P3 Gauge

Setup
&
Operation

Before you start installing... Plug it in and light it up!

Your gauge only needs the OBD2 connection to operate. We recommend plugging it in and starting the engine before full installation to confirm everything is working as intended.

The P3 Gauge is custom made for your vehicle, it usually installs INSIDE your drivers side air vent, but every car is different.

Check our vehicle specific resources at **www.P3.io/support** for additional info, videos, or guides to help with installation.

Gauge Buttons

Basic Functions
(while running)

TAP LEFT
Peak Recall

TAP RIGHT
Change Mode

Pressing the peak recall button while on the 0-60 timer will cycle through timers

OBD2 | Optional inputs | Hideaway box | Gauge Display

OBD2 Harness

- **BLACK** = Ground
- **RED** = 12v Power
- **GRAY** = CAN High
- **ORANGE** = CAN Low

Optional Harness Input Wires

- **BROWN** = Analog Input 1 (0-5v)
- **BLUE** = Analog Input 2 (0-5v)
- **GREEN** = Display Dimmer Line (0-15v)
- **YLW/BLCK/PRPLE** = P3 Analog Boost Sensor

Modes & Readouts

Note: Not all readouts are supported on every vehicle.
Check your specific vehicle's product page to confirm compatibility.

Boost / Vacuum (boost): Measures pressure from your intake system, either through OBD2 or a boost sensor. Shown in PSI and inHg, or BAR if preferred.

Coolant Temp (Coolant): Gives you the real coolant temperature—not just the generic gauge on your dash. Shows in °F or °C.

Air/Fuel Ratio (AFr): Lets you know how rich or lean the engine is running. Displayed in parts air to fuel (XX.XX:1) or configurable to stoichiometric Lambda for gas.

Intake Air Temp (IAt / Air / Air1 / Air2 / IAT2): Tracks the temperature of air entering the engine. Also available post-cooler as IAT2. Useful for monitoring performance. Read in °F or °C.

Oil Temp (OiL): Shows actual engine oil temperature for better insight during spirited driving or track days. °F or °C.

Charge Air Cooler (CAC-Air): Tells you the temperature inside your charge air cooler. Helpful for turbo/supercharged setups. °F or °C.

Ethanol Content (Ethanol): Shows realtime Ethanol content of your fuel entering the engine. Requires a compatible tune for reading over obd2 or alternatively our P3 ESVA+Sensor.

Ignition Timing (Igntn): Displays when spark is fired relative to piston position, measured in degrees before/after Top Dead Center.

Transmission Temp (trAnS): Automatic transmission fluid temperature. Especially useful for performance builds or towing with large vehicles. °F or °C.

Oil Pressure (OiL-PrES): Real-time engine oil pressure in PSI, common readout for engine health.

Exhaust Gas Temp (Egt): Tracks exhaust temp to help prevent overheating and protect turbos/mods. °F or °C. Some vehicles will have multiple readings.

Throttle Position (throttle): Shows how far the throttle is open—either in percentage or degrees, depending on your vehicle.

RPM / Shift Light (rP-Shift): Live engine speed, with a programmable shift light to match your driving style. The shift light will flash in ALL modes.

Speed (SPEEd): Displays raw speed directly from the ECU—more accurate than your speedometer, which is slightly inflated by the manufacturer.

Battery Voltage (bAtt): Monitors battery and alternator performance in volts.

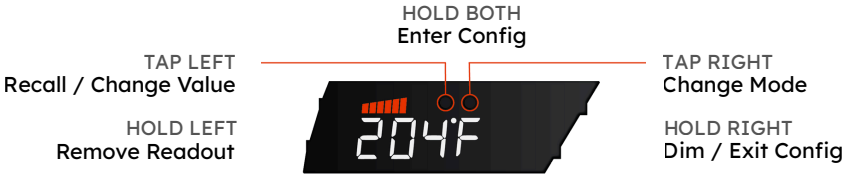
0–60 / 0–100: Acceleration timers that start when the car moves and stop at target speed. Shows your result until the next stop. (Displays 0–100 and 0–160 when in Km/h)

60–130: Measures mid-range acceleration—great for tuning performance. (100–210 in Km/h)

60–0 / 100–0: Braking performance timers. Start at speed and stop at zero. See your result after each run. (100–0 and 160–0 in Km/h)

Display & Features

Connect with your car at a deeper level, and customize your display modes.



Peak Recall & Shift-light

Tap **LEFT** to view the peak value for the current mode. The shift-light will activate by flashing the display in all modes, not just "rp-Shift" mode. Set using SL.XX in config.

The P3 Gauge also tracks peak temps like EGT, Air, and Coolant in the background, so you can check them later even if you weren't displaying that mode.

Removing Readouts

REMOVE A READOUT

- While in normal running mode, tap RIGHT to find the readout you want to remove.
- Hold LEFT until "----" appears. (You'll see the bar graph scroll back and forth.)
- That readout is now hidden until restored.

RESTORE ALL READOUTS

- Hold BOTH buttons until "ConF" appears, then release.
- Tap RIGHT until you see "cc.x." (x can be any value, remember it)
- Tap LEFT to scroll through cc options and stop at the former previous value. (your car config setting)
- Hold RIGHT until the screen turns off to save and exit.
- Start the engine. (First startup may take a few seconds longer.)
- The gauge will re-scan your ECU and restore all available readings.

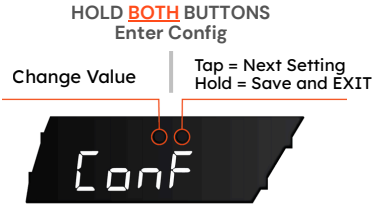
Advanced Config

Dive into the details...
Unlock more options and features.

Customize readings, add extra sensors, select PSI, Bar, °F or °C, change which factory sensors we use for boost, and much more.

All the details you need are below.

NOTE: Default Settings shown in **BLACK**



For numerical inputs, holding the change value button will rapidly increase the value.

TAP RIGHT FOR NEXT

TAP LEFT TO CHANGE

Config Menu

Code & CEL Read/Clear
See next page.

Boost Source • varies per vehicle, multiple options work on most cars.

A = Analog boost using P3 sensor
b = Analog from BMW MAP tap via Analog In 2
c = OBD2 boost charge pipe (newer vehicles)
d = OBD2 boost from MAP (most vehicles)
E = BMW E OBD boost (charge pipe MAP)
F = BMW F/G OBD boost (charge pipe MAP)
0 = Digital boost for Audi/VW FSI
1 = Digital boost for Audi/VW TSI/TFSI
4 = Alt. digital boost (BMW N54)
5 = OBD2 boost alt. (some vehicles)
6 = OBD2 rescaled MAP (Camaro Gen6 etc.)
8 = Alt. digital boost (BMW N63)

0-5v Analog Inputs 1 and 2
See "Analog Inputs" page.

Boost Reading
Unit Selection

Boost Pressure Precision • Choose between 0.1 or 0.5 or 0 whole units. (0.0X with Bar)

Shift Light Setpoint
80 = 8000 rpm

Temperature Unit Selection

Diagnostic Trouble Code (D.T.C)

READ CODES

- Hold BOTH until “ConF” appears, then release. (“d.t.c.” will show.)
- Tap LEFT to display stored P codes, gauge will say “no codes” if none are present.
- See **p3.io/dtc** for a list of common codes.

CLEAR CODES / TURN OFF CHECK ENGINE LIGHT (CEL)

- Turn key ON, engine OFF (KOEO).
- Hold BOTH until “ConF” appears (“d.t.c.” will follow).
- Hold LEFT until “CLrd” appears. (“HoLd” shows while clearing.)
- Clearing may work with the engine running, but KOEO is recommended.

Speed Units English
y = mph, n = kph

Speed Calibration
-9% to 20%

Display Dimmer (default is manual dim)
A = Auto (green wire) P = Persists after restart

Power Control • A = Auto, b = Off until LEFT button
S = Switched (always on, hook to switched power)

AnLg = No CANbus
(bSt.A/AN1/AN2 Only)

Car Config • Varies per vehicle, see specifics at p3.io/support

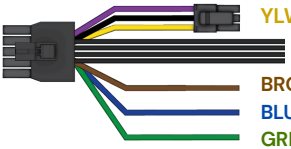
Low Priority Mode
y = Slower Data Rate

A = Air/Fuel Ratio
L = Lambda (1.0)

P3 Boost Sensor (bSt.A) Calibrate
open air / engine off • Tap.1 = LEFT btn.
Calibration must be performed with the engine off!

Factory Reset
Hold LEFT to reset all to factory default.
After reset you must configure CC and bSt settings.

Analog Inputs



YLW/**BLCK**/**PRPLE** = Optional P3 Analog Boost Sensor
(configured with bSt.A & Cal.b)

BROWN = Optional Analog Input 1 (0-5v)
BLUE = Optional Analog Input 2 (0-5v)
GREEN = Optional Display Dimmer Line (0-15v)

NOTE: *If your sensor needs 5V power/reference, use the purple wire on the gauge harness.*

Analog Input Setting: **TAP LEFT TO CHANGE**

A1.n	A1.Y	A1.EC	A1.Ft	A1.LC	A1.PS
Disabled *A1 shown same for A2	**Enabled** Manual Range Config (see below)	**EC Preset** Ethanol from P3 ESVA	**Ft Preset** Fuel Temp. from P3 ESVA	**LC Preset** AFR from LC-2 Kit	**PS Preset** 0-150psi P3 Pressure Sensor

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The P3 Gauge supports a wide range of preset or custom options for analog readings, You can purchase P3 Sensors and Add-ons at: P3.io/options

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Universal Analog Settings

When enabled in custom manual range (A1.y or A2.y) the following new options appear:

TAP LEFT TO CHANGE + **TAP RIGHT FOR NEXT** ↓

Precision (Decimal Point) • tap LEFT to toggle the location of the decimal point and set the top possible range. If your value will be max 4 digits, you'll want 9999 (no decimal point)

Analog Input LOW (0 volts) • tap LEFT to change the value, hold LEFT to change quickly. This value is shown at zero volts.

Analog Input HI (5 volts) • tap LEFT to change the value, hold LEFT to change quickly. This value is shown at five volts.

Bargraph LOW • Change the visual range of the bargraph. Tap LEFT to increase, hold LEFT to go quickly.

Bargraph HI • Change the visual range of the bargraph. Tap LEFT to increase, hold LEFT to go quickly.

NOTE: *The example values above are for a 0-150psi sensor with 0.5v-4.5v output. This equals ~19psi per 0.5volt, meaning 0v setting should be -19psi, and 5v should be 169psi. The example has 1 decimal point of precision, allowing readings like 35.2psi, etc.*

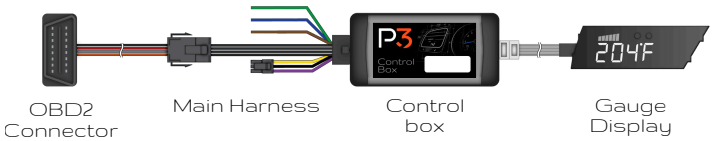
Troubleshooting

Engine Started?

The gauge turns on only when the engine is running.

Check all connections.

*Firmly connect **OBD2 Connector** to your port.*
*Connect **OBD2 Harness** to main harness.*
*Connect **Main Harness** to the control box.*
*Connect the **Display Cable** to the control box.*



Verify Config Settings.

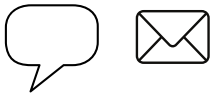
Seeing "....." on the screen for longer than 30 seconds after the car is started?

*You need to **configure** the gauge for your car.*
*visit **p3.io/support** for car specific settings.*

Can't enter config mode?

Holding BOTH buttons should enter config even when the car is off.
If you cannot enter config, the gauge may not have power.
Check your obd2 fuse and wiring, or test the black/red wires with a voltmeter.

Still need help?



p3.io/contact

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Live Chat

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@p3gauges

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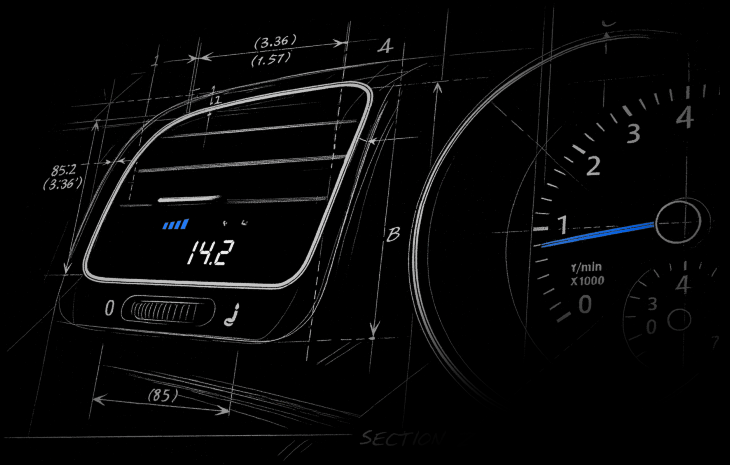
service@p3.io

Built Different.



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