

Thank you for choosing the BIG GUN POWERBOX. This POWERBOX is usable only for the following fuel injected models:

Polaris General 1000

This product 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. 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

Product Note:

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.

IMPORTANT - PLEASE READ CAREFULLY

Some vehicles modifications with Big Gun products must not be used on public roads and in some cases may be restricted to close course competition. Those products not identified as US EPA legal are intended for off-road or marine applications only. Not intended for use on emission controlled vehicles.

WARRANTY:

This product is warrantied for 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, etc.) will void the warranty. Please contact the manufacturer to obtain a RMA number in order to return the product.



INSTALLATION - Please call technical support for any installation questions.

- 1. Make sure your vehicle is cold before starting the installation.
- 2. Remove the driver seat, middle engine cover behind the seats and the engine cover located in the box.
- 3. When removing the cover in the box, take note of the two fuel injectors located right on top of the engine.
- 4. Determine a location to mount the EFI controller. We suggest either mounting the controller behind the gear shifter or within the battery compartment. Use the supplied Velcro patch to mount the controller.
- 5. Route and connect the controller's BLACK ground lead to a grounding frame bolt or the negative side of the battery.
- 6. Route both the injector connection leads on the controller from your mounting location, up through the middle engine cover to the fuel injectors.
- 7. Disconnect the factory fuel injector connectors from the fuel injectors one at a time. Connect one of the EFI fuel injector connectors in line with the factory fuel injector connection. It does not matter which EFI connector pair goes to which cylinder. For reference though the connector pair with a double pinned RED and YELLOW wires is the controller's channel #1.
- 8. After connecting the EFI controller check all the wire connections to ensure proper connection. To do this just pull on the connections to make sure they are properly locked in.
- 9. The controller comes with O2 bypass OX-025 which needs to be installed to properly allow fueling throughout the entire range. Locate the narrowband O2 sensor on the exhaust pipe. Follow the wire harness back to the connectors. Disconnect the connectors and install the O2 bypass. Zip tie the connector going back to the sensor out of the way.
- 10. Use the supplied zip ties to secure the harness in place and away from hot and moving parts.

 IMPORTANT: Make sure all connections are firmly secure and allow a little slack at the connections to prevent engine vibration from damaging/breaking a wire on the harness.
- 11. Make sure you can view the controller and **START** your vehicle. The LEDs on the controller will energize and may scroll back and forth for several seconds. With a proper installation the controller will stop scrolling the LEDs and go to a steady or slow flashing GREEN LED(s) to the far left. With an improper installation the LED display will consist of a flashing 1st LED GREEN and a flashing 8th LED GREEN. This occurs when the EFI is not receiving a proper injector signal. Re-check the wire connections for any defects.

 IMPORTANT: The flashing 1st LED GREEN and 8th LED GREEN is common for a proper installation during deceleration, because the stock fuel map may shut off the fuel injectors during this process. This display is also common when just turning the key on. The display is also shown for a couple minutes when turning the key off.
- 12. Replace removed components to complete the installation.



TUNING ADJUSTMENTS

IMPORTANT: Your POWERBOX controller already comes pre-programmed with our recommended stage 1 settings. We highly suggest installing the controller and going for a test ride before making any adjustments.

The POWERBOX has six (6) programmable features available. To begin this process press the MODE button and to enter each successive mode, just press the MODE button again. The unit comes with pre-programmed settings which should match the recommended starting settings on the following page.

Tuning for mode 1 - GREEN – Fuel addition during cruise/steady throttle.

This adjustment deals with adding fuel during all steady throttle conditions. A flashing green LED should appear somewhere on the LED display. Light settings less than 3 are subtracting fuel from the stock map.

Tuning for mode 2 – YELLOW - Fuel addition during acceleration

Tuning for this mode depends greatly upon your individual bike and can vary widely from the base setting. After market high flow exhaust systems and high flow air filters "MAY" cause you to tune differently from the base settings. This combination could have a setting difference as great as three yellow LED's. Note that this adjustment is only for hard acceleration. A flashing yellow LED should appear somewhere on the LED display. Light settings less than 2 are subtracting fuel from the stock map.

Tuning for mode 3 – RED - Fuel addition during full throttle

This adjustment deals with adding fuel during full throttle and heavy load conditions to achieve the peak horsepower. This mode could vary widely from the base settings depending on the set up of your vehicle and could have a difference as great as three red LED's or more. A flashing red LED should appear somewhere on the LED display. Light settings less than 1.5 are subtracting fuel from the stock map.

Tuning for mode 4 – GREEN / BLUE - Represents an electronic accelerator pump.

The adjustment deals with modifying fuel based on moderate to high load rate changes. A flashing green LED should appear somewhere on the display along with a solid blue LED on the right. Adjust this mode to target quick blips of the throttle.

Tuning for mode 5 – YELLOW / BLUE - Represents an adjustment for when the yellow fuel engages
This mode "MAY" vary from the base settings depending on the set up of your bike. The lowest LED setting (1)
represents the lightest load to switch on the yellow fuel and the highest LED setting (8) represents the heaviest load to
switch on the yellow fuel. A flashing yellow LED should appear somewhere on the display along with a solid blue LED
on the right.

Tuning for mode 6 – RED / BLUE - Represents an adjustment for when the full throttle fuel engages
The base setting for this mode will rarely have to be changed. The red LED should be engaged during the full throttle
period. The lowest LED setting (1) represents the lightest full throttle load to switch on the red fuel and the highest
LED setting (8) represents the heaviest full throttle load to switch on the red fuel. A flashing red LED should appear
somewhere on the display along with a solid blue LED on the right.

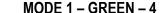


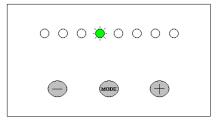
CONTROLLER FUNCTIONALITY

• To program your POWERBOX the vehicle must be running in order to supply power to the box.

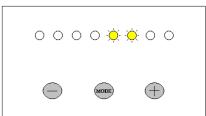
- If at any time you stay in an adjusting mode for longer than five (5) seconds without pressing any buttons, the POWERBOX will exit adjusting mode and will return to the ready state.
- Settings are saved for all modes after the POWERBOX exits back to the ready state.
- Settings in each mode are adjusted by pressing the PLUS (+) and MINUS (-) buttons located on the right and left side of the MODE button. For easy reference the LED's are numbered 1 through 8. However, the LEDs can be adjusted to the following positions: 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8. For example, in a particular mode, if LED 4 is flashing then the LED display is set to 4 in that mode. If the PLUS (+) button is pressed once then LEDs 4 and 5 will flash simultaneously and the LED display is set to 4.5. If the PLUS (+) button is pressed once again, only LED 5 will flash and the LED display is set to 5. The LED display can also be set to 0.5 by pressing the MINUS (-) button and scrolling the colored LED to position 1 and then pressing the (-) button once more until the LED in position 1 is flashing twice as fast as normal.
- Always make sure your vehicle is at normal operating temperature when making tuning adjustments.

RECOMMENDED BASE SETTINGS – STAGE 1

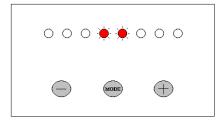




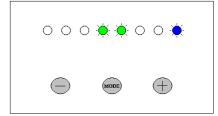
MODE 2 – YELLOW – 5.5



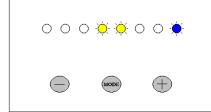
MODE 3 – RED – 4.5



MODE 4 – GREEN/BLUE – 4.5



MODE 5 – YELLOW/BLUE – 4.5



MODE 6 – RED/BLUE – 4.5

