# **Attitude Instructions Ford 6.0 Powerstroke**





©2003, Edge Products Incorporated
All rights reserved.
Edge Products Incorporated
5875 South Adams Avenue
Suite 100
Ogden, UT 84405
(801) 476-3343
www.edgeproductsinc.com

#### THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK.

Do not use this product until you have carefully read the following agreement.

This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions

### DISCLAIMER OF LIABILITY

Edge Products Inc. and its successors, distributors, jobbers, and dealers (hereafter **SELLER**) shall in no way be responsible for the product's proper use and service. THE **BUYER** HEREBY WAIVES ALL LIABILITY CLAIMS.

The **BUYER** acknowledges that he/she is not relying on the **SELLER's** skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof and the **BUYER** hereby waives all remedies or liabilities, expressed or implied, arising by law or otherwise, (including without any obligations of the **SELLER** with respect to fitness, merchantability and consequential damages) or whether or not occasioned by the **SELLER's** negligence.

The **SELLER** disclaims any warranty and expressly disclaims any liability for personal injury or damages. The **BUYER** acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the **BUYER** agrees to indemnify the **SELLER** and to hold the **SELLER** harmless from any claim related to the item of the equipment purchased. Under no circumstances will the **SELLER** be liable for any damages or expenses by reason of use or sale of any such equipment.

The **SELLER** assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

### LIMITATION OF WARRANTY

Edge Products Inc. (hereafter "SELLER") gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of SELLER's product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.

The Warranty is Limited to two (2) years from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the **SELLER** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Edge Products Inc.

Under no circumstances shall the **SELLER** be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances will the **SELLER** be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT: THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN SIXTY (60) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

### About the Attitude

Congratulations on purchasing the *Attitude* by Edge Products Incorporated, the leader in diesel electronics and power gain technology. The following manual contains information and instructions on the proper use of the *Attitude*. Please read carefully before proceeding to install the *Attitude* to your vehicle.

IMPORTANT: This version of the Attitude is only compatible with the Edge Ford 6.0 Juice module version 2.4 or later. If you have a prior version, an upgrade is necessary before the Attitude will connect to your Juice module.

The *Attitude* allows you to monitor the performance of your vehicle's vital engine components and output values. The following parameters can be displayed on the main *Attitude* screen:

Boost

RPM

• EGT (exhaust gas temperature)

 Percent back down due to high EGT

One of the most powerful features of the Attitude is the option to monitor the EGT of your vehicle and automatically lower the power output to maintain an EGT below a maximum desired level. The Attitude will also alert you both visually and audibly at preset engine parameter thresholds and also record the maximum values reached in each of the parameters.

# **Getting Connected**

The Attitude monitor connects under the hood to the Edge *Juice* module. Follow these steps to install the Attitude:

- 1. Place your Attitude monitor on the dash of your vehicle approximately where you want it installed and, with the driver's door open, feed the cable through the open door, and into the engine compartment via the slot near the hood hinge.
- 2. Determine where you want to attach the Attitude mounting arm and, using the self adhesive tape on the mounting arm base, stick the mounting hardware to the back of the Attitude and to your vehicle's dash area. Due to the adhesive tape's inability to stick in extreme hot and cold conditions, two set screws are included with your Attitude mounting hardware to secure the mounting hardware to the dash of your vehicle. Desired mounting locations will vary widely.



Due to adhesive tape failure in some conditions, two set screws are included to permanently secure the mounting arm to your vehicle if desired. 3. Connect the Attitude to your Edge Juice module by snapping together the cables wih the green connections and connecting the map sensor (the little brown wire) to the map sensor connection. Secure any excess cable to prevent entanglement with moving engine parts.

Juice mounting location.

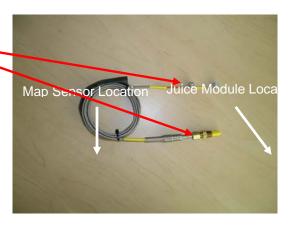
Map sensor location.



The map sensor connection is located near the oil filler cap as shown here. This photo shows the Edge map sensor wire connected.



EGT with thermocouple connectors and brass threaded insert.



4. It is necessary to tap a small hole

into your exhaust manifold to insert the EGT sensor. Drill the hole using a 5/16" drill bit, then tap it with an 1/8" NPT tap. Once the hole is drilled and tapped, insert the EGT sensor by threading it into the hole. The photo below is taken viewing the truck from the *ground up*. The section of the exhaust manifold that requires tapping is located on the driver's side above the driveline.



The EGT thermocouple installed into the drilled and tapped exhaust manifold.

(Looking **up** at the exhaust manifold from under the vehicle.)

Once your Attitude monitor is installed successfully and you have turned on your vehicle, you will see a screen similar to the following:



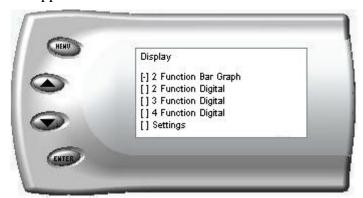
# Changing the Display View

The Attitude allows you to view multiple engine parameters on the same screen. To select a desired view, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the Display option and press the [Enter] button. The following screen appears:



3. Select the desired viewing option by using the up and down arrows and pressing the [Enter] key. Below are examples of the display options:

## **Two Function Bar Graph Display Sample**



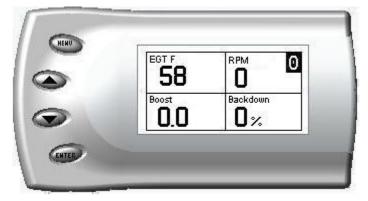
# **Two Function Digital Display Sample**



# **Three Function Digital Display Sample**

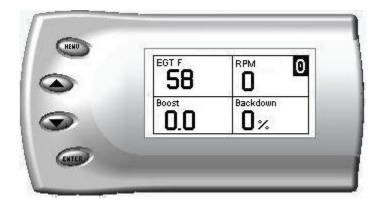


# **Four Function Digital Display Sample**



# Adjusting the Backlight

When viewing engine parameters (like the sample below) press the [Enter] button to adjust the backlight. Each time the [Enter] button is pressed, the backlight will change to either bright, dim, or off.



# Juice Configuration

The *Attitude* allows you to configure your Juice module in a variety of ways. To change the Juice configurations, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Juice Configuration* option and press [Enter]. The following screen appears:

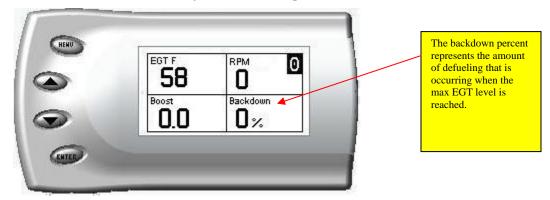


3. Select the desired option and press [Enter]. The following are descriptions of each of the Juice Configuration options available:

#### **Max EGT Set Point**

As the exhaust gas temperature approaches the EGT set point, a percentage of defueling occurs. This percentage is represented by the backdown value you can display on your screen. The percentage represents the amount of *defueling* that is occurring due to the max EGT value being reached. In other words, fueling is decreased at higher percentages. When this value reaches 100% the fueling delivered by the Juice module has been totally disabled. However, stock fueling will allow the truck to reach its stock EGT levels which may exceed the preset *Max EGT Set Point* which you established in the Attitude.

Important Note: Any other high performance modifications in addition to the Juice can allow the fueling to exceed stock EGT levels even after 100% defueling by the Attitude is reached, which may result in dangerous EGT levels.



After selecting the *Max EGT Set Point* option from the Juice Configuration screen (previous steps), the following screen appears:



1. Change the Max EGT set point by pressing the up and down arrow keys to select the maximum temperature that you want your exhaust gas temperature to reach, then pressing [Enter]. When the exhaust gas temperature reaches this value, the power delivery will be retarded so as not to allow the temperature to exceed this set value.

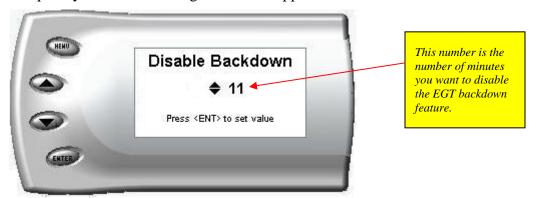
### **Disabling Backdown at Set EGT**

There are times you may not want to disable the EGT backdown feature for a limited period such as in a competition setting. For whatever the reason you can disable the EGT backdown for a period of 1-30 minutes.

#### Warning: Disabling this feature could lead to dangerous EGT levels.

To remove the option that backs down the power at a set EGT point, perform the following steps:

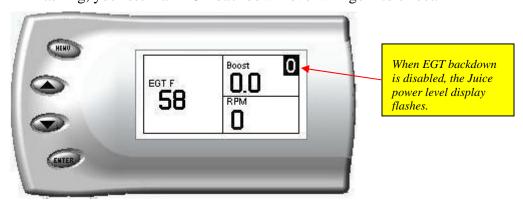
- 1. Make sure the Attitude is set to view the EGT level as one of the engine parameters.
- 2. When you are viewing EGT as one of the engine parameters, press [Enter] twice quickly and the following screen will appear:



3. The number on this screen represents the number of minutes the EGT Backdown feature will be disabled. Press the up or down arrow keys to select the desired number of minutes you would like this feature disabled. (The number of minutes you do NOT want your power decreased because of high EGT levels.)

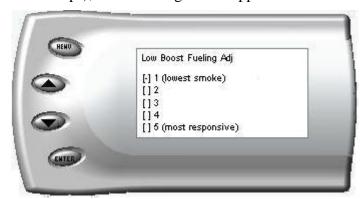
#### Note: Selecting this option automatically sets your Juice module to level 5.

4. After you have selected the number of minutes you would like the EGT backdown option disabled, press [Enter]. The screen will return to your previous view mode, and the Juice power level indicator will flash until the designated time for disabling has been reached. When the Juice power level indicator quits flashing, your set max EGT backdown level will go into effect.



### **Low Boost Fueling Adjustment**

After selecting the *Low Boost Fueling Adj* option from the Juice Configuration screen (previous steps), the following screen appears:



Adjusting the fuel at low boost allows you to adjust the way in which your truck delivers fuel at low boost levels. Select option 1 for the lowest level of fuel at low boost, and select option 5 for the highest level. You will see a significant change in vehicle response and smoke level depending on which option you select.

## Alerts

The Attitude can actually alert you when certain engine parameter levels are met such as EGT, Boost, and Engine Temperature. When these parameter thresholds are met, the Attitude screen will display the value and you will hear a repeating audible alarm. The volume of this audible alarm can not be changed. To set alerts, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Alerts* option and press [Enter]. The following screen appears:



3. Turn alerts *On* by scrolling to the *Alerts are On/Off* option and press [Enter] to turn alerts On or Off.

To change the EGT Alert value [default is 1350] scroll to the *EGT Alert* option and press [Enter]. The following screen appears:



- 4. Press the up and down arrow keys until you see the desired EGT level at which you want to be alerted and press [Enter] to set that value.
- 5. To change the Boost Alert value [default is 25] scroll to the *Boost Alert* option and press [Enter]. The following screen appears:



6. Press the up and down arrow keys until you see the desired Boost level at which you want to be alerted and press [Enter] to set that value.

Note: If you desire to temporarily stop the Attitude from alerting you to a specific threshold, while the actual alert is signaling you, press any key (menu, arrow or enter) and the alert will temporarily stop. When all of the alarm parameters drop below the set thresholds, then exceed them again, the alert will start up again.

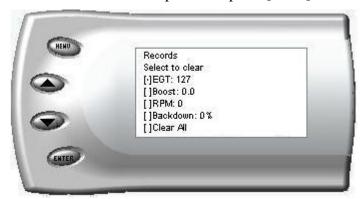
## Records

The *Attitude* can actually keep a record of the maximumengine parameter values that your vehicle produces. These records are stored in the Records section of the Attitude. To view or clear these values, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Records* option and press [Enter]. The following screen appears:



3. All of the records are stored on this screen. To clear an individual record, select that record and press [Enter]. To clear all the values, select *Clear All* and press [Enter].

# **Adjusting Juice Power Levels**

The Juice power level is displayed in the upper right-hand corner of the screen when vehicle parameters are being viewed. To adjust the power levels, press the arrow keys to the desired level. Levels can be changed at any time while viewing vehicle parameters.



**NOTE:** The Juice module power level adjuster is disabled when the Attitude controller is installed. Power levels must be adjusted using the Attitude controller.

### **Power Gains**

The following power gains are representative of an actual test vehicle. Power gains may vary somewhat on a different vehicle or in different geographic settings.

	Horsepower	Torque
Level 0:	0	0
Level 1:	40 HP	80
Level 2:	60 HP	100
Level 3:	80 HP	160
Level 4:	100 HP	250
Level 5:	115 HP	290

# Index

adhesive tape1	getting connected 1
adjusting power levels14	Graphs4
Alerts	Horsepower gains14
backlight6	Juice Configurations7
Bar Graph4	juice power level14
Boost alert	Low Boost Fueling Adustment 10
cable connections2	map sensor location2
Clearing records	Max EGT set point8
Digital Display 5	Maximums 13
dim6	mounting the attitude 1
disabling EGT backdown9	Records
Disclaimer2	<i>Setup</i> 4
EGT alert	Storing records
EGT backdown disable9	Torque gains14
EGT sensor installation 3	- 0

Technical Support: (801) 476-3343