

WOT Box 4.8 Software Instructions

You will need:

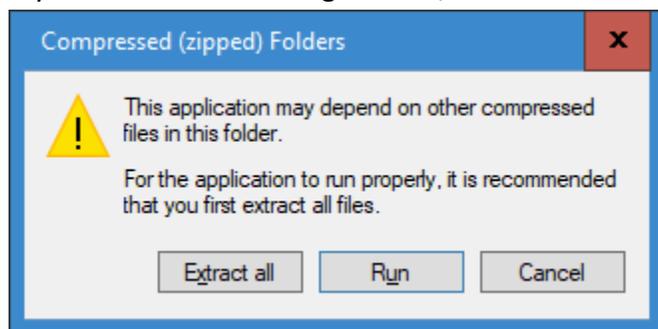
- Laptop computer with Windows XP, Vista, 7, 8, 10, or 11
- WOT Box installed in your car
- USB to Serial Adapter (included in the WOT Box kit)

Step 1 – IMPORTANT - Install the driver

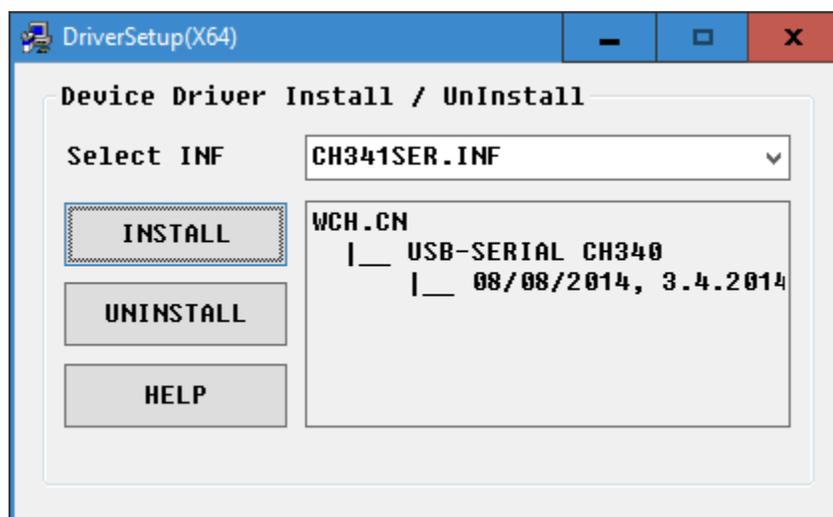
Double click on Step 2 - Driver.EXE to install the driver.

<input type="checkbox"/> Name	Date modified	Type	Size
 Step 1 - Instructions.pdf	4/29/2017 6:18 PM	Adobe Acrobat Docu...	655 KB
 Step 2 - Driver.EXE	4/13/2016 11:42 AM	Application	238 KB
 WOT Box Software 4.7.exe	2/25/2018 10:44 AM	Application	347 KB

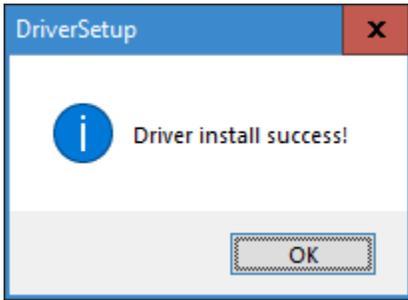
If you receive the message below, click “Run”



Next, you will see the driver installation screen. Click “INSTALL”.



You should receive the message “Driver install success!” **If not, STOP** and restart your computer to try the installation again. You may need to right click on the driver.exe file and choose “Run as Administrator”. The WOT Box will not work until the driver is successfully installed.



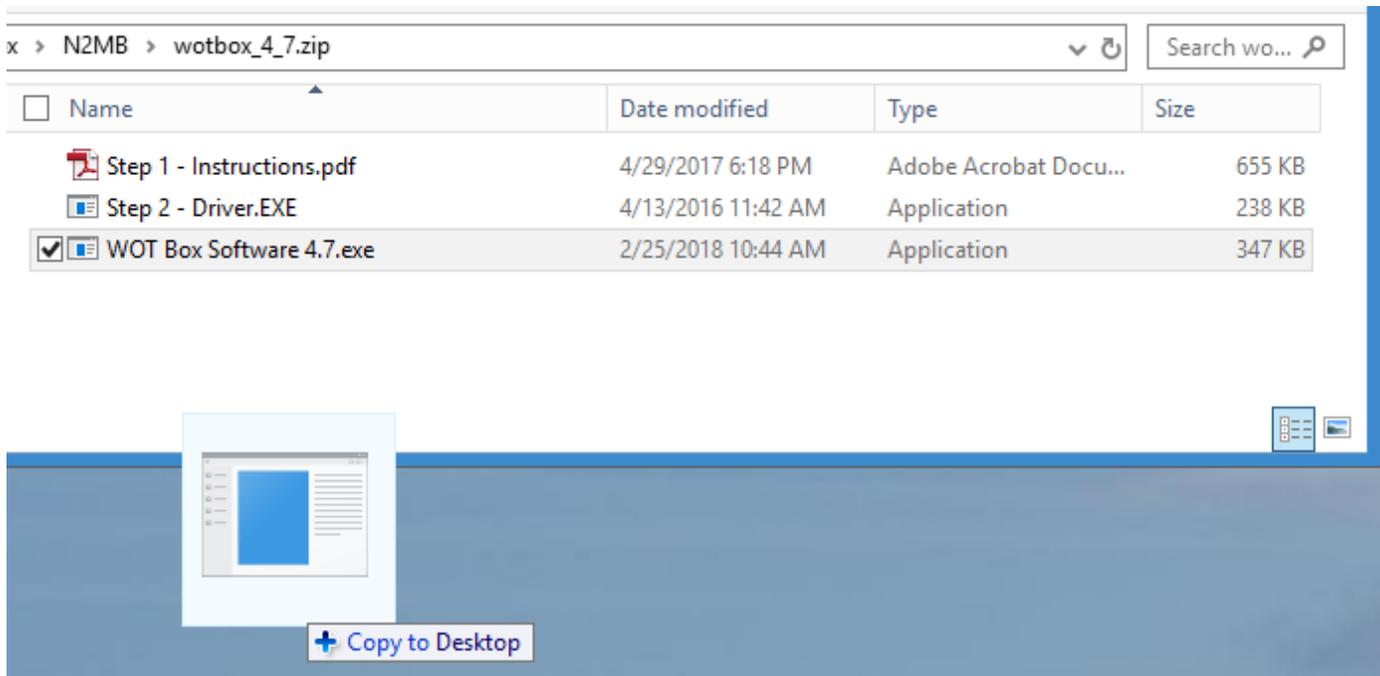
Now plug the USB to Serial adapter into your computer. If it was already plugged in, unplug it and plug it back in again.

Note: if your USB to serial adapter is black or has “2303” written on it, your USB adapter is no longer supported. Contact us at sales@n2mb.com to order a new 340 adapter.

Step 2 – Copy the WOT Box Software to your Desktop

Note: You will only need to do this once. After this, open the software on your desktop and click “Read”.

1. Drag the software from the zip file to your desktop so that you can run it easily.

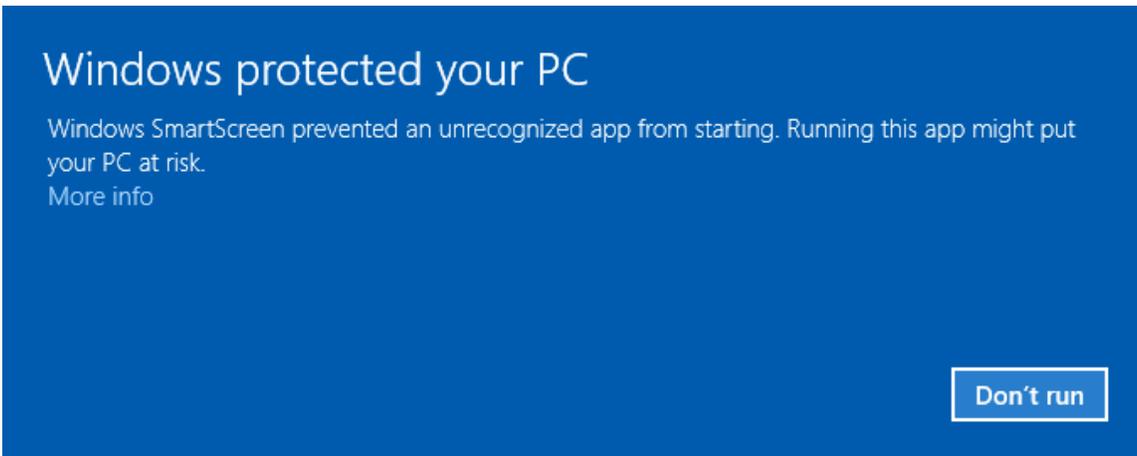


Step 3 – Using the WOT Box Software

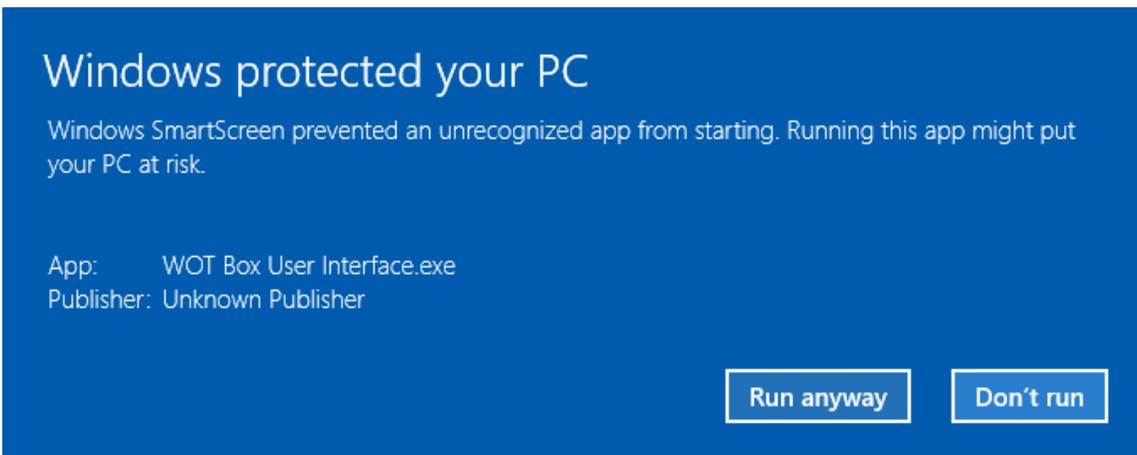
1. Connect the USB to Serial adapter to the WOT Box Serial Port and to your computer.
2. Turn your car key to the "ON" position. Make sure the WOT Box is receiving power from the car before connecting with the N2MB Software. **The LED on the WOT Box must be on for the software to connect.**
***Note:** If the WOT Box does not remain powered with the key in the "on" position, then you will need to start the car to use the software. Known cars that require this are the Dodge Neon SRT-4 and the Audi A4.*
3. Double click on the WOT Box Software on your desktop.



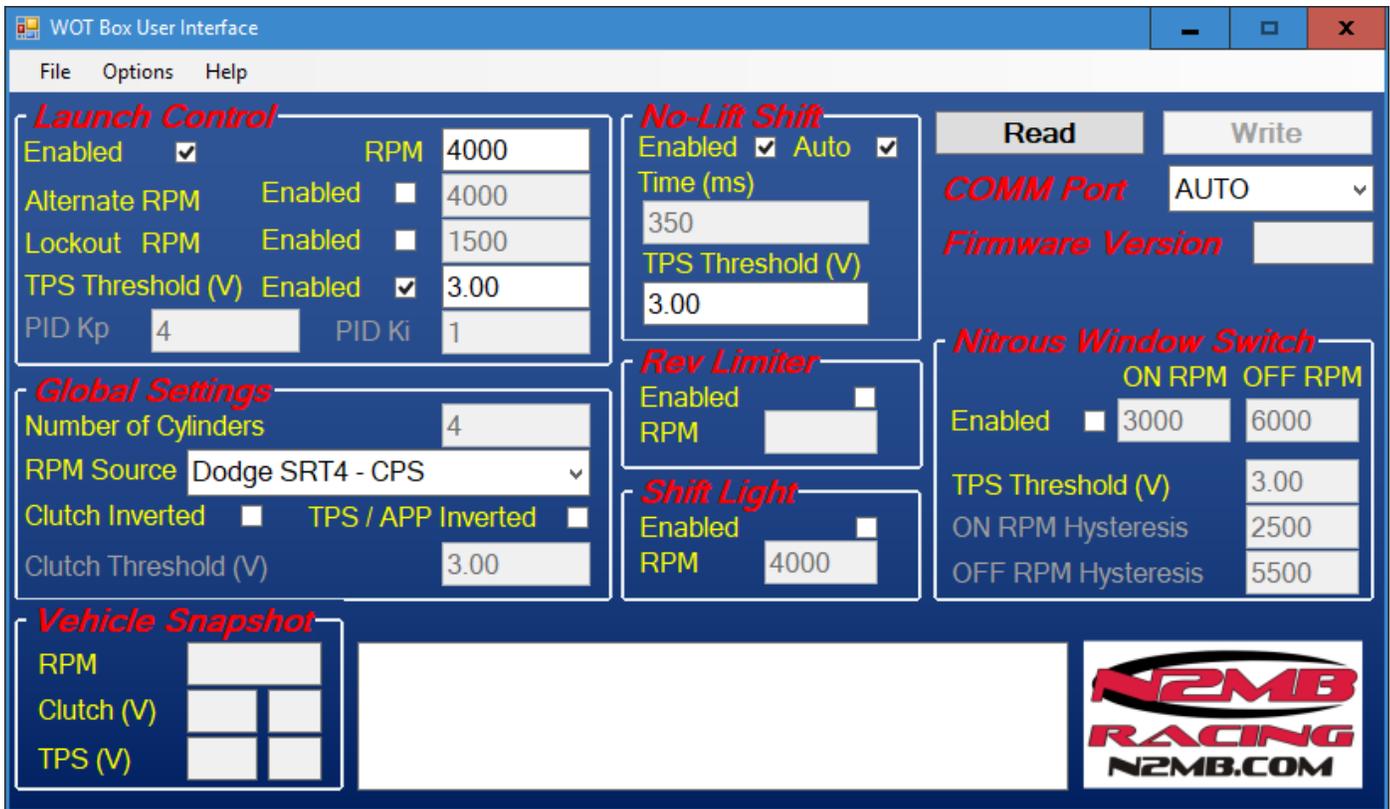
4. If you receive this error:



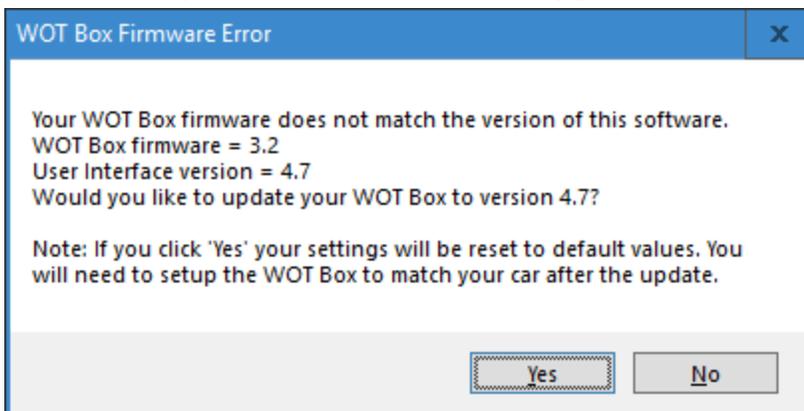
You can safely click "More Info" and then "Run Anyway". This error happens since this is a new version of the software that has not been seen by Microsoft enough times yet.



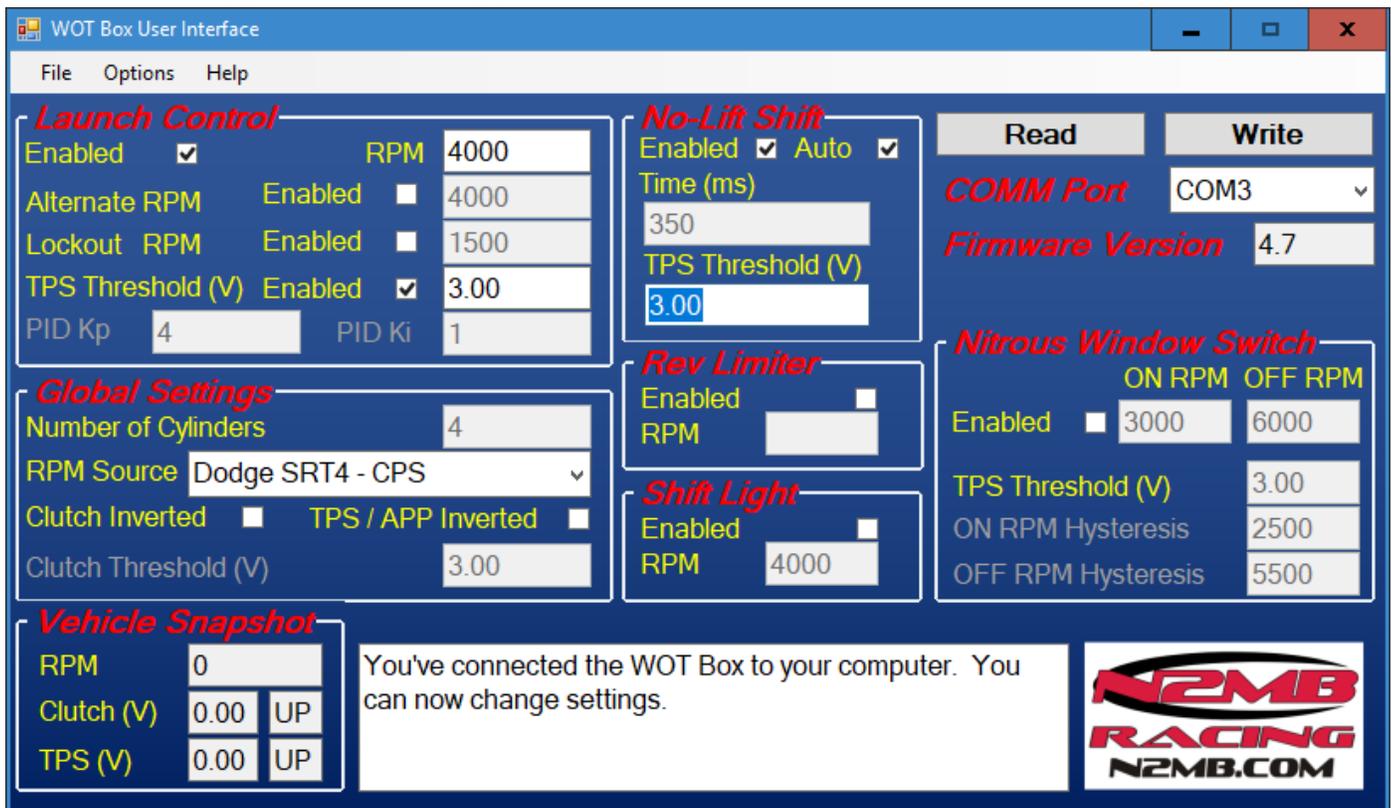
5. The WOT Box software will open. You should not need to select the com port, since "AUTO" is selected by default. **Click "Read"**



6. **If it does not connect:** Make sure you have selected the correct com port. You determine which port is correct by doing the following. Close the N2MB software, unplug the USB to serial adapter. Open the N2MB software and note all the com ports that are listed. The correct one will not be any of these. Close the software again. Reconnect the USB to serial adapter to the computer. Restart the N2MB software. The new com port that shows up will be the right one. If no new ports show up, then you need to install or reinstall the driver for the USB to serial adapter.
7. If you are upgrading from an older version of the WOT Box firmware, you will receive the message below the first time you connect. **Click "Yes" to upgrade.**



8. If the firmware upgrade is successful, your software should look like this:



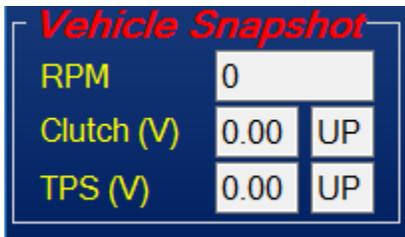
9. Setup your settings to match your car by following the instructions below. Recommended settings for common cars are included below.

Configuring the WOT Box to match your car

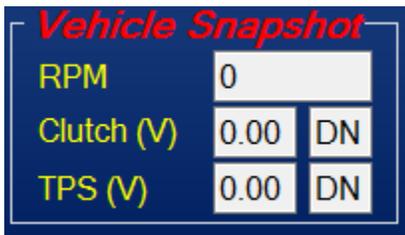
WARNING: DO NOT USE THE WOT BOX SOFTWARE WHILE DRIVING THE CAR. ALL OF THE TESTS BELOW SHOULD BE COMPLETED BEFORE MOVING THE VEHICLE.

1. Open the WOT Box Software.
2. Click READ.
3. Click the Down Arrow next to the RPM Source Box.
 If your instructions say to connect the YELLOW WOT Box Wire to a crank position sensor or cam position sensor and your vehicle is listed, select your vehicle.
 If your instructions say to connect the YELLOW WOT Box Wire to an ignition coil signal, select: **OTHER-Ignition Signal**.
 If your instructions say to connect to a fuel injector, select: **OTHER-Fuel Signal**.
4. Next, make sure that the number of cylinders box is correct. Once you have set the number of cylinders, click WRITE to program your changes.

5. Make sure that the clutch and accelerator (gas) pedals are not pressed, and click READ.
Make sure both the TPS and Clutch boxes in the lower left hand corner of the software read UP:



6. If the TPS box in the lower left reads DN, click the checkbox for Inverted TPS and click WRITE.
7. If the Clutch box in the lower left reads DN, click the checkbox for Inverted Clutch and click WRITE.
8. Press the clutch down and click READ. Make sure that the clutch box reads DN.
9. Press the accelerator down and click READ.
10. Make sure that the TPS box reads DN. If not, check your wiring.



(Note: Your voltages will be different than those shown here.)

11. Start your car. Click READ again and verify that the RPM Box in the lower left shows your idle RPM. If the RPM isn't correct, check the instructions to make sure that you've selected the right signal and check your wiring.
12. Remember, the WOT Box GUI only reads a snapshot- you have to press READ to read the values from the car again. You also must click WRITE after you make changes to the settings.
13. Test the WOT Box as described below.

Troubleshooting - Testing the WOT Box

1. Key on the car but do not start the engine. Press the gas pedal to the floor. You should see the LED on the WOT Box start to rapidly blink. On the SRT-4, it is normal for the LED to go out ~3 seconds after keying on the car. If you are not able to finish the test before the power goes off, turn the key off and turn it back on. If it does not, check your **APP or TPS sensor signal connection (WOT Box BLUE wire)**.
2. Next, with the gas pedal still pressed, press the clutch pedal to the floor. You should see the LED on the WOT Box briefly go out, and then come back on solid for one second and then finally resume blinking rapidly. If you do not see this, check your **Clutch Pedal Position Switch signal connection (WOT Box GREEN wire)**.
3. Unplug the WOT Box from the WOT Box wiring harness. Make sure the car will not start with the WOT Box unplugged. If it does start, or starts and runs on a few cylinders, then the RED / ORANGE wire connections are not correct. Make sure the power for all the ignition coils has been cut and is now running through the WOT Box. The RED WOT Box wire should be connected to the +12V source for all the coils, the ORANGE WOT Box wire should be connected to the same wire, but on the side that provides +12V power to the coils.

4. Next, start the engine. Quickly press the gas pedal to the floor and immediately step on the clutch. You should hear the engine start to rev up, stumble for a short period while the ignition is cut, then return back on and continue revving. Remove your foot from the gas before you hit the rev limiter. The 2-step will not engage if the gas is depressed before the clutch. This is normal. If the engine does not stumble or pause when the LED turns out, then **check the RED and ORANGE wires**. Verify that the RED and ORANGE 16 AWG wires are wired facing the proper way. If they are reversed, the ignition cut will not work.
5. Lastly, test the 2-Step. Before engaging the 2-step, make sure the engine is idling in neutral with the clutch up at less than 1500 RPM. Press the clutch pedal down and then press the gas pedal all the way down. The gas pedal must be floored for the 2-step to engage. The engine should rev up to the desired RPM and hold. If it does not, be sure to remove your foot from the gas before you hit the rev limiter. If the 2-step does not work, check the **WOT Box YELLOW wire**.

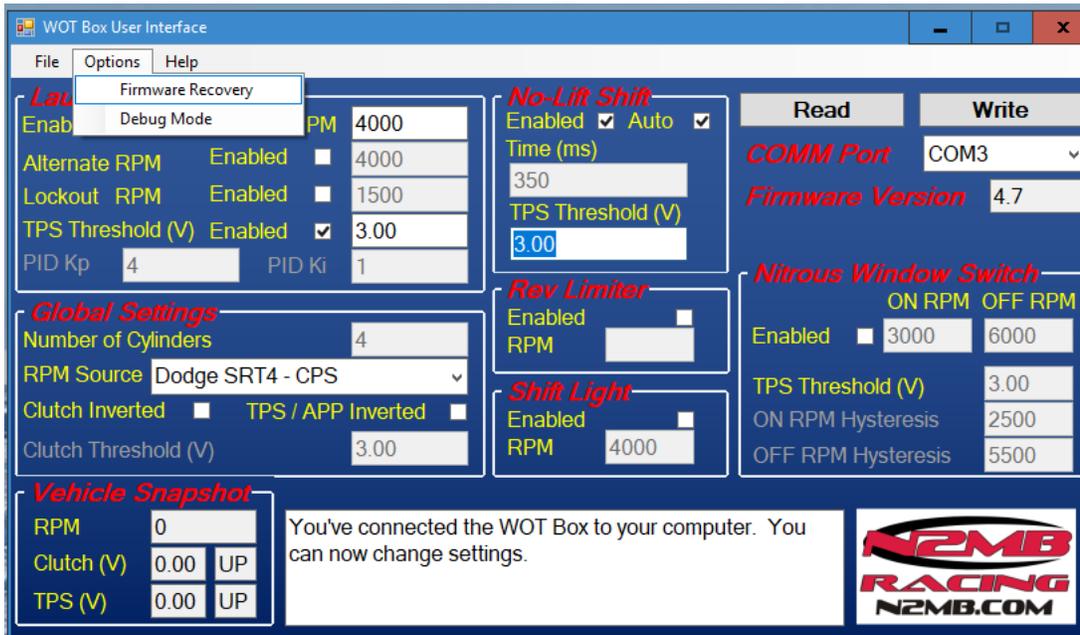
WOT Box Settings – Additional Information

- **TPS Threshold (V)** – We recommend that you set the TPS threshold for both the no-lift shift and launch control to a voltage that matches 75% throttle to ensure reliable activation of both features. On most cars, 3.0 volts is a good value for this. 2010+ Mustangs will require a TPS threshold of 1.7 volts.
- **Alternate RPM** – The alternate RPM is used for three-step launch control. If you tap the button on the box or trigger it with an external push button, while the launch control is active, the launch control will change to this RPM. It is useful for having a second RPM to jump to just before launching, but after staging.
- **Lockout RPM** – **We recommend disabling the launch control lockout. It is not required for most users and generally makes engaging the launch control more difficult.** When enabled, the engine RPM must be below this RPM before you push in the clutch, before you push the gas to launch the car. It prevents the launch control from engaging once the car is moving, but is generally not needed, as long as you don't push the clutch in while driving and floor the gas.
- **No-lift shift Auto Mode** – Using the no-lift shift in "Auto" mode automatically cuts the ignition during a no-lift shift for the duration that your clutch is down, up to 350 ms. Since almost everyone takes longer than 350 ms to shift, this is essentially the same as setting it to 350 ms. Start off with the no-lift shift set to this mode for the easiest shifting. Once you are comfortable with no-lift shifting and want to go faster, try switching to manual mode. Set 250 ms to start. Adjust up or down from there based on feel. You want the ignition to be cut long enough for your shifter to get into the next gear without forcing it, and the ignition should start to come back on as you are releasing the clutch. Anything less than 100 ms is probably too short and not doing much to make your no-lift shifting easier.
- **Rev limiter** – A global rev limiter is available if you want to limit your engine RPM at all times to be below this value. It will not change the rev limiter built into your ECU. It can only be set lower than your existing rev limiter.
- **PID Kp and Ki** – These values control how accurately the launch control holds the RPM you program. We do not recommend changing these values. Changing these values can cause the launch control to become unstable and cause damage to your car when used incorrectly.

Recovery Procedure

If your WOT Box stops responding and isn't fixed by powering it off and then on, then you may have lost your settings and must perform the Recovery Procedure.

1. Turn the ignition key on your car to the OFF position. **Make sure that the WOT Box LED is NOT on at this point.** If it is still on, unplug the WOT Box from the car at the white harness connector on the box.
2. Connect the USB to Serial adapter to your computer and the WOT Box.
3. Open the WOT Box Software. Click "Options" then "Firmware Recovery".



4. Select the correct comm port. You can determine which port is correct by doing the following. Close the N2MB software, unplug the USB to serial adapter. Open the N2MB software and note all the comm ports that are listed. The correct one will not be any of these. Close the software again. Reconnect the USB to serial adapter to the computer. Restart the N2MB software. The new comm port that shows up will be the right one. If no new ports show up, then you need to reinstall the driver for the USB to serial adapter.
5. Click WRITE.
6. When you see the message "Waiting for WOT Box Power", power on the WOT Box by turning your key to "on" position. If you unplugged the WOT Box in step 1, **plug it back in now.**

Note: If your vehicle does not provide power to the WOT Box with the key in the "on" position without the engine running, you will need start your car in this step. Start from the "off" position and smoothly but quickly go to the "start" and then "on" position after the engine has started. This will allow continuous power to be provided to the WOT Box to allow the firmware upgrade to complete. Known cars that require this are the Dodge Neon SRT-4 and the Audi A4.

If you've performed the procedure correctly, the WOT Box will start to program and the interface will display the stock settings. Once you see this, the recovery procedure is complete, and you can change the settings again to match your car. Follow the instructions in the "Configuring the WOT Box to match your car" section.

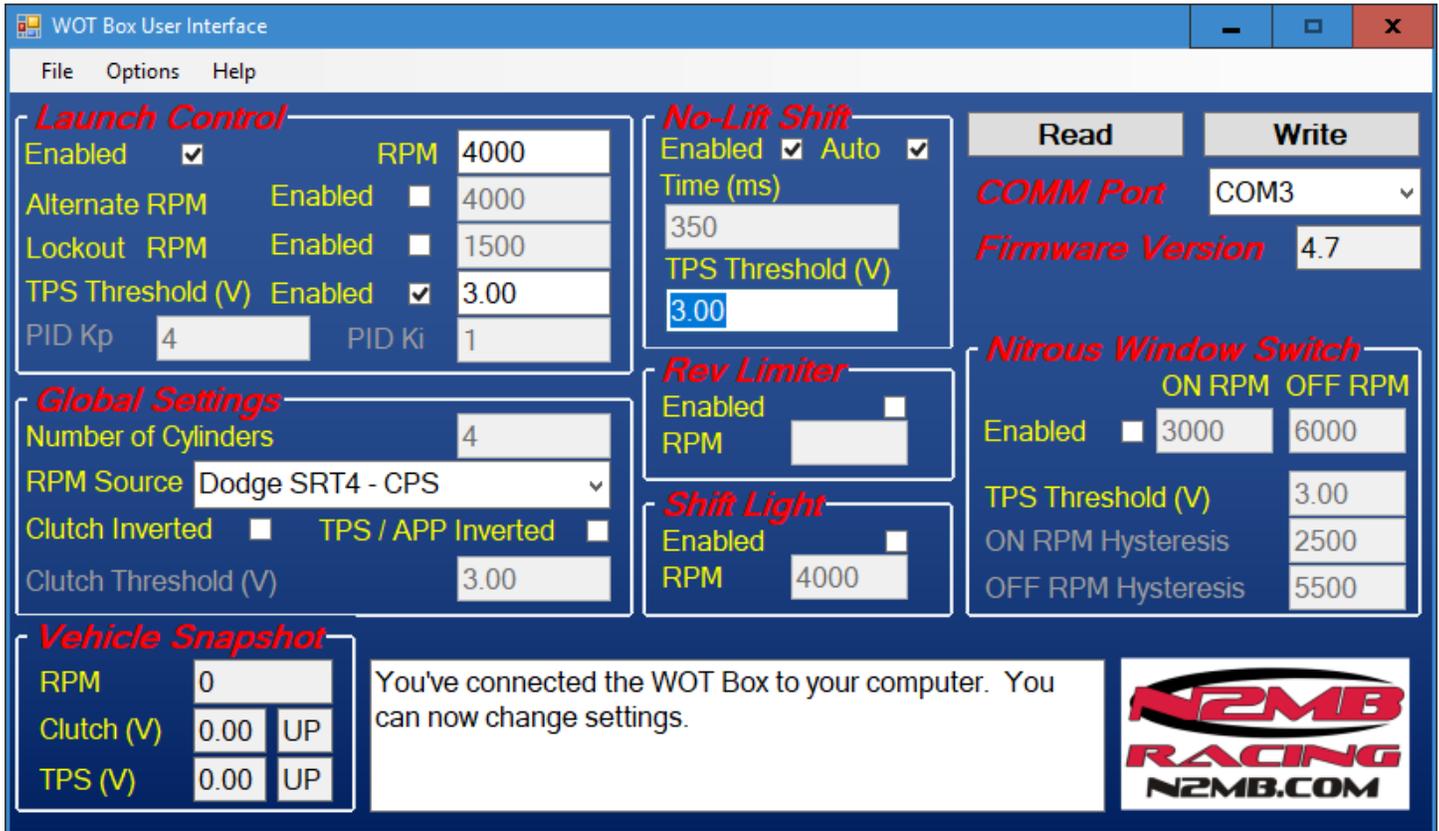
If you have any trouble running the recovery, a step-by-step video is available here:

<https://youtu.be/iPLJHdmkveM>

Recommended settings for most cars

Below are recommended settings for common cars. If your car is not listed, email us at support@n2mb.com

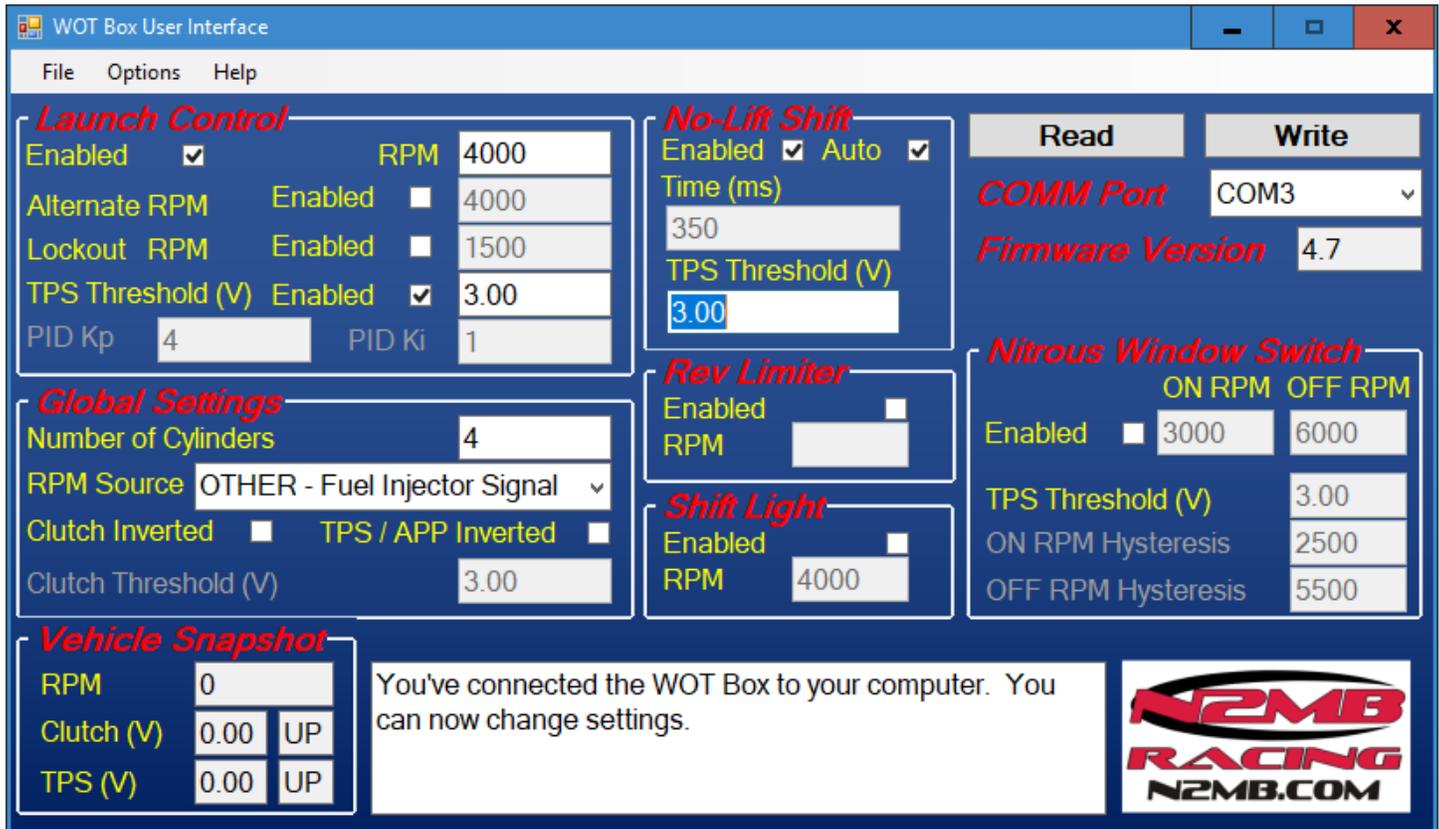
Dodge Neon SRT4



The screenshot shows the WOT Box User Interface for a Dodge Neon SRT4. The interface is divided into several sections:

- Launch Control:** Enabled . RPM: 4000. Alternate RPM: Enabled 4000. Lockout RPM: Enabled 1500. TPS Threshold (V): Enabled 3.00. PID Kp: 4, PID Ki: 1.
- No-Lift Shift:** Enabled Auto . Time (ms): 350. TPS Threshold (V): 3.00.
- Rev Limiter:** Enabled . RPM: [empty].
- Shift Light:** Enabled . RPM: 4000.
- Global Settings:** Number of Cylinders: 4. RPM Source: Dodge SRT4 - CPS. Clutch Inverted . TPS / APP Inverted . Clutch Threshold (V): 3.00.
- Nitrous Window Switch:** ON RPM: 3000, OFF RPM: 6000. Enabled . TPS Threshold (V): 3.00. ON RPM Hysteresis: 2500. OFF RPM Hysteresis: 5500.
- Vehicle Snapshot:** RPM: 0. Clutch (V): 0.00 UP. TPS (V): 0.00 UP.
- Read/Write Panel:** Read: COMM Port: COM3, Firmware Version: 4.7. Write: [empty].
- Message:** You've connected the WOT Box to your computer. You can now change settings.
- Logo:** N2MB RACING N2MB.COM

Dodge Caliber SRT4



The screenshot shows the WOT Box User Interface for a Dodge Caliber SRT4. The interface is divided into several sections:

- Launch Control:** Enabled . RPM: 4000. Alternate RPM: Enabled 4000. Lockout RPM: Enabled 1500. TPS Threshold (V): Enabled 3.00. PID Kp: 4, PID Ki: 1.
- No-Lift Shift:** Enabled Auto . Time (ms): 350. TPS Threshold (V): 3.00.
- Rev Limiter:** Enabled . RPM: [empty].
- Shift Light:** Enabled . RPM: 4000.
- Global Settings:** Number of Cylinders: 4. RPM Source: OTHER - Fuel Injector Signal. Clutch Inverted . TPS / APP Inverted . Clutch Threshold (V): 3.00.
- Nitrous Window Switch:** ON RPM: 3000, OFF RPM: 6000. Enabled . TPS Threshold (V): 3.00. ON RPM Hysteresis: 2500. OFF RPM Hysteresis: 5500.
- Vehicle Snapshot:** RPM: 0. Clutch (V): 0.00 UP. TPS (V): 0.00 UP.
- Read/Write Panel:** Read: COMM Port: COM3, Firmware Version: 4.7. Write: [empty].
- Message:** You've connected the WOT Box to your computer. You can now change settings.
- Logo:** N2MB RACING N2MB.COM

Ford Mustang: 1996 - 2009

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read	Write
COMM Port	COM3
Firmware Version	4.7

Global Settings

Number of Cylinders

RPM Source

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM OFF RPM

Enabled

TPS Threshold (V)

ON RPM Hysteresis

OFF RPM Hysteresis

Vehicle Snapshot

RPM

Clutch (V) UP

TPS (V) UP

When Launch Control is enabled and you go to Wide Open Throttle at idle, This is the RPM that your vehicle will maintain.



Ford Mustang: 2010-2017

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read	Write
COMM Port	COM3
Firmware Version	4.7

Global Settings

Number of Cylinders

RPM Source

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM OFF RPM

Enabled

TPS Threshold (V)

ON RPM Hysteresis

OFF RPM Hysteresis

Vehicle Snapshot

RPM

Clutch (V) UP

TPS (V) UP

After you've changed the settings that you want to change, click this button to save them to your WOT Box.



Ford Mustang: 2018+ (Note RPM Source must be set to MazdaSpeed3 below)

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM 4000

Alternate RPM Enabled 4000

Lockout RPM Enabled 1500

TPS Threshold (V) Enabled 1.71

PID Kp 4 PID Ki 1

No-Lift Shift

Enabled Auto

Time (ms) 350

TPS Threshold (V) 1.71

Read	Write
COMM Port	COM8
Firmware Version	4.8

Global Settings

Number of Cylinders 4

RPM Source MazdaSpeed3 or 6 - CKP

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V) 2.00

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM OFF RPM

Enabled 3000 6000

TPS Threshold (V) 3.00

ON RPM Hysteresis 2500

OFF RPM Hysteresis 5500

Vehicle Snapshot

RPM 0

Clutch (V) 0.00 DN

TPS (V) 0.00 UP

You've connected the WOT Box to your computer. You can now change settings.



Nissan 350Z and G35

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM 4000

Alternate RPM Enabled 4000

Lockout RPM Enabled 1500

TPS Threshold (V) Enabled 3.00

PID Kp 4 PID Ki 1

No-Lift Shift

Enabled Auto

Time (ms) 350

TPS Threshold (V) 3.00

Read	Write
COMM Port	COM3
Firmware Version	4.7

Global Settings

Number of Cylinders 6

RPM Source Nissan 350Z / G35 - CKP

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V) 2.00

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM OFF RPM

Enabled 3000 6000

TPS Threshold (V) 3.00

ON RPM Hysteresis 2500

OFF RPM Hysteresis 5500

Vehicle Snapshot

RPM 0

Clutch (V) 0.00 DN

TPS (V) 0.00 UP

When Launch Control is enabled and you go to Wide Open Throttle at idle, This is the RPM that your vehicle will maintain.



Mazda Speed 3 / Mazda Speed 6

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read	Write
COMM Port	COM3
Firmware Version	4.7

Global Settings

Number of Cylinders

RPM Source MazdaSpeed3 or 6 - CKP

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM	OFF RPM
Enabled <input type="checkbox"/>	<input type="text" value="3000"/> <input type="text" value="6000"/>
TPS Threshold (V)	<input type="text" value="3.00"/>
ON RPM Hysteresis	<input type="text" value="2500"/>
OFF RPM Hysteresis	<input type="text" value="5500"/>

Vehicle Snapshot

RPM

Clutch (V) DN

TPS (V) UP

When Launch Control is enabled and you go to Wide Open Throttle at idle, This is the RPM that your vehicle will maintain.



Chevrolet Cobalt SS / Saturn ION Redline

Volkswagen GTI MkV and newer (2003-present Volkswagen GTI)

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read	Write
COMM Port	COM3
Firmware Version	4.7

Global Settings

Number of Cylinders

RPM Source OTHER - Ignition Signal

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

ON RPM	OFF RPM
Enabled <input type="checkbox"/>	<input type="text" value="3000"/> <input type="text" value="6000"/>
TPS Threshold (V)	<input type="text" value="3.00"/>
ON RPM Hysteresis	<input type="text" value="2500"/>
OFF RPM Hysteresis	<input type="text" value="5500"/>

Vehicle Snapshot

RPM

Clutch (V) DN

TPS (V) UP

You've connected the WOT Box to your computer. You can now change settings.



Most VW / Audi 1.8T cars

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read		Write	
COMM Port		COM3	
Firmware Version		4.7	

Global Settings

Number of Cylinders

RPM Source OTHER - Fuel Injector Signal

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

	ON RPM	OFF RPM
Enabled <input type="checkbox"/>	<input type="text" value="3000"/>	<input type="text" value="6000"/>
TPS Threshold (V)	<input type="text" value="3.00"/>	
ON RPM Hysteresis	<input type="text" value="2500"/>	
OFF RPM Hysteresis	<input type="text" value="5500"/>	

Vehicle Snapshot

RPM

Clutch (V) DN

TPS (V) UP

When Launch Control is enabled and you go to Wide Open Throttle at idle, This is the RPM that your vehicle will maintain.



Dodge Challenger 5.7L

WOT Box User Interface

File Options Help

Launch Control

Enabled RPM

Alternate RPM Enabled

Lockout RPM Enabled

TPS Threshold (V) Enabled

PID Kp PID Ki

No-Lift Shift

Enabled Auto

Time (ms)

TPS Threshold (V)

Read		Write	
COMM Port		COM9	
Firmware Version			

Global Settings

Number of Cylinders

RPM Source OTHER - Fuel Injector Signal

Clutch Inverted TPS / APP Inverted

Clutch Threshold (V)

Rev Limiter

Enabled

RPM

Nitrous Window Switch

	ON RPM	OFF RPM
Enabled <input type="checkbox"/>	<input type="text" value="3000"/>	<input type="text" value="6000"/>
TPS Threshold (V)	<input type="text" value="3.00"/>	
ON RPM Hysteresis	<input type="text" value="2500"/>	
OFF RPM Hysteresis	<input type="text" value="5500"/>	

Vehicle Snapshot

RPM

Clutch (V)

TPS (V)

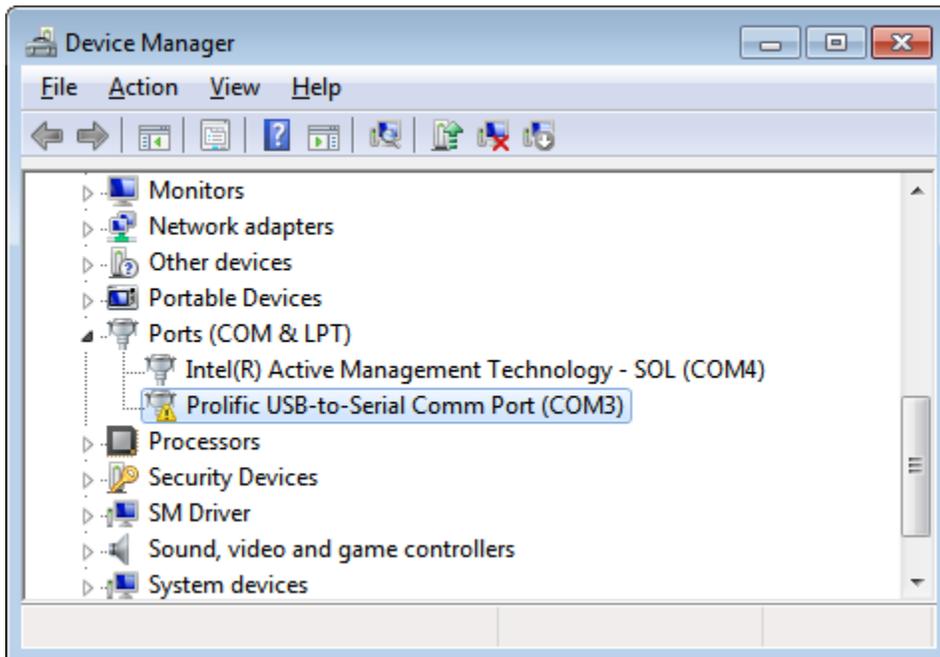
If No-Lift Shift is engaging when you're not at Wide Open Throttle, try raising this value (lower it for inverted TPS.) If you're at Wide Open Throttle but No-Lift Shift won't engage, try the opposite.



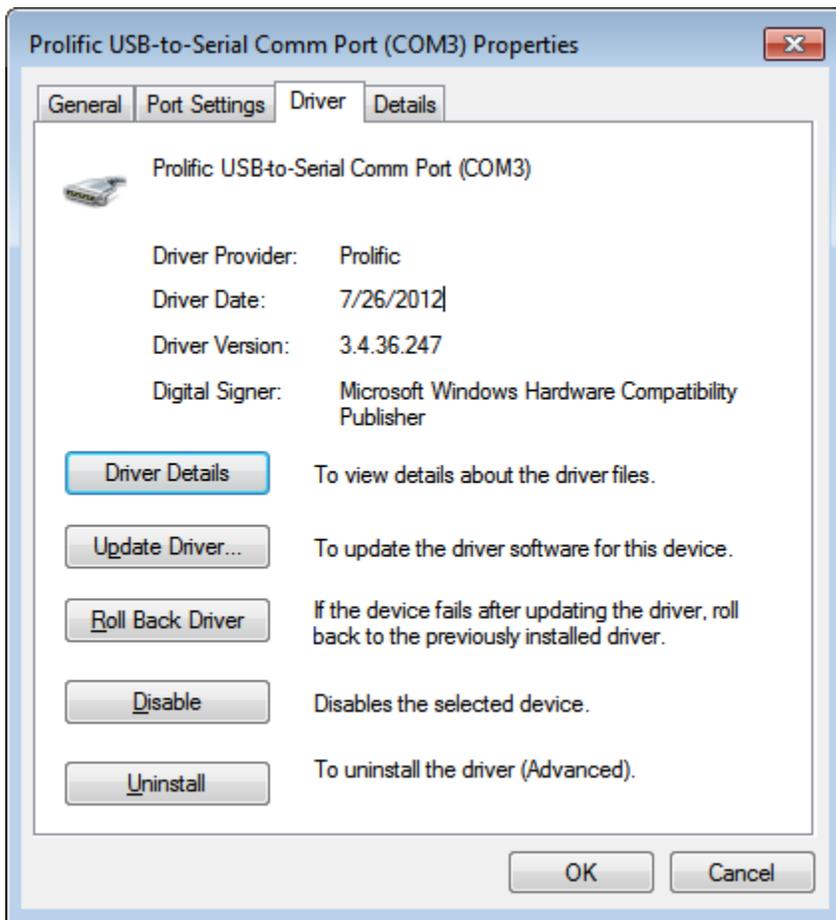
Fixing the PL-2303 USB to Serial Drivers

If you cannot connect to the WOT Box, the USB to Serial driver is likely the problem.

1. First, make sure you have installed this driver: [PL2303 Prolific GPS AllInOne 1013.exe](#)
2. The first time you run it, it may ask you to uninstall another driver. Complete the process and reboot the computer. Then run the installation again.
3. Next, plug in the USB to Serial adapter.
4. Open the Windows Device Manager by clicking **Start**, and then **Control Panel**.
5. Click **Hardware and Sound** or **Device Manager**.
6. Click **Device Manager**.
7. Double click on the **Prolific USB-to-Serial Comm Port** to open the properties. You will likely see a yellow exclamation mark next to it, indicating that it is not working.,

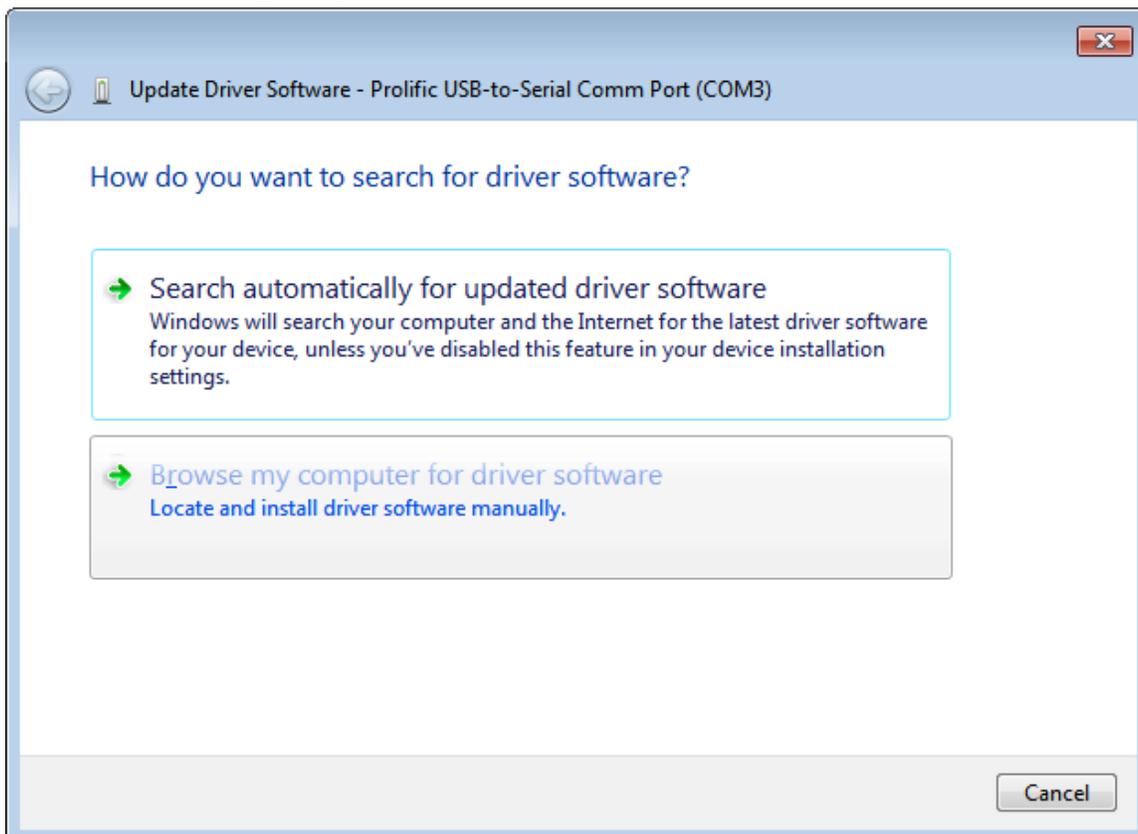


8. Click on the **Driver** Tab.

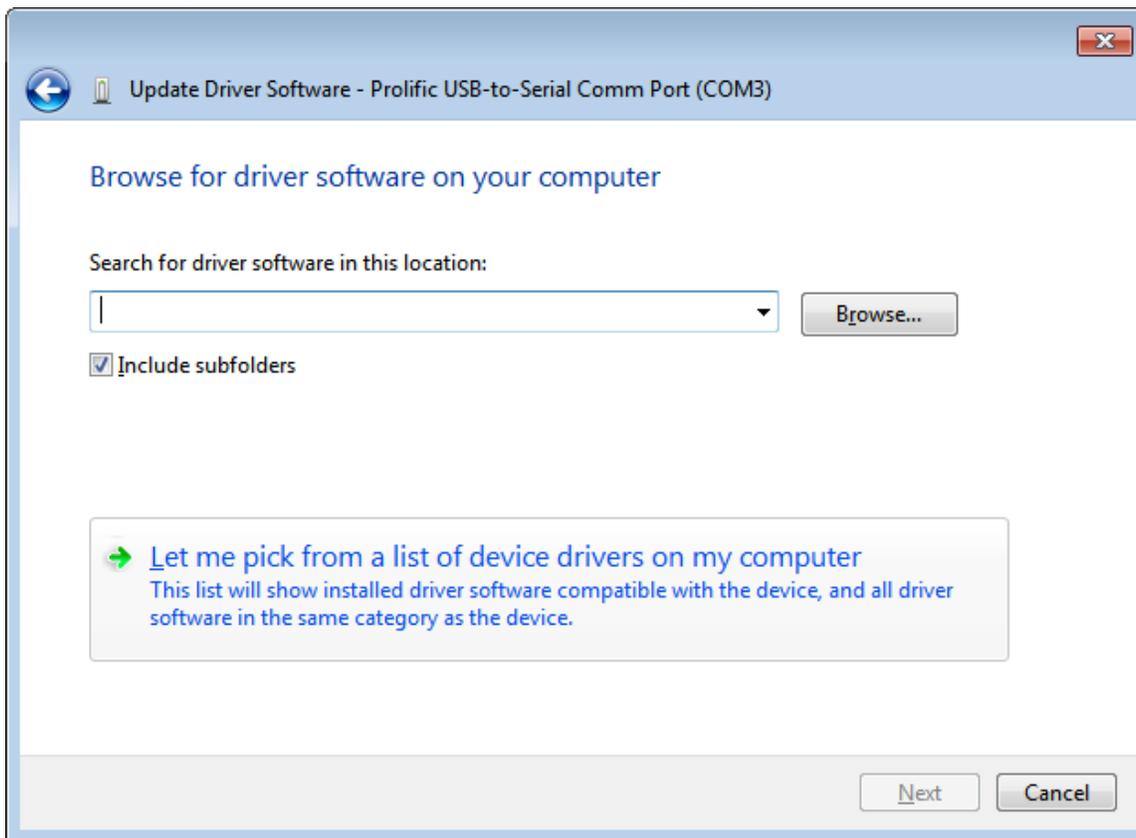


9. Click on the “**Update Driver...**” button.

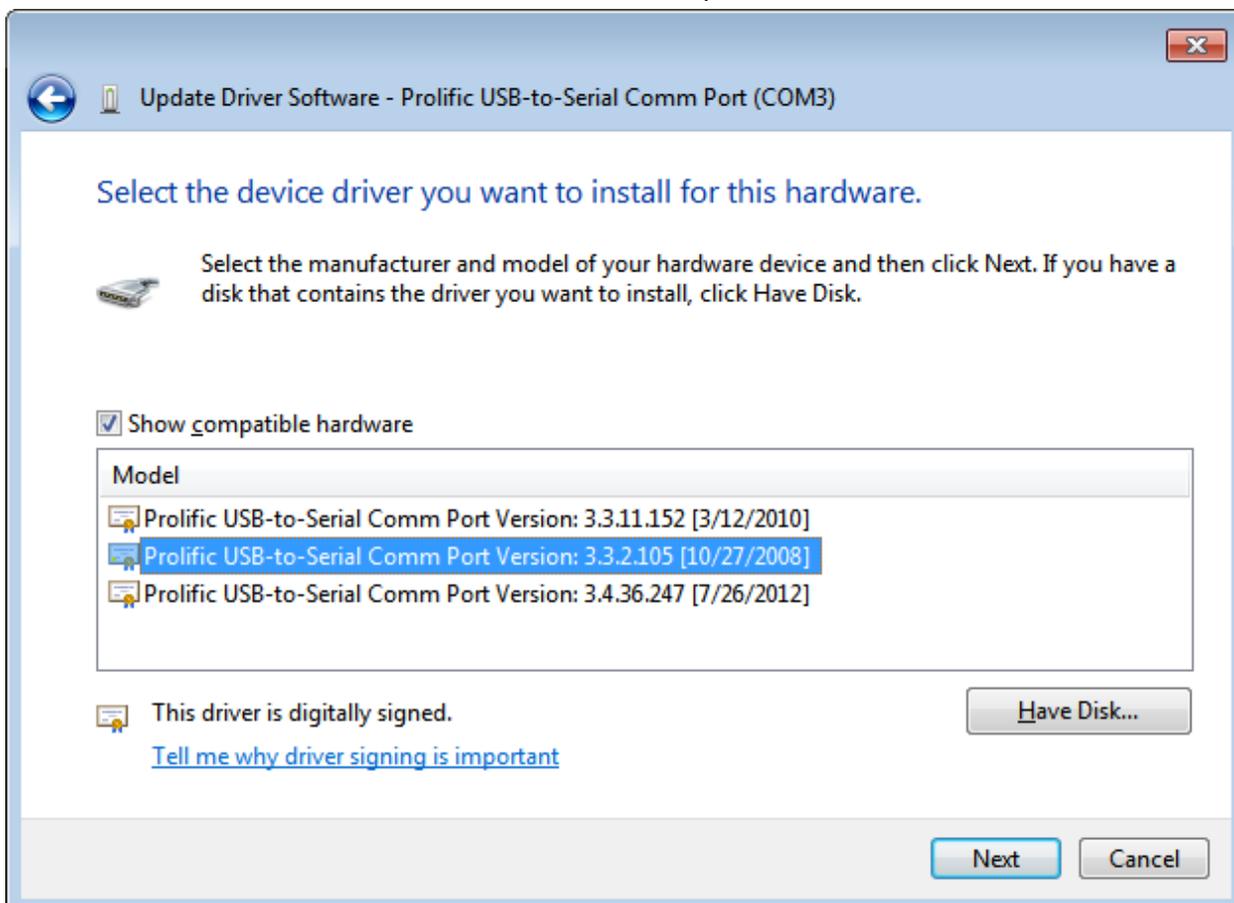
10. Click on “**Browse my computer for driver software**”



11. Click “Let me pick from a list of device drivers on my computer”



12. Finally, select “Prolific USB-to-Serial Comm Port Version: 3.3.2.105 [10/28/2008]”. Any other version will not work. If this version is NOT available, return to step 1 and reinstall the driver.



13. Click **“Next”** and **“Close”**. If the computer asks you to reboot, you may do that.
14. The exclamation point next to the USB to Serial adapter should now be gone. You will be able to connect to the WOT Box, using the com port listed on your screen.

