iLink Series Scan Tool
USER MANUAL

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 scan tool. 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.
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 Getting Started

iLink series is professional level diagnostic handheld tools, offering different features in vehicle systems diagnostics for a vast array of car manufacturers.
http://www.videnttech.com/product/FeaturedProfessionalScanTools/

1.1 Tool Descriptions

This section illustrates external features, ports and connectors of the scan tool.
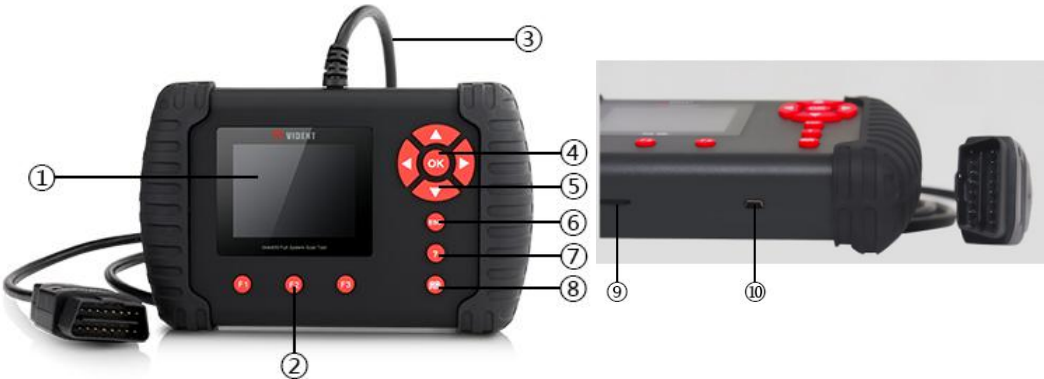
front and side view

1 **LCD Screen** －to display the software.

2 **Function Keys / Shortcut keys** - three keys that correspond with "buttons" on some screens for executing commands or provide quick access to most frequently used applications.

3 **Diagnostic Connector** – to connect to vehicle's DLC.

4 **OK Key** –to confirm the current operation.

5 Selection Keys – to select an option or scroll through a screen of data or text.

6 **ESC Key** – to returns to previous screen.

7 **HELP Key** – provide tips for diagnosis or for the tool itself.

8 **Reset Key** – Press and hold for 5 seconds for emergency reboots.

9 TF Card Port – holds the TF memory card for data backup and software update.

10 USB port －NOT IN USE

1.2 Accessory Included

1) **Scan tool**

2) **Diagnostic Cable**

3) **User's Manual** - instruction on tool operations.

4) **Password Paper** - provides serial no and password of each tool.

5) **Memory Card** - Used to store data and to upgrade the scan tool

6) **Blow molding case** - stores the scan tool and its accessories

7) **Software CD** - contains update client and user manual.

1.3 Specifications

Display: Backlit, 2.8" TFT color display

Working Temperature: 0 to 60 ℃ (32 to 140℉)

Storage Temperature: -20 to 70℃ (-4 to 158℉)

Power Supply: 8-18V vehicle power, 12V AC/DC power

Tool Dimensions: 194*117*47mm (L*W*H)

Gross Weight: 0.9 Kg

Protocols: ISO15765(CANBUS 11bit&29bit TP16,TP20,UDS,FIAT CAN,VOLVO CAN),ISO14230(KWP2000),ISO9141-2,J1850VPW,J1850PWM,KWP1281, KWP2089,KW81,KW82,ALDL,SCI,DSI,DSII,LUCAS,MELCO,BENIX, ISO7800, SIMENMS_ISO1,SIMENMS_ISO2

1.4 Preparation &Connections
1.4.1 Preparation
--Turn the vehicle ignition to ON position.
--Vehicle battery voltage should be 9~14 volts
--Throttle should be on a closed position.
1.4.2 Connecting to Vehicle
1. Locate the data link connector (DLC). The DLC is generally a standard 16 -pin connector located 12 inches from the center of the steering wheel, under or around the driver's side.
2. Plug the diagnostic cable into the vehicle DLC socket.
3. The scan tool automatically boots up.

1.5 System Setup

The System Setup functions allow you to adjust default settings and view information about the scan tool. Options are :
- Language
- Unit
- Beep Set
- Key Test
- LCD Test
- About
- Shortcuts
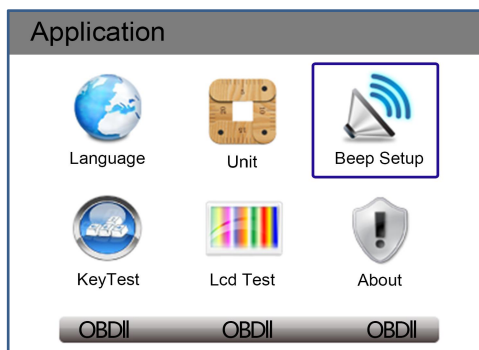
1.5.1 Select Language

English is the default language.
1. Select **Language** from Setup menu and press the **OK key**.

2. Press the **LEFT/RIGHT** arrow key select a language and press the **OK key** to confirm.

Application/Setup/Language

| English | 中 文 | Español |
| Deutsch | Français | 日本語 |

OBDII   OBDII   OBDII
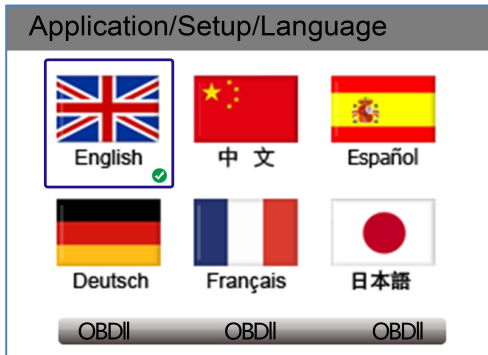
1.5.2 Unit of Measure

To change the unit setup:
1. Select **Units** from Setup menu and press the **OK key**.
2. Press the **LEFT/RIGHT** arrow key select an item and press the **OK key** to save and return.

Application/Setup

Langu...   ...p Setup

Unit of Measure

☑English   ☐ Metric

KeyTest   Lcd Test   About

OBDII   OBDII   OBDII
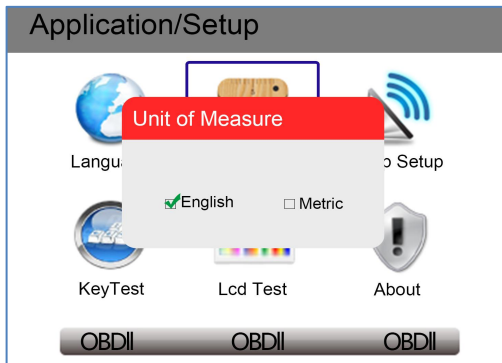
1.5.3 Beeper set

The default setting is Beep on.

1. Select **Beep Set** from Setup menu and press the **OK key**.

2. Press the **LEFT/RIGHT** arrow key to set the beep on or off and press the **OK key** to save.

Application/Setup

Langu...   ...p Setup

Beeper set

ON   OFF

KeyTest   Lcd Test   About

OBDII   OBDII   OBDII

3
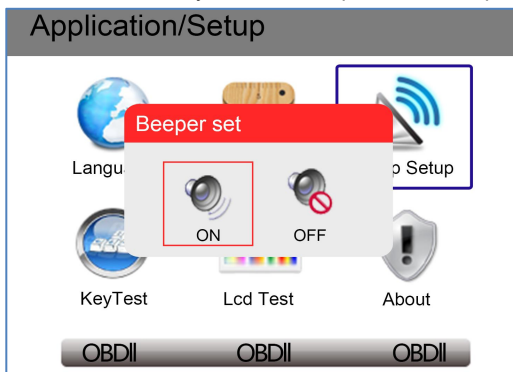
1.5.4 Key Test

This function checks if the keys are working properly.

1. Select **Key Test** from Setup menu and press the **OK key**.
2. Press any key to start test. The virtue key corresponding with the key you pressed will be highlighted on the screen if it works correctly. Otherwise, the key is not functioning properly.
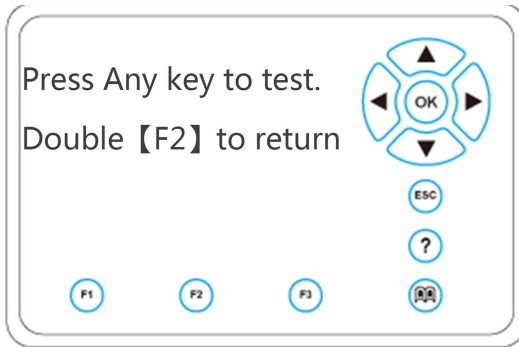
3. Click the F2 function key twice to exit.

1.5.5 LCD Test

LCD test checks if the LCD is working properly.

1. Select **LCD Test** from Setup menu and press the **OK key** to start test. Check if there are any missing spots in the LCD screen.
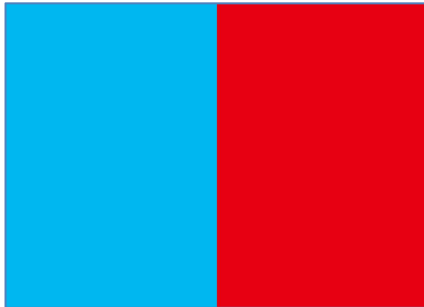
2. When completed, press the **ECS** key to exit.

1.5.6 About

Selecting Setup>About option opens a screen that show information about your scan tool, such as serial number and register password which may be required for product registration.

VIDENT
www.videnttech.com

Product Serial Number
4000315001361
Register password:0016b3
Copyright(C)2016 Vident Technology
Co., Ltd
All rights reserved

1.5.7 Configure Shortcut Keys

Selecting Shortcuts option lets you to change the functionality of the shortcut buttons.

To assign a function to a shortcut button:
1. Select **Shortcuts** from Setup menu and press the **OK key**. A screen with available shortcut keys displays.
2. Press the **UP/DOWN** arrow key select an shortcut key and press the **OK key**.

Shortcuts
Edit ShortCuts F1 Function
Edit ShortCuts F2 Function
Edit ShortCuts F3 Function
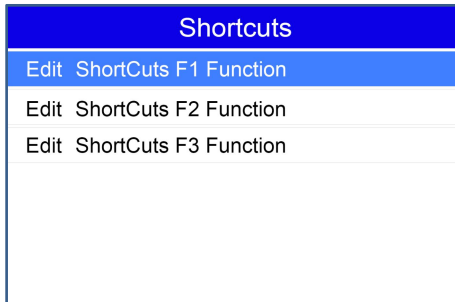
3. Scroll with the **UP/DOWN** arrow keys to highlight an application and press the **OK key** to assign the application to the shortcut key.

2 Diagnostic Operations

This section illustrates how to use the scanner to read and clear diagnostic trouble codes, and view "live" data readings and ECU information on controllers installed on the vehicles and also save "recordings" of the data readings.

Following applications are preloaded into the scanner:

- **OBDII/EOBD** – OBDII/EOBD diagnosis for all 9 generic OBD modes.
- **Scan** – Applicable System diagnosis on multi-brands.
  NOTE:
  Different models cover different systems.

- **Setup** – Basic tool setting.
- **Playback** – To access saved diagnostic data.

NOTE:
Following common maintenaces are mostly available in iLink400.
Other models has limited maintenances.

- **Oil Light Service/Reset** – Reset oil service light, oil inspection light, service mileage,

service intervals and more.
- **EPB** – Diagnosis and advanced service function of the electric parking brake system
- **BRT** – Battery configuration
- **DPF** – Diesel particulate filter regeneration
- **TBA/TPS** – Throttle body alignment
- **TPMS** – Tire Pressure Measuring Sensor Reset
- **SAS** – Steering angle sensor calibration
- **AFS** – Adaptive Front Lighting System
- **Sunroof Initialization**
- **Suspension Match**
- **Gearbox Match**
- **ABS Bleed**
- **Gear Learning**
- **Immobilizer Programming**
- **Injector Coding**

2.1 Vehicle Identification

The vehicle identification information presented is provided by the ECM of the vehicle being tested. Therefore, certain attributes of the test vehicle must be entered into the scan tool to ensure the data displays correctly. The vehicle identification sequence is menu driven, you simply follow the screen prompts and make a series of choices. Each selection you make advances you to the next screen.

It typically identifies a vehicle by any of the following means, The options available vary by vehicle manufacturer, not all the following options are available for all vehicles.

- Automatic VIN acquisition
- Manual VIN entry
- Manual vehicle selection
- Vehicle data recorder

2.1.1 Automatic VIN Acquisition

Automatic VIN Acquisition only available on some manufacturers. It allows to identifying a vehicle by automatically requesting the vehicle identification number (VIN).

1. When a vehicle make has been selected, the following screen displays. Select VIN acquisition from the menu, and press the OK key.

VIN Acquisition
VIN CODE automatic acquisition
VIN CODE manual acquisition
Vehicle type manual acquisition

2. The scan tool starts to communicate with the vehicle and read the Vehicle Specification or VIN Code automatically.

```
Automatic Selection


    The VIN code is 1FAHP2H81EG138476
    Are you sure ?



YES                                          NO
```
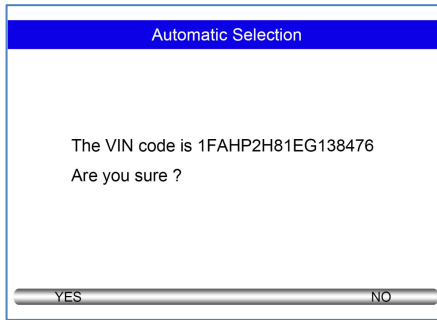
3. Answer **YES** if the Vehicle Specification or VIN code is correct and a menu of controller selection displays. Answer **NO** if it is incorrect, and you are required to enter the correct VIN number manually.

```
INPUT DATA

LFPM5 ACP591 A76342
                    VIN




Finish           Keyboard         Back
```
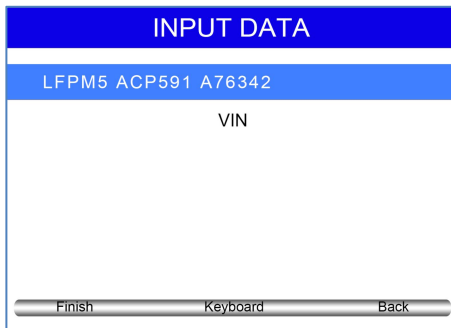
2.1.2 Manual VIN Entry

Manual VIN Entry identifies a vehicle by manually inputting a 17-digit VIN code.

1. Select manual VIN entry. A virtual keyboard opens for VIN entry.

```
Acquire VIN information



    Enter VIN manually or tap 'read' to
              acquire VIN




Finish           Keyboard         Back
```
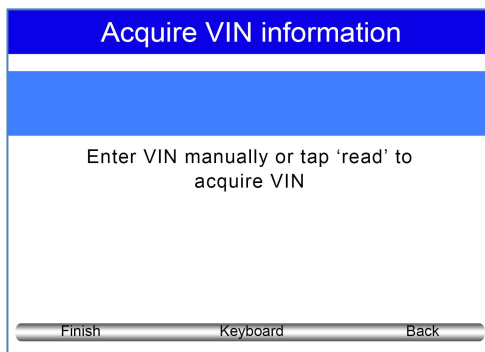
2. Input a valid VIN code and use the function key **Finish** to confirm. The scan tool starts to identify the vehicle.

2.1.3 Manual Vehicle Selection

Manual Vehicle Selection identifies a vehicle by making several selections according to certain VIN characters, such as sub-brand, model year, and engine size.

1. On each screen that appears, select the correct option and then press the OK key. Follow the on-screen prompts until the menu of controller selection displays.

Application/Scan/European			
Ferrari V10.00	Fiat V10.00	Jaguar V10.20	Lamborghini V10.00
Lancia V10.00	Landrover V10.00	Maserati V10.00	Maybach V10.00
OBDII	Test		OBDII

Select Application
System Tests
Model Tests
2012-2014 500 / 2012 500L / 2012 Panda
2011-2014 Freemont / 2012 Viaggio

Model Menu
UNO PICK-UP
131 TOFAS
500
BARCHETTA
BRAVO(198)
BRAVO VAN
BRAVO-BRAVA
CINQUECENTO
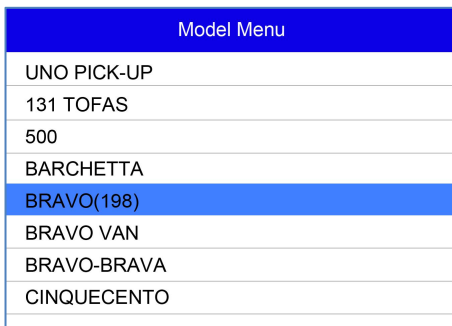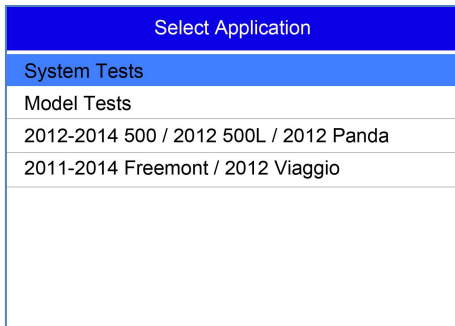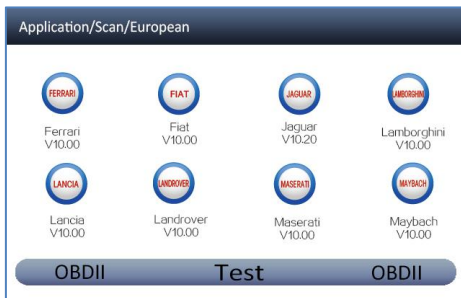
2.1.4 Save a Tested Vehicle Info.

The scan tool is able to save a tested vehicle by creating a Vehicle Record. It provides quick identification of previously tested vehicle(s).

1. Identify the vehicle by any of the means above, and run an automatic system test by selecting **Auto Scan**.

Main Groups
Auto Scan
Control Unit

8
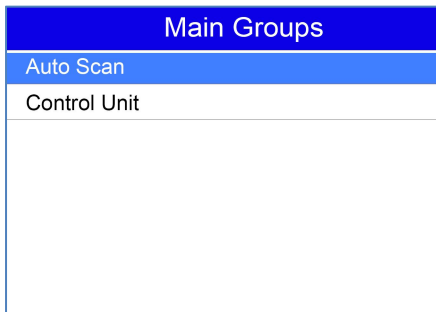
2. When the test finished, press the function key **Save** on the screen, and a screen with a virtual keyboard displays.

```
┌─────────────────────────────────────┐
│         Save vehicle record          │
│                                      │
│   V W -                              │
│                                      │
│                                      │
│  Q W E R T Y U I O P   7 8 9         │
│  A S D F G H J K L *   4 5 6         │
│  Z X C V B N M - ' /   1 2 3         │
│  Caps Lock     SPACE     . 0 -       │
│                                      │
│   Finish        Previous   Backspace │
└─────────────────────────────────────┘
```

3. Enter a unique name for this vehicle and save it, and you will see this new vehicle in Vehicle Data Recorder menu.

```
┌─────────────────────────────────────┐
│            Vehicle record            │
├─────────────────────────────────────┤
│  BMW E34                             │
├─────────────────────────────────────┤
│  Fiat bravo（198）                   │
│                                      │
│                                      │
│                                      │
│                                      │
│                                      │
│   YES                          NO    │
└─────────────────────────────────────┘
```
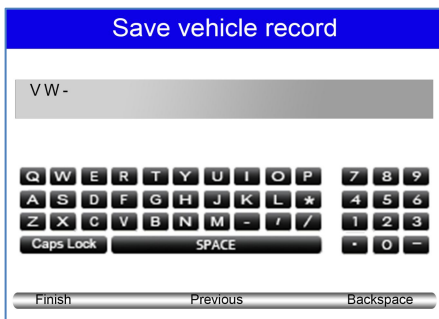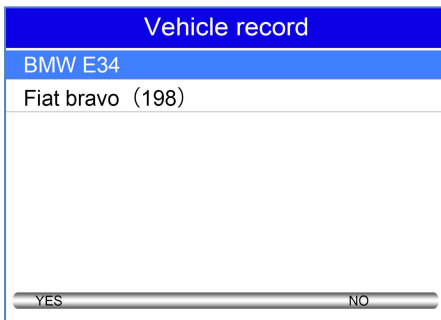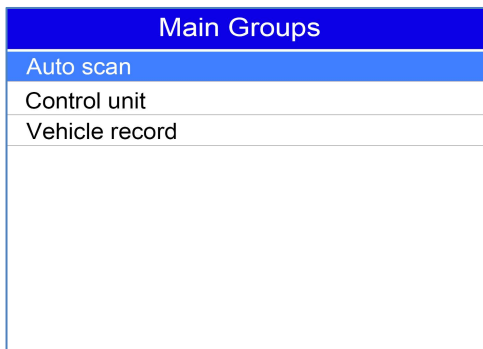
To identify a previously tested vehicle:
1. Select **Vehicle record** and press the **OK key** to start.

```
┌─────────────────────────────────────┐
│             Main Groups              │
├─────────────────────────────────────┤
│  Auto scan                           │
├─────────────────────────────────────┤
│  Control unit                        │
├─────────────────────────────────────┤
│  Vehicle record                      │
│                                      │
│                                      │
│                                      │
│                                      │
│                                      │
│                                      │
└─────────────────────────────────────┘
```

2. Select the vehicle under test and press the **OK key**.

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2.2 System Selection

When you have completed the identification of vehicle, a menu for selecting systems to test displays. Menu options typically are

- Auto Scan
- Control Unit

2.2.1 Auto Scan

Auto Scan performs an automatic system test to determine which control modules are installed on the vehicle and obtain diagnostic trouble codes (DTCs) overview.

1. Select Auto Scan from the menu and press OK to start.

Main Groups
Auto Scan
Control Unit
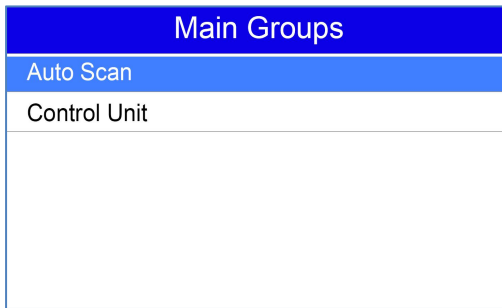
2. When auto scan finishes, a menu with a list of installed controllers together with their DTC overview displays.

	Auto Scan		
100%			
1	ABS Brakes	Fault	3
2	Airbags	Pass	No Fault

Quick Erase   Pause   Display DTC
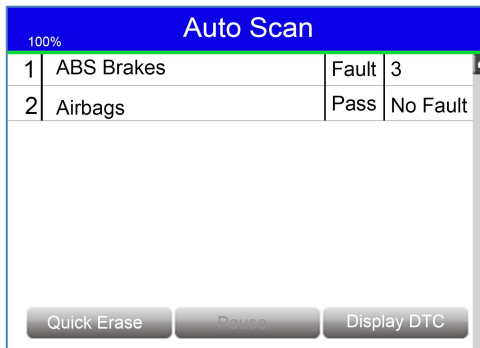
3. If there is diagnostic trouble code(s) detected in a control unit, press the function key corresponding with **Display DTC** on the screen to view details of code information, and press the function key **Quick Erase** to clear them.

4. Select the system you would like to test, and press the **OK key**. When the scan tool has established connection with the vehicle, the Function Menu displays.

Function menu
Read Codes
Erase Codes
ECU Information
Live Data
Special Functions

2.2.2 Control Unit

Control Unit screen displays all controllers available to this specific vehicle manufacturer.

1. Select **Control Unit** from the menu and press the **OK key**. A controller menu displays.

Main Groups
Auto scan
Control Unit

2. Select the system you would like to test. When the scan tool has established connection with the vehicle, the Function Menu displays.

Common
01-Engine
02-Auto Trans
03-ABS Brakes
15-Aerbags

2.3 Diagnostic Function

After a system is selected and the scan tool establishes communication with the vehicle, the Function Menu displays. Typically the menu options are

- Read Codes
- Erase Codes
- Freeze Frame
- ECU Information
- Live Data
- Special function

2.3.1 Read Codes

Read Codes menu lets you read trouble codes found in the control unit. Typical menu options include:

- Present/Permanent/Current Codes
- History Codes

Present/Permanent/Current codes stored in a control module are used to help identify the cause of a trouble or troubles with a vehicle. These codes have occurred a specific number of times and indicate a problem that requires repair.

History codes are also referred to as past codes that indicate intermittent DTCs that are not currently active.

1. Select **Read Codes** from Function Menu and press the **OK key**. A code list including code number and its description displays.
2. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

2.3.2 Erase Codes

Erase Codes menu lets you to clear all current and stored DTCs from a selected control module. Also it erases all temporary ECU information, including freeze frame. Erase Codes does not fix the problem that caused the fault! DTCs should only be erased after correcting the condition(s) that caused them.

1. Select **Erase Codes** from Function Menu and press the **OK key**. Follow the on-screen instructions to complete the procedure.

Erase Codes
DTC and Freeze Data will be lose Do you wish to continue?
YES   NO
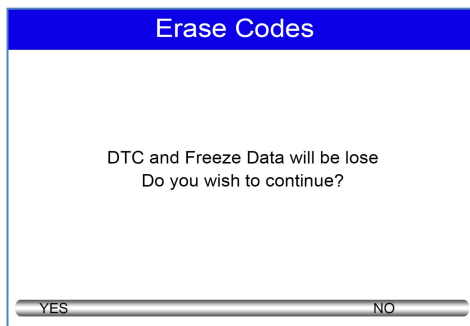
2.3.3 Freeze Frame Data

Freeze Frame 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.

Freeze Frame Data	
00256	
Fault Status	01100000
Faule Priority	0
Fault Frequency	1
Mileage	2171 km
Time Indication	0
Date	2003:1422
Save	Back

2.3.4 ECU Information

ECU Information screen displays the identification data of the control module under test, such as the control module identification string and the control module coding.

1. Select **ECU Information** from the menu and press the **OK key**.

2. A screen with detailed information of the selected control module displays.

2.3.5 Live Data

Live Data menu lets you view and record real time PID data from a selected vehicle electronic control module.

Menu options typically include:

- Complete Data List
- Custom Data List

2.3.5.1 Complete Data List

Complete Data List menu lets you view all live PID data from a selected system.

| Complete List		
ENGINE SPEED	0	rpm
VEHICLE SPEED SENSOR	11	mph
ABSOLUTE THROTTLE POS.	0.4	%
SHIFT LEVER SWITCH	PN	
BATTERY VOLTAGE	0.1	V
WHEEL SPD SENSOR-FL	1	mph

Pause   One Graphic   Save

1. Scroll with the up and down arrow keys to highlight a line, if the **One Graphic** on the bottom is highlighted, it indicates graphing is available for the selected line. Press the function key **One Graphic** to display the PID graph.
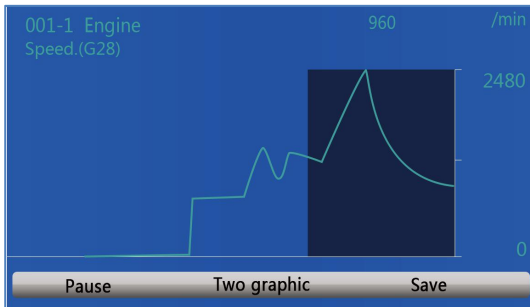
2. Press the function key **Two Graphics** to display two PID graphs in one screen.
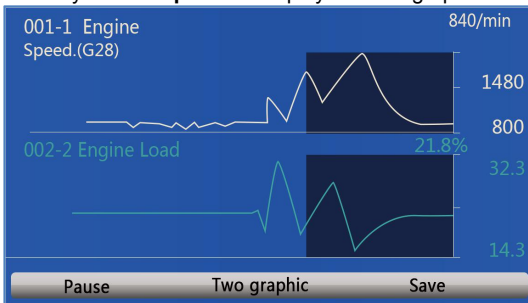
3. Press the function key **Merge Graph** to display two PID plots in one coordinate for easy and intuitive diagnosis.
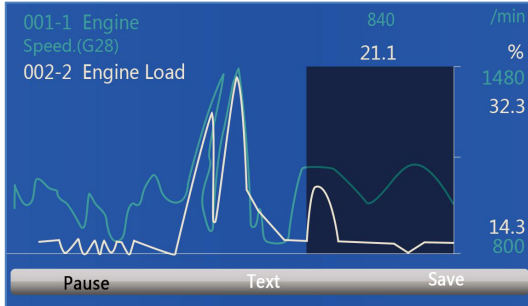
4. To record the data to memory of the scan tool, use the function key **SAVE**, and press **Stop Saving** to stop recording at any time.
5. Press **Text** to return to text viewing of PID data.
6. Select **Pause** to suspend collecting data from the scan tool and use the **Start** key to resume collecting data.
7. Press the **ECS key** to return to the previous menu.

2.3.5.2 Custom Data List

Custom Data List menu lets you to minimize the number of PIDs on the data list and focus on any suspicious or symptom-specific data parameters.

1. Select **Custom List** from the menu and press the **OK key**. The custom data stream selection screen displays. Scroll with the up and down arrow keys to highlight a line, press the **OK key** and then repeat the action to make more selections.

Custom List	
✔ 001 -1 Engine Speed(G28)	1
☐ 001 -2 Coolatnt Temperature(G62)	2
☐ 001 -3 Lambda Control Bank 1	
☐ 001 -4 Basic Setting Requirements	
☐ 002 -1 Engine Speed(G28)	

Select All   Clear All   View Data

2. When finished selection, use the function key **VIEW DATA** to display selected items.

2.3.6 Special Functions(&Active Test)

Note: This function is available in iLink400,iLink410 and iLink450 for its own covered systems.

The Active Test function is used to access vehicle-specific subsystem and component tests. Available tests vary depending on the manufacturer, year and model, and only the available tests display in the menu.

During an active test, the tester outputs commands to the ECU in order to drive the actuators. This test determines the integrity of the system or parts by reading the engine ECU data, or by monitoring the operation of the actuators, such as switching a solenoid, relay, or switch, between two operating states.

Selecting Active Test opens a menu of test options that varies by make and model. Selecting a menu option activates the test. Follow all screen instructions while performing tests. The content and pattern of the on-screen information vary according to the type of test being performed. Some toggle and variable control tests display Active Test Controls at the top of the screen with data stream information below, or vice versa.

1. Choose the electronic control module, such as **ABS**.

ABS
Diagnostic Trouble Codes(DTC)
Data Display
Special Functions
Module Information

2. Enter **Special Functions**

Special Functions
Automated Bleed
ABS Motor
ABS Relay
Tire Size Calibration
Lamp Tests
Solenoid Tests

3. Choose available active test such as **Solenoid Tests**.

Solenoid Tests
Left Front Isolation Valve
Left Front Dump Valve
Right Front Isolation Valve
Right Front Dump Valve
Rear Isolation Valve
Rear Dump Valve

Also this special function is designed to provide you with quick access to the vehicle systems for various scheduled service and maintenance performances. The typical operation screen is a series of menu driven executive commands. By following the on-screen instructions to select appropriate execution options, enter correct values or data, and perform necessary actions, the system will guide you through the complete performance for various service operations.

Special Functions
Automated Bleed
ABS Motor
ABS Relay
Tire Size Calibration
Lamp Tests
Solenoid Tests

3 Common Special Services/Functions

This section gives brief instructions of the most commonly required service and maintenance operations. Typical service operation screens are a series of menu driven executive commands. Follow on-screen instructions to complete the operation.

Service and maintenances can be found under the main menu or Maintenance menu,meanwhile they can be found under the specific control module too.

3.1 Oil Light Service/Reset

a)If the service lamp is on, you must provide service for the car. After service, you need to reset the driving mileage or driving time so that the service lamp turns off and the system enables the new service cycle. b)After changing engine oil or electric appliances that monitor oil life, you need to reset the service lamp.

3.2 ABS bleeding

When the ABS contains air, the ABS bleeding function must be performed to bleed the brake system to restore ABS brake sensitivity.

If the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced, the ABS bleeding function must be performed to bleed the ABS.

3.3 Battery matching

Use the car diagnostic device to reset the car battery monitoring unit to clear original fault information about insufficient battery electric quantity, and match the battery again and monitor battery based on current battery information.

Battery matching must be performed in the following cases: a) Main battery is replaced. Battery matching must be performed to clear original electric quantity insufficiency information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start&stop function, sunroof without one-key trigger function, power window without automatic function. b) Battery monitoring sensor. Battery matching is performed to re-match the control module and motoring sensor to detect battery electric quantity use information more accurately, which can avoid the instrument panel displaying false information.

3.4 Electronic Parking Brake (EPB) Service

EPB Service menu allows you to perform the service and maintenance of brake systems, including deactivation and activation of the brake control system, bleeding brake fluid, opening and closing brake pads, and setting brakes after disc or pad replacement, on multiple brands of vehicles where electronic brake systems are fitted.

3.5 Diesel Particulate Filter (DPF) Regeneration

DPF Regeneration menu let you perform the DPF cleaning to clear the blockage through continuous burning of the particulates captured in the DPF filter. When a DPF regeneration cycle is completed, the DPF light automatically goes off.

3.6 TPS(Throttle Body Alignment)

Use the car decoder to initialize the throttle actuation element so that the ECU learning value is returned to the initial status to more accurately regulate throttle (or idle motor) operations to control intake air quantity.

Throttle matching must be performed in the following cases: a) The ECU is replaced and the ECU does not yet store throttle working features. b) The ECU is disconnected and the ECU memory is lost. c) The throttle assembly is replaced. d) The intake passage is replaced or removed, which affects idle speed control by ECU and throttle body. e) The throttle is cleaned. Although the idle throttle potentiometer features are not changed, with the same throttle opening, the intake quantity has changed and idle speed control features have changed.

3.7 Steering Angle Sensor (SAS) Calibration

SAS Calibration menu let you perform calibration of the Steering Angle Sensor, which permanently stores the current steering wheel position as straight-ahead in the sensor EEPROM. On successful calibration of the sensor, its fault memory is automatically cleared.

3.8 TPMS Adaptation

TPMS Service menu allows you to check the tire sensor IDs from the vehicle ECU and to perform TPMS programming and reset after tires and/or TPM sensors are replaced and/or tires are rotated.

3.9 Immobilizer

To prevent the car being used by unauthorized keys, the anti-theft key matching function must be performed so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car.

When the ignition switch key, ignition switch, combined instrument panel, ECU, BCM, or remote control battery is replaced, anti-theft key matching must be performed.

3.10 Injector Coding

Write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder so as to more accurately control or correct cylinder injection quantity.

After the ECU or injector is replaced, injector code of each cylinder must be confirmed or re-coded so that the cylinder can better identify injectors to accurately control fuel injection.

3.11 Gear Learning

Crankshaft position sensor adaptive learning. The crankshaft position sensor learns crankshaft tooth machining tolerance and save to the computer to more accurately diagnose engine misfires. If tooth learning is not performed for a car equipped with Delphi engine, the MIL turns on after the engine is started. The diagnostic device detects the DTC P1336 'tooth not learned'. In this case, you must use the diagnostic device to perform tooth learning for the car. After tooth learning is successful, the MIL turns off.

After the engine ECU, crankshaft position sensor, or crankshaft flywheel is replaced, or the DTC 'tooth not learned' is present, tooth learning must be performed.

3.12 Suspension Match

This function is used to adjust car body height.

When the car body height sensor and control module in the air suspension system are replaced or the car level is incorrect, perform this function to adjust the car body height sensor for horizontal calibration.

3.13 Sunroof Initialization

This function is used to set sunroof lockup close, close on rainy days, slide/tilt sunroof memory function, outside temperature threshold, etc.

3.14 Gearbox Match

This function is used to learn the gearbox to improve shift quality.

After the gearbox is dismounted or repaired (after battery powered off for some car series), shift delay or impact is caused. In this case, perform this function to make the gearbox compensate automatically according to driving conditions so as to reach more comfortable and ideal shift quality.

3.15 AFS (Adaptive Front Lighting System)

This function is used to initialize the adaptive headlight system. The adaptive headlight system determines whether to automatically turn on the headlight according to ambient light intensity, monitors driving speed and body posture, and adjusts the headlight lighting angle.

4 OBDII/EOBD Diagnostics

When **Diagnostics** 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
- Freeze Frame Data
- Erase Codes
- Live Data
- I/M Readiness
- O2 Sensor Test
- On-board Monitor Test
- Component Test
- Vehicle Information

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
- Permanent Codes

To read codes from a vehicle:

1. Press the **Read** hot key to directly read the codes from home screen. Or scroll with the **UP/DOWN** key to highlight **Read Codes** from Diagnostic Menu and press the **OK** key.
2. Select **Stored Codes/Pending Codes/ Permanent Codes** and press the **OK** key to confirm.
3. A code list including code number and its description displays.

4.2 Erase Codes

There are two ways to erase codes:

- Press the **Erase** hot key to erase codes from home screen.
- Traditional way: select Erase Codes from the diagnostic menu.

1. Press the **Erase** hot key to directly erase the codes from the home menu. Or use the **UP/DOWN** key to highlight **Erase 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 Erase Codes steps.

4.3 Live Data

Live Data menu lets you view, record and playback real time PID data from the electronic control module.

Menu options typically include:

- View Data
- Record Data
- Playback Data

4.3.1 View Data

The **View Data** function allows real time viewing of the vehicle's electronic control unit's PID data, including sensor data, operation of switches, solenoids and relays.

Menu options typically include:

- Complete Data
- Custom Data
- Unit of measure (Please refer to Chapter 1.5.2)

4.3.1.1 Complete Data Set

Complete Data Set displays all supported PIDs of the vehicle being tested.

1. Use the **UP/DOWN** key to highlight **Live Data** from Diagnostic Menu and press the **OK** key.
2. Select **View Data** or **Complete Data Set** from the list and press **OK** key to confirm.
3. Press the **OK** key to view PID graph if the PID gives a numeric reading.

4.3.1.2 Custom Data List

Custom Data List menu lets you to minimize the number of PIDs on the data list and focus on any suspicious or symptom-specific data parameters.

1. Select **Custom List** from the menu and press the **OK** key.
2. Use the **RIGHT** key to select or deselect a line or press **LEFT** key to deselect all if needed. Press the **OK** key to confirm and **ESC** key to cancel.

4.3.2 Record Data

The **Record Data** function is used to record PIDs to help diagnose intermittent drivability problems that can't be determined by any other method.

Menu options typically include:

- Complete Data
- Custom Data
- Unit of measure (Please refer to Chapter 1.5.2)

NOTE
There are two types of trigger methods used.

- Manual Trigger---triggers recording whenever operators press the **OK** key.
- DTC trigger--- automatically triggers recording when a code is detected by vehicle. DTC Trigger is not available on all vehicles. Some vehicles need to be driven for a long period of time to store a code after a drivability fault occurs. If **DTC trigger** is selected to make a recording, there might not be drastic change in the data before and after trigger.

To record data:
1. Select Record data from the menu and press the **OK** key.

2. Refer to **View Data** to set up **Complete Data Set** or **Customer Data Set** to record.

3. If the recording is to be overwritten, selected **Yes**; if data is not to be overwritten, pick **No** to return to Select Memory screen and choose another one.

4. If **Manual Trigger** is selected, following screen displays:

5. If **DTC Trigger** is picked, following screen displays:

6. Press the **OK** key to start recording or wait codes to trigger.

NOTE
Different vehicles communicate at different speeds and support a different number of PIDs. Therefore, the maximum number of frames that can be recorded varies.The code reader keeps recording data until

- the memory is full.
- the operator presses the **ESC** key.

7. After recording, the code reader displays a prompt to **Playback.**

8. Select **YES** to view recorded data; pick **NO** or press the **ESC** key to return to **Record Data**.

4.3.3 Playback Data

The **Playback Data** is used to playback recorded PID data.
1. Scroll with the up and down arrow key to select **Playback Data** from the Menu.

2. Use the **UP/DOWN** key to select a memory area that is marked with an asterisk (*) and press the **OK** to confirm.

4.4 View Freeze Frame

Freeze Frame 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.

1. Select **View Freeze Frame** from the Diagnostic Menu. Details of freeze frame data displays.

2. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys 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

To retrieve I/M Readiness Status data :

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 driving cycle	
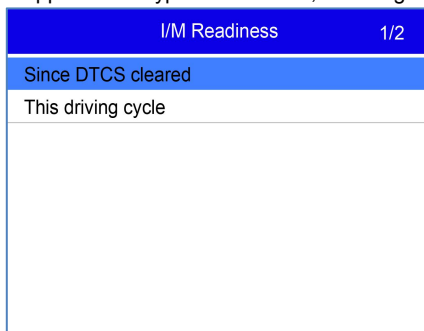
3. Depending on readiness test, one of these 2 screens will be present. Use the up and down arrow keys to scroll through data. Press the **ESC** key to exit.

This driving cycle	1
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 O2 Monitor Test

1. Use the **UP/DOWN** key to highlight **O2 Monitor Test** from Diagnostic Menu and press the **OK** key. Use the **UP/DOWN** key to highlight an O2 sensor and press the **OK** key to confirm.

2. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

3. Press **OK** key to view data of selection.

4. Press the **ESC** key to exit and return.

4.7 On-Board Monitor Test

The On-Board Monitor Test function is useful after servicing or after clearing a vehicle ECU's memory. It receives test results for emission-related powertrain components and systems that are not continuously monitored for Non-CAN vehicles. And for CAN vehicles, it receives test data for emission-related powertrain components and systems that are and are not continuously monitored. It is vehicle manufacturer who is responsible for assigning test and component IDs.

1. Use the **UP/DOWN** key to highlight **On-Board Monitor Test** from Diagnostic Menu and press the **OK** key.

2. Depending on the protocol the vehicle used, one of these 2 screens shows.

On-Board Monitor Test	1/25
EGR MON.B1S1	
EGR MON.B1S2	
EGR MON.B2S1	
EGR MON.B2S2	
Catalyst Mon.B1	
Catalyst Mon.B2	
EGR Monitor Bank 1	

Or

On-Board Monitor Test	3/5
Oxygen Sensor Monitors and Const...	
O2 Sensor Heater System Time to...	
Exhaust Gas Recirulation System...	
Ehancad Evaporative System Monit...	
Catalyst Efficiency Monitor	

3. Use the **UP/DOWN** key to highlight a test group and press the **OK** key to confirm. A screen with details of the selected sensor displays. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.
4. Press the **ESC** key to exit and return.

4.8 Component Test

Component Test allows the code reader to control operation of vehicle components, tests or systems.

1. Use the UP/DOWN key to highlight Component Test from Diagnostic Menu and press the OK key.
2. Use the **UP/DOWN** key to highlight a system or component, press the **OK** key to start test and the code reader displays the message "Command Sent!"
3. Press the **ESC** key to exit and return.

4.9 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 OBDII 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.

To request vehicle information:
1. Use the **UP/DOWN** key to highlight **Vehicle Info.** 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 Playback Data

The PlayBack data function allows viewing test results recorded by the scan tool.
1. Select **PlayBack** from home screen and press the **OK key**.

2. A screen with a list of test records displays. If no data is recorded, the message "No Data available!" is displayed.
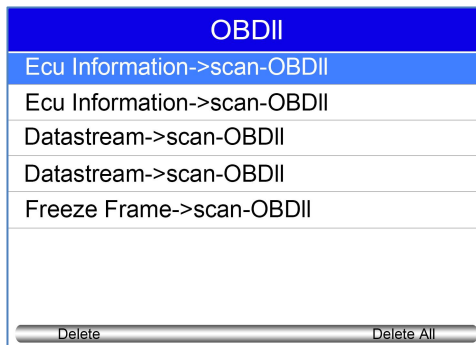
3. Scroll with the arrow keys to select desired testing entries and press the **OK key**. Details of the test record displays.

1 of 2 Frame		
DTC_CNT	0	
FUEL SYS1		
FUEL SYS1		
LOAD_PCT		%
ECT		℉
SHRTFT1		%

Pre Frame   Print   Next Frame

4. If you are reviewing live data or freeze frame data, use the function key **Next Frame** or **Pre. Frame** to scroll through all possible frames when necessary.
5. To erase a record, scroll with the arrow keys to highlight it and press the function key **Delete**. To delete all records, press the function key **Delete All**. Answer **Yes** to delete and **No** to quit.

6. Software Update and Printing

To apply software updates to the tool you will need a Windows PC/Laptop and an TF Card Reader.

6.1 Registration part 1 - Create an account
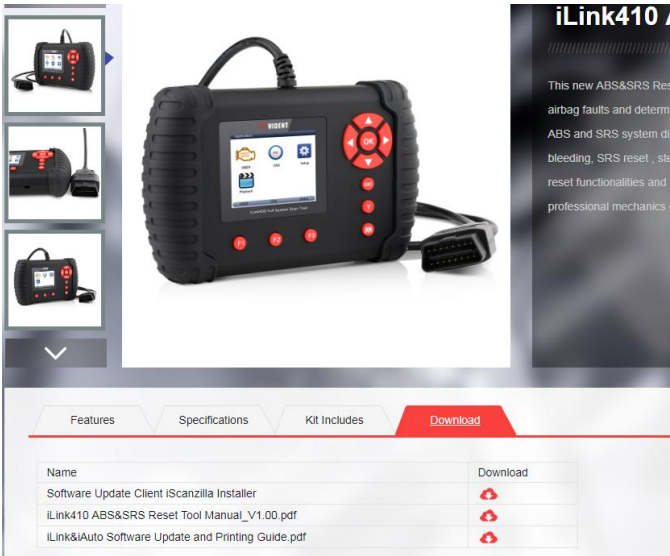
Firstly you need to create an account with Vident and register your tool. This can be done through the update software iScanzilla or through our website.

1. Just select your tool from the list on the Vident>Support&Service>Update Client and Manuals page (http://www.videnttech.com/support/update/)   and follow the instructions to download the latest version of iScanzilla.

In the package you can find a disc preloaded with iScanzilla. You can install from disc directly too.

iLink400 Update Gu...
iLink400 Update Guide v...

iLink400/450/440/41...
iScanzilla Installer

Alternatively, you could download the update client from our website. It's right under the download tab of individual product page.

2. The file downloaded will be a compressed zip file. Open that file and run the installer inside it.

3. Once installed, open the iScanzilla software, click the Register button and complete the registration form to create your user account.

Alternatively, you can click the **Sign Up** button on the right upper side of our website to create an user account.

## 6.2 Registration part 2 - Add your tool to the account

Note: For new user of Vident products(iLink&iAuto series), when you insert TF card into computer and run iScanzilla, registration is automatically finished.
For user who already have one scan tool(iLink&iAuto series)registered, please register manually as follows:
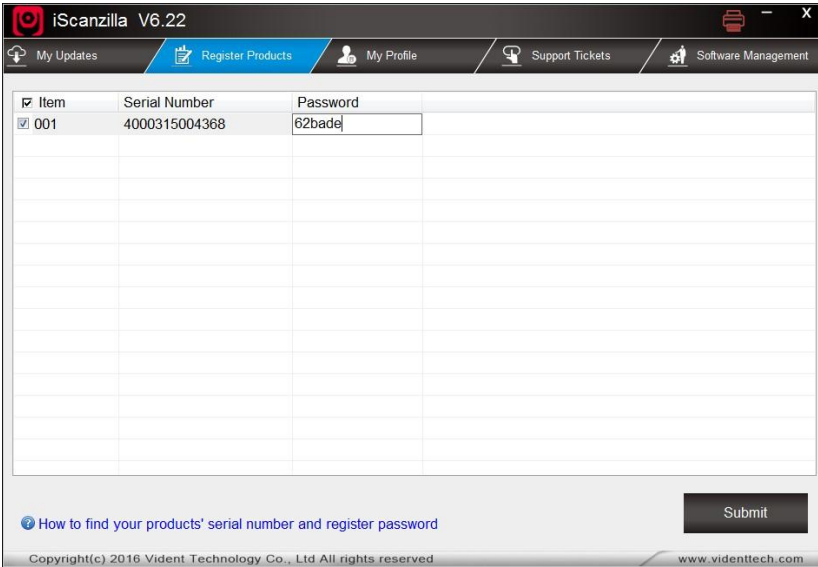
To register the tool, you will need the tool's Serial Number and 'Register Password'.
You can find these on the tool by selecting Setup > About.

Or you can check the Password Paper in the package as follows:

iLink Series Scan Tool User Manual V1.0
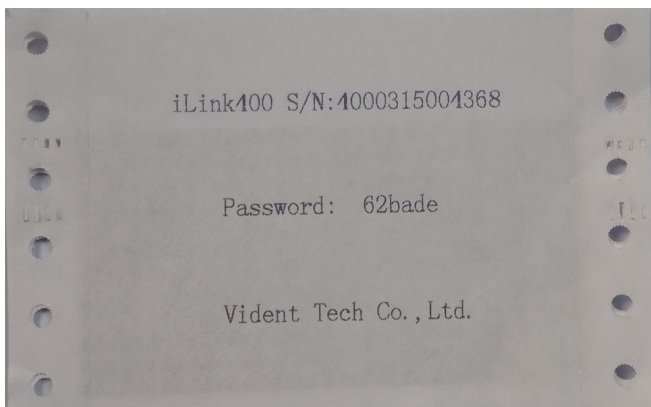
When logged into iScanzilla, click the 'Register Products' icon.

2. On the 'S/N Registration' tab, put a tick in the box marked '001' then enter the product's serial number and password, and click Submit.
3. A confirmation box should be shown confirming successful registration.

Alternatively, you can register the product in the member center when logged in on our website.

6.3 Updating your tool

1. Now close the iScanzilla software, remove the TF card from your tool (making sure the tool is turned off first!) and connect it to the PC via an TF card reader.
2. Once Windows has detected the TF card, run the iScanzilla software and login again. click the 'My Updates' button. After a few seconds, a list of the available software updates will appear.
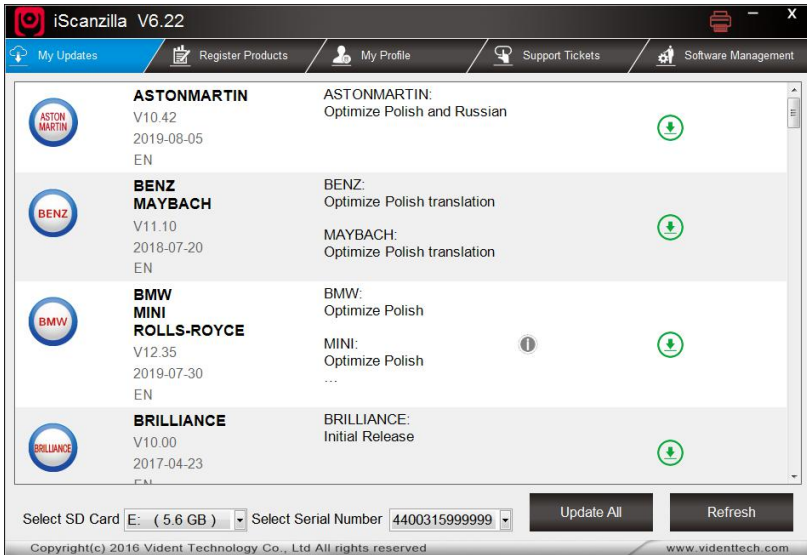
Ensure that the correct serial number is displayed in the drop-down list.

3. Click the Update button to download and install available updates.
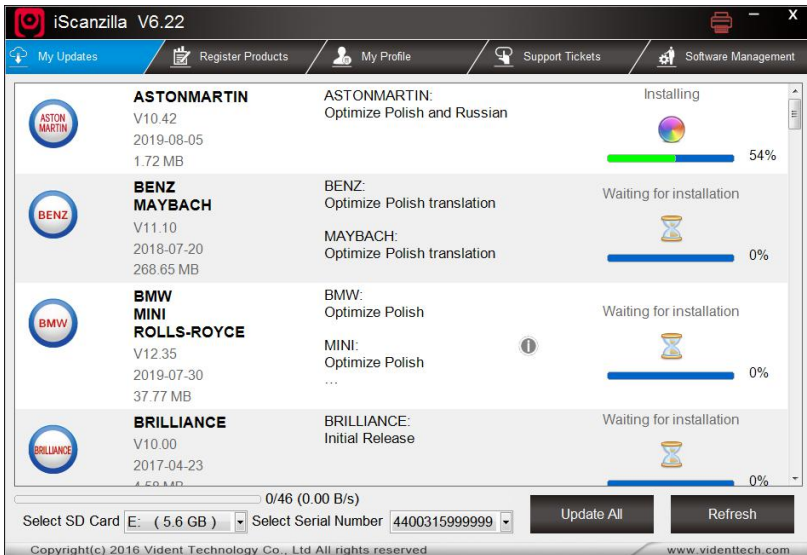
Please note: the update process can take a long time. If your tool has not been updated recently, it may take a few hours for the update process to complete. Once the update has completed, don't forget to 'safely remove' the SD card in Windows before unplugging it, to avoid the possibility of data corruption.

6.4 Renewals

If your free updates ran out, your tool will continue to function - it will not 'time out' - but you will no longer be able to access the update servers. Should you wish to continue updating your tool, you will need to purchase an update package. Please go to our website and log in to process the purchasing.
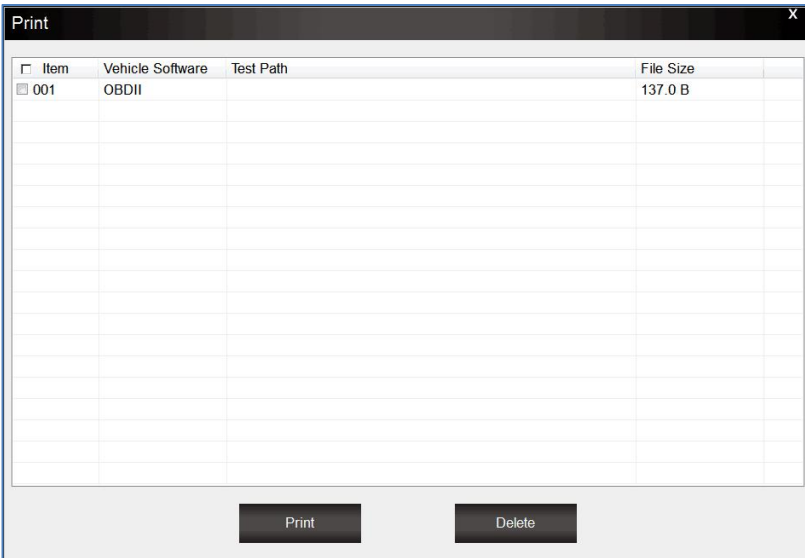
6.5 Printing Data

It's very easy to print out the test result through iScanzilla.
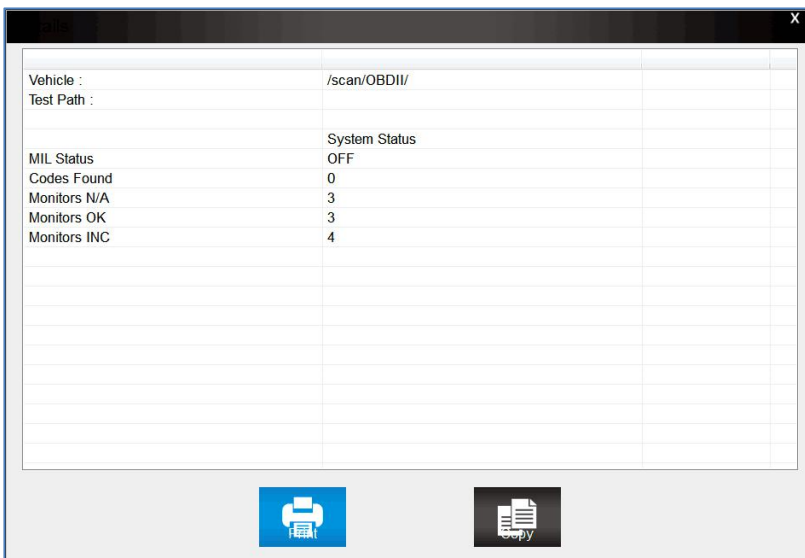
1.Click the ⎙ Button located on the upper side of iScanzilla. You can enter the print screen without logging in iScanzilla.
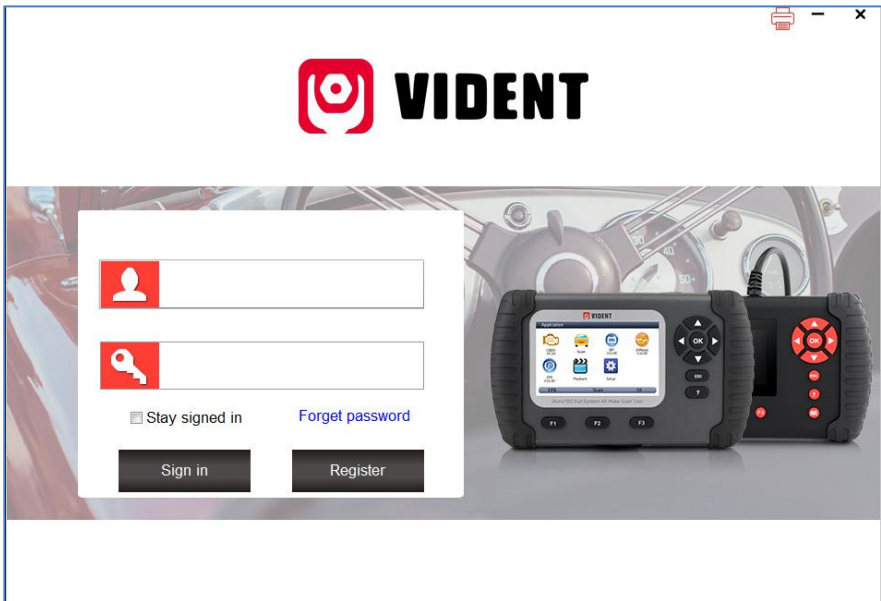
2.All data saved/stored in the TF card would appear on screen.

☐ Item	Vehicle Software	Test Path	File Size
☐ 001	OBDII		137.0 B

Print	Delete

3.Tick a piece of data to either review it or print it out.

Vehicle :	/scan/OBDII/	
Test Path :		
	System Status	
MIL Status	OFF	
Codes Found	0	
Monitors N/A	3	
Monitors OK	3	
Monitors INC	4	

🖨 Print   📋 Copy

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Visit our website
www.videnttech.com

For Technical Assistance, send us email
support@videnttech.com