

# Clarke®



## **EOBD ENGINE FAULT CODE READER**

Model No: CEOBDPRO

Part No: 4501130

## **USER INSTRUCTIONS**



## Table of Contents

<b>1.</b>	<b>INTRODUCTION</b>	
1.1	About the CEOBDPRO Code Reader	3
1.2	Safety Precautions and Warnings	3
<b>2.</b>	<b>GENERAL INFORMATION</b>	
2.1	On-Board-Diagnostics (OBD) II	4
2.2	Diagnostic Trouble Codes (DTCS)	4
2.3	Location of the Data Link Connector (DLC)	5
2.4	OBD II Readiness Monitors	6
2.5	OBD II Monitor Readiness Status	6
2.6	OBD II Terminology	7
2.7	Vehicle Coverage	8
<b>3.</b>	<b>PRODUCT INFORMATION</b>	
3.1	Device Description	9
3.2	Product Specifications	9
3.3	Accessories Included	10
3.4	Vehicle Power	10
3.5	Product (Tool) Setup	10
3.6		
<b>4.</b>	<b>OPERATION</b>	
4.1	Connection	12
4.2	Diagnostics	13
4.3	Code 'Look Up'	23
4.4	Reviewing Data	23
4.5	Help	25
<b>5.</b>	<b>SOFTWARE UPDATES</b>	
5.1	Software Downloads	26
<b>6.</b>	<b>DECLARATION OF CONFORMITY</b>	27

# 1 INTRODUCTION

## 1.1 About the CEOBDPRO Code Reader

This powerful device will help you take charge of your vehicle's maintenance and servicing needs. Today's vehicles use Computer Control Systems to ensure peak performance and fuel efficiency while reducing pollutants in the vehicle's emissions. These systems also have the ability to perform self-testing and diagnostics on various vehicle systems and components, and provide valuable information to aid in servicing and repair. However, these sophisticated systems often required expensive devices and test equipment in order to retrieve this information. Until now, consumers had to rely on professional service technicians to maintain their vehicles in top condition.

The CEOBDPRO Code Reader brings the power of the technician into your hands in a cost-effective, easy-to-use package. Whether you are a "put the key in and go" consumer, hobby mechanic or skilled DIYer, the Code Reader offers the features and functions you need to take control of your vehicle's testing, servicing and maintenance needs.

## 1.2 Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the Scan Tool, read this instruction manual first and observe the following safety precautions as a minimum whenever working on a vehicle:

1. Always perform automotive testing in a safe environment.
2. Wear safety eye protection that meets approved standards.
3. Keep clothing, hair, hands, tools, test equipment, etc, away from all moving or hot engine parts.
4. Operate the vehicle in a well-ventilated work area; exhaust gases are poisonous.
5. Put blocks against driven wheels and never leave the vehicle unattended while running tests.
6. 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.
7. Always put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
8. Keep a fire extinguisher suitable for fuel / chemical /electrical fires nearby.
9. Don't connect or disconnect any test equipment with the ignition on, or engine running.
10. Keep the code reader dry, clean and free from oil, water and grease. Use a mild detergent on a clean cloth to clean the outside of the device when necessary.

## **2. GENERAL INFORMATION**

### **2.1 On-Board-Diagnostics (OBD) II**

The first generation of On-Board Diagnostic (called OBD I), was developed by the California Air Resources Board (ARB) and implemented in 1988 to monitor some of the emission control components on vehicles. As technology and the desire to improve On-Board Diagnostic capability increased, a new generation of On-Board Diagnostics system was developed. This second generation of On-Board Diagnostic regulations is called "OBD II".

The OBD II system is designed to monitor emission control systems and key engine components by performing either continuous or periodic tests of specific components and vehicle conditions. When a problem is detected, the OBD II system turns on a warning lamp (MIL) on the vehicle instrument panel to alert the driver typically by the phrase of "Check Engine" or "Service Engine Soon". The system will also store important information about the detected malfunction so that a technician can accurately find and fix the problem.

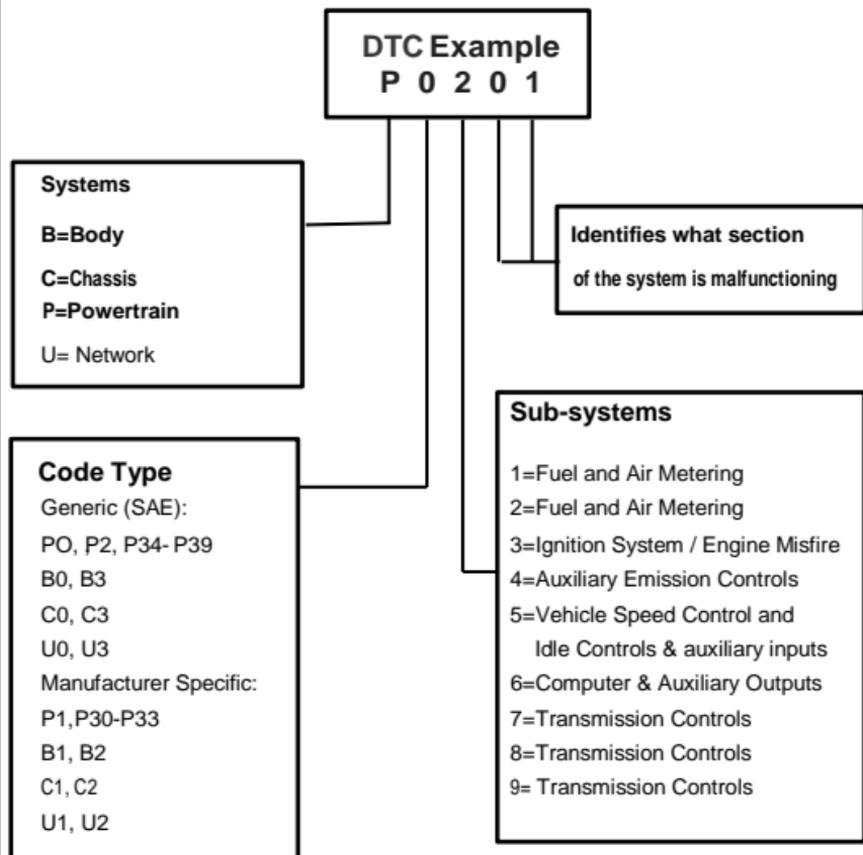
Here below follow three pieces of such crucial information:

- Whether the Malfunction Indicator Light (MIL) is commanded 'on' or 'off';
- Which, if any, Diagnostic Trouble Codes (DTCs) are stored;
- Readiness Monitor status

### **2.2 Diagnostic Trouble Codes (DTCs)**

OBD II Diagnostic Trouble Codes are codes that are stored by the on-board computer diagnostic system in response to a problem found in the vehicle. These codes identify a particular problem area and are intended to provide you with a guide as to where a fault might be occurring within a vehicle. OBD II Diagnostic Trouble Codes consist of a five-digit alphanumeric code. The first character, a letter, identifies which control system sets the code. The other four characters, all numbers, provide additional information on where the DTC originated and the operating conditions that caused it to set.

Below is an example to illustrate the structure of the digits.



### 2.3 Location of the Data Link Connector (DLC)

The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-cavity connector where diagnostic scan tools interface with the vehicle's on-board computer. The DLC is usually located 12 inches from the centre of the instrument panel (dash), under or around the driver's side for most vehicles. For some vehicles, the DLC is located in the passenger foot-well and in others it may be behind the ashtray. Refer to the vehicle's service manual for the location if the DLC cannot be found.

### 2.4 OBD II Readiness Monitors

An important part of a vehicle's OBDII system are the Readiness Monitors, which are indicators used to find out if all of the emissions components have been evaluated by the OBD II system. Periodic tests are run on specific systems and components to ensure that they are performing within allowable limits.

Currently, there are eleven known OBD II Readiness Monitors (or I/M Monitors). Not all monitors are supported by all vehicles and the exact number of monitors in any vehicle depends on the motor vehicle manufacturer's emissions control strategy.

**Continuous Monitors** - Some of the vehicle components or systems are continuously tested by the vehicle's OBDII system, while others are tested only under specific vehicle operating conditions. The continuously monitored components listed below are always ready:

1. Misfire
2. Fuel System
3. Comprehensive Components Monitoring (CCM)

Once the vehicle is running, the OBDII system is continuously checking the above components, monitoring key engine sensors, watching for engine misfire and monitoring fuel demands.

**Non Continuous Monitors** - Unlike the continuous monitors, many emissions and engine system components require the vehicle to be operated under specific conditions before the monitor is ready. These monitors are termed non-continuous monitors and are listed below:

1. EGR System
2. O<sub>2</sub> Sensors
3. Catalyst
4. Evaporative System
5. O<sub>2</sub> Sensor Heater
6. Secondary Air Injection
7. Heated Catalyst
8. A/C system

## 2.5 OBD II Monitor, Readiness Status

OBDII systems must indicate whether or not the vehicle's PCM's monitor system has completed testing on each component. Components that have been tested will be reported as "Ready", or "Complete", meaning they have been tested by the OBDII system. The purpose of recording readiness status is to allow inspectors to determine if the vehicle's OBDII system has tested all the components and/or systems.

The powertrain control module (PCM) sets a monitor to "Ready" or "Complete" after an appropriate drive cycle has been performed. The drive cycle that enables a monitor and sets readiness codes to "ready" varies for each individual monitor. Once a monitor is set as "Ready" or "Complete", it will remain in this state. A number of factors, including erasing of diagnostic trouble codes (DTCs) with a scan tool or a disconnected battery, can result in Readiness Monitors being set to "not ready". Since the three continuous monitors are constantly evaluating, they will be reported as "Ready" all of the time. If testing of a particular supported non-continuous monitor has not been completed, the monitor status will be reported as "Not Complete" or "Not Ready."

In order for the OBD monitor system to become ready, the vehicle should be driven under a variety of normal operating conditions. These operating conditions may include a mix of highway driving and stop and go, city type driving, and at least one overnight-off period. For specific information on getting your vehicle's OBD monitor system ready, please consult your vehicle owner's manual.

## 2.6 OBD II Terminology

**Powertrain Control Module (PCM)** - OBDII terminology for the on-board computer that controls engine and drivetrain.

**Malfunction Indicator Light (MIL)** - Malfunction Indicator Light (Service Engine Soon, Check Engine) is a term used for the light on the instrument panel. It is to alert the driver and/or the repair technician that there is a problem with one or more of vehicle's systems and may cause emissions to exceed federal standards. If the MIL illuminates with a steady light, it indicates that a problem has been detected and the vehicle should be serviced as soon as possible. Under certain conditions, the dashboard light will blink or flash. This indicates a severe problem and flashing is intended to discourage vehicle operation. The vehicle on-board diagnostic system cannot turn the MIL off until the necessary repairs are completed or the condition no longer exists.

**DTC**--Diagnostic Trouble Codes (DTC) that identify which section of the emission control system has malfunctioned.

**Enabling criteria** - (Also termed Enabling Conditions). These are the vehicle-specific events or conditions that must occur within the engine before the various monitors will set, or run. Some monitors require the vehicle to follow a prescribed "drive cycle" routine as part of the enabling criteria. Drive cycles vary among vehicles and for each monitor in any particular vehicle.

Please refer to the vehicle's factory service manual for specific enabling procedures.

**OBDII Drive Cycle** - A specific mode of vehicle operation that provides conditions required to set all the readiness monitors applicable to the vehicle to the "ready" condition. The purpose of completing an OBD II drive cycle is to force the vehicle to run it's on-board diagnostics. Some form of a drive cycle needs to be performed after DTCs have been erased from the PCM's memory or after the battery has been disconnected. Running through a vehicle's complete drive cycle will "set" the readiness monitors so that future faults can be detected. Drive cycles vary depending on the vehicle and the monitor that needs to be reset. For vehicle specific drive cycle, consult the vehicle's owner's manual.

**Freeze Frame Data** – When an emissions related fault occurs, the OBDII system not only sets a code but also records a snapshot of the vehicle operating parameters to help identify the problem. This set of values is referred to as Freeze Frame data and may include important engine parameters such as engine RPM, vehicle speed, air flow, engine load, fuel pressure, fuel trim value, engine coolant temperature, ignition timing advance, or closed loop status.

**Fuel Trim (FT)** - Feedback adjustments to the base fuel schedule. Short-term fuel trim refers to dynamic or instantaneous adjustments. Long-term fuel trim refers to much more gradual adjustments to the fuel calibration schedule than short-term trim adjustments. These long-term adjustments compensate for vehicle differences and gradual changes that occur over time.

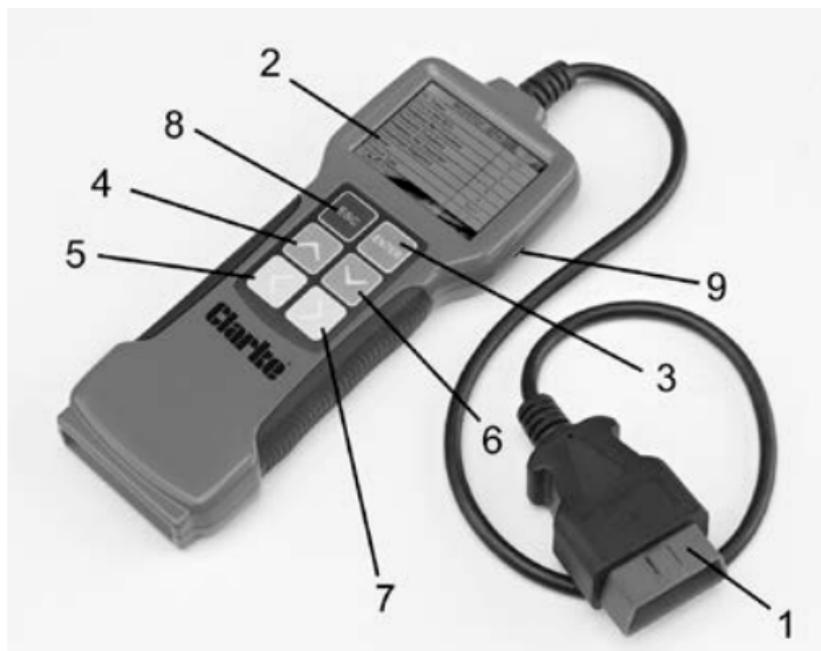
## 2.7 Vehicle Coverage

The code reader is specially designed to work with all OBD II compliant vehicles, including Control Area Network (CAN). It is required by EPA that all 1996 and newer vehicles (cars and light trucks) sold in the United States must be OBD II compliant and this includes all American, Asian and European vehicles.

A small number of 1994 and 1995 model year gasoline vehicles are OBD II compliant. To verify if a 1994 or 1995 vehicle is OBD II compliant, check the Vehicle Emissions Control Information (VECI) Label, which is located in the engine bay, (typically, by the radiator) of most vehicles. If the vehicle is OBD II compliant, the label will designate "OBD II Certified regulations mandate". For the vehicle to be OBD II compliant it must have a 16-pin DLC (Data Link Connector) under the dash and the Vehicle Emission Control Information Label must state that the vehicle is OBD II compliant.

### 3. PRODUCT INFORMATION

#### 3.1 Device Description



1. **Cable with OBD II CONNECTOR**--Connects the code reader to the vehicle's Data Link Connector (DLC).
2. **LCD DISPLAY**--Indicates the test results.
3. **ENTER BUTTON**--Confirms selection (or action) from a menu list.
- 4/6. **UP/DOWN BUTTONS**—Moves the cursor up/down for selection.
- 5/7. **LEFT/RIGHT BUTTONS**—Moves the cursor left or right for selection or move page up or down if more than one page is displayed.
8. **ESC BUTTON**—Returns to previous menu.
9. **USB Port**—Connects to a computer to update the scanner on-line.

#### 3.2 Product Specifications

1. **Display: 2.8" Colour LCD**
2. **Operating Temperature: 0 to 50°C (-32 to 122 F°)**
3. **Storage Temperature: -20 to 70°C (-4 to 158 F°)**
4. **Power**—8-18 V DC (provided via heavy duty OBD II cable)
5. **Dimensions:**  
Length Width Height  
210 mm x 85 mm x 25 mm
6. **Weight: 287g**

### 3.3 Accessories Included

- 1) User Manual
- 2) USB Cable – used to connect to a computer for upgrading online.

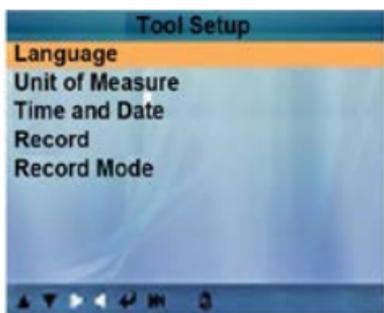
### 3.4 Power Supply

The power to the code reader is provided via the vehicle Data Link Connector (DLC). Follow the steps below to turn on the code reader:

1. Locate DLC on the vehicle. (A plastic DLC cover may be found for some vehicles and you will need to remove it before plugging in the OBDII cable.
2. Plug the OBDII cable into the vehicle's DLC.

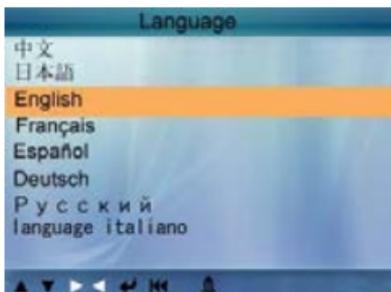
### 3.5 Device (Tool) Setup

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



#### Select the Language

Choose [Language] and press [ENTER], and the screen will display the interface as shown below:



Press the [▲] [▼] keys to select any language and press [ENTER] to confirm. The system will switch to the chosen language interface.

### **Beeper: Set the Beeper ON/OFF.**

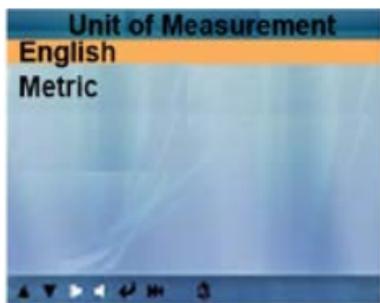
Choose [Beeper] and press [ENTER]. The screen will display the interface as shown below:



Press [▲] or [▼] to select ON/OFF and press [ENTER] to confirm.

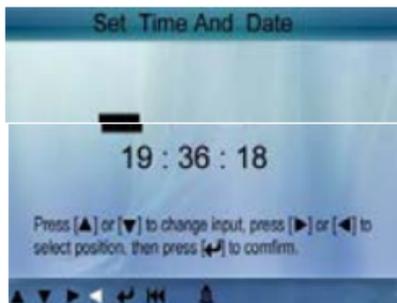
### **Unit of Measurement: Set the Unit of Measurement.**

Choose [Beeper] and press [ENTER]. The screen will display the interface as shown below



### **Time and Date: Set the time and date.**

Choose [Time and Date] and press [ENTER]. The screen will display the interface as shown below:



Press [▲] or [▼] to change input, press [LEFT] or [RIGHT] to select position, then press [ENTER] to confirm.

#### **Record: Select recording ON/OFF.**

Choose [Record] and press [ENTER]. The screen will display the interface as shown below:



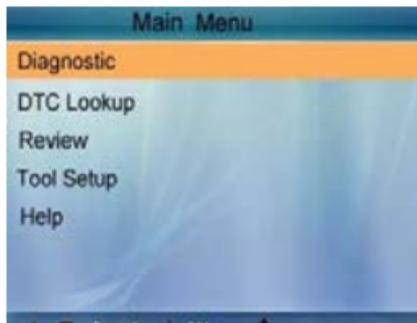
Press [▲] or [▼] to select recording ON/OFF and press [ENTER] to confirm.

## **4. OPERATION**

### **4.1 Connection**

1. Turn the ignition off.
2. Locate the vehicle DLC.
3. Plug the OBDII cable into the vehicle
4. Turn the ignition on. (Engine can be off or running).

After finishing, press [ENTER] button to enter Main Menu as shown below:



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

## 4.2 Diagnostic

Select [Diagnostic] in Main Menu and press [ENTER]. The screen will display Monitor Status interface as the following.

Monitor Status	
MIL Status	ON
DTCs in this ECU	87
Readiness Supported	8
Readiness Complete	5
Readiness Not Supported	3
Datastream Supported	66
Ignition	Spark
Protocol Type	VPW

Press [ESC] to back to the Main Menu of Diagnostic. The screen will display as follows:

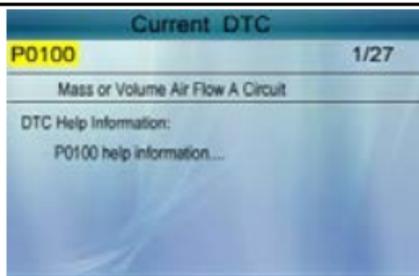
Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System Test

### 4.2.1 Read Codes

Select [Read Codes] and press [ENTER] in Diagnostic Menu. If there are any codes, the screen will display the codes as shown below:

Read Codes
Current DTCs (\$03)
Pending DTCs (\$07)
Permanent DTCs (\$0A)

Referring to the above figure to select different item by pressing [▲] or [▼] and press [ENTER] to confirm.



1/27 indicates there are 27 codes in total and that P0100 is the first code to display.

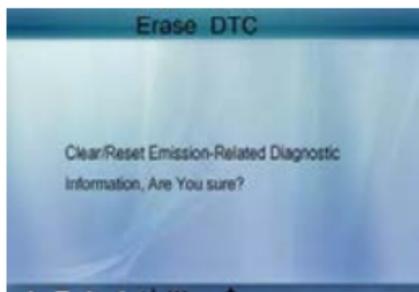
The screen will also show the content of the code below the number of code.

You can use the [▼] key to view the next code.

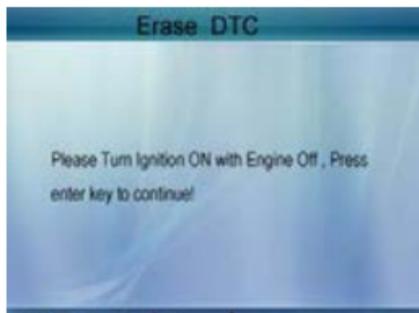
After viewing all the codes, you can press [ESC] to return to the Diagnostic Menu.

#### 4.2.2 Erase Codes

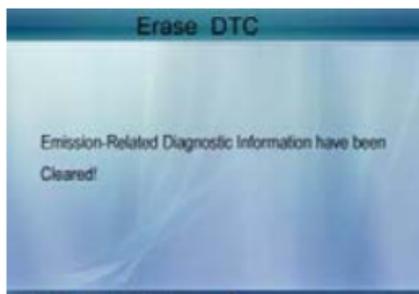
Select [Erase Codes] and the screen will display the interface as shown below:



Press [ENTER] to erase DTC shown below:



According to the above figure, press [ENTER] and the screen will display the interface as shown on the next page:



Notes:

- ◆ Before performing this function, make sure to retrieve and record the fault codes.
- ◆ After clearing, you should retrieve fault codes once more or turn the ignition on and retrieve the codes again. If there are still some fault codes in the system, please troubleshoot the code using a factory diagnosis guide, then clear the code and recheck.

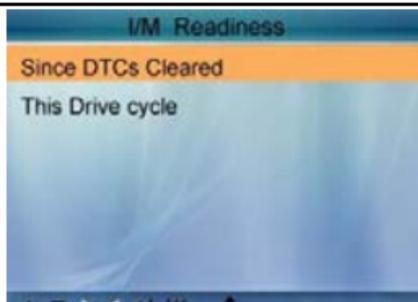
#### 4.2.3 I/M Readiness

I/M readiness refers to 'Inspection and Maintenance' that is legislated by the Government to meet Federal clean-air standards. I/M Readiness indicates whether or not the various emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing.

The purpose of the I/M Readiness Monitor Status is to indicate which of the vehicles described in Chapter 2.5), and verify which ones have not yet run and completed testing and diagnosis of their designated sections of the vehicle system.

The I/M Readiness Monitor Status function also can be used (after repair of a fault has been performed) to confirm that the repair has been performed correctly, and/or to check for Monitor Run Status.

Select [I/M Readiness] and press [ENTER], the screen will display the interface as shown below:



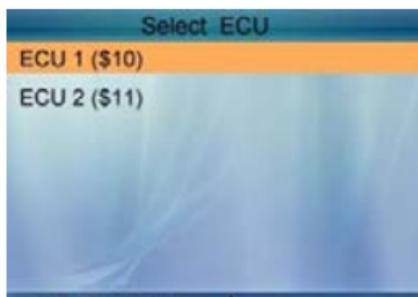
You can use the [▲] [▼] buttons to select and press [ENTER]. The screen will display the interface as shown below:

I/M Readiness	
Misfire monitor	N/A
Fuel system monitor	N/A
Comprehensive component monitor	INC
Catalyst monitor	OK
Heated catalyst monitor	OK
Evaporative system monitor	N/A
Oxygen sensor monitor	OK
Secondary air system monitor	N/A
Oxygen sensor heater monitor	OK
EGR and/or VVT system monitor	INC

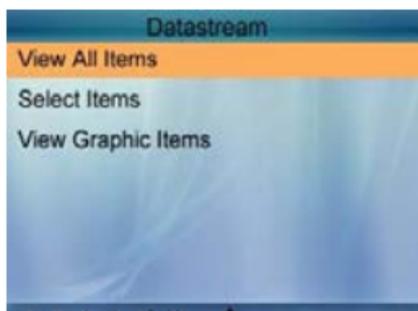
You can use the [LEFT] [RIGHT] button to view other data of vehicle. Press [ENTER] to return to Diagnostic Menu. N/A means not available on this vehicle, INC means incomplete or not ready, OK means Completed or Monitor OK.

#### 4.2.4 Data Stream

Press the [▲] or [▼] button to select Data Stream in Main Menu interface and then press [ENTER] button to confirm, the screen will display the interface as shown below:



From the display shown in the picture above, press [ENTER] button, the screen will display the interface as shown below:



Select [View All Items] and press the [ENTER] button. The screen will display the interface as shown below:

The screenshot shows a table titled "All Datastream" with five rows of data. The table has two columns: the parameter name and its value. The bottom of the screen shows navigation icons and "1/8".

All Datastream	
Fuel system 1 status	N/A
Fuel system 2 status	N/A
Engine coolant Temperature	143°C
Short Term Fuel Trim - Bank 2	-75.8%
Short Term Fuel Trim - Bank 4	-27.3%

You can use the [LEFT] [RIGHT] buttons to view other data streams. Press [ENTER] to return to Diagnostic Menu.

Select [Select Items] in Data stream menu and press [ENTER]. The screen will display the interface as shown below:

The screenshot shows a menu titled "Select Datastream" with five items, each with a selection icon [ ] to its left. The first item, "Fuel system 1 status", is highlighted in orange. The bottom of the screen shows navigation icons and "1/8".

Select Datastream	
[ ]	Fuel system 1 status
[ ]	Fuel system 2 status
[ ]	Engine Coolant Temperature
[ ]	Short Term Fuel Trim - Bank 2
[ ]	Short Term Fuel Trim - Bank 4

You can use the [▲] [▼] buttons to select data stream items, and press the [LEFT] [RIGHT] buttons to turn the page. The screen will display the interface as shown on the next page:

Select Datastream	
[✓]	Fuel system 1 status
[✓]	Fuel system 2 status
[✓]	Engine Coolant Temperature
[✓]	Short Term Fuel Trim - Bank 2
[✓]	Short Term Fuel Trim - Bank 4

▲ ▼ ▶ ◀ ↺ ⏪ ⏩ 1/8

After selected items and pressing [ENTER], the screen will display the interface as shown below:

Select Datastream	
Fuel system 1 status	N/A
Fuel system 2 status	N/A
Engine coolant Temperature	143°C
Short Term Fuel Trim - Bank 2	-75.8%
Short Term Fuel Trim - Bank 4	-27.3%

Press [ESC] to return to the Diagnostic Menu. Select [View Graphic Items] in Data stream menu and press [ENTER], and the screen will display the interface as shown below:

Select Datastream	
[ ]	Engine Coolant Temperature
[ ]	Short Term Fuel Trim - Bank 2
[ ]	Short Term Fuel Trim - Bank 4
[✓]	Intake Manifold Absolute Pressure
[ ]	Intake Air Temperature

▲ ▼ ▶ ◀ ↺ ⏪ ⏩ 1/7

You can use the [▲] [▼] buttons to select single data stream items to view item of live data with a graph. Press the [ENTER] button, and the screen will display the interface as shown below:



Press [ESC] to return to the Diagnostic Menu.  
 You can view all data stream items or select a certain item of live data with a graph.

#### 4.2.5 View Freeze Frame

When an emission-related fault occurs, certain vehicle conditions are recorded by the on-board computer. This information is referred to as Freeze Frame Data which is a snapshot of the operating conditions at the time of an emission-related fault.

Note: if DTCs were erased, Freeze Frame Data may not be stored in the vehicle memory depending on the vehicle.

Select [Freeze Frame] in main menu interface and the screen will display the interface as shown below:

Freeze Frame	
DTC that caused required freeze frame data storage	B3376
Short Term Fuel Trim - Bank 1	16.4%
Short Term Fuel Trim - Bank 3	-71.1%
Long Term Fuel Trim - Bank 1	0.0%
Long Term Fuel Trim - Bank 3	64.1%

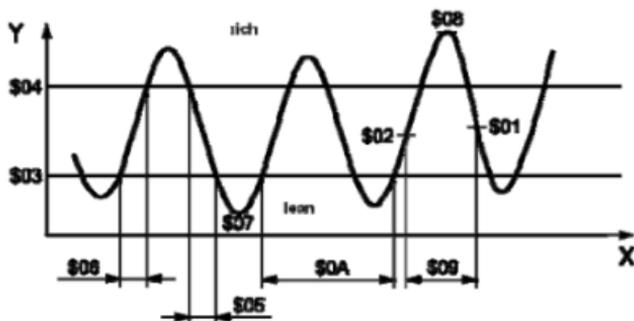
You can use [LEFT] [RIGHT] button to view the data.  
 Press [ESC] to return to Diagnostic Menu.

#### 4.2.6 O2 Sensor Test

The results of O2 sensor test are not live values but instead the results of the ECU live sensor screens such as Graph Screen.

Not all test values are applicable to all vehicles. Therefore, the list generated will vary depending on vehicle. In addition, not all vehicles support the Oxygen Sensors screen.

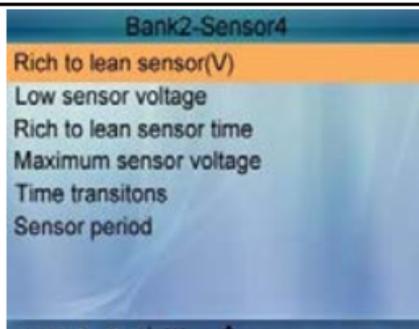
For results of the latest mandated on-board oxygen sensor monitoring test, see the graph below:



Select [O2 Sensor Test] in the Diagnostic menu and press [ENTER]. The screen will display as shown below:



Press the [ENTER] button and the screen will display as shown below:



You can use the [▲] [▼] buttons to select an item and press [ENTER], and the screen will display as shown below:

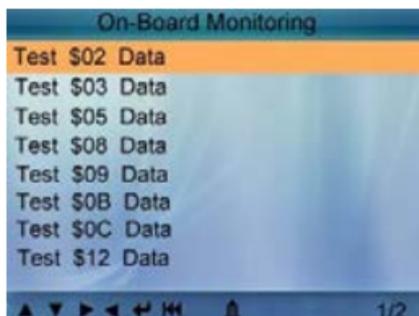
A screenshot of a test results screen titled "Rich to lean sensor(V)". It displays a table with the following data:

Test ID	\$01
Test Value	0.900
Munimum Limit	0.425
Maximum Limit	0.000
Status	Fail

Press [ESC] to return to Diagnostic Menu.

#### 4.2.7 On-board monitor test

This function can be utilized to read the results of on-board diagnostic monitoring tests for specific components/systems. Select [On-board Monitoring] in main menu and press [ENTER] and the screen will display as shown below:



You can use the [▲] [▼] buttons to select an item and press [ENTER], and the screen will display as shown below:

Test \$O2 Data	
Component ID	\$5e
Limit Type	Max
Test Value	33733
Minimum Limit	----
Maximum Limit	39982
Status	Pass

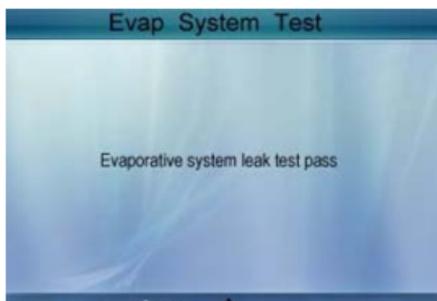


Press [ESC] to return to the Diagnostic Menu.

#### 4.2.8 EVAP System Test

The EVAP test function lets you initiate a leak test for the vehicle system. The AUTO SCANNER does not perform the leak test, but signals to the vehicle function. Refer to the vehicle procedures necessary to stop the test.

Select [EVAP System Test] and press [ENTER]. The screen will display the relative information about the EVAP system. Some vehicle manufacturers do not allow external devices to control the vehicle system. If the car supports this function, it will display as below:



#### 4.2.9 Vehicle Info

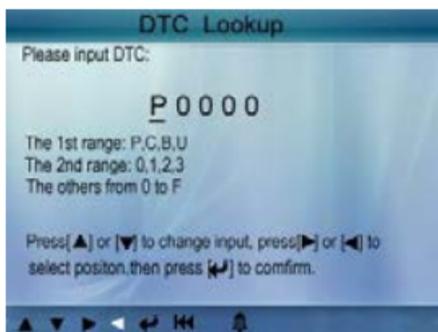
Select [Vehicle Info] and press [ENTER]. The screen will display the information, such as VIN (Vehicle identification Number), CID (Calibration ID) and CVN (Calibration verification number), as shown below:



Press [ESC] to return to the Diagnostic Menu.

#### 4.3 Code Lookup

Select [Code Lookup] in the Main Menu and press [ENTER]. The screen will display the interface as shown below:



You can use the [▲] [▼] key to change the first letter. It can be switched on by pressing the [LEFT] [RIGHT] key to input number. After you input the code number, press [ENTER] to view the definition of the code. After viewing the definition, press [ESC] to return to the Main Menu.

#### 4.4 Review

This function is used to review the recorded Data Streams, DTC, and Freeze Frame data.

Select [Review] in the Main Menu and press [ENTER], and the screen will display the interface as shown below:



CAUTION: About the record function, please view the chapter Tool Setup.

### 1) Review DTC

Select [Review DTC] in the Review and press [ENTER], and the screen will display the interface as shown below:

Review DTC		
Date & Time	DTC num	DTC type
2010-05-15(18.42.09) LCGJD52E76H238345	18	Current
2010-05-15(18.45.06) LCGJD54S75Q23567	18	pending

The recorded DTC will be displayed as shown.

You can use the [▲] [▼] keys and press the [ENTER] button to view detailed information,

### 2). Review Data stream

The operation is similar to the "Review DTC" function.

### 3). Review Freeze Frame

The operation is similar to the "Review DTC" function.

### 4). Delete DTC

Select [Delete DTC] in the Review and press [ENTER] and the screen will display the interface as shown below:



Press [ENTER] to confirm, and press [ESC] to return to Main Menu.

**5). Delete Data stream**

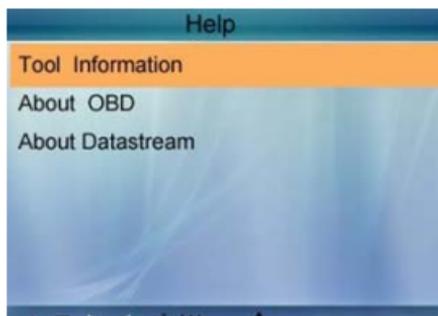
The operation is similar to the "Delete DTC".

**6). Delete Freeze Frame**

The operation is similar to the "Delete DTC".

**4.5 Help**

This function is used to view Tool Information, About OBD, and About Data stream



Tool Information includes: software version, hardware version, serial number, supported, time and date.

About OBD: Relevant introductions information about OBD.

About Data Stream: Relevant introductions information about Data Stream.

## 5 SOFTWARE UPDATES

### 5.1 Software Downloads

Occasionally new software and DTC library information is made available for download. It is possible to update the code reader software and DTC library information via a computer.

To perform the update you will need:

- The CEOBDPRO Code Reader
- A PC or laptop with USB ports
- A USB cable

Full information and any available upgrades with detailed instructions can be downloaded from **[www.clarkeinternational.com](http://www.clarkeinternational.com)**

## WARRANTY AND SERVICE

### Limited One Year Warranty

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for its intended purpose.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not affect your statutory rights.

---

## ENVIRONMENTAL RECYCLING POLICY

---



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## 6. DECLARATION OF CONFORMITY



**Clarke**<sup>®</sup>  
**INTERNATIONAL**

Hernnall Street, Epping, Essex CM16 4LG

### DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2004/108/EC *Electromagnetic Compatibility Directive.*  
2011/65/EU *Restriction of Hazardous substances.*

The following standards have been applied to the product(s):

EN 55022:2010, EN 61000-3-2:2006 +A1:2009 +A2:2009, EN 55024:2010, EN 61000-3-3:2008.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2010

Product Description:	OBDII / EOBD Diagnostic tool with colour display
Model number(s):	CEOBPRO
Serial / batch Number:	N/A
Date of issue:	31/10/12

Signed:



.....

J.A. Clarke  
Director

A SELECTION FROM THE VAST RANGE OF

**Clarke**<sup>®</sup>

QUALITY PRODUCTS

**AIR COMPRESSORS**

From DIY to industrial. Plus air tools, spray guns and accessories.

**GENERATORS**

Prime duty or emergency standby for business, home and leisure.

**POWER WASHERS**

Hot and cold, electric and engine driven - we have what you need

**WELDERS**

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

**METALWORKING**

Drills, grinders and saws for DIY and professional use.

**WOODWORKING**

Saws, sanders, lathes, mortisers and dust extraction.

**HYDRAULICS**

Cranes, body repair kits, transmission jacks for all types of workshop use.

**WATER PUMPS**

Submersible, electric and engine driven for DIY, agriculture and industry.

**POWER TOOLS**

Angle grinders, cordless drill sets, saws and sanders.

**STARTERS/CHARGERS**

All sizes for car and commercial use.



**PARTS & SERVICE: 0208 988 7400**

**E-mail: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com) or [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

**SALES: UK 01992 565333 or Export 00 44 (0)1992 565335**

**Clarke**<sup>®</sup> INTERNATIONAL Hemnal Street, Epping, Essex CM16 4LG  
[www.clarkeinternational.com](http://www.clarkeinternational.com)