

EGT MODULE Installation Instructions:

To minimize errors we encourage you to read all instructions at least once before proceeding with the installation process. Before powering up the module for the first time, please double check the polarity of the power connector

DiabloSport recommends you have a certified mechanic tap your manifold

Required Tools



Needle Nose Pliers



7/64 Drill Bit



1/8 Tap for installation

STEP:1

Your DiabloSport EGT kit should contain the following:



1x EGT sensor module



1x Vehicle power cable



1x EGT Thermocouple



1x Trinity analog cable



1x Molex 4 pin connector



3x Wire pins

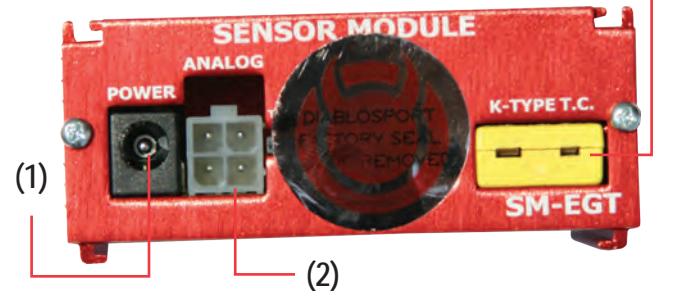
STEP:2

Connection Overview:

1-Connects to the fused vehicle 12v-18v power source

2-Analog input/output (0-5v)

3-K type Thermocouple connection



STEP:3

Installation Instructions:

Begin by finding a suitable mounting location for the EGT module. The EGT module should be located inside the cab of your vehicle to avoid exposure to weather. The EGT module should also be in a central location since the connecting wires need to reach your vehicle's ignition power supply, header tube, and the Trinity itself.

STEP:4

Installing your EGT Thermocoupler:

1. For the most accurate results install the probe within 8-10" from your vehicle's turbo(s) on the downpipe. The probe should screw into a 1/8 NPT tap. DiabloSport recommends using a certified mechanic to perform this procedure.

Caution: Be careful when tightening the EGT probe. Avoid "overtwisting" the wires as this can cause the insulation to become loose and cause internal shortages.

2. Plug the connection end of the thermo coupler into the EGT module. The negative pin should be on the left side. The cable is polarized so it can only be connected one way



EGT MODULE Installation Instructions:

STEP:5

Installing the Power Source:



Warning connecting the EGT power in reverse polarity will damage the unit. Please check all connections before powering up for the first time.

The EGT module will only accept 12-18V DC for power.

- 1.Start by connecting the negative wire (black) to your vehicle's ground. The most common vehicle grounding is the negative (black) terminal of your vehicle's battery.
- 2.Connect the positive wire (red) to a switched 12v power source (on/off with vehicle start) such as your vehicle's ignition power. This location can differ from vehicle to vehicle so check your owner's manual for exact location. The power source must supply at least 1 amp of current, be fuse protected, and be a "switchable" power source. DiabloSport recommends using a 5 amp fuse(not included) for safety reasons.
3. Do not plug the power cable into the EGT module until all other steps are complete.

EGT MODULE

Terms of use:

DiabloSport Inc does not guarantee the sensor module functionality with any ECU, data logger or other devices that use the output signals. Implementation and integration of the sensor module with any other device(s) must be done at your own risk. Improper installation and usage may lead to engine damage. Mount and install the sensor module in a location where it does not obstruct the driver's view and/or ability to safely control the vehicle

Limited Warranty:

DiabloSport Inc. warrants the product to be free from defects for 90 days from the date of purchase. Serviceable goods must be determined by DiabloSport to be defective before any warranty or replacement is issued. DiabloSport's obligation under warranty shall be limited to repairing or replacing, under the discretion of DiabloSport, any part proven defective. This warranty is limited to the repair or replacement of parts in the manufactured good and the necessary labor done to affect its repair or replacement.

Service Under Warranty:

In the unlikely event that your DiabloSport device hardware should fail during the warranty period, a return merchandise number (RMA) must be first retrieved from DiabloSport's website . Please see DiabloSport's return policy at www.diablosport.com

Disclaimer:

DiabloSport Inc. shall not be liable for direct, special, incidental, or consequential damages resulting from any legal theory including, but not limited to, lost profits, downtime, goodwill, damage, injury to persons, or replacement of equipment and property due to improper installation, integration and/or misuse of any DiabloSport Inc's product(s). This warranty applies to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 90 day warranty period.

Specifications:

Physical Dimensions	2" x 2.875" x 1.125" (52mm x 75mm x 28mm) L x W x H
Accuracy	+ - 2 Deg C (+ - 3.6 Deg F)
Measurement Range	0-1023 Deg C (32-1873 Deg F)
Analog Outputs	Linear 0-5V (Driving Current 20mA)
Operating Voltage	8V - 18V
Power Consumption	0.3 Watts
Operating Temperature	0-85 Deg C
Sensor	One K - Type Thermocouple
Enclosure	Extruded Aluminum

Notes:

DIABLOSPORT® Trinity EGT Interface

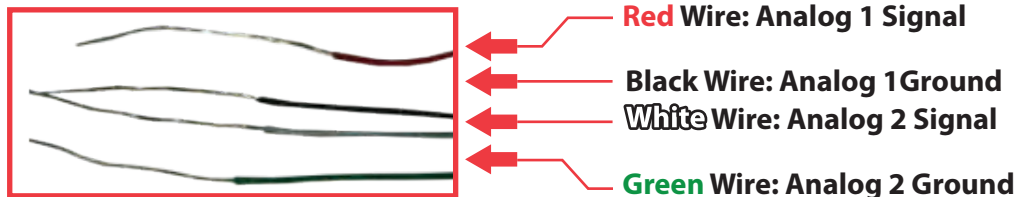
Monitoring/Logging Analog Inputs

- The Trinity has 2 analog inputs or 1 input/1 output for monitoring external sensors not accessible through OBD-II Port or controlling external devices. Some examples of non-factory sensors include boost gauges, Air/Fuel meters, EGT sensors and others. The Trinity will allow you to display 5 volt signals in the form of a virtual gauge streamed directly from an analog input.



Example: Trinity Part # T1015 Analog I/O Cable available at www.diablosport.com. The T1015 is produced by DiabloSport to make hooking up external sensors much easier take a look at the following diagram to see which wire to use to connect your analog signal.

NOTE: If you have only 1 analog input device to use with the Trinity you should always choose "CHANNEL TWO" as the input.



- Popular sensor manufacturing companies such as PLX, Innovate, and many others already have pre-designed devices that can receive data from single or multiple inputs. If you already have an analog sensor device there's more good news: The Trinity is compatible with any 5 Volt signal. While it may take some tinkering and some tools, (soldering iron, clamps, etc...) you can hook any device that sends a 5V signal to a Trinity by using the DiabloSport Analog I/O Extension Harness. For more information on how it works, recommended sensors, or what you will need to do to get your analog device working visit www.diablosport.com
- Pictured left: The DiabloSport analog I/O Cable designed to work with bare wire style analog devices/sensors that put out 5V signal. Comes with 2.5 mm jack and bare wire ready for solder.

Note: Some devices may need to be rewired or soldered to function with Trinity. DiabloSport does not offer tech support on 3rd party devices. If you have questions about how a 3rd party sensor functions in relation to voltage check with the original equipment manufacturer.

- In order to access these options do the following:

- **Step 1:** From the main menu of the Trinity press "Options" and scroll down to select "Configure Analog Input".



- **Step 2:** From the configuration menu select "Add a New Parameter" and the Trinity will prompt you to enter a name for your parameter. For this example enter "EGT" and then you will need to choose which channel the Trinity will receive the analog input on.

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DIABLOSPORT® Trinity EGT Interface

Monitoring/Logging Analog Inputs

- **Step 3:** Now select the unit of measure for your device and follow the instructions provided with the device to choose high and low values for that will be scaled from zero volts (low value) to five volts (high value). To find these values you may need to consult the documentation that was provided with your analog device. Many devices have temperatures or values that can be mapped in Metric or Standard for this example we will use (F) or Fahrenheit.

Example: DiabloSport EGT Module “Measurement Range” can be set to 0-1023 Deg Celsius OR 32-1873 Deg Fahrenheit.

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- **Step 4:** Once you've selected your high and low values press OK. You will now be able to select this parameter in the logging menu or monitor mode. Create or open a saved log file in the DiabloSport logging menu (Section 4 of this manual) and **click a gauge to modify it.**

Note: You must have at LEAST 1 other OBD-II Parameter included in a NEW gauge layout in order for the analog input to function properly. This gauge can be included on the same page or on another gauge page.

- **Step 5:** Now in the “Gauge Edit Menu”, select “Change Parameter.” Scroll down to where it says “analog inputs” and then select the analog device you configured previously in this section EGT (F).



- **Step 6:** Now that you have selected the analog input for your gauge, make sure the analog device is hooked up properly and test that you are getting a reading on screen. If everything is functioning as expected, save your log file and you will then be able to record a new log with it, or view it in monitoring mode!

