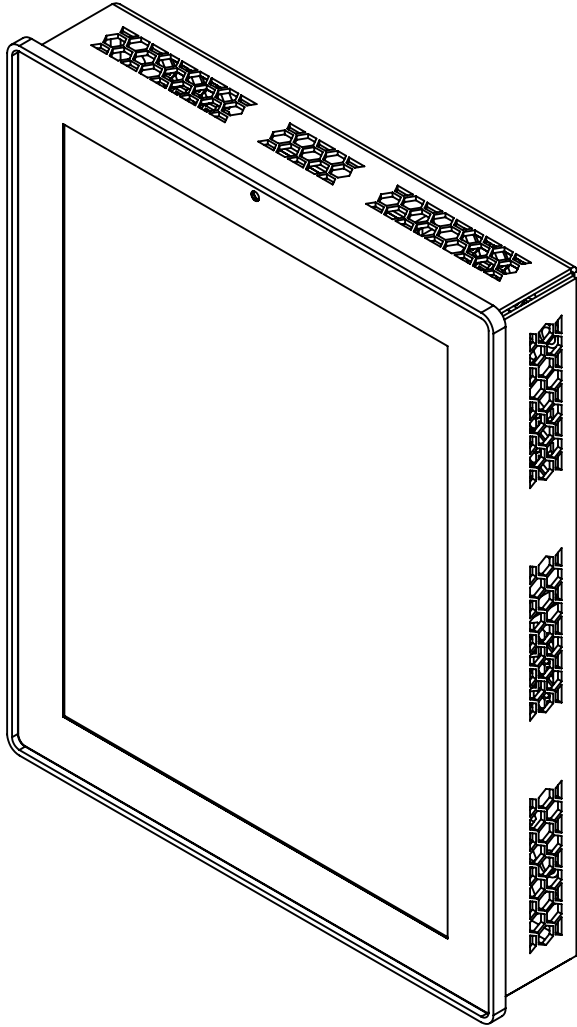


**OFFSHORE DYNAMICS DUAL ENGINE DISPLAY**  
**Part Numbers: 4166**  
**USER MANUAL**



**Revision A\V1.0.0**



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# 1

## INTRODUCTION

The Offshore Dynamics NMEA2000® Dual Engine Display has a 10.4” diagonal display area and has a high bright sunlight readable 1000 cd/m2 display.

The Dual Engine Display can monitor two user selectable engines simultaneously, with alarm monitoring and logging.

It is supplied with a wired remote button panel, which can control the brightness of the display, acknowledge and clear alarm conditions

### 1.1 PRODUCT FEATURES

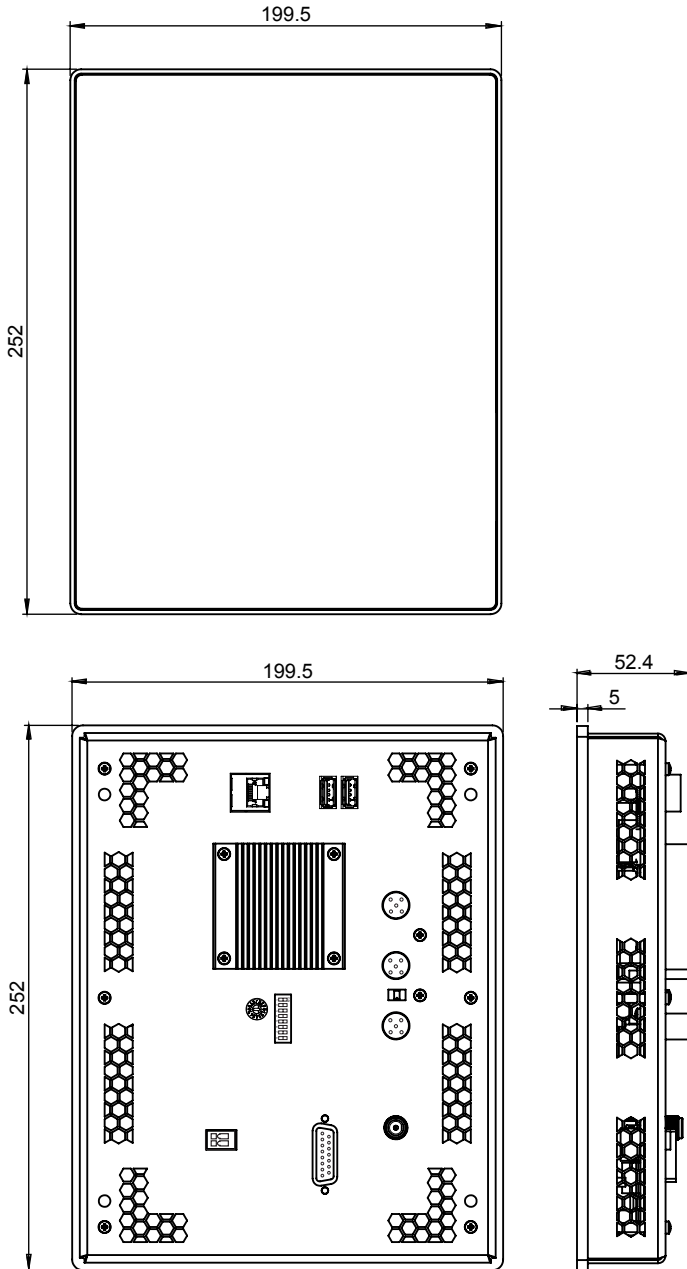
The Offshore Dynamics NMEA2000® Dual Engine Display has the following features:

- Sunlight readable dimmable display using our BlackGlass™ technology
- 768 x 1024 Resolution
- Remote button panel providing: Brightness up/down, Alarm Mute
- Monitoring of vessels engine status with alarms
- Internal 105dB Sounder
- Includes 1 x NMEA2000® and 2x J1939 interfaces
- Switchable internal line terminator resistors for J1939 interfaces
- User selectable Engine Manufacturer (MTU, MANN, Caterpillar & others) via rotary switch on rear of display
- User selectable metric or US imperial units
- Toughened glass screen
- IP rating for of IP65 for the front and IP20 for the rear of the display

# 2

# UNIT DIMENSIONS

Dual Engine Display



# 3

## INSTALLATION

### 3.1 UNPACKING THE BOX

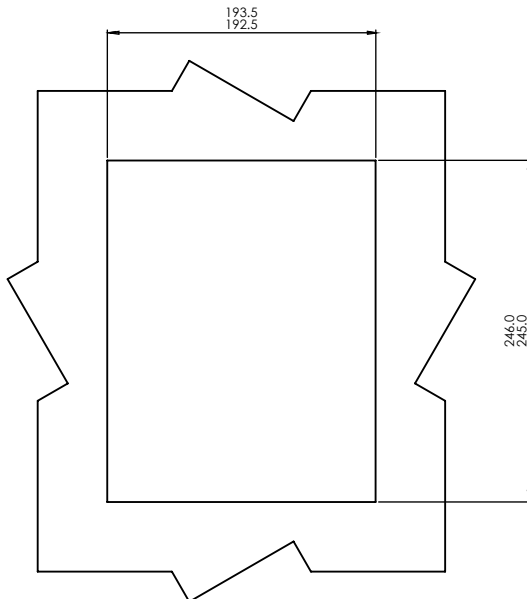
You will find the following items in the shipping box:

- 1 x Dual Engine Display
- 1 x Remote button panel
- 1 x DC Power cable
- 1 x Bag containing 4 thumbwheel nuts & 4 sprung washers for button panel
- 1 x Bag containing 4 screws & 4 mounting clamps
- 1 x User Manual (This Document)
- 1 x Mounting cut out template

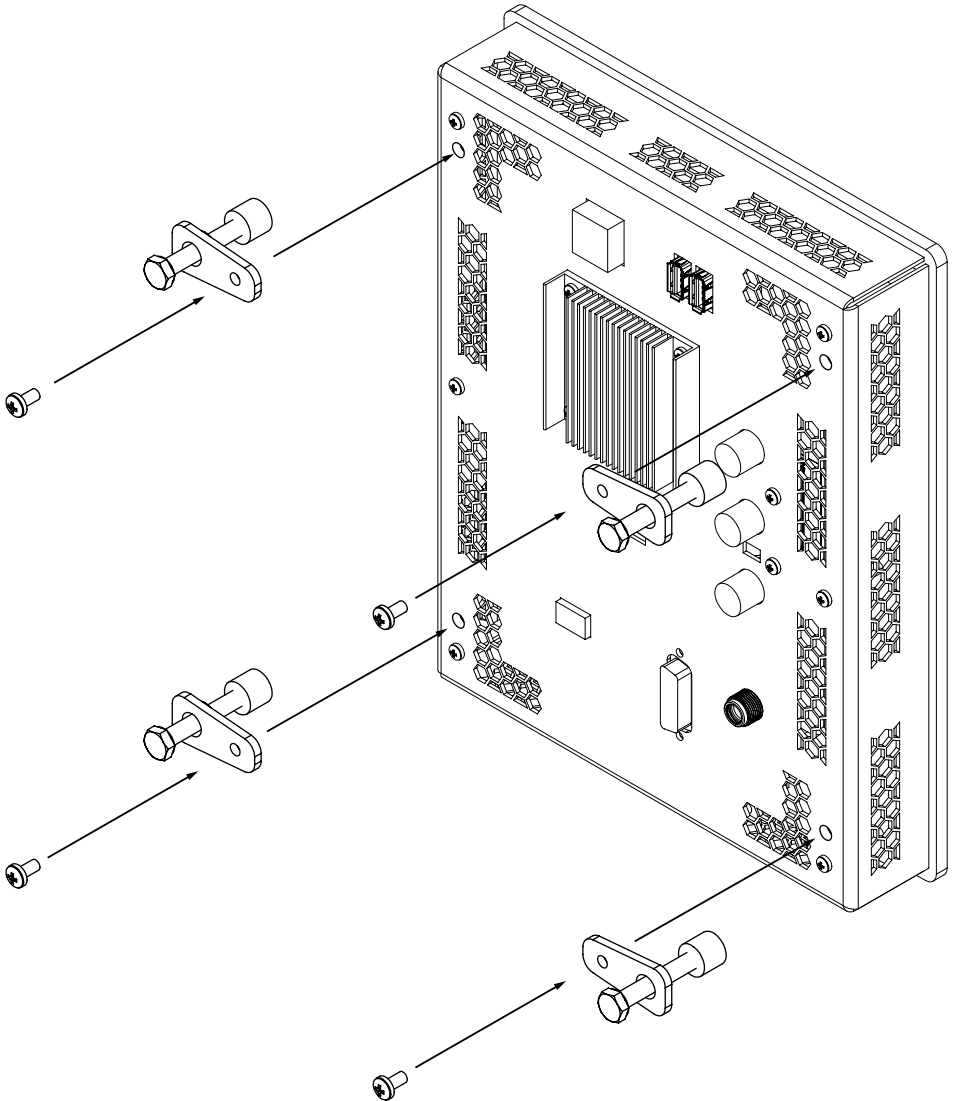
### 3.2 MOUNTING THE UNIT

1. The unit should be mounted through a panel to a flat surface min 8mm, max 25mm.
2. It can be mounted 45 degrees either way of vertical.
3. Ensure an adequate ventilation around the product to prevent heat build up or a minimum of 50mm.
4. Remember to allow enough clearance for access to cables and connectors. Cables should be restrained to prevent damage to connectors.

Drawing showing panel cut out.



5. The unit should be sealed to the mounting surface using a suitable silicone sealant. This Silicone sealant will be part of the seal used to provide the IP rating for the product.
6. Using the 4 mounting clamps to the rear of display secure the unit to the mounting surface by tightening the screws.



### 3.3 CONNECTING THE DUAL ENGINE DISPLAY

Before making any connections to the unit, ensure the NMEA2000® bus power and DC supply are turned off.

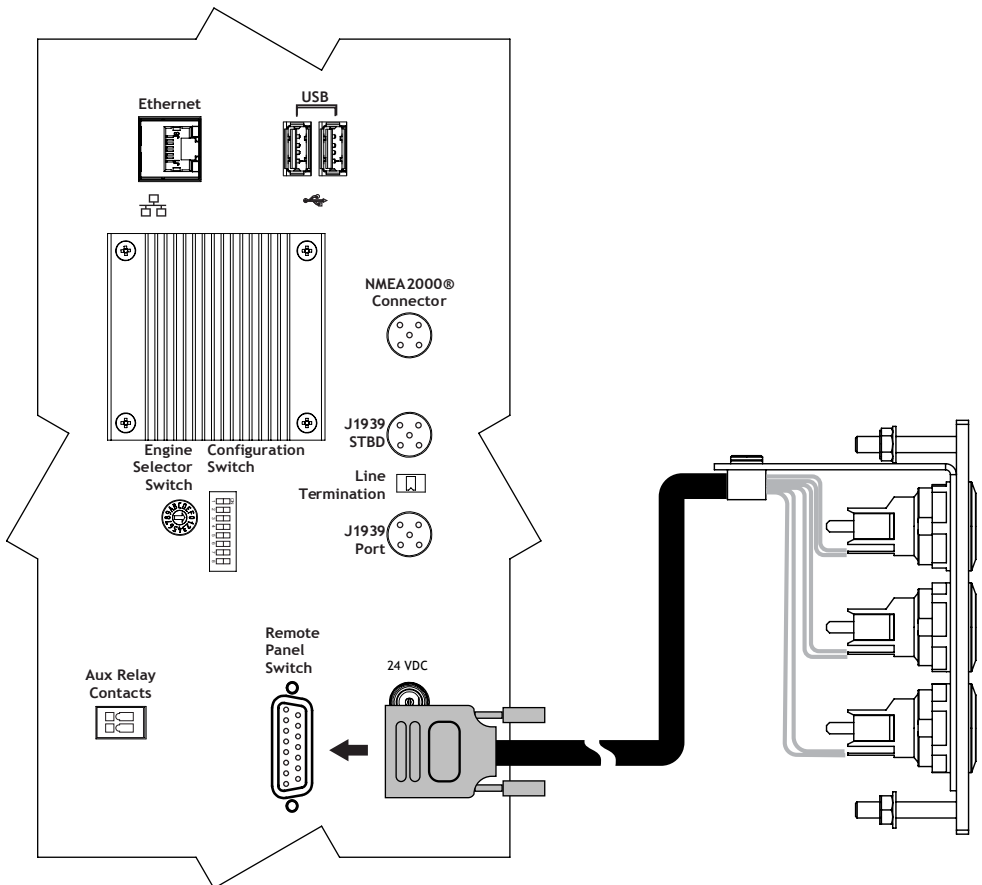
Connect NMEA2000® cable to 'Socket' on the back of the unit, observing correct orientation to ensure the keyway aligns. The cable can be extended up to 6mtrs and connect into the T-adaptor on the network backbone. Ensure that the screw ring is securely tightened so that the connection remains sound.

Connect the two J1939 cables in the same manner.

Ethernet connector is for internal Offshore programming use ONLY.

The DC Power cable can be inserted into the port marked. Ensure correct orientation and make sure the screw ring is securely tightened. There are two USB A and one USB OTG connectors, these are for program updates only.

Connect the Control Panel D Type Connector to the 15Way Remote Control Panel. Please see image below for reference.





### 3.4 SELECTING ENGINE MANUFACTURER & DEVICE SET UP

Situated on the rear of the unit is an 8 Way Configuration switch & Rotary Switch. Their functions are as follows:

#### Configuration switch

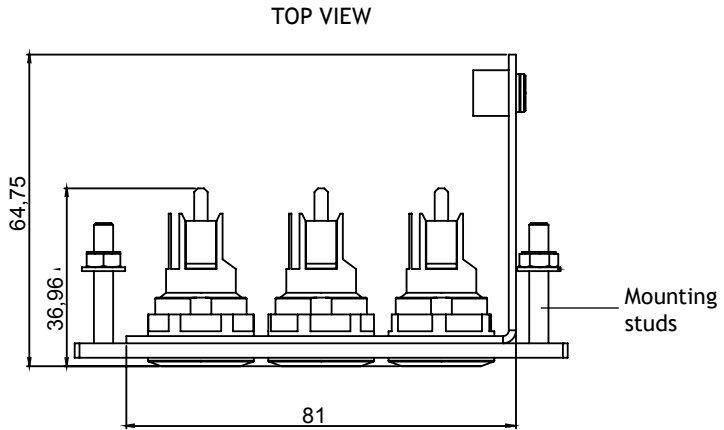
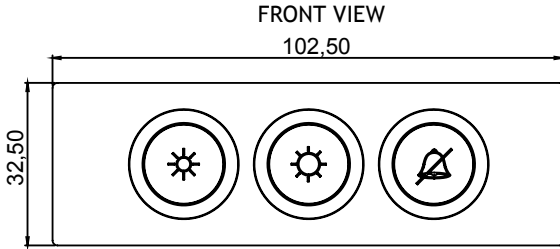
Switch No.	Switch OFF	Switch ON
1	Imperial units	Metric Units
2	One fuel display bar	Two fuel display bars
3	Two engine displays	Three engine displays
4	As per switch 3	Four engines displays
5	No J1939 Data Conversion	Retransmit J1939 data over NMEA200® port
6	-	-
7	-	-
8	-	-

#### Rotary switch

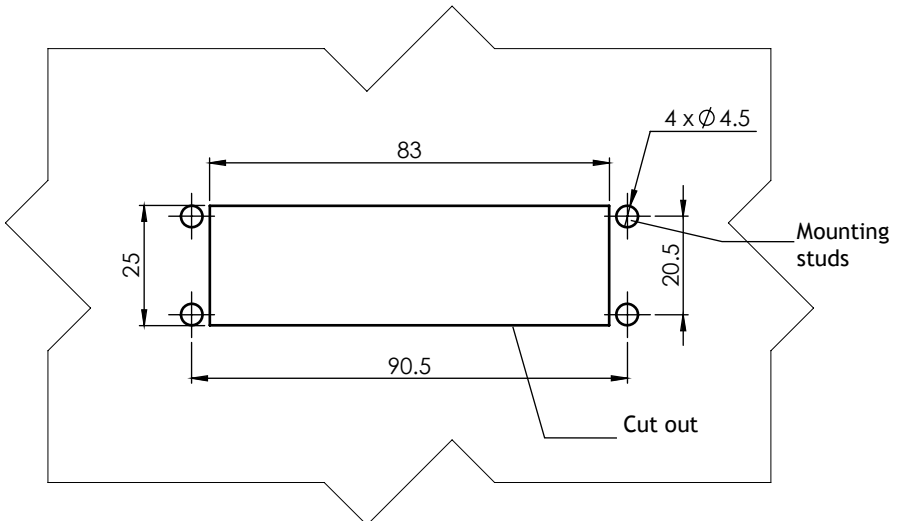
Switch No.	Engine manufacturer	Engine data source
0	Caterpillar	J1939
1	Cummins	NMEA2000®
2	MAN	J1939
3	MTU	J1939
4	Volvo	NMEA2000® from their gateway
5	Yanmar	NMEA2000®
6	-	-
7	-	-
8	-	-
9	-	-
A	Evinrude	NMEA2000®
B	Honda	NMEA2000®
C	Mercury	NMEA2000® from their Smartcraft adaptor
D	-	-
E	-	-
F	-	-

### 3.5 MOUNTING THE CONTROL PANEL

Please see line drawing showing outline, mounting studs and mounting area for the Control Panel. Mounting cut out template should be used as a reference for installation.



PANEL MOUNT CUTOUT



## 4

## USER CONTROLS

The Remote panel is provided with a 1m cable tail for situation away from the Display.

## 4.1 BUTTON FUNCTIONS






DIM



BRIGHT



ALARM MUTE

Button	Function
	<b>DIM</b> Each press will decrement the brightness level, holding the button will continue to decrement until the minimum level is reached.
	<b>BRIGHT</b> Each button will increment the brightness level, holding the Button will continue to increment until the minimum level is reached.
	<b>ALARM MUTE</b> This will mute all current active alarm conditions

- The display will power on automatically when the DC is connected to it.
- After approx 1 minute the computer will boot up into the home screen.
- Set your desired brightness as per in this table.

If you require technical support for any Offshore Dynamics products you can reach us using any of the following ways:

- Tel: +44(0)1425 610022
- Fax: +44(0)1425 614794
- Email: [support@osukl.com](mailto:support@osukl.com)
- Web: [www.osukl.com](http://www.osukl.com)
- Post: Offshore Dynamics Ltd  
Unit 10-11 Milton Business Centre  
Wick Drive, New Milton, Hampshire BH25 6RH, UK.

Offshore Dynamics Ltd  
Unit 10 -11 Milton Business Centre, Wick Drive,  
New Milton, Hampshire, BH25 6RH, United Kingdom

Tel: +44(0)1425 610022      Fax: +44(0)1425 614794  
Email: [sales@osukl.com](mailto:sales@osukl.com)      Web: [www.osukl.com](http://www.osukl.com)

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### **WARRANTY RETURN PROCEDURE**

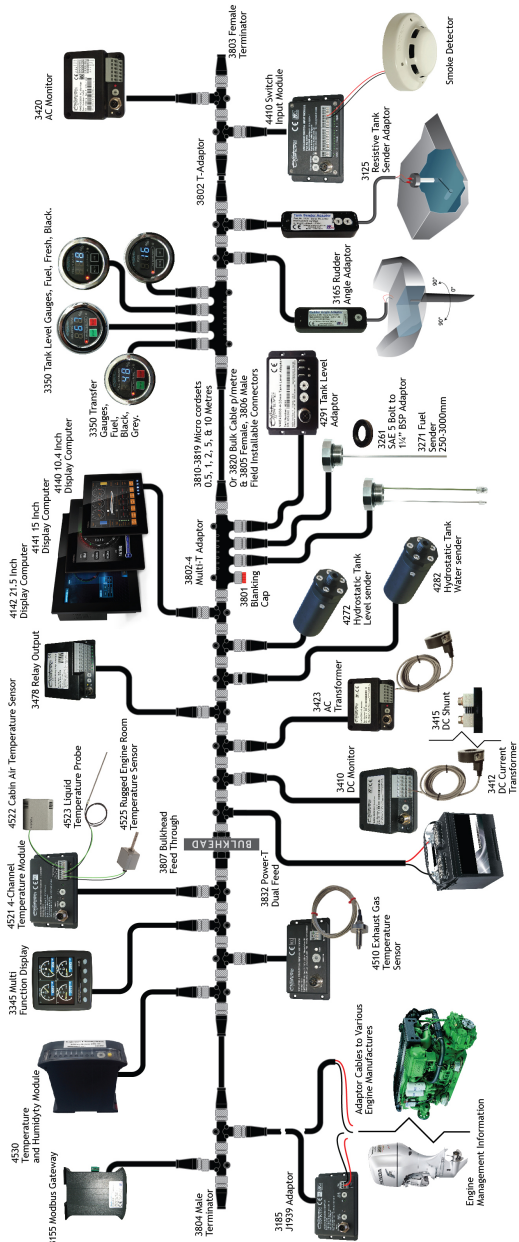
To apply for warranty claims, contact Offshore Dynamics or one of its dealers to describe the problem and determine the appropriate course of action. If a return is necessary, place the product in its original packaging together with proof of purchase and send to an Authorized Offshore Dynamics Service Location. You are responsible for all shipping and insurance charges. Offshore Dynamics will return the replaced or repaired product with all shipping and handling prepaid except for requests requiring expedited shipping (i.e. overnight shipments). Failure to follow this warranty return procedure could result in the product's warranty becoming null and void.

Offshore Dynamics reserves the right to modify or replace, at its sole discretion, without prior notification, the warranty listed above.

# OFFSHORE DYNAMICS PRODUCT MAP

## NMEA2000® VESSEL MONITORING AND CONTROL SYSTEMS

### Parts Map



Up to 16 of each type of device can be installed on a single network