

## THANK YOU FOR PURCHASING THE ATTITUDE BOX DEVELOPED BY ATTITUDE INDUSTRIES.

This Attitude Box is capable of handling the fuel needs for your vehicle from stock, to pipes and air intakes, and beyond. This is an Electronic Jet Kit. Like jet kits in the past the more you modify the more responsibility you take in getting your fuel curve right.

## **Product Features:**

- Plug and Play Installation Minutes to install. Stage 1 base settings are preset.
- **NO Computer Needed, NO Dyno Required** Make adjustments on the vehicle with the engine running.
- Simple Push Button Adjustment Interface
- Water-Resistant

DO NOT TURN ALL THE SETTINGS UP TO 8. The higher the setting DOES NOT mean more power. You are making fuel adjustments where the proper fuel tuning will achieve the best power and torque.

#### PLEASE READ ALL INSTRUCTIONS BEFORE STARTING INSTALLATION. BE SURE YOUR VEHICLE'S ENGINE IS COLD.

**IMPORTANT – PLEASE READ CAREFULLY -** The Attitude Box is legal ONLY for closed course vehicles. The Attitude Box is not applicable, nor intended for use on emissions controlled street, highway or off-road vehicles. The Attitude Box is not applicable, nor intended for use on aircraft.

**WARRANTY** – The Attitude Box has a warranty of 2 years from original date of purchase against defects in materials or workmanship. The customer must provide a valid proof of purchase to obtain the benefits of the warranty. Any modifications of the controller (cut wires, soldered wires, extensive abuse, improper use of dielectric grease, etc.) will void the warranty. Please contact the manufacturer to obtain a RMA number in order to return the product.

Attitude Industries · 3125 S 400 W, Salt Lake City, Utah 84115 USA · Mon-Fri 9am-5pm MST Phone: (406) 539-3015 · Email: support@tunewithattitude.com

# **TUNING INSTRUCTIONS**

The controller can be adjusted "on the fly" to tune your vehicle. No computer or other external device is needed to make tuning adjustments. All that is required is for your vehicle to be running which provides power to the controller. Most controllers come pre-programmed to the recommended base light settings which represents a typical stage 1 (intake + exhaust) vehicle modification. It is recommended to install the controller and take a test ride first before making any mode adjustments.

Six modes are available to make adjustments. You enter the adjustment mode by pressing the MODE button. Correctly entering the adjustment mode will display flashing LEDs on the LED display. Pressing the MODE button repetitively will move you through all the modes. **Note: The MODE button is sensitive and will at times skip a mode.** Pressing the MODE button at the last mode will bring you back to the first mode. To exit the adjustment mode and return to operation mode you just wait several seconds until the LED display reverts back to solid LED colors.

The six modes available are distinguished by an LED color combination. The six modes in respective order are as follows: Green, Yellow, Red, Green-Blue, Yellow-Blue, and Red-Blue. All six modes have 15 possible light settings. The settings are adjusted by pressing the PLUS (+) and MINUS (-) buttons. For easy reference the LEDs are numbered 1 through 8. Half step settings are represented by two same color LEDs flashing (ex: 4.5 has 4th and 5th LEDs lit). The 0.5 setting is represented by the 1st LED blinking at a much faster rate. Modes 4, 5, and 6 are distinguished by the 8th LED also blinking blue.

Every mode represents an adjustable feature within your vehicle's drive cycle. Reference the Example Drive Cycle diagram to gain a visual understanding. Each mode can be defined as either a FUELING mode or a SWITCH POINT mode as follows:

**FUELING MODES** - Modify the fuel amount compared to the stock fuel when the corresponding zone is active. The higher the light setting the MORE fuel is being added. The lower the light setting the closer you are to running STOCK fuel levels. Light settings for GEN 3.5 controllers can be SUBTRACTING fuel from the STOCK fuel level.

Note: The controller can be set to stock fueling without uninstalling the unit.

GEN 3 / GEN 3.2 controllers – Set ALL FUELING modes to a light setting of 0.5 to revert back to stock.

**GEN 3.5 controllers** – Stock FUEL settings vary according to application. Check website for info.

**SWITCH POINT MODES** – Determine the transition point between two corresponding zones. The higher the light setting the longer it takes for a zone to engage. The lower the light setting the faster a zone will engage. Note: Switch point modes do not have to be adjusted that frequently.

## Mode 1 - GREEN - CRUISE FUEL

Represents fuel modification under CRUISE conditions. When the LED display shows solid GREEN lights then the GREEN zone is active and fuel is modified by this mode. Mode has the largest affect on fuel mileage.

#### Mode 2 - YELLOW - ACCELERATION FUEL

Represents fuel modification under ACCELERATION conditions. When the LED display shows solid YELLOW lights then the YELLOW zone is active and fuel is modified by this mode.

### Mode 3 – RED – FULL THROTTLE FUEL

Represents fuel modification under FULL THROTTLE conditions. When the LED display shows solid RED lights then the RED zone is active and fuel is modified by this mode. Mode has the largest affect on tuning for the vehicle's top horsepower value.

### Mode 4 - GREEN-BLUE - IDLE SWITCH POINT

Represents transition between STOCK FUELING and the GREEN zone. Light settings correspond to RPM values. The 1st LED will very slowly blink GREEN when no zone is engaged.

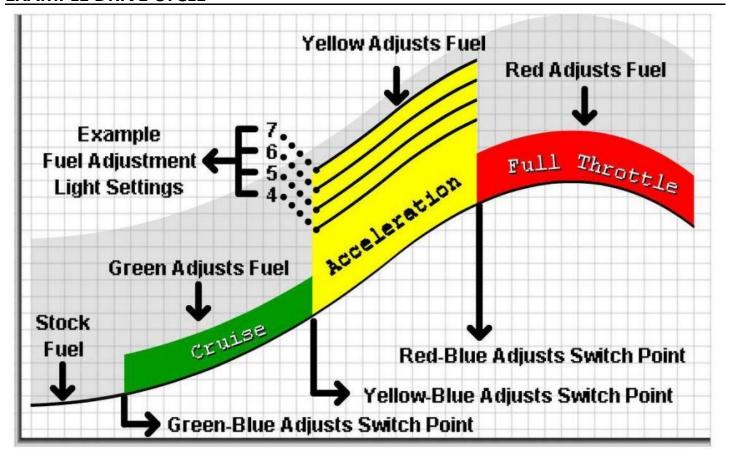
## Mode 5 - YELLOW-BLUE MODE - ACCELERATION SWITCH POINT

Represents transition between GREEN and YELLOW zones which relates to cruising and accelerating conditions. The YELLOW zone is load based and engages differently between gears and riding conditions.

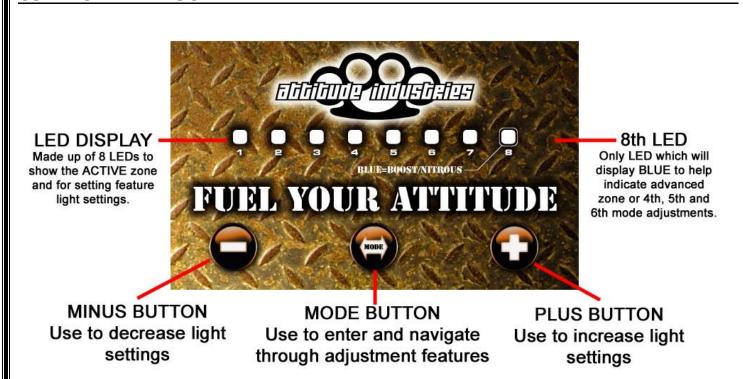
#### Mode 6 - RED-BLUE MODE - FULL THROTTLE SWITCH POINT

Represents transition between YELLOW and RED zones which relates to accelerating and full throttle conditions. The RED zone is load based and engages differently between gears and riding conditions.

# **EXAMPLE DRIVE CYCLE**



# **CONTROLLER LAYOUT**



# **Installation Instructions – Generic Install**

- 1. Make sure the vehicle is completely cool and secure from rolling around before starting the installation.
- 2. We first recommend checking your user's manual for the OEM instructions for gaining access to the vehicle's fuel injector(s).
- 3. Inspect the controller to become familiar with the parts. Every controller comes with at least one pair of mating connectors and a BLACK ground wire. The 12V power source comes from the double pinned RED wire which will be pinned inside one of the connectors.
- 4. Remove the seat and or seats from your vehicle.
- 5. Remove plastic panels covering access to the engine / fuel injectors.
- 6. Determine where you will mount the controller. Use the Velcro patch to mount the unit. Typical locations are next to the battery or the vehicle's ECU. Try to mount in an easily accessible location to take advantage of the true "on the fly" adjusting, but make sure to place in an area reasonably protected from mud / water. The controller is water-resistant, but not 100% waterproof.
- 7. Remove any more necessary parts to locate the fuel injector(s) which are typically on the throttle body. The throttle body is positioned between the engine and the air box. If the application has multiple injectors then there will be multiple throttle bodies.
- 8. Route the harness along the frame from your chosen mounting location towards the fuel injector(s).
- 9. Disconnect the stock connector from the injector and plug in the mating controller connector. Plug in the vehicle's injector connector you took off back into the other mating controller connector. Repeat as necessary for any remaining connector pairs. NOTE: For multiple injector applications it usually does not matter which EFI connector pair goes to which cylinder. For reference though the connector pair with a double pinned RED and YELLOW wire is the EFI's channel #1. If easily distinguishable on the vehicle then we do recommend to install channel #1 on the front cylinder. The controller is powered up through the double pinned RED wire.
- 10. Attach the BLACK ground wire from the controller to the common grounding bolt or secure the wire to the negative post of the battery. You may cut open the ring terminal for easy installation underneath a bolt.
- 11. **START THE VEHICLE. Do NOT simply turn the key on.** The LEDs on the controller will energize and may scroll back and forth for several seconds or none at all. The controller will then go to a very slow blinking LED or a few solid green LED's. This indicates a proper installation.
- 12. Vehicle reassembly is opposite of the disassembly procedures listed beforehand. Use zip ties to secure harness.

#### **Final Installation Note**

Re-check your wire routing and the controller location to make certain that in no way the wires can come into contact with any moving parts or high heat source. The controller should be mounted in a way as to not cause a handling problem with the machine.

### **Troubleshooting**

Please make sure you are trying to **START** your vehicle and **NOT** just turning the key on. If the number 1 LED is flashing green and the number 8 LED is flashing red at IDLE then this indicates a connection issue. Re-check the wires from the controller and make sure they are connected to the proper wire of your vehicle's stock harness. The controller only needs power (RED wire) and a proper ground (BLACK wire) to show this error display.

If the vehicle fails to start then you will also need to re-check the wiring. Make sure the BLACK ground wire is attached to a proper grounding source. Re-check all connections to make sure the connectors are clicking securely together.

### Support

All controllers are backed by a great support team. First contact your dealer or product representative where you purchased the product and check if they can assist you. If all else fails then feel free to contact the manufacturer directly to gain additional support. Call toll free within the USA at 1-877-764-3337 or 1-406-388-2377 for international customers.