

**NEXUS**  
Passion for Performance™





## GLOBAL COVERAGE

**Compasses – 10 year limited warranty**  
**Electronics – 2 year limited warranty**

For updated list of distributors see  
[www.nexusmarine.se](http://www.nexusmarine.se)

As we constantly strive to improve our products, all specifications are subject to change without notice.  
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# MAGNUS OLSSON

## — THE LIVING LEGEND OF THE OCEANS

**Magnus “Mange” Olsson knows what sail racing at the highest level truly means. He has sailed more than 600,000 nautical miles, completed over five circumnavigations, two Americas Cup Challenges, and is currently working on his seventh around the globe project.**

“On board computer systems are an invaluable aid to improving sailboat performance,” he states with conviction.

While Magnus was the three time national champion in the 505 dinghy class and after completing his civil engineering degree from the Royal Technical High School in Stockholm he created a new navigation system. It was based on connecting the signals from a log and a compass to a basic computer.

It was in the mid 1970s and the digital age was barely born.

“It was in the run up to the 1977 Americas Cup,” Magnus explained. “Pelle Petersson called me asking if I could do something to help the navigation on board the AC boat “Sweden” to become easier and more efficient to operate. The system worked really well and it opened my eyes to the possibilities that existed to connect different instruments to each other.”

Thirty years and many prestigious projects later Magnus is once again occupied with what he like most – developing sailing and sailing boats at a professional level. Now 57 years old, he is currently working on Ericsson’s challenge for the Volvo Ocean Race 2008.

“Before a Volvo Ocean Race we devote many months to sail and boat testing. A major part of the work is to establish a database of each sail’s performance. We create what we call a sail map showing the crossovers and sweet spots for each individual sail.”

Every sail has its own so-called “sweet spot.” This is the point where the sail is at its most efficient in terms of the wind speed and angle. But in the high and low registers the sail will overlap with other sails to create a so-called ‘crossover’. The question will be, for example; ‘Will it be faster with a no.3 genoa and a full mainsail, or are we faster with a no.4 genoa plus a reef in the main?’

“Without a computer and reliable instruments that work is impossible. Today, with the assistance of the data log, we can look back in time and compare the sail setting we have now what we had earlier.”

Performance speed -Target Boat Speed (TBS) - is something Magnus talks about with enthusiasm. Performance speed is the value that the boat should deliver when it is being sailed at its optimum. The numbers are based on both theoretical and previous sail tests, and the more accurate the sail tests have

been, the more the target boat speed is based on real values. On the mast displays TBS is shown alongside the actual speed being achieved.

“We started this in the 1997/8 Whitbread. It proved to be an outstanding tool to raise the motivation on board. We constantly aimed to match Target Boat Speed, and when we sailed faster than the TBS it really lifted the crew’s spirits.”

Target Boat Speed is something most sail racers use today.

It also went well for Magnus and his crew on EF Language. They won what was the toughest offshore race of its era, the Whitbread Round The World Race, now the Volvo Ocean Race.

Magnus admits that he has devoted endless hours to analysing the values that boat computers provide. When he started his sailing career it was mostly analogue displays, dead reckoning and radio positioning, while in time satellites came along for both positioning and weather. With today’s GPS and the capability to receive accurate weather projections navigators can simulate different routes at sea. In other words, you can create different scenarios from which you can choose the fastest route to the target.

“Even with inshore racing major progress has been made,” continues Magnus. “In particular the start procedure has become far more precise with the new systems now available. By giving the software details of the start line along with real-time boat speed and positioning information, you can receive a constantly updated analysis of the time and distance to the start line.”

When Magnus looks into the future, trying to foresee the next steps in advanced software sailing systems, he smiles. “The future? Well, just imagine if you could know or make a qualified guess as to what will happen five or ten minutes ahead? For example, will the wind turn? Will it increase or decrease? Maybe instruments will be so advanced that they can analyse the prevailing conditions and make both short and long term predictions.”

Magnus has sailed more, further and in tougher conditions than most. He has also experienced more types of boat that most sailors do in a lifetime; from small dinghies to advanced carbon fibre monohulls. And despite his 57 years, when he wants to have fun and sail really fast he doesn’t hang about. He takes the helm of a 60ft trimaran and heads off for another day’s racing at 30+ knots. For him, that’s what sailing is all about.

Photo: Hans Berggren

## NXR RACING INSTRUMENTATION

New for 2007, the NXR racing instrumentation system provides the ultimate in integrated networking for all-out racing boats. Designed to meet the demands of the world's top racing yachtsmen, the NXR compromises on nothing as it collects, analyses and displays information on every possible navigational and operational variable on board the most sophisticated sailing boats on the water today.

### Raw power, for true systems integration

Flexibility is what the NXR is all about. The PC interface allows the navigator to customise almost every aspect of the system's operation from the relative comfort of the navigation station, as well as integrating the network with external packages such as tactical software, chart plotting programs, and data inputs from non-navigational hardware including load cells on the rig canting keels, and engine sensors. Analogue displays can be configured on the PC at the touch of the button to display relative angles and other visual data.

### Precision data; where you want it, when you need it

Real-time information is brought to the crew by the new Multi Control displays that allow the user to select whatever combination of data best suits his current needs, and the superb new XLR mast displays, designed for maximum visibility in all light conditions and built to withstand the toughest conditions.

### Rocket scientists need not apply

Despite being one of the most versatile networks of its kind, the NXR is intuitive to operate with clear and accessible menus taking the operator exactly where he needs to go. The system links smoothly with most tactical and charting programs available on the market today.



### NXR multi-control instrument

Perfect for mounting either on the deck or down below, the NXR multi-control instrument is the primary display that users of NXR will mount both at the helming position and at the navigation console. This instrument allows the user to access all of the digital information provided by the NX system, in any combination. The display shows the data in clear, easy-to-read digits, with both primary and secondary readouts.

Built to withstand the toughest conditions, the NXR multi control allows the user to access a comprehensive range of information at the press of a button via a built-in remote control complete with four dedicated preset buttons that allows the selection of up to 10 favourite settings. The result is that the helmsman or navigator can pre-programme a series of preferred data combinations suited to different points of sailing or particular locations, thereby saving valuable time in adjusting instruments at critical moments.

### NXR XLR instrument

The XLR instrument is the all-new mast display designed by Nexus specifically for the NXR instrumentation system. The result of a long process of customer consultation the XLR features 63.5 mm (2.5 inch) digits, proven to be the ideal size for large racing yachts. Their first class readability is further enhanced by their crisp presentation. Fully programmable from the navigation workstation, the XLR displays incorporate a host of new features designed to maximise their utility to the Grand Prix racing crew.

- Inverted LCD with high light output makes the display easy to read at night without any loss of night sight
- Choice of red or green background light separates instruments and allows crew to differentiate key datasets
- Option of two colours for frames - graphite grey and light grey. Allows owner to select a colour scheme that best suits his boat's overall design, both frames included.
- Easy to read lead text ensures that viewers recognize which function is displayed, avoiding potentially costly mistakes
- User defined lead text

These stylish and rugged displays are fully waterproof, capable of withstanding extended, open ocean conditions. Despite their size they weigh just 300 g each.



### NXR steer pilot

The steer pilot is a highly innovative instrument that has proven its value out on the racecourse many times since it was first introduced as part of the NX2 system in 2005. Put in simple terms, this valuable instrument continuously displays to the helmsman the direction in which he should be steering in order to reach a given point in the fastest and most efficient way.

It does this by combining data from the compass, speed transducer and GPS and when required analyses it against a boat's technical specification, most commonly the polars, to determine the fastest route. When the helmsman deviates from that route the needle instantly moves away from the centre line on the display, indicating in the clearest way possible the direction and extent of that deviation. The system updates five times per second, ensuring that there is no time lag between the error occurring and the information being transmitted to the helmsman.

Using the NXR steer pilot quickly becomes second nature to the helmsman, and will hold his concentration for extended periods without becoming tiring or straining his vision. Meanwhile the navigator can update the parameters at the navigation workstation at any time and the new optimum course will instantly be indicated on the instrument without any need for the verbal transmission of complex instructions.

As well as indicating the fastest point of off-wind sailing, the steer pilot can also be programmed to indicate;

- Deviation from a compass course
- Deviation from a pre determined apparent wind angle
- Course to waypoint, with or without compensation for drift





## AURELIA DITTON - TURNS SAILING INTO ART

**Lia Ditton seeks freedom and adventure, both in sailing and in art. When, as a 19-year-old, she left England to learn to carve stone she ended up in a yacht race in Thailand. She has now completed two solo trans-Atlantic races, as well as a number of art exhibitions with themes linked to her favourite interests – the sea and sailing.**

Lia, or Aurelia as she's really called, belongs to a small but growing group of young British solo sailors. With Ellen Macarthur as her role model, and an upbringing in a family that loves sailing, perhaps it's not so surprising that Lia is now a full-time sailor.

"I'm on Guadelope in the West Indies, after sailing solo in the Route du Rhum race. It took 23 days to sail from St Malo in France," says Lia. "I came second, I had hoped to win, but bearing in mind that three boats had to pull out this year I'm pleased anyway."

It's been possible to follow Lia's days on board via her website, [www.aureliaditton.com](http://www.aureliaditton.com). This is how she describes crossing the finish line:

"The line crossing; the end, is never quite what you imagine or have been imagining for the twenty something days at sea. Suddenly people, conversations and activity are moving at a hundred miles an hour and you are climbing out of your foul weather gear at the dock side and spraying champagne and being thrown in the water, with a cluster of people that you don't know and haven't met, but who have been following you, clambering 'What was it like, what was it like?!' At some point later you wonder if anyone would notice if you crept back on board and crawled into the bunk with a muesli bar and went to sleep; sleep being the most delicious thought on your mind; sleep having been afforded last who knows when."

Before starting to sail full time, Lia began an art degree at the renowned Chelsea College of Art in London. It was as a student from this school that she travelled to the Far East to learn more about stone carving. Her curiosity about life meant that she ended up in Phuket one night; a night that turned out to be the one before a large regatta. She applied for, and was given, a place onboard one of the racing boats, and then sailed the regatta - plus the transport sailing from Thailand, across the Indian Ocean, through the Red Sea, the

Suez Canal, the Mediterranean and home to England! The journey took seven months.

Then she headed off to the West Indies, and lots of races. In other words, it took a while before she was back at college to finish her degree. "I'm a person who would rather say yes than no. You have to take the chances you get in life and sometimes you have to create them yourself," she says.

One of Lia's projects that attracted attention took place in London in the summer of 2006. The idea behind "One Woman, One Boat & the Sea" was to "recreate" an Atlantic crossing as art. She placed a 12-metre long and nine-metre wide trimaran close to the Tate Britain, London. For 28 days, Lia lived in the middle of London onboard the boat "Shockwave," the same boat in which she completed the solo trans-Atlantic race OS-TAR in 2005. Sailing across the Atlantic also took 28 days.

The exhibition's artistic aim was to examine the relationship between a boat and its skipper, and each day she wrote in her blog from the onboard computer. But "One Woman, One Boat & the Sea" was also a way of providing visitors with an opportunity to meet a solo sailor close up. A ramp was constructed next to the boat and every day there were 40-50 visitors who wanted to chat a bit with Lia.

"When I sail I want to experience solitude and become close to nature. During the exhibition I was anything but alone, apart from at dawn when I sometimes climbed up the mast and enjoyed the sunrise over London."

Naturally, the contrast between Lia's life onboard the boat in London where an unknown man, tipsy from a night at the pub, could knock on the hull, and her lonely life out on the sea is enormous. This is what she wrote during the twenty-first day out at sea in the last Route du Rhum:

"I am rolling up the jib and about to unfurl the larger Code 0, when there is a breathing sound off the starboard beam. I turn on the full beam on my head torch, but there is no visible jet of water or ripple to note. It is pitch-black. Back into darkness, the creature exhales again, now much closer, near the stern. I pause. He is eerily close. As I walk up the deck on the port side to check that the sheets are clear and free to run, what I think is a whale, is now on the port side.

When the Code 0 unfurls we begin to slip away, and it is my turn to breathe out."

# NEXUS NX2 SYSTEM

## For maximum precision

Analogue instruments continue to play a vital role in navigation due to the immediate impact that they have on the visual senses, but in the modern world digital displays provide the majority of information to racing sailors. Only they can supply the level of precision needed to monitor minute changes in important variables, often down to as little as one hundredth of a unit. The Silva NX2 system takes this advantage a stage further by linking all its digital instruments via a network. The result is that when the operator wishes to change trim values, activate lighting, clear the trip metre or to calibrate instruments, he only needs to reach for the nearest digital instrument, key in the new settings, and the other instruments on the network receive the information simultaneously. Another important advantage is the ability to manage waypoints. Enter or select your waypoints from anywhere onboard; at the wheel or helm, at the navigation table or on the flybridge.

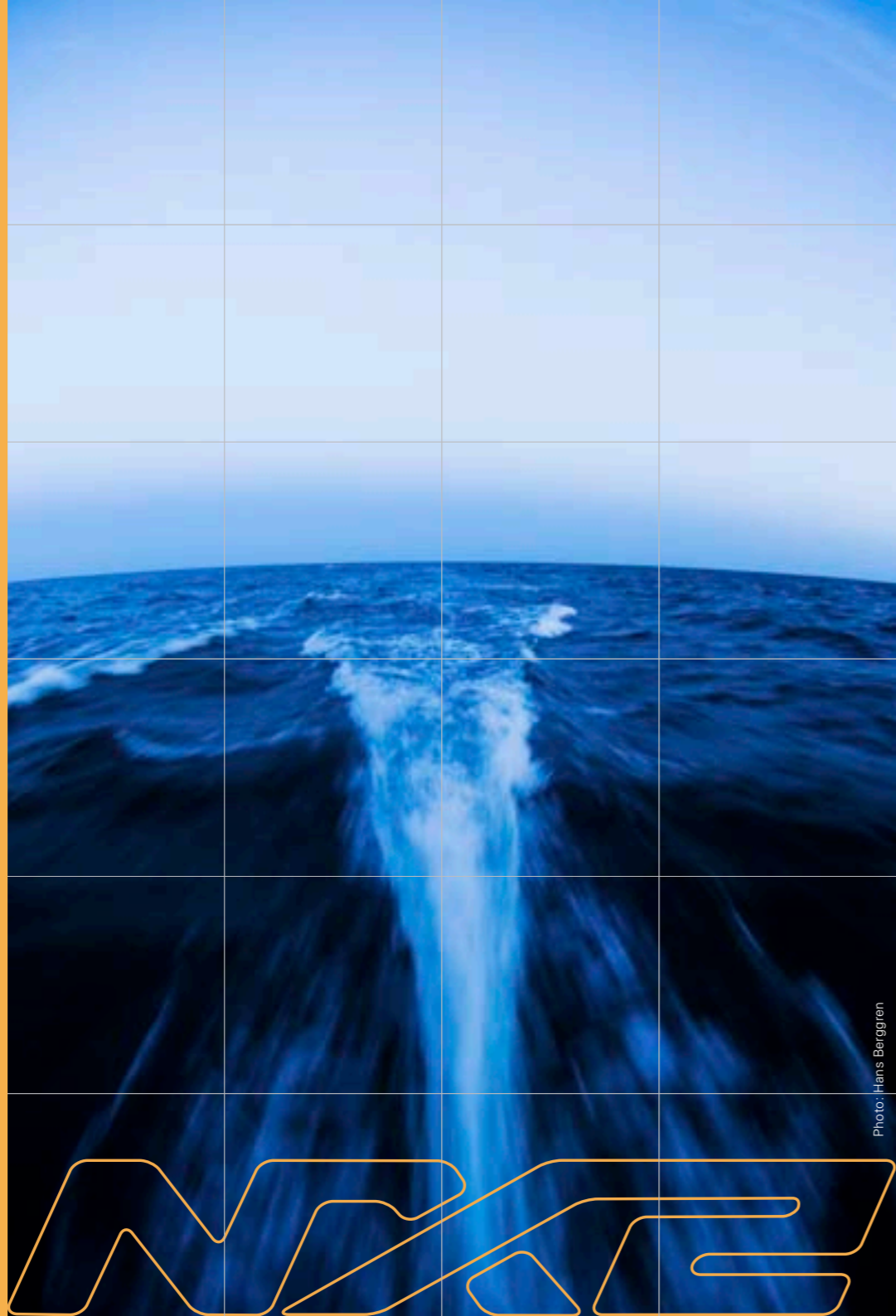


Photo: Hans Berggren

# THE NEXUS NX2 SYSTEM



## Optimal function, readability and quality

The word Nexus is Latin for connection, summing up exactly what Silva NX2 is all about. The network has been designed to connect three groups of core components in the most effective way possible.

## Instruments

There are sixteen: seven digital, nine analogue, and a remote control. These instruments display the wide range of data available through the NX2 system, in real-time and via clear, easy to read graphics.

- Frame design with softer, more appealing lines.
- Displays feature a 15% larger surface and larger characters, resulting in 50% improved readability in daylight.
- Lighting and display technology allows 100% improved readability in darkness.
- Light frequency (630 nm), has a minimal effect on night vision.
- More distinct symbols for analogue instruments.
- Pushbutton system for even easier and faster operation.



## Server

A marvel in miniature. The server is the brain of the instrument and forms the core of the system; receiving information from the transducers and other inputs, analysing it, and sending the results to the instruments. It also acts as an intelligent connection box for the transducers and instruments, enabling the connection of other compatible units, regardless of make, via the NMEA port.

- Built-in port for PC connection, using a standard PC cable.
- Powerful interface, makes it easier to integrate NX2 with the latest models of PCs.
- Choose between NMEA or FDX protocol.



## Transducers

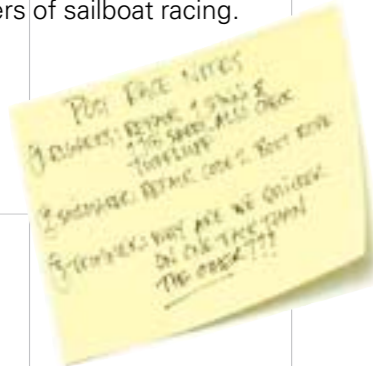
5 options: Log, Depth, Wind, Compass and GPS.

- Connections which require no screws, making installation, cleaning and maintenance easier.
- Cable couplings, which can be connected without preparation.

**Connect your NX2 Server to your Laptop - a new unique racing instrument!**

**Maximum racing performance at no extra cost!**

The new NX2 Server with FDX (Fast Data eXchange) protocol opens the door to laptop convenience. FDX, together with the Nexus 'NX2 Race' software, increases the speed at which the information flows through the network by up to 10 times. FDX extends the frontiers of sailboat racing.



With information input direct from the network, your laptop will update just as fast as the NX2 instruments, and with the added advantage that you can alter settings, calibrate and auto-deviate the compass, and much more, all from the convenience of the navigation station using a keypad and full-size screen. Difficulties in calibrating wind-speed and wind-angles are a thing of the past – the unique Nexus software does the job for you!

Nexus has created partnerships with a number of leading sail racing and tactician software developers who have embraced the FDX protocol. This enables the user to choose the software that is best for them, opening the gateway to maximum performance and gaining access to continuous calibration and much more. Visit our home page [www.nexusmarine.se](http://www.nexusmarine.se) for more information!

Look at some of the advanced calibration functions that are now easily accessible

- Compensation of wind angle for up-wash and mast-twist when sailing close hauled.
- Compensation of wind-speed during downwind sailing.
- Individual calibration of boat-speed (log-transducer) for starboard and port tacks
- Compensation for tide wind (current and leeway) for true geographical wind direction

**Steer by the needle**

**Find your optimum course for running**

The NX2 Race software continuously receives wind, speed, and heading data. The server takes that information and where available combines it with the information in a boat's polar diagram to find the angle to the wind that the boat must sail to reach the leeward mark in the fastest and most efficient way. The course that the helmsman needs to steer to maintain that wind angle is calculated and used as the reference for the Steer Pilot. So, when the wind conditions change, the Steer Pilot immediately indicates the new course.



Polar diagram

Steer information



Steer Pilot

**Nexus NX2 Multi Control**

The most flexible of the NX2 instruments, the Multi Control can display all the data sent out on the network and can even function as a remote control for the other instruments.

The NX2 Multi Control is powerful yet simple, with remote control functionality for accessing regularly required information and enabling the set-up of all the other instruments on the network. The NX2 Multi Control also allows access to the advanced navigation and performance functions that relate to the unique configuration of an individual boat. Whether the information is to be displayed on a regular NX2 instrument or a Multi XL display, it can be accessed effortlessly day or night with breathtaking ease - but the really smart part is the amount of information that can be accessed and viewed at any one time...

All digital NX2 instruments are equipped with the new "silver back display" which provides extremely high contrast. All NX2 instruments have illuminated displays and push buttons available in three levels.



**SPECIFICATIONS DIGITAL INSTRUMENTS**

- Weight:** 260g
- Enclosure:** Waterproof
- Power supply:** 12V DC (10-16V)
- Current consumption:** 9mA at 12V

**SPECIFICATIONS MULTI XL**

- Weight:** 320g
- Enclosure:** Waterproof
- Power supply:** 12V DC (10-16V)
- Current consumption:** 8mA at 12V



**Nexus NX2 Multi Control**

Multi-Control is included in the various start packages: Multi Control with server and Multi Control with server, log and depth transducer.

Art.No. 22117-3, NX2 Multi Control

Art. No: 22118-31, Incl. Server, 8m cable (200kHz)

Art. No: 22118-21, Incl. Server with Speed Log and Depth Transducer (200kHz) TH52mm (see pages 19+24)



**Nexus NX2 Speed**

Displays following functions:

- Boat speed
- Depth
- Trip distance
- Total distance
- Average speed
- CMG/DMG <sup>1</sup>
- BTW/DTW <sup>1</sup>
- Start timer

Art. No: 22117-1 NX2 Speed Instrument

Art.No 22118-11, NX2 Speed incl. transducer TH52mm

See Transducer on pages 20-22

<sup>1</sup> Requires Server and transducers



**Nexus NX2 GPS Navigator**

The NX2 GPS Navigator is one of the most versatile on the market. It can be used as a stand-alone unit, as part of the network, or with other GPS systems via the NMEA-port in the server. This NX2 instrument is unique in that it enables the user to create, edit or select waypoints from any onboard NX2 GPS instrument

Art. No: 22117-6, NX2 GPS Navigator

Art. No: 22118-6, With GPS antenna, 10m (32.8ft.) cable



**Nexus NX2 Autopilot**

The autopilot instrument monitors the NX2 Autopilot. It allows the user to select a range of autopilot steering references including: compass heading, wind direction, bearing to waypoint and rudder steering. (Silva Remote Control can even steer the NX2 Autopilot independently).

Art.No. 22117-7, NX2 Autopilot



**Nexus NX2 Compass**

- Heading
- Steer memory
- External trim button
- Steer BTW <sup>1</sup>
- Steer CTS <sup>1</sup>
- Steer wind <sup>1</sup>
- Boat speed <sup>2</sup>
- Course and distance made good <sup>2</sup>
- Trip distance <sup>2</sup>
- Battery voltage
- Total distance <sup>2</sup>
- Off-course Alarm

Art. No: 22117-5, NX2 Compass

Art. No: 22118-5, With Compass Transducer 35°

<sup>1</sup> Requires Server and transducers

<sup>2</sup> Requires Log transducer



**Nexus NX2 Wind Data**

- Digital and analogue readings
- True wind speed <sup>1</sup>
- Apparent wind speed
- Boat speed (over ground or water) <sup>1</sup>
- Target boat speed. PC required <sup>2</sup>
- True wind angle <sup>1</sup>
- Apparent wind angle
- Geographical wind direction <sup>2</sup>
- Trip distance <sup>1</sup>

Art. No: 22117-4, NX2 Wind Data

<sup>1</sup> Requires Log transducer

<sup>2</sup> Requires Server and transducers

**Big is beautiful - the NX2 Multi XL mast display**

The NX2 Multi XL is totally flexible and it can be geared to suit all requirements from One Design and Rating fleets to Maxis and major cup contenders. Access to the Multi XL functionality is via the NX2 Multi Control, allows rapid access to regularly required information and enables changes to the set-up of all the instruments. The NX2 Multi Control also provides access to the advanced navigation and performance functions that relate to the unique configuration an individual boat. Whether it is a regular NX2 instrument or the new Multi XL display, information can be accessed effortlessly day or night with breathtaking ease - but the really smart part is the amount of information that can be accessed and viewed at any one time...

The Multi XL is a fully programmable, large digit display which can be installed anywhere and configured to display any function available from the NX2 network. The Multi XL is provided with a smart initialisation function to facilitate the installation and set-up of the system. Choose from any of the 35 pre-configured settings or make your personalised page with the unique copy and paste function. The pre-configured settings can be selected through a NX2 Multi-Control or Remote Control. Three brightness levels allow you to adjust the intensity to suit prevailing conditions.

Art. No: 22308-1, Multi XL instrument

**Option**

Mast bracket in carbon fibre for Multi XL or other NX2 instrument.

Art. No: 69995-1, Bracket for one instrument, weight 270g

Art. No: 69995-2, Bracket for two instruments, weight 510g

Art. No: 69995-3, Bracket for three instruments, weight 720g

Art. No: 69995-4, Bracket for four instruments, weight 980g



**MULTI XL**

- Boat speed
- Depth
- Apparent wind angle
- Heading
- SOG/COG
- Average speed
- Shallow alarm
- Apparent wind speed
- Course made good
- Position
- Target boat speed
- Deep alarm
- True wind angle
- Distance made good
- BTW/DTW
- External trim button
- 1-10 min start timer
- 1 min intervals
- Anchor alarm
- True wind speed
- Current set
- XTE
- External MOB
- Geographic wind
- Current drift
- WP closure velocity
- Elapsed time
- Velocity made good
- Course on next tack
- ETA/TTG
- Trip distance
- Steer wind
- Steer memory
- Steer BTW
- Battery Voltage
- Total distance
- Off course Alarm
- Steer CTS
- Water temperature
- Arrival alarm
- MOB



## NEXUS NX2 ANALOGUE

### Nexus NX2 Steer Pilot

This is our most interesting and effective analogue instrument, drawing information from the electronic compass, water-speed sensor and the GPS to create one single piece of critical data represented by the needle! The Steer pilot enables the helmsman to steer to an exact course using updated steering information refreshed 5 times every second by the NX2 server. The instrument needle instantly indicates the smallest deviation from the intended course or preferred wind angle.

The Steer Pilot can also guide the helmsman to steer by the needle using the data from a Polar Diagram as reference. On a downwind course, the Steer Pilot enables the helmsman to steer the optimum course for the best VMG, refreshing the data five times per second.

So, how do I use it? It'd really very easy. With a steering wheel, imagine that the instrument needle is connected by an invisible wire to the centre of your wheel. When the deviation appears, just turn the wheel as if it was connected to the needle, back to a straight up position, it's that easy!

With a tiller, imagine that the end of the tiller is "fixed" at the tip of the needle and that you can pull the needle back to its straight up position just by "dragging" it there, it just works! After a few minutes training you will be able to steer your boat in a straight line without even thinking! you could pull the needle back to its straight up position just by "dragging" it there, it just works! After some minutes training you will be able to steer your boat in a straight line without even thinking!



#### Nexus NX2 Steer Pilot

You can select your steering reference from several options:

- Compass steering (up to 2 course memories)
- Apparent wind angle to follow wind shifts
- Waypoint steering (BTW) without compensation for drift.
- Course to steer (CTS). Same as BTW but including compensation for Drift

Art.No. 22115-02, NX2 Steer Pilot

#### SPECIFICATIONS ANALOG INSTRUMENTS

**Weight:** 260g  
**Enclosure:** Waterproof  
**Power supply:** 12V DC (10-16V)  
**Current consumption:** 40mA at 12V

## NEXUS NX2 ANALOGUE



### Nexus NX2 Speed Trim

The NX2 analogue Speed Trim instrument displays the difference in speed since the last trimming. It can be operated from a Remote Control instrument, Wind Data.

#### Monitor the change in:

- Boat Speed
  - True wind speed
  - Speed over ground
  - Apparent wind speed
  - VMG
  - Speed of current
  - WCV
  - Target boat speed
- Target boat speed must be calculated and transmitted from a PC.

Art.No. 22115-03, NX2 Speed Trim



### Nexus NX2 Wind

The NX2 analogue Wind angle instrument displays true and apparent wind angle. Fields are clearly marked in red and green allowing for superior readability, especially during night navigation. The scale and display is illuminated.

Art. No. 22115-01, NX2 Wind



### Nexus NX2 Speed

Displays an easily read indication of the current boat speed in knots: 0-16 knots for sailboats, 0-50 knots for power boats.

Art.No. 22115-05, NX2 Speed (0-16kts)

Art.No. 22115-06, NX2 Speed (0-50kts)



### Nexus NX2 GPS Course

The NX2 analogue GPS Course repeater displays heading over ground from a GPS receiver, allowing for superior readability and heading presentation. A sensitive 360° needle gives you an accurate and stable compass heading.

Art.No. 22115-13, NX2 GPS Course



### Nexus NX2 Compass

The Nexus NX2 analogue Compass repeater and compass heading displays have superb readability. A sensitive pointer on the 360° scale gives an accurate and stable compass heading.

Art. No. 22115-10, NX2 Compass



### Nexus NX2 Depth

The Depth instrument gives an easy to read display of the true depth in metres or feet. The logarithmic scales show shallower sections more clearly.

Art.No. 22115-07, NX2 Depth (0-200m)

Art.No. 22115-08, NX2 Depth (0-600ft)



### Nexus NX2 GPS Speed

The NX2 GPS Speed repeater gives easy on the eye readings of boat speed. Two scales are available, 0-16 knots for sailboats and 0-50 knots for power boats.

Art.No. 22115-11, NX2 GPS Speed (0-16kts)

Art.No. 22115-12, NX2 GPS Speed (0-50kts)



### Nexus NX2 Rudder

Together with NX2 Autopilot, a rudder position instrument can be used to give precise information about the rudder angle. A great benefit, for sail racing and manoeuvring in harbours.

Art.No. 22115-09, NX2 Rudder

## NX2 SERVER

The new NX2 Server with FDX (Fast Data eXchange) protocol opens the door to laptop convenience. FDX together with the Nexus software "NX2 Race" increases the speed of information delivery by up to 10 times. The new FDX extends the frontiers of sailboat racing.

With information direct from the network, you can experience the same fast update rate on your laptop as is standard on NX2 instruments. Now, from your laptop, you can adjust settings, calibrate and auto-deviate the compass. Difficulties in calibrating wind-speed and wind-angles become a thing of the past – the unique Nexus software does the job for you!



### NX2 Server

The NX2 Server functions as a terminal station for the Nexus Network to which all transducers, NMEA input and output are connected. Furthermore, the Server has outputs for external M.O.B. (Man Over Board) and trim buttons and an external alarm. All screw terminals are clearly marked for easy installation. The NX2 unique plug wiring system enables a tidy and clean installation below deck with no excess cables.

### SPECIFICATIONS

<b>Dimensions:</b>	110x165x30 mm (4.3x6.5x1.2")
<b>Weight:</b>	220g (7.8oz)
<b>Enclosure:</b>	Splash proof
<b>Cable:</b>	RS-232 cable and Serial to USB converter, power cable
<b>Power supply:</b>	12V DC (10-16V)
<b>Current consumption:</b>	27mA at 12V
<b>Communication in:</b>	Nexus Network, NMEA and NMEA/FDX
<b>Communication out:</b>	Nexus Network, NMEA and NMEA/FDX

Art. No. 22120-11, NX2 Server for 200kHz depth transducer





## THE CARIBBEAN - HERE WE COME!

**Most sailors' wishlists include an Atlantic crossing. This dream is to become reality for the crew of Lotta, a German Luffe 48, thanks to a generous owner and active sailing associations. They are on the Canary Islands, gearing up for the highlight of their adventure, the Atlantic Rally for Cruisers.**

The Atlantic Rally for Cruisers, the ARC, is a trans-Atlantic crossing that combines relaxing long-distance sailing with a gentle form of racing. Each year more than 1000 sailors, onboard a total of more than 200 yachts, depart from Las Palmas on the Canary Islands to Guadelope in the French West Indies.

"We are looking forward to the ARC, but Lotta will be sailed backwards and forwards over the Atlantic in a square. From Germany to the Canary Islands, across the Atlantic, up to New York and then back to Germany. Therefore we have christened our project the Atlantic Square," says Rolf Schomburg, Lotta's skipper during the ARC race.

At the beginning of November the marina at Las Palmas is lively and very crowded. Many of the 224 yachts have extra large fenders so that they won't be scraped to pieces while they are in port preparing for the ARC. With only a few days to go until the start there are lots of things to do.

Rolf and his crew from Kieler Yacht Club and Flensburger Segeln Club feel well prepared.

"We reckon on the crossing taking 14 - 15 days," he says. "Even if not everybody on the crew has experience of long stretches at sea they have all gone through proper training, both theoretical and practical."

The requirements for getting a place onboard Lotta are membership in one of the two German sailing associations, Kieler Yacht Club or Flensburger Segeln Club, as well as preferably having completed the clubs' Youth Programme. This includes sailing keel boats, alternated with theoretical instruction in navigation, safety, boat skills etc. Kieler Yacht Club's Youth Programme started way back in 1925, which means that Lotta's oldest crew member in this year's ARC race is 65 years old.

"I have been active on the Youth Programme myself," says Rolf Schomburg. "That was how I started sailing, 'learning by doing'. Then I became a leader and now I'm skipper on a trans-Atlantic sailing. It's my way of giving something back to the club, at the same time as it being a great holiday."

The boat, a fast, easy-sailing Luffe 48, has been made available to the Atlantic Square project by its owner. In this way, Lotta's owner has generously made it possible for the clubs and the Youth Programme to carry out this project. In return, the owner and his family have the chance to sail the boat for a few weeks while it is in the West Indies.

"We carried out a similar project four years ago, and it went very well," says Rolf. Back then it took several years to plan and carry out such a large project, with lots of legs and crew changes.

"The experience and the structuring that we gained there have been of great benefit now. We started planning Atlantic Square a year ago."

The project has created its own website, where they publish stories about the trips and pictures from the different legs of the route. The site is well-visited by the clubs' members and many youngsters that are active in the Youth Programme see the chance that it might be their turn one day.

"Apart from the watch rotation, each crew member has tasks to carry out according to a timetable. These could be cleaning, checking the various systems, washing up, steering, navigating. And, of course, if someone wants to fish then that's fine too."

The trans-Atlantic sailing from Las Palmas can start in everything from very light winds to strong trade winds. A few days out from the Canary Islands the winds are generally light, sometimes there is a dead calm.

In order to reach the West Indies as fast as possible the route choice is between going a long way south towards the Cape Verde Islands, and probably finding more wind, or the short route straight across, with the risk of being becalmed. The closer to the West Indies you get, the more the silky smooth trade winds help out.

When land can be seen on the horizon, after two weeks at sea, the trade winds start to blow at full strength. Those who have a good crossing can enjoy everything from starry heavens and hot sunshine to meetings with whales, dolphins and flying fish. For others, the ARC can be something of a nightmare. Intrigues onboard are usual for those lacking experience of long-distance sailing. A badly prepared boat can be shipwrecked.

"I don't think there'll be any problems," says Rolf. "Yes, I've experienced conflicts onboard, but if you manage them in the right way they usually pass after a couple of days."

## NX INSTRUMENTATION - INTRODUCTION

### The new NX range – instruments for sail and power

You may not be out on the racecourse every weekend, but you still deserve the very best in marine instrumentation. For too long the racing boats have had the monopoly on stylish designs, top quality displays and the latest in computer and networking technology, but no more! The Nexus NX instrumentation system offers cruising yachtsmen an entry-level system that combines precision, elegant styling and top quality displays with a flexibility that allows your system to grow with you as your needs and ambitions develop over time.

While the NX system has a race boat pedigree the system is designed to be quick to set up and simple to operate. Cabling has been kept to an absolute minimum – and done away with altogether as far as the wireless wind transducer is concerned – to keep installation as easy as possible.

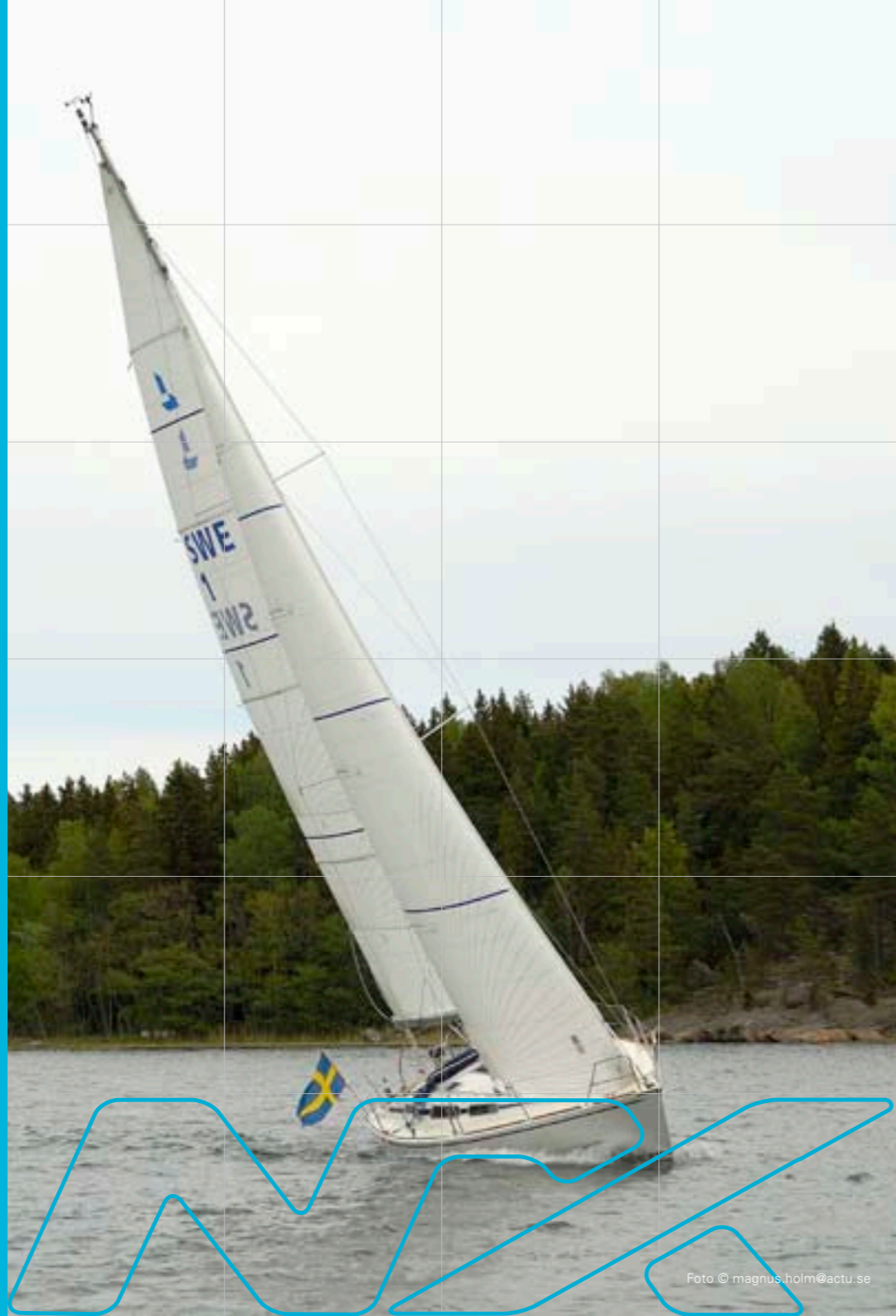


Foto © magnus.holm@actu.se

**NEXUS**  
Passion for Performance™

## NX INSTRUMENTS

### Watch your system grow as you do.

Start with a single Sea Data display and log transducer that gives you just boat speed and distance run, and then add additional capabilities as your needs change. Installing the compact WSI connection box enables you to connect additional individual, combi and wind transducers, with all the information transmitted by a single cable to a single or, if you choose, multiple multifunction Sea Data instruments on deck or at the chart table. The NX Wind Instrument adds the final touch, displaying true and apparent wind data in digital and easy-to-read graphical form.

### Information at your fingertips

Switch between depth, speed and wind angles at the touch of the button. The stylish Sea Data instrument will display any of the information generated by the system in large, clear digits. Select the data that suits your needs at a particular time quickly and simply using the buttons and menus on the Sea Data. It could not be simpler.

### Transducers

The NX system offers a range of 43 mm and 52 mm transducers to suit every need. Separate log / water temperature, depth and wind transducers are all available, as are combined log / temperature / depth units in both through-hull and transom mounted configurations. The wireless wind transducer is quick and simple to install, and its solar powered rechargeable and replaceable batteries have a four-year life. The system is also compatible with existing Silva Star transducers

The NX system offers two, versatile displays to meet all the needs of the cruising navigator; the digital multifunction Sea Data and the digital / analogue Wind Instrument, for maximum convenience and flexibility.

#### 22910-1 Sea Data Instrument

The days of having to buy costly individual displays to show speed and depth and wind speed are well and truly over. Users of the NX instrumentation suite instead have in the stylish and rugged Sea Data a single instrument that does it all. All the operator has to do is simply toggle through the options to select his priorities using the buttons on the face of the unit.

The large, easy-to-read display shows two sets of data at any one time using a large, primary read-out together with a second, smaller format. These can be quickly changed as required, and additional units can be added by owners who wish to view multiple data sets together or in separate locations such as on deck and at the chart table.

The Sea Data can be connected directly to 43mm and 53mm speed and depth transducers, while additional functionality is provided by connection to the WSI connection box, a compact server that acts as the data hub for log, depth, temp and wind transducers and sends the information in real time to the Sea Data by a single cable.

With just the log and depth transducers connected the Sea Data will display speed, depth and distance run, plus water temperature where the transducer allows. It also incorporates a start timer, and deep and shallow water alarms. With the addition of a wind transducer the highly versatile Sea Data will also display apparent wind angle and speed, and true wind angle and speed.



#### 22920-1 Wind Instrument

The NX Wind Instrument brings a new layer of functionality to the NX instrumentation system, allowing both the digital and analogue display of wind data on a single unit. In large, clear digits the Wind Instrument displays apparent wind speed and angle, and true wind speed and angle as calculated by the WSI, while at the same time showing the same information in analogue format for instant appraisal by helmsman and navigator. Stylishly designed and built to withstand the toughest marine environments, the Wind Instrument enables the Nexus NX to demonstrate its full potential as a versatile capable instrumentation system.



# NX PACKAGES

At Nexus we have put together a series of NX packages designed to meet every need and ensure that the buyer has all he needs to get going. Just decide what information you want to see and what type of transducers you prefer, and we will do the rest.

And don't forget, if you want to add additional displays and transducers in the future to your current package – there's nothing simpler!

## 22910-52 Sea Data log, with Log / Temp transducer TH52, 8m cable

A basic NX2 package comprising a Sea Data multifunction instrument together with a 52mm log and temperature transducer. The Sea Data displays;

- Speed,
- Distance run
- Sea temperature
- Start timer.



## 22910-43 Sea Data log, with Log / Temp transducer TH43, 8m cable

As for 22910-52 above, but with a 43mm log / temperature transducer



## 22911-52 Sea Data Set 1 with Tri-transducer (log, depth and temp) TH52

Do you prefer the convenience of a single transducer? This NX instrumentation package comprises a Sea Data multifunction instrument plus WSI connection box and 52mm Triducer. In this configuration the Sea Data is connected by a single cable to the WSI connection box, with a second cable leading from the WSI to the Tri-transducer. The system displays;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms



With the WSI connection box, the package is ready to accept the wireless wind transducer (available separately – part no. 22922) should the user choose to upgrade

## 22911-43 Sea Data Set 2 with WSI-box and 43mm log and depth transducers

For those owners who may already have dual transducer apertures in their hulls, this NX instrumentation package brings together the Sea Data multifunction instrument and individual log / temperature and depth transducers, together with a WSI connection box. The Sea Data displays;

- Speed
- Distance run
- Depth
- Sea temperature
- Start timer and deep / shallow alarms

The package is also ready to accept a wireless wind transducer (available separately – Art. No. 22922).

## 22912-3 NX Sea Data Combi, with transom transducer (Log / Temp / Depth) 8+4m cable

Ideal for smaller boats and RIBs where a through-hull transducer would be unsuitable, this NX package contains a Sea Data multifunction display, WSI connection box and the transom mounted Combitransducer. The following data is available for display;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms.

The package is ready to accept a wireless wind transducer (available separately – Art. No. 22922).

## 22921-1 NX Wind Instrument with WSI box and wireless wind transducer

The basic wind measurement NX package. The wireless wind transducer sends data via a unique radio link to the WSI connection box, which processes the information and then sends it via a cable for display on the NX Wind Instrument. The instrument will display in digital form;

- True wind speed
- Apparent wind speed
- True wind angle
- Apparent wind angle

The NX wind Instrument will also display either true or apparent wind angle in analogue form to give a graphical representation of the wind angle relative to the direction in which the boat is travelling.

# NX PACKAGES

## 22931 NX Start Pack 1

This start pack provides everything that the boat owner needs to monitor the key navigational variables of wind, depth and speed. At the core of the system lies the WSI connection box, receiving by cable from the Triducer real time data on depth, boat speed and water temperature. At the same time the WSI receives via a wireless radio link wind speed and direction from the wireless wind transducer. The information is then processed and sent via a single cable to a Sea Data multifunction display, where the user can select his preferred combination of data readouts. The information available is;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms
- True wind speed
- Apparent wind speed
- True wind angle
- Apparent wind angle



## 22933-52 NX Start Pack 3

The NX start pack 3 gives the user a comprehensive NX system to the user who requires continuous data on the wind conditions at the same time as he monitors a variety of other data. The start pack provides both a Sea Data multifunction instrument and an NX wind instrument, enabling the user to monitor both the wind conditions and a selection of other data such as speed or depth at the same time.

The WSI connection box gathers and processes all the information collected from the transducers and then transmits it via a single cable to the Sea Data instrument and then to the Wind Instrument. The start pack comes with two transducers; a triducer which gathers information on speed, depth and water temperature at a single point, and a wireless wind transducer which sends its information to the WSI connection box via a unique radio link. The information available from this system is as follows;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms
- True wind speed
- Apparent wind speed
- True wind angle
- Apparent wind angle



## 22932 NX Start Pack 2

The NX Start Pack 2 combines a Sea Data multifunction instrument, WSI connection box and wireless wind transducer with a 43mm log and temperature transducer and a 43mm depth transducer. This is ideal for the user who prefers to use two transducers, or who already has the necessary skin fittings in his hull. With the WSI connection box collecting and processing the data that it receives from the three transducers, the Sea Data instrument can be set to display a combination of the following;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms
- True wind speed
- Apparent wind speed
- True wind angle
- Apparent wind angle



## 22933-43 NX Start Pack 4

The complete NX system in a convenient package - the NX start pack 4 provides both a Sea Data and Wind Instrument together with a WSI connection box connected by cable to a 43 mm depth transducer and a 43 mm log / water temperature transducer. A wireless wind transducer communicates with the WSI via a unique radio connection.

The WSI connection box is connected by a single cable to a Sea Data multifunction instrument and an NX wind instrument, allowing the user to view a comprehensive series of data at the same time. This package is designed for boat owners who either prefer to use separate log and speed transducers, or whose boats are already configured with the necessary skin fittings. The information available from the system is as follows;

- Speed
- Distance run
- Depth
- Water temperature
- Start timer
- Deep / shallow alarms
- True wind speed
- Apparent wind speed
- True wind angle
- Apparent wind angle





## NEXUS SUPPORT TEAM - RACE SUPPORT WHEREVER YOU ARE

**Mathias Hellgren has an eye for detail in all that he does, both at work and when he goes sail racing. And when he packs his sailing bag in preparation for yet another regatta there is one thing that he never forgets; the red shirt that bears the words 'Nexus Race Support'.**

"The race support is incredibly valuable. Not only to the sailors who receive on-the-spot assistance with their instrument systems, but also for Nexus as we receive real time feedback from the people who really use our products."

Mathias is the Race Specialist at Nexus Marine and part of the company's International Race Support Team. This consists of specialists that Nexus has appointed in most of the major sailing nations around the world, including Australia and New Zealand. Their mission is to be on location at all the major regattas, and each season they attend around 100 sail racing events.

"Having our Support Team on location alongside the sailors is vital," says Mathias. "However good the systems and manuals are, nothing beats having someone beside you who can talk you through all the settings, answer your questions, and really help you get the best out of your Nexus equipment."

Mathias and his colleagues travel to the regattas, go onboard the boats, listen to the skippers and navigators and advise them on how to ensure that they are getting 100% out of their systems."

"Often only a few clicks through the menus and settings is all that is needed to solve most issues."

The most common question Mathias gets asked is, "Why does the wind transducer give different values on different tacks? Even though the boat seems to sail as close to the wind on both starboard and port tack, the instruments may show, for example, 24 degrees (starboard) and 26 degrees (port)."

"The wind instrument takes the longest to calibrate," Mathias explains. "You must first align the transducer at the mast top correctly, but even then you still have to consider the effects of mast twist, wind sheer and up-wash."

Wind sheer is the change in direction of the wind that occurs between the top of the mast and the sails 'pressure point'. Up-wash is what occurs when the wind hits the mast and sails, resulting in a slightly different wind angle on each

tack, even though the calibration and mounting are correct.

"Nexus is unique in the market in having the calibration function TRUE® which automatically compensates for the wind sheer, mast twist and up-wash. With that function activated, the instruments display the same values on both tacks," explains Mathias.

Mathias loves his at work as he gets to combine his career with his chief passion – sailing. He spends a lot of his time out meeting other sailors, and when he does make it back to the Nexus HQ during the week he works in the group contributing to the improvement and new products to Nexus R&D.

"Meeting with sailors is key to being able to contribute to new products. Keen racers that push the equipment to its limits bring a fresh perspective and always have views on what can be done to take the systems on to the next level."

Before Mathias joined Nexus as a Race Specialist he was a professional sailor. He focused on 60 ft trimarans for some years but also built a broad base of racing experience; from dinghy sailing to large monohulls.

One of his major achievements to date was winning the Baltic Sea Marathon in 2003, a 600 nautical mile ocean race, as part of a two-man crew. The race was four full four days in gale force winds. During a long tack the mainsail was torn from the mast and skipper Christian Backhausen and Mathias considered abandoning the race. Neither of them wanted to give up and, as Mathias was the youngest and fittest, it was his job to climb up and sew the sail to the mast.

"Aha," he smiles, "I clung on to the mast as best I could while I worked, and after two hours we were ready and could continue on to the finish."

The glamour of long distance sailing is one thing, but when Mathias sets out to really challenge himself, it has to be either sail racing in a one-design class where all the boats are the same, or the big 60ft trimarans.

"Sailing has so many dimensions. For me a start in a big one-design fleet is something really special. There you are challenged on many levels; speed, manoeuvres, tactics, rules, wind shifts. To sail trimarans is also amazing, but in a different way. The extreme speeds have to be experienced to be believed!"

Mathias smiles again. He seems to be enjoying life.

## NEXUS TRANSDUCERS

### Nexus has left nothing to chance.

Once installed, they are quickly forgotten, but the best displays that money can buy will not make up for low-grade information sent to them by sub-standard transducers. Nexus has always paid special attention to the design and production of its transducer range in recognition of the vital role that they play in any instrumentation network.

The special propeller fitted in the Nexus Wind Transducer allows for extremely low drag, eliminating the whiplash effect and making it more effective and precise than traditional cup designs. The log, depth, compass and GPS transducers also exemplify leading edge design and reliability.

The Nexus system incorporates a range of 43mm and 52mm transducers to suit every need. Separate log / water temperature, depth and wind transducers are all available, as are combined log / temperature / depth units in both through-hull and transom mounted configurations. The wireless wind transducer is a marvel of convenience and accuracy, bringing racing technology to the recreational sailor at a competitive price.



Anonimo Sailing Team

## RACE TRANSDUCERS



### Wind transducer Twin Fin Race in carbon fibre

Our unique wind transducer; the Twin Fin features a three bladed propeller and double wind vanes that are toed in to give extremely good stability in both low and high wind speeds. The three bladed propeller, unlike the more common cups design, is always 100% efficient. That, together with the optic reading technique, makes the transducer superior at low wind speeds and also provides for excellent linearity.

Art. No: 22511, Wind transducer Twin Fin Race



### Ultrasonic Speed Sensor

The ultrasonic speed sensor makes cutting edge, high technology speed sensing affordable. Instead of a paddlewheel, it uses two transducers mounted in one compact housing to detect particles in the water and calculates speed based on their distance apart. The transducer reacts instantaneously to changes in boat speed.

### SPECIFICATIONS

**Frequency:** 4.5 MHz  
**Supply Voltage:** 10-15 VDC  
**Current:** 155 ma @ 12 VDC  
**Speed Range:** 0.1 – 40 knots  
**Hole Diameter:** 52mm  
**Hull Deadrise Angle:** Up to 20°

Art. No. 22997, Ultrasonic Speed Sensor



### MRC box (Mast Rotation Compensation)

Enables compensation for wind angle on rotating masts. Two compass transducers are required, one on the mast (rotating) and one on the boat (fixed). The MRC box compares the bearings from the two compasses and sends the information to the Wind Data instrument where the compensation is made. You can use an already installed NX2 compass transducer.

Art. No: 69980, MRC box



TH43

### Log Transducers

The Log Transducer measures boat speed, distance and water temperature. The unique paddle wheel construction provides very accurate data. Retractable through-hull transducer for easy cleaning of paddle wheel. Dummy plug included.

The Log Transducer is available in two dimensions, 43mm and 52 mm diameter. The 52mm transducer has a built in lock valve to prevent water leakage when cleaning the paddle wheel

### SPECIFICATIONS

**Dimensions:** 92x43 mm  
**Weight:** 320g (11.3oz)  
**Enclosure:** Waterproof  
**Cable:** 8 m (26.2ft)  
**Power supply:** 12V DC (10-16V)  
**Current consumption:** 20mA at 12V  
**Speed range:** 0-30kts (km, mph)  
**Temp. measure range:** -5° to +40°C (23° to +104°F)  
**Accuracy (speed):** ± 1%

Art.No. 20707, Log Transducer TH43

Optional: Art.No. 21154, Paddlewheel high speed, blue, 0-45kts

# TRANSDUCERS

## NX Combitransducer

This transom mounted transducer measures depth, boat speed and water temperature - ideal for small boats and RIBs that prefer not to use through-hull transducers and prefer a single transducer solution. Easy to attach and detach, the Combitransducer is made from glass-filled polyester for strength and durability.

Art. No. 22926 NX Combitransducer

## NX Triducer for Speed, Depth and Temperature

The latest in through-hull transducers, the Triducer requires only a single aperture in the hull to collect three separate sets of data; speed, depth and water temperature. The single fitting reduces drag through the water, saves on maintenance, and maximises the integrity of the hull. The Triducer is made from glass-filled polyester for strength and can be retracted to reduce fouling when at rest. A dummy plug is supplied for fitting when not used for long periods.

Art. No. 22928 Wireless Wind transducer incl. WSI-box

## Wireless Wind transducer including WSI-box

The twin-fin wireless wind transducer brings all the advantages of wireless instrumentation to the cruising sailor. Gone are the complications and aesthetic issues of running wiring from the top of the mast down to the chart table. Instead, the wind transducer establishes a unique pairing using radio with the WSI connection box that forms the core of the NX instrumentation system, ensuring that each transducer / server pairing is distinct from every other. The information is then fed from the WSI connection box to both the NX Sea Data and Wind Instrument.

The twin fin design makes this a highly stable and accurate wind transducer. The internal batteries are continuously charged by a small solar panel mounted on the transducer arm, have a life of around three to four years, and are easily replaced.

Art. No. 22928 Wireless Wind transducer incl. WSI-box

## Wind Transducer Wireless (Spare part and for Sea Data set)

See Wireless Wind transducer including WSI box above. The wind transducer comes without the WSI box.

Art. No. 22922 Wireless Wind transducer

## WSI (Wireless Sensor Interface) Connection Box

The Wireless Server Interface (WSI) Connection Box forms the core of the NX instrumentation system; the central point at which all the data collected from the transducers is processed and then sent down a single cable to the Sea Data and, if installed, Wind Instrument displays. Among its many functions, the WSI combines boat speed and apparent wind speed & angle, to calculate the true wind speed & angle. The WSI communicates directly with the wireless Wind Transducer via a unique radio pairing, and the slim and compact box is quick and simple to install.

Art. No. 22927 WSI-box



## 22409 Depth Transducer TH43 Silva classic 43mm through hull

Measures the water depth. This 43mm transducer can be connected either direct to the Sea Data or to a WSI connection box. Depth can either be displayed as distance from the transducer, or adjusted to show from the surface. Built from durable glass-filled polyester the transducer can be retracted as required to reduce fouling and comes with a dummy plug for long-term storage.

## 22329 Depth Transducer TH52 Silva classic 52mm through hull

As for the 43mm depth transducer, but for a 52mm hull aperture.



# TRANSDUCERS



## Compass Transducer 35°

Low weight fluid damped compass in compact size allows mounting in cramped areas. It can be flush mounted. The compass is auto-deviated from the Multi Control instrument. The ideal powerboat compass.

### SPECIFICATIONS

**Dimensions:** ø108x49mm (4.2x1.9")  
**Weight:** 144g (5.1oz)  
**Enclosure:** Waterproof  
**Cable:** 8m (26.2ft)  
**Power supply:** 12V DC (10-16V)  
**Current consumption:** 35mA at 12V  
**Accuracy:** ± 2.5°  
**Sensitivity:** ± 0.1°  
**Pitch and roll:** 35°

Art. No: 21731, Compass Transducer 35°

Optional: Art. No: 21735-2 Mounting bracket



## GPS Antenna

The compact and water resistant GPS antenna is suitable for a wide range of applications. The parallel GPS receiver is prepared for reception of differential correction data in accordance with RTCM SC-104. It can be mounted directly on the deck, on a pulpit or on a mast using standard mounts. It can be connected directly to NMEA compatible navigation equipment such as PC or Radar.

### SPECIFICATIONS

**Dimensions:** ø108x49mm (4.2x1.9")  
**Weight:** 200g (7oz)  
**Enclosure:** Waterproof  
**Transducer cable:** 10m (32.8ft)  
**Power supply:** 12V DC (6-16V)  
**Current consumption:** 100mA  
**Communication out:** NMEA 0183  
**Receiver:** 16 channel parallel  
**Antenna:** Ceramic patch  
**Position accuracy:** Less than 25 m 95% of the time

Art. No: 21970-3, GPS Antenna

Optional: Art. No: 20992-2, Antenna bracket

## "Twin Fin" Wind Transducer

The unique "Twin Fin" sensitive and responsive wind transducer provides accurate wind speed and wind angle data to the Nexus Network. The three bladed propeller gives superior performance in light winds and the "Twin Fin" toe in the vane makes the transducer extremely stable for wind direction. Easy, snap-in attachment for mast mounting included.

### SPECIFICATIONS

**Dimensions:** 450x300mm (17.7x11.8")  
**Weight:** 295g (10.4oz)  
**Enclosure:** Waterproof  
**Cable:** 25m (82ft)  
**Power supply:** 12V DC (10-16V)  
**Current consumption:** 20mA at 12V  
**Accuracy:** Angle ± 0.5%  
**Speed:** ± 0.5 m/s (kts, bf)

Art. No: 22462, Wind Transducer Twin Fin

Art. No: 22511, Wind Transducer Twin Fin Race

Options: Art. No: 67400-15, Mast top adaptor 15° in aluminum



## Compass Transducer 45°

The gimbal design and the liquid damping systems are of vital importance for the performance. A liquid damped fluxgate sensor ensures unique stability in rough seas - the ultimate test for an electronic compass. The compass transducer is auto-deviated in the Multi Control instrument.

### SPECIFICATIONS

**Dimensions:** 125x140x120mm (4.9x5.5x4.7")  
**Weight:** 650g (22.9oz)  
**Enclosure:** Waterproof  
**Cable:** 8m (26.2ft)  
**Power supply:** 12V DC (10-16V)  
**Current consumption:** 25mA at 12V  
**Accuracy:** ± 1.5°  
**Sensitivity:** ± 0.1°  
**Pitch and roll:** 45°

Art. No: 20860, Compass Transducer 45°

# NEXUS AUTOPILOTS

## THE AUTOPILOT SYSTEM CONSISTS OF FIVE COMPONENTS:

### 1. INSTRUMENT

#### Choose from three instrument control alternatives:

- Fixed control via the Autopilot instrument
- Handheld control via the Remote Control instrument
- Bracket or surface mount control via the Multi Center

#### All instruments control the Autopilot in four steering modes:

- **Compass mode.** Steer to a set compass heading
- **Nav mode.** Steer to a waypoint set by an optional navigator
- **Wind mode.** Steer to a windangle from the optional wind transducer
- **Power steering mode.** Power steer the rudder. May be used to avoid heavy wheel effort when manoeuvring.

All instruments offer a dual display of compass heading and digital rudder angle indicator.



Art. No: 21210-903, Remote Control instrument



Art. No: 22117-7, NX2 Autopilot instrument

### 2. COMPASS

The extremely stable compass provides very accurate steering information. It will guide the Autopilot when you need it the most, in rough weather. NX2 offers a choice of two compass transducers. One for sail boats with a pitch and roll of 45°. The other for power boats with a pitch and roll of 35°.



Art. No: 20860, Compass transducer 45°



Art. No: 21731, Compass transducer 35°

### 3. SERVO (DISTRIBUTION) UNIT A-1510

The course computer and interconnection terminal for all components.

- Automated functions include compass compensation, installation set up and parameter adjustment
- Unique "soft start/stop" function to reduce mechanical wear, reduce power consumption and lead to smoother handling
- Transmits and receives data via the fast Nexus Network, enabling the autopilot to react without delay
- Sea state damping function
- Built in NMEA 0183 interface
- Automatic tacking function with connected wind transducer
- Alarms for off course, off track or watch alarms



**Servo Unit A-1510**  
**Dimensions:** 160 x 110 x 38 mm **Weight:** 420 g **Enclosure:** Splash protected **Cable:** 8 m  
**Power supply:** 10 - 36 V **Power consumption:** 0,3 A at 12 V plus drive unit demand  
**Max. motor output drive:** 15 A **Out:** NMEA 0183 compass, RAI

Art. No: 21035-2, Servo Unit A-1510

### 4. RUDDER ANGLE TRANSMITTER

Waterproof construction with transducer life rated to over 50 million rudder movements. The rudder linkage is self aligning, self lubricating, corrosion resistant and easily adjustable to varying lengths. It is suitable for vessels with rudderstocks up to 75 mm (3") in diameter. It is mounted near the rudder shaft and connected to the tiller arm or quadrant.



**Rudder Angle Transmitter**  
**Dimensions:** 100 x 70 x 100 mm (3.9 x 2.7 x 3.9") **Weight:** 290 g (10 oz) (without cable and linkage arm) **Enclosure:** Water proof Current / **Power consumption:** 0,5mA / 2,5mW **Transmitter arm:** 120mm (4.7") long **Ball joint linkage arm:** 395mm (15,6") long **Cable:** 15m (50ft) **Rudder angle:** ± 55° **Resistance:** 10k

Art. No: 21036-1, Rudder Angle Transmitter



**Linear Drive Transmitter**  
 Mounted directly onto the HP-40 Linear Drive  
**Dimensions:** 420 x 20 x 35 mm (16.5 x 0.8 x 1.4") **Weight:** 235 g (8 oz) **Enclosure:** Water resistant Current / **Power consumption:** 0,5mA / 2,5mW **Cable:** 1m (3ft)  
**Rudder angle:** ± 55° **Resistance:** 10k

Art. No: 69981, Linear Drive Transmitter

# NEXUS AUTOPILOTS

### 5. DRIVE UNIT

The Drive Units are specifically designed for autopilot use to give high mechanical and hydraulic accuracy with a long lifecycle. Offering low internal leakage to give faster and more accurate steering with low power consumption, they provide extreme rudder precision via variable motor speeds and soft start/stop. Silent operation makes them very popular with sail boat owners.

NX2 offers two types of hydraulic drive units. The Integrated Linear Drive or Pumpset and Linear Drive combination for vessels with mechanical steering. Other types of non-hydraulic drive units may also be used (linear, rotating or relay/solenoid). The weather resistant design with its compact size allows for installation in constricted areas.



**Integrated Linear Drive**  
**Dimensions:** Length 855 x width 143 x height 126 mm (33.6 x 5.6 x 5") **Total length at mid stroke:** 728 mm (29") **Weight:** 6.2 kg (13.7 lb) **Enclosure:** Splash proof **Power supply:** 12 V DC (24 V DC on request) **Average Current / Power consumption:** 2 - 4 A / 24 - 48 W (at 12V)  
**Max stroke:** 254 mm (10") **Peak thrust:** 500 kg (1102 lb) **Max. rudder torque:** 882 Nm (7800 lb in), with 180 mm tiller arm (+/- 45°) **Hardover to hardover time:** 7 sec. (no load)

Art. No: 69991-12, Integrated Linear Drive

Art. No: 69989-12 Integrated Linear drive inc. Linear feed back unit



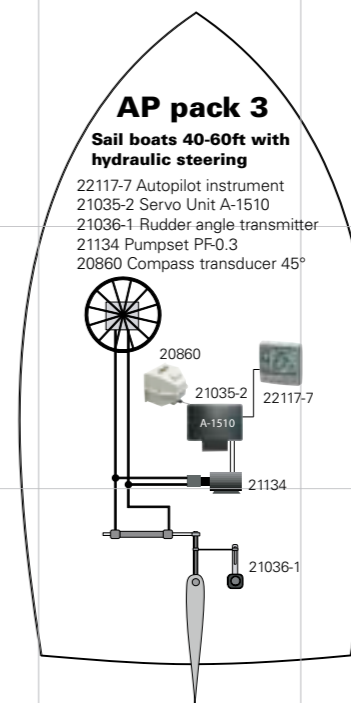
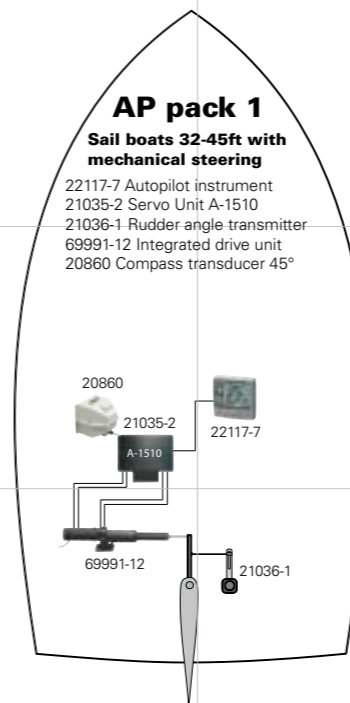
**Pumpset PF-0.3**  
**Dimensions:** Length 230 x width 105 x height 100 mm (9.1 x 4.1 x 4.0") **Weight (without oil):** 3,3 kg (7.27 lb) **Enclosure:** Splash proof **Power supply:** 12 V DC (24 V DC on request) **Peak pressure:** 70 bar (1000PSI) **Ram capacity min - max:** 100 - 400 cc (6 - 24 in3) (no load) **Peak flow rate:** 1150 cc/min (70 in3/min) (no load) **Average Current / Power consumption:** 2 - 4 A / 24 - 48 W (at 12V)

Art. No: 21134, Pumpset PF-0.3



**Linear Drive AN-23**  
**Type:** Hydraulic linear drive cylinder **Dimensions:** Length 670 x width 70 x height 70 mm (26.4 x 2.8 x 2.8") **Total length at mid stroke:** 583 mm (23") **Weight (without oil):** 2 kg (4.40 lb) **Enclosure:** Splash proof **Max stroke:** 229 mm (9") **Peak thrust:** 680 kg (1430 lb) **Max. rudder torque:** 1020 Nm (9020 lb in), with 150 mm tiller arm (+/- 50°) **Hardover to hardover time:** 12 sec. (no load)

Art. No: 21136, Linear Drive AN-23

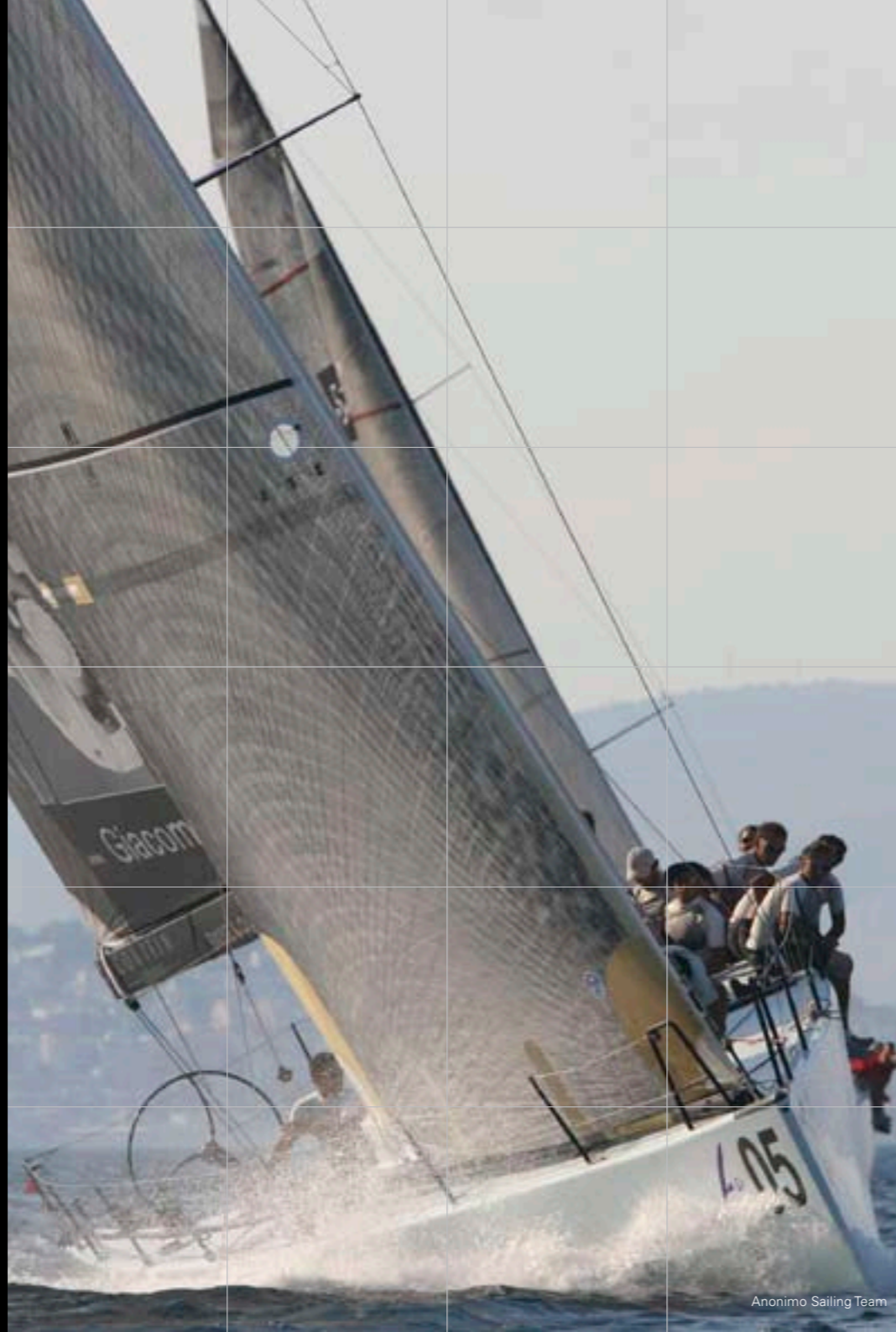


## VHF RADIOS

Nexus has led the way in taking the traditional fixed VHF radio and reinventing it as a multi-functional instrument capable of bringing a wealth of information to the boat owner in a single, compact unit. The S15 was one of the first VHF radios to bring Digital Selective Calling (DSC) to the general public; allowing operators to contact other, specified, DSC receivers and if needed to send digitally encoded distress signals containing a unique identification number and, when connected to a GPS, their precise location.

Both the fixed VHF radios in the current Nexus range bring full DSC functionality and a range of VHF features displayed on large, easy-to-read screens to boat users within rugged, fully waterproof casings. The acclaimed S15 also incorporates a sophisticated GPS Navigator and full NAVTEX capability, allowing the user to receive a wide range of marine safety information including weather warnings.

Nexus fixed VHF DSC radios can be found on a wide range of craft; from RIBs to large cruising and racing boats, and are particularly recommended for navigation stations where space for instrumentation is at a premium.



Anonimo Sailing Team

## VHF RADIOS

### 28315 VHF NX1500 handheld VHF

The all-purpose, high quality, waterproof handheld VHF from Nexus. This compact unit comes with a choice of 5W or 1W transmitting power and a high quality LCD display. Rechargeable lithium batteries give around 12 hours life with typical use, and rubber protection helps make the NX1500 a rugged and dependable unit.

### 28315-1 VHF NX1500 handheld VHF with ATIS

As for 28315 but with Automatic Transmitter Identification System (ATIS) for European Inland Waterways

#### Features

- All current marine channels including M1 / M2
- Waterproof to IPX7
- High quality LCD
- 16 hours battery life with typical use
- Compact, lightweight design





**Features**

- 25W / 1W power
- Digital Selective Calling
- Waterproof fist microphone with numeric keypad, channel select and DSC function buttons.
- Front mounted distress button with protective cover. Transmits position when attached to GPS (interface allows connection to NMEA 0183 standard output)
- Top quality, big screen LCD for clear viewing in all light conditions
- Fully waterproof
- Full scan, memory scan and dual watch facilities
- Channel 16 instant access button
- Meets CE standards EN301-025, EN60945 complies with R&TTE directive for non-compulsory fit VHF radios.

**28320-1 VHF NX2000 Grey / Orange fixed mount with DSC**

A tough and versatile fixed VHF radio with Digital Selective Calling, this all-new VHF features the latest technology for the very best in reliability, performance and first class reception. The NX2000 offers a choice of 25W and 1W transmission power, and when connected to a GPS antenna can send out a distress call together with its exact location at the press of a single button. A separate channel 70 watch-keeping facility continuously and automatically monitors for distress, urgency and safety messages plus of course anyone who is simply calling you using your individual MMSI code.

Fully waterproof, the NX2000 is ideal for all applications including sailing boats, RIBs, fly bridges on motorboats and more.

**28320-2 VHF NX2000 Grey / Black fixed mount with DSC**

As for 28320-1, but with grey and black casing



**28320-3 VHF NX2000 White / Grey fixed mount with DSC**

As for 28320-1, but with white and grey casing



**Silva S15 Class D DSC Marine VHF Radio**

Three units in one! The Silva S15, when connected to a suitable GPS and NAVTEX receiver, has all the functionality of a top of the range, fully featured marine DSC VHF receiver, combined with a state of the art GPS navigator (including storage of up to 50 waypoints) plus a dual frequency NAVTEX unit, all in one compact waterproof\* package. The large LCD display is able to display up to 8 lines of information, or single items of information in a large easy to read format.

**Features**

- Rugged fully waterproof\* construction
- Programmable memory scan - lets you store and scan an unlimited number of your most often used channels
- Large LCD readout – allows viewing even in direct sunlight
- Channel 16 instant access button
- Security keylock – allowing operation only on channel selected
- 25 Watts output power - for clear communication even at maximum range
- Front mounted DISTRESS button with protective cover
- Waterproof\* Fist/Microphone with integral numeric keypad, channel select and DSC function buttons
- Interface to allow connection to GPS and NAVTEX receivers
- Meets CE standards EN301-025, EN60945 complies with R & TTE directive for non-compulsory fit handheld VHF radios

\* Silva S15DSC Meets IPX-7 standard and is waterproof to a depth of 1 metre for up to 30 minutes.

Art. No: 28011, Silva S15DSC Class D VHF Radio

Art. No: 28012, Silva S15DSC Class D VHF Radio including internal NAVTEX receiver with antenna

Accessories:

Art. No: 21970-3, 16-Channel GPS antenna

**SPECIFICATIONS**

<b>Input voltage:</b>	11 - 16VDC
<b>Frequency range:</b>	156.025 - 163.275Mhz
<b>Channels:</b>	1-28, 60-88 (excl CH70). Ch70 only receiver for DSC distress, urgency and safety (using single antenna).
<b>RF power output:</b>	25 Watts
<b>Low power:</b>	1 Watt
<b>Current drain:</b>	Standby: 0.3A Receive: 0.9A Transmit: 5.0A high power
<b>Dimensions(mm):</b>	79(H) x 179(W) x 130(D)
<b>Weight (grms):</b>	1175g

**S15-N NAVTEX Receiver**

- Dual frequency NAVTEX Receiver module 518 / 490Khz
  - Connects directly to Silva S15 radio via standard plug/socket
  - Connects directly to most PCs - Software and interface cable included
  - Efficient receiver design with dual frequency (switchable) output for clear reception of NAVTEX information
  - Fits standard range of Marine antenna mounts (1" x 14TPI)
  - 2 year warranty
- Art. No: 28075, Silva S15-N NAVTEX Receiver



# SILVA COMPASSES

## How to choose a compass

Simply by answering some commonly asked questions.

### Which compass do I need...?

#### What kind of boat do you have?

The main difference between a powerboat compass and a sailboat compass is the heeling angle limit and the damping characteristics. A powerboat compass has fixed lubber lines to maintain the best dynamics, while steel boats need compasses with D-correctors or soft iron correctors.

### Which size of compass do I need...?

#### What is the size of your boat?

If the compass will be read from a distance you will need a bigger compass. The simple thumb rule is: a boat longer than 7,5 meters (25 feet) requires a 100 series capsule or larger.

70 series has an apparent scale of 70mm

100 series has an apparent scale of 100mm

125 series has an apparent scale of 125mm

### What type of mounting do I need...?

#### Where will the compass be mounted?

There is a Silva compass for every mounting need. In the bulkhead, on the dashboard, on the headlining, on the mast etc. All models are designed so that no unnecessary drilling is needed.

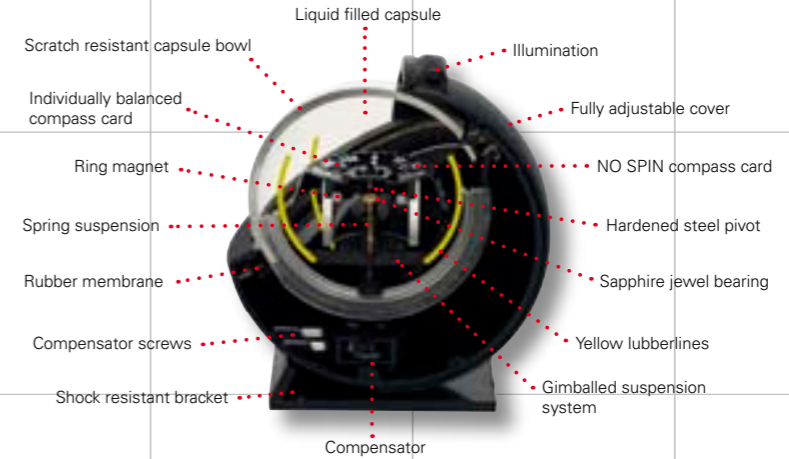
### Why do I need a compensator?

We strongly recommend the use of a compensator, and not only in steel boats. Almost all models can be supplied with a built-in compensator to avoid magnetic disturbances. Such disturbances will be found on any boat, the source varies from loudspeakers to the radio, engine, wipers, electronic instruments (not NX2) and other metallic components. Remember that the distance to the source is more critical than its strength.

**All Silva marine compasses have 10 years warranty!**

**NEXUS**  
Passion for Performance™

# SILVA COMPASSES



### 102B/H Challenger

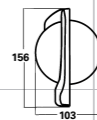
#### High stability compass for bulkhead mount

- Big digits - easy to read at distance
- Top quality / accuracy relation
- Big full cover
- Template matches Contest 101 and 100
- All UV resistant materials
- Capsule filled with UV resistant liquid
- No transparent capsule - eliminates burn effect
- Two axis gimbals
- Heeling scale
- Edge scale with big digits
- Two lubber lines at 45° - allows for reading from the rail
- Built-in red illumination - for best contrast at night
- 102B/H is equipped with a heeling angle scale and illumination

Art. No: 36449-0011, 102B/H



Available colours:



All article numbers refers to magnetic north balancing zone. All compass models are available in equator and south balancing.

## SAIL BOAT COMPASSES

### Bulkhead mount compasses

The bulkhead mount compasses (70P, 100P, 102B/H, 100B/H and 125B/H) are specifically designed for sailboats and yachtsmen demanding absolute accuracy and a steady card in all conditions and high heeling angles.

### Bulkhead-mounted front reading series with 3 yellow gimbaled lubber lines.

The gimbaled lubber lines stay vertical even if the boat is heeling (max 45°). The two extra lubber lines at 45° offset permit reading from the rail or an off steering position mounting.

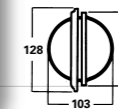
### Flush and pedestal mount compasses

The flush and pedestal mount compasses (125F, 150F, 125 and 150) are designed for those yachtsmen that demand absolutely accuracy and a steady card in all conditions, despite the heeling angle.

An extended centre needle eliminates parallax errors and the gimbaled yellow lubber lines stay vertical even when in rough seas. Compensation is standard. It is also possible to add a heeling compensator.

The bulkhead compass 102B/H has a 100 mm capsule. It is standard equipped with red illumination. The cradle is gimbaled and a heeling angle scale is printed on the compass front. The optional compensator is easy to fit in a holder under the detachable front. The front also covers the mounting screws. White protection cover

## SAIL BOAT COMPASSES

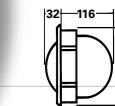
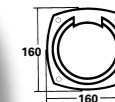


### 100P

The 100P is a bulkhead mounted front reading compass. The 100P is also suitable for mast mounting by using the optional mast bracket (Art. No: 69996). Heeling angle 30°.

Art. No: 35037, 100P

Art. No: 35038, 100PT



### 125B/H

125B/H is equipped with a heeling angle scale and illumination. The capsule protrudes only 32 mm into the cockpit.

Art. No: 35075, 125 B/H

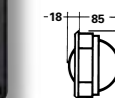
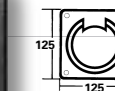


### 70P

70P with apparent scale size of 70 mm. The compact size makes it very easy to install, and popular for smaller sailboats. Suitable for mounting at most angles. One lubber line for easy and safe reading at a glance. Heeling angle 30°.

Art. No: 34990, 70P

Art. No: 34993, 70PT



### 100B/H

100B/H is equipped with a heeling angle scale and illumination. The capsule protrudes only 18 mm into the cockpit.

Art. No: 35053, 100B/H



## SAIL RACE COMPASSES

The Elite racing models have been developed by the world's top racers and Olympic sailors. The tactical scales and quick readability give a critical advantage. The cone-shaped card with gimbaled lubber lines has a main steering scale on the horizontal part of the compass card and a tactical scale on the vertical edge of the card.



### 103R

103R is the world's most popular racing compass for dinghies. First developed for the Laser, it has become a firm favourite across many dinghy classes. The 103R is also available with an ordinary 360° scale, Art. No: 35063, 103R

Detecting wind shifts may be the tiny difference between winning and losing. Silva's tactical scale grades from 0-20 and the figures correspond on port and starboard tack. If the reading on starboard tack is 2 the reading on port after tacking should also be 2. In this way you only have to remember one figure. This is a great benefit in triangular course sailing where racers need to watch the wind shifts, rather than their actual course.



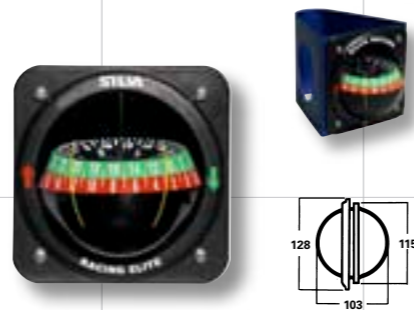
### 73R

73R is the perfect combination compass. It can be installed in any inclination or position with a bracket that allows for fast and easy removal. The handle makes it useful as a sighting compass; simply remove the compass from its bracket and sight the mark to determine the bearing. Tactical compass scale on the vertical part of the card. 73R is also easy to remove from bracket for security purposes.

Art. No: 35022, 73R

## SAIL RACE COMPASSES

The double scale, divided into a green starboard and a red port scale, allows sailors to read the actual course on port and starboard tack from the helmsman's normal position at the rail. You no longer have to add 45° to your reading. The green and red memory arrows tell you to tack if the figures decrease on starboard tack and to tack if the figures increase on port. The top scale allows you to read the course on downwind or to check the start line position.



### 103PE

103PE designed for bulkhead-mount. Optional mastbracket.

Art. No: 36305-0801, 103PE



### 103RE

103RE is designed for the Laser and other dinghies.

Art. No: 36303-0801, 103RE



### 85

85 is a very stable compass for small and fast dinghies. Deck mounted with flat underpart. No need for making big holes in the boat. A common installation is two 85 compasses, one at each rail. The 85 model also has a memory ring for setting a desired course.

Art. No: 35034, 85 black, no illumination

Art. No: 35034-1011, 85E white, illumination

Art. No: 35034-0011, 85E black, illumination



### 103P

103P is designed for bulkhead mount. Optional mast bracket for dinghies.

Art. No: 35059, 103P

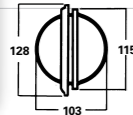


## POWER BOAT COMPASSES

Specially designed for powerboats to give exceptional stability in all conditions. The cone-shaped NO SPIN card is virtually unaffected by boat speed or engine vibration. It has a main steering scale on the horizontal part of the compass card and direct reading on the vertical edge of the card. Ideal for cockpits where steering is done both sitting and standing.

### 100 SERIES

The 100 series front and top reading compasses have 3 yellow lubber lines and an apparent scale size of 100 mm. The two side view lubber lines at 45° offset allow easy reading and also allow for mounting the compass to one side of the steering position.



#### 100P

100P is a bulkhead mounted front reading compass. Unlimited pitch and 30° roll.

Art. No: 35037, 100P  
Art. No: 35038, 100PT



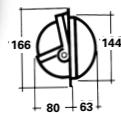
#### 100BC

100BC is a front reading compass with a solid bracket that permits various mounting alternatives, even on the headlining. The BC model has a built-in compensator.

Art. No: 35047, 100B  
Art. No: 35051, 100BC



Available colours:



#### 100FBC

100FBC may be mounted at any angle from vertical to horizontal. Perfect for dashboard mounting. Adjustable illumination in the protection covers. The FBC model has a built-in compensator.

Art. No: 35054, 100FB black  
Art. No: 35057, 100FBC black  
Art. No: 35054-1111, 100FB white  
Art. No: 35054-1151, 100FBC white  
Art. No: 35054-9031, Compass 100FB with Wheelmark



Available colours:



#### 100NBC

100NBC with a solid bracket permits various mounting alternatives, even on the headlining. Adjustable illumination in the protection cover. The NBC model has a built-in compensator.

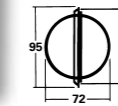
Art. No: 35040, 100NB black  
Art. No: 35044, 100NBC black  
Art. No: 35040-1111, 100NB white  
Art. No: 35040-1151, 100NBC white  
Art. No: 35040-9031, Compass 100NB with Wheelmark



## POWER BOAT COMPASSES

### 70 SERIES

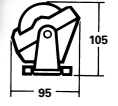
The 70 series front and top reading compasses have one main yellow lubber line that allows easy and safe reading at a glance. Apparent scale size of 70 mm.



#### 70P

70P is a bulkhead mounted compass. The compact size makes it very easy to install, either on a bulkhead or in the dashboard. From vertical to 30° slope mounting.

Art. No: 34990, 70P  
Art. No: 34993, 70PT



#### 70BC

70BC with solid bracket permits various mounting alternatives, even on the headlining. The BC model has a built-in compensator.

Art. No: 35009, 70B  
Art. No: 35012, 70BC



Available colours:



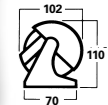
#### 70FBC

70FBC may be mounted at any angle from vertical to horizontal, perfect for dashboard mount. Adjustable illumination in the protection covers. The FBC model has a built-in compensator.

Art. No: 34998, 70FB black  
Art. No: 34999, 70FBC black  
Art. No: 34998-1111, 70FB white  
Art. No: 34998-1151, 70FBC white



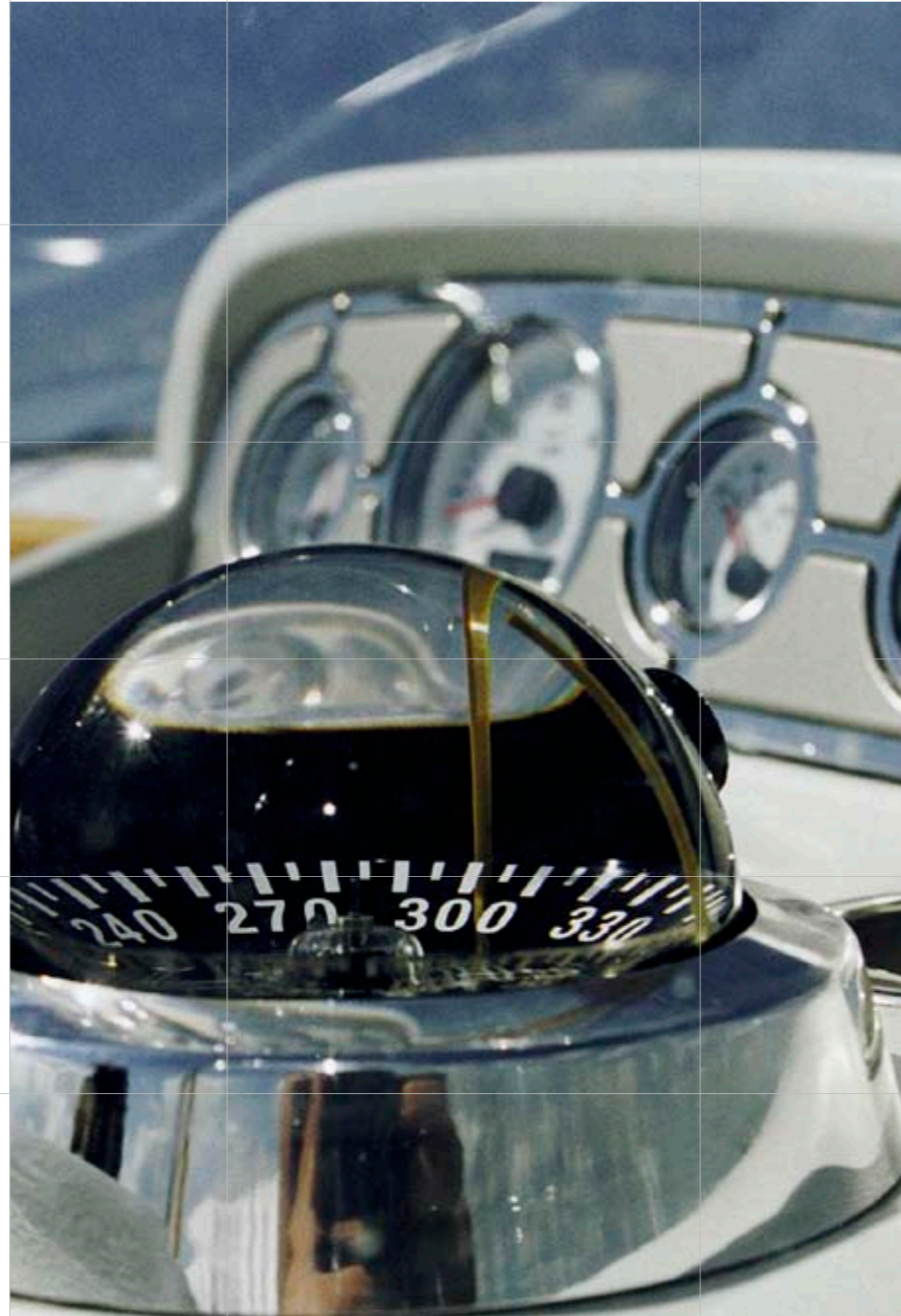
Available colours:



#### 70NBC

70NBC with adjustable illumination in the protection cover. The solid bracket permits various mounting alternatives, even on the headlining. The NBC model has a built-in compensator.

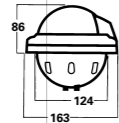
Art. No: 35000, 70NB black  
Art. No: 35003, 70NBC black  
Art. No: 35000-1111, 70NB white  
Art. No: 35000-1151, 70NBC white



# SAILING AND STEEL BOAT COMPASSES

## Sailing Compasses

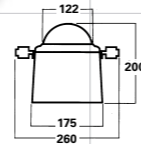
Designed for those yachtsmen that demand an absolutely accurate and steady card in all conditions, whatever the angle of heel. An extended centre needle eliminates parallax errors and the gimballed yellow lubber lines stay vertical even when exposed to rough seas. Compensator is standard. It is also possible to add a heeling compensator.



**125FT**  
125FT is a flush mounted compass with an apparent scale size of 125 mm and a gimballed cradle.  
*Art. No: 35325-0711, 125FT*

## Steel Boat Compasses

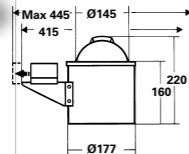
Standard equipped with compensators and D-correctors for the world's most accurate performance, specifically designed for steel boats and commercial vessels.



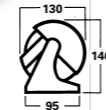
**125T-S**  
125T-S with an apparent scale size of 125 mm. Standard equipped with heeling error corrector.  
*Art. No: 35074-5751, 125T-S*



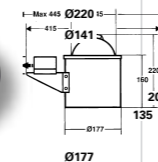
© Gavin Young



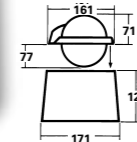
**150T-S**  
150T-S with an apparent scale size of 150 mm. Standard equipped with heeling error corrector.  
*Art. No: 35085-5751, 150T-S*



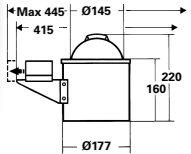
**100NBC-S**  
100NBC-S is a steel boat compass with an apparent scale size of 100 mm and adjustable illumination in the protection cover.  
*Art. No: 35045, 100NBC-S*



**150FT**  
150F is a large flush mounted compass with an apparent scale size of 150 mm and a gimballed cradle. Supplied with hard protective cover.  
*Art. No: 35086-0751, 150FT*



**125T**  
125 is a pedestal compass with an apparent scale size of 125 mm and a gimballed cradle. The standard 175mm base plate fits most steering pedestals.  
*Art. No: 35074-1751, 125T*

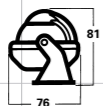


**150T**  
150 is a pedestal compass with an apparent scale size of 150 mm and a gimballed cradle. This robust compass is fitted in an aluminium housing and comes with a hard protective cover.  
*Art. No: 35081-1751, 150T*

## MULTI PURPOSE COMPASSES



Available colours:



**58**

Optimal for smaller power boats, cars and other vehicles. The unique built-in compensator handles even large errors (up to 40°). Equipped with illumination and a bracket that allows for mounting on any surface.

Art. No: 35730-1651, 58 White

Art. No: 35730-9021, 58 Grey

Art. No: 35730-0651, 58 Black



**58F**

The 58F can either be mounted with screws or with adhesive tape. The flat bottom plate avoids the need for any mounting holes

Art. No: 36484-0601, 58F

## MULTI PURPOSE COMPASSES



**33**

The popular parallel steering needle compass. You just set the desired course on the memory ring and then steer with the needle parallel to the lines. This is the same method as used in orienteering on land. Fully externally gimbaled, it may be fitted horizontally or vertically or at any angle in between.

Art. No: 34616, 33



Available colours:



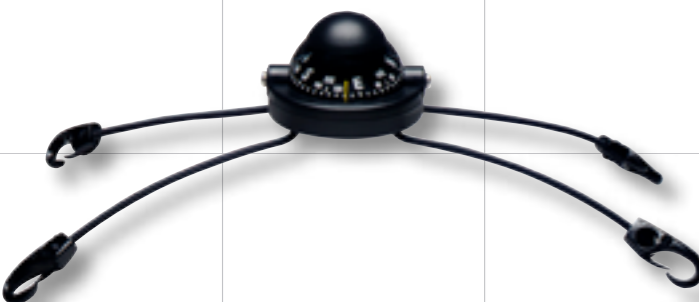
**85**

85 is a very stable compass, flush mounted with a flat bottom plate. No need for drilling large holes. The 85 model also has a memory ring, for setting a desired course. The construction of the compass card makes the model 85 very well dampened and suitable for high speed and rough conditions.

Art. No: 35034-1011, 85E white

Art. No: 35034-0011, 85E black

Art. No: 35034-9021, 85E chrome



**58 KAYAK**

A compass designed for kayaking. Clips on by straps, to the deck of the kayak.

Art. No: 36528-0601, 58 KAYAK



© Peder Sundström

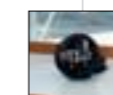
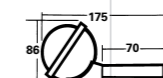


**70UN**

The universal compass that can be used in its bracket as a steering compass or as a bearing compass when handheld. The design allows for many mounting alternatives. It can be installed in any inclination or position with a bracket that allows for fast and easy removals. It is also easy to remove for security purposes. Suitable for kayaks, dinghies, canoes, small boats and more...

Art. No: 35014, 70UN

Art. No: 32849-1, additional bracket



**70UNE**

70UNE has the same features as the 70UN, but additionally comes with a built-in diode illumination, powered by two watch batteries and a waterproof switch.

Art. No: 35014-1141, 70UNE

Art. No: 32849-1, additional bracket

## ACCESSORIES AND HAND HELD COMPASSES



**Bracket R aluminium**  
Weight: 15 g  
For model 103R and 103RE  
Art. No: 69992, Bracket R aluminium



**Bracket R plastic**  
Weight: 118 g  
For model 103R and 103RE.  
Art. No: 69991, Bracket R plastic



**Mast bracket MC**  
Made in anodized aluminium.  
Fits most dingy masts with max diameter 60 mm wide and 85 mm deep.  
For 100P/PT, 103P and 103PE.  
Weight: 143 g.  
Art. No: 69996, Mast bracket MC



80-series  
80-Series Designed for easy holding with a protective cover of friction rubber. Case of ABS plastic. Compass housing with glass optics gives a very distinct reading. Accuracy max 0.5° from true course. Graduation: 360° + 360° double graduation each degree marked. Lanyard included and it floats!  
Size: 87 x 73 mm. Weight: 140 g.  
**80:** Orange rubber cover. Battery operated lighting diode 2 mA, 3V. The battery lasts for approx. 7200 sightings. Batteries: Two silveroxide SR 41 W, 1.5V, 42 mA.  
**80NL:** Blue rubber cover. Without light source.  
Art. No: 35031, 80NL Blue rubber cover, without light source.  
Art. No: 35024-7041, 80 Orange rubber cover, with light source.



## ACCESSORIES AND HAND HELD COMPASSES



**Clinometer 131**  
The popular clinometer for all types of vehicles. With two scales, one  $\pm 35^\circ$  and a fine tuning scale  $\pm 5^\circ$ . The 131 model is used on sailing boats for checking the angle of heel and on powerboats for the power trim check.  
Art. No: 35188, Clinometer 131



**91B, 96 and 97**  
91B the popular Nexus ruler. Single hand instant bearing and distance. Flexible plastic. Dimensions. Ruler graduated up to 10 NM. **96** and **97** the traditional protractor. With bearing and contra bearing. Dimensions: the 96, 242x171x171 mm. The 97: 328x232x232 mm  
Art. No: 67028, Ruler 91B  
Art. No: 67030, Protractor 96, 250mm  
Art. No: 67031, Protractor 97, 320mm



**Expedition 54**  
Top of the Silva range of traditional base plate compasses. It has a unique precision sighting system which allows for bearings accurate to  $\pm 0.5$  degrees to be taken! Add the same map measuring scales and silicon grip feet as on Ranger 4, and you have a top-of-the-range compass for the advanced user!  
Art. No: 35852-1011, Expedition 54



**Expedition 15**  
With an increased sized sighting mirror, this classic "expedition" compass has become even better. The Expedition 15 has a sighting hole in the mirror for the most accurate bearings, silicon rubber feet for maximum friction on a map when taking bearings and is equipped with Romer scales for plotting positions on maps and mm/inch map measuring scales. Built-in magnifying lens and luminous markings for night navigation are other important features for the most demanding users. Expedition 15TDCL also has magnetic declination adjuster as well as a built-in clinometer for measuring vertical angles.  
Art. No: 36814-8011 Expedition 15T  
Art. No: 36818-8811 Expedition 15TDCL

## BINOCULARS

### ETERNA™ Navigator 7x50

The new waterproof ETERNA™ Navigator with built-in compass. With porro prism design, anti-reflection coated lenses and large light throughput these binoculars are intended primarily for marine use. A key feature is the individual focusing function that, after a one-off adjustment for individual eyesight, gives the freedom to directly focus on a desired object without manual focusing! Perfect in rough seas. Rugged, robust and of course waterproof. If you should be unlucky enough to drop them in the water, ETERNA™ Navigator will float!

- Protective cover in signal yellow plastic
- Battery illuminated compass
- Waterproof, nitrogen gas filled
- Individual focus function. After initial adjustment, they need no further manual adjustment
- Magenta anti-reflection coating for reduction of UV/IR stray light
- Very good night vision
- Extended eye relief for wearers of glasses
- Will float even without neck strap!
- Extra wide neck strap with pocket and lens cleaning brush
- 2 years limited warranty

Art. No: 830750-1, Eterna™ Navigator



### ETERNA™ Marine II 7x50

With porro prism design, anti-reflection coated lenses and large light throughput these binoculars are intended primarily for marine use. A key feature is the individual focusing function that, after a one-off adjustment for individual eyesight, gives the freedom to directly focus on a desired object without manual focusing! Perfect in rough seas. Rugged, robust and of course waterproof. If you should be unlucky enough to drop them in the water, ETERNA™ Marine II will float!

- Protective cover in signal yellow plastic
- Waterproof, nitrogen gas filled
- Individual focus function. After initial adjustment, they need no further manual adjustment
- Magenta anti-reflection coating for reduction of UV/IR stray light
- Very good night vision
- Extended eye relief for wearers of glasses
- Will float even without neck strap!
- Extra wide neck strap with pocket and lens cleaning brush
- 2 years limited warranty

Art. No: 830750-2, Eterna™ Marine II



## BINOCULARS



Pocket 8x21



Pocket 10x25

### Pocket

The compact format and the low weight make Silva Pocket the binoculars that you can always take with you! Perfect as extra binoculars in the boat, in the car etc.

- 8x or 10x magnification
- Ruby Fire™ Anti-reflection coating
- Solid rubber coated design
- 2 years limited warranty
- Comes fully equipped with carrying case and neck strap

Art. No: 870821, Silva Pocket 8x21

Art. No: 871025, Silva Pocket 10x25



### Lite-Tech™ Compact

- Emerald Fire™ full multi-coating
- Bak-4 roof prism
- Waterproof
- Fog proof
- Nitrogen filled
- Extra wide neck strap

Art. No: 850825, Lite-Tech Compact 8x25

Art. No: 851025, Lite-Tech Compact 10x25

## L-SERIE HEADLAMPS



### L1

Experience the real power of the Ultra-Bright 3-Watt Luxeon™ LED. State of the art technology that delivers such a dramatic brightness that it leaves others in the shade!

- Four light modes: Power Save, Medium, Bright, Blinking
  - Batteries: 4 pieces AA (LR6) included
  - Light range up to 63 meters
  - Discharge time up to 200 hours (using light mode Power Save)
- Included with the headlamp is an external battery case for 4 C (LR14) batteries (not included) which increases the discharge time by 300% and ensures better performance in cold temperatures.

Art. No: 57081



### L2

The Light-Weight L2 is a Super-Bright headlamp perfect for outside activities when on the move.

- The 1-Watt Luxeon™ LED gives that extra brightness just when you need it!
- Four light modes: Power Save, Medium, Bright, Blinking
  - Batteries: 2 AA (LR6) included
  - Light range up to 35 meters
  - Discharge time up to 85 hours (using Power Save light mode)

Art. No: 57082



### L3

Using five powerful, white LEDs, L3 gives optimal performance for users that want stronger light than traditional LED headlamps. The L3 is also equipped with a red LED for night-vision – for example reading a sea chart during night navigation.

- Five light modes: Red on, Power Save, Medium, Bright, Blinking
- Batteries: 4 AA (LR6) included
- Light range up to 22 meters
- Discharge time up to 150 hours (using light mode Power Save)

Art. No: 57083



### L4

L4 is an extremely compact and traditionally styled LED headlamp. The L4 is powered by 3 AAA (LR3) batteries (included) integrated in the headlamp body making it extremely compact and lightweight. Equipped with 4 LEDs (3 white and 1 red), the L4 gives the user a perfect floodlight for any close range work. The red light is used in applications where night vision must remain unimpaired.

- Five light modes: Red on, Power Save, Medium, Bright, Blinking
- Batteries: 3 pieces AAA (LR3) included
- Light range up to 15 meters
- Discharge time up to 90 hours (using light mode Power Save)

Art. No: 57084

## M4 AND PORTABLE POWER



### M4 Marine, adjustable reflector, red or white light

The M4 Marine is a compact, lightweight and high performing LED-headlamp using the same design concept that has proved such a success on the other M-models.

Due to its compact design, the M4 Marine is the perfect choice when weight and space is crucial. Also ideal when high performance is required at sea.

The new M4 Marine has a rugged, splash-proof body housing three high-power LEDs (2 white and 1 red). This LED technology provides the performance necessary for close range work (up to 20 meters), but with extremely low power consumption. Up to 150 hours battery life and weights only 80g with batteries.

The M4 Marine has four different light modes:

- **Red light** - when the night vision is needed.
- **Flashing red light** - for emergency.
- **White light**
- **Flashing white light** - ideal for attracting attention in emergency situations.

Another important feature on the M4 Marine is the tilting reflector that ensures the correct light angle regardless of the application.

Weight: 80g (incl. batteries)

Art. No: 57000-1, M4 Marine





## ADC - ATMOSPHERIC DATA CENTER



### ADC Pro

This is the top model in the ADC line. With all the features of the ADC Summit plus a humidity sensor, this is the unit for the professional/most-demanding user. The humidity sensor provides information such as RH (relative humidity), heat index, air density/relative air density, dew point, wet bulb – all functions valued by professional users such as sailors, engineers, painters and engine tuners as well as by hobby-meteorologists, mountaineers and demanding outdoor users.

Same features as ADC Wind plus:

- Altitude (current, min and max)
- Altitude Alarm
- Cumulative ascend/descend
- Ski-run counter
- Current barometric pressure (mbar, hPa or inHg) and a past 24-hour barometric history
- Weather forecast in 5 levels (Sunny, Partly Cloudy, Cloudy, Rain, Storm Warning)
- RH (Relative Humidity)
- Heat index
- Dew point
- Wet bulb
- Air Density/Relative Air Density
- Data log memory (automatic and/or manual)
- IR data communication using accessory ADC IR device (optional extra)

Art. No: 55252



### ADC Summit

Featuring an air-pressure sensor on top of the functionality provided in the ADC Wind, this unit is the perfect companion when in the mountains and/or when an altitude/barometric pressure/weather capability is required. The ADC Summit is designed for sailing, kiting, surfing, mountaineers, climbers, skiers and many others. Your performance data can be logged in the ADC Summit and downloaded through the ADC IR interface (optional accessory) to a PC.

Same features as ADC Wind plus:

- Altitude (current, min and max)
- Altitude Alarm
- Cumulative ascend / descend
- Ski-run counter
- Current barometric pressure (mbar, hPa or inHg) and a past 24-hour barometric history
- Weather forecast in 5 levels (Sunny, Partly Cloudy, Cloudy, Rain, Storm Warning)
- Data log memory (automatic and / or manual)
- IR data communication using accessory ADC IR interface (optional extra)

Art. No: 55251



### ADC Wind

Ever wondered about the wind and its effect on you and your performance?

The SILVA ADC Wind is the perfect instrument designed for outdoor people such as sailors, trekkers, para gliders, skiers, golfers, balloonists, hang gliders, windsurfers and many others.

- Displays current, max and average wind speed (in km/h, mph, feet/s, or knots)
- Shows current temperature (°C and °F) and a past 24-hour temperature history
- Wind chill (current and min)
- Wind chill alarm
- Real time clock with alarm
- Time, day and date
- Chronograph with 50 lap times
- Race Timer
- Compass (one of the impeller blades works as a compass needle when held horizontally)

Art. No: 55250



### ADC IR

The Software and Communication device that enables downloading of the logged data from the ADC Summit/Pro into a PC. The ADC IR is connected directly to the USB port on the PC and receives the data from the ADC Summit/Pro. The software graphically shows the logged data which can also be exported in a text-file format for use in other applications such as spreadsheets etc. Comes with a 1 m extension cable and software.

Art. No: 55253

# NOTES



Model	Horizontal	Vertical	Roof	Bulkhead	Two side view	Redestal	Flush	Compensator	Illumination
<b>SAIL BOAT COMPASSES, PAGE 34-35</b>									
70P				X	X			•	•
70PT				X	X			•	•
100P				X	X			•	•
100PT				X	X			•	•
100B/H				X				•	X
102B/H				X				•	X
125B/H				X				•	X
<b>SAIL RACING COMPASSES, PAGE 36-37</b>									
73R	X	X	X						
85	X								•
103R	X								•
103P				X				•	
103RE	X			X					
103PE				X					
<b>POWER BOAT COMPASSES, PAGE 38-39</b>									
70P				X				•	•
70FB	X	X		X				•	X
70NB	X	X	X	X			X	•	X
70B	X	X	X	X				•	X
100P				X				•	•
100FB				X			X	•	X
100NB	X	X	X				X	•	X
100B	X	X	X					•	X
<b>SAILING-/STEEL BOAT COMPASSES, PAGE 40-41</b>									
100NBC-S	X	X	X			X		X	X
125T-S						X		X	X
150T-S								X	X
150 FT							X	•	X
150 T						X		X	X
125 FT						X	X	•	X
125 T						X		X	X
<b>MULTIPLE PURPOSE COMPASSES, PAGE 42-43</b>									
58	X	X	X					X	X
33	X	X						X	X
85	X	X					X		•
70 UN	X	X	X					•	
70 UNE	X	X	X					•	X

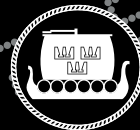
X Standard      • Optional

All Silva compasses are available balanced for the different magnetic zones.

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