OBD2 All-In-One USB   Scan Tool Instructions

This package includes 3 items: an OBD2 All-In-One USB unit, an OBD2 cable, and a USB cable. This unit is intended to be used with 1996 and newer cars and trucks that are OBD2 or EOBD compliant (The US required OBD2 on all 1996 and newer passenger cars, light-duty trucks, and medium-duty vehicles). For more detailed information on any aspect of the OBD2 All-In-One unit, you can read information at www.obd2allinone.com

Quick Driver Installation Instructions

❶ Boot up your PC or Laptop and insert the provided CD-ROM

❷ Plug the OBD2 cable into the vehicle's OBD2 diagnostic port and the other end of the cable into the OBD2 All-In-One unit. At this point you should see the Green power light steadily lit and brief flashes initially from the other lights.

❸ Plug the USB cable into the All-In-one Unit and the USB connector into one of the open USB ports on your PC

❹ At this point Windows will detect the new device and ask you to browse the CD-ROM drive for the driver. The drivers are located in the USBDrivers directory. Choose the correct operating system folder for your computer and click OK, then allow the system to completely install the drivers.

❺ After driver installation, open your Windows System Control Panel and choose the Hardware Device Manager. Expand the Ports (COM & LPT) item and look at the Properties for the USB Serial port and note which COM port has been assigned to the unit. You will need to tell the diagnostic software package you select which COM port is being used by the All-In-One unit.

Getting Started

To use the OBD2 All-In-One unit you will need a computer, and an OBD2 software package on that computer that is compatible with the OBD2 All-In-One unit. The computer can be a laptop PC or a desktop PC with a working USB port.

You will need a software package loaded onto your PC in order to collect data, and see and clear trouble codes. There are many software packages available on the included CD, or for download from the Internet, both free and paid versions, that work with the ELM327 processor chip used in this unit. You can check the www.obd2allinone.com home page for the various packages available, as new ones are developed over time.

Turn on your PC and start whatever data collection software you have downloaded and installed. Be sure to specify in the software the proper COM port noted in the Quick Start instructions above. Turn the car key forward to light up the dash and start the communication between your cars ECU/PCM and the PC. Various programs offer different ways to reset or initialize the unit, and this should be done when you start the program. You should see the lights on the unit blinking, showing communication between the car and the PC. A short video showing these steps is available at www.obd2allinone.com

A Note About COM Ports

The COM port used will be the first available COM port, usually COM3 or COM4, but occasionally it will be a COM port above COM4. Some diagnostic programs will not work above COM4. In these cases, you may have to select a diagnostics software package that allows operation above COM4 or change the assigned COM port to an unused COM1 to COM4 port via the Windows System Control Panel, Hardware Device Manager.

Communication Speeds

New software packages will be developed over time that are compatible with the OBD2 All-In-One unit. These new packages will have more features, and will have the capability to run at higher speeds, taking advantage of the new software selectable baud rates. The OBD2 All-In-One unit has 2 different **hardware**-selectable communication speeds, 9600 and 38400 baud.

The unit as shipped is set to operate at 9600 baud, to offer compatibility with currently available software packages. If you download a software package that has the ability to run at 38400 baud, the OBD2 All-In-One unit can be changed to run at this speed via an internal jumper switch. (see the diagram below). Even newer software will ignore this jumper setting and operate at much higher speeds using software selectable baud rates.

Changing the Baud Rate Jumper
The case of the OBD2 All-In-One unit can be carefully pried open with a screwdriver or other tool, revealing the internal circuit board. On the top side of this circuit board is a single black jumper switch. Lift up to remove this small black plastic jumper from the 2 pins it is on, and slide it down over just one of the pins (or remove it from the case completely if you'd like) and this will enable the unit to operate at the higher 38400 baud speed.
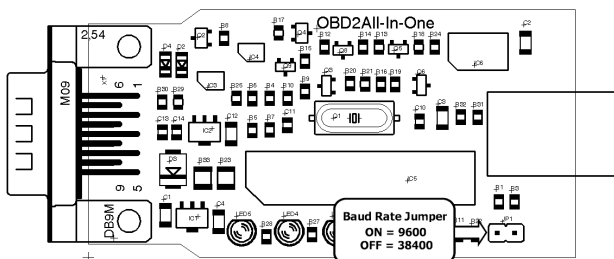
Troubleshooting: If all the cables are connected, but you are still not seeing data, there are a number of things to check. First plug the OBD2 cable into the car and the unit to power it up, and make sure the green power light is on. Make sure your cables connections are secure. Make sure your car key is turned forward to light up your dash, or the vehicle is running.

To see if communication is taking place between the OBD2 All-In-One unit and the PC, you can use the HyperTerminal program on Windows PC's. Start up the HyperTerminal program (usually under Start > Programs > Accessories > Communications), select the COM port that the USB driver assigned, and select a baud rate of 9600 (or 38400 if you changed the jumper), Flow Control none. A window should appear with a prompt in it that looks like this: >

Type ATZ at this prompt and you should see a response from the unit showing ELM327. At the same time you should see the lights blinking on the unit. If you now type 0100 at the prompt, you should see a response of some numbers and letters. This shows communication with your cars ECU/PCM. At that point you know that proper communication is taking place between your OBD2 All-In-One unit, the PC, and the car. Any of the software packages should function properly for you. The first program to try is the Scantool program, in the Scantool folder on our CD, it is the simplest to install and get working quickly.

This HyperTerminal test has got to work, or else the PC is not talking properly with the car's ECU/PCM. If you are still having problems after the HyperTerminal test, check under the device manager of the system control panel on your PC to verify the COM port you selected is the one that is active. If all of this fails, your USB port may be bad and you should try another computer.

Help for Windows Vista Users

Windows Vista will sometimes automatically detect the OBD2allinone unit as another type of device, such as a USB mass storage device, and not give you an option to choose the drivers off the CD we have included with the unit. If this happens, open the Control Panel (click Classic View on the left pane, if not already displayed), open the Device Manager item, and click Continue if prompted for permission. Now a list of devices will be displayed with plus signs next to them. Find the newly installed item, such as USB mass storage devices (expand the category if necessary by clicking the plus sign). Double click on this new device (sometimes it will have a yellow circle on it because it is not working properly), and a Properties window will pop up. Choose the Driver tab at the top and select Reinstall/Update Driver. You will be prompted with How do you want to search for driver software? Click Browse my computer for driver software. Select the Browse... button, and the Browse For Folder dialog will appear. Click Computer and navigate to the CD, (which should be your D: or E: drive), and select the USBDrivers folder, then select the Vista folder, and click OK, and then next. At this point the drivers should install and update for the correct device, and will install the USB Serial Converter item. The procedure will repeat and install the USB Serial Port (COMx) item, under the Ports (COM & LPT) category. Make note of which COM port it has installed on, and tell what ever program you are using this COM port number.