KINCROME

Diagnostic Scan Tool OBDII/EOBD

K8412

June 2024

General Notice

For your own safety and the safety of others, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating your code reader. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by vehicle manufacturer. Read, understand and follow all safety messages and instructions in this manual.

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 at a minimum whenever working on a vehicle:
Always perform automotive testing in a safe environment. 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 PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
Keep a fire extinguisher suitable for gasoline/chemical/ electrical fires nearby. Ignition is on or the engine is running.
Keep the scan tool dry, clean, free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool, when necessary.

Warranty and Service

Limited One Year Warranty

We warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

1) The sole responsibility of our company under the Warranty is limited to either the repair or, at the option of our company, replacement of the scan tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
2) This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired Center.
3) We shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the scan tool. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Table of Contents

1 General Information

1.1 On-Board Diagnostics (OBD) II

The first generation of On-Board Diagnostics (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 evolved and the desire to improve the On-Board Diagnostic system increased, a new generation of On-Board Diagnostic 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 valuable information:

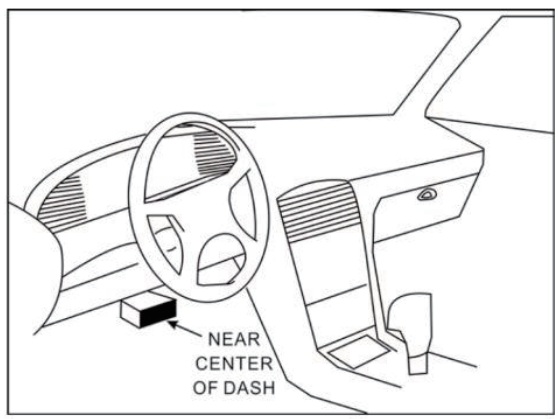
1) Whether the Malfunction Indicator Light (MIL) is commanded ‘on’ or ‘off’;

2) Which, if any, Diagnostic Trouble Codes (DTCs) are stored;

3) Readiness Monitor status.

1.2 Location of the Data Link Connector (DLC)

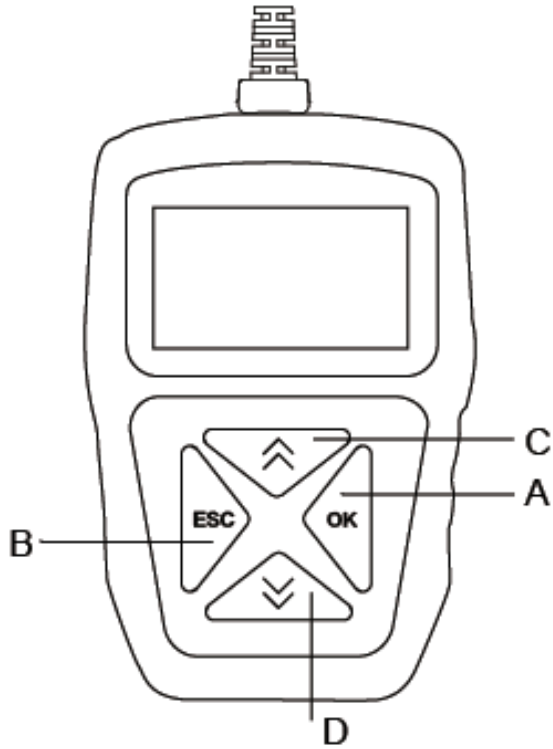
The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-cavity connector where diagnostic code readers interface with the vehicle’s on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver’s side for most vehicles. If Data Link Connector is not located under dashboard, a label should be there telling location. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to access the connector. If the DLC cannot be found, refer to the vehicle's service manual for the location.



2 Use the scan tool

2.1 Tool Descriptions

This section illustrates external features, ports and connectors of the code reader.



A OK Key - Enters diagnostic operation or confirms an action.
B ESC Key - Enters SETUP for system, such as language, measurement unit and contrast of the LCD display. During diagnostics, it cancels an action and returns to previous screen or level.
C UP Key - Moves selection up. When LCD display contrast ratio is adjusted, it is used to enhance brightness.
D DOWN Key - Moves selection down. When LCD display contrast ratio is adjusted, it is used to weaken brightness.

2.2 Accessory Descriptions

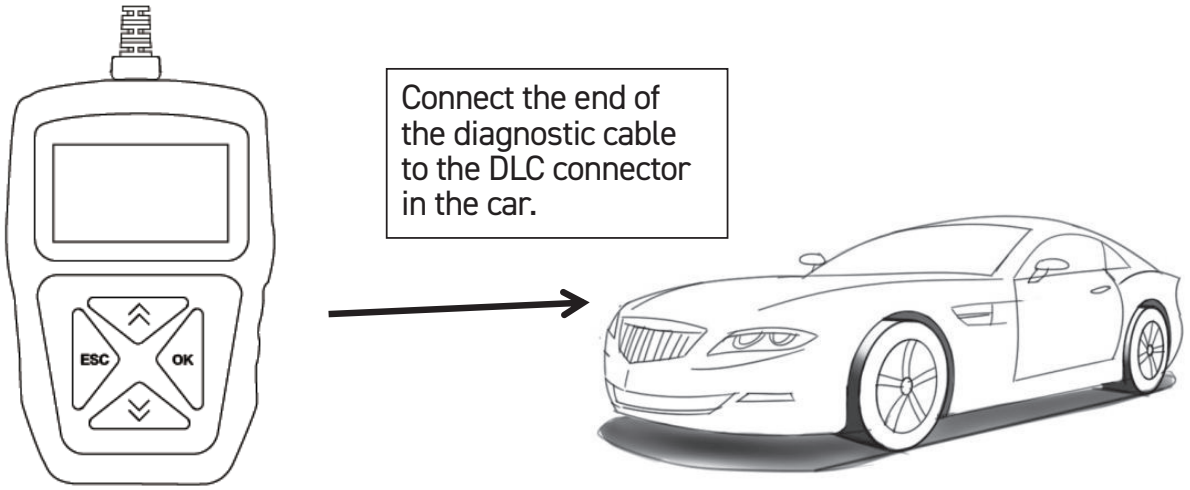
This section lists the accessories that go with the code reader. If you find any of the following items missing from your package, contact your local dealer for assistance.
1 User's Guide - provides operation instructions for the usage of the code reader.

2.3 Technical Specifications

Display:	128 x 64 pixels, backlit display screen
Working Temperature:	0 to 60 °C (32 to 140°F)
Storage Temperature:	-20 to 70°C (-4 to 158°F)
Power Supply:	8-18V vehicle power
Supported Protocols:	J1850-PWM, J1850-VPW, ISO9141, KWP2000 (ISO 14230), and CAN (Control Area Network ISO 11898)
Measurement (L x W x H):	112 x 76 x 20mm
Weight:	0.2 kg

3 Getting Started

3.1 Connecting to Vehicle



3.2 Providing Power to Code Reader

Before using the code reader, make sure to provide power to the code reader. The unit functions using the 12 Volt power supply from the vehicle.

3.2.1 Connecting to Vehicle Power

The code reader normally powers on whenever it is connected to the data link connector (DLC).

To connect to vehicle power:

1. Turn the ignition off.
2. Locate the data link connector (DLC). The DLC port is typically located under the dashboard, near the steering column.

Note: *The Vehicle manufacturer's owner's manual should be consulted prior to the OBDII scanner.*

3. Connect the code reader with the DLC.
4. Switch the ignition key to the ON position.
5. The code reader automatically boots up.

3.3 Application Overview

When the code reader boots up, there are 4 diagnostic operations for choose:

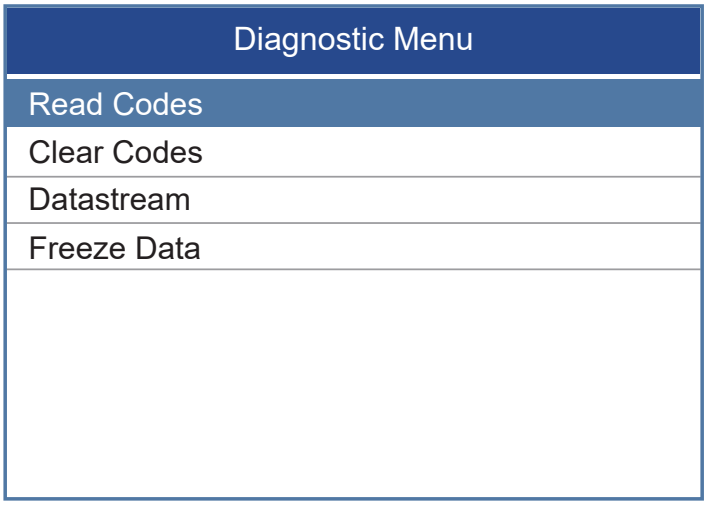
- **OK** – detects OBDII protocol and generates a status of engine system for short time before diagnostic operation starts.
- **ESC** – leads to System Setup to configure code reader to specific needs.

4 OBDII/EOBD Diagnostics

When **OK/SCAN** application is selected from Home screen, the code reader starts to detect the communication protocol automatically. Once the connection has been established, a menu that lists all of the tests available on the identified vehicle displays.

Menu options typically include:

- Read Codes
- Clear Codes
- Datastream
- Freeze Frame Data



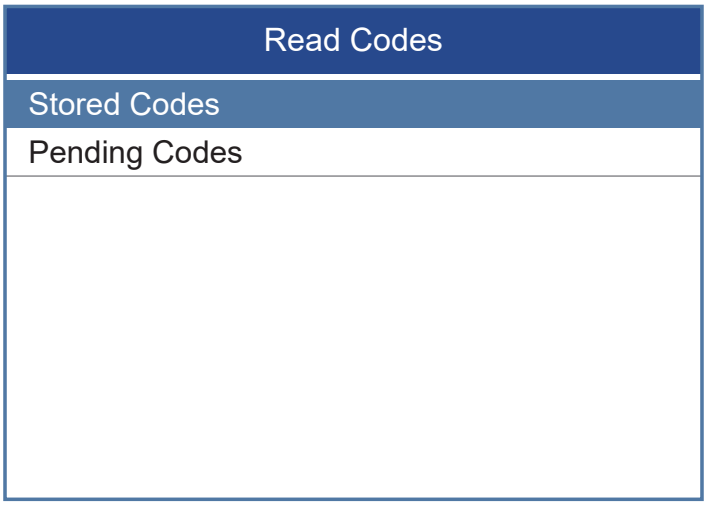
4.1 Read Codes

Read Codes menu lets you read stored codes, pending codes and permanent does found in the control unit. Typical menu options include:

- Stored Codes
- Pending Codes

To read codes from a vehicle:

1. Scroll with the **UP/DOWN** key to highlight **Read Codes** from Diagnostic Menu and press the **OK** key.
2. Select **Stored Codes or Pending Codes** and press the **OK** key to confirm.
3. A code list including code number and its description displays.



4.2 Codes

1. Press **UP/DOWN** key to highlight **Clear Codes** from Diagnostic Menu and press the **OK** key.
2. Follow the on-screen instructions and answer questions about the vehicle being tested to complete the procedure.
3. Check the codes again. If any codes remain, repeat the Codes steps.

4.3 Datastream

Datastream menu lets you view real time PID data from the electronic control module.
Press **OK** to display the full name of PID data after they are displayed.

4.4 View Freeze Frame Data

Freeze Data menu displays freeze frame data, a snapshot of critical vehicle operating conditions automatically recorded by the on-board computer at the time of the DTC set. It is a good function to help determine what caused the fault.
To view freeze frame data:
1. Select **Freeze Data** from the Diagnostic Menu. Details of freeze frame data displays.
2. Use the **UP/DOWN** arrow keys to scroll through data to select lines, and **OK/ESC** to scroll back and forth through different screens of data. If no freeze frame detected, the message "No freeze frame data stored!" is displayed.
3. Use the **ESC** key to return to Diagnostic Menu.

4.5 Read I/M Readiness Status Data

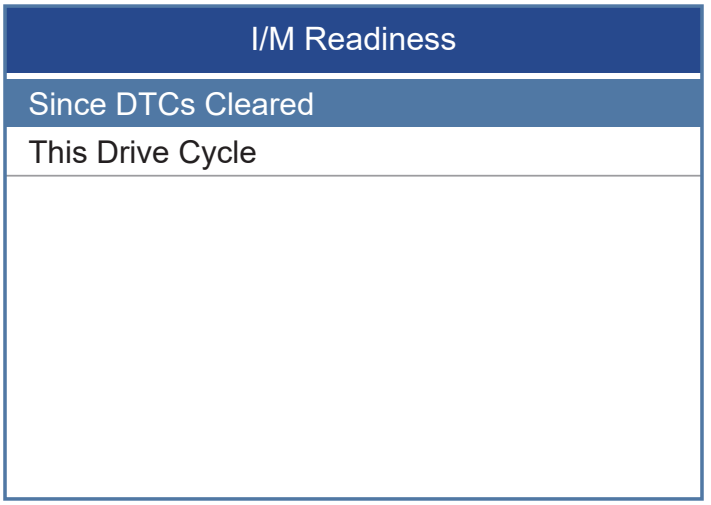
I/M Readiness option allows to view a snapshot of the operations for the emission system on OBDII/EOBD vehicles.
I/M Readiness is a useful function used to check if all monitors are OK or N/A. The vehicle's computer performs tests on the emission system during normal driving conditions. After a specific amount of drive time (each monitor has specific driving conditions and time required), the computer's monitors decide if the vehicles emission system is working correctly.

When the monitor's status is:

- OK - vehicle was driven enough to complete the monitor.
- INC (Incomplete) - vehicle was not driven enough to complete the monitor.
- N/A (Not Applicable) - vehicle does not support that monitor.

There are two types of I/M Readiness tests:

- Since DTCs Cleared - shows status of the monitors since the DTCs were last cleared.
- This Drive Cycle - shows status of monitors since the start of the current drive cycle.



Below is a list of abbreviations and names of OBD II monitors supported by the code reader.

No.	Abbreviation	Name
1	MIS	Misfire Monitor
2	FUE	Fuel System Monitor
3	CCM	Comprehensive Components Monitor
4	CAT	Catalyst Monitor
5	HCAT	Heated Catalyst Monitor
6	EVAP	Evaporative System Monitor
7	AIR	Air Conditioning Refrigerant Monitor
8	O2S	Oxygen Sensor Monitor
9	HRT	Oxygen Sensor Heater Monitor
10	EGR	Exhaust Gas Recirculation System Monitor

NOTE

- *To review I/M Readiness status, make sure that the ignition key is switched to ON with the engine off.*
- *Not all monitors are supported by all vehicles.*

To retrieve I/M Readiness Status data by typical way:

1. Scroll with **UP/DOWN** key to highlight **I/M Readiness** from Diagnostic Menu and press the **OK** key. If vehicle supports both types of monitors, a screen for monitor type selection displays.
   Select a monitor type and press the **OK** key.
2. If the vehicle is tested supports both types of monitors, following screen displays.

I/M Readiness	1/2
Since DTCs Cleared	
This Drive Cycle	

3. Depending on readiness test, one of these 2 screens will be present. Use the **UP/DOWN** arrow keys to scroll through data.
   Press the **ESC** key to exit.

This Drive Cycle1	
MIS	OK
FUEL	OK
CCM	OK
CAT	INC
HCAT	N/A
EVAP	OK
AIR	N/A

or

Since DTCs Cleared	1
MIL	ON
MIS	OK
FUEL	OK
CCM	OK
CAT	INC
HCAT	N/A
EVAP	INC

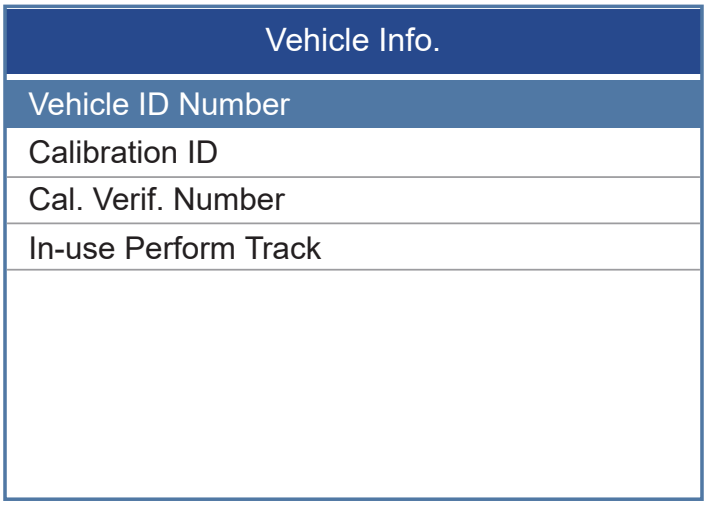
4.6 Request Vehicle Information

Vehicle Information allows to request the vehicle's VIN number, calibration ID(s) which identifies software version in vehicle control module(s), calibration verification numbers (CVN(s)) and in-use performance tracking on model year 2000 and newer OBD II compliant vehicles.
CVNs are calculated values required by OBD II regulations. They are reported to check if emission-related calibrations have been changed. Multiple CVNs may be reported for a control module. It may take several minutes to do the CVN calculation.
In-use performance tracking tracks performance of key readiness monitors.

NOTE
Available options will vary depending on the vehicle under test.

To request vehicle information:

1. Use the **UP/DOWN** key to highlight Vehicle ID Number. from Diagnostic Menu and press the **OK** key.
   Follow on-screen instruction and send the command to read vehicle information.
2. Use the **UP/DOWN** key to highlight an available option and press the **OK** key. A screen with details of the selected option displays.
3. Press the **ESC** key to exit and return.

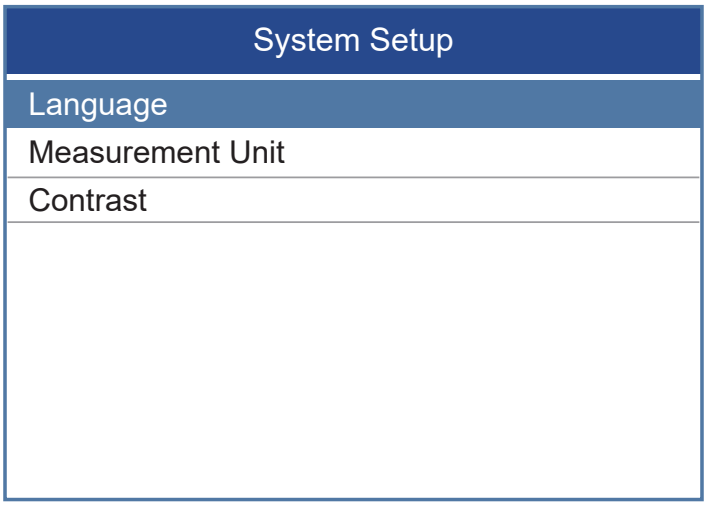


5 System Setup

This section illustrates how to program the code reader to meet your specific needs.

When Setup application is selected, following available service displays.

- Language: 8 languages for choose
- Measurement Unit: English and Metric
- Contrast: adjust LCD display contrast ratio



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WARRANTY

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