

PCV user's guide.

There is more information and instructions available on the supplied CD.

Now that you have installed your Power Commander here is a brief overview on how to use the unit.

The Power Commander is shipped with a map for a completely stock bike unless it is special ordered with a different map. **If it is necessary to load a map for a different configuration you will need to perform the following steps:**

- First you will need to insert the supplied CD into your computer. The CD is designed to automatically start running upon inserting into the drive. It may take a few seconds for the setup menu to appear. (If it does not begin to run after 30 seconds go to the "My Computer" icon and double click it. Then double click the "CD drive" icon. Lastly, double click "setup.exe". This will manually start the CD)
- In order for the Power Commander to communicate with the computer the Power Commander Control Center Software must first be installed. Click on "install software" in the menu and follow the directions. (This will create a folder called C:\Program Files / Power Commander 5 that the software and maps will be stored in).
- From the CD you will need to transfer the map database for your particular bike(s). Click on "map database". Find your model from the list and click on the model. (This will automatically install all the maps for that model to the C:\Program Files/Power Commander 5 folder.)

The latest software and maps can be found at www.powercommander.com

- The PCV maps are not the same as the PCIII maps. Load a map that has a .pvm file extension only.
- In order to send a map to the Power Commander you must first connect the USB cable to the computer and to the Power Commander unit. Make sure that the cable is fully seated into the Power Commander. There is a detent on the cable that could require light pressure to fully engage the cable. Open the Power Commander software by double clicking the PCV icon on your desktop. Click on OPEN MAP FILE and select the map you want to use from the database. Once the map is shown in the grid area click on SEND MAP.

The values in the map represent a percentage of fuel change over stock. If you see a value of 10 in the map then at the throttle position and RPM range the bike will be 10% richer than stock. If the value was a -10 then it would be 10% leaner than stock. You have the ability to fine tune your fuel curve by altering these values. We recommend leaving this to one of our Tuning Centers as they have the ability to accurately read the air/fuel curve which allows them to optimize the fuel curve for every cell. Without having the ability to read the air/fuel ratio of the bike it is impossible to accurately make fine adjustments to your fuel curve.

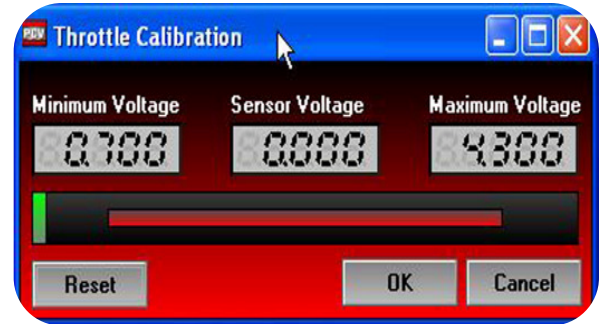
- If you disconnect the battery or disconnect the Power Commander from the bike it will not lose the map. The only way to lose the map is to download another map to the unit.

The Power Commander will come configured for Throttle Position, Speed and Gear position.

If you should need to recalibrate any of these parameters go to DEVICE TOOLS - CALIBRATE. The speed and gear position were setup with stock gearing and stock tires. Changing either of these variables can affect the accuracy of these readings. If you should need to recalibrate speed or gear it is necessary to get the bike either on a rear wheel stand or on a dynamometer.

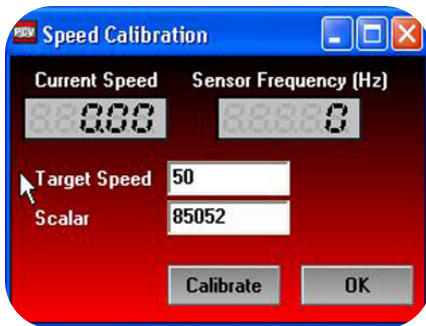
TPS CALIBRATION

It is important that the PCV software TPS read 0% when the bike is fully warmed up and at idle. If it needs to be reset make sure the bike is fully warmed up before resetting. With the engine off click on Reset, open throttle to the stop and close, then click OK. If your bike has fly-by-wire throttle only reset the throttle position on a dynamometer.



SPEED CALIBRATION

Type in your set target speed (recommended to be at least 30mph) Get the back wheel spinning to the set target speed and once the speed is steady click on Calibrate then click OK.



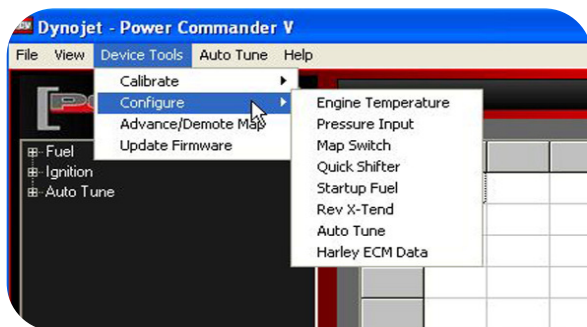
For the most accurate readings use a dynamometer to calibrate speed.

GEAR CALIBRATION

Once speed is calibrated you can then setup up gear position if needed. Get the bike on a stand or dynamometer and put the bike in first gear. Hold the throttle steady and click on calibrate for gear 1. Repeat this step for all gears. If your bike is a 5 speed input values for 6th gear that are less than that of 5th gear. Click OK



CONFIGURE



Engine temp - Displays engine temp either via the J1850 port or thru the 0-5v input

Pressure input - Offset base fuel map on 0-5v input

Map switch - enable this if using a map switch. Do not select if using Auto tune

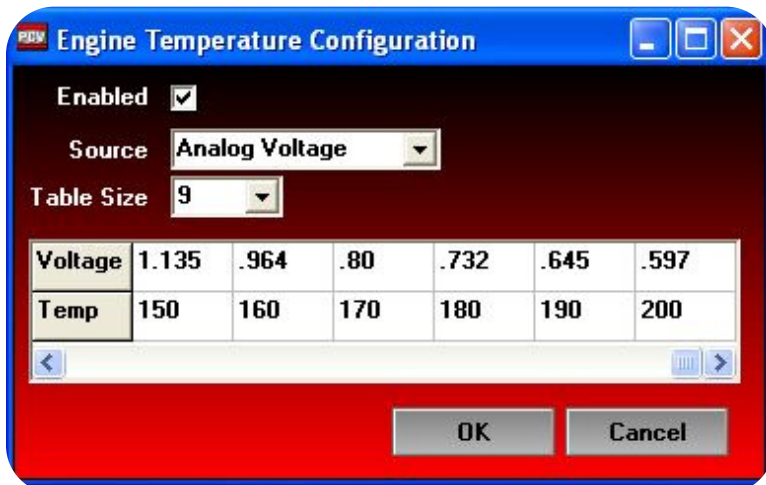
Quick shifter - adjustments of kill times. Gear dependent adjustments can only be made if software displays gear

Startup fuel - adjusts for fuel during startup

Rev Xtend - turns rev Xtend ON/OFF

Auto tune - configures auto tune options

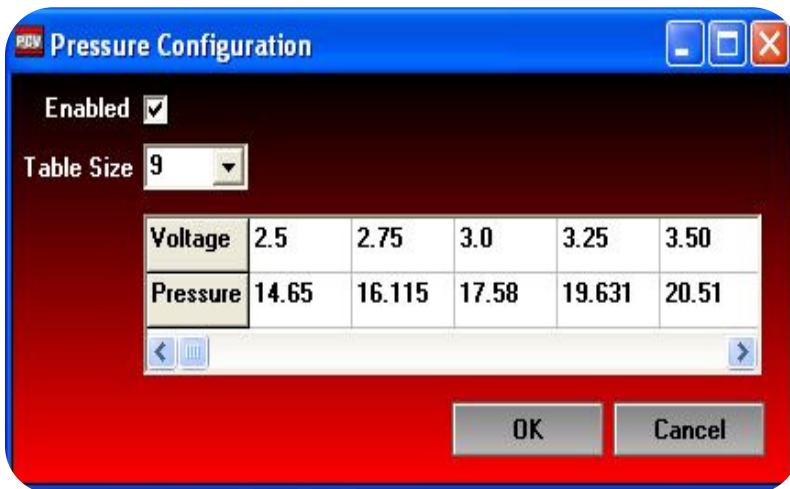
Harley ECM data - select J1850 data. Right click any gauge on the main screen to display Harley data.



Engine temperature

On Harley models the engine temperature will be displayed via the J1850 data. Click enabled and the source of J1850.

For all other models the engine temperature can be configured thru the analog input. The more tables that are configured the more accurate your reading will be. Input the voltage read at the header pin of the analog input in relation to engine temperature



Pressure

You can offset your fuel curve based on this 0-5v analog input. This is intended to be used for boosted applications but can be based on any 0-5v signal.

Input the voltage readings of the sensor you are tapped into in relation to the reading you want displayed in the software.

On all models other than Harley if you are using the analog input to configure engine temperature do NOT enable the pressure.



Quick Shifter

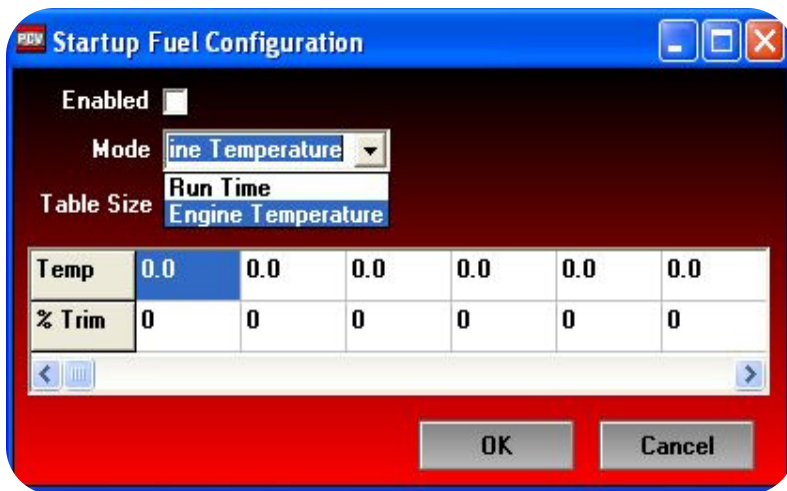
If using a quick shifter make sure the enabled box is checked.

If the gear setup has been configured the PCV has the ability to adjust the kill times per gear. Make the Mode Gear Dependent in the drop down menu.

If gear is not setup the software will deliver the same kill time for all gears.

Minimum RPM - lowest RPM that the shifter can be activated

Shift Interval - period of time between shifts that the software will activate. This reading is in milliseconds.



Start up fuel

Start up fuel can be based on time or engine temperature. Choose what mode from the drop down menu.

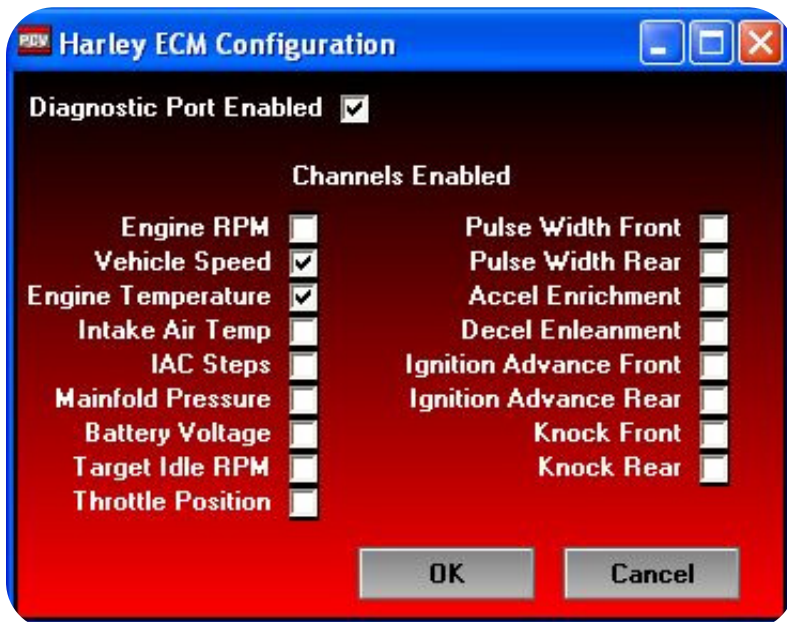
Time - from the first revolution of the crank the software will deliver a set percentage of fuel for a given amount of time in seconds

Engine temp - the software will deliver a percentage of fuel over the fuel map based on engine temperature. This can only be used if engine temperature has been configured.



Auto Tune

Each PCV from Dynojet comes configured for use with the Autotune kit. These configuration settings are explained in more detail with the instructions that come with the Autotune kit.



Harley ECM data

The J1850 data is streamed thru every PCV Harley Davidson model. This allows the software to display each channel listed.

The Speed and Engine Temperature channels are enabled as the unit is shipped from Dynojet. To enable other channels check the box next to the channel. These channels can be displayed on the main software screen by right clicking on any of the digital gauges.