

OPERATING MANUAL



SILVA NEXUS

Operating Manual • Silva NEXUS Speed Log

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1. INTRODUCTION

To enable you to get the most out of your instrument, we have produced this manual which we ask you to read carefully.

The NEXUS Speed Log is a powerful log for both power and sailing boats. It gives information about speed, distance and time.

The NEXUS Speed log can be upgraded at any time by connecting it to NEXUS Network.

2. FUNCTIONS GENERAL

Logical handling

The instrument is easy to understand and operate. Identical page operation makes the choice of functions easy to learn.



The upper part of the display will show the boat speed (size 24.4 mm). Below in slightly smaller digits (size 13.6 mm) a number of navigation data (sub-functions) are provided. The arrow at the upper part of the display indicates the damping period selected.

2.1. HOW TO USE THE 4 BUTTONS

1. How to use in normal "VIEW" mode.

LCD ARROW: Indicates selected damping level



Main function

Sub function

KEY: "Unlock", change or clear value, then "lock"

UP: + "Pull up" previous from main group

DOWN: - "Pull down", next function from main group

Long press on PAGE gives access to the LIGHT SWITCH, light levels are MAX - MID - LOW or OFF

To clear and reset a value: Press both UP and DOWN (Middle) buttons simultaneously
Long press on KEY entries to the ADJUST and CALIBRATION function

2. How to use, the edit or UNLOCK mode



CURSOR moves from left to right

DECREASE - digit or text

INCREASE + digit or text

KEY "Lock" or Enter when ready

2.2. QUICK GUIDE

Boat Speed

6.05 KT

Trip Distance

12345 TRP

12345 LOG

- 10'STA

12:04'52

12345 DST

456 AV'S

SEA LOW

23 MTR

2790 CMG

12.34 DTW

3. SPEED FUNCTIONS

Will always show BOAT SPEED in knots (KT), km/h (km) or miles/h (Mh). Select unit in the calibration routine (see chapter 6, Calibration, C11).

"SPACE": (See chapter 5.).

Resets only when CLEAR is pressed.

TOTAL LOG distance 0-19999 nm (not resettable)

Start the timer with KEY button. Another press on KEY within 5 min gives a new start from -5:00 (see further chapter 3.1.).

Elapsed timer in Hrs/min/sec from power up or reset start timer. Resettable.

DISTANCE FROM POWER UP or from timer, start timer reset.

From power up or timer, start timer reset.

Select between LOW (1 sec), MID (5 sec), MAX (22 sec). The LCD arrow will indicate the selected level.

***) ADDITIONAL FUNCTIONS ONLY
AVAILABLE WITH NEXUS NETWORK,
SEE OPERATING MANUAL FOR MULTI
CONTROL AND SERVER.**

*) Depth

*) CMG/DMG

*) BTW/DTW

3.1. HOW TO USE THE START TIMER/TIMER

Select with UP/DOWN the START TIMER function.



Standby position for start timer!

Press **KEY** and the timer starts to count down.

Press **KEY** or **UP** if you want to select -5' standby position.

To reset the timer press **CLEAR** (i.e. middle buttons) during count down.

Note! The **TIMER** always runs when the power is on.

4. ILLUMINATION

The instrument uses red back lighting, controlled at three levels. A long press on the **LEFT** button (i.e. **PAGE/CURSOR**) will give access to the light switch.



OFF is flashing

Select preferred lighting level **LOW**, **MID**, **MAX** and press **KEY** button.

5. HOW TO MOVE A SUB-FUNCTION

Here you can set up your favourite sub-function in the "SPACE" window (see chapter 3. **SPEED** functions).

Example:

Find the sub-function **TRIP**. Press **PAGE** (i.e. left) and **KEY** (i.e. right) simultaneously (LCD flashing), press **KEY**. Each time you turn on the instrument, **TRIP** is displayed as the default function.

Press **CLEAR** (i.e. middle buttons simultaneously) to get back the "SPACE" window.

6. CALIBRATION

In order to have your instrument functioning correctly, it is important to run through the calibration procedures. Once done, the calibration values are stored in the memory of the instrument even if the power is cut.

To enter the calibration routine, press **KEY** > 2 sec. (long press). Use **UP/DOWN** button to select the type of calibration channel. Press **KEY** for return to normal use.

List of CAL-channels:

- C10 RET:** (Press **KEY** to return to main when ready).
- C11 UNIT:** Select between **KTS** (knots), **K/h** (km/h) or **M/h** (miles/h).
- C12 1.25 CAL:** Factory set for speed and distance, (1.00 - 1.99).

To find out **YOUR** calibration value, run the boat a known distance at cruising speed. Then compare with the **TRIP** distance shown.

Use the following formula:

True distance / measured distance x present calibration value = New calibration value.

In case of water currents, do the run in both directions and divide the distance by two.

C13 OFF SOG: (ON = Speed Over Ground instead of water speed on the large main display). **ONLY AVAILABLE WITH NEXUS NET-WORK. SET C13 TO OFF SOG.**

7. PART SPECIFICATION

The Silva NEXUS Speed log comes with all necessary fittings for most installations. Check each part prior to installation.

- 1 # Operating manual
- 1 # Warranty card
- 1 # Instrument
- 1 # Template
- 1 # Instrument cover

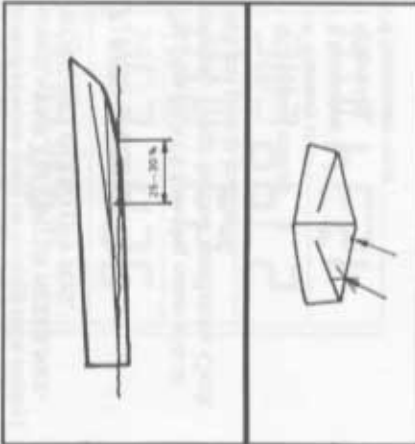


- 4 # Instrument screws
- 4 # Rubber screw caps
- 1 # Connection cover
- 1 # 4-pole, jack plug
- 1 # Paddlewheel transducer with 8 m cable.
- 1 # Power cables, Red and Black, 3 m
- 1 # Dummy plug
- 1 # Silicone grease
- 4 # O-ring
- 1 # Through-hull fitting with nut
- 1 # Locking device
- 2 # Cable straps
- 4 # Extra cable protectors (0.25mm)

8. INSTALLATION

ALWAYS CONNECT BATTERY POWER VIA A SLOW 5 A FUSE OR AUTO FUSE

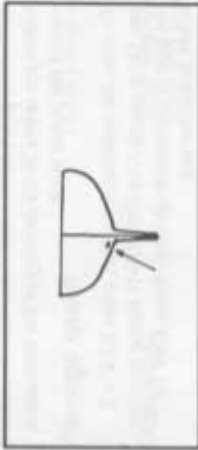
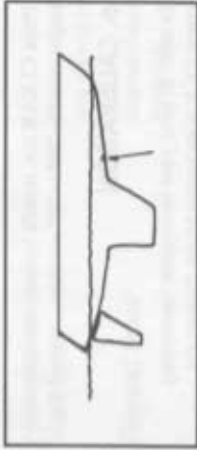
8.1. LOCATION OF THE PADDLEWHEEL TRANSDUCER



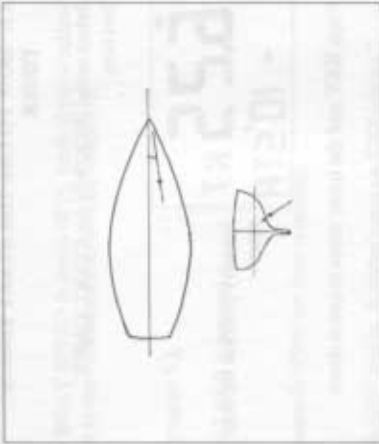
Generally the transducer should be placed as far forward as possible along the waterline length and close to the centreline.

It is important that the transducer is always in the water within the whole speed range of the boat. Please note that the actual waterline length of fast power boats shortens considerably at high speeds. Therefore the transducer should be placed at 25-35% along the true waterline, from the bow, when at full speed.

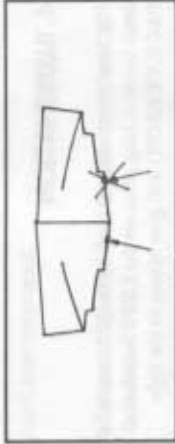
Example:



Sailboats with a fin keel must have the transducer located at least 25 cm but not more than 75 cm in front of the keel. It should be placed no more than 10 cm off the centreline.



On sailboats with a pronounced "V" in the hull, such as full-keel yachts, it might be favourable to angle the transducer slightly so that it aims at the bow, rather than directly parallel to the centreline. This will help balance the passing waterflow measurement from one tack to another.

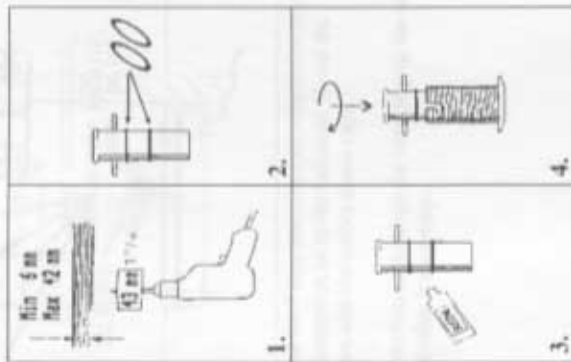


Avoid placing the transducer near the edge of sharp hull chines. Transverse waterflow in these areas can affect the accuracy of measurements.

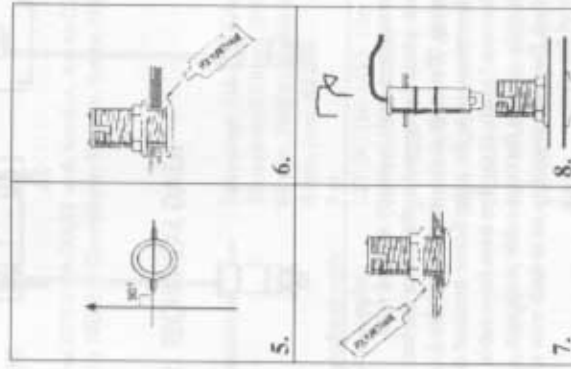
If you have questions about the location of the through-hull, contact your builder, yacht dealer, or other Silva owners with similar boats for advice.

Always remember to allow for accessibility from the inside of the yacht when determining the final location.

8.2. INSTALLING THE THROUGH-HULL FITTING

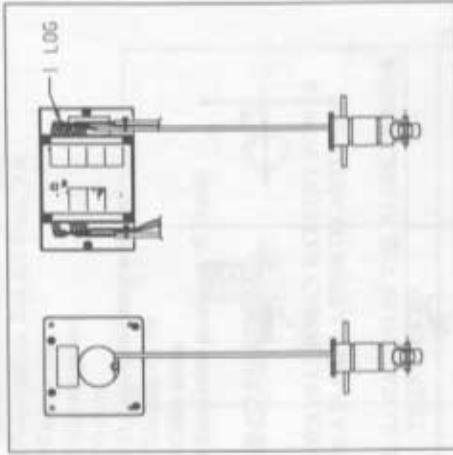


1. Use a 43 mm (1 11/16") hole cutter to cut through the hull. (See section 8.1 for correct location).
2. Slide both rubber O-rings onto the dummy plug.
3. Generously apply the silicone grease to the exterior of the dummy plug.
4. Install the dummy plug in the through-hull fitting. Use a slow twisting motion and be sure that plug is properly seated into the fitting.
5. With the dummy plug properly installed in the through-hull fitting, mount the fitting so that the handle is exactly at right angles (90°) to the boat's centreline. (For pronounced V-hulls see section 3).
6. Apply the polyurethane sealing compound on the outer flange of the through-hull fitting and tighten the nut on the inside by hand.
7. When this outer sealant has cured, remove the nut and apply sealant on the inside. Tighten the nut again by hand.
8. Install the wire locking device onto the dummy plug/paddlewheel transducer.



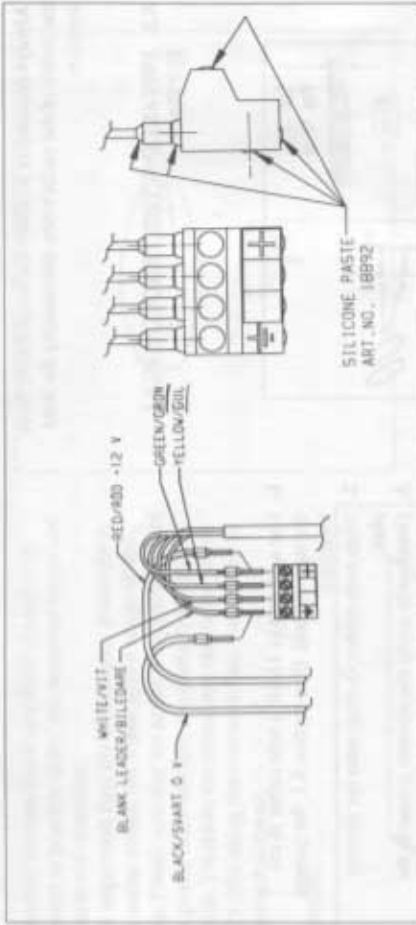
8.3. CONNECTION TO INSTRUMENT/ CONTACTS

The paddle wheel transducer connects to the instrument or the Server if available.



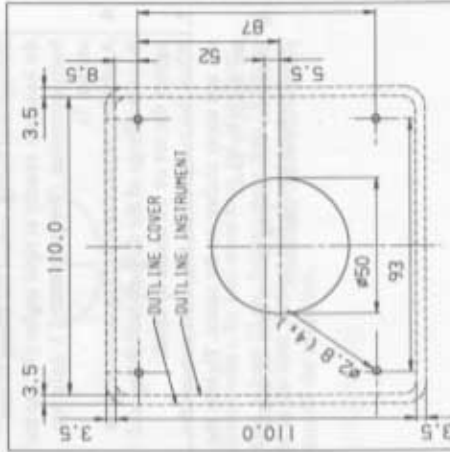
The transducer cable is clearly marked with colours which correspond to the colour marked jack plug. The cable is also marked with No 1 which correspond to the input Screw terminal on the Server (if used). If the 8 m transducer cable needs to be cut, use the extra cable protectors supplied. Press the protectors on to each wire with a pair of flat pliers.

8



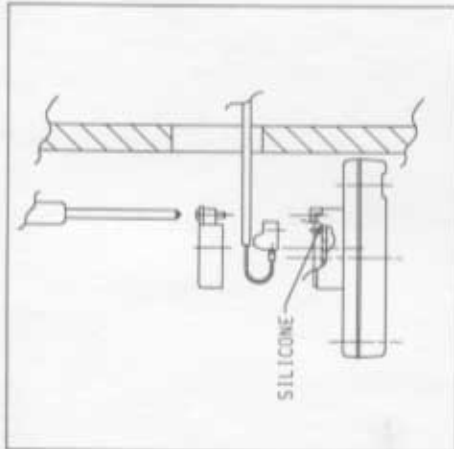
8.4. INSTALLING THE INSTRUMENT

The instrument is mounted from the front and must be mounted on a smooth surface.



1. Use the template and attach it to the desired location. Drill the holes as indicated.

2. Put silicone grease on each contact!
Connect to the instrument and screw on the connection cover.



3. Use the 4 instrument screws supplied to attach the instrument on to the bulkhead. Cover the screws with the rubber screw caps.

Use the two cable straps for strapping up the cable installation if necessary.

9. FAULT FINDING

In most cases the reason for faults in electronic instruments is a faulty connection. So, first check the connections according to the diagram.

Also check:

- Sufficient battery voltage
- Cables for damage
- Faulty contact in connectors
- The fuse is not blown and is of the right type
- The transducers are correctly installed.

If any error messages appear on the display, contact your Silva agent for service.

10. OPTIONS

The following items can be supplied in the NEXUS Network:

NEXUS Depth complete with transducer. Art.no 20445-2.
NEXUS Multi Control + Server (NEXUS Network). Art.no 20445-3.

Repeaters:

Analog Wind. Art.no 20550-1.
Analog Steer Pilot. Art.no 20550-2.
Analog Compass. Art.no 20550-6.
Analog Log (0-16 kts). Art.no 20550-3.
Analog Log (0-50 kts). Art.no 20550-4.
Analog Depth (0-200 m). Art.no 20550-5.
Analog Depth (0-600 ft). Art.no 20550-7.
Digital Multi Control Repeater. Art.no 20445-4.

Button for TAC and M.O.B. function. Art.no 19763.

Transducers:

Log/Temp 0-30 kts. Art.no 20707.
Depth. Art.no 20711.
Wind. Art.no 20721.
Compass. Art.no 20860.

GPS:

Silva GPS COMPASS with bracket. Art.no 20700.
Silva NEXUS Chartplotter System. Art.no 20882.

11. TECHNICAL DATA

Dimensions: Instrument 110 x 110 mm.
Through-hull fitting Ø 42 x 86 mm. Hull thickness min. 6 mm, max. 42 mm.

Transducer cable: 8 m.

Power supply: 12V DC (10-16V). The instrument is polarity protected.

Power consumption: Instrument 0,08 W (with max. illumination 0,8 W).
Transducer 0,06 W.

Speed range: 0,2 - 30 knots (depending on transducer type, max. 90 knots).

Temperature range: Operation -10°C to +70°C.
Storage: -30°C to +80°C.

Weight: Instrument 260 g.

12. MAINTENANCE

- Clean the instruments with mild soap solution only! Do not use high-pressure wash equipment!
- It is advisable to remove the instrument during long cold periods.
- Put silicone grease on each contact.
- Always use the instrument cover for protection.
- Check terminals and use wire protectors.

13. WARRANTY

Silva Sweden AB gives a two year warranty against manufacturing faults or faulty components. The supplied warranty receipt together with a purchasing receipt must be shown if a warranty claim is made. The warranty does not apply to damages caused by careless handling, faulty installation nor by not fusing the instrument according to the instructions. The warranty does not apply to secondary damages caused by faults in instruments or transducers. The right to change the specification is reserved by the manufacturer.