AEROCHARGER®
RZR Turbo Kit - Field Guide

Aero-Commander EFI Controller



To adjust your Aerocharger® Turbo system for varying elevations and operating conditions, you may choose to make slight adjustments to the fuel settings. There are six different program modes of the Aero-Commander:

- **Cruise** (Green light) - Idle and Low-load fueling
- **Acceleration**(Yellow light) - Mid-load fueling
- **Full Throttle** (Red light) – High-load fueling
- **Boost Curve Start** (Green w/ Blue light)
- **Boost Curve Finish** (Yellow w/ Blue light)
- **Power Jet** (Red w/ Blue light) – Max Fuel added with 3rd Injector, this is the maximum fuel curve setting



To make adjustments to the Aero-Commander you will need the RZR to be running, and allow the AEM wideband air/fuel gauge O2 Sensor to heat up and become active for about one minute. The Aero-Commander will also need to run through a startup sequence. **This will be indicated by a single green LED scrolling back and forth for a couple seconds.**

Then the far left LED will become a solid green, indicating that the controller is in "Operation Mode" and will start with "Cruise" mode



If there is a green LED on the left along with a flashing red LED on the right, the Aero-Commander is not receiving a proper injector signal.



Once the system is active you may make adjustments to the controller. To do this press the **Mode Button** to activate the **Programming Mode**.



Each time you hit the **Mode Button** you advance to the next **Programming Mode**. Once you get to the desired mode, you can add or remove fuel from the controller by using the **+** (moves the setting to the right or "more fuel") and **–** (moves the setting to the left of "less fuel") buttons on the Aero-Commander. You can move to the next mode by hitting the **Mode Button** again or you can simply wait and the controller will automatically go back to the normal **Operating Mode**.

"Brad's Recommended" Settings

Example of **Cruise** settings while in **Programming Mode** .....



Example of **Acceleration** settings while in **Programming Mode**.....



Example of **Full Throttle** settings while in **Programming Mode**.....



Example of **Boost Start** settings during **Programming Mode**.....



Example of **Boost Finish** settings during **Programming Mode**.....



Example of **Power Jet** settings during **Programming Mode**.....



After adjusting your settings in **Programming Mode**, simply wait and you will default back to **Operating Mode**. When the Aero-Commander is operating you can see only four standard statuses. **Cruise**, **Acceleration**, and **Full Throttle** statuses will be indicated by LEDs changing to their programming mode colors. When boost mode is active, it will be indicated by the 8th light turning blue, while the other lights remain the color associated with the current mode.

Example of **Cruise** status during **Operating Mode**.....



Example of **Acceleration** status during **Operating Mode**.....



Example of **Full Throttle** status during **Operating Mode**.....



Example of **Boost** status during **Operating Mode**.....
(Note: Left lights can be other colors)



While you can make any changes desired to the fuel controller, we recommend that you keep the Air/Fuel ratio between **11.5 - 12.5** while under full throttle. If you run your engine too lean, as would be indicated by larger readings on the air/fuel O2 gauge, serious damage can be done to your engine. **Note:** When you get off of the throttle, there will be a temporary spike in the air/fuel reading, this is to be expected. You may also see lean readings during no throttle acceleration, e.g. coasting down a hill. This too is normal.

Helpful Tuning Hints:
The Aero-Commander has been preset with a tune that works best for our conditions here at the factory (900ft and 20-70F.) During testing at higher elevations, we reduced the Power Jet settings to 3-4 lights. It is typical for the A/F to be rich during part throttle operation. But, what is most important is that when you drop the hammer, you keep the Air/Fuel Ratio between 11.2 and 12.5. Testing shows 11.8 will produce the best power. If you are operating on dry pavement and experience a stutter when full throttle is applied abruptly, this is most likely the engine hitting the rev limiter. This can be corrected by making changes to the clutch. The clutch that is provided with your kit was designed to work best in sand, dirt, and grass. If drag racing on asphalt is your goal, we can make adjustments to the clutch. For Clutching concerns please feel free to contact EPI directly as they are very familiar with the Aerocharger® kit and can help you tune for individual driving styles and conditions.

A guideline for Air/Fuel Ratios:

10	Rich Low power Black Smoke
11	Rich
11.2	OK
11.5	Best Torque
11.8	Safe Best Power
12.2	Safe Best Power
12.5	Safe
13.2	Lean
14	Very Lean
14.7	Very Lean
15.4	Danger at Wide Open Throttle