

National Instruments NI USB-8473 for Coda OBDII

Table Of Contents

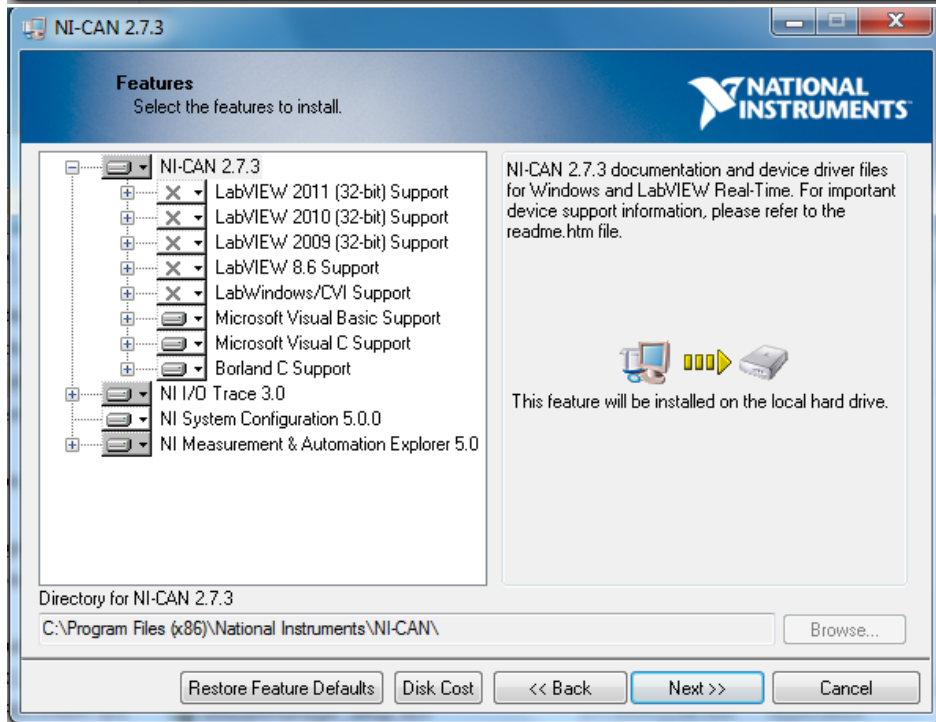
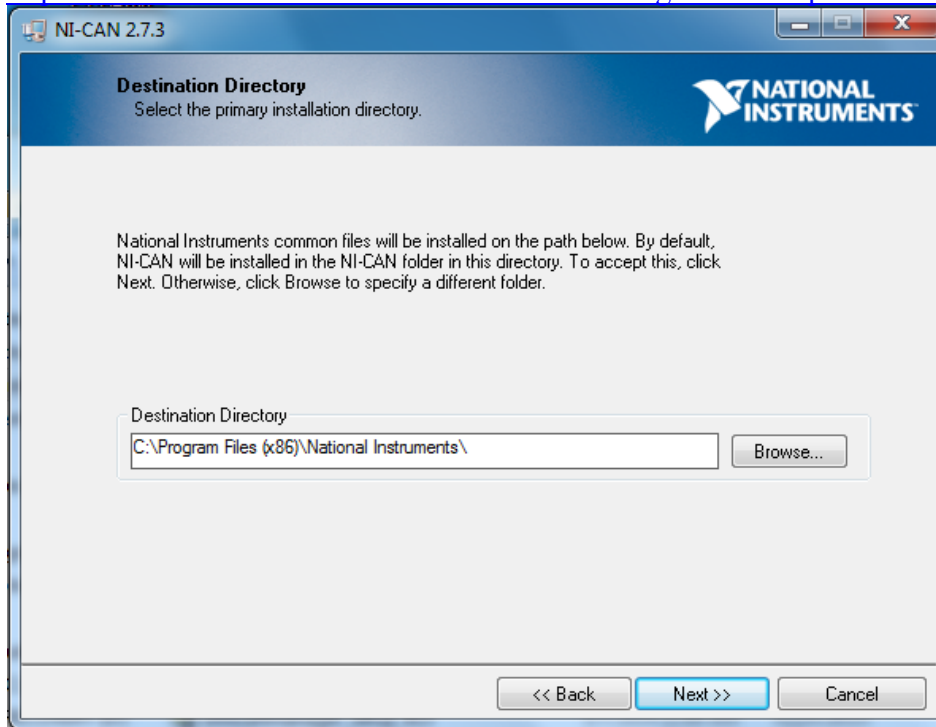
A.) Software Installation Instructions

B.) Diagrams and Pin Wiring

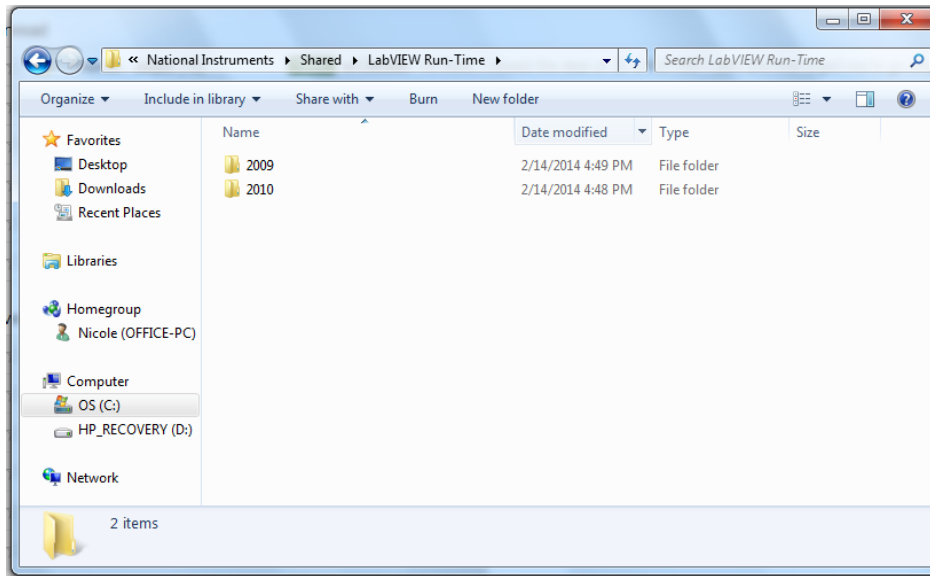
C.) Required Materials

A.) Software Installation Instructions For NI USB-8473 to Coda OBD II

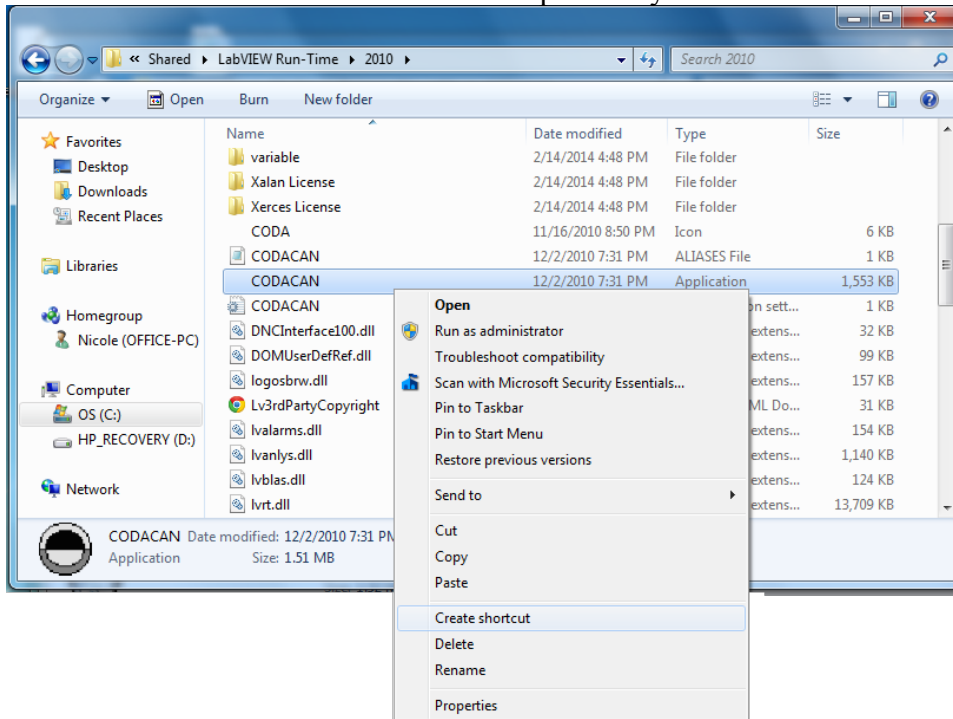
- 1.) Install National Instruments CAN software version 2.7.3 (a newer version is likely okay, but if problems arise, get 2.7.3) for NI USB-8473. Available for download here: <http://www.ni.com/download/ni-can-2.7.3/2646/en/> It may also be necessary to download this **If** the next steps do not get it working the first time: <http://www.ni.com/download/labview-run-time-engine-2010-sp1/2292/en/>



- 2.) Once the file has been downloaded and installed, browse the CD for folder named "2010". This contains important LabVIEW files and the .exe file necessary to run the CODACAN interface
- 3.) If 64 bit OS, copy the 2010 folder to to: C:\Program Files (x86)\National Instruments\Shared\LabVIEW Run-Time
or if 32bit, copy the 2010 folder to: C:\Program Files\National Instruments\Shared\LabVIEW Run-Tim



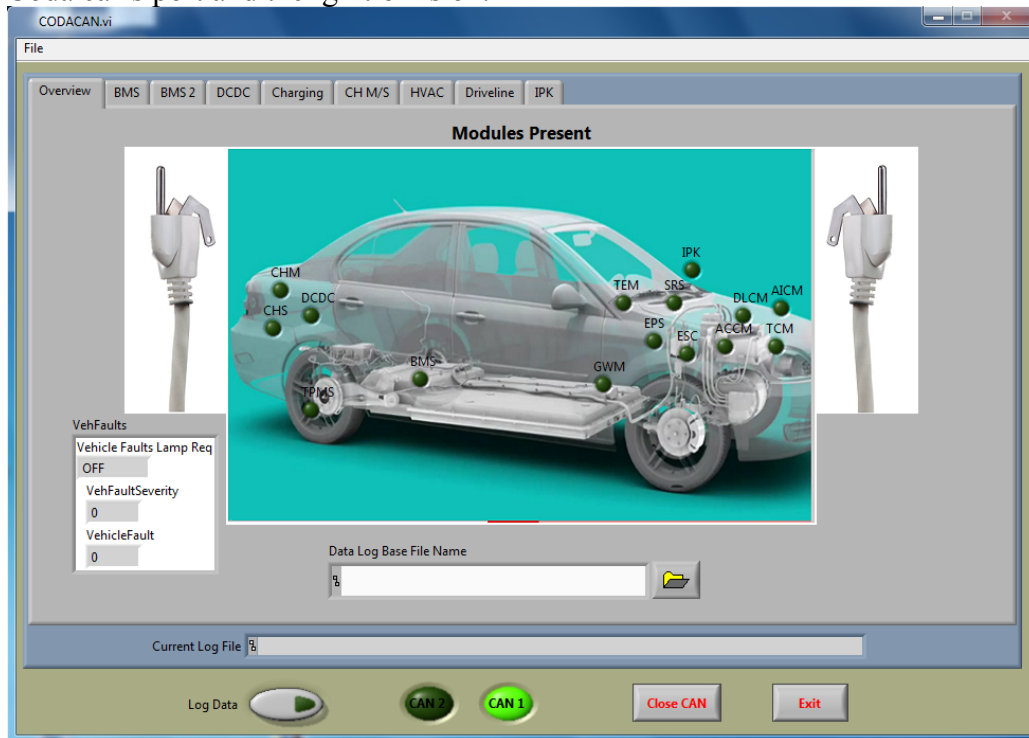
- 4.) Next, open the 2010 folder, and right click on CODACAN.EXE and create a shortcut. Place that shortcut on the desktop for easy access.



- 5.) Connect the NI USB 8473 via USB and ensure it is properly configured with your OBDII.



- 6.) Once the NI USB-8473 is connected via USB click "Connect to CAN" The diagnostics will be available once the OBDII connector is connected to the Coda car's port and the ignition is on.



B.) Diagrams and Pin Wiring

CAN Interfaces for Hi-Speed USB, for more details visit:

http://www.ni.com/pdf/products/us/2006_8250_151_101_d.pdf

The Coda car has four CANBUS systems, the **Red** the **Yellow**, **Green**, and **Blue**. Each goes to a different CANBUS system in the car, and certain information is viewable from each. A switch should be wired in to allow for the DB9 Can_H and Can_L (**BLUE**) to be connected between the respective Can_H and Can_L terminals for each color on the OBDII connector. No other connections on the DB9 are necessary.

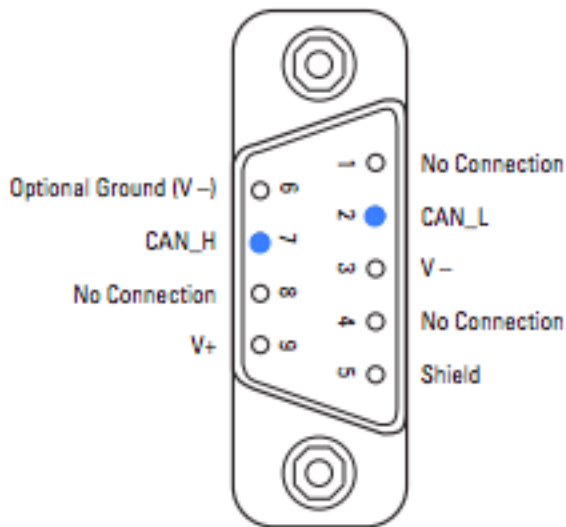
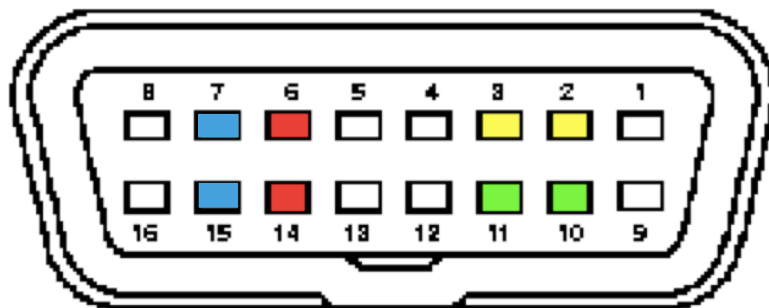


Figure 1. CAN DB9 Connector (USB CAN Modules)

OBDII Connections Male Side



Red

Diag Hi - 6

Diag Low - 14

Yellow

BCAN Hi - 2

BCAN Low - 3

Green

DCAN Hi - 10

DCAN Low - 11

Blue

CCAN H - 7

CCAN L - 15

C.) Required Materials

1. National Instruments Ni USB-8473 available here:
<http://sine.ni.com/nips/cds/view/p/lang/en/nid/203384>
2. OBDII Connector - We recommend buying an OBDII extension cord (much cheaper) and cut it. Available here:
https://www.amazon.com/dp/B000SBCHCA/ref=cm_sw_r_awd_qibkvb0MPAXEG
3. Serial Connector - The male side will be cut, available here:
https://www.amazon.com/dp/B00CEMGMMM/ref=cm_sw_r_awd_Yjbkvb0V3M4AT
4. Three Way Switch - A switch allowing a 3x1 connection. As detailed in section B, the switch should allow for three CANBUS pairs to be connected individually to a single CANBUS pair.