

Raymarine®

NEW PRODUCT INTRODUCTION

ALPHA
PERFORMANCE
DISPLAY AND SMART
WIND

AUGUST 2023



THE RAYMARINE PERFORMANCE SAILING SOLUTION

AXIOM



AXIOM

ALPHA



SMART WIND



NEW PRODUCT INTRODUCTION

ALPHA PERFORMANCE DISPLAYS

ALPHA INTRODUCTION



7- and 9-inch-high visibility touchscreen displays

Fully customisable dashboard and graphic displays to help you make smarter sailing decisions.

Be a better sailor and navigator with intuitive performance sailing graphics

Create a network of Alpha displays + Axiom for a commanding view of critical Display data



ALPHA: MAXIMUM PERFORMANCE



High bright 1500 nit displays

Polarized sunglass-friendly extra wide viewing angle, viewable on the mast or remote location

Exclusive HydroTough™ nano coated display resists water and oils

Auto-dimming using an integrated ambient light sensor

ALPHA: MAXIMUM FLEXIBILITY



Portrait & Landscape mounting options

Mount at the nav station, cockpit, or mast.

Lockable touch screen with programmable auto-lock.



ALPHA: MAXIMUM FLEXIBILITY



Race timer

03:27

Line bias

Stbd 16_m

Dist to line

845_m

Time to burn

1m 23_s

AWS

12.5
kts

STW **5.7** kts

Target STW **6.3** kts

Wind shift **+12°**

Steer to layline **038°_s**

Time to tack **10m 30_s**

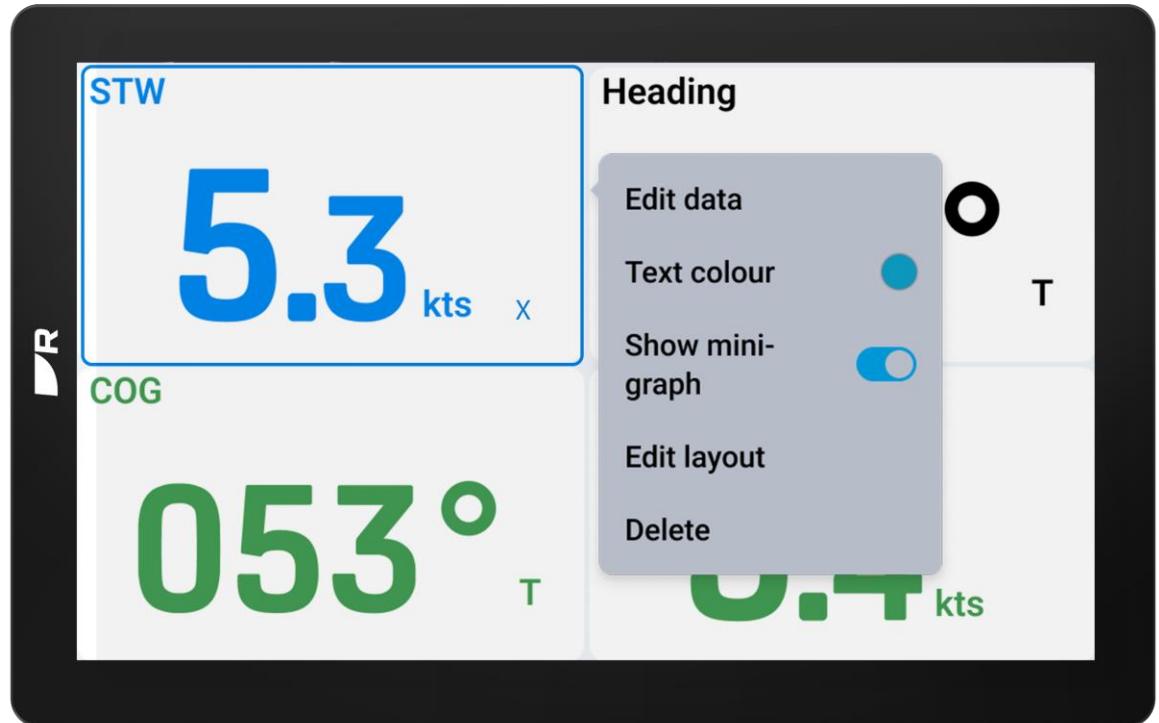
Dist to tack **2.5** nm

Fully customisable dashboard page layout widgets with graphs, bars, dials or digits.

ALPHA: MAXIMUM FLEXIBILITY



Customisable
colours and
dashboard page
layouts



MAXIMUM FLEXIBILITY: AXIOM CONTROL



Take control of remote Alpha displays from any Axiom display.

ALPHA DISPLAY X

DISPLAY

Cockpit left

PAGE

BRIGHTNESS

Alpha display

Data 2

Search

Audio

Cockpit

- Cockpit left
- Cockpit centre
- Cockpit right
- Ungrouped
- SI 1
- SI 2

Move up

Move down

Rename

TIME TO TACK
5m 49s

TACK
2 nm

TTG
15 s

74%

Depth

ALPHA: BE A BETTER SAILOR



Intuitive graphical Display displays designed for tactical awareness and improved decision support.

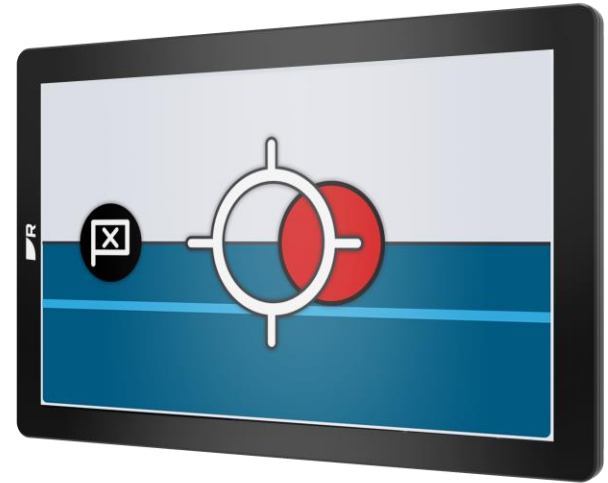
Sailing Graphics



ALPHA: BE A BETTER SAILOR



Hit your lay line every time with
Sailpoint™



ALPHA: BE A BETTER SAILOR



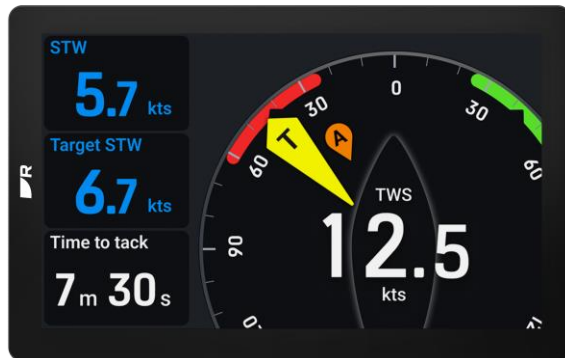
SailPoint™ provides you with a visual reference of your target wind angle, to help you achieve maximum VMG upwind or downwind.

Dynamic horizon line shows if you are sailing to your target boat speed.

ALPHA: BE A BETTER SAILOR



Dynamic wind performance display, automatically zooms into pertinent portion of the wind Display display



ALPHA: BE A BETTER SAILOR



Dynamic wind performance display, automatically zooms into pertinent portion of the wind Display display



ALPHA: 3D FLOATING COMPASS



The 3D compass widget provides skippers with digital simulation of the familiar ship's compass

The compass floats and provides current heading like an actual compass

3D FLOATING COMPASS VIDEO



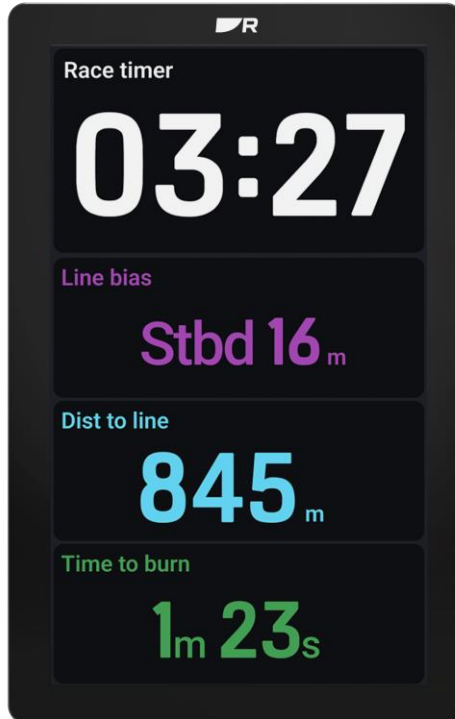
ALPHA SAILING DATA GALLERY



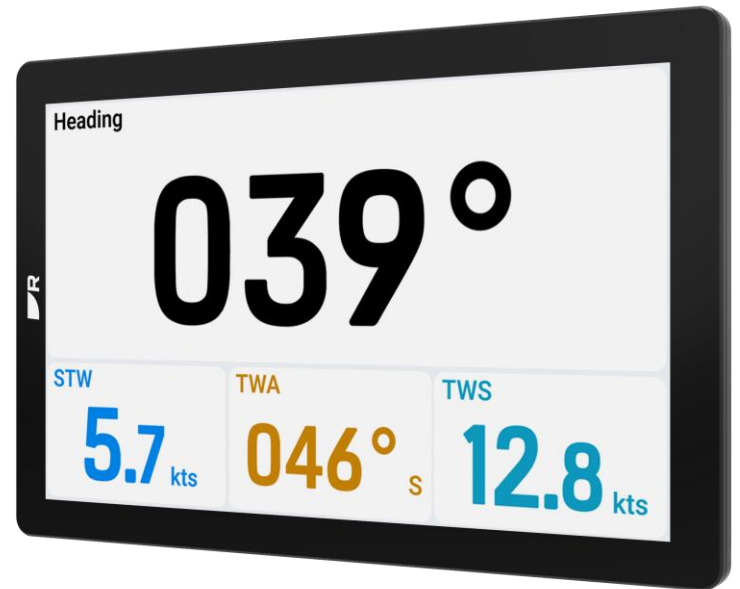
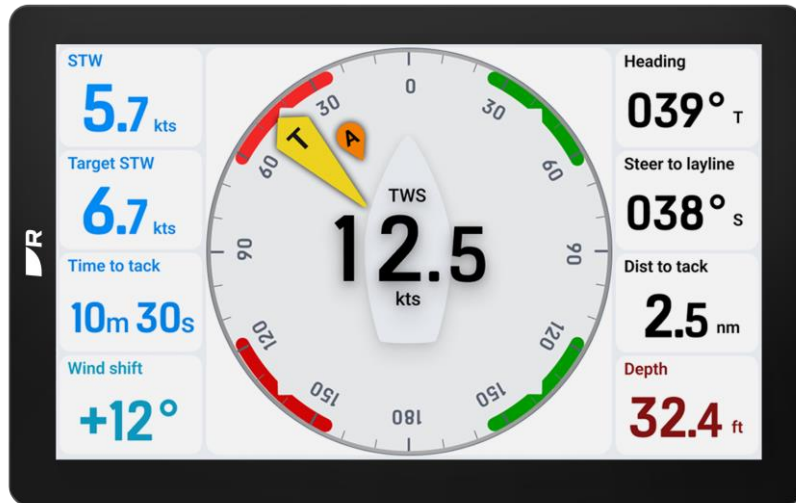
ALPHA SAILING



ALPHA SAILING

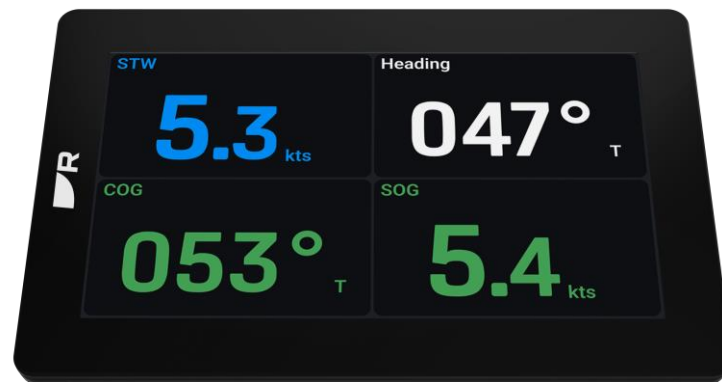
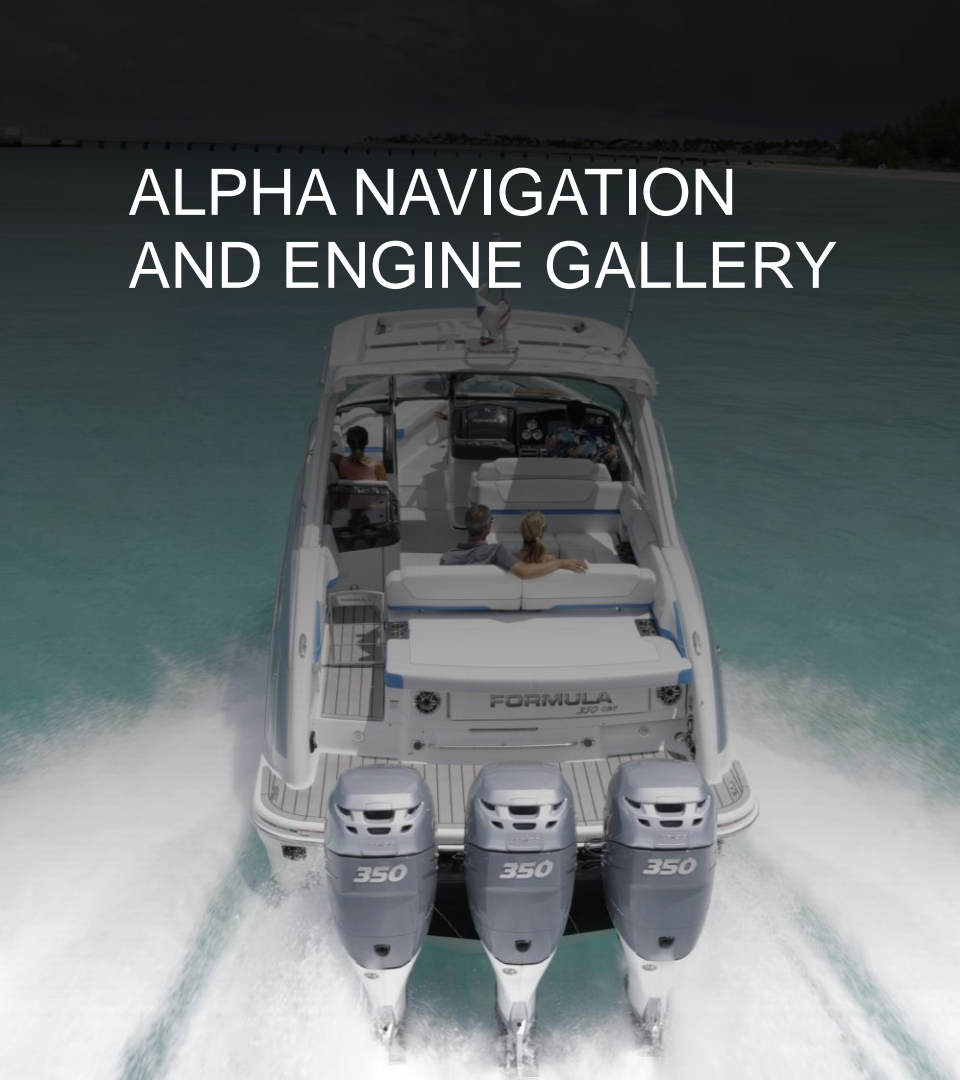


ALPHA SAILING

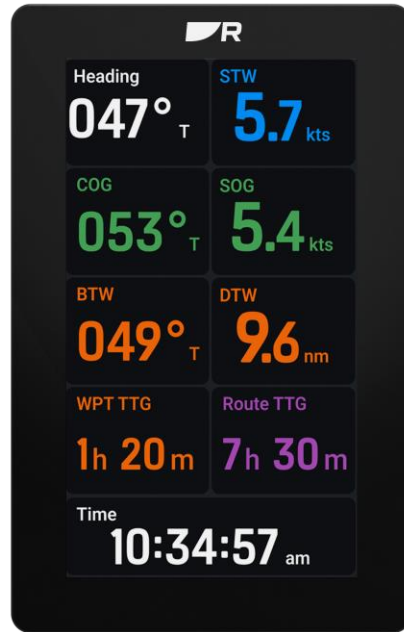




ALPHA NAVIGATION AND ENGINE GALLERY



ALPHA NAVIGATION



ALPHA ENGINE DATA



ALPHA
AND AXIOM

LIVE DEMO



ALPHA: SIMPLIFIED INSTALLATION



Single cable for power and data

Daisy chain up to 4 displays

Fewer cables in the mast / through the deck



ALPHA: SIMPLIFIED INSTALLATION



Optional 1m, 3m, 5m, 10m power and data cables (power/data cable not included)

Optional 0.3m and 1m network daisy chain cables



ALPHA MAST MOUNTING BRACKETS



Available in dual landscape, single portrait and single landscape configurations for both 7 and 9-inch

Light, strong, anodized aluminum construction

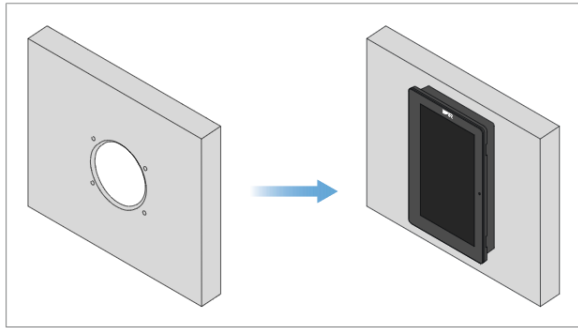


Stackable with interlocking screws, included

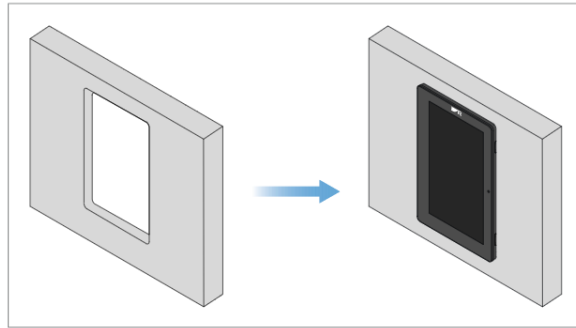
Display mounting screws included with brackets



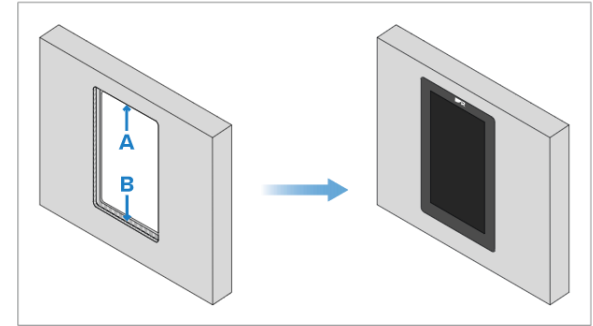
HELM MOUNTING OPTIONS



Instrument Mounting
(91mm 3.58 in Hole)

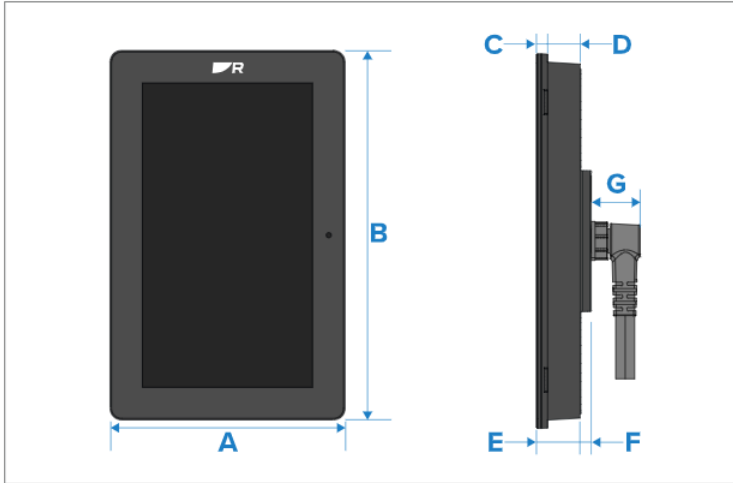


Surface Mounting



Flush Mounting

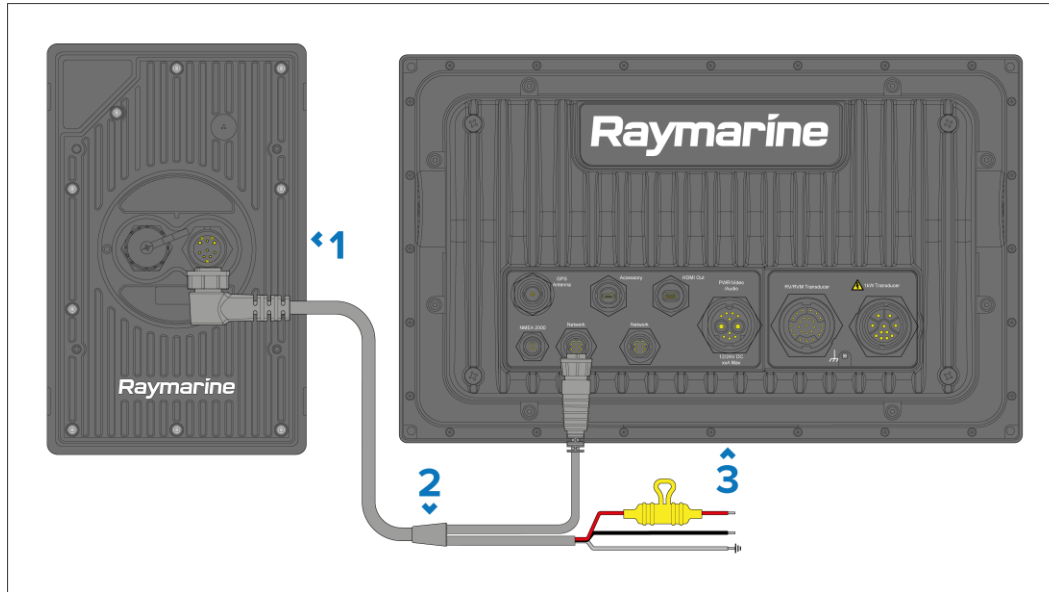
PRODUCT SIZE



The Alpha 7 in landscape has a height that almost matches that of an i70, making it a fit for most companion ways.

Alpha 7	Alpha 9
A) 120.1 mm (4.72 in)	A) 148.9 mm (5.86 in)
B) 188.4 mm (7.42 in)	B) 253.9 mm (9.99 in)
C) 7 mm (0.28 in)	C) 7 mm (0.28 in)
D) 18 mm (0.71 in)	D) 20.5 mm (0.81 in)
E) 25 mm (0.98 in)	E) 27.5 mm (1.06 in)
F) 7 mm (0.28 in)	F) 7 mm (0.28 in)
G) 30.9 mm (1.22 in)	G) 30.9 mm (1.22 in)

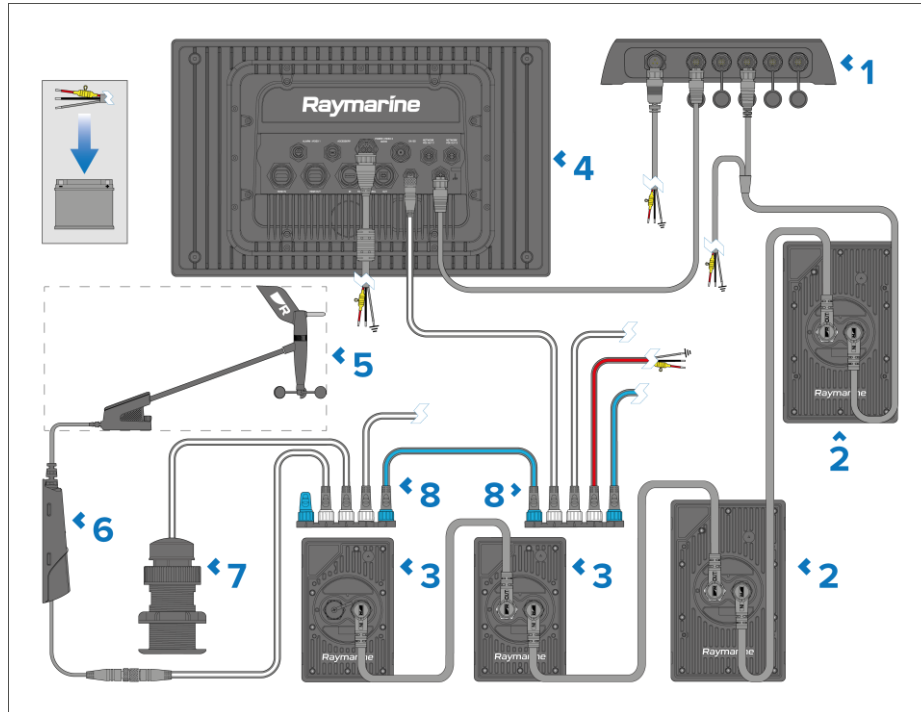
ALPHA SYSTEM



Axiom and Alpha Basic Integration

1. Alpha Display
2. Alpha Power/RayNet Data Cable
3. Axiom Display

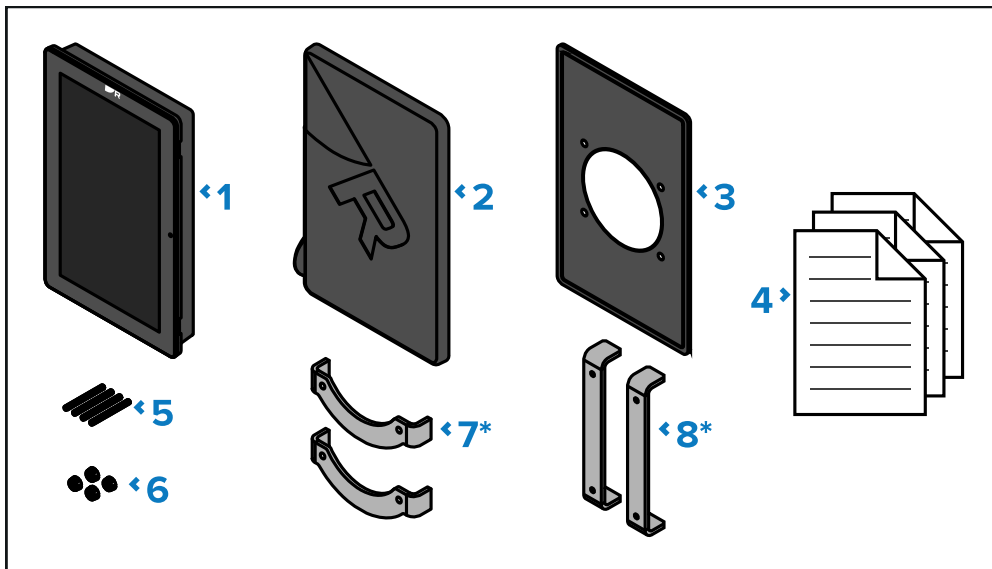
ALPHA SYSTEM



Alpha and Axiom Extended System

1. RNS-5 Network switch
2. Alpha 9 Performance display
3. Alpha 7 Performance display
4. Axiom 2 XL chartplotter display.
5. RSW Wired Smart Wind.
6. Wired Wind Gateway
7. DST Transducer
8. SeaTalk^{ng}® 5-way connector (A06064)

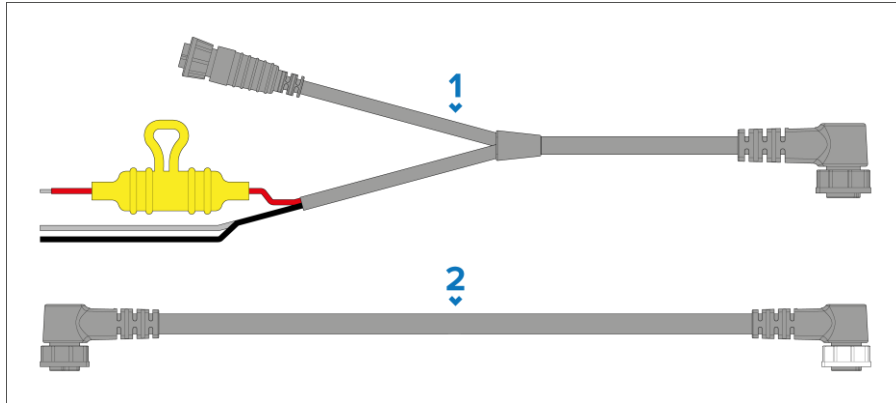
ALPHA PACKAGE CONTENTS



1. Alpha display
2. Suncover
3. Gasket
4. Documentation
- 5 4 x Threaded studs, M4 x 40 mm
- 6 4 x Thumb nuts
- 7 Alpha 7 only — 2 x mounting brackets
- 8 Alpha 9 only — 2 x mounting brackets

Note: Power cable sold separately

ALPHA REQUIRED CABLES



Alpha displays requires a separately available combined RayNet and power cable in order to function, which is NOT supplied with the product.

Depending on the system configuration, either one or both of the following cables will be required:

1. 8-pin right angled power to RayNet and bare end power wires cable, available separately — used to supply power to the Alpha display directly from a 12 V or 24 V power source.
2. 8-pin right angled Alpha daisy chain cable, available separately — used to supply power and data to additional performance displays connected (or “daisy-chained”) in a series.



ALPHA DISPLAYS PRICING (CAN)



PART NO.	UPC Code	DESCRIPTION	CAD MSRP
E70649	723193842720	Alpha 7" Performance Instrument Display	CAD 1,618.65
E70650	723193842737	Alpha 9" Performance Instrument Display	CAD 2,698.65
Alpha Performance Instruments Accessories			
A80752	723193859315	Power & Raynet Cable - Alpha Performance Instrument 1m	CAD 80.99
A80709	723193842768	Power & Raynet Cable - Alpha Performance Instrument 3m	CAD 107.99
A80753	723193859322	Power & Raynet Cable - Alpha Performance Instrument 5m	CAD 134.99
A80754	723193859339	Power & Raynet Cable - Alpha Performance Instrument 10m	CAD 202.49
A80710	723193842775	Daisy Chain Cable - Alpha Performance Instrument 0.3m	CAD 60.74
A80747	723193858912	Daisy Chain Cable - Alpha Performance Instrument 1.0m	CAD 101.24
A80711	723193842782	Alpha 7" Performance Instrument Single Mast Bracket - Landscape	CAD 195.74
A80712	723193842799	Alpha 7" Performance Instrument Dual Mast Bracket - Landscape	CAD 330.74
A80713	723193842805	Alpha 7" Performance Instrument Single Mast Bracket - Portrait	CAD 249.74
A80714	723193842812	Alpha 9" Performance Instrument Single Mast Bracket - Landscape	CAD 263.24
A80715	723193842829	Alpha 9" Performance Instrument Dual Mast Bracket - Landscape	CAD 398.24
A80716	723193842836	Alpha 9" Performance Instrument Single Mast Bracket - Portrait	CAD 317.24



Raymarine®

NEW PRODUCT INTRODUCTION

SMART WIND SENSOR

AUGUST 2023

SMART WIND INTRODUCTION



Precision Wind Data for Everyone

Professional-level wind system designed for leisure sailors.

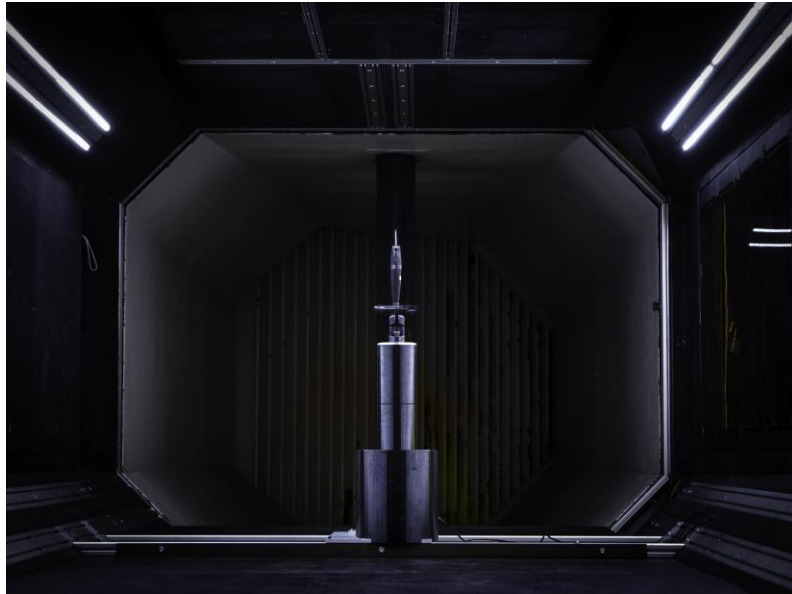
The all-new wind sensor design delivers the precision you would expect from calibrated instrument.

The integrated 3D motion sensor and Raymarine Smart Wind™ technology gives every skipper a new level of sailing intelligence.

The result is highly accurate calibrated wind speed and direction data to fuel your Raymarine sailing features.

Be a better sailor and have confidence in your decision making when it matters most.

SMART WIND: TESTED FOR EXTREME ACCURACY



The wind transducer has been tuned and balanced through extensive wind tunnel testing to ensure the raw data being received at the mast head is as accurate as it can possibly be.



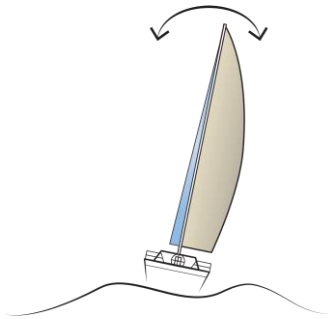
SMART WIND: 3D SENSOR



Integrated AHRS technology (3D sensor) accounts for wave action and vessel pitch and roll, automatically delivering improved true wind accuracy.

The 3D sensor and Smart Wind technology delivers superior wind measurement by compensating for mast twist and bend.

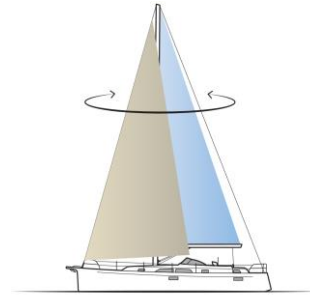
Smart Wind technology compensates for the effects of airflow and upwash against the sails, delivering stable and trusted true wind direction.



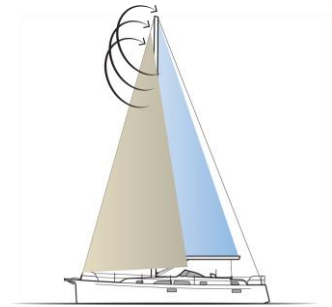
Roll



Pitch



Mast Twist



Upwash

SMART WIND: SELF CALIBRATING



Raymarine Smart Wind technology delivers expert level accuracy with no complicated and expensive black-box processors or cumbersome calibration tables.



SMART WIND: ROTATING MAST



Rotating mast compatible

Integrated AHRS intelligently compensates for rotating masts used on performance race yachts, catamarans, and trimarans.

This is something only previously possible with a wireless mast rotation sensor and gateway.



SMART WIND: BE A BETTER SAILOR



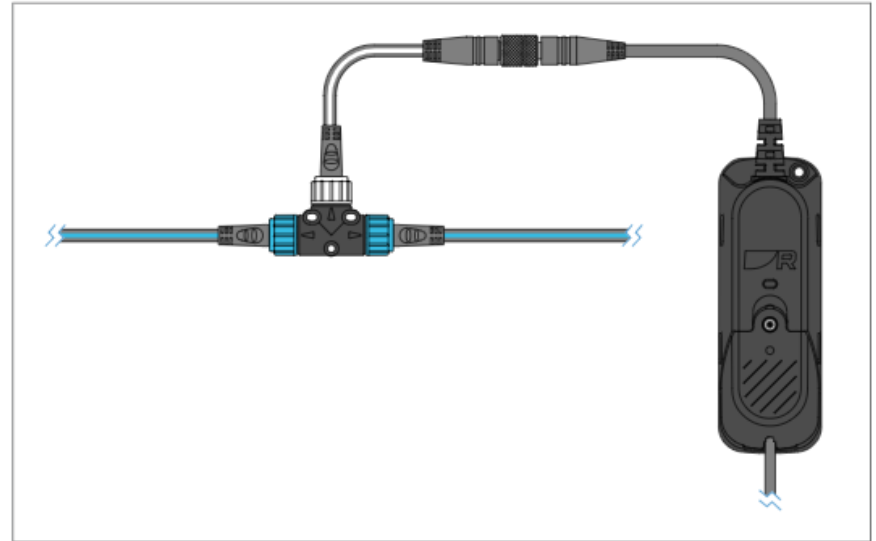
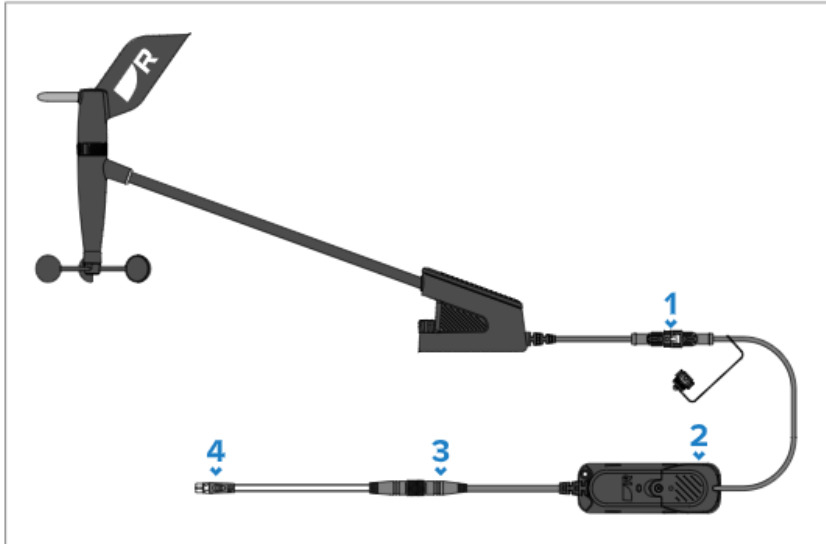
Trusted, high-accuracy True Wind data combined with Alpha Displays and Axiom chartplotters let you sail smarter.



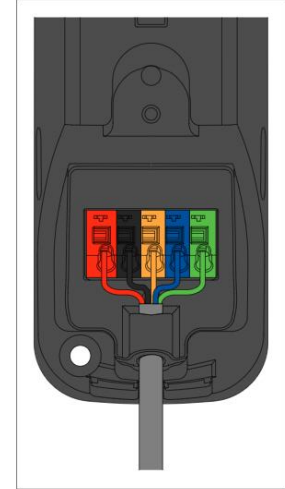
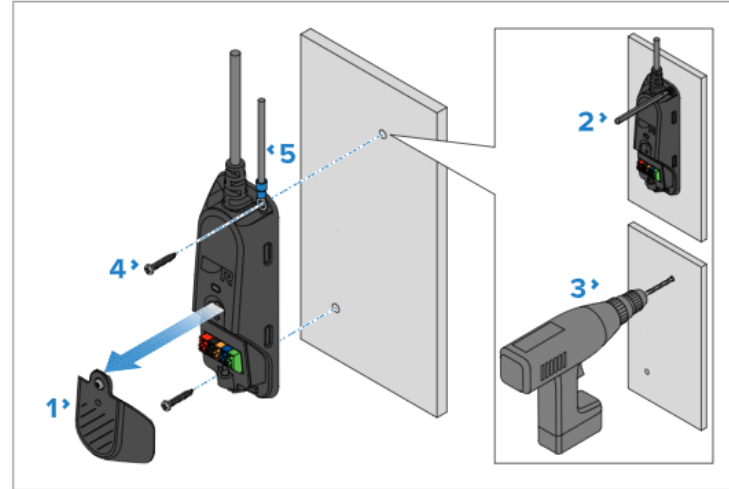
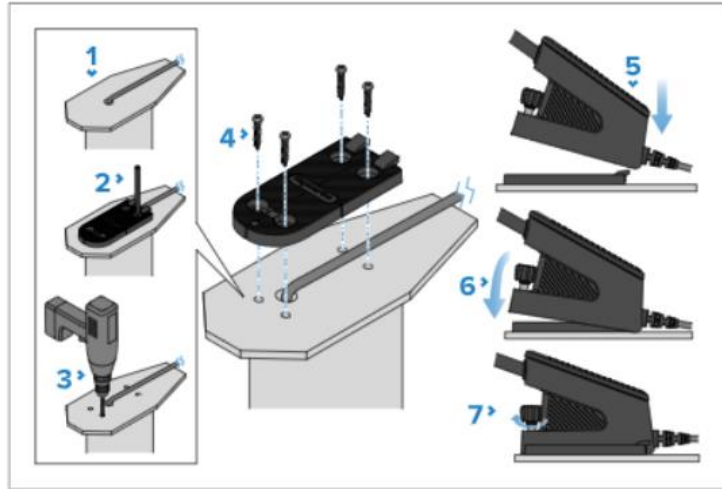
SMART WIND: RSW-WIRED SYSTEM



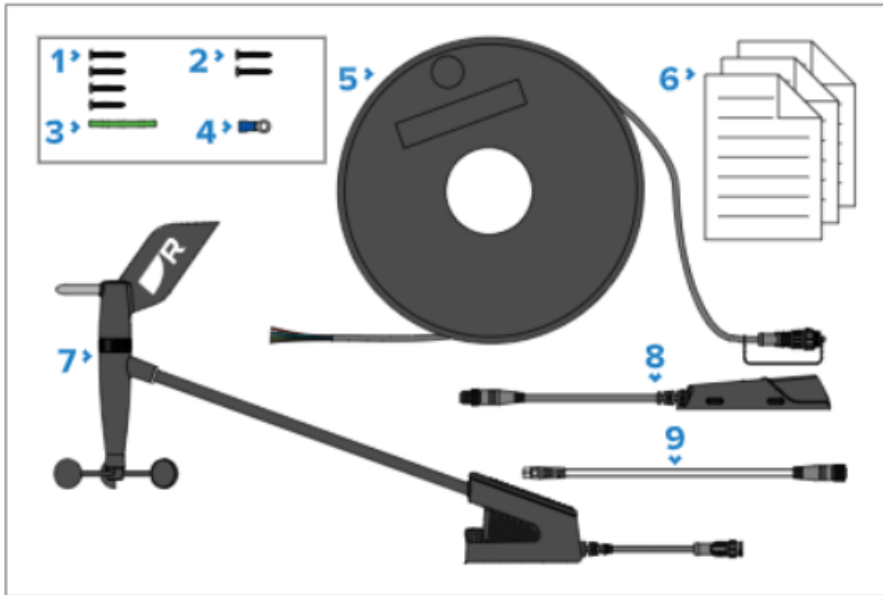
SMART WIND: RSW-WIRED SYSTEM



SMART WIND: WHAT'S IN THE BOX



SMART WIND: WHAT'S IN THE BOX



Item	Description
1	No.10 x 3/4" self tapping screws x 4 (for mounting the wind transducer).
2	No.7 x 3/4" self tapping screws x 2 (for mounting the gateway).
3	40 mm (1.57 in) heat shrink tube (required to insulate ground wire when shortening the mast cable).
4	Ring crimp terminal (required for additional ground connection when the gateway is not mounted on a metal surface).
5	Mast cable, 30 m (98.43 ft) reel.
6	Documentation.
7	Wind transducer.
8	Smart wind wired gateway.
9	SeaTalkng [®] to DeviceNet adaptor cable, 120 mm (4.72 in).

RSW WIRED: PRICING



PART NO.	UPC Code	DESCRIPTION	CAD MSRP
RSW - Smart Wind Transducers			
E70670	723193846629	RSW - Smart Performance Wind Transducer, Short Arm with 30m Cable	CAD 1,147.49

SMART WIND: RACE AND WIRELESS



RSW-Wireless

Launching Q1 2024



RSW-Race

Raymarine®



AXIOM

NEW LIGHTHOUSE 4.5 SAILING FEATURES

AUGUST 2023

POLAR MANAGER



- Axiom now supports the direct import of Polar data using a CSV file via microSD
- Upload multiple polars for different sailing conditions
 - Inshore
 - Offshore
 - Short Handed
- Duplicate and rename existing polars
- Supports on-MFD manual adjustment of polar values for fine-tuning
- We will no longer accept polar submissions online from end-consumers
- Axiom's built-in polar database will continue to be updated periodically for OEM and fleet sailing customers only

Example_Polar

TWA/TWS	4.0kts	6.0kts	8.0kts	10.0kts	12.0kts	14.0kts	16.0kts	18.0kts	20.0kts	25.0kts	30.0kts
0.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0°	1.00	1.20	2.40	2.60	2.80	3.00	3.20	3.60	2.40	2.20	2.00
50.0°	1.00	1.20	2.40	2.60	2.80	3.00	3.20	3.60	2.40	2.20	2.00
55.0°	1.00	1.20	2.40	2.60	2.80	3.00	3.20	3.60	2.40	2.20	2.00
60.0°	1.00	1.20	2.40	2.60	2.80	3.00	3.20	3.60	2.40	2.20	2.00
80.0°	1.00	1.20	2.40	2.60	2.80	3.00	3.20	3.60	2.40	2.20	2.00
90.0°	1.50	2.00	2.50	3.00	3.20	3.60	3.80	4.00	4.50	5.00	6.00
100.0°	1.50	2.00	2.50	3.00	3.20	3.60	3.80	4.00	4.50	5.00	6.00
110.0°	1.50	2.00	2.50	3.00	3.20	3.60	3.80	4.00	4.50	5.00	6.00
120.0°	1.50	2.00	2.50	3.00	3.20	3.60	3.80	4.00	4.50	5.00	6.00

Tap a data cell to edit the boat speed value

Save

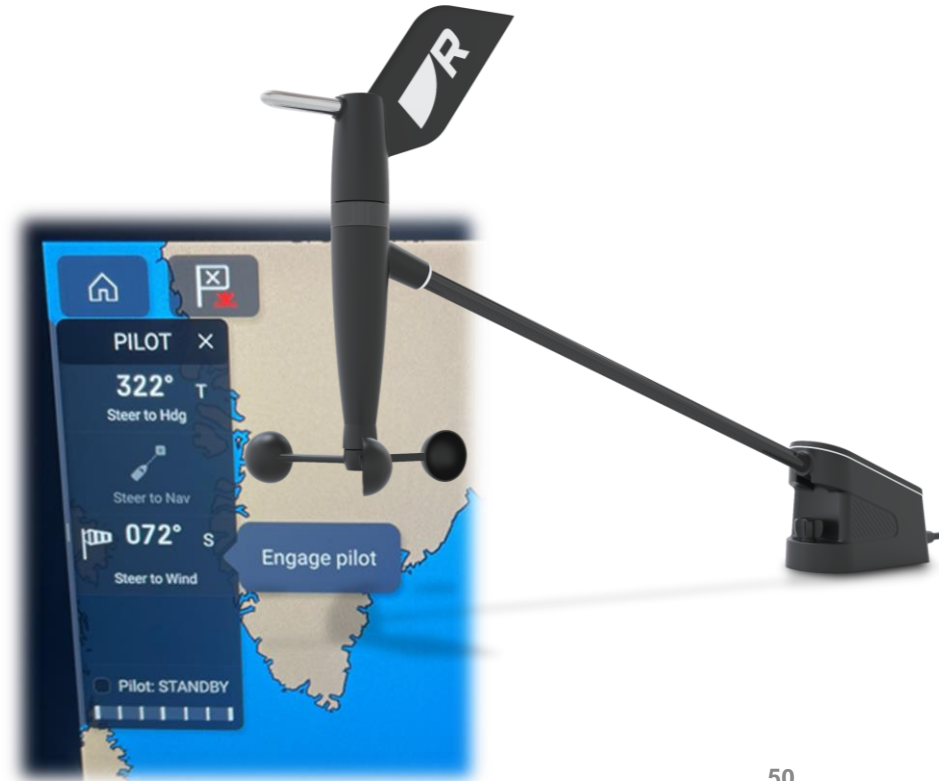
STEER TO WIND FROM AXIOM



Axiom support 2 new sailing steering options in its built-in autopilot controls.

- Steer to Wind Angle – Holds the boat at the preferred angle to the wind, using live data from the boat's wind transducer
- Steer to Target Angle – Holds the boat at the target angle to the wind, based on the polar information uploaded into Axiom.

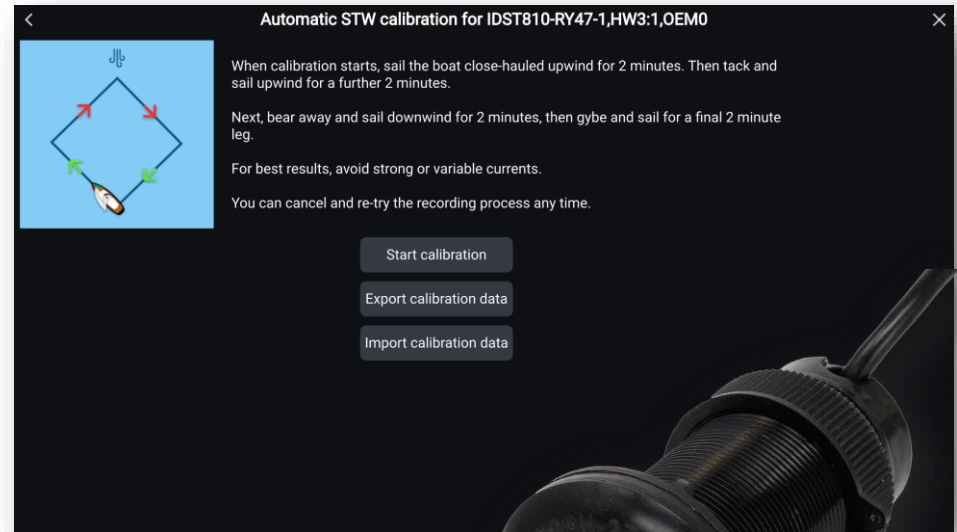
Beta



AUTOMATIC SPEED CALIBRATION



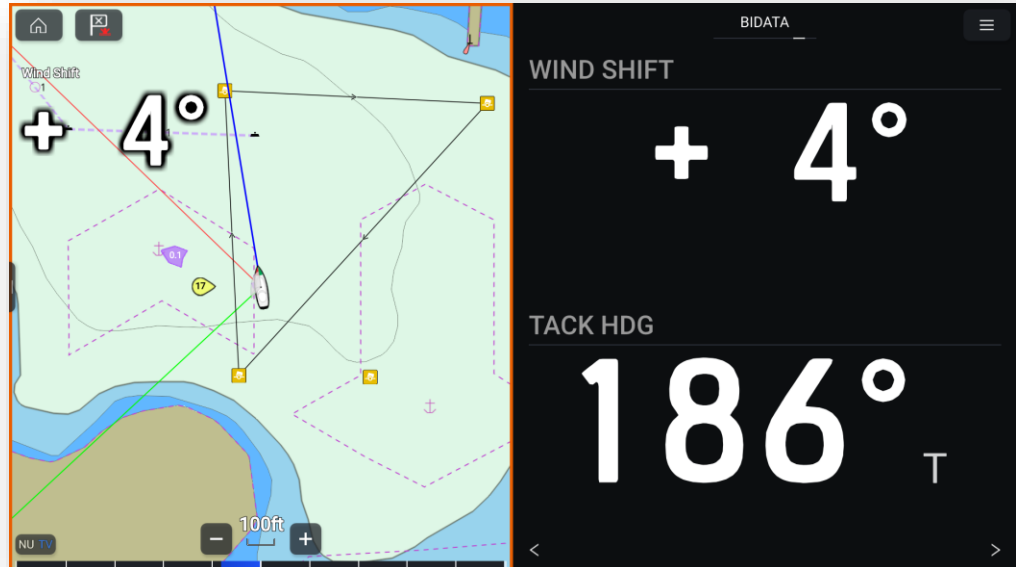
- Sophisticated, patented algorithm that removes the tack to tack, heel and linearity errors in a speed transducer
- Critical to ensure you get good True Wind Data
- Prompted setup through Axiom's *Network* tab. Touch the DST810 and select Calibrate



WIND SHIFT INDICATORS



- Available as a horizontal bar display on the chart, sidebar data, floating data, or Dashboard data Item
- Value is broadcast across the network to Alpha instruments
- Adjustable averaging time
 - Linked to the value found in the Laylines settings in the Chart app
 - Long-press on the wind shift data item to reset as needed



SAIL RECOMMENDATION



MYPAGE

Sail recommendation

1 Reef Main

75% Jib

Dual cell

Mainsail rec

1 Reef

Jib rec

75%

Individual cells

Sail recommendation has changed

New sail recommendation: Main: 1 Reef Jib: 75%

OK

Consult the owner manual
Sailing configurations must be respected
Sea state must be taken into account

KCS
EXCESS

Apparent Wind Angle | AWA : 30-70°

Apparent Wind Speed AWS (knots)	Apparent Wind Angle AWA : 30-70°			Apparent Wind Angle AWA > 70°			
	Main	Jib	Code 0	Main	Jib	Code 0	
0-5	Full	0%	Full	0-16	Full	0%	Full
0-23	Full	0%	0%	0-20	Full	Full	0%
23-28	Reef 1	Full	0%	20-24	Reef 1	Full	0%
28-33	Reef 1	75%	0%	24-30	Reef 2	75%	0%
33-38	Reef 2	60%	0%	30-34	Reef 3 0%*	60%	0%
38-45	Reef 2	40%	0%	34-38	Reef 3 0%*	40%	0%
45-55	Reef 3 0%*	0%	0%	38-50	0%	25%	0%
> 55	0%	0%	0%	> 50	0%	0%	0%

* 0% IF MAINSAIL WITH 2 REEPS

- Import a sail plan and Axiom will make automatic recommendations based on the wind conditions
- Developed for cruising catamarans, charter/boat clubs and other applications where an inexperienced captain can benefit from a little more help on sail selection and reefing
- Recommendations appear as a programmable data item. Exceeding limits will prompt an on-screen warning
- CSV file imported through the Boat Settings menu

SAILING SIMULATOR IMPROVEMENTS



- Simulated wind now always blows from the same direction
- Simulated boat now automatically follows the laylines
- Touch Menu...Navigation...Tack boat to execute a tack maneuver
- Synchronized data. Show the integration across the Chart app, Dashboard app and connected Alpha displays with realistic values

