veratron®

eco friendly

OceanLink® facelift gauges

Marine specialists since 1958

VDO

OceanLink facelift portfolio overview

OceanLink® Facelift

- New Tachometer and GPS Speedometers with different dial scales.

- DOT-matrix LCD, 128x32 pixels
- Black dial with black bezel, white dial with white bezel, chrome bezel optional
- Customer logo printed on dial (white or black)
- Front mount
- Molex MX150 connector and NMEA2K interface (Micro C M12)
- 10-30V nominal operating voltage
- Environmental class protection: IP X7 exposed front and IPX5 extended rear
- 1x front pushbutton

- GPS Speedometer with embedded 10Hz GPS sensor to internally calculate SOG, COG, Time and Date.
- Engine hours internal calculation.

Connector

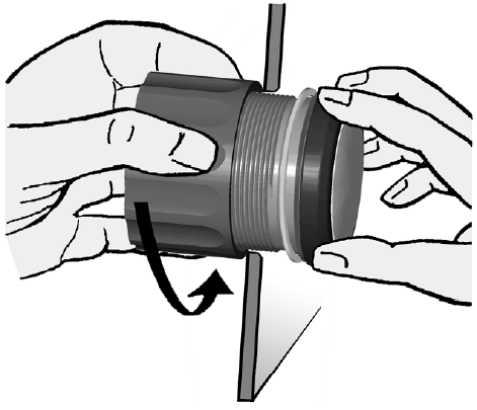
- NMEA 2000® M12 5-poles.
- Molex MX 150 connector for I/Os.

Molex MX 150

Pin	Signal
1	Term.30 (Battery)
2	Term.31 (GND)
3	Buzzer 500 mA (output)
4	Tachometer input “ pulse per revolution
5	CAN L /SAE JS 1939
6	CAN H /SAE JS 1939
7	Term.15 (Ignition)
8	Analogue (0 to 400 ohm)
9	Analogue (0 to 400 ohm)
10	Illumination
11	Easylink Bus power
12	Easylink Bus Data

Installation concept

- Spinlock



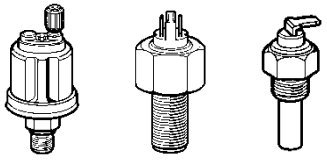
OceanLink - USP

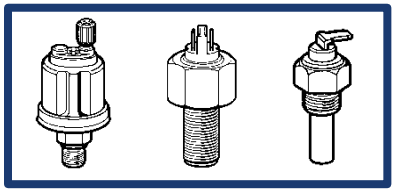
- Marine CAN Bus gauges (double lens, Flush Installation, OL Bezel)
- Master – Satellite Concept
- Satellites compatible with Volvo Penta and MAN gauges
- Plug & Play System (additional Satellites can be connected without the need to reprogram the Master)
- System modularity, flexibility and integration
- Connection of analog sensors to the master
- Master configuration without PC
- Cost effective solution
- Applications which fulfills the request of the market
- Easy expandable
- Easy integration in panels for customized solutions
- High reliability
- Fast Installation
- Reduced harness

OceanLink – Master/Satellites concept

Engine

Engine



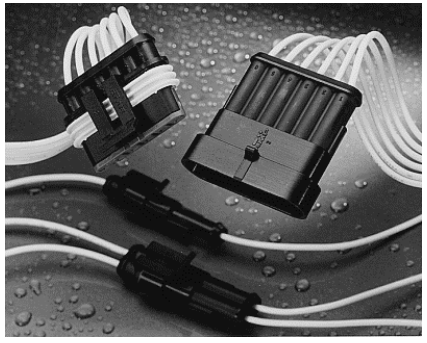


Analogue instrumentation:
Each sensor is directly wired to the dedicated gauge

OceanLink instrumentation:
The sensors are ALL connected to the Master gauge only

The Master distributes the data to the satellites over EasyLink bus

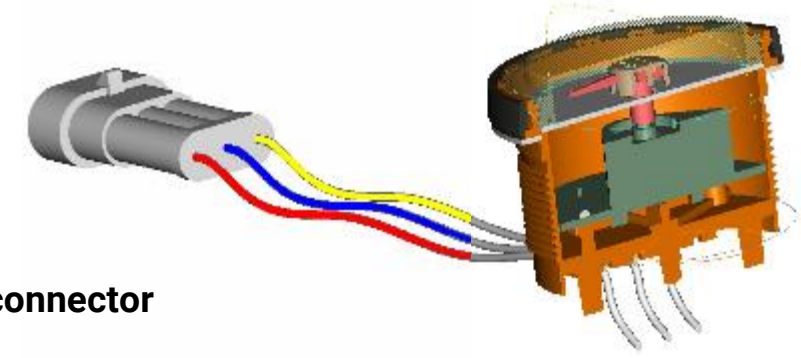
EasyLink satellites interface



Red +VDC

Blue Ground

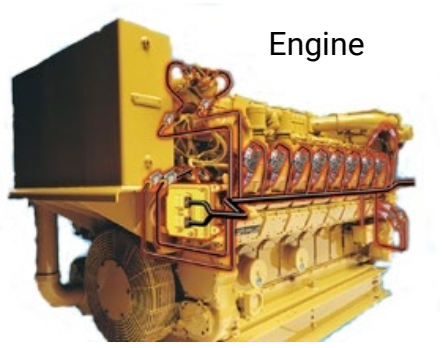
Yellow Data



AMP Serie 1.5 Super Seal connector

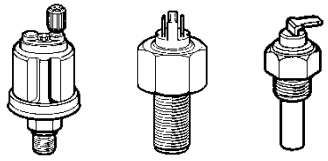
Max no. of satellites per line:	16
Max length for the line:	20 meters
Operating current per satellite:	70 mA

OceanLink - Digital instruments

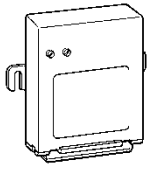


Engine

Engine sensors
(temp, press, etc..)



Electronic
Control Unit



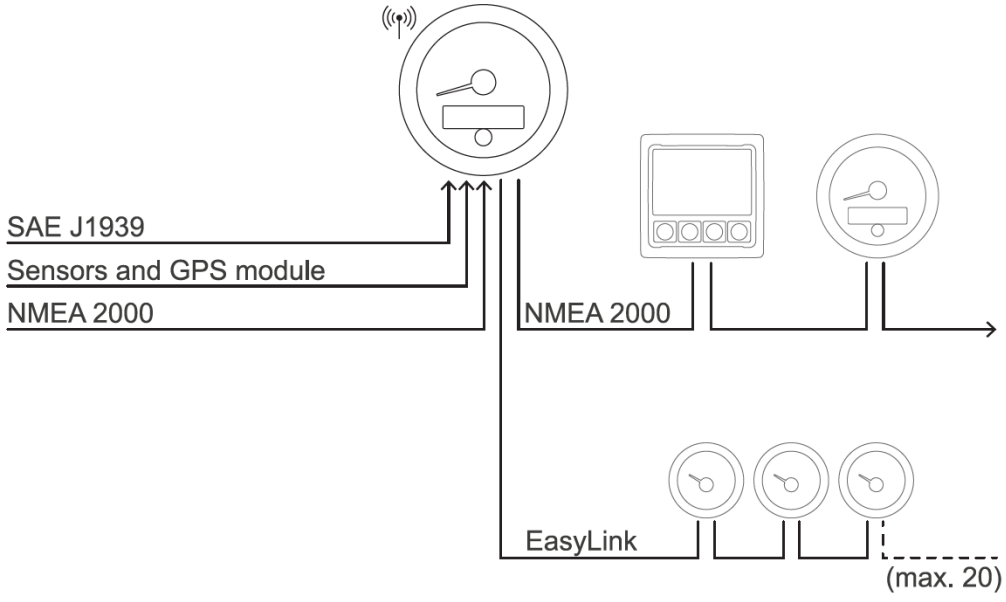
CAN communication (J1939)

- 2 wires only
- digital communication
- no fuzzy harnessing

NMEA 2000 gateway

- Embedded gateway available as per OceanLink® family.

- SAE J1939
- 2x configurable resistive inputs
- EasyLink connectivity
- Configuration via embedded menu
- Alarm output



OceanLink
Display Indication

Parameter Group Numbers

Bezeichnung	PGN
ELECTRONIC ENGINE CONTROLLER #2	61443
ELECTRONIC ENGINE CONTROLLER #1	61444
ENGINE HOURS, REVOLUTIONS	65253
ENGINE TEMPERATURE	65262
ENGINE FLUID LEVEL / PRESSURE	65263
CRUISE CONTROL / VEHICLE SPEED	65265
FUEL ECONOMY	65266
INLET/EXHAUST CONDITIONS	65270
VEHICLE ELECTRICAL POWER	65271
TRANSMISSION FLUIDS	65272
DASH DISPLAY	65276
TURBOCHARGER INFORMATION #4	65176

Parameters taken out from PGN

Messwert	PGN
% Load	61443
Exhaust gas temperature 1 (before turbine)	65176
Exhaust gas temperature 2 (before turbine)	65176
Exhaust gas temperature	65270
Intake air temperature	65270
Engine hours	65253
Engine speed	61444
Vehicle speed	65265
Fuel consumption (L/h)	65266
Fuel quantity	65276
Cooling water temperature	65262
Charge air pressure	65270
Transmission oil pressure	65272
Engine oil pressure	65263
Transmission oil temperature	65272
Engine oil temperature	65262
Battery voltage	65271

Parameter Group Numbers

PGN	Message name
59392	Acknowledgment ISO
60928	Address Claim ISO
65240	Commanded Address ISO
126208	Command Group Function
126464	TX/RX PGN List Group Function
126993	Heartbeat PGN
126996	Product Information
126998	Configuration Information
127250	Vessel Heading
127251	Rate of Turn
127257	Attitude
129025	Position, Rapid Update
129026	COG & SOG, Rapid Update
129029	GNSS Position Data
129033	Local Time Offset
130311	Environmental Parameters
130314	Actual Pressure
130316	Temperature, Extended Range
127258	Temperature (Old Version)

Settings Menu

When the gauge is ON, the button is used to select between the 8 levels for the Backlight and Contrast of the LCD.

To enter in the settings menu the user must first turn OFF
the power, then keep the button pressed while power is turned ON again until “SETTINGS” is displayed on the LCD.

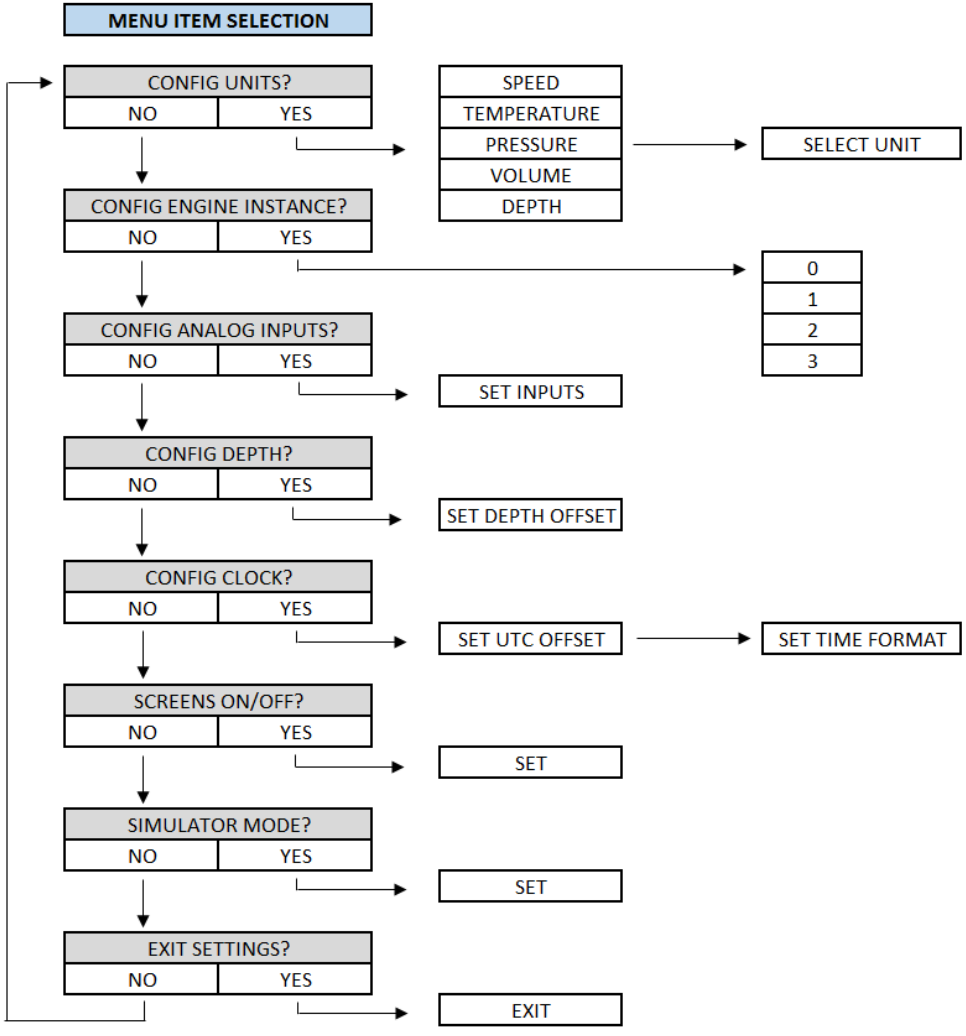
The button has 2 simple functions to navigate the settings:

- Short press to change the menu item.
- Long press to confirm and navigate into the menu setting. The selected menu item flashes as a visual confirmation.

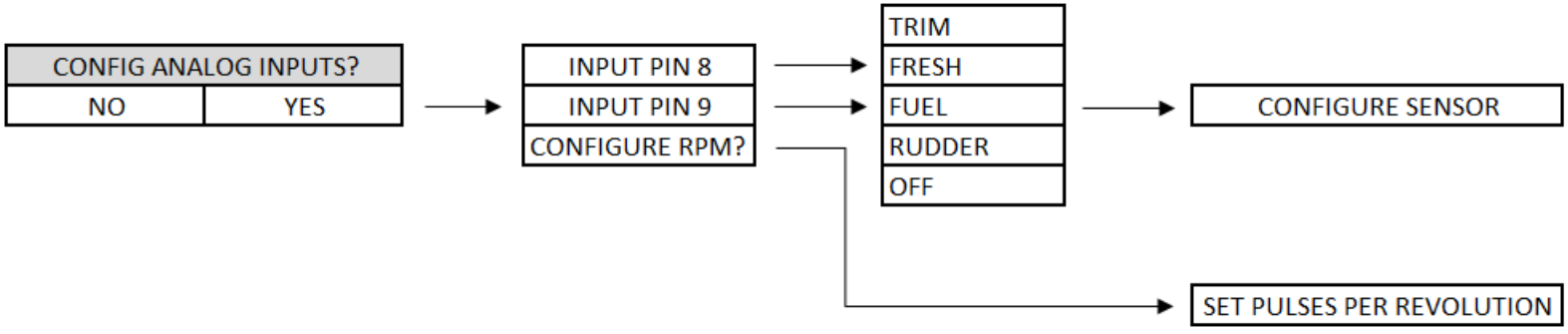
Once all the items are scrolled, the unit will ask if to exit from the settings menu or not.

If Exit is selected, the device will store all the changes and it reboots.

Settings Menu



Settings Menu – Analogue input setup



When a sensor configuration is selected, the gauge will ask whether to use a default calibration or a customized one.

In the first case, it is possible to select between a selection of predefined sensor curves.

Otherwise, it is possible to perform a custom calibration in 3 or 5 steps, to perfectly suit the real application.

At the end of the process, the gauge asks if to store the calibration or discard it.

OceanLink Navigation

OceanLink Navigation - overview

- Analogue indicator readable in extreme weather condition.
- Infrared electronic switch
- NMEA2000 compatible, AcquaLink compatible.
- Spinlock installation method or flush mount.
- Anti fog dual lens.
- White and chrome bezel available as optional
- Protection grade IP X7 exposed front and IPX5 extended back
- Warning telltale for missing data.
- Dial scale through it illumination cold white
- Pointer red Illumination

Wind Angle and Wind Speed

- Apparent wind or true wind selectable via IR switch.
- Telltale indication for selected function:
  - AWA (Apparent wind angle)
  - TWA (True wind angle)
  - AWS (Apparent Wind Speed)
  - TWS (True Wind Speed)

- Scale 360°movement for wind angle
- Damping and Offsets adjustable via Diagnostic Tool.
- Backlight always on, or dimmable in case OceanLink® 4.3” TFT is present in the network.
- Gauges are able to calculate internally TWA and TWS if the valid boat speed values are present, vice versa in case SOG or boat speed are not available only AWA & AWS are possible.

- NMEA 2000 PGN130306, 128259, 129026.

Compass

- Magnetic or true heading selectable via IR switch.
- Telltale indication for selected function:
  - M° (Magnetic heading)
  - T° (True heading)

- Scale 360°movement
- Damping and Offsets adjustable via Diagnostic Tool.
- Backlight always on, or dimmable in case OceanLink® 4.3” TFT is present in the network.

- NMEA 2000 PGN127250

Depth

- Depth Below Transducer and Depth Below Keel selectable via IR switch.
- Telltale indication for selected function:
  - DBT (Depth Below Transducer)
  - DBK (Depth Below Keel)

- Scale 270°movement
- Shallow water alarm and keel offset adjustable via Diagnostic Tool.
- Backlight always on, or dimmable in case OceanLink® 4.3” TFT is present in the network.

- NMEA 2000 PGN128267

Connector

- NMEA 2000® M12 5-poles standard connector only available.
- Instruments powered from the network.

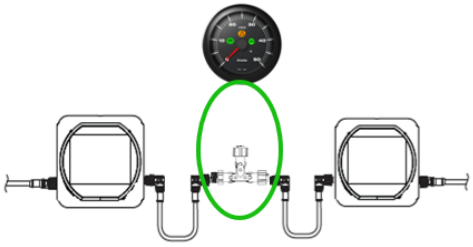
Cross-reference

Daisy chain network

Original installation with Faulty Display

Daisy Chain generic network

Original installation with new VDO OceanLink Classic Navigation

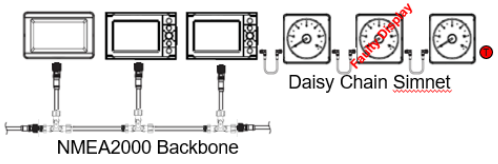


Daisy Chain generic network

Buy separately (in green):
A2C39312700 T-joiner NMEA2000
A2C96243700 0.5Mt NMEA2000 cable OR
A2C96243800 2.0Mt NMEA2000 cable OR
A2C96244000 6.0Mt NMEA2000 cable

Example with B&G H5000 analogue

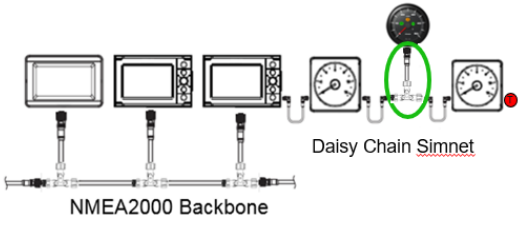
Original installation with Faulty Display



Daisy Chain Simnet

NMEA2000 Backbone

Original installation with new VDO OceanLink Classic Navigation



Daisy Chain Simnet

NMEA2000 Backbone

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A2C96243800 2.0Mt NMEA2000 cable OR
A2C96244000 6.0Mt NMEA2000 cable

From B&G 24005729 and 24006199 Simnet to NMEA2000 adapter cable

Cross-reference B&G to VDO

B&G – H5000 Analogue			VDO		
Part number	**Description**	**q.ty**	**Part number**	**Description**	**q.ty**
000-11720-001	*H5000 Analogue Depth 200 m*	*1*	*A2C1957350001*	*OceanLink Classic 85mm Depth 200mt*	*1*
000-11722-001	*H5000 Analogue Heading Display*	*1*	*A2C1957380001*	*OceanLink Classic 85mm Compass*	*1*
000-11716-001	*H5000 Analogue Apparent Wind Angle 0-50Kt*	*1*	*A2C1957420001*	*OceanLink Classic 85mm Wind Speed*	*1*
000-11717-001	*H5000 Analogue true Wind Angle 0-50Kt*	*1*			
000-11714-001	*H5000 Analogue AWA 360*	*1*	*A2C1957400001*	*OceanLink Classic 85mm Wind Angle*	*1*
000-11715-001	*H5000 Analogue true Wind Angle 360*	*1*			
000-11718-001	*H5000 Analogue Magnified Apparent Wind Angle*	*1*	*A2C1957390001*	*OceanLink Classic 85mm MAG wind*	*1*
000-11719-011	*H5000 Analogue Boat Speed 12.5knots*	*1*	*A2C1351970001*	*OceanLink Classic GPS Speedo 14Knots*	*1*
000-11721-001	*H50000 Analogue boat Speed 50 knots*	*1*	*A2C1351980001*	*OceanLink Classic GPS Speedo 35Knots*	*1*
			A2C135199001	*OceanLink Classic GPS Speedo 70Knots*	*1*
Installation Kit for Simnet Backbone					
			A2C39312700	*T-joiner NMEA2000*	*1*
			24005729	*Simnet to NMEA2000 (from B&G)*	*1*
			24006199	*NMEA2000 to Simnet (from B&G)*	*1*
				*VDO NMEA Cable**	*1*
Installation Kit for NMEA200 Backbone					
			A2C39312700	*T-joiner NMEA2000*	*1*
				*VDO NMEA Cable**	*1*


Thank you for your attention