

<b>Product Name:</b>	PE Sealed Dash Kit
<b>Product Part Number:</b>	92005005
<b>Document Number:</b>	6000712-00

## MANUAL REVISIONS

Revision	Date	Description
-00	1/13/25	Initial release of manual – based on firmware v1.00.22

### WARNING!

The PE Sealed Dash with CAN is intended for off-road use only. Proper care must be taken as this device should not be exposed to volatile chemicals.

Performance Electronics, Ltd. assumes no responsibility for any damage that results from incorrect installation or misuse of this product. It is up to the end user to verify the correct setup and determine the suitability for their specific application.

 **WARNING:**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## INTRODUCTION AND OVERVIEW

The PE Sealed Dash is a touchscreen LCD that allows you to monitor critical engine channels from the driver's seat. The PE Sealed Dash provides user configurable channel warnings, full-screen alarms and screen recording options to view and play back recorded screen data.

### Features

- Compatible with PE3, Hondata, MoTec and Megasquirt ECUs
- Display up to 8 data channels
- Full color LCD
- Water and dust resistant enclosure
- Tested to IP67 standards
- Configurable multi-touch display
- Visible in direct sunlight
- Adjustable brightness
- User configured warning and alarms
- Screen playback last two runs
- Min/Max recall

## PART IDENTIFICATION

PE Sealed Dash Kit (P/N: 92005005)



## INSTALLATION

### Mounting

There are two mounting options for the PE Sealed Dash, a surface mount and recessed mount.

The surface mount installation requires locating and drilling five holes. Four 0.20" diameter holes for the mounting posts and one 1.25" diameter hole for the communication plug.

The recessed mount installation requires cutting an opening that measures 4.35" wide by 3.20" tall. Recessed mounting requires using the bracket (PN: 20015013) provided with the kit.

Be sure there is adequate clearance behind the panel for the mounting posts and communication cable. Take care that drilling will not enter any other component, wires or structure. Four nuts are provided for fastening. The communication cable enters from the back in the center of the dash. If additional clearance is needed, there is a 90° cable (PN: 99005009) sold separately.

### Connecting to an ECU





Connect the Dash using the supplied M12 to JST cable directly to the 4 pin JST connector on the PE3-IG2 ECU or to the 4 pin JST connector on the PE manufactured EFI harness.

If you are building your own harness with a PE DIY Kit, or connecting to a Hondata, MoTec or Megasquirt ECU, you will need to purchase the EFI Pigtail Adapter (PN: 99005004) separately to adapt to your wire harness.

Note: The EFI Pigtail Adapter is sold separately and is not required if using a PE3-IG2 or PE manufactured EFI harness.



\*EFI Pigtail Adapter PN: 99005004

Wire Color	Wired Connection
 Red	Switched +12v
 Brown/Tan	CAN Lo
 Brown/Pink	CAN Hi
 Black	Ground

## SETUP AND CONFIGURATION

Note: The dash is a capacitive touch screen which senses human touch. It may not operate properly if gloves or other hand protection are being used.

### Basic Configuration

Switch +12v power on for the PE Sealed Dash. A splash screen will be displayed with the Performance Electronics logo, then the home screen will display.

Press **Menu** to enter setup area.



### Initial Setup

Five initial settings must be established:

1. **Layout:** Select how many channels to display. Press Layout and select desired channel layout
2. **CAN Setup:** Set CAN Bus type for your ECU.

Select CAN Bus Speed:

- PE3 ECUs broadcast 1000(kbps)
- OBD-II data is broadcast 500(kbps)

Select CAN Bus Type:

- Set PE3-8400 ECU to Bosch MS4.3
- Set PE3-IG2 ECU to PE-IG2

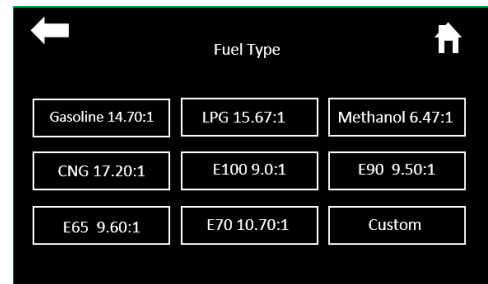
3. **Display:** Adjust your screen backlight level. Invert main screen colors from black to white. Flip the screen to best fit your installation.
4. **Channel Display:** From the home screen, tap the channel you wish to change and select the input to be displayed. Channel options are:

- RPM
- Throttle Position (TPS)
- Air Temp (IAT)
- Engine Temp (ECT)
- Manifold Pressure (MAP)
- Manifold Boost (Boost)
- Battery Voltage (Battery)
- Ignition Angle (Ign Angle)
- Lambda/AFR#1
- Speed
- Injector Open Time (Open T)
- Lambda/AFR#2
- Oil Temp (Oil T)
- Oil Pressure (Oil P)
- Fuel Temp (Fuel T)
- Fuel Pressure (Fuel P)
- Gear
- Off



Note: Depending on your ECU, your available channel list may differ from the list above.

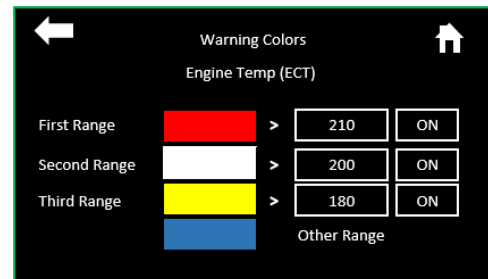
- Fuel Type:** Select one of eight pre-calibrated fuel types or enter a custom stoichiometric value.



## Channel Warning Colors

Each channel allows you to configure up to four warning colors. When a warning condition is met, the box surrounding the channel on the home screen will change to the specified color. To set these warnings:

- Power on the PE Sealed Dash and tap the channel you want to configure. Then tap **Setup Warning Colors**.
- Using this example, a blue border will be displayed around the Engine Temp (ECT) channel until the temperature reaches 180°F. When at or over 180°F, the border will turn yellow, at or over 200°F, it will turn white, and at or over 210°F it will turn red.
- Each range may be adjusted to a specified value by tapping the range area, then enter your desired value and save by tapping **EN** (enter).
- Individual ranges can be turned on or off.
- The range color can be set by tapping the range color on the Warning Colors screen, then tapping the desired color on the Select Color screen. If you do not wish to have a colored box, select black when using the normal main screen colors or white when using inverted main screen colors.

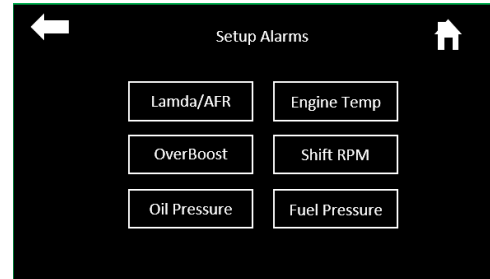


## Full-Screen Alarms

The PE Sealed Dash can display full-screen alarms for critical engine functions. If an alarm is triggered, the entire dash screen will slowly flash the selected color and display the data channel value. The alarm screen and home screen will slowly flash until the alarm is no longer active. Select **Menu** then select **Alarms** to enter this setup. Up to 6 full-screen alarms may be enabled.

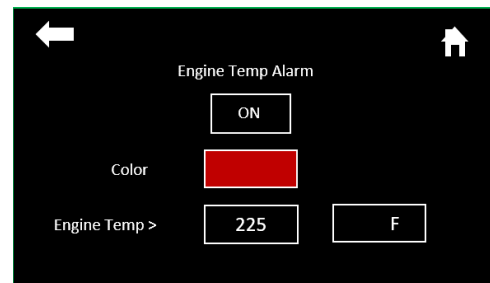
The alarm selections are:

- Lambda/AFR
- Engine Temp
- Over Boost
- Shift RPM
- Oil Pressure
- Fuel Pressure



Tap the alarm you want to set:

- The Alarm can be turned On or Off.
- Select Color to choose the alarm screen color.
- Enter alarm value and unit of measurement.
- Press the back arrow to set additional alarms.
- Press the home button to exit.



## OPERATION

After the PE Sealed Dash is powered on, data from the CAN Bus will be displayed.

### Reset

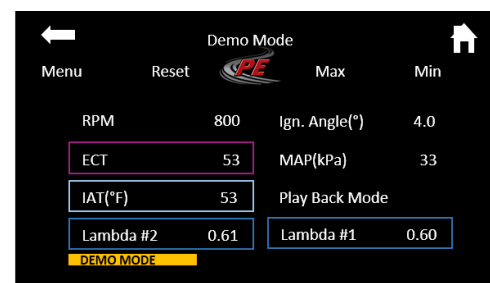
Pressing this will clear all Max/Min data stored in the dash. Max/Min data is retained when the PE Sealed Dash is powered off. Be sure to reset before each run to ensure accurate data.

### Max / Min

Pressing these will display either the maximum or minimum data point value of each channel since the last reset.

### Demo Mode

The dash may be run in Demo Mode by tapping **Menu** and then **Demo**. The dash will return to the home screen and begin displaying data. Alarms and warnings are functional with demo mode activated.



## Screen Recording

The PE Sealed Dash will record up to two runs or 60 minutes of data. Recorded data will remain in memory until a new run is recorded, at which time, the oldest data is overwritten. Tap **Menu**, then **Record Config** and then toggle Record Config **On**. This allows you to setup the screen record function. Set recording to begin at a certain **RPM** and/or **TPS** percentage. Set the **Time** to delay recording start once conditions are met. Setting any of the values at 0 disables the condition.



## Playback

Tap the **Menu** button and select **Playback**. The screen will open to the beginning of the most recent recorded run.

Play ▶ – play back the most recent run

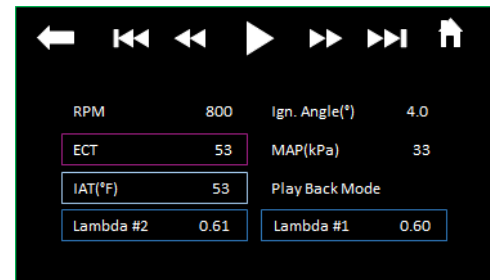
Pause II – pause the run playing

Fast Forward ▶▶ – move forward in the run playing

Rewind ◀◀ – move backward in the run playing

Skip Forward ▶▶ – move to the next run

Skip Backward ◀◀ – move to the previous run



SPECIFICATIONS	
PE Sealed Dash Technical Specifications	
Parameter	Specification
Type of Construction	Injection molded enclosure
Size	4.80" (122 mm) W x 3.63" (92 mm) H x 1.59" (40 mm) D
Weight	7.8 oz (222 g)
Environmental Sealing	Protected from dust ingress and liquids
Operating Temperature	-22°F to 167°F (-30°C to 75°C) ambient
Communication	CAN bus (adjustable speed)
Operating Voltage	7-18 VDC
Visual Output	Color – TFT capacitive touch-screen display
Screen Recording	8 channels, approx. 60 minutes

