

**- Instrument -**

**Installation and Operation Manual**  
**English**



## 1 Installation

- **The installation includes 6 major steps:**

1. Read the installation and operation manual.
2. Plan where to install the transducers and instruments.
3. Run the cables.
4. Install the transducers and instruments.
5. Take a break and admire your installation.
6. Learn the functions and calibrate your system.

**Before you begin drilling ...** think about how you can make the installation as neat and simple as your boat will allow. Plan where to position the transducers, WSI-box and instruments. Think about leaving space for additional instruments in the future.

- **A few "do nots" you should consider:**

- Do not cut the cables too short. Allow extra cable length at the Inertface box so it can be disconnected for inspection without having to disconnect all attached cables.
- Do not place sealant behind the display. The instrument gasket eliminates the need for sealant.
- Do not run cables in the bilge, where water can appear.
- Do not run cables close to fluorescent light sources, engine or radio transmitting equipment to avoid electrical disturbances.
- Do not rush, take your time. A neat installation is easy to do.



- **The following material is needed:**

Wire cutters and strippers.

Small Philips and small flat head screw driver.

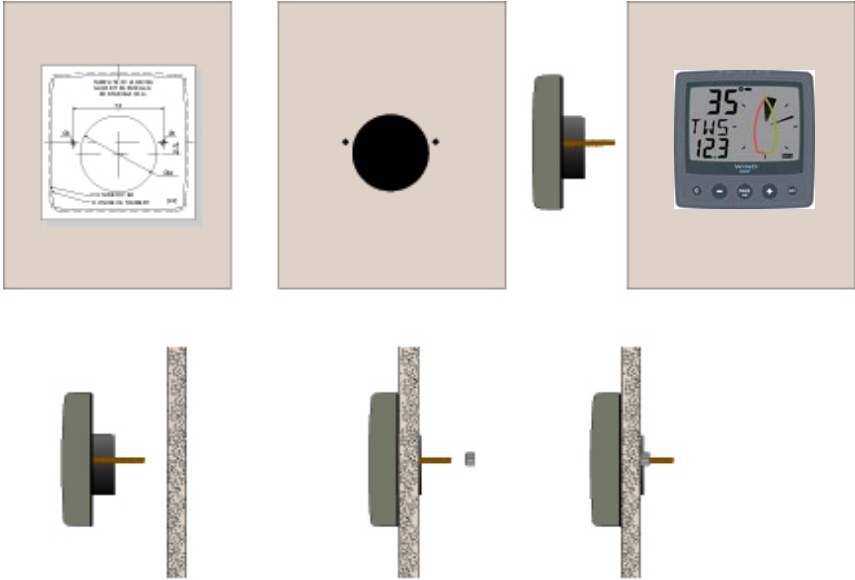
Hole saw for the instrument clearance hole 63 mm (2½").

5 mm (¼") drill for the mounting holes.

If you are doubtful about the installation, obtain the services of an experienced technician.

### 1.1 Installing the instrument

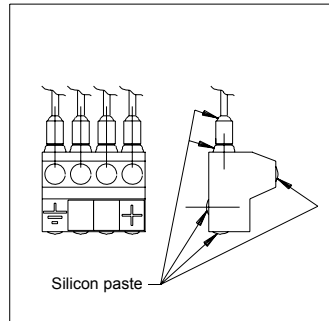
- Place the adhesive drill template on the desired location for the instrument. Drill the 2 holes using a 5 mm (1/4") drill for the two pin bolts. Use a 63 mm (2 1/2") hole saw to machine the clearance hole for the instrument connection socket. Remove the template.



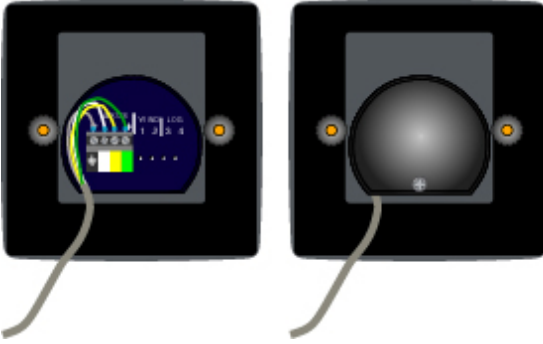
- Screw the two pin bolts to the instrument
- Put the instrument in place
- Screw the two nuts from the back

**Note! The two nuts must just be tighten by hand only**

- Run the Network cable from the Interface box to the instrument.
- If you want to cut the Network cable to length, disconnect 4-pole jack plug and cut the cable. Peel off about 35 mm (1.4") of the cable insulation. Remove about 6 mm (1/4") from the 3 isolated wires (the 4th wire is an earth / screen). Attach the 4 cable protectors to the wires using a pair of flat pliers.
- Connect the 4 cable protectors to the 4-pole jack plug as shown. Apply silicon paste on all locations as shown.



**Note: Must be done to avoid corrosion.**



- Apply silicon paste to the instrument connection pins at the back of the instrument. Press the jack plug onto the instrument pins. Press the cable in to the cable leads.
- Mount the connection back cover with the screw.

#### **1.1.1 Installing instrument to the Interface box**

All instruments are connected directly to the Network. They all use the same colour coded 4- pole jack plugs. (F or instrument installation, see 2.2).

**Part specification**

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**Items delivered with the instrument**

<b>Qty</b>	<b>Description</b>	<b>Reference</b>
1	Instrument package	2
1	Interface box	3
1	Instrument cover	4
1	Drill template for instrument	5
1	Installation and operating manual	6
1	Warranty card	7
2	Instrument mounting screws	8
2	Plastic nuts	8
1	Connection back cover	8
2	Silicon paste tube	8
2	Plastic cable strap	8
1	Network cable, 8 m (26 ft)	10
5	Cable protectors, 0,25 mm (0.1 inch)	11
5	Cable protectors, 0,75 mm (0.3 inch)	11
1	3m red power cable	12
1	3m black power cable	13
3	Mounting screws for instrument	19
1	Instrument	20
1	Instrument bracket	20
3	Mounting screws for Interface bo	21

**Registering this product**

Once you have checked that you have all the listed parts, please take time to fill in the warranty document and return it to your national distributor.

By returning the warranty card, it will assist your distributor to give you prompt and expert attention. Keep your proof of purchase. Also, your details are added to our customer database so that you automatically receive new product catalogues when they are released.

Warranty conditions see 12.

### 1.3.4 Mounting the Instrument step by step

1. Mark the mounting holes using the bracket as an template



2. Drill the three mounting holes using a 3,2mm drill



3. Mount the bracket with the three supplied screws



4. Insert the transducer into the bracket from front to back



5. Tighten the lock nut by hand only (do not use any tool)



6. Attach the security clamp



## 2 Connection to other systems

A system is fully compatible with other Network systems. If you want to connect the system to a system, you have to move the connection of the log and depth transducers to the Interface box. Note that a 200kHz depth transducer must be used. The 200kHz transducer is recognized by the colour of the leads that should be blue, black and screen. If your existing depth transducer has other colours of the transducer leads, it has to be changed. 200kHz transducers are available for all types of products through hull fittings.

The network cable of the system may be connected at any location in the existing system. That is normally at the Server but if it is more convenient, you may connect the Network cable to any existing instrument.

## 3 Pairing procedure of Instrument

When all instruments have been installed, a pairing procedure between the Instrument and the Interface unit must be made to introduce it to your specific network system. This is how you do it:

- a. **Make sure the Instrument is fully charged!**  
If the Instrument has been stored in a dark place for a long time, you must first charge it by exposing the solar cell for sun light some hours before use.
- b. **Pairing!**  
Hold the Instrument within 2m from the Interface unit, and then press the INIT button (through the hole in the bottom of the battery lid) by use of the "pin".

If the batter lid is open, you may see the LED. The built in LED will flash 2 times then lit for 2s, before it is turned off. Your Nexus system is now ready for use.

If the pairing of some reason did not work, the LED will flash a third time. You should then release the Instrument box airing, see below!





## 4 Re-initialization of the Instrument

To release the Instrument and re-initializing it, press and hold the INIT button for 5s.

The Instrument can then be re-initialised again to the same, or to any other Interface box as described above.

när den åter skall monteras. Se procedur enligt ovan.

## 5 Maintenance!

If you have been using the Instrument pack for several seasons, you may need to change the rechargeable cells.

Use original NiMh cells.

**IMPORTANT!** Do not change the rechargeable cell in strong light! If needed, cover the solar cell with your hand while changing cells!

Open the battery lid and remove the old cell from the connector, install the new cells. Return the used Cells to waste collection!

## 6 Change Instrument or Interface box / Release the pairing

If the Instrument or the Interface box has to be exchanged, Interface box pairing has to be released. To release the Interface box, there are two alternatives:

### A From a Data instrument

1. Press and hold the SET button for two seconds
2. Press the PLUS button until the text C15 is showed
3. Note the value for C15.
4. Press SET (short) and enter the value 99.9 using MINUS, PLUS and PAGE.
5. Press SET.
6. The Interface box has now released the pairing and you can now enter the value you noted under point 3 again
7. Press PAGE followed by SET to exit the setting mode

### B From a instrument

1. Press and hold the SET button for two seconds
2. Press the PAGE button until the text C50 is showed
3. Press the PLUS button until the text C53 is showed
4. Note the value for C53 (normally 1.70).
5. Press SET (short) and enter the value 1.99 using MINUS, PLUS and PAGE.
6. Press SET.
7. The Interface box has now released the pairing and you can now enter the value you noted under point 4 again

8. Press PAGE followed by SET to exit the setting mode

**Release the pairing of the Instrument**

To release the Instrument and re-initializing it, press and hold the INIT button (see picture on previous page) for 5s. Use the supplied initialization pin.

## 7 First start (only in a Network)

### 7.1 Initialising the instrument

At power on, the instrument will perform a self test. The display will first show all segments, then the software version number and the Network ID number.

At first power on after installation, you will be asked to press the SET button key [PrS KEY]. This will give the instrument a logical ID number on the Network.

To initialise the instrument, press **SET** on all installed digital instrument, one at the time but only after the instrument show OK.

**Note: Always wait for the text "Init OK" to be displayed, before you press SET on the next instrument!**



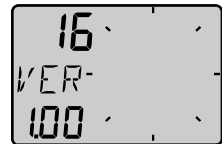
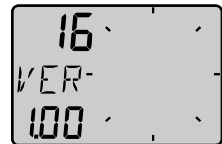
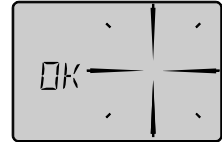
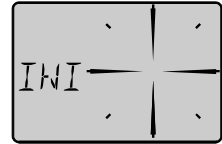
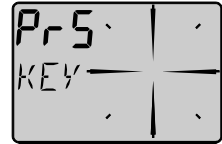
The Server automatically gives the first unit ID number 16, then 17 and so on. The order in which you press **SET** is the same order as the instruments will be given a logical ID number on the Nexus Network.

The example shows that the instrument version number is 1.00 and the given logical ID number is 16.

### 7.2 Re-initialising the instrument

If two instruments by mistake have the same ID number, this can cause disturbance and block the information on the Nexus Network.

To re-initialise the instrument, press **MINUS** and **PLUS** together during the power up sequence when version and ID numbers are displayed.



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## 10 Maintenance and fault finding

### 10.1 Maintenance

- To clean the instrument, use only mild soap solution and rinse with water.
- Do not use detergents or high pressure washing equipment.
- At least once a year, check all your connections and apply additional silicon paste at each connection point.
- Always use the instrument cover for protection, when not in use.
- Storing transducers and instruments when not in use for longer periods: It is advisable to remove the instruments and transducers, and store them inside the boat or at home in room temperature, if possible.



### 10.2 Fault finding

Before you contact your dealer, and to assist your dealer to give you a better service, please check the following points and make a list of:

- All connected instrument and transducers, including their software version numbers.
- Instrument software version number.
- Network data bus ID numbers for each instrument (displayed at power up).

#### 10.2.1 General

In most cases, the reason for faults in electronic equipment is the installation or poor connections. Therefore, always first check that:

- Installation and connection is made per instructions for instrument and transducers, (see chapter 1).
- Screw terminals are carefully tightened.
- No corrosion on any connection points.
- No loose ends in the wires causing short cuts to adjacent wires.
- Cables for damage, that no cables are squeezed or worn.
- Battery voltage is sufficient, should be at least 10 V DC.
- The fuse is not blown and the circuit-breaker has not opened.
- The fuse is of the right type.
- Two instruments do not have the same ID number, (see chapter 7.2).
- Check the following important setting: C18

#### 10.2.2 Fault - action

##### 1. : No reading [ --- ]

- If inaccurate data is received, check the connections (separate through deck connection or below decks connection), are properly made.
- Make sure the Instrument is aligned correctly, (see C54, 9.2.3).
- Check the setting of C18.

##### 2. functions: No reading [ --- ]

- C16 should be BSP. See 9.1.6.

- If you have a voltmeter available, you can check the condition of the Instrument. When measuring with voltmeter make sure everything is connected, that the power is on and make sure the paddle wheel is rotating.
- At the back of the instrument, measure between pin 4 and ground.
- When not rotating, the value should be fixed at either about 0 or 12 V DC. When rotating very slowly, by hand, the value should flip between 0 and 12 V DC. When rotating faster, the value should average around 6 V DC.

**Irregular values:** Check the , (see C11, 9.1.1).

### 10.2.3 Error messages

The following error messages can appear on the display:

**ERROR 2** Network is missing, check colour coded connections

**ERROR 3** No Network data received within a given time.

**ERROR 10** Range error caused by bad format, e.g. 430°.

**ERROR 11** Remote command that can not be performed.

If other error messages than the above appears on the Wind instrument, contact your dealer.

## 11 Specifications

### 11.1 Technical specifications

**Dimensions:** 113 x 113 x23 mm  
(4.3x 4.3 inch).

**Instrument cable:** 8 m (26 ft).

**Power supply:** 12V DC (10-16V). The instruments are polarity protected

**Power**

**consumption at 12V:** 0,08W

with maximum lighting 0,8W.

**Temperature range:** Storage:-30°to +80°C (-22°to +176°F)  
Operation: -10° to +70°C(14°to +158°F)

**Weight:** 260 gram (9.17 oz).

**Enclosure:** Water proof

## 12 Warranty

### WARRANTY

#### GENERAL

All our products are designed and built to comply to the highest class industry standards. If the products are correctly installed, maintained and operated, as described in the installation and operation manual, they will provide long and reliable service. Our international Network of distributors can provide you with the information and assistance you may require virtually anywhere in the world.

Please read through and fill in this warranty card and send it to your national distributor for product registration.

#### LIMITED WARRANTY

The warranty covers repair of defective parts due to faulty Manufacturing and includes labour when repaired in the country of purchase. The warranty period is stated in the product manual, and commences from the date of purchase. The above warranty is the Manufacturer's only warranty and no other terms, expressed or implied, will apply. The Manufacturer specifically excludes the implied warranty of merchantability and fitness for a particular purpose.

#### CONDITIONS

- The supplied warranty card and receipt with proof of purchase date, must be shown to validate any warranty claim. Claims are to be made in accordance with the claims procedure outlined below.
- The warranty is non-transferrable and extends only to the original purchaser.
- The warranty does not apply to Products from which serial numbers have been removed, faulty installation or incorrect fusing, to conditions resulting from improper use, external causes, including service or modifications not performed by the Manufacturer or by its national distributors, or operation outside the environmental parameters specified for the Product.
- The Manufacturer will not compensate for consequential damage caused directly or indirectly by the malfunction of its equipment. The Manufacturer is not liable for any personal damage caused as a consequence of using its equipment.
- The Manufacturer, its national distributors or dealers are not liable for charges arising from sea trials, installation surveys or visits to the boat to attend to the equipment, whether under warranty or not. The right is reserved to charge for such services at an appropriate rate.
- The Manufacturer reserves the right to replace any products returned for repair, within the warranty period, with the nearest equivalent, if repair within a reasonable time period should not be possible.
- The terms and conditions of the warranty as described do not affect your statutory rights.

#### CLAIMS PROCEDURE

Equipment should be returned to the national distributor, or one of its appointed dealers, in the country where it was originally purchased. Valid claims will then be serviced and returned to the sender free of charge.

Alternatively, if the equipment is being used away from the country of purchase, it may be returned to the national distributor, or one of its appointed dealers, in the country where it is being used. In this case valid claims will cover parts only. Labour and return postage will be invoiced to the sender at an appropriate rate.

#### DISCLAIMER

Common sense must be used at all times when navigating and the Manufacturer's navigation equipment should only be considered as aids to navigation.

The Manufacturers policy of continuous improvement may result in changes to product specification without prior notice.

File id:

**WARRANTY CARD**  
TO BE RETURNED TO YOUR NATIONAL DISTRIBUTOR

OWNER:

Name: \_\_\_\_\_

Street : \_\_\_\_\_

City/Zip Code : \_\_\_\_\_

Country: \_\_\_\_\_

Product name:

Serial number:

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Dealers stamp:

Tick here if you do not wish to receive news about future products





