



SeaWi User's Manual Index

SeaWi User's Manual Index	1
SeaWi App Main Features	2
NMEA Monitor View	6
Chart and Navigation View	10
Settings View	21
SeaWi NMEA forwarding	26
SeaWi File System	27
NMEA 2000® PGNs	28
NMEA 0183 sentences	29
NMEA 2000® WiFi Adaptors	30
NMEA 0183 WiFi Adaptors	31
Configuration Examples	32



SeaWi App Main Features

A full Navigation Tool for Android Tablets and Phones

Navigation Data

Visualize navigation data on your phone or tablet: position, SOG, COG, speed, heading, apparent wind, true wind, ground wind, VMG, Beaufort force, depth, water temperature, UTC time. *(A NMEA 2000® or a NMEA 0183 WiFi adaptor is required to receive NMEA data. SeaWi decodes NMEA 2000® and NMEA 0183 data received in TPC, UDP Unicast and UDP Multicast packets).*

You can also use the built-in GPS of your device to show position, SOG, COG and UTC time.

AIS Targets

SeaWi decodes AIS information and allows you to visualize AIS target information on your phone or tablet: AIS target name and MMSI, AIS target position, AIS target SOG, AIS target COG, distance and bearing from your vessel, heading, rate of turn, length, beam, draft, IMO, Callsign, CPA distance, CPA time. SeaWi also decodes, visualizes and stores Save and Rescue (SAR) messages received from vessels. SeaWi shows AIS targets on the chart and triggers alarms for dangerous AIS targets, AIS target lost or SAR message received. *(An AIS receiver and a NMEA 2000® or a 38400 baud NMEA 0183 WiFi adaptor; or a WiFi AIS receiver is required to receive AIS info).*

You can select your buddies and keep track of them.

SeaWi calculates the Closest Point of Approach vector (CPA) of AIS targets and shows it on the chart. You can program alarms depending on CPA distance and CPA time as an aid to avoid collisions.

Engine (NMEA 2000®)

SeaWi decodes and visualizes NMEA 2000® engine data: engine rpm, water temperature, oil pressure, alternator potential, fuel rate, ... You can use any NMEA 2000® device that sends PGN 127488, PGN 127489 and PGN 127497 as Maretron® FFM100, Maretron® J2K100, Noland® RS11, ...). *(A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).*

Switch status (NMEA 2000®)

SeaWi decodes NMEA 2000® binary switch bank status data and can visualize AC and DC electrical circuit status, monitor switch loads and trigger switch status alarms, e.g., running lights, anchor lights, running pumps, presence alarms, deck lights, ... (You can use any NMEA

2000® device that sends PGN 127501 as Maretron® RIM100, ...). (A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).

Tanks (NMEA 2000®)

SeaWi decodes NMEA 2000® fluid level data and visualizes tank maximum capacity, tank level and tank alarms. You can configure five tank types: fuel, fresh water, waste water, oil and black water. (You can use any NMEA 2000® device that sends PGN 127505 as Maretron® TLA100, Maretron® TLM100/TLM200, Maretron® TLM150, Noland® RS11, ...). (A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).

Alarms

SeaWi allows you to program multiple alarms: anchor alarms, depth alarms (shallow water alarm, deep water alarm), wind alarms (high wind alarm, low wind alarm), alarm of lost data (depth data lost, heading data lost, position data lost, apparent wind data lost), AIS alarms (dangerous AIS target by distance, dangerous AIS targets by CPA, lost AIS target, AIS SAR message), switch status alarms and tank alarms.

Tracks

You can create, visualize, store, load and delete tracks. A track is viewed as an on-screen trail that represents the course you have taken. The tracks are saved and may be visualized at any time. You may continue a saved track whenever you need it.

You may configure the time period or the distance between track points and the number of viewed points at high resolution (default value 1.000). You can also save tracks to a file and load tracks from a file.

Waypoints

You can create, visualize, edit, store, load and delete waypoints. You can create a waypoint tapping and holding on a chart position. Once the waypoint dialog appears you can modify the waypoint position and place the waypoint at your vessel's position or at a position of your choosing. You can mark the waypoint with six different symbols: generic waypoint, anchorage waypoint, diving waypoint, fishing waypoint, dangerous waypoint and MOB waypoint.

You may add a photo to your preferred waypoints.

Man Over Board (MOB)

You can create a Man Over Board waypoint with only one click (menu MOB). Your vessel's position and UTC time and date will be automatically saved. You can manage the MOB mark as a waypoint from waypoints view.

SeaWi Ruler

You can measure a distance between two points and find the course using the SeaWi Ruler. You can find the Ruler Icon on the chart top right corner. A short press on a chart point will show chart point position, distance and course from your own vessel.

SMS Service

The SMS Service allows you to receive SMS messages when an alarm is activated. If you are anchored and you are not on board you can program alarms (anchor alarm, depth alarm, dangerous AIS target alarm, lost data alarm and switch status alarms) and receive them on your phone. When not on board you can schedule SMS messages at certain intervals of time and receive navigational data from your vessel on your phone.

SeaWi NMEA forwarding

You can forward all navigation and AIS data where you need them. Forward NMEA data to other tablets and phones on your boat. Forward NMEA data remotely and use SeaWi app and visualize the same navigational and AIS data as if you were aboard.

Log Trip and Simulation Mode

You can record navigational data of your trip and recover them later to review your trip in Simulation Mode.

Charts

Off-line OpenSeaMaps charts of the entire world are available. Currently charts of Europe, North America, Mediterranean Sea, Black Sea, Caribbean, Australia, New Zealand, Pacific and North Africa are available. Charts of the rest of the world will be available soon. You may review how the charts look like at OpenSeaMap home page at www.openseamap.org.

OpenSeaMap is an open source, worldwide project to create a free nautical chart. In 2009, OpenSeaMap came into life. This map includes beacons, buoys and other navigation aids. OpenSeaMap is a subproject of OpenStreetMap and uses its database.

Disclaimer

Before using SeaWi App you must read, understand and agree the terms on the disclaimer dialog:

This application is intended to serve only as an aid to navigation. Use of specific features such as AIS, alarms or cartographic aids is meant only to aid safety and decision-making. These features cannot be relied upon as complete or accurate as their use and availability may vary locally. It is your responsibility to use caution, sound judgment, official government charts, notices to mariners and proper navigational skill when using this application or any other electronic navigational product.

By pressing "I agree", I am stating that:

1: I have read and agree with the above disclaimer of liability, and understand the limits of proper use of this application.

2: This application may send SMS messages if this service is correctly configured. The cost of SMS messages depends on the carrier contracted by the user and may be high especially when the user is in roaming. The user is solely responsible for any costs incurred for using the SMS service.

3: This application contains navigational charts generated from © OpenStreetMap contributors.

*4: SeaWi licenses are not only to download charts but they are also a donation to help us to continue developing SeaWi app. SeaWi off-line charts are generated from OpenSeaMap maps project and they **DO NOT HAVE BATHYMETRIC INFORMATION**. Before purchasing a license you may want to visualize how the charts of you zone look like. You can review them from OpenSeaMap home page at www.openseamap.org.*

By continuing past this screen, I agree to be bound by the terms of Open Database License (www.openstreetmap.org/copyright).

*SeaWi App © by SeaWi Marine (2012-2015). www.SeaWiMarine.net
Charts by © OpenStreetMap contributors*



NMEA Monitor View

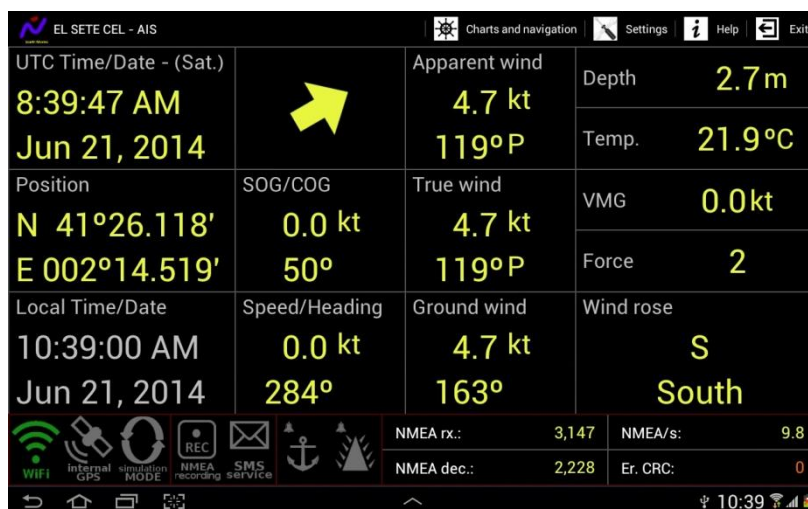


Figure 1. NMEA View on 10.1" tablets

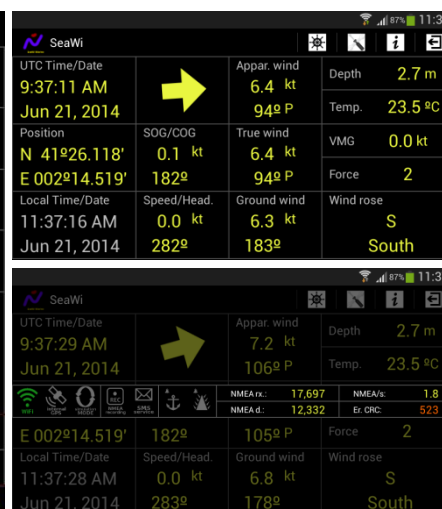


Figure 2. NMEA View on small devices



Figure 3. Status icons and NMEA sentences counters

Tip: On small devices tap and hold screen to visualize the **Status and NMEA Counters** dialog.

Tip: You may change screen font size selecting Visualization settings. You may set font size separately for labels, data and units.

Tip: To reset the counters tap and hold on counters dialog.

WiFi icon



Green: **WiFi Mode** active. SeaWi is receiving NMEA 2000® or NMEA 0183 sentences

Grey: **Simulation Mode** active (simulated NMEA sentences read from a file)

Red: **WiFi mode** active. SeaWi is not receiving NMEA sentences

To receive NMEA 2000® or NMEA 0183 data you need a NMEA 2000® or a NMEA 0183 WiFi adaptor (*SeaWi decodes TCP, UDP unicast and UDP multicast packets*). In WiFi Mode SeaWi may show the following data:

- Vessel Position
- SOG (Speed Over Ground)
- COG (Course Over Ground)
- UTC Time and Date
- Speed
- Heading

- Apparent Wind
- True Wind
- Ground Wind
- Beaufort Force
- VMG (Velocity Made Good)
- Depth
- Water Temperature
- AIS Target Info (*An AIS receiver and a NMEA 2000® or a 38400 baud NMEA 0183 WiFi adaptor; or a WiFi AIS receiver is required*)

Default WiFi connection: UDP Unicast / port: 10110

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets, when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).

Tip: In **WiFi Mode**, tap icon to restart the WiFi connection.

Tip: To configure **WiFi Mode** go to **IP connection, simulation and recording** settings.

Tip: In **WiFi Mode** if icon is grey, go to *WiFi settings* on your tab or phone to connect to WiFi.

In **WiFi Mode** the font colour for data is **yellow**.

Built-in GPS icon



Green: Position, COG and SOG data is received from tablet or phone built-in GPS

Grey: Tablet or phone built-in GPS is off

Yellow: Built-in GPS data filter is active. Built-in GPS is receiving data

Red: Built-in GPS data filter is active. Built-in GPS is not receiving data

Using the built-in GPS SeaWi may show the following data:

- Vessel Position
- SOG (Speed Over Ground)
- COG (Course Over Ground)
- UTC Time and Date

Tip: Tap icon to turn on or off built-in GPS data filtering.

Tip: In **WiFi Mode** if icon is grey, go to *location settings* on your tab or phone to use built-in GPS.

Simulation Mode icon



Green: **Simulation Mode** is active

Grey: **Simulation Mode** is not active

In **Simulation Mode** data is read from a file containing NMEA 2000® or NMEA 0183 sentences. SeaWi generates simulation data files when **NMEA Recording** is on.

The simulation files are stored in folder **SeaWi/SimLog** of your phone or tablet.

Tip: Tap icon to turn on or off, or restart **Simulation Mode**.

Tip: To configure **Simulation Mode** go to **IP connection, simulation and recording** settings.

In **Simulation Mode** the font colour for data is **pink**.

NMEA Recording icon



Green: **NMEA Recording** is active

Grey: **NMEA Recording** is not active

NMEA Recording stores in a file all NMEA 2000® and NMEA 0183 sentences received. **NMEA Recording** keeps track of your trip.

The files are stored in folder **SeaWi/SimLog** of your phone or tablet.

Tip: Tap icon to turn on or off **NMEA Recording**.

Tip: You can review your trips and their data whenever you want.

Tip: If you are using the built-in GPS and you want to record position, COG, SOG and UTC time from this device, go to *settings menu* and configure the built-in GPS to use NMEA sentences.

To use NMEA recording you need a chart group license or the premium license. Go to **Chart Manager** to obtain licenses.

SMS Service icon



Green: **SMS Service** is active

Grey: **SMS Service** is not active

Red: **SMS Service** is not available on your tablet or phone

SMS Service sends regular SMS messages containing important navigation data or alarm information (anchor alarms, AIS alarms, depth alarms, ...)

Tip: If you are anchored and you are not on board you can receive anchor alarms on your phone or tablet.

Tip: Tap icon to turn on or off **SMS Service**.

Tip: To configure **SMS Service** go to **SMS messaging service** settings. You should configure the **Cell phone number** in **SMS messaging service** settings before using **SMS Service**.

!!! Standard text messaging rates may apply based on the subscriber's plan with your mobile phone carrier.

To use SMS Service you need a chart group license or the premium license. Go to **Chart Manager** to obtain licenses.

Anchor Alarm icon



Green: **Anchor Alarm** is on

Grey: **Anchor alarm** is not available

Red: **Anchor Alarm** is off

Tip: If anchor alarm data is available tap icon to turn on or off **Anchor Alarm**.

Tip: If anchor alarm data is not available go to **Anchor View** and set anchor initial data.

Tip: To configure **Anchor Alarm** distance and ring tone go to **Alarm** settings.

To use alarms you need a chart group license or the premium license. Go to **Chart Manager** to obtain licenses.

Dangerous AIS Target Alarm icon



Green: **Dangerous AIS Target Alarm** is on

Red: **Dangerous AIS Target Alarm** is off

Tip: To configure **Dangerous AIS Target Alarm** distance, CPA distance, CPA time and ring tone go to **Alarm** settings.

To receive AIS Target Info an AIS receiver and a NMEA 2000® or a 38400 baud NMEA 0183 WiFi adaptor; or a WiFi AIS receiver is required.

To use alarms you need a chart group license or the premium license. Go to **Chart Manager** to obtain licenses.



Chart and Navigation View

My Ship



Tip: Select **My Ship** menu icon to position your own ship on the centre of the screen. Your own ship will remain on the centre of the screen.

Navigation Data



Figure 4. Navigation Data view

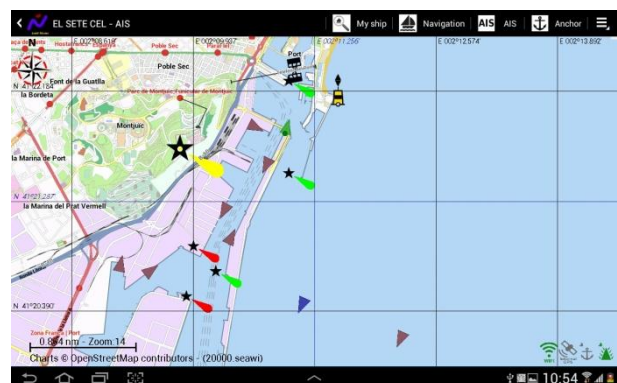


Figure 5. Chart full screen view

Tip: Select again **Navigation** menu icon for full screen chart view.

Tip: Tap and hold data frame (right frame) to visualize the **Status and NMEA Counters** dialog.

Tip: Tap chart to get point position and distance from your own ship.

Tip: Tap on an AIS target to visualize ship information.

AIS Data



Figure 6. AIS Data view



Figure 7. AIS target information

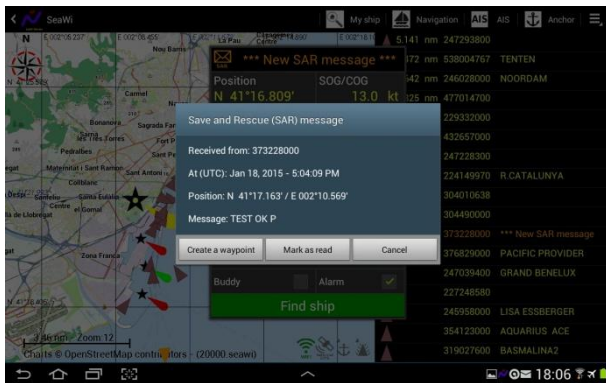


Figure 8. Save and Rescue (SAR) message



Figure 9. AIS targets' CPA vectors

Tip: Tap on an AIS target to visualize ship information.

Tip: Select again **AIS** menu icon for full screen chart view.

Tip: Tap and hold AIS list frame (right frame) to visualize the **Status and NMEA Counters** dialog.

Tip: Tap chart to get point position and distance from your own ship.

311263000	
Position	SOG/COG
N 40°04.504'	17.7 kt
E 002°24.721'	74°
Distance	Head
33.74 nm	80°
Bearing	Turn
66° Sb	0°
MMSI	Length
311263000	--
IMO	Beam
--	--
CallSign	Draft
--	--
CPA (TCPA)	
4.151 nm (02h04m38s)	
Last m.	
Feb 4, 2015 6:42:25 PM	
Buddy	Alarm
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Find ship	Show CPA
	<input checked="" type="checkbox"/>
	Show info
	<input checked="" type="checkbox"/>

Figure 10. AIS target dialog

AIS target dialog options (checkbox settings):

Buddy: Add AIS target to the buddy list
Alarm: Enable or disable alarm of this AIS target
Show CPA: Shows AIS target's CPA vector on chart
Show info: Shows AIS target's COG, SOG, CPA distance and CPA time on chart



Blue: Selected AIS target
Brown: General AIS target
Red: Dangerous AIS target with (alarm muted)
White: Lost target (visible for 1 minute on the chart after being lost)
Orange: AIS target has sent a Save and Rescue (SAR) message



Red: Dangerous AIS target
Orange: Lost Target (visible for 1 minute on the chart after being lost)



Blue: Selected buddy AIS target
Green: Buddy AIS target
Red: Dangerous buddy AIS target
White: Lost target (visible for 1 minute on the chart after being lost)
Orange: AIS target has sent a Save and Rescue (SAR) message



Red: AIS beacon - SART icon

Tip: Tap on an AIS target to select it and visualize information.

Tip: Once an AIS target is selected you can deactivate the alarm for this target.

Tip: Once an AIS target is selected you can mark this target as a buddy.

Tip: Once an AIS target is selected you can view COG, SOG, CPA vector, CPA distance and CPA time on chart.

Tip: Once an AIS target tap on message icon to view the Save and Rescue (SAR) message received.

To receive AIS Target Info an AIS receiver and a NMEA 2000® or a 38400 baud NMEA 0183 WiFi adaptor; or a WiFi AIS receiver is required.

Anchor Data

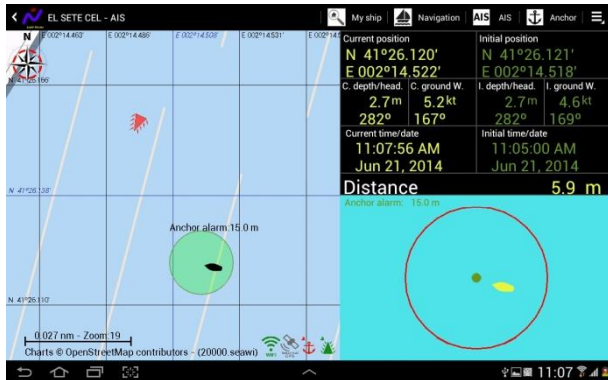


Figure 11. Anchor Data view



Figure 12. Counters dialog on Anchor Data view

Tip: Tap anchor frame (right lower frame) to set initial anchor data on or off.

Tip: Tap and hold anchor frame (right lower frame) to reset initial anchor data.

Tip: Select again **Anchor** menu icon for full screen chart view.

Tip: Tap and hold data frame (right upper frame) to visualize the **Status and NMEA Counter** dialog.

Tip: Tap chart to get point position and distance from your own ship.

Tip: Tap on an AIS target to visualize ship information.

Tracks

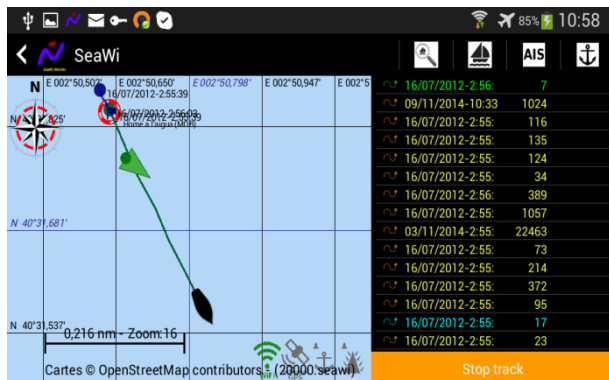


Figure 13. Track view

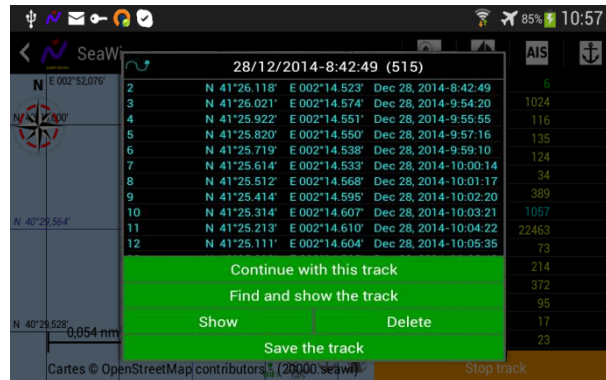


Figure 14. Track information

You can create a track tapping the *Create new track* button from the Track View. A track is viewed as an on-screen trail that represents the course you have taken. The track does not have a maximum number of points but the number of viewed points at high resolution is limited (max. 5.000) in order to maintain the app performance. Once the limit of viewed points at high resolution is exceeded, the exceeded points are viewed at a lower resolution. The tracks are saved and may be visualized at any time. You may continue a saved track whenever you need it.

You may configure the time period or the distance between track points and the number of viewed points at high resolution (default value 1.000).



Current track



Selected saved track

Tip: You can save a track to a file from the track dialog.

Tip: You can load a track from a file from track settings.

To use tracks you need a chart group license or the premium license. Go to **Chart Manager** to obtain licenses.

Waypoints



Figure 15. Waypointing view



Figure 16. Waypoint information

You can create a waypoint tapping and holding on a chart position. Once the waypoint dialog appears you can modify the waypoint position and place the waypoint at your vessel's position or at a position of your choosing. You can mark the waypoint with six different symbols: generic waypoint, anchorage waypoint, diving waypoint, fishing waypoint, dangerous waypoint and MOB waypoint. You may add a photo to your preferred waypoints.

Tip: Tap and hold on a chart position to create a waypoint.

Waypoint types:



Generic waypoint (the bottom left camera indicates that an image of the waypoint is present)



Anchorage waypoint (the bottom left camera indicates that an image of the waypoint is present)



Anchorage waypoint (the bottom left camera indicates that an image of the waypoint is present)



Diving waypoint (the bottom left camera indicates that an image of the waypoint is present)



Dangerous waypoint (the bottom left camera indicates that an image of the waypoint is present)



MOB waypoint (the bottom left camera indicates that an image of the waypoint is present)

Engines (NMEA 2000®)



Figure 17. Engines view

SeaWi decodes and visualizes NMEA 2000® engine data: engine rpm, water temperature, oil pressure, alternator potential, fuel rate, ... You can use any NMEA 2000® device that sends PGN 127488, PGN 127489 and PGN 127497 as Maretron® FFM100, Maretron® J2K100, Noland® RS11, ...). (A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).



All gauges are configurable and the user can set blue (water temperature), green and red scales.

Tanks and Switches (NMEA 2000®)

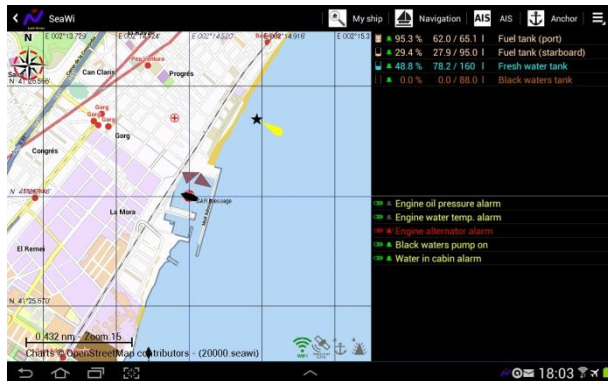
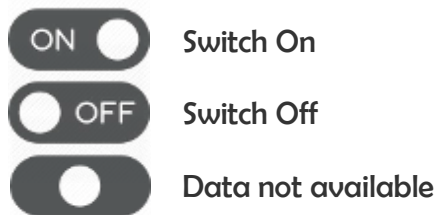


Figure 18. Tanks and switches view

SeaWi decodes NMEA 2000® binary switch bank status data and can visualize AC and DC electrical circuit status, monitor switch loads and trigger switch status alarms, e.g., running lights, anchor lights, running pumps, presence alarms, deck lights, ... (You can use any NMEA 2000® device that sends PGN 127501 as Maretron® RIM100, ...). (A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).



SeaWi decodes NMEA 2000® fluid level data and visualizes tank maximum capacity, tank level and tank alarms. You can configure five tank types: fuel, fresh water, waste water, oil and black water. (You can use any NMEA 2000® device that sends PGN 127505 as Maretron® TLA100, Maretron® TLM100/TLM200, Maretron® TLM150, Noland® RS11, ...). (A NMEA 2000® WiFi adaptor is required to receive NMEA 2000® data).



Orange: Fuel tank
Blue: Water tank
Brown: Waste water tank
Grey: Grey water tank
Violet: Oil tank



Data not available

Chart Manager

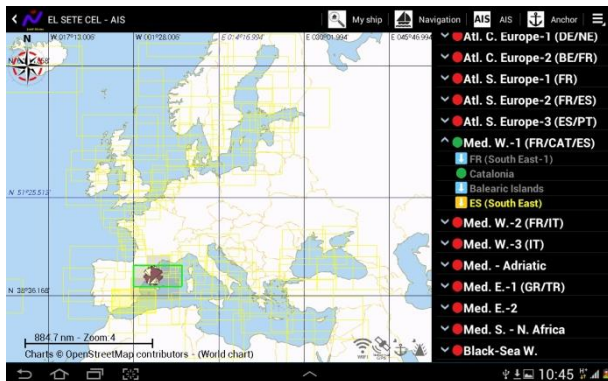


Figure 19. Available chart list



Figure 20. Chart options dialog

Tip: Tap on the map or on a chart group list name (left frame) to select a chart group.

Tip: Tap and hold on the map or on a chart list name (left frame) to visualize the chart options dialog.

Tip: If chart list is not available, tap and hold on the world map to download chart list.

Chart Group License With a Chart Group License you can download all the charts in the group

Premium License With the Premium License you can download all the charts available

Tip: If you are going to download charts from more than two chart groups, it is recommended to purchase the **Premium License**.

After purchasing three different **Chart Group Licenses**, the **Premium License** will be automatically granted.

Chart and Chart Group status:






-  You don't have a license for this chart / You don't have a license for this chart group
-  The chart is installed / You have a license for this chart group
-  The chart is ready to be downloaded
-  The chart is being downloaded
-  The chart is installed and a new version of this chart is ready to be downloaded



Figure 21. Chart Group list

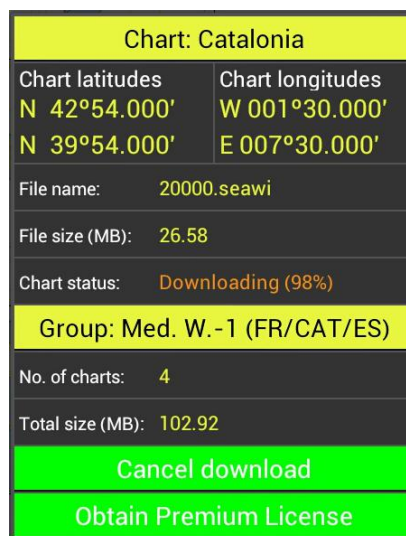


Figure 22. Chart Options dialog

How to download Charts:

- Connect the device to Internet
- Select **Chart Manager** from SeaWi menu
- A list of Chart Groups will download and will be displayed on the right frame (Figure 12)
- Select a Chart Group
- Press and hold on a chart to display the Chart Options dialog (Figure 13)
- Get the Chart Group License (to download charts of the Chart Group only) or the Premium License (to download all charts)
- Download the chart

SeaWi licenses are not only to download charts, but they are also a donation to help us to continue developing SeaWi app. SeaWi off-line charts are generated from OpenSeaMap maps project and DO NOT HAVE BATHYMETRIC INFORMATION. Before purchasing a license you may want to visualize how the charts of your zone look like. You can review them from OpenSeaMap home page at www.openseamap.org.

Man Over Board (MOB)



Tip: In a Man Over Board (MOB) situation, select **MOB** menu to create a **MOB** waypoint on your vessel's position.

SeaWi Ruler: Measuring Distances and calculating Courses



You can measure a distance between two points and find the course using the **SeaWi Ruler**. You can find the Ruler Icon on the chart top right corner. Click the Ruler Icon and the **SeaWi Ruler** will appear on the chart. A short press on a chart point will show chart point position, distance and course from your own vessel.

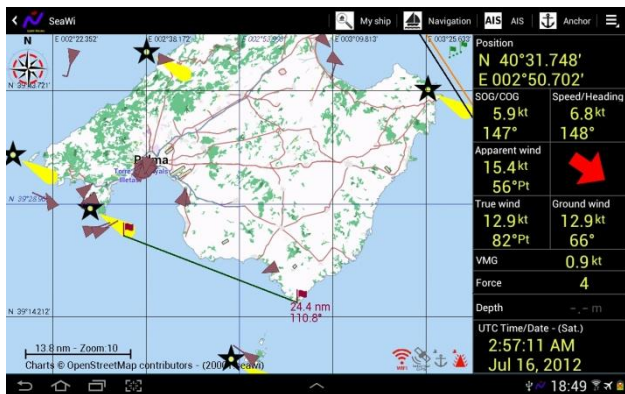


Figure 23. SeaWi Ruler



Figure 24. Short press on a chart point

N 39°16.618'
E 002°29.768'
77.0 nm
192.1°

Info shown after a short press on any chart point



Settings View

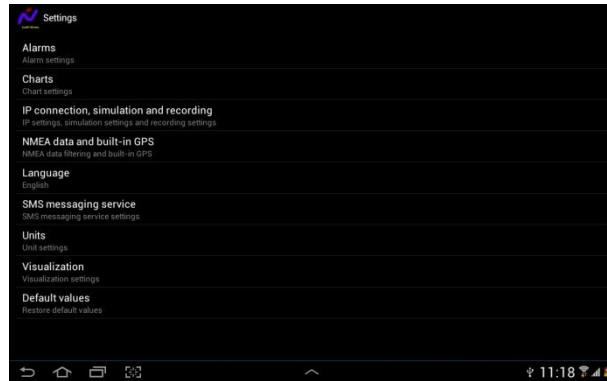


Figure 25. Settings view

Alarm settings

- Alarm log
- Anchor alarm
 - Anchor alarm
 - Set anchor alarm distance
 - Set anchor alarm ring tone
- Depth alarms
 - Depth alarms
 - Shallow water alarm
 - Set shallow water alarm minimum depth
 - Set shallow alarm ring tone
 - Deep water alarm
 - Set shallow water alarm maximum depth
 - Set deep alarm ring tone
- Wind alarms
 - Wind alarms
 - High wind alarm
 - Set high wind alarm speed limit
 - Set high wind alarm ring tone
 - Low wind alarm
 - Set low wind alarm speed limit
 - Set low wind alarm ring tone
- AIS alarms
 - AIS alarms
 - Dangerous AIS target alarms
 - Dangerous AIS target alarm by distance
 - Set dangerous AIS target alarm distance
 - Set dangerous AIS target alarm by distance ring tone
 - Dangerous AIS target alarm by CPA and TCPA
 - Set dangerous AIS target alarm closest point of approach distance
 - Set dangerous AIS target alarm closest point of approach time
 - Show dangerous AIS target CPA vector
 - Set dangerous AIS target alarm by CPA and TCPA ring tone

- AIS lost target alarm
- Set AIS lost target alarm ring tone
- AIS SAR message alarm
- Set AIS SAR message alarm ring tone
- Lost data alarms
 - Lost data alarms
 - Set lost data alarm ring tone
 - Lost depth data alarm
 - Lost heading data alarm
 - Lost position data alarm
 - Lost apparent wind data alarm
- Switch alarms
- Tank alarms

Chart settings

- Show chart coordinates
- Show own vessel's heading vector
- Show own vessel's COG vector
- Show apparent wind vector
- Show AIS targets' COG vector
- Show waypoints
- Show waypoints' name
- Show tracks' name
- Show chart scale
- Show wind rose
- Show chart limits
- Show AIS dangerous alarm distance
- Show anchor alarm distance
- Show connection status icons

Network, Wi-Fi-NMEA device, simulation and recording settings

- WiFi connection protocol settings
 - IP port
 - UDP unicast connection
 - UDP multicast connection
 - Multicast address
 - TCP connection
 - TCP server address
- SeaWi forwarding settings
 - Enable SeaWi forwarding
 - Forwarding destination address
 - Forwarding destination port
- WiFi-NMEA device selection
- Simulation mode settings

- Enable NMEA data simulation mode
 - Select simulation file
- Enable recording of NMEA sentences

NMEA data and built-in GPS

- COG and SOG settings
 - Use mean values for COG and SOG
 - Set time window to calculate mean values for COG and SOG
- True wind and VMG Settings
 - Calculate true wind
 - Calculate VMG
- NMEA 0183 data filtering
 - Allow NMEA 0183 sentences
 - Filter NMEA 0183 sentences with CRC error
 - Filter NMEA 0183 sentences by prefix
 - Filter NMEA 0183 sentences
- NMEA 2000® data settings
 - Allow NMEA 2000® sentences
 - Filter NMEA 2000® sentences
 - Use info from own AIS data
- Built-in GPS settings
 - Filter data received by built-in GPS
 - Use NMEA sentences

Language settings

- Language

SMS messaging service settings

- SMS general settings
 - Cell phone number
 - Test SMS message
 - Enable SMS messaging service
 - SMS log
 - Limit max. number of SMS messages
 - Maximum number of SMS sent messages per session
- SMS regular message settings
 - Enable regular SMS messages service
 - Message regularity
 - Include switch information in regular SMS
 - Include tank information in regular SMS
- SMS alarm message settings
 - Enable alarm SMS messages
 - Enable anchor alarm messages
 - Enable depth alarm messages

- Enable AIS dangerous target alarm messages
- Enable lost data alarm messages
- Enable switch alarm messages
- Enable tank alarm messages

Tracks

- Track interval
- Maximum number of track points viewed at high resolution
- Load a track
- Delete all tracks

Waypoints

- Load waypoint list
- Save all waypoints
- Delete all waypoints

Engines (NMEA 2000®)

- Two engine configuration
- Engine views switching time
- First NMEA 2000® engine settings and alarms
- Second NMEA 2000® engine settings and alarms
- Gauge settings

Switch Banks (NMEA 2000®)

- First NMEA 2000® switch bank settings and alarms
- Second NMEA 2000® switch bank settings and alarms
- Third NMEA 2000® switch bank settings and alarms
- Fourth NMEA 2000® switch bank settings and alarms

Tanks (NMEA 2000®)

- Tank 0 settings
- Tank 1 settings
- Tank 2 settings
- Tank 3 settings
- Tank 4 settings
- Tank 5 settings
- Tank 6 settings

- Tank 7 settings

Unit settings

- Depth, anchor and AIS target dimensions units
- Distance units
- Speed units
- Wind speed units
- Pressure units
- Volume units
- Temperature units

Visualization settings

- Screen configuration
 - Keep the screen turned on
- NMEA monitor screen text size settings
 - Text size of NMEA monitor screen labels
 - Text size of NMEA monitor screen values
 - Text size of NMEA monitor screen units
 - Text size of counter labels
 - Text size of counter values
- Chart and engine/navigation screen text size settings
 - Text size of chart and navigation screen labels
 - Text size of chart and navigation screen values
 - Text size of chart and navigation screen units
 - Text size of chart and engine screen value
- Chart and anchor screen text size settings
 - Text size of chart and anchor screen Distance label
 - Text size of chart and anchor screen Distance value
 - Text size of chart and anchor screen Distance unit
 - Text size of other chart and anchor screen labels
 - Text size of other chart and anchor screen labels values
 - Text size of other chart and anchor screen labels units
- AIS target dialog, chart dialog and other dialogs text size settings
 - Text size of AIS target dialog Position and SOG/COG labels and chart dialog big labels
 - Text size of AIS target dialog Position and SOG/COG values and chart dialog big values
 - Text size of AIS target dialog SOG unit
 - Text size of other AIS target dialog labels and chart dialog small labels
 - Text size of other AIS target dialog values and chart dialog small values
 - Text size of other AIS target dialog units

Default values

- Restore default values



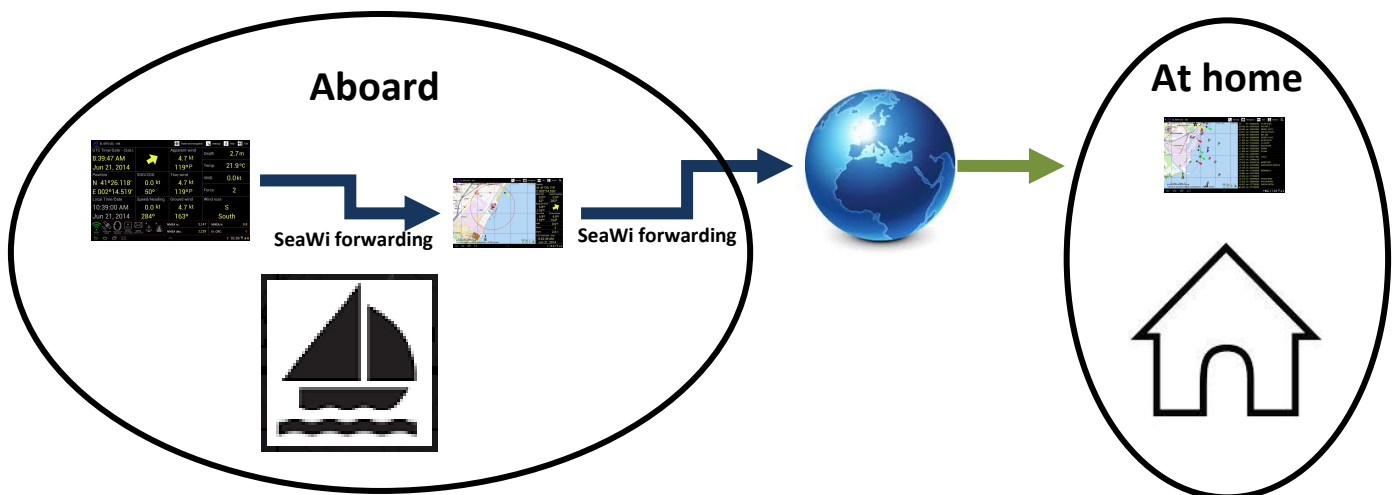
SeaWi NMEA forwarding



You can forward all navigation and AIS data where you need them. Forward NMEA data to other tablets and phones on your boat. Forward NMEA data remotely and use SeaWi app to visualize the same navigational and AIS data as if you were aboard.

Tip: SeaWi NMEA forwarding uses the UDP protocol to send data. Configure SeaWi to UDP Unicast to receive SeaWi forwarded data.

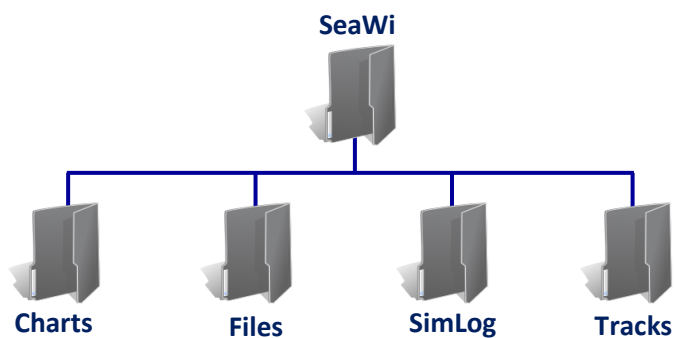
To use SeaWi NMEA forwarding you need a chart group license or the premium license. Go to [Chart Manager](#) to obtain licenses.



(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).



SeaWi File System



Charts folder:

Chart files (*.seawi)

Files folder:

AIS buddy file (Buddies.xml)

Help file (SeaWiHelpVxx_xx_xx.pdf)

Alarm log file (alarmlog.txt)

SMS log file (smslog.txt)

SAR message log file (sarmessagelog.txt)

SimLog folder:

Simulation files (*.nmea)

Track folder:

Saved track files (*.xml)

Waypoint folder:

Saved waypoint files (*.xml)



NMEA 2000® PGNs

SeaWi decodes the following NMEA 2000® PGNs:

- PGN 126992 System Time
- PGN 127250 Vessel Heading
- PGN 127488 Engine Parameters, Rapid Update
- PGN 127489 Engine Parameters, Dynamic
- PGN 127497 Trip Parameters, Engine
- PGN 127501 Binary Switch Bank Status
- PGN 127505 Fluid Level
- PGN 128259 Speed, Water referenced
- PGN 128267 Water Depth
- PGN 129025 Position, Rapid Update
- PGN 129026 COG and SOG, Rapid Update
- PGN 129033 Time and Date
- PGN 129038 AIS Class A Position Report
- PGN 129039 AIS Class B Position Report
- PGN 129040 AIS Class B Extended Position Report
- PGN 129794 AIS Class A Static and Voyage Related Data
- PGN 129801 AIS Addressed Safety Related Message
- PGN 129802 AIS Safety Related Broadcast Message
- PGN 129809 AIS Class B static data (msg 24 Part A)
- PGN 129810 AIS Class B static data (msg 24 Part B)
- PGN 130306 Wind Data
- PGN 130310 Environmental Parameters
- PGN 130311 Environmental Parameters



NMEA 0183 sentences

SeaWi decodes the following NMEA sentences:

- DBT Depth Below Transducer
- DPT Depth of Water
- GGA Global Positioning System Fix Data. Time, Position and fix related data
- GLL Geographic Position – Latitude/Longitude
- HDG Heading – Magnetic
- HDM Heading – Magnetic
- MTW Water Temperature
- MWV Wind Speed and Angle
- RMC Recommended Minimum Navigation Information
- VDM Automatic Information System (AIS) position reports from other vessels
- VDO Automatic Information System (AIS) position reports from own vessel
- VHW Water Speed and Heading
- VPW Speed – Measured Parallel to Wind
- VTC Track Made Good and Ground Speed
- VWR Relative Wind Speed and Angle
- VWT True Wind Speed and Angle
- ZDA Time & Date – UTC, Day, Month, Year and Local Time Zone



NMEA 2000® WiFi Adaptors

NMEA 2000® WiFi Adaptors that may be used with SeaWi to receive AIS and navigation data:

- DMK Box 11A and DMK Box 11A-GPS (It has to be configured to operate in Infrastructure Mode connected to an Access Point.) (It can translate RayMarine SeaTalk data to NMEA 0183 sentences.)
(<http://www.dmk yacht.com>)
- Actisense NGT-1-ISO (A Serial RS232 to WiFi adaptor is required).
(<http://www.actisense.com>)
- Digital Yacht NavLink (NMEA 2000® to NMEA 0183 WiFi): AIS and navigation data. It translates NMEA® 2000 to NMEA 0183 sentences. SeaWi receives NMEA 0183 data.
(<http://www.digitalyacht.co.uk>) or (<http://www.digitalyachtamerica.com>).
- Vesper Marine XB-8000 Class B AIS Transponder: AIS and navigation data. It translates NMEA® 2000 to NMEA 0183 sentences. SeaWi receives NMEA 0183 data.
(<http://www.vespermarine.com>)
- Vesper Marine WatchMate Vision: AIS and navigation data. It translates NMEA® 2000 to NMEA 0183 sentences. SeaWi receives NMEA 0183 data.
(<http://www.vespermarine.com>)

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).



NMEA 0183 WiFi Adaptors

NMEA 0183 WiFi Adaptors that may be used with SeaWi to receive AIS and navigation data:

- Digital Yacht WLN10 (4800 baud NMEA 0183 to WiFi): navigation data (<http://www.digitalyacht.co.uk>) or (<http://www.digitalyachtamerica.com>)
- Digital Yacht WLN10HS: (38400 baud NMEA 0183 to WiFi): AIS and navigation data (<http://www.digitalyacht.co.uk>) or (<http://www.digitalyachtamerica.com>)
- Digital Yacht iAIS Wireless Receiver: AIS and navigation data (<http://www.digitalyacht.co.uk>) or (<http://www.digitalyachtamerica.com>)
- Vesper Marine XB-8000 Class B AIS Transponder: AIS and navigation data (<http://www.vespermarine.com>)
- Vesper Marine WatchMate Vision: AIS and navigation data (<http://www.vespermarine.com>)
- ShipModul Marine Electronics MiniPlex-2Wi: AIS and navigation data. (It can translate RayMarine SeaTalk data to NMEA 0183 sentences.) SeaWi receives NMEA 0183 data. (<http://www.shipmodul.com>)
- Brookhouse iMux-WiFi: AIS and navigation data. (It can translate RayMarine SeaTalk data to NMEA 0183 sentences.) SeaWi receives NMEA 0183 data. (<http://brookhouseonline.com>)
- DMK Box 11A and DMK Box 11A-GPS (It has to be configured to operate in Infrastructure Mode connected to an Access Point.) (It can translate RayMarine SeaTalk data to NMEA 0183 sentences.) (<http://www.dmkyacht.com>)

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).



Configuration Examples

Generic Wi-Fi-NMEA 0183 device

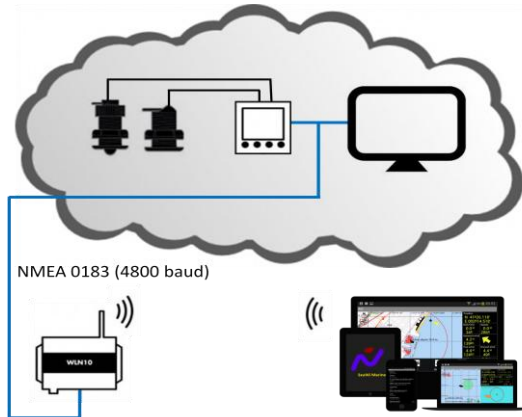


Figure 26. NMEA 0183 System with Digital Yacht WLN10

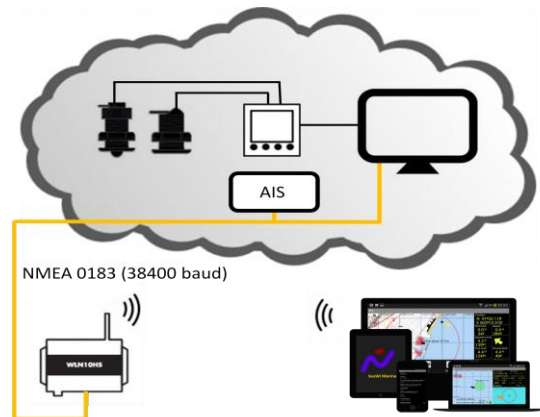


Figure 27. NMEA 0183 System with Digital Yacht WLN10HS

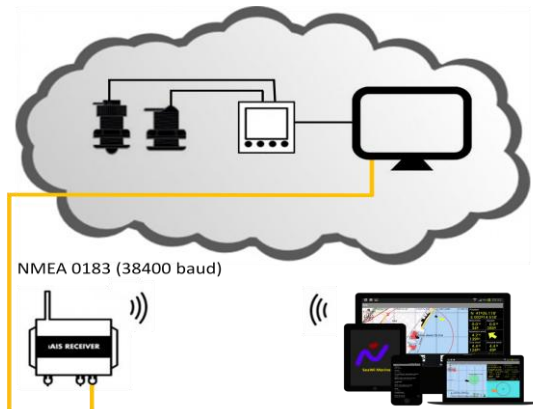


Figure 28. NMEA 0183 System with Digital Yacht iAIS

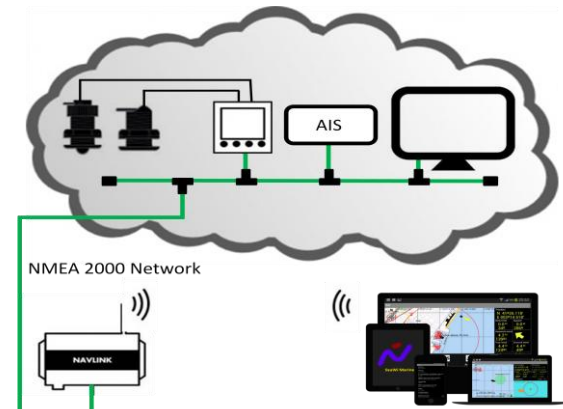


Figure 29. NMEA 2000 System with Digital Yacht NavLink

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).

DMK Box 11A or DMK Box 11A-GPS NMEA 2000® device¹

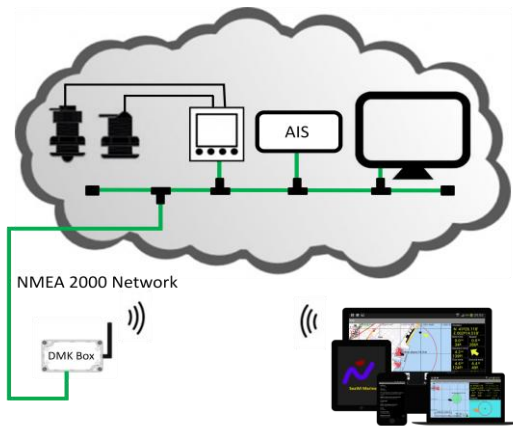


Figure 30. NMEA 2000 System with DMK Box¹

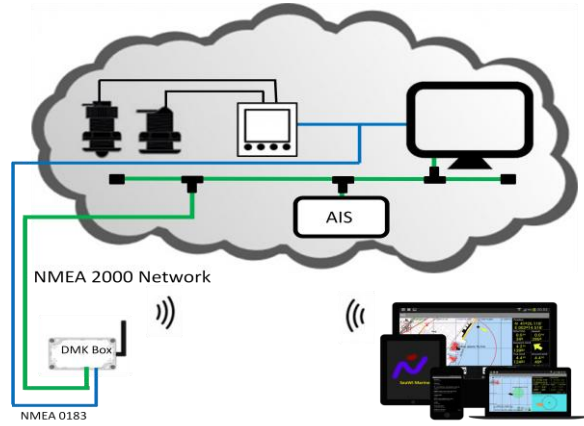


Figure 31. NMEA 2000 / NMEA 0183 System with DMK Box¹

(1) It must be configured to operate in Infrastructure Mode connected to an Access Point

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).

Actisense NGT-1-ISO NMEA 2000® device

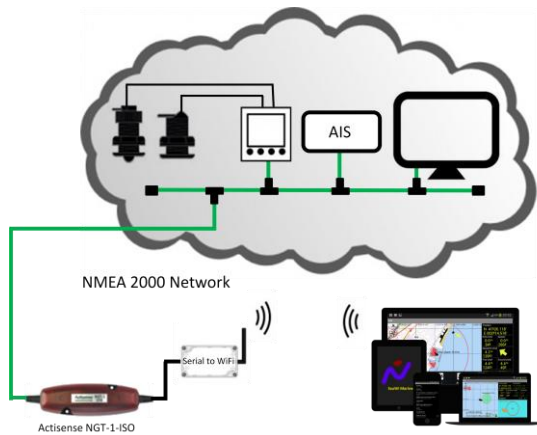


Figure 32. NMEA 2000 System with Actisense NGT-1-ISO

(Be careful with UDP broadcast packets. Some tablets and phones may filter out broadcast packets when the screen goes off. Use UDP Multicast or SeaWi Forwarding to received NMEA data on multiple devices).