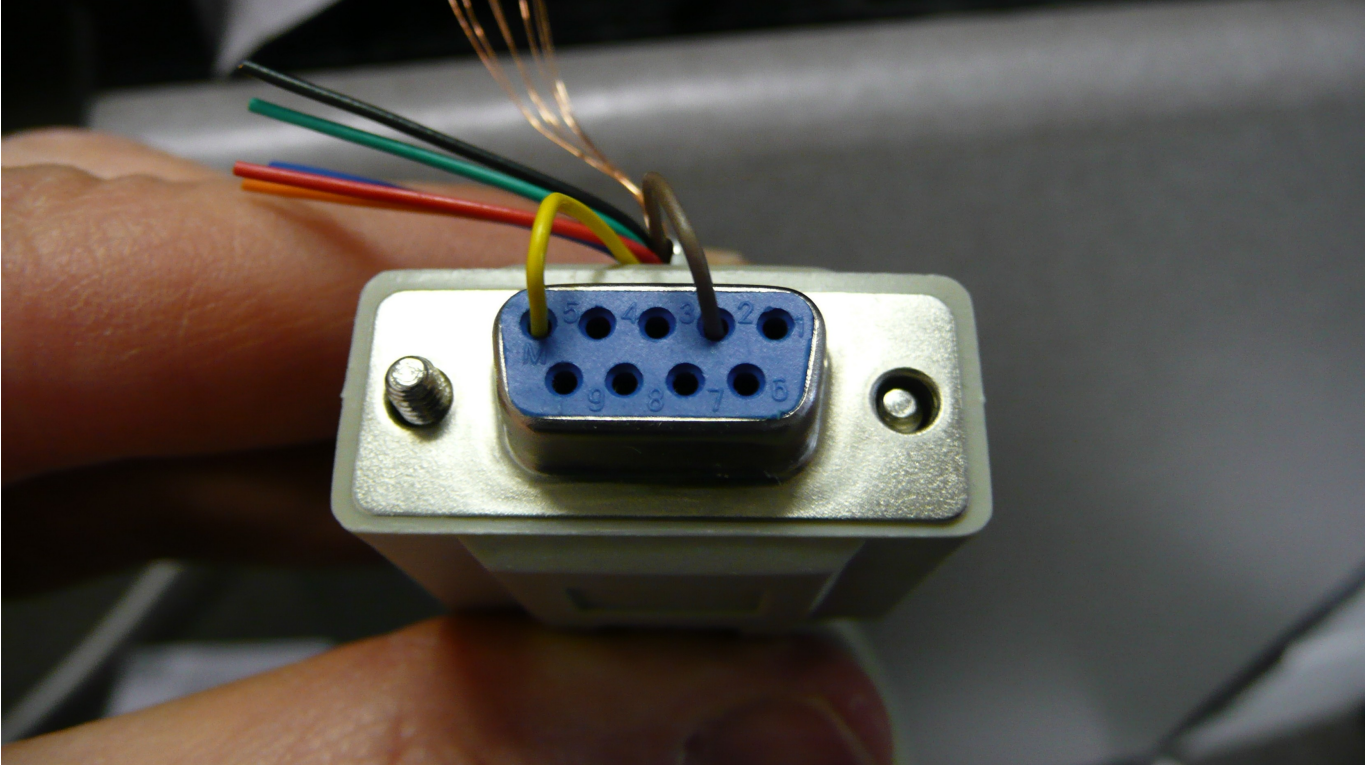


## How to get your AEM Digital WBO2 to connect to the **AccessTUNER™** Professional or Race software v1.00

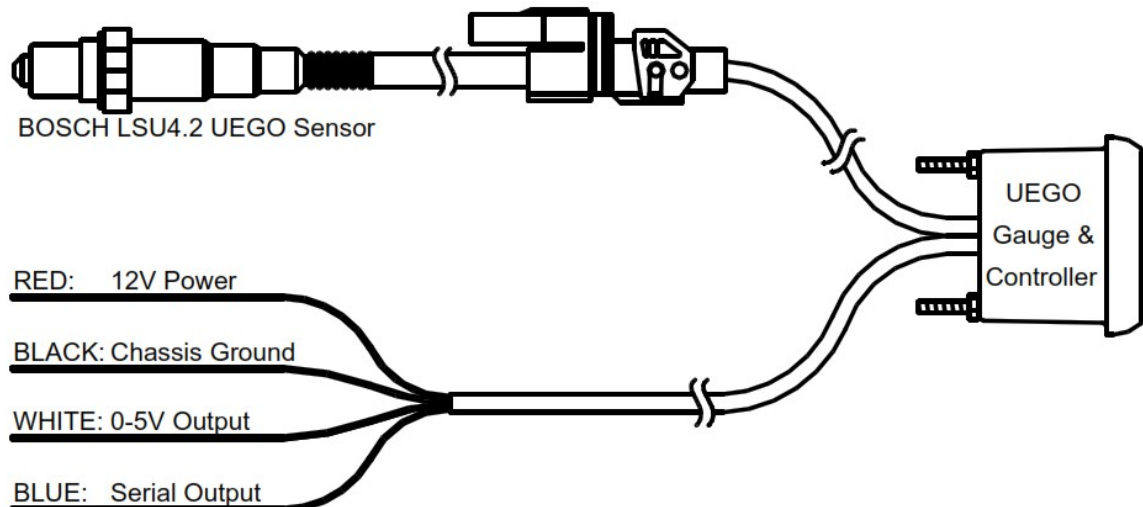
The install of this unit is a bit more difficult because you first must make a custom serial harness so a USB-to-Serial adapter can then be used to get the serial WBO2 data from the gauge to the **AccessTUNER** software. These first diagrams will show you what wires need to be cut and soldered together in order for this WBO2 serial data to be properly transmitted to your **AccessTUNER** software. You will need the following tools:

- 1- Wire cutter/stripper.
- 1- Soldering gun.
- 1- Electricians tape.

You will need a known good serial cable so that you can cut the female end of the cable off and reuse it. The female end is pictured below:



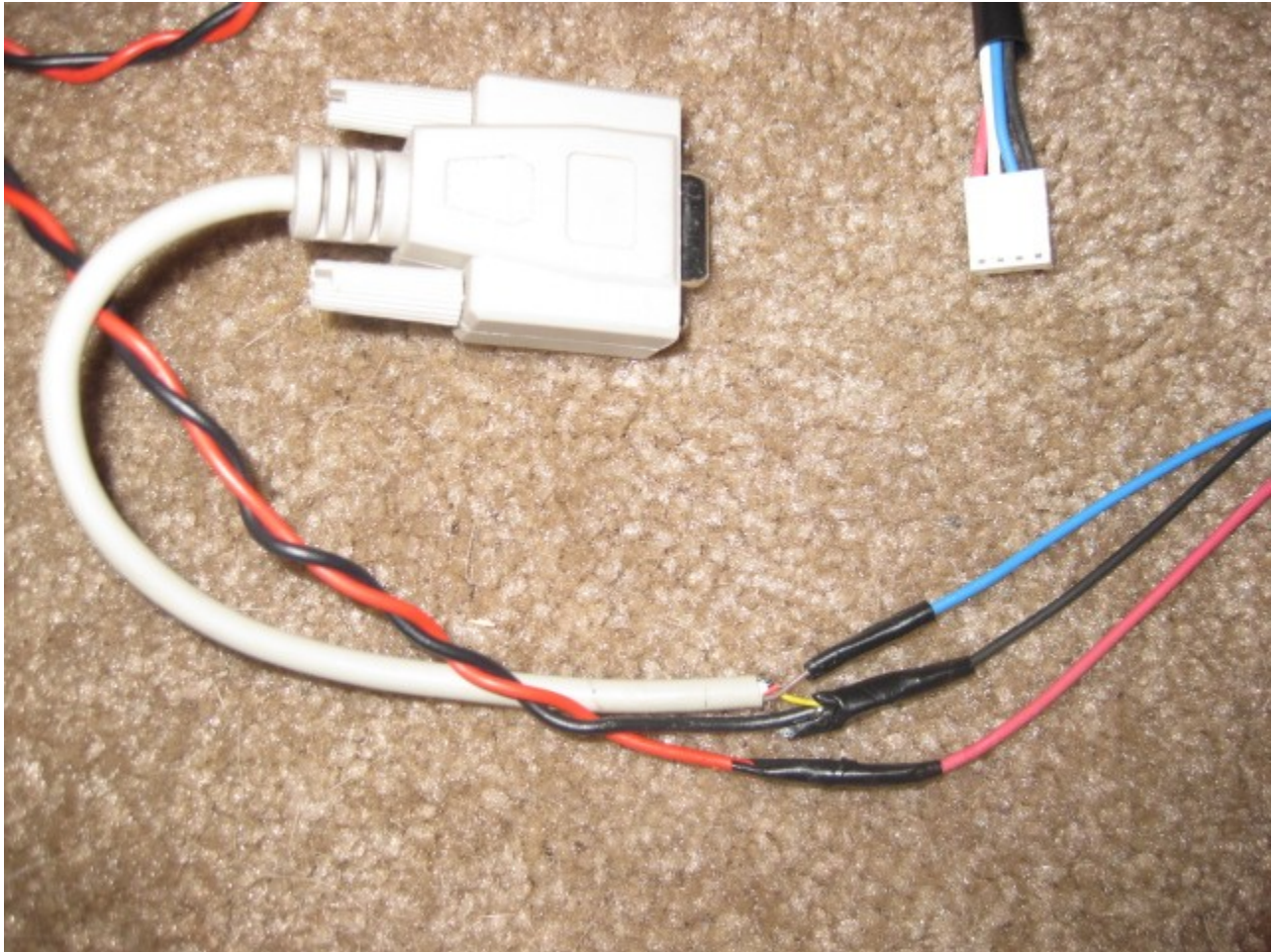
We pushed the YELLOW and BROWN wires into their perspective pin locations for demonstrative purposes only. The other end of the serial cable will not be used.



Solder the YELLOW #5 Ground wire of the cut serial cable (female end, as pictured below) to the BLACK: Chassis Ground wire from the AEM

Solder the BROWN #2 Comms wire of the cut serial cable (female end, as pictured below) to the BLUE: Serial Output wire from the AEM

The finished custom cable should look similar to the one pictured below. Please note how thin the serial cable wires are, you may want to heavily wrap (with electrical tape), fold some cable over and zip tie it together to the thicker portion of the cable, or otherwise reinforce this portion of the cable to provide some additional strain relief. This custom serial cable would then connect to your computer if you have a serial port or to a USB-to-Serial cable if you only have USB ports on your tuning computer.



**1<sup>st</sup>** – Install the device manufacturers’ software and verify that the device is working properly through your COM Ports before you try to connect it to the **AccessTUNER** software. If you cannot get the device to communicate with your laptop using the manufacturer’s software then you will not be able to get it to work with the **AccessTUNER** software. If the MFG does not have stand-alone software for this device, you can skip this step.

**2<sup>nd</sup>** – Connect the customer serial cable (female end) to your USB-to-Serial converter, then plug your USB-to-Serial converter for this device into an open USB port on your computer. If you have the same brand of USB-to-Serial converter for all of your devices then you will want to plug them in one at a time so you can see which COM Port is going to which device. If you have a designated serial port on your laptop, we suggest you use that port for your **AccessTUNER** cable (if you are using the older serial cables).

**3<sup>rd</sup>** – Connect your **AccessTUNER** cable to your computer, either to your designated serial port or through a USB-to-Serial converter.

**4<sup>th</sup>** – Right click on your My Computer icon, choose the Properties option, then the Hardware tab, and finally the Device Manager button, see below picture.

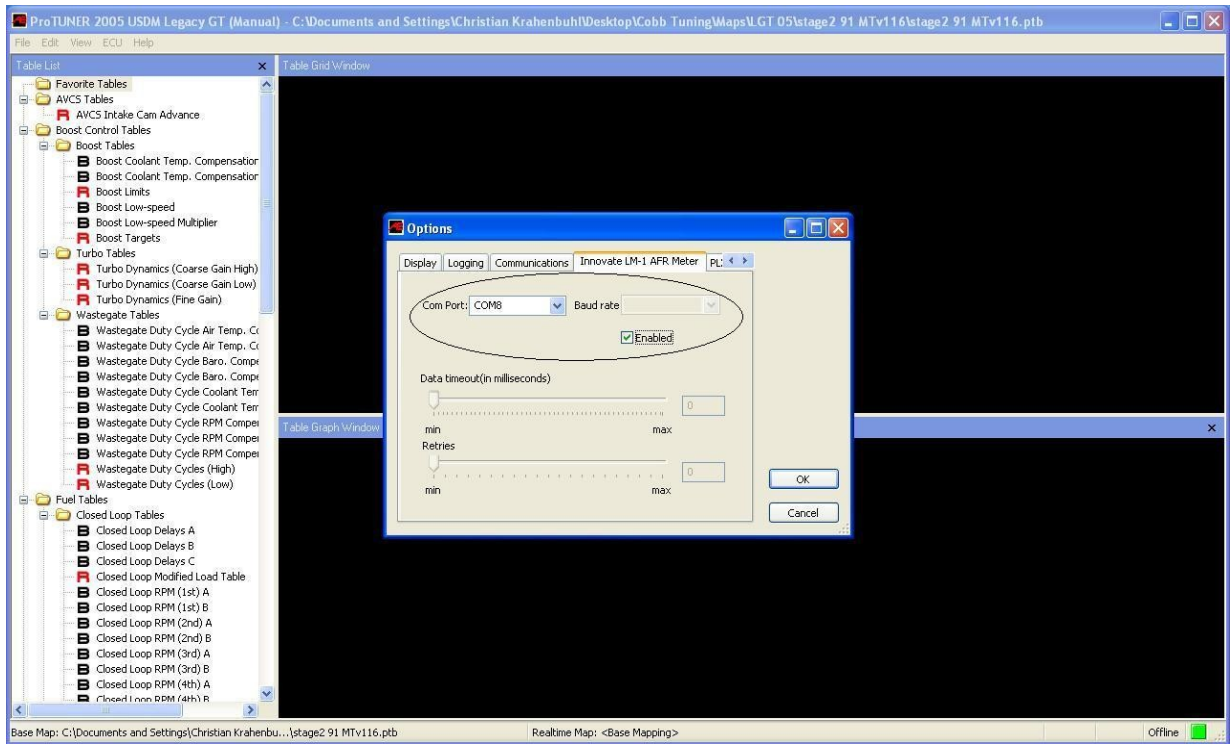


In the Device Manager area you will want to double-click the “Ports (COM & LPT)” device link so you can see what COM Ports Windows has assigned to the AEM UEGO and the **AccessTUNER** cable. Write down which device is on which COM port; you will need to know which Com Port goes to which device for step 7.

5<sup>th</sup> – After you have opened your **AccessTUNER** software and BEFORE you choose the Live Tuning option (CTRL+L) in your **AccessTUNER** software, press CTRL+F so that you can access your Configure Options menu.

6<sup>th</sup> – If you need to, you can go to the Communications tab and press the “Auto Detect” button; this will open a Com Port and attempt to find the ECU. The ignition must be in the full “ON” position and the **AccessTUNER** cable must be connected to the OBDII port and the USB-to-Serial converter on your laptop. After the ECU is found, make sure the correct Com Port is selected in the “Com Port:” drop down menu.

7<sup>th</sup> – Now go to the “AEM UEGO AFR Gauge” tab and choose the correct Com Port for that device (or its USB-to-Serial converter). Make sure you have “Enabled” that device as well; a check mark should be in the “Enabled” box, see below (this enables the software to receive the serial information). Please verify that no other external devices have been enabled as well. Press the OK button to save your settings and to close this window.



8<sup>th</sup> – For this final step you will need to choose the Live Tuning option through the software, CTRL+L. This will connect the **AccessTUNER** software to the ECU and bring in the serial information in from the AEM UEGO. Now press CTRL+F and go to the “Logging” tab and check the box that allows you to datalog the Lambda (or AFR) serial information from the AEM UEGO. If you wish to view this information on the dashboard, go to the “Gauge List” tab and check the option to view the Lambda (AFR, or other supported device information) from the external device. Press the OK button to save your settings and to close this window. Start the vehicle; you should now be seeing the external WBO2 device providing serial information to the **AccessTUNER** software.



v1.00