Depth dual log interface

Reference product : 90-60-451

INSTALLATION GUIDE

REV A

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1   PRESENTATION

The **depth dual log interface** allows the connection of two speedometers log sensor and the depth sensor, to the **TOPLINE Bus** of your installation. This measurement instrument provides on the one hand the information on speed and distance covered by the ship, and on the other, the depth, the water temperature and the voltage of the power supply bus.

The **depth dual log interface** is designed to be mounted on wide boats(multihulls, , mono 60'), so that one of the two speedometers is always immersed, whatever the lodging of the boat.

Depending on your performance requirements, you can use three types of log sensor :

- The speedometer log sensor with paddlewheel.

- The electromagnetic speedometer log sensor.

- The ULTRASONIC SPEEDO Log sensor ***Attention, for the sensors ULTRASONIC SPEEDO, it is necessary to connect a sensor Starboard and a sensor Port. It is forbidden to connect two identical sensors***

1.1   Architecture of the installation
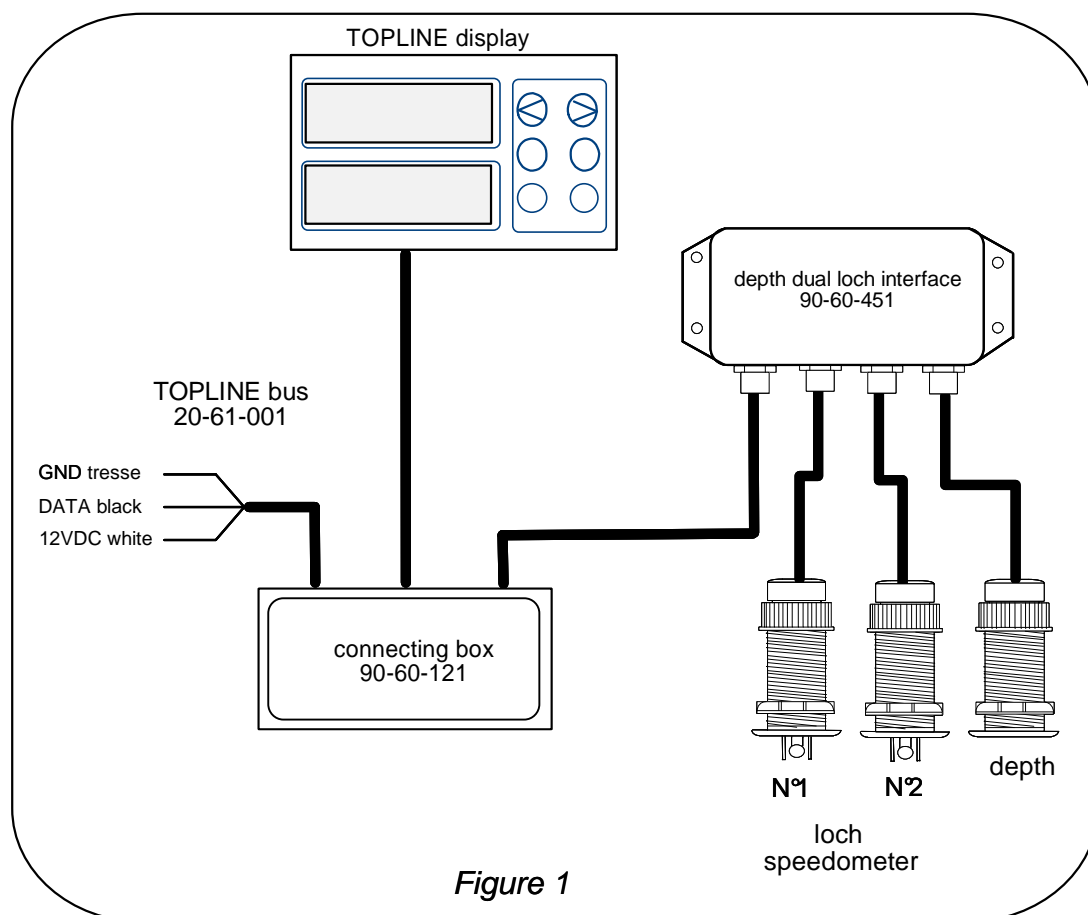
Figure 1

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1.2 Depht dual loch interface fonctionnement

The *depth dual loch interface* reads the speedomètre *n°1,* mounted on port side, or the speedomètre **n°2,** mounted on starboard. Using the front side switch, select the operating mode ; The running condition is indicated with a red led and a green led.

- Switch on position ❶ : the port side speedometer is activated. The red led is alight.

- Switch on position ❷ : the starboard speedometer is activated. The green led is alight.

- Switch on position *Auto* : the speedometer, port side or starboard, is selected according to the apparent wind angle side.

Note that : the mode *Auto* is running only if an *nke* masthead unit is connected to the *TOPLINE BUS* of your installation.

If the masthead unit is out of order, the red led and the green led are blinking : checked if the channel *apparent wind* is available on the display.

2   TECHNICAL SPECIFICATIONS

- Power supply : 10 to 16VDC
- Consumption : 60mA
- Tightness :IP54
- Weight : 160 g
- Operating temperature : -10℃ to +50℃
- Storage temperature : -20℃ to +60℃

3   DIAGNOSTIC FOR 1ST LEVEL TROUBLESHOOTING.

This chapter can help you rapidly resolve minor problems which do not require the intervention of a specialist. Before contacting technical support, please check the troubleshooting table below.

Problem	Possible causes and solutions
The *Topline* installation does not detect the Depth-finder log interface	The bus cable is not or is badly connected to the terminal box : check the plugging and the connection inside the terminal box. Check the state of the cables : they must not show any sign of wear or cut.
The surface speed displayed is **0.00,** no matter what the speed of the ship is.	Check that the vaned rotor is not clogged (algae, seashells). Check that the calibration coefficient is not set to **0.00** : see chapter 3.
The surface speed displayed is **0.00** and the water temperature channel displays « **Pan** ».	It may be that the log sensor is badly connected or broken. Check the state of the cable and the connection to the box.
The depth-finder displays depth but the display flickers intermittently.	Your depth-finder is struggling to detect the seabed ; clean the surface of the depth-finder sensor.
The depth-finder continuously displays a constant depth : example **2.10**	It may be that the depth-finder is detecting the keel and not the seabed. Please refer to the installation guide of the depth-finder sensor.
Your display indicates *battery fault.*	Check the voltage of your battery with a voltmeter : the operating voltage must be above 10VDC. Check that the battery maintains the load.
The red led and the green led are blinking.	May be the masthead unit is out of order,: checked if the channel *apparent wind.*

If you do not manage to solve the problem, please contact your distributor.

4   INSTALLATION

4.1   List of accessories

- 15 meter bus cable fitted with a connector : 90-60-460
- TOPLINE Terminal box : 90-60-121
- Cable adapter for old version of depth-finder sensor 90-60-453.
- Cable adapter for old version of vaned rotor log sensor : 90-60-454
- TOPLINE bus connector : 90-60-465.

4.2   Installation precautions

It is recommended to mount this housing towards the bow of the ship and at a certain height, in a location that is unlikely to get flooded.

4.3   Installation of the depth dual log interface housing

The housing of the *depth dual log interface* is splash-proof. It is fitted with three connector sockets for the connection of the depth-finder sensor, the log sensor and the TOPLINE bus cable. The housing will be mounted using four M4 screws (not included).
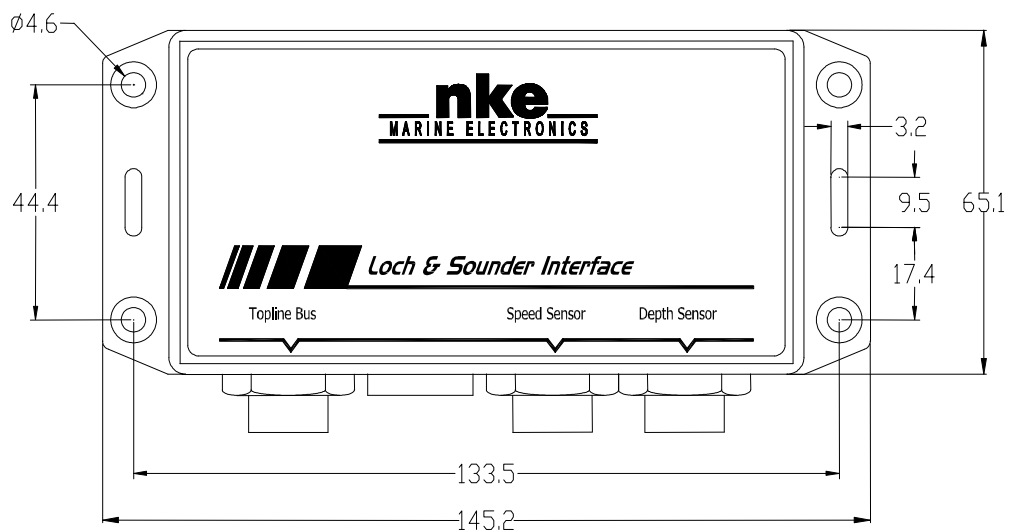

Figure 2

> **CAUTION :**
> - To guarantee the watertightness of the *depth dual log interface*, make sure the connectors are firmly screwed onto the connector sockets.
> - The connection of the sensors must be performed with the installation power switched off.

4.4   Connection to the *Topline* bus

1. Make the bus cable run from the **depth dual log interface** to the **TOPLINE** terminal box of your installation.

2. Connect the bus cable inside the terminal box.

GND
DATA black
12VDC white

Figure 3 : connecting to TOPLINE bus
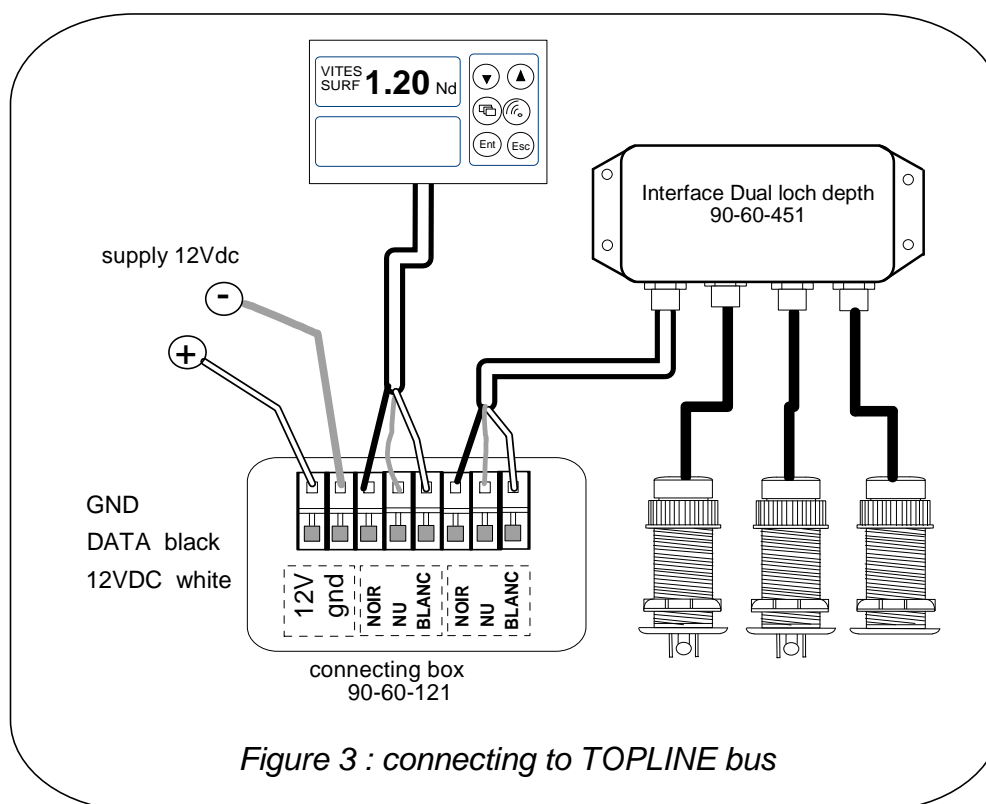
If you reduce the length of the bus cable 90-60-460, strip and galvanise the wires before connecting them inside the terminal box.

4.5   Connection of the sensors

The sensors are equipped with a 6 meter cable and a moulded waterproof connector. You will connect the speedometer log sensor, paddlewheel, electromagnetic or ultrasonic, onto the connector socket marked **speed sensor** and the depth sensor onto the **depth sensor** connector socket (see figure 2).

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