Configuration and Setup:



Your new P3cars.com gauge is packed with many advanced features, but has been designed to work for your car pretty much right out of the box. There are a few settings that you may wish to change such as English or metric units, or selecting the proper engine model for your car, or setting the trigger RPM of the shift light. Below is a basic description of the gauges different features and modes.

WIRING: When first installing, connect ONLY the obd2 connector to check functionality before proceeding. GREEN=dimmer BROWN=Analog1 BLUE=Analog2 AUX PLUG=external boost sensor

MAIN BUTTON FUNCTIONS

BMW

Left Button TAP = Peak recall (and start 15 second record).

Left Button HOLD = 15 sec playback

Right Button TAP = View Current Mode Name (If pressed again within 5 sec, change mode)

Right Button HOLD = Night / Day Dimmer toggled (if auto-dimming is not enabled)

*Note on peak recall:* Peaks for Air, Coolant, and EGT are stored in the background, switching to that mode and recalling the peak will show the peak from since that mode was last recalled or the car was restarted.

## GAUGE MODES

Boost: This mode will show vacuum and boost. Depending on settings in the config menu this may be from VAG ecu data or an external analog sensor. Boost is read in PSI by default and Vacuum is inHg. If you configure the gauge to metric boost will be in BAR. PLEASE CALIBRATE USING "CALB" IN THE CONFIG MENU FOR PROPER READINGS.

Coolant: This mode will show your current coolant temp. Unlike the needle on your dash, this will show you exactly the temp that your engine is currently running at, and is configurable between Celsius & Fahrenheit.

Air: Air intake temperature. This is the reading of the temperature of the air entering the engine, and is configurable between Celsius & Fahrenheit.

Igntn: Actual ignition timing. This mode will show you the ignition timing of your engine in real-time.

Egt: Exhaust Gas Temperature. This is the temp of the exhaust gas as calculated by your ECU.

Throttle: Actual throttle plate position. Use this mode to see how your car changes the actual drive by wire throttle blade in relation to what your foot tells it to do.

rp-Shift: RPM readout. It can be handy to use this mode to see an exact RPM or to record/playback and see your shifts. Shift-light set in the config menu will work on ALL modes.

Speed: Actual roadspeed direct from VSS. This is the actual road speed value of the car, uncorrected. This is the raw value, therefore it may not match your cluster which tends to read high in many cars.

0-60: Zero to sixty Performance Timer. Come to a stop and this mode will read "Rdy..." The gauge is ready for you to accelerate to 60. As you accelerate the gauge will time you and automatically stop when you hit 60, leaving your time on the screen. When you slow to zero again the gauge will change to "Rdy..."

Batt: Battery Voltage. This is the voltage of your cars power system, anything between 13-14.5 volts while running is normal.

## **CONFIGURING THE GAUGE**

For version 2.1+ simply hold both buttons to enter the config menu, you can do this at any time! RELEASE the button as soon as you see the word "Conf". SAVING YOUR SETTINGS: Your settings will not be saved until you exit the config menu by HOLDING the right button until the gauge resets.

**CONFIG BUTTON FUNCTIONS** 

Left Button TAP = Change Value

- Left Button HOLD = Change Value fast repeat
- **Right Button TAP** = Change to next config mode

**Right Button HOLD** = EXIT config menu and SAVE settings.

DEFAULT	VALUES	FUNCTION
D.On	On or Off or On.A or On.P	Turn the gauge display ON or OFF or ON-Auto-Dimming(if you have attached the green wire to your dimmer line) or ON-Persistant-Dimmer(for dimmer setting not resetting on restarts.)
En.Y	Y or N or b	nglish units? No = Metric, Y = English, b = Boost only (boost in PSI, rest in metric)
Pr0.1	0.1 or 0.5 or 1.0	Pressure resolution/decimal point. 0.1 = tenths, 0.5 is round- ed to 5 tenths, 1.0 = whole numbers only
U.bg.Y	Y or N	Vacuum bargraph in boost mode – set to N for no bargraph while in vacuum
SL.57	30 – 99	Shiftlight activation RPM x 100, default is 5700
Bst.d	d, A, n	Boost reading – digital or analog or none. (analog is for gauges with boost sender and tubing to manifold) Digital is for boost from diag port.
A1.N	Y or N	Enable or disable the first analog input (brown wire)
A2.N	Y or N	Enable or disable the second analog input (blue wire)
Clr.C	None	Hold the first button to clear codes.
Cal.b	None	Calibrate the analog boost sensor to your ambient conditions. — tap left button after confirming engine is off
Car.4	Car.0-8	<ul> <li>Car.0-2 NOT USED.</li> <li>Car.3 for K-Line pre-2008 BMW.</li> <li>ANLG for analog mode, no obd2 needed.</li> <li>Car.4 for E9X M3 or N54 BMW's with N54 engine USE bSt.A SETTING.</li> <li>Car.5 N55 E8X, E9X BMW's with N55 engine USE bSt.d SETTING.</li> <li>Car.6 N55 with PIGGYBACK TUNE tap AN2(blue wire) to MAP sensor pre-piggyback. USE bSt.A SETTING.</li> <li>Car.7 F30 and F20 and F10 Cars N20 and N55 engine USE bSt.d SETTING</li> <li>Car.8 F1X Cars w/ n63 and s63 engine USE bSt.d SET-TING</li> </ul>