

Daniamant DanEI-300

Electronic Inclinator - Brief Installation Instructions



All relevant safety regulations and safety standards must be closely observed.

Maintenance and repairs must be carried out only by trained and qualified personnel with knowledge for electrical devices.

Step 1

Check the completeness of the delivery. The electronic inclinometer shall be delivery in one packing unit, containing:

- 1x Display Unit
- 1x Sensor Unit with Mounting Plate
- 1x Sensor Cable (3 m)
- 1x Power Supply Cable (3 m)
- 1x Data Cable (3 m)
- 1x Grounding Wire (0.5 m)
- 1x Operation and Service Manual
- 1x RJ45 Cable Gland

NOTE: Ethernet cable is NOT part of the delivery.

Step 2

Determine the installation position for the Display Unit and the Sensor Unit. The installation position shall be chosen for convenience of operation, and also to satisfy the compass safe distance below:

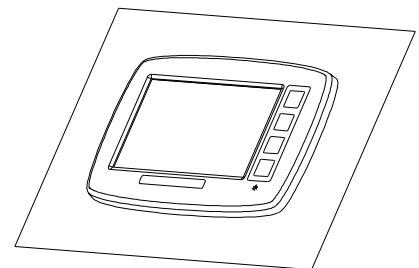
Component	Standard Compass	Steering Compass
Display Unit	0.70 m	0.40 m
Sensor Unit	1.45 m	0.90 m

The accessibility for maintenance and service must be considered when selecting the installation location.

Step 3

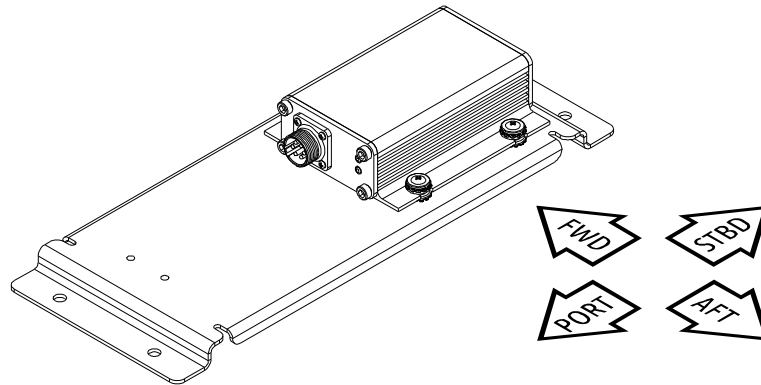
It is recommended to use flush mounting for the Display Unit. Prepare the cutouts according to the mechanical drawings, and install the Display Unit into the bridge console.

Other mounting options are also available. However, some mechanical parts, such as mounting brackets and plates, will be needed. These parts are included in the scope of delivery.



Install the sensor unit. The sensor unit on the mounting plate shall be installed on a horizontal surface and aligned with the ship's axis.

Step 4



Accuracy of the sensor may be severely degraded due to misalignment during installation.

Establish the following electrical connections according to the electric drawings:

Step 5

- Connect the sensor cable between the Display Unit and the Sensor Unit
- Connect the power supply cable to the ship's 24V DC power supplies (main and emergency)
- Connect the data cable to relevant devices such as Integrated Navigation System and Voyage Data Recorder
- Ground the Display Unit using the grounding wire

NOTE: The shielding of the power supply cable and data cable shall be properly grounded.

Turn on the power switch on the Display Unit and perform the following tasks:

Step 6

- Confirm that the green LED on the rear side of the Display Unit is illuminated
- Confirm that the LCD backlight and keypad illumination is all right
- Confirm that the green LED on the Sensor Unit is illuminated and the yellow LED keeps blinking
- Wait for approximately 1 minute, confirm that the system boot is successful and the main user interface is shown on the screen
- Adjust the brightness of the Display Unit and confirm that the keys and the illuminations are working properly

Go to the Settings Menu and perform the following tasks:

Step 7

- Enable/disable heel angle warning and set the required angles
- Save the setting and confirm it is effective

Check the function of the Sensor Unit:

Step 8

- Turn the Sensor Unit and confirm the heel/pitch angle readings vary correspondingly
- If heel angle warning is enabled, turn the Sensor Unit to trigger the warning and confirm the warning function is working properly
- Securely fix the Sensor Unit to its installation place.

Make corrections for alignment error:

Step 9

- Make sure the ship is stable and measure the actual heel angle and pitch angle
- Go to the Service Menu, input the correction values and save
- Confirm the corrected heel angle and pitch angle is in accordance with the ship's actual attitude

NOTE: The Sensor Unit needs some time to heat up and reach the stable working conditions. Therefore it is recommended to make the alignment error correction when the Sensor Unit has been powered on and running for more than one hour.

Finish

Now the electronic inclinometer should be working well. In case of problems, please contact your dealer or send an email to service@daniamant.com.

NOTE: These instructions describe the installation of the standalone version of the electronic inclinometer. For the installation of the network version or additional display units, please check the Operation and Service Manual. Please also refer to the drawings and Operation and Service Manual for details that are not described in this Brief Installation Instructions.