DialedN, LLC

OmniGauge Alpha

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Setup / QuickStart

Congratulations on your purchase of the DialedN OmniGauge Alpha! Depending on your order configuration, you will power the gauge one of two ways -

1. Wire the red (positive) and black (negative) to your vehicle's **12-volt** electrical system. We recommend wiring the red (positive) wire to ignition voltage and the black (negative) wire to a vehicle/chassis ground. Ignition voltage is a circuit that is only powered when the vehicle is on. Wiring this way will ensure the gauge turns off when you turn off the vehicle.
2. USB-C type connector located on the right side of the gauge. We recommend that the source turns off when the vehicle is turned off to prevent battery rundown. If the source is powered all the time, then we recommend unplugging the gauge while the vehicle is off.

Now it's time to decide where to mount the gauge. When ordering, you may have purchased the windshield mount, vent mount, gauge pod, or you might already have 52mm gauge pods and you're upgrading. Once you've decided where the gauge(s) is going, power it up!

Now that you have the gauge powered up, let's move onto the transmitter. It's very important that you first start the vehicle **before** plugging in the transmitter. This sequence will allow the transmitter to initialize properly.

Every vehicle manufacturer placed the Data Link Connector (DLC) in a different spot. The federal government has mandated that the DLC be located on the driver's side of the vehicle. Generally, the connector can be found somewhere under the dashboard on the driver's side. You may want or need to relocate the connector to prevent the transmitter from encroaching on your space. If you're having trouble locating the connector, go ahead and search Google images for "DLC Connector" and then put your vehicle manufacturer and model at the end of your search text.

With the DLC located, remember to start up your vehicle before plugging the transmitter in.

Move back to the gauge. Here you'll find the setup screen with a language selector. Select your language and tap save. Now you'll see an empty dropdown list on the setup screen. Tap the SCAN button. The gauge will now send out a signal to any transmitters in the area and the transmitter will respond with its MAC address. Tap the dropdown to reveal the MAC address of the transmitter and select it. The gauge will automatically move onto the settings page which we'll detail out below. Update the necessary settings and hit SAVE.

Your gauge is now paired to your transmitter and ready to start visualizing your vehicle data!

Settings

In this section, we will discuss the different settings within the gauge and their functions. To get to the settings screen, simply drag down from the top when viewing any gauge.

Default Gauge

When the gauge is turned on, it will automatically load the gauge that you have selected from this drop down.

Engine

Select your engine type.

- I4 – Inline 4-cylinder
- I6 – Inline 6-cylinder
- V6
- V8
- V10
- V12
- Rotary (for my Mazda friends)

Graph Line

This defines the thickness and number of plot points of the graph line on all the gauges.

- Thin
  - 50 plot points
  - The line is 2 pixels thick.
- Regular
  - 30 plot points
  - The line is 6 pixels thick.
- Thick
  - 18 plot points
  - Line is 10 pixels thick.

Metric Units

This defines whether to show data in the US-standard units, or metric units.

Setup

If, for some reason you needed to pair the gauge with a new transmitter or change your language, you will tap the Setup link to go back to the Setup screen.

Color

Tap the COLOR button to access the color settings. Tab the appropriate color setting to adjust that color. Using your finger, select the base color from the color wheel. Tap and hold the area labeled “Hold Here For More” to switch to the color hue. Then again, tap and hold the area labeled “Hold Here For More” to switch to the color saturation. Once you’ve selected the color you want, hit SAVE. If you wish to reset the color back to the default, simply tap that button.

- Primary
  - This is the primary color for the gauge.
- Secondary
  - This is the secondary color for the gauge.
- Background
  - This is the background color for the gauge.
- Alerts
  - When an alert occurs, the message will be in this background color.

Brightness

Here you will set the brightness for the gauge and select a background logo.

- Day Time
  - The brightness setting when the gauge is in Day Mode
- Night Time
  - The brightness setting when the gauge is in Night Mode
- Background Logo
  - The logo will be displayed as the background on all the gauge faces.
  - Once a logo image is selected, a selector bar will appear under the drop down. This selector bar will control the background image transparency.

Alert Settings

The Alert Settings are used for alert notifications. If you have also purchased the LED Controller and paired your OmniGauge Alpha with the LED Controller, when alerts are triggered, the interior LEDs will automatically flash red.

Over Boost

Here you will define the maximum acceptable boost pressure. This only applies to turbocharged and supercharged vehicles.

Low Fuel

Here you will define when you want to be alerted that your fuel level is low.

Coolant Temp

Here you will define the maximum acceptable coolant temperature.

Max RPM

Here you will define the maximum acceptable RPM for your engine.

Blinding Alerts

When blinding alerts are enabled, you get the following features:

- Shift Alert
  - When you reach or exceed the Max RPM value, the gauge will present you with a shift alert no matter which gauge you are viewing.
- Threshold Alerts
  - Despite what gauge you are viewing, if the transmitter detects a value outside of the Alert Settings or specific data metrics outside of the normal operating range, the gauge will present you with an alert.

Gauges

Now for the good stuff!

RPM/Speed Combo

As the RPM changes, the indicator needle will rotate. As the vehicle changes speed, the MPH or KPH will be updated.

The RPM gauge can be changed by the primary color selection.

The RPM needle can be changed by the secondary color selection.

Tapping the screen will change the gauge face to be a different style. Tap again to return to the original style.

If your vehicle's Malfunction Indicator Lamp (MIL) or "Check Engine Light" is on, the MIL will appear and tapping the MIL will show you any fault codes and corresponding code descriptions stored in your engine computer. From there, you also have the option to clear those codes.

Fuel & Coolant, or Coolant & Engine Load

If the vehicle does not support fuel level, the gauge automatically adjusts to engine load instead. The gauge scales are presented in the primary color.

If the coolant temperature equals or surpasses the Alert Settings > Coolant Temp value, the coolant icon will turn red. If the fuel level equals or goes below the Alert Settings > Low Fuel value, the fuel icon will turn red.

Tapping the screen will show/hide the numerical values for both metrics.

Boost

This gauge is only present if the vehicle has a Manifold Absolute Pressure (MAP) sensor and not specifically if the vehicle has a turbocharger or supercharger. In a situation where a vehicle does NOT have a turbocharger or supercharger, this gauge will always read engine vacuum. For vehicles with those turbos or superchargers, this gauge will show both the vacuum and boost pressure and graph it in the background.

Additional metrics are displayed at the top of the gauge.

There is a Max area which will display the max boost pressure read. To reset, simply tab the RESET button.

The data metrics and graph can be changed by the primary color selection.

There is a Max area which will display the max boost pressure read. To reset, simply tab the RESET button.

The data metrics and graph can be changed by the primary color selection.

Air Flow

This gauge is only present if the vehicle has a Mass Air Flow (MAF) sensor. This gauge shows the amount of air going into the engine and graphs it in the background.

Additional metrics are displayed at the top and bottom of the gauge.

There is a Max area which will display the max air flow read. To reset, simply tab the RESET button.

The data metrics and graph can be changed by the primary color selection.

The Throttle Position Sensor (TPS) data and graph can be changed by the secondary color selection.

There is a Max area which will display the max boost pressure read. To reset, simply tab the RESET button.

The data metrics and graph can be changed by the primary color selection.

Engine Load

This gauge shows the calculated load, or stress, being put on the engine and graphs it in the background. A second graph line for the ignition timing is also graphed.

Additional metrics are displayed at the top of the gauge.

The data metrics and graph can be changed by the primary color selection.

The ignition timing data and graph can be changed by the secondary color selection.

Fuel Trims

This gauge will indicate both the short- and long-term fuel trims. As your engine runs, the computer is constantly adding and subtracting fuel to keep your engine running as efficiently as possible. Normal readings are +-15% with 0% being perfect (which no engine is). Depending on your engine selection, you may have 1 or 2 “banks” displayed. As the data is collected, it is graphed in the background.

The short-term fuel trims can be changed by the primary color selection.

The long-term fuel trims can be changed by the secondary color selection.

If you have 2 banks on your engine, tapping on either bank 1 or bank 2 will zoom in/out on that bank.

O2 Sensors

Oxygen sensors are used by your engine computer to calculate how efficient the explosion is. Vehicles have one oxygen sensor before the catalytic converter and one after (also known as upstream and downstream). Normal readings are between zero and one volt. Depending on your engine selection, you may have 1 or 2 “banks” displayed. As the data is collected, it is graphed in the background.

The sensor 1s can be changed by the primary color selection.

The sensor 2s can be changed by the secondary color selection.

If you have 2 banks on your engine, tapping on either bank 1 or bank 2 will zoom in/out on that bank.

Critical Systems

Here you will see a list of critical system metrics. Again, not all vehicles support all metrics so you may see “N/A” for some that are not supported by your specific vehicle.

The data can be changed by the primary color selection.

Tapping any metric will make that metric full screen and graph the data in the background.

“MIL” stands for Malfunction Indicator Lamp (MIL), also known as the “Check Engine Light”. Tapping the MIL will show you any fault codes and corresponding code descriptions stored in your engine computer. From there, you also have the option to clear those codes.

Ignition Timing

This gauge shows the ignition timing before top-dead-center (TDC) and graphs it in the background. A second graph line for the engine load is also graphed.

Additional metrics are displayed at the top of the gauge.

The data metrics and graph can be changed by the primary color selection.

The engine load data and graph can be changed by the secondary color selection.

Throttle Position

This gauge shows the current throttle position and graphs it in the background. Please note that it's normal for this value to be above zero when the vehicle is idling. Many vehicles will read around 15% throttle at idle. A second graph line for the ignition timing is also graphed.

Additional metrics are displayed at the top of the gauge.

The data metrics and graph can be changed by the primary color selection.

The ignition timing data and graph can be changed by the secondary color selection.

Disclaimer

Each vehicle manufacturer allows for different data to be requested from the engine computer. At DialedN, we do our best to accommodate all vehicles, but depending on the year, make, and model, some data points may not be available from your vehicle. As we expand our available data sets, there will be periodic firmware updates available on our website.

The transmitter can remain plugged in at all times.

Like any other computer, errors happen. If you ever have communication issues with the vehicle, the first step is to start the vehicle and with it running, disconnect and then reconnect the transmitter effectively rebooting it.