

inspectwise

Trouble Code Scanner

ELM327 Wifi V1.5 OBD2

USER MANUAL



Thank You!

Thank you for choosing this InspectWise® diagnostic tool. We always endeavor to bring you products that makes car inspections easy and thorough.

To always ensure the optimal functioning and performance of your product, we would like to advice the following.

1. Before using this product for the first time, carefully read the instructions in this manual and always adhere to these.
2. If you have any further questions or you want to see instruction videos, visit www.InspectWise.net/manuals/, or for any assistance, you can rest assured that we are just a call away.



Thank you again for choosing our products!



Brief Introduction

The ELM327 OBD2 Interface is a car diagnostic tool that is used to transmit data from OBD2 compliant vehicle to Laptop Computers, Desktop Computers, Android Smartphones, Android Tablets, Apple iPhones and iPads. The technology that it provides with allow you to receive real-time information from the ECU (vehicles computer) and to read and clear trouble codes associated with the Check Engine Light.

The car diagnostic tool can be used with most OBD2 compliant vehicles and interfaces are compatible for use with Windows, Mac OSX, iPhone, iPad and Android Smartphones and Tablets. Some software applications have nice graphics while others have robust logging for diagnostic purposes. These scanners can be used for professional or entertainment purposes.



LED Indicators

1. Power – Red Led: Indicates that the adapter is turned on. This should stay on all the time when the device is connected.
2. Tx – Yellow Led: Blinks when data is sent from the device to the vehicle.
3. Rx – Green Led: Blinks when data is sent from the vehicle to the device.
4. Tx – Yellow Led: Blinks when data is sent from the PC (or mobile device) to the OBD2 device.
5. Rx – Green Led: Blinks when data is sent from the OBD2 device to the PC (or mobile device)

Features

The ELM327 can be paired with many different devices including Laptop Computers, iPhones, iPad, Samsung Galaxy Smartphones and Tablets, Android Smartphones and Tablets as well as OSX computers.

- Check and Clear the Check Engine Light
- Read Real-Time Data Sensors: Horsepower, Revs, Acceleration, Throttle, Speed, Boost, Coolant...
- Log Data to your Smartphone or Laptop
- Record Lap Times, Acceleration and Vehicle Speed Data
- View Test Results, Graphs and Realtime Data Sensors
- View Dials, Bars, Graphs, Digital Displays, Fuel Status, Fuel Economy, Raw Data, GPS Positioning and Maps
- View Real-Time consumption (Litres by km or Miles Per Gallon)
- Log Real-time Data and receive it via Email or Text File

ELM327 Software

The software that is right for you is a personal choice however we can make a few recommendations.

Interface	Application
Anroid	Torque
Windows	ScanMaster-ELM
Mac OS	Movi-Pro
iOS	Car Scanner / DashCommand
Linux	PyOBD

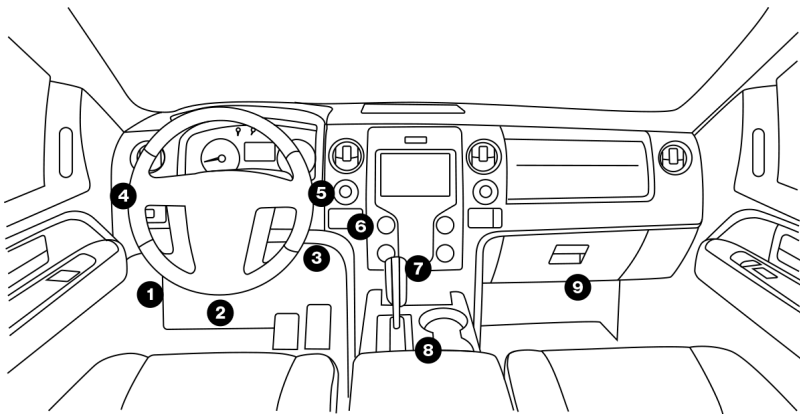
Brand specific software

New Android and iOS apps for ELM327 are introduced all the time. For diagnosing the battery health of different electric car brands there are many apps already available. Most often these apps are brand specific. For example, Leaf Spy for Nissan Leaf.

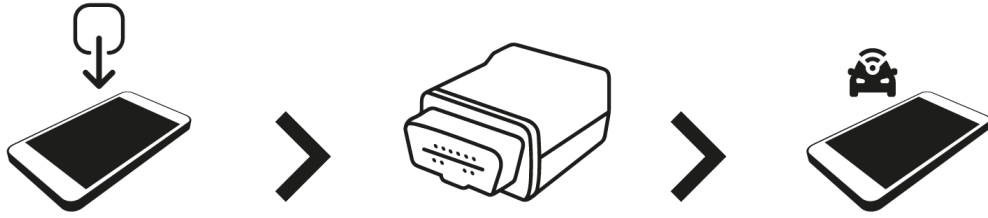
Tesla doesn't have an OBD2 port. You need to buy an adapter to connect this device to the console connector of your Tesla (different adapter for before 2019 models). With the adapter you can use the Scan My Tesla app to check the battery health and other things.

How to locate the OBD2 port on your car

Most often Google is the best source for information when you try to find the OBD2 port on a specific vehicle. Input search like "OBD2 port on Mercedes-Benz EQB 2022" and you will often find photos, videos, or discussion forums about this issue.



OBDII ports are usually straight forward and easy to access - either under the steering wheel column in the cab of the vehicle or beneath the dashboard. Sometimes OBD ports are concealed behind a protective cover. If you can't find your OBDII port in locations 1-3, try the other possible locations 4-9.



Setup for iPhone or iPad

1. Upload a compatible app from App-Store, for example Car Scanner.
2. Start your vehicle or make sure the ignition switch has power to the battery.
3. Connect the ELM Interface to your vehicle.
4. Go to your iPhone or iPad Settings > Wi-Fi
5. Select the Wifi network created by the adapter. Usually it's called "Wifi_OBDII".
6. Open the software application of your choice, Car Scanner (or DashCommand or RevLite).
7. In Car Scanner go to settings (gear icon on the top-right corner). Tap on "Adapter". Select connection type: Wi-Fi. Make sure you have the correct adapter IP address (192.168.0.10) and port (35000).
8. In Car Scanner tap on big green "Connect" button.
9. Trouble codes and real-time data should now be available to you.
10. Next time, just make sure that you're connected to Wifi_OBDII network and tap on "Connect" button.

Setup for Android devices

1. Upload a compatible app from the Play-store. We recommend using Torque.
2. Start your vehicle or make sure the ignition switch has power to the battery.
3. Connect the ELM Interface to your vehicle.
4. Go to your mobile device settings. Select WLAN network "Wifi_OBDII".
5. Open the Torque app.
6. In Torque go to settings (gear icon on bottom left corner). Tap on "OBD2 Adapter Settings". Select connection type: Wi-Fi.
7. Exit and reopen Torque app.
8. Trouble codes and real-time data should now be available to you.
9. Next time, just make sure that you're connected to Wifi_OBDII network and Torque should connect automatically.

Wifi Signal Reach

The Wifi signal broadcasted by the ELM327 reaches only about 15 meters. This means that if you want to diagnose a vehicle from outside or even a short distance away, your connection will be limited to almost non-existent.

OBD2 Protocols and Compatibility

The scanner is compatible with 99.9% of all vehicles produced after 1998 and will connect to all OBD2 CAN Bus Protocols including ISO15765-4 (CAN), ISO14230-4 (KWP2000), ISO9141-2, J1850 VPW, and J1850 PWM.

Firmware

The Version Interpreters have gone through several updates over the past few years. InspectWise® device is upgraded version (from the v1.4 firmware interpreter) v1.5 which works to provide a better overall experience for users. The new v1.5 units are light-years ahead in terms of reliability, being able to connect and maintain connections without disruption.

Realtime Data Sensors

The ELM327 can read the following realtime data sensors.

Absolute Throttle Position	Fuel Used (trip)
Accelerator Pedal Position	GPS Accuracy
Air Fuel Ratio	GPS Altitude
Ambient Air Temperature	GPS Bearing
Average Trip Speed	GPS Latitude
Barometer	GPS Longitude
Barometric Pressure	GPS Satellites
Catalys Temperature	Horsepower
Command Equivalence Ratio	Intake Air Temperature
Cost Per Mile	Intake Manifold Pressure
CO2 Emissions	Kilometers Per Litre
Distance to Empty Fuel Tank	Mass Air Flow
Distance Traveled Since ECU Error Code was Cleared	Miles Per Gallon
Distance Traveled while Check Engine Light Lit	O2 Sensors
EGR Commanded	O2 Volts
EGR Error	Relative Throttle Position
Engine Coolant Temperature	Run Time Since Engine Start
Engine kW	Speed
Engine Load	Timing Advance
Engine Oil Temperature	Torque
Engine RPM	Transmission Temperature
Ethanol Fuel Percentage	Trip Average KPL
Evap System Vapour Pressure	Trip Average MPG
Exhaust Gas Temperature	Trip Distance
Fuel Flow Rate	Trip Time
Fuel Level	Turbo Boost and Vacuum Gauge
Fuel Pressure	Voltage (Control Module)
Fuel Rail Pressure	Volumetric Efficiency
Fuel Trim Bank	

OBD2 Error Codes

OBD2 (OBDII or OBD-II) Error Codes can be used to troubleshoot problems with cars, trucks and other vehicles. These error codes are stored in the vehicles ECU (electronic control unit) and will help you to identify why vehicles check engine light has illuminated.

Most apps are connected to error code databases, and you can check the actual meaning of the error code if you are connected to internet. Note that this device is taking your WIFI connection, so you need a mobile connection, or you need to switch to working WIFI internet right after the scan to do an online check for the code descriptions.

You can always use Google. Do search with your car make, model, year, and the trouble code. Very often you will find information about how this problem has been fixed by others.

Troubleshooting

These are some of the most common problems with ELM327 interfaces and how to diagnose them.

Problem	Solution
ECU Connection Failed	Make sure the vehicle is running or that the ignition switch is providing power to the vehicle; Make sure the scanner is connected to the interface you are using (ie. laptop or smartphone); Try connecting to another vehicle
Error Detecting OBD-II Protocol	Make sure the vehicle is running or that the ignition switch is providing power to the vehicle; Make sure the scanner is connected to the interface you are using (ie. laptop or smartphone); Try connecting to another vehicle
No Wifi SSID	Make sure the vehicle is running or that the ignition switch is providing power to the vehicle; Make sure that a red light is illuminated on the scanner; Be sure that Wi-Fi is enabled on your device (ie. laptop or smartphone)
Not Connecting	Check that the vehicle has power and a red light is illuminated on the scanner; Be sure that WiFi is enabled on the receiving device (ie. laptop or smartphone)
Red Light Only	This is a sign that the scanner is receiving power; Connect to the scanner via Wifi

Disclaimer & Safety

When using the diagnostic tools, it is required that you take care if you are driving while this device is plugged in. If the OBD2 port is located near the gas and brake pedals you should use extreme care and may require an extension cable to lift the tool up and away from your feet. As well, you should always keep your eyes on the road and take care not to be distracted by the data streaming to your smartphone or laptop. This should be viewed only by passengers in the vehicle. Always practice safe driving habits!

Technical index

SSID	WiFi_OBDII
Hardware version	ELM327 V1.5
IP	192.168.0.10
Subnet	255.255.255.0
Port	35000
Range	15 m (Line of sight)
Antenna	Internal
Operating Temperature	-15 to 30 Deg Celsius
Operating humidity	less than 60%
Plastic	Automotive Grade
Physical Dimensions	7.7 x 4.5 x 2.5 cm
Weight	70 grams
Communication mode	WIFI
Main control chip	PIC18F25K80
Supported system	iOS, Android, Windows, Mac OS
Operating voltage	9v ~16v
Operating current	65mA
Compatible software	Any ELM327 compatible app or software Windows: ScanMaster-ELM, ScanTool.net, PCMSCAN ELM etc. iOS: Car Scanner, Auto Doctor, Mini OBDII, Leaf Spy, Dash Command for Android : Torque, DashCommand, OBD Car Doctor, Mini OBD, EOBD, Leaf Spy Symbian: OBD Scope Mac OS: Movi Pro Linux: ByOBD
Compatible OBD2 Protocols	1. SAE J1850 PWM (41,6 Kbaud) 2. SAE J1850 VPW (10,4 Kbaud) 3. ISO9141-2 (5 baud init 10,4 kbaud) 4. ISO14230-4 KWP (5 baud starting to 10,4 kbaud) 5. ISO14230-4 KWP (fixed 10,4 Kbaud) 6. ISO15765 -4 CAN (11 bit ID 500 Kbaud) 7. ISO15765-4 (CAN 29 bit ID 500 Kbaud) 8. ISO15765-4CAN (11-bit ID250Kbaud) 9. ISO15765-4CAN (29-bit ID250Kbaud) 10. SAE J1939 CAN (29-bit ID250Kbaud) 11. USER1 (CAN 11-bit ID125Kbaud) 12. USER2 (CAN 11-bit ID50kbaud)

Warranty

This device comes with 1 year warranty. Please contact InspectWise® by email **warranty@InspectWise.net** for information about how to return your product for repair to us. Attach the purchase receipt and explain what kind of malfunction occurred. To get the device replaced or repaired we will require you to return the malfunctioning product to our warehouse in Oulainen / Finland on your own expenses.

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