AUTOTUNE NOT WORKING

When you run an AutoTune session, and are monitoring the green "hits" screen you should either see cells incrementing, or errors. If you have any errors, you may not get any hits until the errors go away. Be certain you are on the "hits" screen by looking at the top, next to Mode. You can press the Mode button on the bottom to scroll through the various screens to return to "hits".

HITS Shows the number of samples taken in each VE cell.

- Literally like a counter, the longer you stay in a cell, the higher the number. The number in the cell is capped at 99 on the screen, but can roll to an infinite number in memory. The cells change color based on the Front VE Table Hits:

   - 1 - 2 = yellow
   - 3 - 6 = orange
   - 7+ = red

- VEFront Shows the VE front table as stored in the tune.

- VERear Shows the VE rear table as stored in the tune.

- These are literally the current values from your VE table (from your tune) displayed on the AT Datalogger screen. These are the values currently being used by the ECM.

LVE-F Learned VE front.

LVE-R Learned VE rear.

- Based on the deviation between the desired AFR (as defined in the AFR or Lambda table) and the actual AFR (as measured by the OEM narrowband or Dynojet wideband o2 sensors), these values are calculated and expressed as "Learned VE Front or Rear". For instance, if your current VE is 100, and based on the error or deviation mentioned above indicates you're 10% too lean, then the LVE-F or LVE-R would show 110 (100 X 10% = 110).
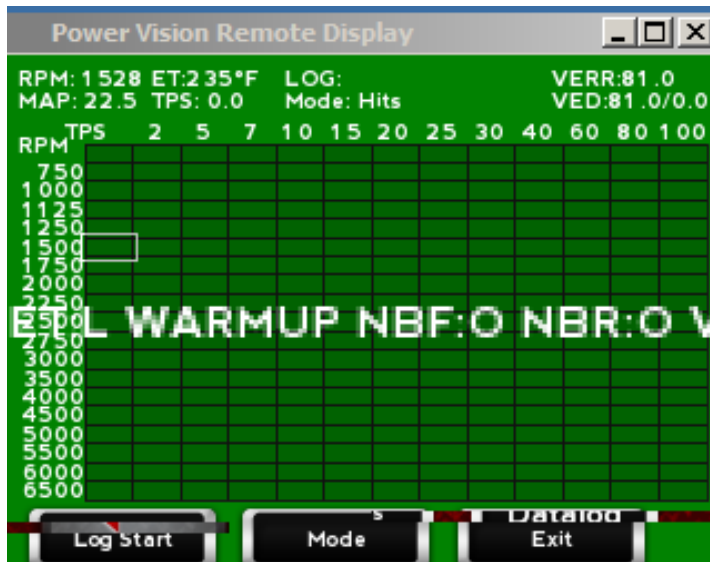
LCOR-F Learned correction to VE front (in percent).

LCOR-R Learned correction to VE rear (in percent).

- Tied directly to the mode and values from above, it's strictly the deviation expressed as a percentage

RT Real Time is the same as HITS but zoomed in.

TYPICAL ERROR MESSAGES

A common error would be ET:L for engine temperature low. AutoTune will not record any hits until a minimum engine temperature has been reached.

NBF:O and NBR:O refer to Narrow Band front and rear, Open Loop. This means the bike is still in Open Loop, and has not gone into Closed loop yet. There can be several reasons why the bike has not gone into Closed Loop, engine temperature being just one.

VE:+ means that you are between cell column. This is usually a temporary error. Move the throttle slightly, and this should go away.
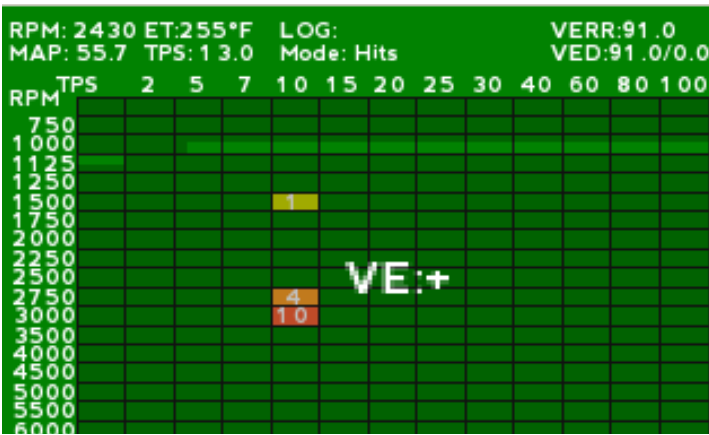
Once all of the errors are resolved, you should get hits in the cells the bike gets to. The cells will change color as more hits are achieved. In the screen to the left there is one cell that is Yellow, one that is Orange, and one that is Red. Once a cell turns Red, this indicates you have enough hits at that cell to make a useful change.
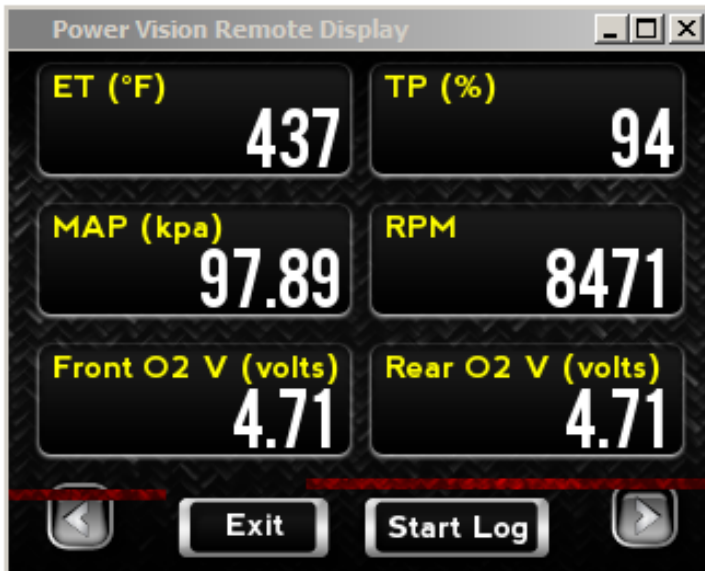

If you are running AutoTune Basic, and are getting errors (NB) related to the stock Narrowband o2 sensors, you may want to try displaying gauges on the Power Vision, and display front and rear o2 sensor voltage. This may help understand if the stock o2 sensors are working or not. You would normally see five volts at startup, then zero to one volt once up to temperature.

See typical gauge screen
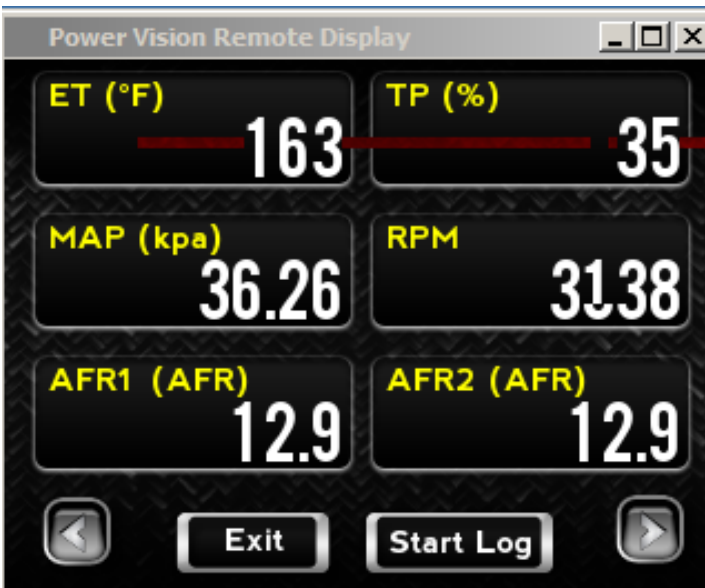
If you are running AutoTune Pro and getting errors (WB) related to the Wideband o2 sensors, you would display AFR from the wideband sensors to help troubleshoot the errors.
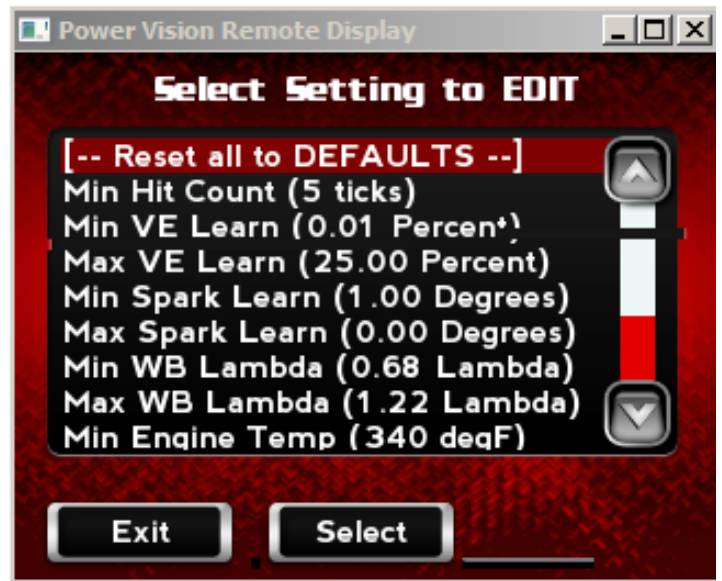
The AutoTune settings can be found here **Program Vehicle>AutoTune>Settings**

Above is a partial listing of available settings.

When running AutoTune you may occasionally see "Saving" on the screen. This indicates the Power Vision is doing an automatic save of data. This occurs automatically every five minutes.