

TO SERVE YOUR PERFORMANCE

Navigation & Performance Analysis software

ABOUT ADRENA

OUR TEAM

Accessible and responsive, the Adrena team is focusing on Customer satisfaction driving for Excellence in service and solution.

ADRENA is a software editor company specialized in racing navigation software and performance analysis tools.

OUR KNOW-HOW

From first inspiration to ultimate innovation.

OUR TARGET

The art of success is to know how to surround the bests.



Founded in 2003 and located near Nantes, in France, Adrena supports sail racers from start to finish, providing tactical decision-making tools adapted to their particular needs: performance analysis, routing, GRIB weather files downloading, etc.

Always at the cutting edge of innovation, Adrena employs a passionate team who has continually perfected the software in order to respond to top-level sailing and to ensure safe navigation.

Within a matter of years, ADRENA became the French market leader in software for regatta sailing and ocean racing. The company, which supplies 100% of Vendée Globe and Volvo Ocean Race skippers, has never stopped developing, perfecting and diversifying its products.

OFFER

Thanks to its 3 software (First, Standard and Pro), and its new software Octopus, ADRENA provides a complete and progressive offer to satisfy both yachtsmen and high-level sailors:

FIRST

Cruising & Occasional Racing

It is aimed at cruising enthusiasts and navigators for occasional racing.

The ADRENA expertise for regatta and weather routing is condensed in a version accessible to everyone.

In addition to traditional navigation functions, a racing module is included as well as several tools to create polar diagrams.

STANDARD

Navigation & Regular Racing

It is aimed at navigators and keen racers looking for powerful tools.

This is the reference software; it offers multiple features for greater precision and highly accurate weather routing.

Thanks to Adrena software, decision-making process becomes much easier when racing.

PRO

Navigation & High-Level Racing

It is aimed at professional navigators looking for a complete solution offering the highest and most detailed performance.

Whether you are racing around the world or inshore, the additional functions of AdrenaPro software are here to answer every possible requirement: navigation preparation, performance analysis, optimization as well as debriefing.

OCTOPUS Cruising

It is aimed at cruising enthusiasts looking for a tool especially developed for their needs no matter their level or requirements. Intuitive and performant, it benefits from ADRENA expertise and provides a significant assistance for anticipation, comfort and serenity all along the navigations.



ADRENAFIRST

Great assistance in racing and cruising

Used straight out of the box with its default settings, it is a complete, effective and unique **(ready to sail)** package for cruising and racing.

For safe cruising

It is capable of managing waypoints and creating routes.

Once the route is plotted, the necessary information for a smooth running of the boat and for staying on track is automatically provided.

It also offers numerous functions linked to safety such as MOB, AIS and alarms (AIS, mooring, arrival on coast).

A strong decision-making tool for regatta

It offers all the features for planning the perfect start, whether for an offshore race or a windward/leeward course.

During the race, it is assisting the crew in decision making by providing the best data at the best moment.

Key features:

- · Touch screen mode
- · Waypoints and routes management
- · Worldwide tides calculation
- GRIB download online or by email up to 16 days
- · Loading and displaying GRIB
- Meteograms
- · Logbook: position, speed, wind
- · MOB and AIS functions
- Safety alarms : MOB, AIS, arrival on

coast, mooring

- · Laylines calculation and display
- Integration of current into time calculations
- Racing module: starting, windward/ leeward and coastal
- Competitors monitoring
- Calculation of IRC /HN recovered time



ADRENAFIRST

Including weather routing

A powerful tool for route forecasting based on weather and boat speed polars. It provides significant information for offshore sailing.

Calculating a routing

It calculates the best route in terms of speed and/or safety by using multiple data: date and place of departure, destination, boat speed polar, wind conditions (GRIB) and currents.

The navigation table summarizes the estimated time of arrival (ETA), the time travelled, the distance to destination. It also determines the course to steer and the expected conditions at every stage of the routing.

Dual Routing, sailing and motoring

It is the opportunity to combine two modes of propulsion in a routing calculation.

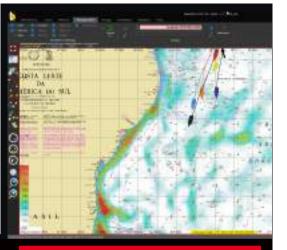
The best route to follow is directly calculated and the software will indicate sailing and motoring periods.

Fuel consumption is estimated in order to anticipate the needs.

Key routing features:

- Calculation of optimum route while automatically avoiding coastlines
- · Routing in 2 clicks
- · Dual routing: sailing and motoring
- Integration of the current into routing calculations
- Routing of competitors
- Safety: wind speed limit in routings

- Summary table of the routing
- Display of wind conditions encountered along the route
- Compulsory waypoint (pivot on isochrone)



ADRENA STANDARD

A powerful tool dedicated to racing

Besides the standard features for navigation and mapping, it is **an essential tool for tactical decision-making.**

Race Management

During the starting sequence, the map centers itself on the start line and the laylines. The «Safe starting area» and specific numerical data are displayed.

During the race, the screen switches to focus on the current waypoint and to display the dedicated numerical data.

RoadBook

When preparing the trip, the navigator locates and annotates specific areas that can be enriched with images by overlaying them on the map.

Replay, debriefing tool

Replaying a race enables the analysis of different phases, tactical and strategic decisions as well as weather conditions changes.

Alarms, enhanced safety at sea

Any danger (AIS target, coast, etc.) and data changes (performance, wind, etc.) are pointed out by a sound and a visual signal.

iDataNet

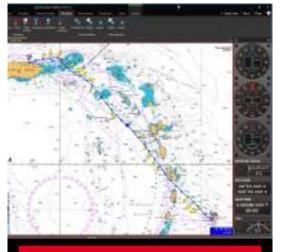
Numerical data can be sent in Wifi on iPhone or iPad and displayed on several screens at the same time.

Key features:

- AdrenaFirst (p.4)
- Waypoints and routes management
- · Reading and display of GRIB
- · Alarm functions
- Compatibility with GPX files (waypoints, routes and tracks)
- · Roadbook with images overlay
- Calculated data sent on iPhone or iPad
- Datagrams: data evolution along the

route (currents, sailect...)

- Management of the starting sequence, windward/leeward and coastal courses
- Competitors monitoring
- Reading of recorded tracks (replay)
- · Reading of historical data: histographs



ADRENA STANDARD

Including weather routing

Top ranked on the market, it provides a useful tool for navigators aimed at route optimization and analysis for both inshore and offshore racing.

Compute a routing

It is computed from multiple data (polars, wind, current, etc...) so it enables to explore and compare several scenarios.

Routing profiles

Thanks to the variables scanning (wind, polar, GRIB shift or departure), it is possible to launch several successive routings. It enables to check the reliability of the route plan.

Inverse isochrones

They enable to visualize the sensitivity of the ETA according to a route shift. If they are parallel, it is possible to change one's heading without any effect on the route duration.

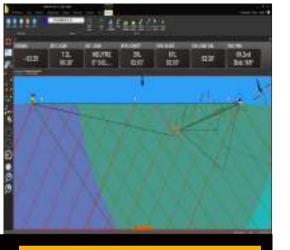
IsoRoutes

They compare isochrones and inverse isochrones and color a corridor that enables to get to destination with a minimum of delay compared to the optimal route.

Key routing features:

- AdrenaStandard (p.6)
- Calculation of the optimum route while automatically avoiding the coasts
- Dual routing: sailing and motoring
- Integration of the current in calculations
- Routing of competitors
- Compulsory waypoint (pivot on isochrone)
- Display of encountered conditions: current, wind, tide and waves

- · Statistics on routing : wind, sails
- · Calculation on a coastal route
- Entry of multiple GRIB for routing calculation
- Differential coloring of the route according to: speed, current, waves, wind
- Routing hypothesis: scanning of variables
- Risk / delay assessment: inverse isochrones and isoroutes



ADRENAPRO

All the know-how of ADRENA

Essential for enhancing your performance in high-level racing, it is equipped with extra features in order to offer sophisticated tools for route analysis as well as Sailect and speed polars creation.

For regatta

It calculates different assumptions to reach the line: direct, tacking, gybing and sailing above a layline. The rotation and acceleration timing are integrated in the time to the line and laylines calculation.

Polars

3 different polars are managed: departure, navigation and performance. They can be adjusted during the race.

Multimedia

Multimedia content synchronization (photos, videos and sound) illustrate the tracks, Roadbook, Sailects or Trimbook for even more detailed records of your sailing.

Tracks and tracks analysis

It is also possible to analyze the loss when maneuvering, to integrate and synchronize external data into the tracks (sensors, records)...

Key features:

- OptimaPro (p.10) + AdrenaStandard (p.6)
- · Integration of external current atlas
- Calculation of inertia and acceleration of the boat
- Time to the line taking into account all manoeuvre
- · Management of a leeward gate
- Use of specific polars: start, navigation, performance
- · Data averaging

- · Adjustment of polars in real time
- Integration of external data into the tracks
- Multiple replay (several boats)
- · Analysis of loss during manoeuvres
- Data sharing with external software (Sailect, segment)
- Graphic display of weather history along the track



ADRENAPRO

Including weather routing

Perfect configuration for Pro Racing. It meets the needs of a professional team on international projects during the pre-season work-up of a boat as well as during the races themselves for course management and course planning.

Communication with the shore

All data received from the CPU can be transmitted to the shore. Thus, the route planner is aware of the current sailing conditions of the boat and can compare them to GRIB files in order to adjust the route and to send a routing to the boat.

Micro-routing on laylines

On a leeward or a windward leg, it enables to know what is the best side of the square and the time difference expected between the «max on right side» and «max on left side» routes.

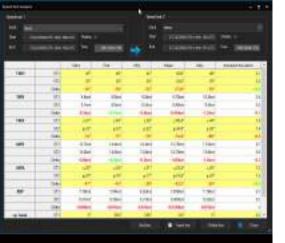
Video creation on routings

Useful in sailing mode in addition to simulation, it enables to study in details the expected boat progression in weather systems, to replay step by step, forward and backwards...

It is an essential pedagogical tool during the trainings which enables to display and to record the most interesting strategic situations.

Key routing features:

- OptimaPro (p.10) + AdrenaPro (p.8)
- Loading of historical GRIBS and global forecast
- Automatic loading of NOAA GRIB
- Micro-routing on laylines: "best side of the race square"
- · Videos creation on routing
- Use of multi-core CPU
- Multiple routings based on historical Gribs and global forecasting
- · Wind stability display



OPTIMA PRO

Deep analysis of your data

Included in the Adrena Pro software, this advanced features tool is used for Sailect creation, tracks analysis, data reading and collecting as well as polar diagrams calculation.

Selective recordings for contextual polars calculation

Polar calculation takes into account the boat configuration (sails, keels, ballasts...) given by the crew during navigation. Data analysis determines the most performant configurations.

Every polar file computed from these calculations can be compared and modified by overlay.

Track analysis

OptimaPro tools enable to highlight, analyze and compare the tracks of one or several boats.

To measure performances more accurately, each section of navigation can be segmented in order to be used in a speed test or to calculate statistics.

Key features:

- Graph of historical data: histograph
- Reading of recorded tracks (replay)
- Multiple replay (several boats)
- Tracks analysis: statistics, speed-test...
- Creation and modification of Sailect
- Calculation of polars by configuration
- Polars comparison
- Table of the best configurations
- · Graphic and digital polar modification

- TrimBook: setting notebook
- External data integration in the track
- Data exchange with internal software (Sailect, segment)
- · Analysis of loss during manoeuvres
- Graphic display of weather history along the track



CARBON EDITION

Graphic Interface

STYLISH DYNAMIC **NEW EXPERIENCE**

GAUGE LIGHT THEME

DARK THEME HIGH TECH SPLIT SCREEN TECHNOLOGY

PERFORMAN

FLUIDITY SMOOTH **CURSOR**

DYNAMIC

TABLET RIBBON

LIGHT THEME

HIGH TECH

STYLISH QUICK

CURSOR TECHNOLOGY

RIBBON

SIMPLE

MODERN

ERGONOMICS

EFFICIENCY

STYLISH

PERFORMANCE

PERFORMANCE

LIGHT THEME

SCREEN SHARING

DIAL

OUICK

GRAPHIC INTERFAC

GAUGE SCREEN SHARING

NEW EXPERIENCE

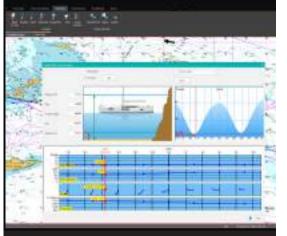
ERGONOMICS

PERFORMANCE

FEATURES TABLE

Description		OPTIMA PRO	ADRENA FIRST	ADRENA STANDARD	ADRENA PRO
	Touch screen mode				
	Calibration of instruments (log compass and windvane)				
	Backup / Recovery of settings, files and cartography				
	Global tide calculation				
	Electronic vector charts (C-Map MAX) or raster charts (SnMap, BSB)				
	GRIB files download online and by email up to 16 days				
Navigatio	Logbook (position, wind, speed and observations)				
60	AIS anti-collision system				
<u>.≥</u>	Alarms (MOB, mooring, arrival on coasts, AIS)				
G	Waypoints and routes management				
~	Superimposition of Google Earth images				
	Datagrams: data evolution along the route (currents, sailect)				
	Roadbook with possibility to add visual annotations on the chart				
	AIS tracking				
	NOAA automatic GRIB loading				
	Competitors monitoring				
İ	Calculation of recovered time IRC/HN				
l a	Management of the start, windward/leeward and coastal route				
1	Laylines calculation and display	i			
egatta	Possibility to send calculated data to iPhone or iPad	İ			
	Inertia and manœuvres taken into account on the sarting area				
~	Polars adjustment in real time				
	Management of a leeward gate	ĺ			
	10 Hz instruments interface				

	Description	OPTIMA PRO	ADRENA FIRST	ADRENA STANDARD	ADRENA PRO
	Calculation of optimum route while automatically avoiding coastlines				
	Dual Routing: sailing and motoring				
	Integration of the current in routing calculations				
	Routing of competitors				
	Routing calculation on a coastal route				
	Compulsory waypoint (pivot on isochrone)				
	Display of wind conditions encountered along the route				
₹	Display of current, tide and waves conditions encountered along the route				
	Simulation of several routings				
Routing	Routing hypothesis: scanning of variables				
-	Risk/delay assessment: inverse isochrones and isoroutes				
	Statistics on routing: wind, sails				
	Multiple routings on historical GRIBS, ensemble forecasting				
	Video creation on routings				
	Micro-routing on laylines: «best side of the navigation square»				
	Loss due to sail change taken into account in routing calculation				
S	Real polars caluclation from navigation data				
S.	VPP polar diagrams creation				
	Creation and modification of Sailect				
nalysis	Performance analysis (VMG, target boat speed)				
4	Graph of data history: histograph				
O	Replay of recorded tracks				
100	Graphic display of weather history along the track				
ल	Multiple replay (several boats at the same time)				
Performance	Tracks analysis: statistics, speed tests				
0	Polars calculation by configuration (sails, keel, ballast)				
I F	Graphic and digital modification of polars				
e l	Data exchange with external software (Sailect, segment)				
	Loss analysis when tacking, gybing and during a manœuvre				



OCTOPUS

New software for smart cruising

Intuitive and easy to set up, it provides an appropriate solution for cruising by offering **more serenity and anticipation** while ensuring a high-secure navigation.

Routing calculation

Routing calculation can be customized according to the sailor's preferences - fastest or most comfortable route for example - and a time of arrival can be set up.

A graphical display indicates the day/night periods to provide a safer navigation.

Polars

Assistance in real speed polar creation is provided. The function offers a more accurate and reliable routing that corresponds to the boat potential.

Mooring assistance

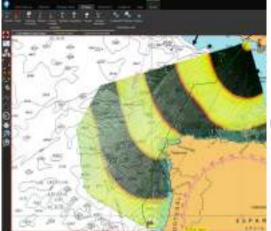
Graphical interface of the conditions to be expected on the chosen mooring area: weather forecast, sea level according to the tide, etc.

Multiple functions linked to safety such as MOB, AIS and alarms (AIS, mooring, arrival on coasts, custom alarms).

Key features:

- Vector and raster charts compatibility
- · Waypoints and routes management
- Best route calculation while automatically avoiding coastlines
- Dual routing: sailing and motoring periods
- Mooring assistance graphic module
- Route anticipation on the next tack
- Assistance for speed polar and sails usage charts creation

- Real polars calculation
- Routing analysis
- Night navigation taken into account in the routing
- Graphical display of day/night periods
- GRIB files download online and by email up to 16 days
- Custom alarms: depth, wind force, wp, etc.
- · MOB, AIS and alarms detection



OCTOPUS

Comfort and safety along the navigation





OCTOPUS FEATURES TABLE

	Description
	Multi-monitor software
=	Touch screen mode
<u> </u>	Backup/recovery of settings, files and cartography
ystem	Automatic reload of the last environment on startup
S	Automatic detection of cable instruments
•,	Automatic sending of waypoint data to the instruments displays
	In/out communication with WIFI device
	Calibration of instruments (log, compass and windvane)
	Waypoints & routes management
	Charts compatibility: electronic vector charts (C-Map MAX) and raster charts (SnMap, BSB)
	Automatic creation of waypoint on C-Map buoy
	Search tool on the chart for ports, waypoints or roadbooks
_	GRIB files download online and by email up to 16 days
0	NOAA, Predictwind, Tidetech and Great Circle direct interface Global tide module
avigation	Tide charts compatibility: SHOM, Proudman (+ high resolution), Winning Tides
60	Display of weather and tide conditions on mooring
<u>`</u>	Display of the route on the opposite tack
S	Logbook (position, wind, speed and observations)
_	Roadbook with possibility to add visual annotations on the chart
	Data export to Google Earth
	Superimposition of georeferenced images
	Meteogram
	Import/export of GPX files
	Sending calculated data to iPhone or iPad

	Description					
	Man over board tracking with drift calculation					
;	Sart AIS MOB detection					
Security	Safety alarms: MOB, AIS, coast detection, anchor drag alarm					
e, l	Custom alarms: depth, wind force and direction, wp, etc.					
	AIS Anti-collision system					
	Best route calculation while automatically avoiding coastlines					
	Routing in 2 clicks					
	Dual Routing: sailing and motoring					
	Integration of tide/current data in routing calculations					
	Possibility to set up min/max values in routing calculation: wind speed/angle and waves height					
	Table of legs: routing(s) summary					
p0	Display of encountered conditions: wind, current, tide and waves					
Routing	Best route calculation according to a given time of arrival					
	Display of day/night periods					
~	Routing calculation of a route with several waypoints					
	Simulation of several simultaneous routings					
	Use of several GRIB files in routing calculation					
	Routing hypothesis on time of departure/arrival, max wind/waves					
	Statistics on routing: wind, points of sailing, comfort					
	Use of a different polar for day and night periods					
	Possibility to draw exclusion areas (Roadbook)					
S	Real polars calculation from navigation data					
a L	VPP polar diagrams creation					
Polars	Sails use charts management (Sailect)					
	Possibility to correct recorded tracks					



ADRENA Software can read **vector maps (C-Map MAX)** and **raster maps (SnMap and BSB)**. The software is delivered with a global coastlines map. Charts are loaded through the Adrena dongle which enables to use them on any PC as long as the dongle is plugged in.

SnMap Raster charts

This raster chart offer is derived from data provided by the SHOM, I.I.M. (Italian HO) and UKHO. Charts are updated once to twice a year.

C-Map vector charts

C-Map MAX charts are electronic vector charts with worldwide coverage. The maps are automatically loaded on screen by using the best chart available and by displaying a level of details adjusted to the current zoom level.





Tidal information can be displayed on the map and can also be incorporated into route and layline calculations as well as destination. Those predictions are available in two formats: atlas and/or GRIB files. Adrena is managing the **SHOM tidal current** atlases, **Proudman and Winning Tides**.

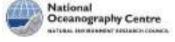
SHOM Tidal current atlases

The SHOM, the French Marine's hydrographic and oceanographic service, provides tidal current atlas for the French coasts (Atlantic, English Channel and North Sea). They are divided into 9 atlases.



Proudman currents

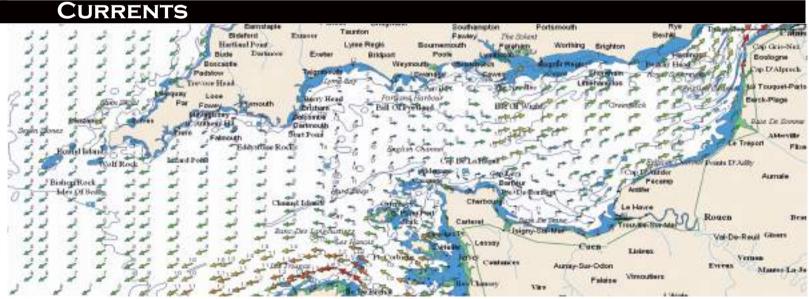
Data are provided by the National Oceanography Centre, a private oceanographic research laboratory based in the United Kingdom. Data apply to the British Isles, the North Sea and the English Channel.

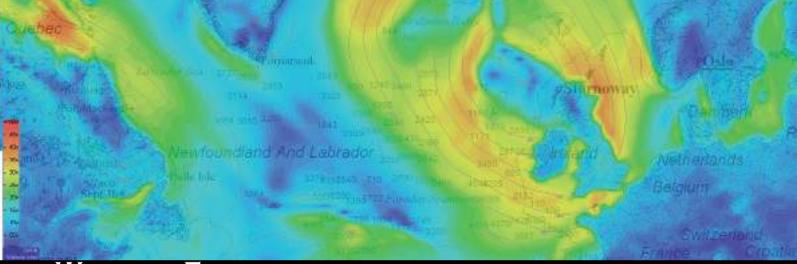


Winning Tides

Data are provided by Graham Sunderland thanks to buoys localized around the Isle of Wight enabling very accurate measures. Winning Tides currents atlas cover the Solent.

winning tides





WEATHER FORECASTS

The weather forecasts are read in **GRIB format.** They can be displayed on screen (winds, depressions/ atmospheric pressure, etc ...) and used in a routing calculation. There are several ways to integrate a GRIB file in ADRENA software:

Directly from Adrena with NOAA interface

A simplified interface allows a free access to the worldwide sea weather forecast provided by NOAA.

The following data based on the American model GFS are available: wind, pressure, precipitations, air temperature, waves, North Atlantic Ocean current, global forecast and historical GRIB files.

With usual tools (web, email subscription,...)

Most of GRIB files formats coming from other sources can be loaded by the predictions menu.

By email request from Adrena

The interface sends an email defining the geographical area and the requested data and receives back the corresponding Grib file.

By interfaces integrated in Adrena

It is possible to access directly to the GRIB.US forecasts (for free), Predictwind (free and paying data) or Navimail from Météo France (accurate and paying predictions).



ADRENA SOFTWARE AND OCTOPUS:

- CPU: I,5 GHz mini/ 2 GHz recommended
- RAM Memory: 2 Go mini/ 6 Go recommended

TECHNICAL DATA REQUIREMENT

- PC running under Windows 7, 8 or 10
- Screen 1024X768 minimum
- NMEA 0183 connection via port COM or network
- · USB slot dedicated to the dongle
- DVD drive for software and charts installation
- Graphic memory: 256 Mo min





TECHNICAL SUPPORT

ADRENA provides a free technical support by email to its Adrena users.

In order to guarantee a high quality service, ADRENA is offering the following services:

- FAQ on the website (www.adrena.fr/en/)
- User guide (menu: Help>User manual)
- Dedicated email address: support@adrena.fr

TRAININGS

Whatever your level of use is, training sessions will help you getting the most of your software according to your own navigation program.

For one or several people

Training sessions can be booked for one or several people. The number of persons is limited in order to guarantee efficiency.

Remotely or at our office

With a high speed internet connection, the trainer can take control of your computer remotely and communicate with you to improve interactivity. Thus you can follow the trainer's explanations and manipulations directly on your screen. Trainings can also be held at our office.

Adapted to your needs

The training session is adapted to your targets and your own navigation program to go deeper into some specific aspects.

Our TUTORIALS



FREE complete trial version for one month!



THE BEST USE THEM... WHY NOT YOU?!

TRIAL VERSION

Use all the functions without any limits by connecting ADRENA to your navigation instruments.

Define your needs by trying the three ranges: First, Standard and Pro.

Validate the compatibility with your onboard installation.

DEMO VERSION

Use all the functions without instrument connection nore saving files.

Route and routing example is included.

Download on www.adrena.fr/en



Your ADRENA retailer

www.adrena-software.com

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