ALDL USB Cable Instructions

This package includes an ALDL USB Cable, a CD ROM with drivers and ALDL software, and this instruction sheet.. This cable is intended to be used with cars and trucks using GM ECM/PCM's originally equipped with 12 pin ALDL connectors in the 1982 to 1995 era. For more detailed information on any aspect of this cable, you can read information from our website at <u>www.aldlcable.com</u>

Quick Start Instructions:

- 1. Boot up your PC or Laptop and insert the provided CD-ROM
- 2. Plug the ALDL-USB cable into one of the open USB ports on your PC
- 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 FT232R directory. Choose the correct operating system folder for your computer and click OK, then allow the system to completely install the drivers.
- 4. 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 ALDL-USB
- 5. Plug the 12-Pin ALDL cable into your vehicle's ALDL port and turn your ignition key forward to light up the dash. You are now ready to collect data.

The COM port used will be the first available COM port, usually COM3, but occasionally it will be a COM port above COM4. Some ALDL Diagnostic programs will not work above COM4, so you may have to select a diagnostics software package that allows operation above COM4. If you need to operate on COM3 or COM4, uninstall devices that are currently using COM3 or COM4. Next, uninstall the ALDL-USB driver that is using a high port number then reinstall the ALDL USB driver to use COM3 or COM4

The ALDL connector has 12 pins in it, of which only 2 are wired for use in this cable. Serial data only flows through one of these pins from your ECM/PCM to your PC computer. Generally GM cars that use pin E are communicating at 160 baud speed, and the cars using pin M are communicating at 8192 baud. The pin locations are labeled inside of the 12 pin connector shell. Pin M and pin E of our cables are jumpered together inside the connector shell and go to the same spot in the circuit. Again, you are only using one of these pins to read data, so only one of these pin locations will be populated on your vehicle. We jumper these 2 pins together so that this cable will work for any 1982 to 1995 era car, regardless of the pin layout in the car.

IF YOU HAVE some other make of car that uses a GM ECM/PCM, such as Lotus, that uses a different connector type or certain mid-80s cars that use Pin D of the ALDL connector, the pin location will probably be different (see <u>http://winaldl.joby.se/aldIdata.htm</u> for a list of vehicles which may use pin D). You should buy the Bare Pin Cable from our web site so you could plug it in to one of these different shaped connectors or the data line on any ALDL compatible vehicle.

A 10Kohm resistor is included on the circuit board. This resistor is needed to jumper between the A and B pin locations for some late 1980's cars in order for the ALDL diagnostic data to start flowing (see the R3 section at <u>http://winaldl.joby.se/aldlcable.htm</u>). If you do not need this resistor for your vehicle, you can leave it in the normal position as indicated below.



If there is any question of whether or not your car needs this 10Kohm resistor, try it in the normal position first to see if data starts flowing.

You can see a list of software packages available for your diagnostic needs on our home page at <u>www.aldlcable.com</u> or on the CD-ROM included in this package To use this cable, plug the 2 ends in and start up your laptop and start whatever data collection or tuning program software you use, and turn the car key forward (but car not running) to light up the dash, and start the data stream flowing. Click the record button in the software package to start logging data. You can then start the car and drive around logging data. View data later on to see and review results.

Trouble shooting: If all the cables are connected properly but you are still not seeing data, there are a number of things to check. When testing any cable, simply plug the USB cable into your Laptop or PC, and then plug the 12-Pin ALDL connector into your vehicle. Start up the HyperTerminal program (usually under Start > Programs > Accessories), select the COM port the USB cable was installed on (usually COM3, see above), and select a baud rate close to the ECM's (for either a 160 or 8192 baud, chose either 2400 or 9600, respectively). As soon as you turn the car key forward to light up the dash, but car not running, data patterns start to stream across the HyperTerminal screen. At that point you know that proper communication is happening between your vehicles ECM and your laptop, and any data logging program should work.

If you are still having problems after this HyperTerminal test, check under the device manager of the system control panel on your PC to make sure your virtual COM port is active and has not been disabled. If you don't see any virtual COM ports enabled, or see red Xs or yellow circles, then you may need to reinstall the driver. Begin be removing the virtual com port that is there and also removing the USB device further down the screen

If you have a 1996 or later vehicle that has a 16 pin connector, it is an OBD2 compliant vehicle and requires a completely different type of scan tool and software. Please see www.obd2allinone.com to purchase.