH TECH CO., LTD., LAUNCH does not bear anyresponsibility arising from misunderstandings.