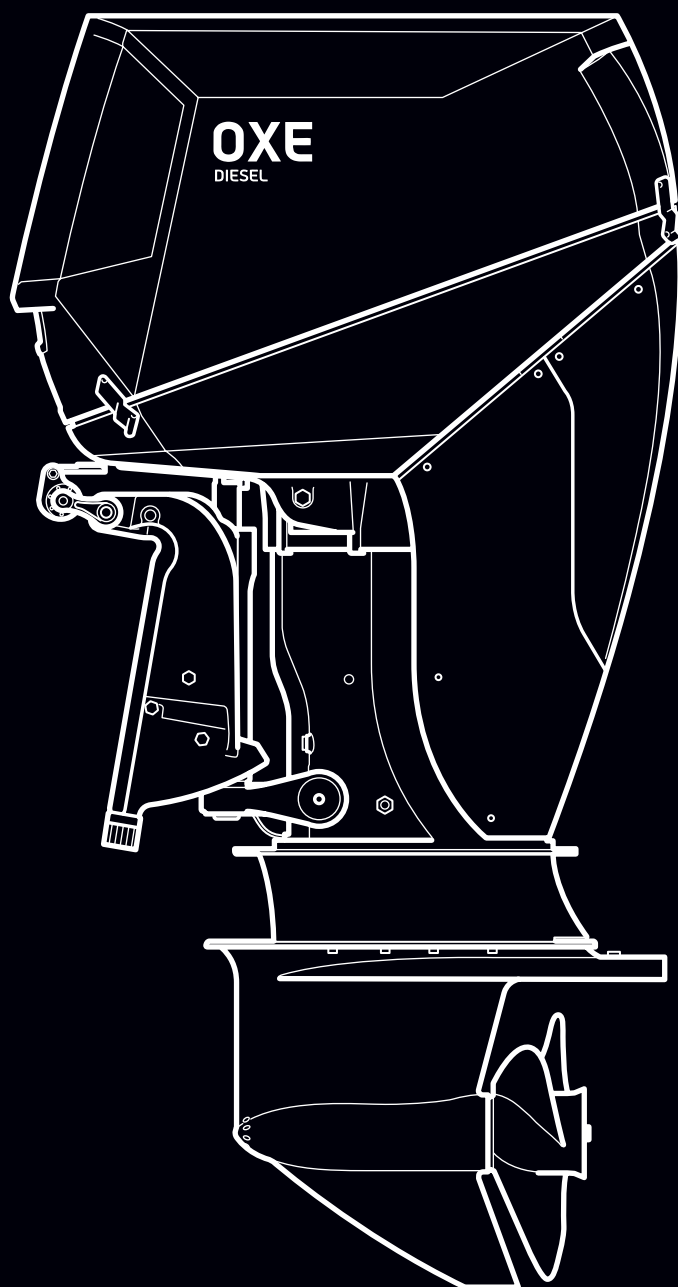


DIESEL ENGINE

# 3.5"-DISPLAY MANUAL



Publication No: ODM 1012



# CONTENTS

<b>About this manual</b>	<b>5</b>
<b>Installation procedure</b>	<b>6</b>
3.5" monitor measurements	6
Mounting 3.5" display	7
Connecting the 3.5" Display	8
<b>Display description</b>	<b>9</b>
Screen settings	9
Buttons	9
<b>Function description</b>	<b>10</b>
Config menu	10
Screen 1	13
Screen 2	14
Screen 3	15
Screen 4	16
<b>Updating the 3.5" display</b>	<b>17</b>
Trouble shooting	18



## **ABOUT THIS MANUAL**

This manual provides you with the information you need to install the display, know about Display key function, readings and fault codes.

Specifications and descriptions are subject to change without notice.

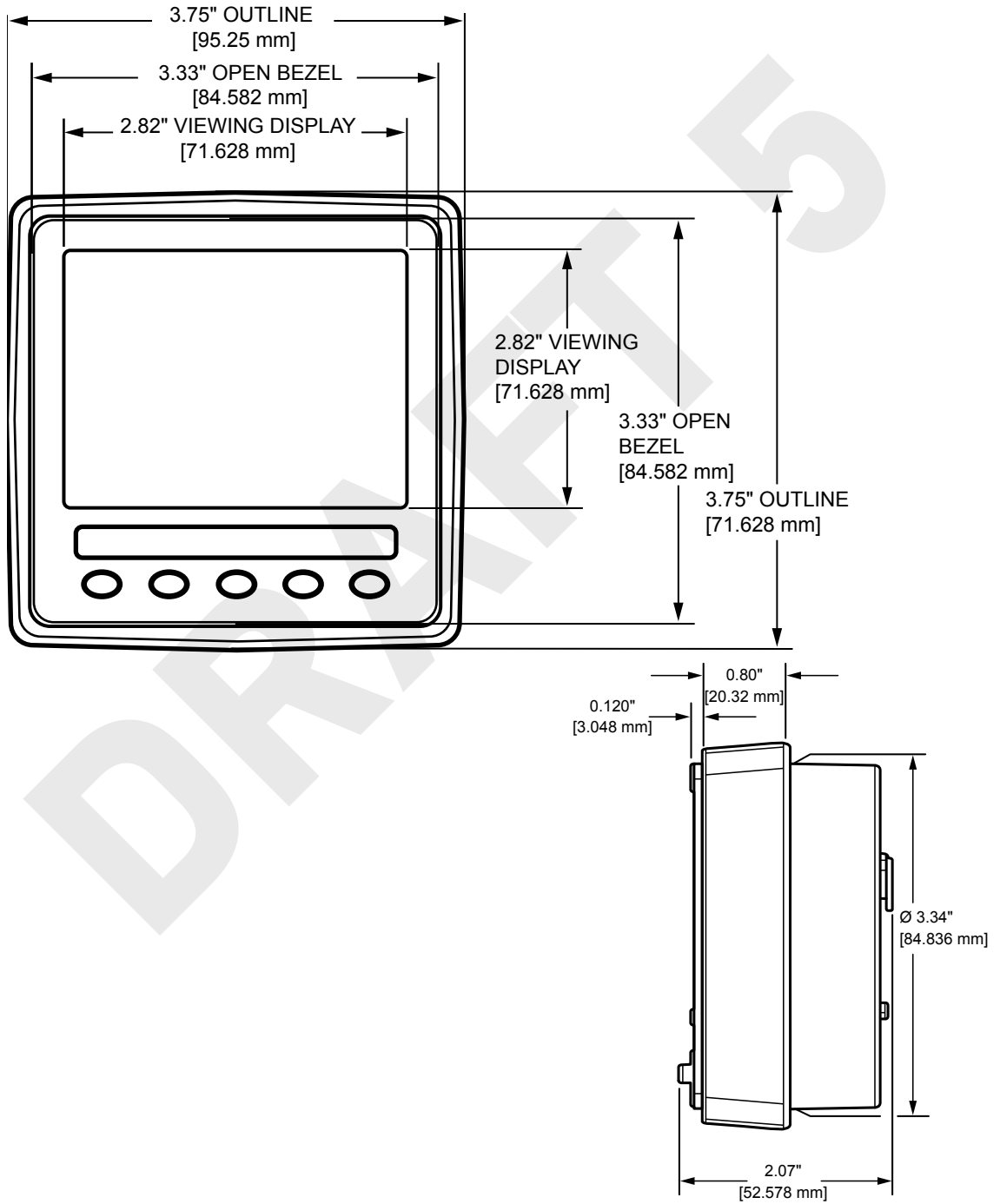
Cimco Marine AB  
Metallgatan 19a  
SE-262 72 Engelholm, Sweden  
+46 (0)431-371130  
info@oxe-diesel.com

6

# INSTALLATION PROCEDURE

## 3.5" MONITOR MEASUREMENTS

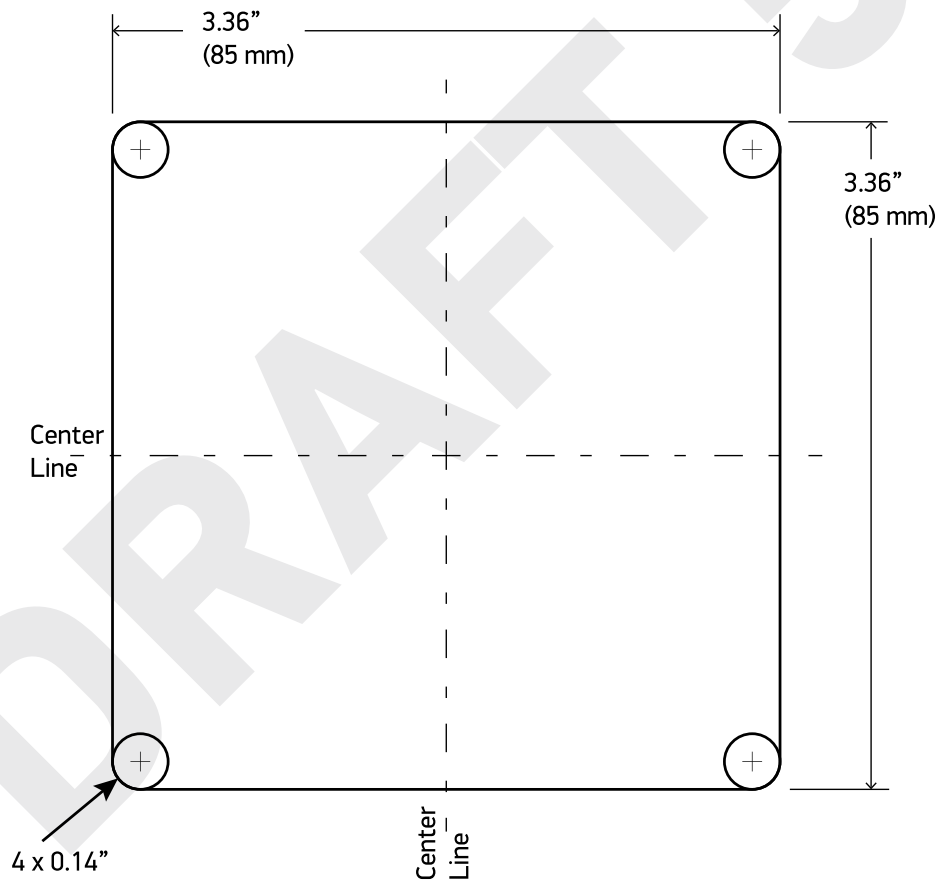
**NOTE!** If you intend to photocopy the following mounting template for use, check ALL measurements using a measuring device prior to using as a template.



## MOUNTING 3.5" DISPLAY

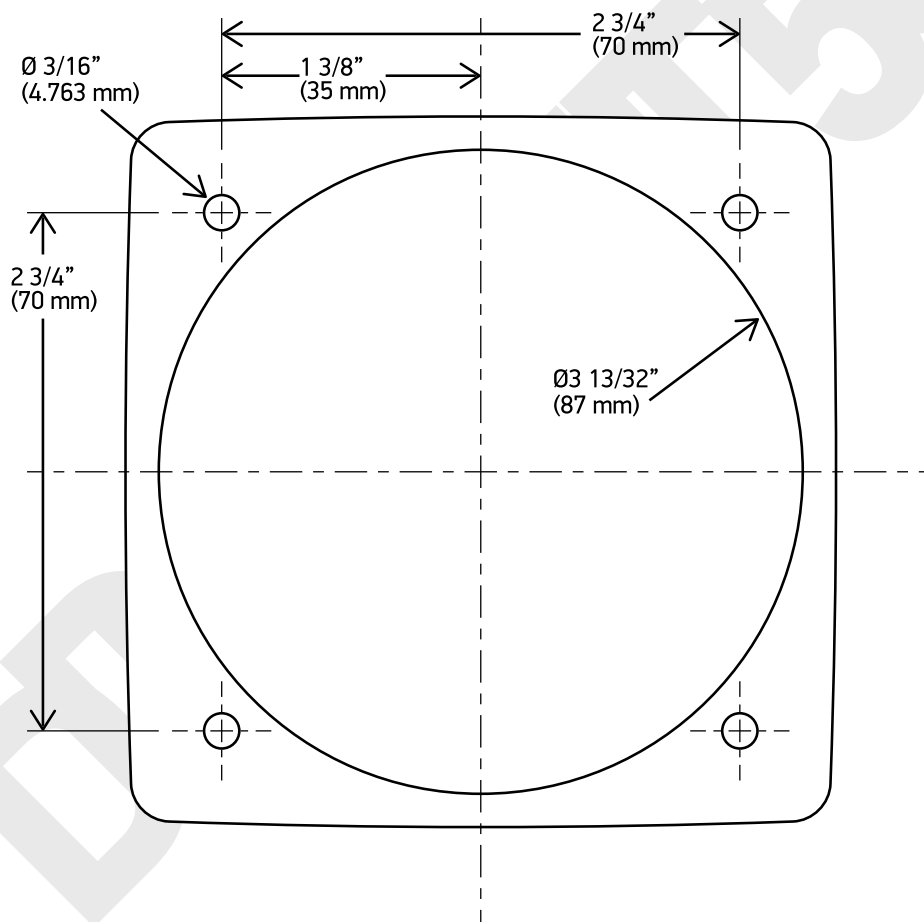
### Measures for flush-mounted display

**NOTE!** If you intend to photocopy the following mounting template for use, check ALL measurements using a measuring device prior to using as a template.



### Measures for dash board cut-out

**NOTE!** If you intend to photocopy the following mounting template for use, check ALL measurements using a measuring device prior to using as a template.



### CONNECTING THE 3.5" DISPLAY

Connecting diagrams are available in the **Installation Manual**.



# DISPLAY DESCRIPTION

9

## SCREEN SETTINGS



## BUTTONS

The 3.5" Monitor is easily operated by means of only three buttons.



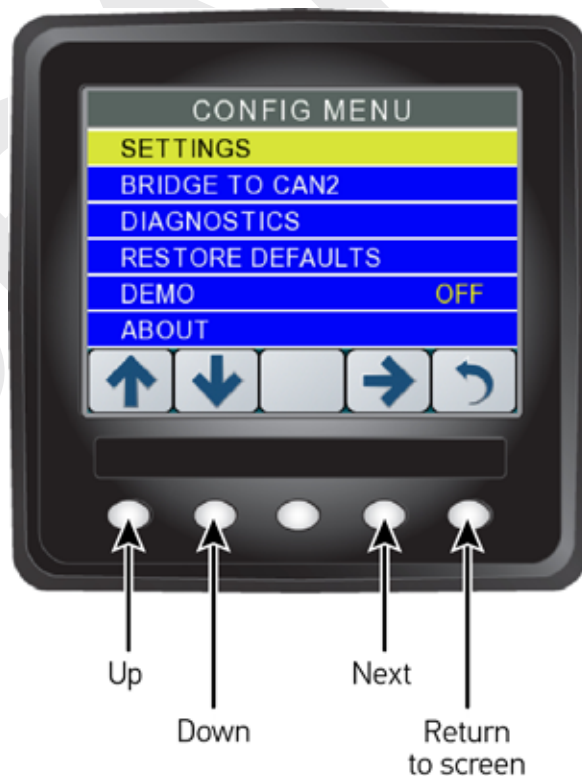
## FUNCTION DESCRIPTION

### CONFIG MENU

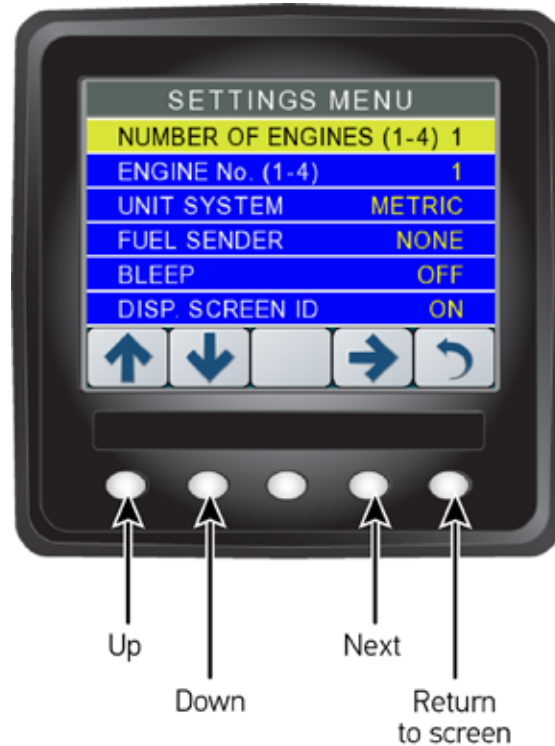
The config menu page is accessed by pressing and holding the fifth button from the left for a few seconds.

The following options are available in the config menu:

- Demo ON/OFF
- Settings
  - Number of engines installed
  - Engine No.
  - Unit system
  - Fuel sender
  - Bleep ON/OFF
- Diagnostic tools
- Restore defaults
- About



## SETTINGS



### Number of engines

This setting represents how many engines are connected to the CAN bus. This is the TOTAL number of engines. When using 3.5" displays, each engine requires a separate display. This setting must be correct and match what is configured in the Engine Control Unit (ECU). Entering the wrong setting may result in errors and false data being displayed. For single engine installations this should always be set to 1.

### Engine No.

This setting represents what engine this display should connect to. For single engine installations this should always be set to 1.

### Unit system

Metric or Imperial.

Metric will display data in kPa and °C

Imperial will display data in psi and °F

### Fuel sender

The display can handle three types of fuel senders.

- European standard analogue sender (0-190 Ω)
- US standard analogue sender (240-30 Ω)
- NMEA2000 digital signal over CAN bus

The analogue senders should be connected with one pin to ground and one to pin 7 on the secondary connector at the back of the display.

### Bleep

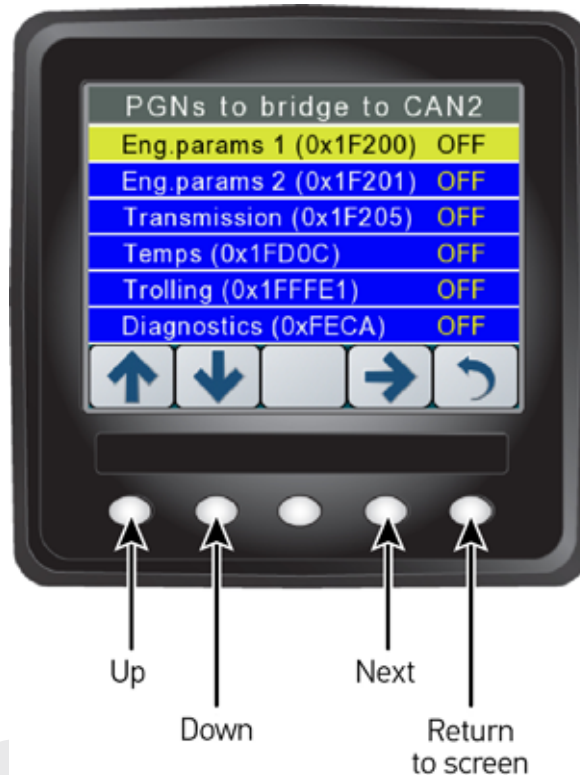
Turn button sound on/off.

### Display screen ID

Enable/disable display of identifying number when switching to screen 1, 2 or 3.

## BRIDGE TO CAN 2

Bridge to CAN2 is used to forward engine data to another CAN network.



- Forwards selected groups of engine data to another CAN network.
- Requires display cable with an additional CAN connector.

There are a number of data groups that can be forwarded. All but the "Trolling" group are standard NMEA 2000 or J1939 messages.

### Diagnostic tools

Provides tools for diagnosing the ports.

### Restore defaults

Loads default settings

- Metric system
- No fuel sender
- 1 engine
- Engine 1 of 1
- LCD backlight to max
- Demo OFF
- Bleep ON
- Disp. screen ID ON

### Demo

Enabling demo will auto generate display data. All data is internal in the display and nothing is sent on the CAN bus.

### About

Software version number and other display data.

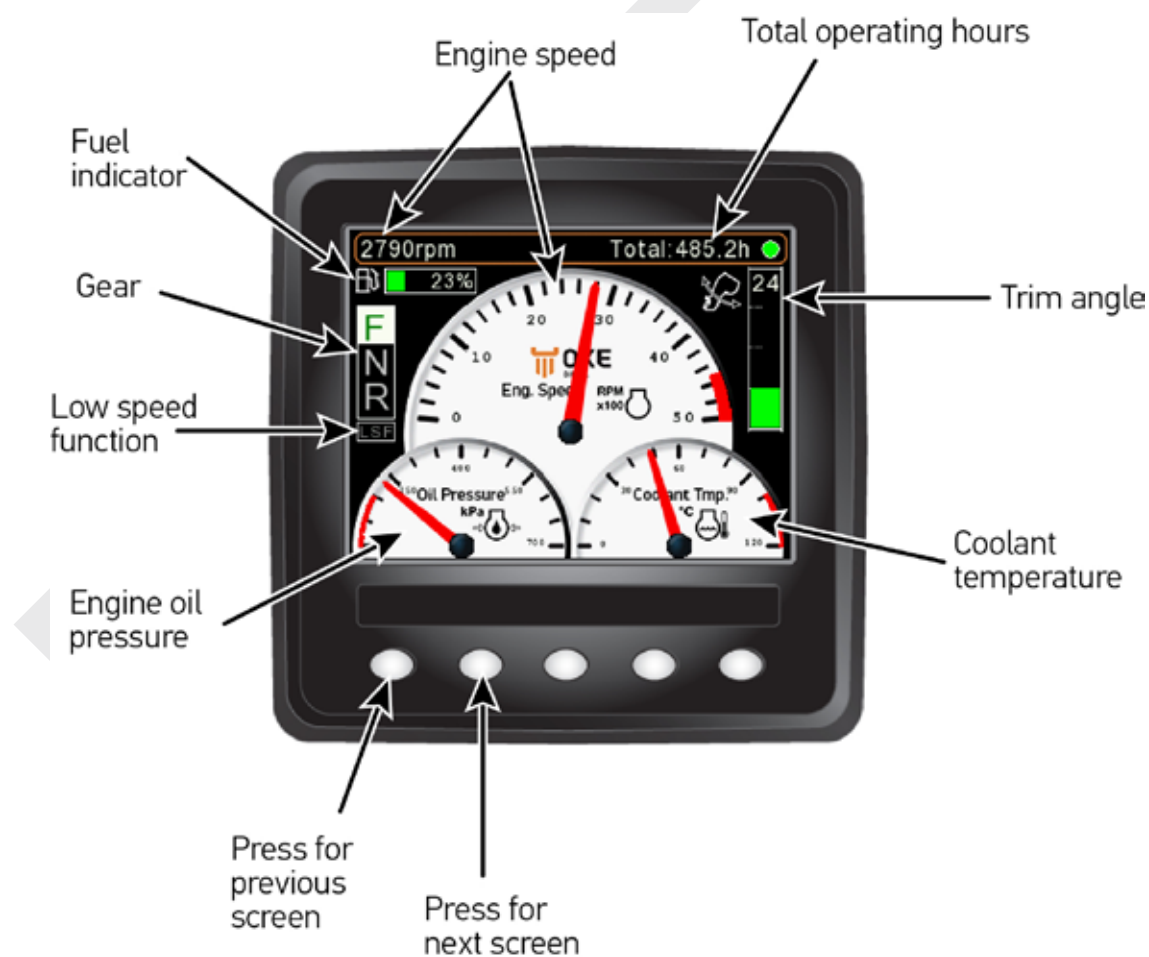
## SCREEN 1

Screen 1 displays information information about

- Engine speed
- Engine oil pressure
- Engine coolant temperature

Additionally the screen displays

- Total engine hours
- Trim angle
- Gear



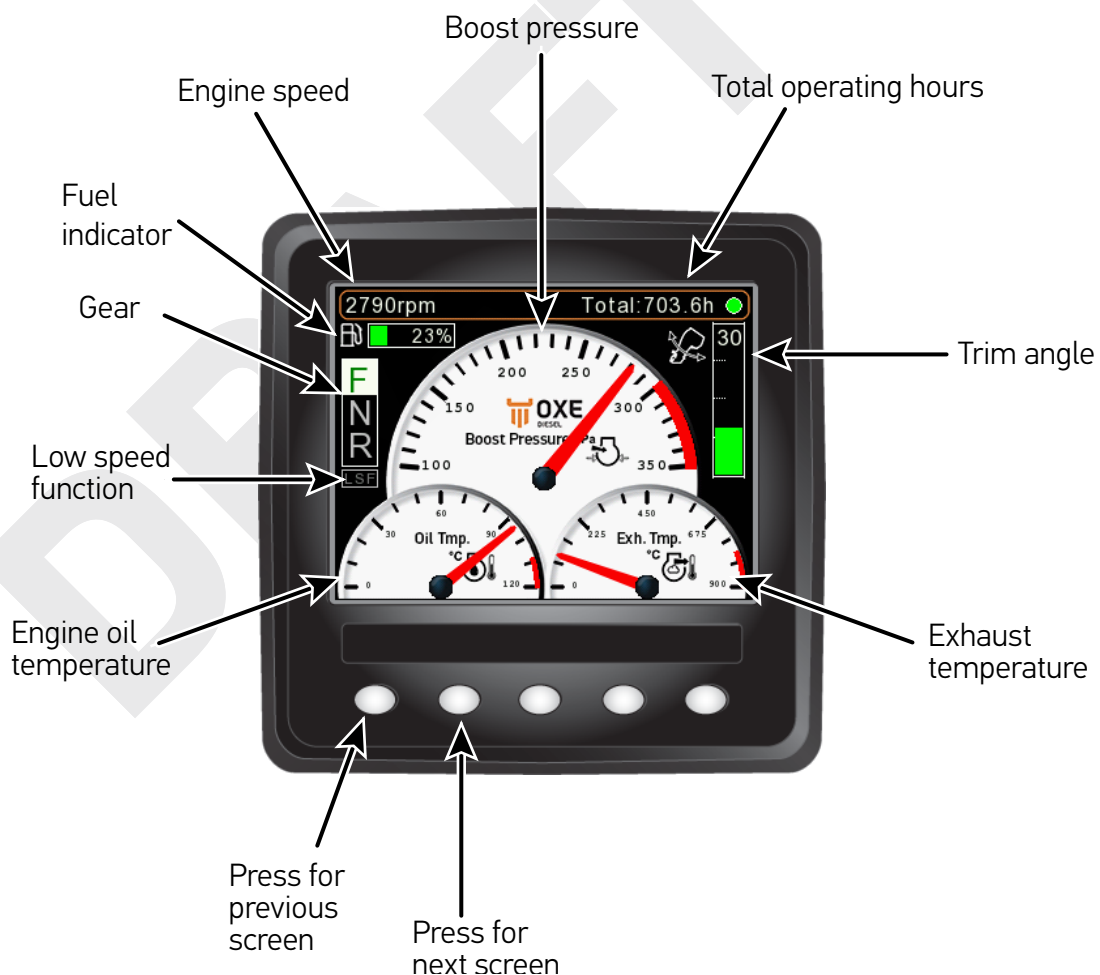
## SCREEN 2

The following is displayed on screen 2

- Boost pressure meter
- Oil temperature meter
- Exhaust temperature meter

Additionally the screen displays

- Engine speed
- Total engine operating hours
- Trim/Tilt
- Gear



**SCREEN 3**

15

Screen 3 provides the overall information from Screen 1 and Screen 2 in words.

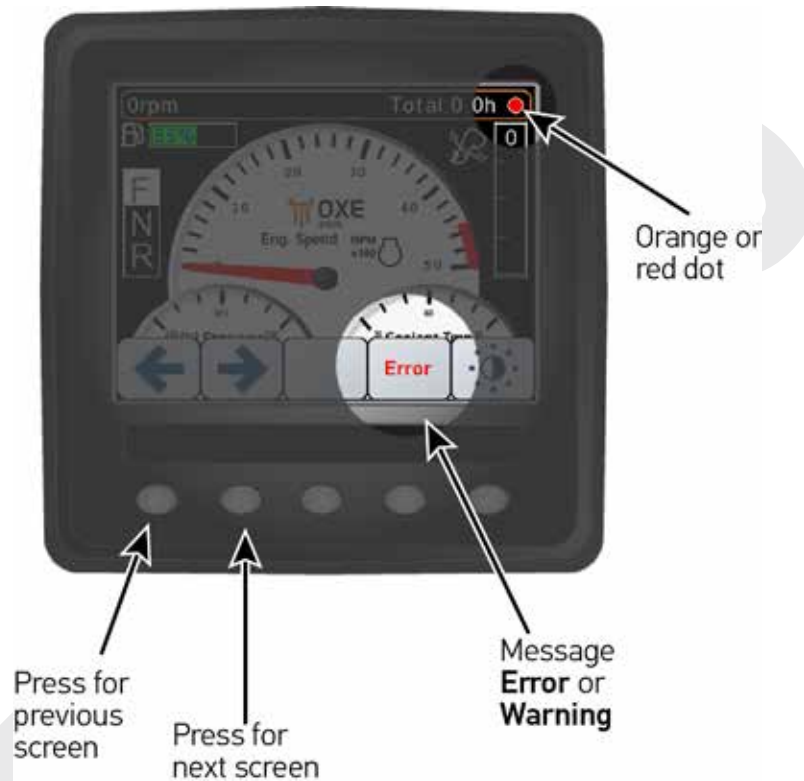


## SCREEN 4

Screen 4 displays error codes.

When an error is detected the little green dot in the upper right corner switches its colour to orange or red, depending on severity.

An orange dot indicates a warning. A red dot indicates a more serious error. In addition to the dot changing colour, button four is lit with the word **Warning** (in orange) or **Error** (in red) displayed.



Pressing the Error-button switches the display to a list with fault codes. The fault codes are explained in the **Service Manual**.





# UPDATING THE 3.5" DISPLAY

**NOTE!** We recommend that an update of the software is performed by an authorized technician. Please contact your dealer.

## USB PORT

The 3.5" display is updated using a USB memory stick which is inserted in the USB port found at the back of the display.

If you have been provided with a pre loaded USB stick you can skip the section preparing the USB Memory stick and go directly to the next section.

### Preparing the USB stick

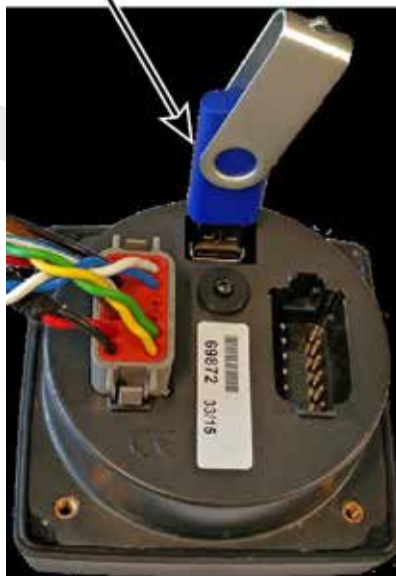
- Use a standard USB memory stick formatted as **FAT32** file system.
- Insert the memory stick into your PC.
- Unzip the **usbupdate\_PROJECTNAME.zip**.

**NOTE!** Please note that you should only copy the files inside the **usbupdate\_PROJECTNAME.zip** file to the root of the USB memory stick and not the zip file itself.

- Copy the unzipped contents of the **usbupdate\_PROJECTNAME.zip** to the previously blank memory stick

### Applying the update

USB memory stick



- Power up the 3.5" display and wait for the installed application to run, then plug the USB stick into the rear USB connector.
- The USB Stick will be automatically detected and the update process will begin.
- Wait for the on-screen prompts before removing the USB Stick, once removed, the unit will reboot.
- The unit will now be updated with the latest firmware and your latest applications.

## TROUBLE SHOOTING

If a 3.5" display will not boot, ensure that the power is OFF.

Insert the USB Stick into the USB Port. Turn on the power while simultaneously holding down **Key 1** and **Key 5**. The screen will turn BLUE and after a few seconds the update process will begin. There will be on-screen information during the update process. Please remove the USB Stick when prompted and the target unit will automatically reboot into the new software.

**NOTE!** If the screen turns RED at any point during the update process, after the BLUE screen has been shown, there were problems reading the information on the USB Memory Stick. This indicates that the software update has not been applied.

**NOTE!** Some USB Memory Sticks are not compatible with the target unit. If the update does not install properly, please try a USB Memory Stick from a different manufacturer.

After testing all available USB Memory Stick models from SanDisk we found them all working without issues.



