

ROAD SIGHT 5 PRODUCT MANUAL



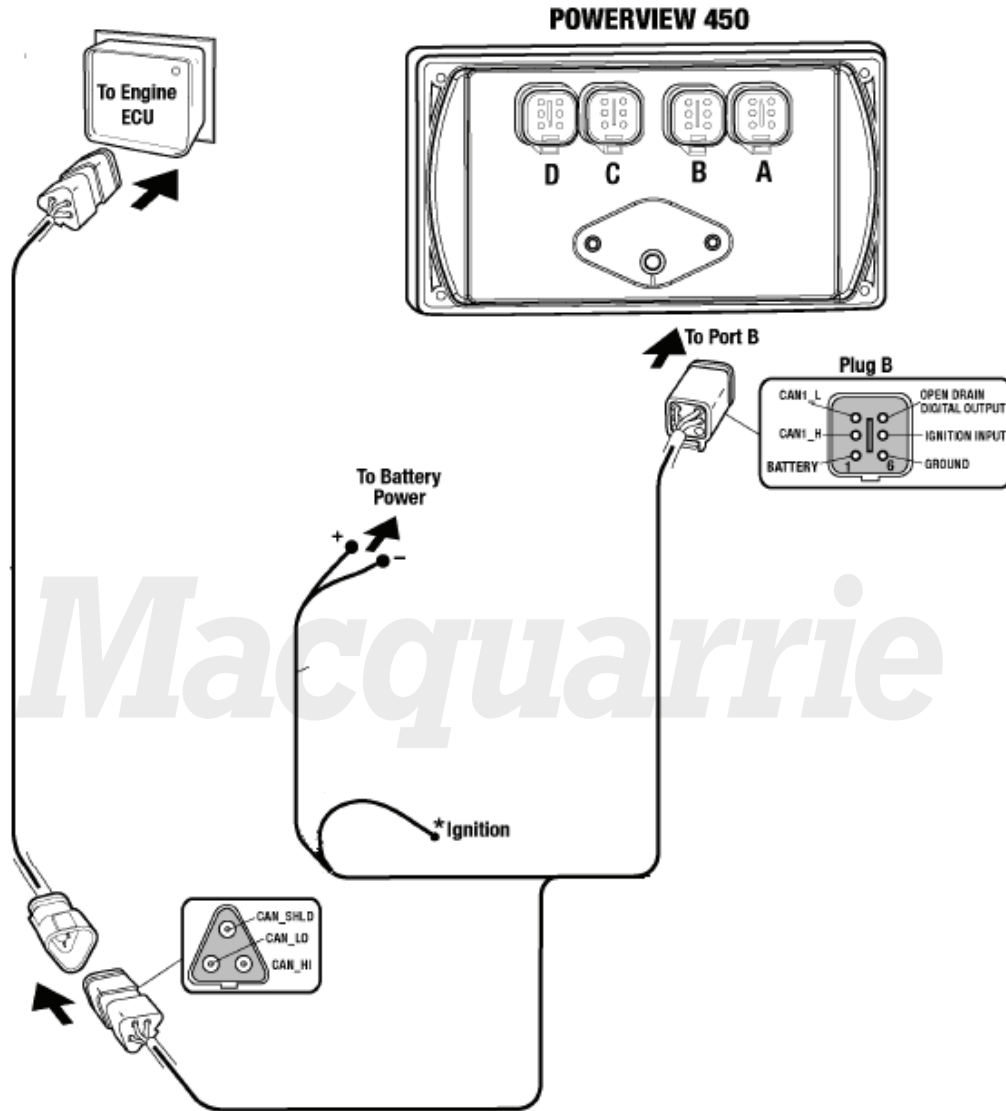
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Installation Instructions

Plug 6-Way Deutsch Connector into Port B on the rear of the PV450 unit



*** Note: Ignition must be connected to the battery or to an ignition switch for the display to turn "ON".**



Getting Started

Main Menu



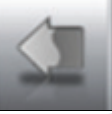



This is the main menu. From here, you can navigate to the desired screen (i.e. gauge display, whole of life parameters, user settings, etc.).



Once you have entered the “Gauge Display”, pressing the help button will bring up a “Help” popup layer over the main screen. Each of the pictures correspond to their respective adjacent buttons.



Legend:

ICON	NAME	DESCRIPTION
	Home	Returns to the first page of the gauge display
	Day/Night Mode	Toggles the display between day/night mode viewing
	Previous Screen	Navigates to the previous screen
	Next Screen	Navigates to the next screen
	Main Menu	Returns to the main menu
	Camera	Displays reverse camera feed



Menu Navigation Map

i. Main menu

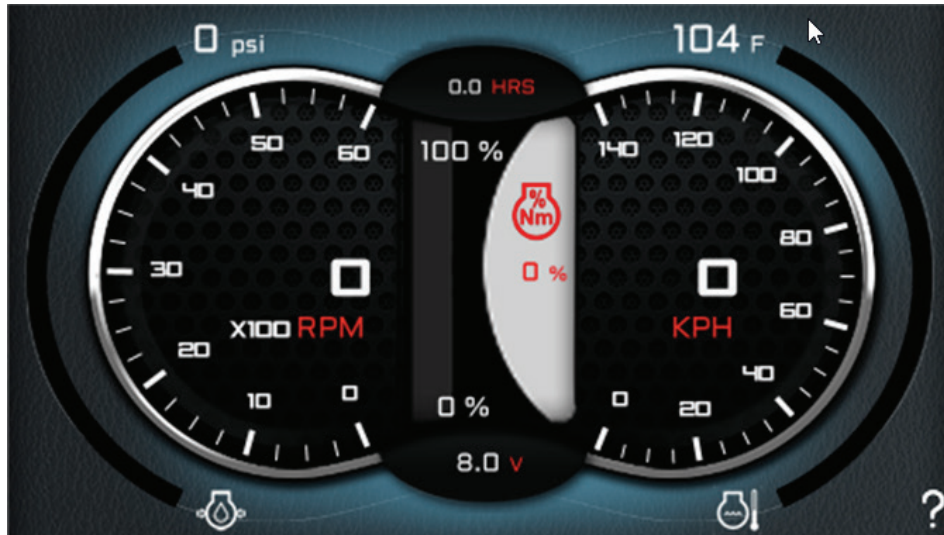
- 1. Gauge Display**
 - a. Gauge Display 1
 - b. Gauge Display 2
 - c. Gauge Display 3
 - d. Gauge Display 4
 - e. Trip Parameters Display
 - f. WOL Parameters Display
- 2. WOL Parameters Settings**
 - a. Max Road Speed
 - b. Top Gear
 - c. Next Gear
 - d. Cruise Control
 - e. Service Brakes
 - f. Overspeed
 - g. Coasted out of Gear
 - h. Panic Stops
- 3. User Settings**
 - a. Ambient Light
 - b. Brightness
 - c. Units
 - d. Language
 - e. Video Mode
- 4. Utilities**
 - a. System Settings
 - i. J1939 Source Address
 - b. Service Reminders
 - c. Date and Time
 - d. Data Logger
 - e. Parameter Setpoints
 - i. Max Road Speed
 - ii. Overspeed
 - iii. Top Gear
 - iv. Next Gear
 - f. Fault Code Logger
 - g. Camera Settings
- 5. Engine Information**
 - a. Engine Serial Number

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General Overview

Gauge Screen 1 – Engine & Vehicle Speed



This is the default/home screen for gauge display. Displayed on the left is an engine speed (RPM) gauge with an oil pressure gauge on the outer left side. Displayed on the right is a vehicle speed (km/h) gauge with a coolant temperature gauge on the outer right side. Machine hours are displayed at the top centre of the display and voltage is displayed at the bottom centre, the engine load is displayed in the centre.

ICON	NAME	DESCRIPTION
	Active Fault	There is an active fault that needs to be reviewed. This icon appears so the operator is still able to view the gauge screen but inform them that there is a fault that needs to be reviewed.

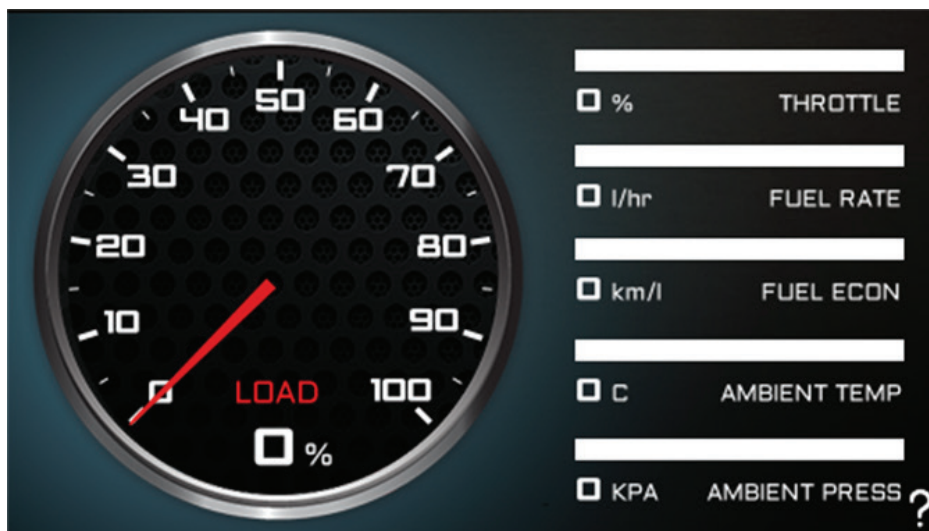


Gauge Screen 2 – Oil, Coolant and Boost



Gauge screen 3 displays oil pressure (kPa), oil temperature (°C), coolant temperature (°C), boost pressure (kPa) and boost temperature (°C).

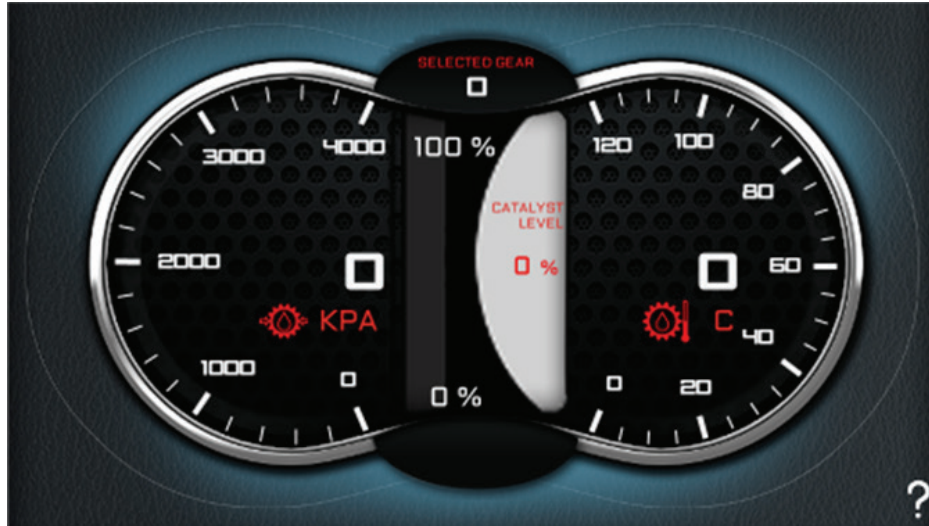
Gauge Screen 3 – Load, Throttle, Fuel Rate, Fuel Econ, Ambient temp, Ambient Press



Gauge screen 2 displays engine load (%), throttle (%), fuel rate (l/hr), fuel economy (km/l), ambient temperature (C) ambient pressure (kPa).



Gauge Screen 4 – Oil Pressure, Oil temperature and Catalyst level

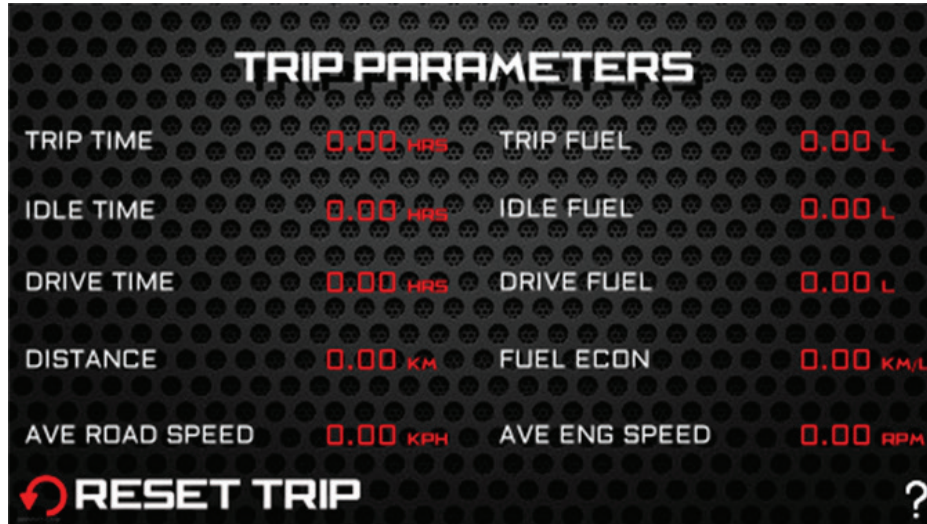


Gauge screen 4 displays oil pressure (kPa), oil temperature (°C), catalyst level (%) and the current selected gear is shown at the top.

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Trip screen 1 – Trip Parameters



PARAMATER	DESCRIPTION
Trip Time	The total time accumulated, in hours, while the engine is in the PTO or remote PTO governor hold state since the last trip reset.
Idle Time	The total time accumulated, in hours, while the engine speed is greater than zero, both the PTO and remote PTO governors are inactive, and the vehicle speed is less than 2 km/h, since the last trip reset.
Drive Time	The total time accumulated, in hours, while the vehicle is in motion during current trip
Distance	The total distance accumulated during the current trip
Ave. Road Speed	Average road speed of vehicle during current trip
Trip Fuel	The accumulated amount of fuel used during the current trip
Idle Fuel	The accumulated amount of fuel consumed whilst engine is idling the current trip
Drive Fuel	The accumulated amount of fuel consumed whilst engine is driving the current trip
Fuel Economy	The average of instantaneous fuel economy (kilometres per litre) for that segment of vehicle operation of interest.
Ave. Engine Speed	Average engine rpm of vehicle during current trip
Reset Trip	Resets all trip parameters to zero



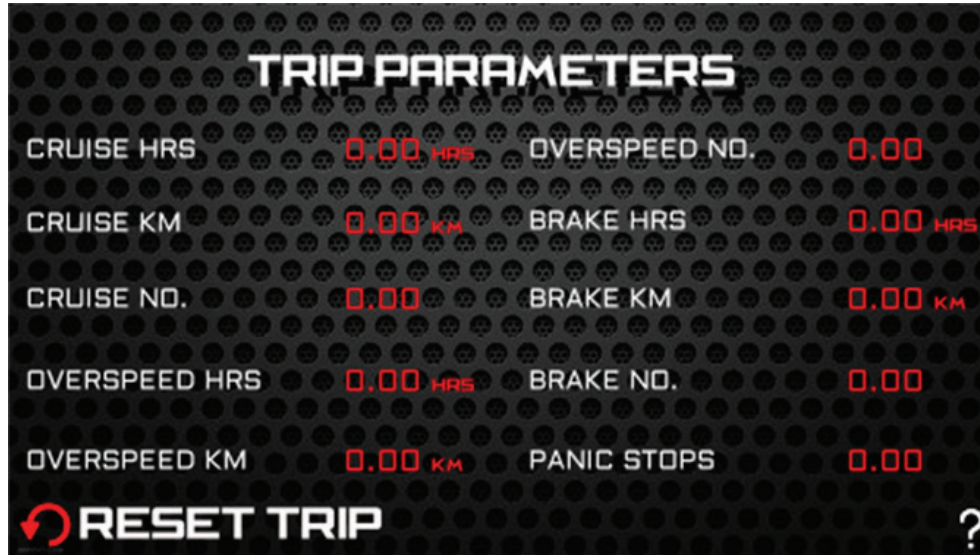
Trip screen 2 – Trip Parameters



PARAMATER	DESCRIPTION
Max kph hrs	The total time accumulated, in hours, that the vehicle is at max kph during the trip
Max kph km	The total distance travelled at the max speed during the trip
Max kph no.	Number of times max speed was reached during the trip
Top Gear hrs	Hours travelled in top gear during trip
Top Gear Km	Distance travelled in top gear during trip
Top Gear no.	Top gear reached during trip
Next Gear Hours	Hours travelled in next highest gear during trip
Next Gear Km	Distance travelled in next highest gear during trip
Next Gear no.	2 nd Highest gear reached during trip
Coasted Out	Number of times vehicle has coasted out during trip
Reset Trip	Resets all trip parameters to zero



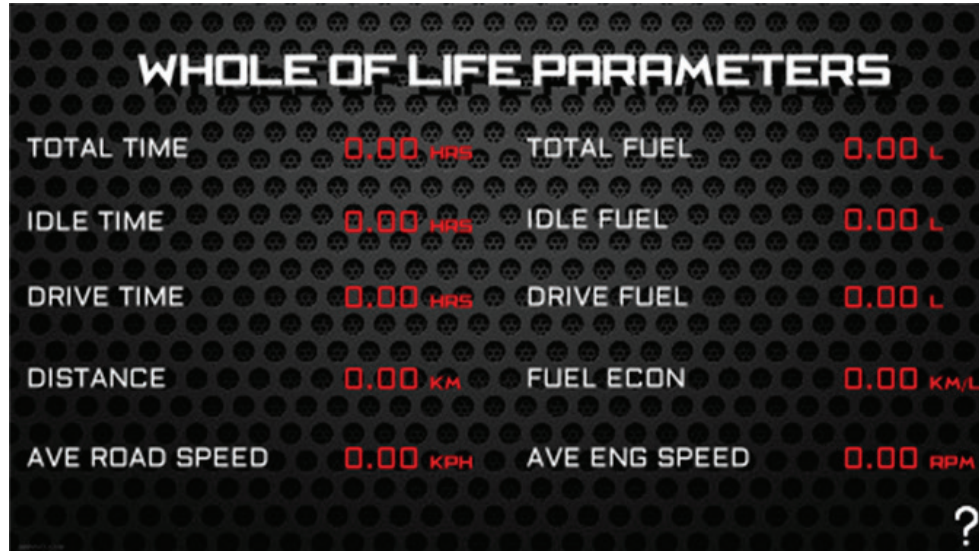
Trip screen 3 – Trip Parameters



PARAMATER	DESCRIPTION
Cruise hrs	Hours travelled using cruise control during trip
Cruise km	Distance travelled using cruise control during trip
Cruise no.	Number of times cruise control was engaged during trip
Overspeed hrs	Hours travelled overspeed
Overspeed km	Distance travelled while overspeed during trip
Overspeed no.	Number of times vehicle overspeed
Brake hrs	Hours spent braking during trip
Brake km	Distance travelled in next highest gear during trip
Brake no.	2 nd Highest gear reached during trip
Panic stops	Number of times vehicle has stopped suddenly
Reset Trip	Resets all trip parameters to zero



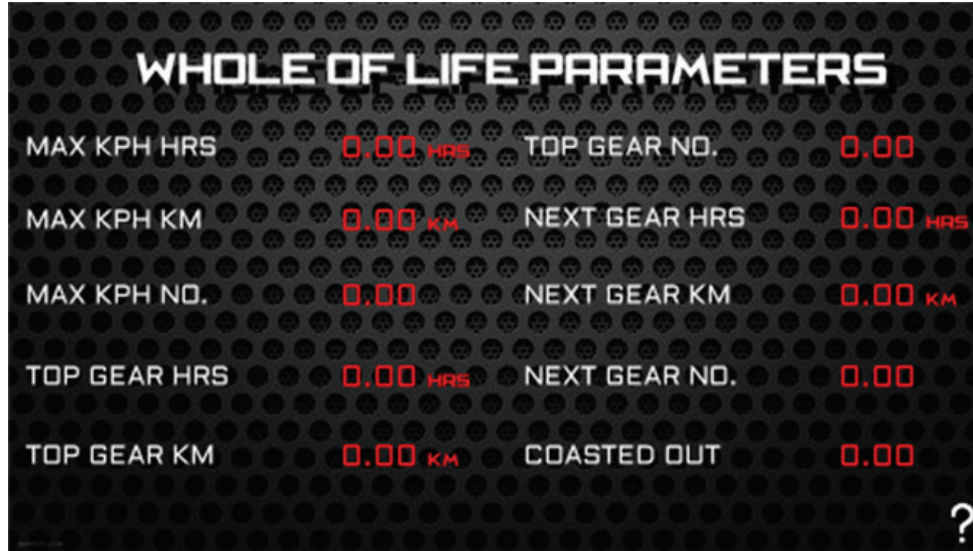
WOL screen 1 –Whole of Life Parameters



PARAMATER	DESCRIPTION
Trip Time	The total time accumulated, in hours, while the engine is in the PTO or remote PTO governor hold state for whole life of engine
Idle Time	The total time accumulated, in hours, while the engine speed is greater than zero, both the PTO and remote PTO governors are inactive, and the vehicle speed is less than 2 km/h, for whole life of engine
Drive Time	The total time accumulated, in hours, while the vehicle is in motion
Distance	The total distance accumulated for whole life of engine
Ave. Road Speed	Average road speed of vehicle for whole life of engine
Trip Fuel	The accumulated amount of fuel used for whole life of engine
Idle Fuel	The accumulated amount of fuel consumed whilst engine is idling for whole life of engine
Drive Fuel	The accumulated amount of fuel consumed whilst engine is driving for whole life of engine
Fuel Economy	The average of instantaneous fuel economy (kilometres per litre) for that segment of vehicle operation of interest for whole life of engine
Ave. Engine Speed	Average engine rpm of vehicle for whole life of engine



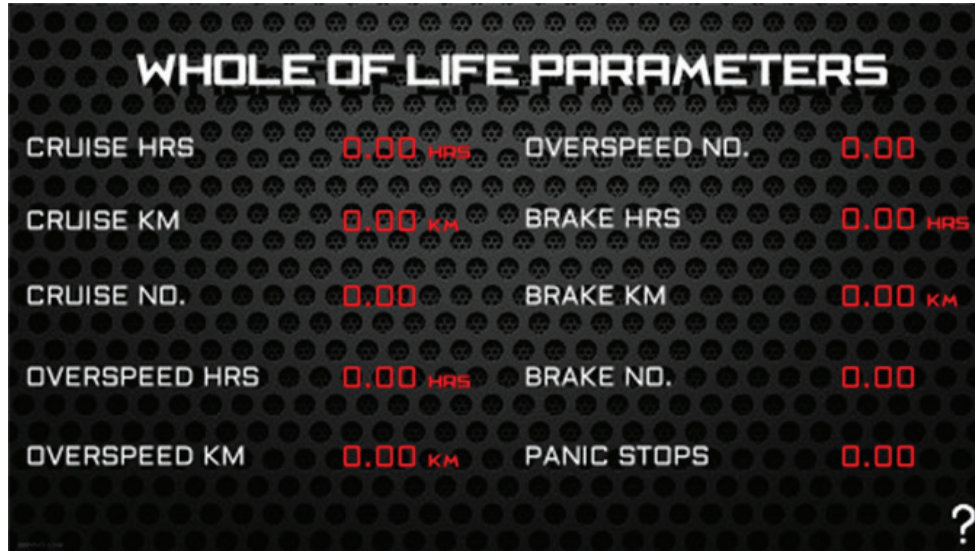
WOL screen 2 –Whole of Life Parameters



PARAMATER	DESCRIPTION
Max kph hrs	The total time accumulated, in hours, that the vehicle is at max kph for whole life of engine
Max kph km	The total distance travelled at the max speed for whole life of engine
Max kph no.	Number of times max speed was reached for whole life of engine
Top Gear hrs	Hours travelled in top gear for whole life of engine
Top Gear Km	Distance travelled in top gear for whole life of engine
Top Gear no.	Top gear reached for whole life of engine
Next Gear Hours	Hours travelled in next highest gear for whole life of engine
Next Gear Km	Distance travelled in next highest gear for whole life of engine
Next Gear no.	2 nd Highest gear reached for whole life of engine
Coasted Out	Number of times vehicle has coasted out for whole life of engine



WOL screen 3 –Whole of Life Parameters



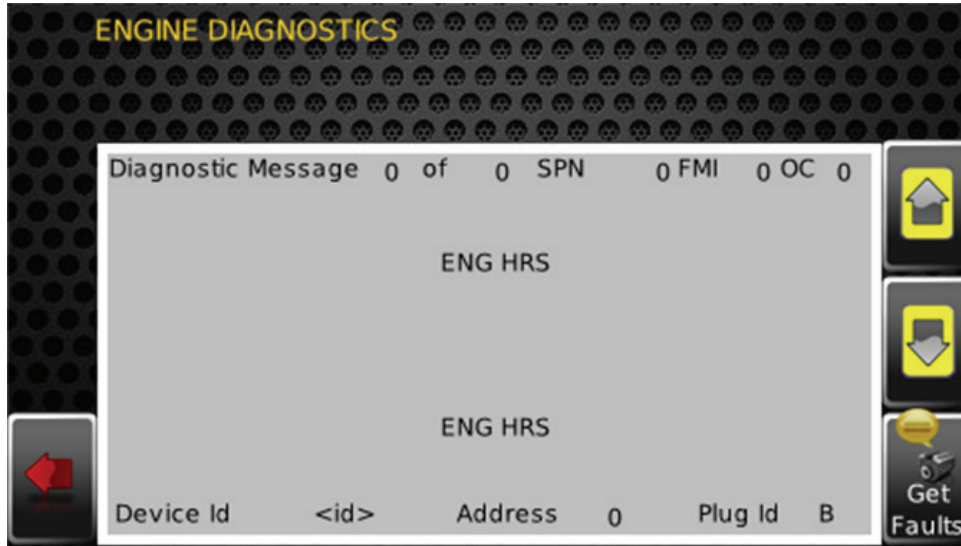
PARAMATER	DESCRIPTION
Cruise hrs	Hours travelled using cruise control for whole life of engine
Cruise km	Distance travelled using cruise control for whole life of engine
Cruise no.	Number of times cruise control was engaged for whole life of engine
Overspeed hrs	Hours travelled while overspeed for whole life of engine
Overspeed km	Distance travelled while overspeed for whole life of engine
Overspeed no.	Number of times vehicle overspeed for whole life of engine
Brake hrs	Hours spent braking for whole life of engine
Brake km	Distance travelled while braking for whole life of engine
Brake no.	Number of times vehicle braking for whole life of engine
Panic stops	Number of times vehicle has stopped suddenly for whole life of engine






Menu Overview

Engine Diagnostics

The engine diagnostics screen shows any active faults in DMI or DMZ in the engine ECM



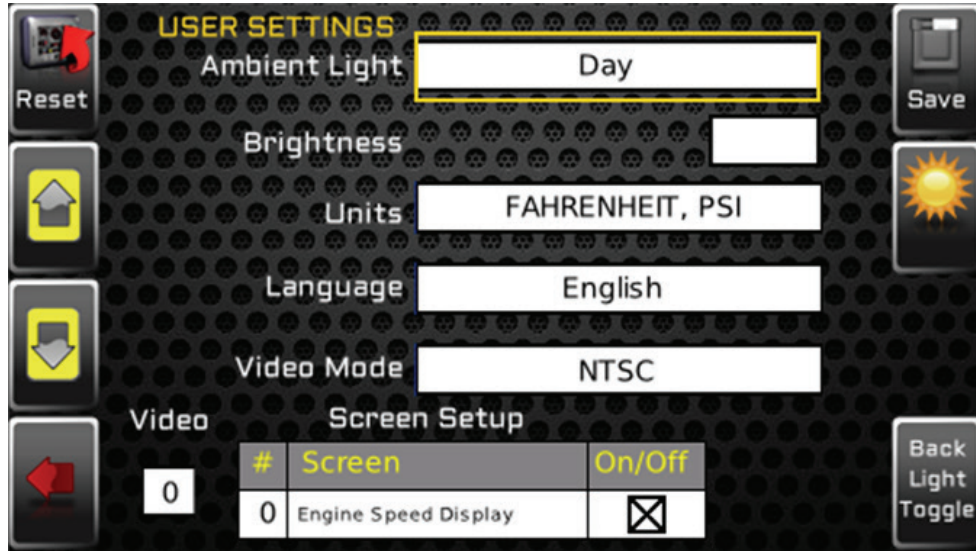
ICON	NAME	DESCRIPTION
	Scroll up/down	Scrolls through all current fault logs/DM's
	Request fault logs	Retrieves any current/new fault logs
	Back	Returns to the previous screen

*This screen may also show some older faults that are not visible in insight.



User Settings

All user settings can be configured on this screen.



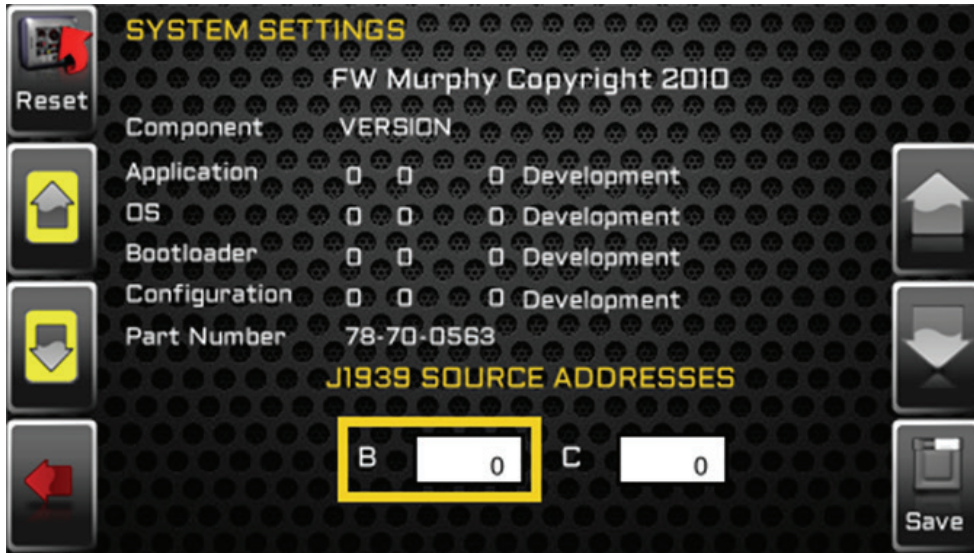
Utilities

By entering the Utilities screen, you can access system settings as well as service reminders. This page also lets you navigate to the “parameter setpoints” page if you wish to change them after installation.



System Settings

This screen contains details the Road Sight software and allows for altering the J1939 source address for the PV450 display CAN ports.



*these settings should only be changed in consultation with the Road Sight OEM

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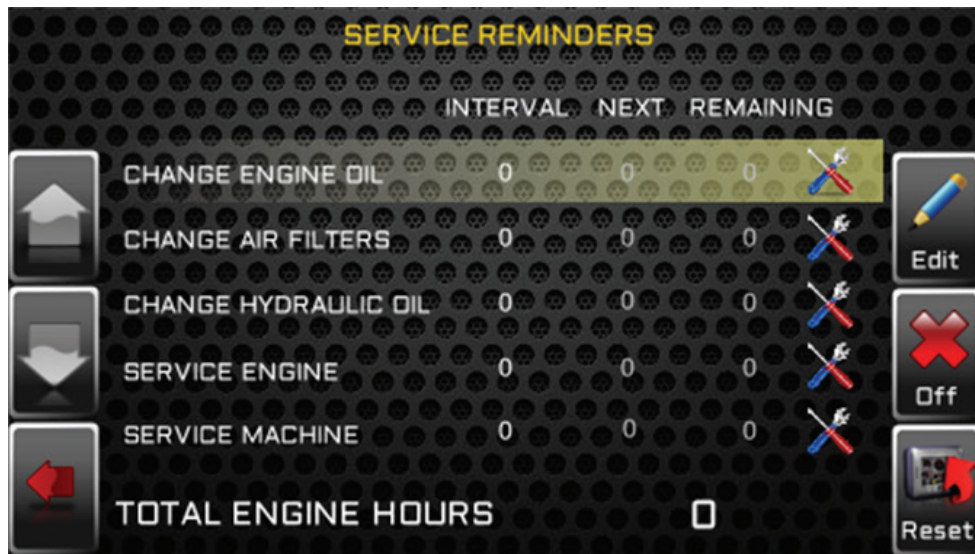
Service Reminders

The Service Reminders screen will display information regarding the maintenance and servicing of the engine.

Interval – The interval indicates how often a service needs to be carried out. For example, an engine might need to be serviced once it has accumulated ‘X’ amount of hours. This interval is generally constant and is as specified by the manufacturer of the engine.

Next – Next specifies the value of total engine hours at which the next service needs to be completed

Remaining – Remaining indicates the amount of engine hours that is to be accumulated before the next service.

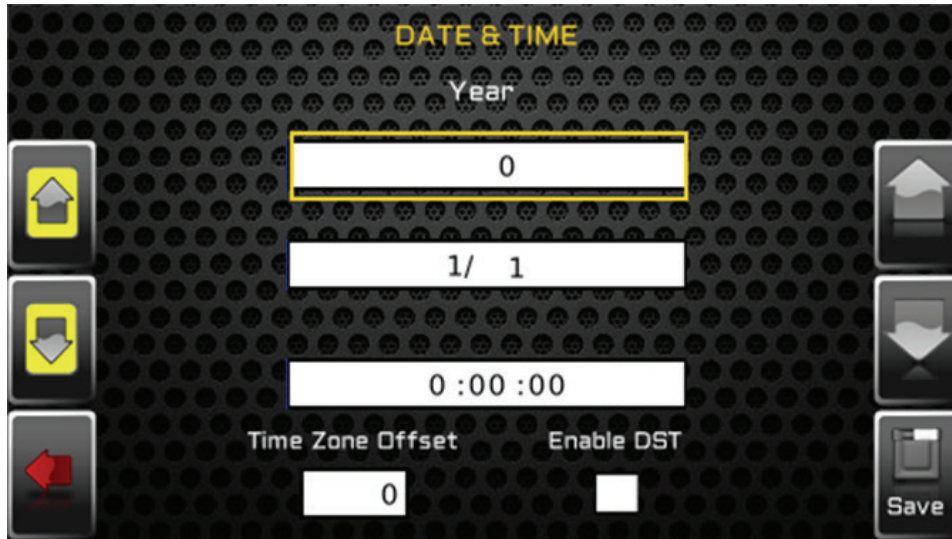


It is possible to adjust the desired service intervals by pressing the “Edit” key on the right. From here, you change the interval and next values for each type of service.



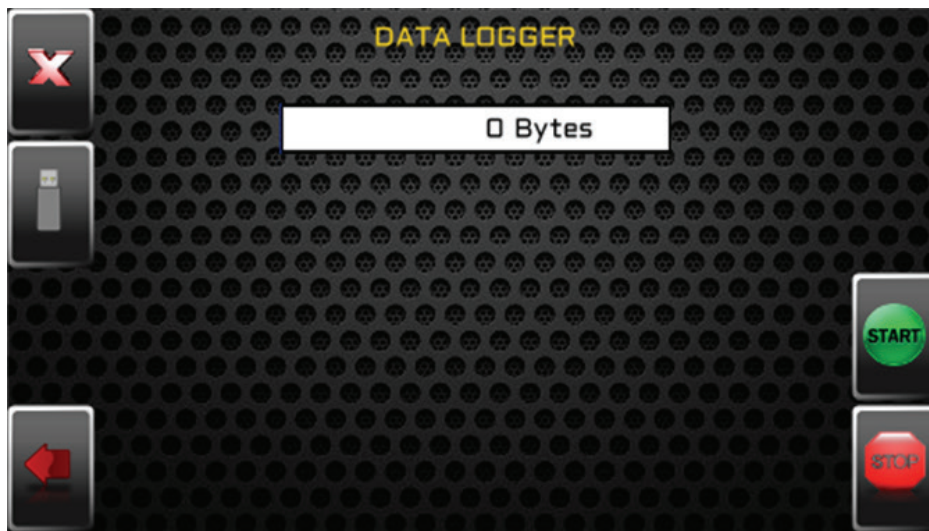
Date and Time

This screen will let you set the date and time; time zones and a daylight-savings mode can also be enabled.



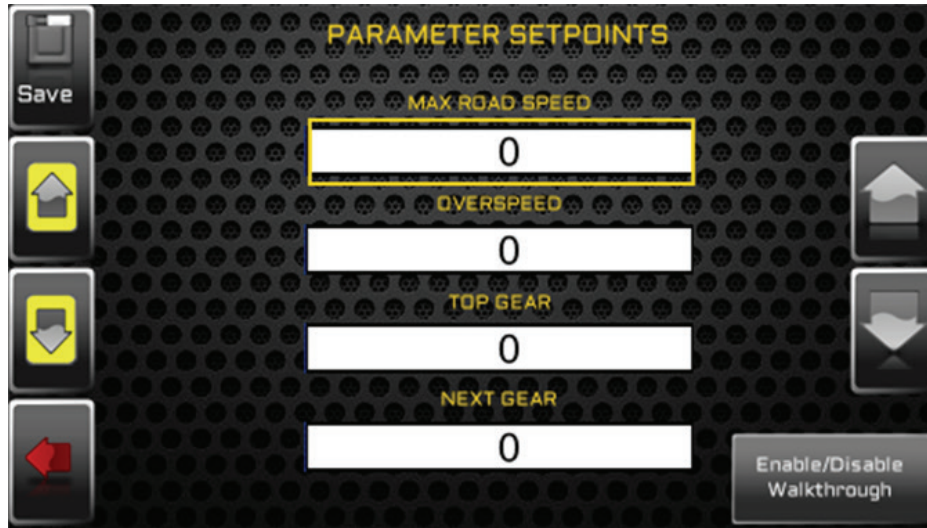
Data Logger

The data logger screen can be used to export all the trip and vehicle data on the PV450 to an external USB drive, the data will automatically be tabulated into an excel spreadsheet for analysis. The number of bytes of data are displayed in the centre.



Parameter Setpoints

The parameter setpoints screen can be used to change the desired setpoints for each variable parameter. These settings are used to calculate the Trip and WOL parameters.



Fault Code Logger

The fault code logger will record any fault codes output by the engine can be transferred to USB using the "transfer log" button.

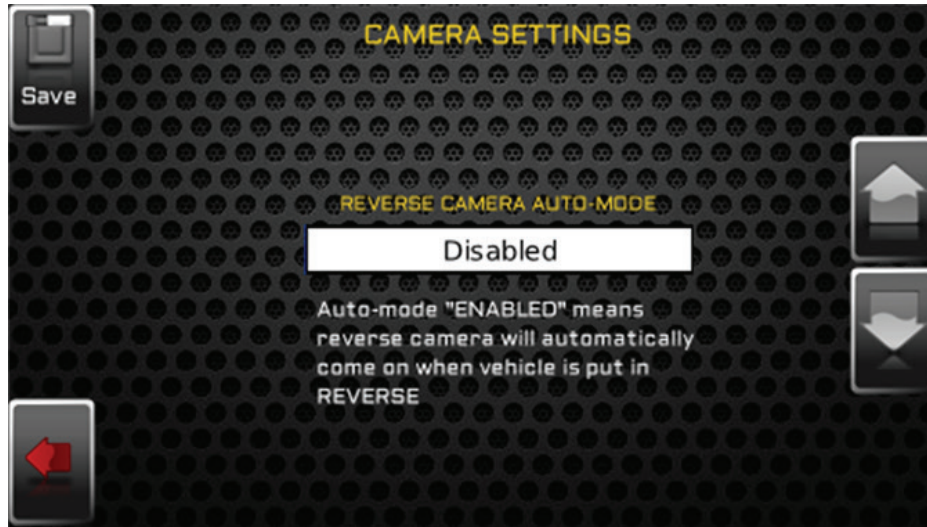


The "Clear Dml Log" button will clear the fault codes using password: 3482



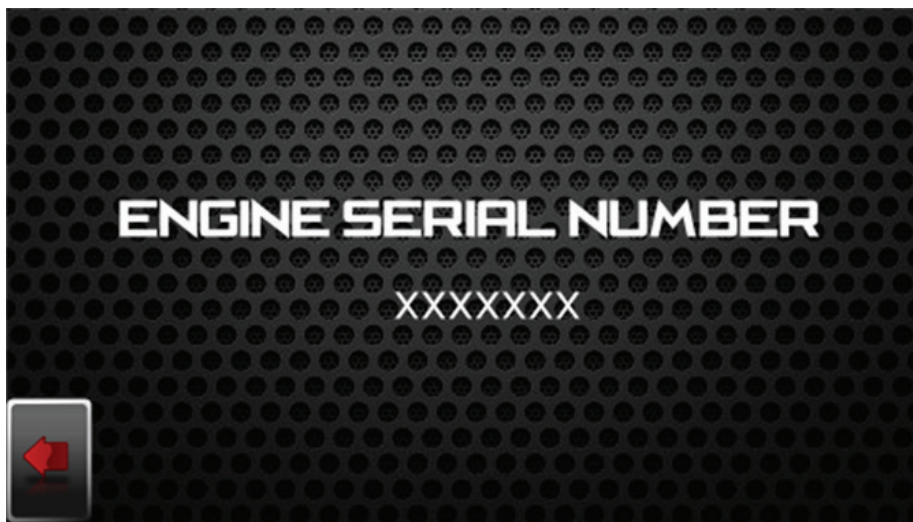
Camera Settings

The camera setting page is designed to control and display a reverse camera. Auto mode can be enabled when a camera is connected that will automatically get the PV450 to display the reverse camera feed when the reverse gear is engaged.



Engine Information

Displays engine serial number and related specifications (*not compatible with all ECU's)



Whole of Life Parameter Settings

If the device is moved into a different vehicle the whole of life parameters can be manually reset using the whole of life parameters button on the home page which will navigate to this menu, select the parameter you wish to reset to a new value.



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