

# EHS Racing EFI Controller Tuning Gen 3.5

100% Satisfaction Guaranteed

1975 N US Highway 1, Rockingham, NC 28379  
www.ehsracing.com 866-997-2345



## 100% Satisfaction Guarantee

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## Agreement:

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## Tuning Instructions

1. This is a general tuning guide to help familiarize yourself with the controls, functions, and operations of your new EFI Tuner. For specific settings please refer to your installation instructions that came with the tuner.

Remember help is only a phone call away we are more than happy to lend a hand with tuning advice.

2. First, we will introduce the controls; there are only 3 buttons (-), Mode, (+). The Mode button is disguised behind the EHS logo you can feel the raised section. The (-) button will lower the active setting of a chosen mode and the (+) button will raise it. The mode button will scroll through the particular modes which are further explained below.

3. Most tuners will come pre set with 6 different modes if for some reason your tuner doesn't have 6 modes its generally ok. Some are designed with less refer back to your installation instructions for specific model setups.

Modes are listed below in respect to how many times the mode button is pushed. For example 1 push = Green, 3 pushes is = to Red

|                                 |                      |
|---------------------------------|----------------------|
| Mode 1 = Green or Cruise        | Mode 4 = Green/Blue  |
| Mode 2 = Yellow or Acceleration | Mode 5 = Yellow/Blue |
| Mode 3 = Red or Full Throttle   | Mode 6 = Red/Blue    |

4. Each mode serves its own function which we will further explain. But before we go into mode specifics its important to know a few details.

To program the EHS tuner, the bike must be running in order to supply power to the tuner.

Simply press the mode button to activate the first mode. If at anytime you stay in an adjustment mode for longer than 5 seconds without pressing any buttons, the EHS Tuner will exit the adjustment mode and will return to the operational mode.

To save settings in a particular mode press the MODE button which goes to the next adjustable mode or wait for the tuner to exit back to the operational mode.

The settings in each mode are adjusted by pressing the (+) and (-) buttons located on the right and left side of the mode button, respectively. For easy reference, the LEDs 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 (+) button is pressed once then LEDs 4 and 5 will flash simultaneously and the LED display is set to 4.5. If the (+) 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 (-) 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.

**With the Gen 3.5 controllers they have the ability to subtract fuel from the stock pulse width applied to the injector from factory settings. So you have the ability to make the map leaner than the factory designed it to. This is necessary for ideal performance on certain models and is why a 3.5 controller will be used for particular models. Follow the install instructions for proper setup but you need to understand you can take away to much fuel and cause a lean condition.**

6. The first mode (Green Mode) represents an additional amount of fuel added under cruise conditions. Cruise conditions are generally just touching the throttle to 1/4 throttle but vary model to model. A flashing green LED should appear on the LED display. To add more fuel, scroll the flashing green LED to the right using the (+) button. To add less fuel, scroll the flashing green LED to the left using the (-) button.

7. The second mode (Yellow Mode) represents an additional amount of fuel added during acceleration. Acceleration conditions are just as it sounds sometimes this mode can be programmed to stay on a very short or long time depending on the model. A flashing yellow LED should appear on the LED display. To add more fuel, scroll the flashing yellow LED to the right using the (+) button. To add less fuel, scroll the flashing yellow LED to the left using the (-) button.

8. The third mode (Red Mode) represents an additional amount of fuel added during full throttle conditions. Full throttle is under max load usually 1/2 to full throttle. A flashing red LED should appear on the LED display. To add more fuel, scroll the flashing red LED to the right using the (+) button. To add less fuel, scroll the flashing red LED to the left using the (-) button.

9. The fourth mode (Green-Blue Mode) is an adjustment to determine the time when the Cruise/Green Mode fuel amount turns on. A flashing green LED appears on the LED display while at the same time a flashing blue LED appears on the 8th LED. To increase the sensitivity and therefore cause the Green Mode fuel to turn on sooner, scroll the flashing green LED to the left using the (-) button. To decrease the sensitivity and therefore cause the Green Mode fuel to turn on later, scroll the flashing yellow LED to the right using the (+) button.

10. The fifth mode (Yellow-Blue Mode) is an adjustment to determine the time when the acceleration/Yellow Mode fuel amount turns on. A flashing yellow LED appears on the LED display while at the same time a flashing blue LED appears on the 8th LED. To increase the sensitivity and therefore cause the Yellow Mode fuel to turn on sooner, scroll the flashing yellow LED to the left using the (-) button. To decrease the sensitivity and therefore cause the Yellow Mode fuel to turn on later, scroll the flashing yellow LED to the right using the (+) button.

11. The sixth mode (Red-Blue Mode) is an adjustment to determine the time when the full throttle/Red Mode fuel amount turns on. A flashing red LED appears on the LED display while at the same time a flashing blue LED appears on the 8th LED. To increase the sensitivity and therefore cause the Red Mode fuel to turn on sooner, scroll the flashing red LED to the left using the (-) button. To decrease the sensitivity and therefore cause the Red Mode fuel to turn on later, scroll the flashing red LED to the right using the (+) button.