



How to configure EGNOS on your Maritime receiver: step-by-step guide

ESSP



ESSP-MOM-29760



Who we are - ESSP

Who we are

European Satellite Services Provider



To deliver EGNOS augmentation services 24/7



To operate and maintain EGNOS system



To promote EGNOS and its applications



To support and to interface with users



To monitor & to analyse EGNOS performance



To support in the development of EGNOS-based applications



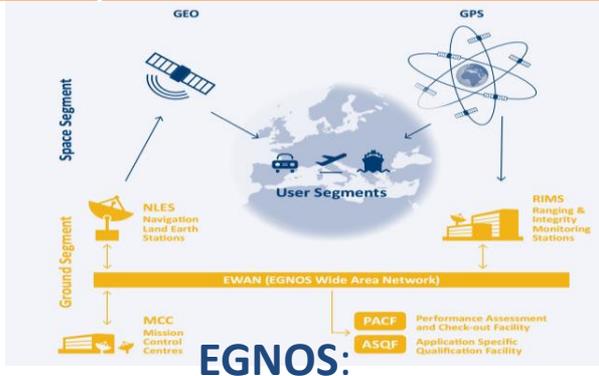
What we offer?

Free GPS augmentation

What we offer

EGNOS: Free GPS augmentation

system



EGNOS:

- The European Satellite Based Augmentation System
- Provides GPS corrections
- Broadcasts from GEO satellites

since 2009



SATELLITE based corrections

- Free of charge
- Sub-metre positioning accuracy
- Real time
- Throughout Europe

Satellite based corrections: Why choosing EGNOS in Maritime?



Satellite-based systems have fundamentally changed maritime navigation. Vessels ranging from small sailing boats to super tankers now have systems on board that rely on satellites for positioning. EGNOS contributes to make navigation more accurate and safer.



Many systems installed on leisure crafts already integrate EGNOS corrections. In European waters, both coastal and inland waterways EGNOS already complements existing ground-based systems.



EGNOS is used in SOLAS/Non-SOLAS receivers



EGNOS

Open Service



❖ **SOLAS** (Safety Of Life At Sea) Receivers
The International Convention for the Safety of Life at Sea (**SOLAS**) is an international maritime safety treaty from the International Maritime Organization (IMO), the maritime arm of the United Nations. It regulates safety of life at sea, which includes any ocean-going vessels.



❖ **Non-SOLAS Receivers**



How to configure your NON-SOLAS GPS/SBAS receiver: step-by-step guide for selected receivers

Non-SOLAS receivers index

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- Example#2: Furuno SC-130
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- Example#9: Kongsberg Seapos 310/320
- Example#10: NSR NGR-1000 / NGC-3000
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- Example#13: Septentrio
- Example#14: SIMRAD P2005
- Example#15: Ublox

What is a GPS/SBAS receiver?

- A **NON-SOLAS GPS/SBAS receiver** is a GPS receiver that locks onto the EGNOS satellites and applies the EGNOS corrections to the GPS signal.

The most common Manufacturers are:

COBHAM



KONGSBERG

navico

SIMRAD



SAAB

FURUNO



Japan Radio Co., Ltd.

ublox

Hemisphere

NSR
marine

Raymarine



septentrio

NovAtel

EGNOS
FOR MARITIME



ESSP-MOM-29760



Precise navigation,
powered by Europe



Example#1: Cobham Satcom SAILOR 657X

COBHAM

Model

Sub-metre accuracy

SAILOR 657Xp

Capabilities

GNSS:

- GPS (L1), GLONASS

SBAS corrections supported (3 channels):

- WAAS, **EGNOS**, GAGAN, MSAS



Example#1: Cobham Satcom SAILOR 657X

How to configure EGNOS OS

1. After turning on the display, it will always requests the type of correction to be used and it will save the selection in the future. In this case, click on **DGNSS**. The device will select automatically SBAS, then, if SBAS is not available will change to GPS+GLONASS.
2. Also SBAS can be **enable/disable** in **Settings** → **General** → **SBAS Correction System**



2. On the main **Position** menu DGPS will be green when SBAS has *PVT. Also in the **Overview** menu SBAS will be shown.

*Position, Velocity, Time



Example#2: Furuno SC-130

FURUNO

Model **Sub-metre accuracy**

Model: SC-130

Capabilities

GNSS:

- GPS (L1/L2), GALILEO (E1B), GLONASS (G1/G2),
- **SBAS corrections supported:**
- WAAS, **EGNOS**, MSAS
- *RAIM functionality



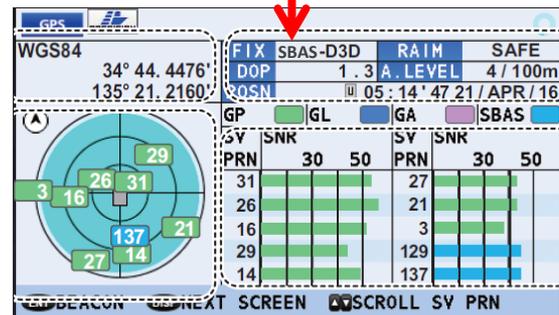
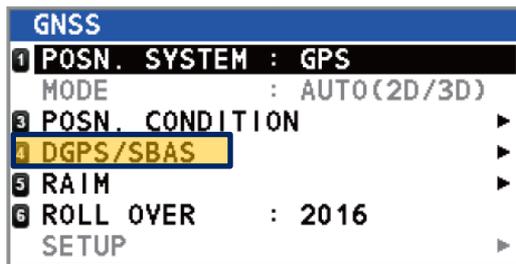
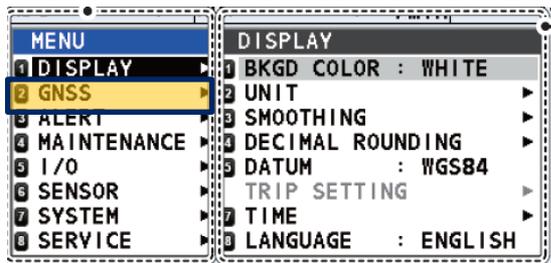
*Alerting when position accuracy is below user set limit

Example#2: Furuno SC-130

How to configure EGNOS OS

1. Open GNSS menu and select DGPS/SBAS
2. Select DIFFERENTIAL

3. SBAS GEO configuration (first configuration only).
 - a) Open GNSS menu.
 - b) Select DGPS/SBAS
 - c) Select AUTO
4. Device indicates SBAS on position display



Example#3: Furuno GP-1971F

FURUNO

Model Sub-metre accuracy

Display unit GP-1971F and GP-1871F

Capabilities

GNSS mono-frequency:

- GPS (L1)

SBAS corrections supported:

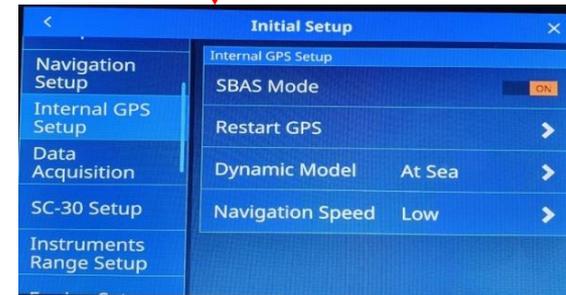
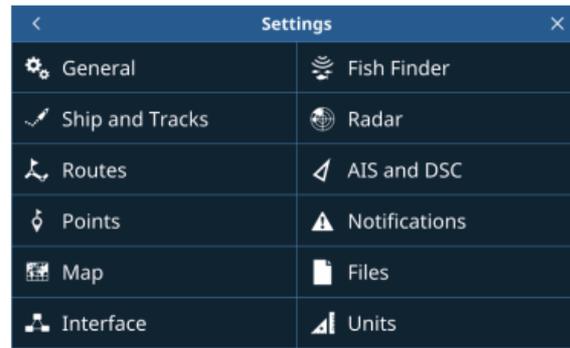
- WAAS, **EGNOS**, MSAS



Example#3: Furuno GP-1971F

How to configure EGNOS OS

1. It must be activated manually. Click on **Menu** → **Settings** (drag the menu to show the items which are not displayed on-screen) → **Initial Setup** → **Internal GPS Setup** → **SBAS mode** → **ON**



Example#4: Hemisphere R330



Model

Sub-metre accuracy

R330

Capabilities

GNSS double frequency:

- GPS (L1/L2)

SBAS corrections supported (3 channels):

- WAAS, **EGNOS**, GAGAN, MSAS

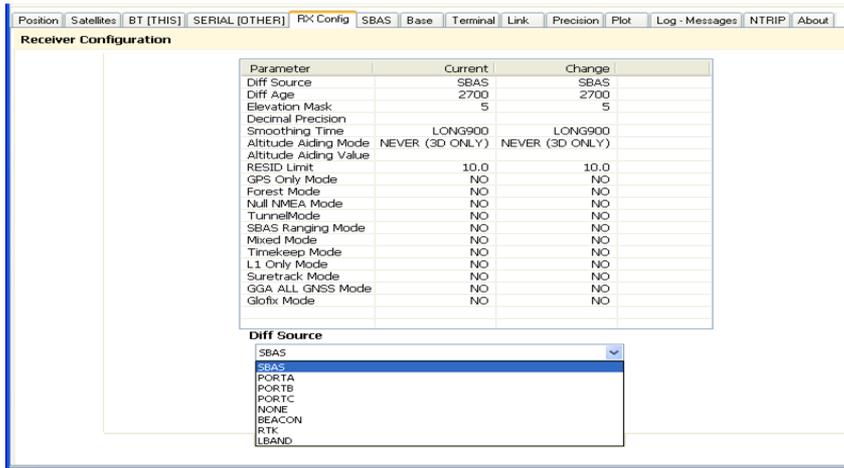


Example#4: Hemisphere R330

How to configure EGNOS OS

1. Use ***PocketMax™** to Communicate with the R330™. On *RX Config* page of receiver configuration software select **SBAS** as **Differential corrections source (Diff Source)**.
2. Also, when you power on the R330™ the Hemisphere GNSS splash screen appears. On Top menu Press the **Down Arrow** button to display the remaining items on the **Top menu** (see at bottom right) and select **Differential**.

* <https://www.hemispheregnss.com/firmware-software/>



Example#5: Hemisphere R632



Model

Sub-metre accuracy

R632

Capabilities

GNSS double frequency:

- GPS (L1/L2), GLONASS, Beidou, Galileo (E1BC/E5a/E5b/E6BC/ALTBO), IRNSS, QZSS, Atlas

SBAS corrections supported (3 channels):

- WAAS, **EGNOS**, GAGAN, MSAS
- Wi-Fi & Bluetooth features



Example#5: Hemisphere R632

How to configure EGNOS OS

1. Create a **Wi-Fi connection** (no password needed) to the receiver and open the user IP port **192.168.0.68**

R632 Reference Station

- Summary
- System Information
- | System Information
- | GPS Status**
- | Satellites
- | Data Transmission
- | Data Recording
- Configuration
- | Reference Station
- | GNSS Configuration
- | Tracking Satellites
- | Heading
- | Network
- | Dynamic DNS
- | Ntrip Server
- | Recording
- | Port Configuration
- | Alerts
- | SNMPD
- | Firewall

Local Time	2022-01-27 09:44:42 (GPS Time + 1)
Satellites	8
Longitude	-3°27' 8.76131"
Latitude	40°28' 21.59425"
Height	661.275 m
Status	DGNSS [4 Sec.]
PDOP	2.349
HDOP	1.343
HRMS	0.403
VRMS	0.578

Station Number	0111
Base Longitude	113°21' 59.82440"
Base Latitude	23° 7' 35.67690"
Base Height	0 m

MET Type	ZZ11A
Pressure	- hPa
Temperature	- °C
Humidity	- %RH

GNSS Configuration	
Cutoff Angle	5
1PPS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
BDS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
GPS	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
GLONASS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Galileo	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
QZSS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SBAS	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

3. Use **Ports configuration**. Choose any COM port and configure it as needed. Also configure the NMEA and rate as indicated below:

Ports Summary :

Port	Status	baud Rate	Protocol	Mode	IP Port	Function
Bluetooth	Enable	-	-	-	-	CMD
LMP	Disable	440.125 MHz	South 9000	-	-	RTK_OUT
COM1	Disable	115200	RS485	-	-	CMD
COM2	Disable	115200	RS485	-	-	CMD
COM3	Enable	115200	RS232	-	-	DEBUG
Ntrip Client	Disable	-	NTRIP	CLIE	-	-
Ntrip Caster	Disable	-	NTRIP	CAST	-	-
Socket 1	Enable	-	TCP	SERV	-	-
Socket 2	Disable	-	TCP	SERV	-	-
Socket 3	Disable	-	TCP	SERV	-	-
Socket 4	Disable	-	TCP	SERV	-	-
Socket 5	Disable	-	TCP	SERV	-	-

↓

I/O Configuration :

Socket 1

<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
Type	TCP
Mode	Server
Port	6060
Function	NMEA(Output)

NMEA	GGA: 1HZ	GSA: 1HZ	GSV: 1HZ	ZDA: 1HZ
Record	RMC: 1HZ	VTG: 1HZ	GST: 1HZ	GLL: 1HZ
	<input type="radio"/> Enable <input checked="" type="radio"/> Disable			

2. Go to **GNSS configuration** and enable GPS and SBAS. Include also the **cut off angle (5°)**.

Example#6: Vector VR1000



Model

Sub-metre accuracy

VR1000

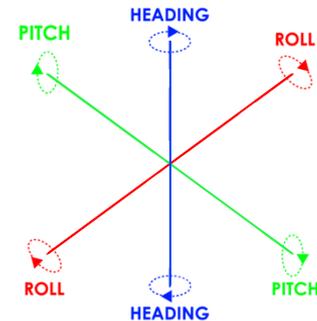
Capabilities

GNSS double frequency:

- GPS (L1/L2), GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas

SBAS corrections supported (3 channels):

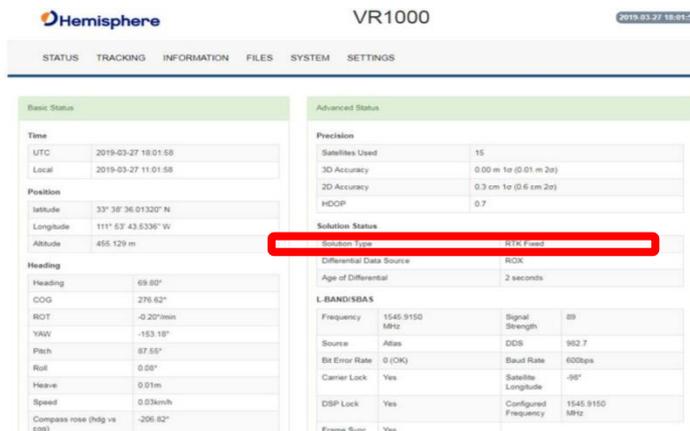
- WAAS, **EGNOS**, GAGAN, MSAS



Example#6: Vector VR1000

How to configure EGNOS OS

1. Open a web browser window and type the following IP address: 192.168.100.1
2. Go to setting and enable SBAS
3. In 3D accuracy indicates the horizontal error using EGNOS and in Solution Type indicates 3D fixed DGNSS
4. Also, the VR 1000 has Led's to inform the GNSS type and quality



Indicator	Description/Function
Power	Solid GREEN indicates receiver is powered on
Primary GNSS	Solid GREEN indicates tracking 4+ satellites Solid RED indicates No Satellites
Secondary GNSS	Solid GREEN indicates tracking 4+ satellites Solid RED indicates No Satellites
Heading	Solid GREEN indicates 2D GNSS heading Solid AMBER indicates 2D sensor heading
Quality	Solid GREEN indicates RTK fixed Flashing GREEN (1/sec) indicates DGPS / Float Solid AMBER indicates Autonomous Flashing AMBER indicates No Position Solid RED indicates No Satellites

Example#7: Japan Radio Company JLR-4340 & JLR-4341

JRC *Japan Radio Co., Ltd.*

Model **Sub-metre accuracy**

Sensor JRL-7500 (JRL-4340) and sensor JRL-7800 (JRL-4341)

Capabilities

GNSS single frequency :

- GPS (L1)

SBAS corrections supported:

- WAAS, **EGNOS**, MSAS



Example#7: Japan Radio Company JLR-4340 & JLR-4341

How to configure EGNOS OS

1. Press “MENU” → “6” → “8” to display the SBAS setting screen. Then, press again “6”.



2. By default, the receivers are configured as “AUTO” in the correction mode “SBAS SEARCH”.

“Type of information” and “ranging” are “OFF” by default.

3. When SBAS is used an indication appears in the bottom right corner (Sb), as depicted in the figure bellow.

```
M BEACON/SBAS 18:05:02 U1
BEACON
1. STATION SELECT : MANUAL
2. FREQUENCY : 309.0kHz
3. BIT RATE : 200bps
4. BEACON INFORMATION: ON
   (309.0kHz 200bps 118)
SBAS
6. SBAS SEARCH : AUTO
7. TYPE O INFORMATION: OFF
8. RANGING : OFF
W84
```

Example#8: Japan Radio Company JLR-4350

JRC *Japan Radio Co., Ltd.*

Model **Sub-metre accuracy**

Sensor JRL-8600 (JRL-4350)

Capabilities

GNSS multifrequency:

- GPS (L1/L2/L5), GLONASS (G1/G2/G3), BeiDou (B1/B2/B3), QZSS

SBAS corrections supported:

- WAAS, **EGNOS**, MSAS



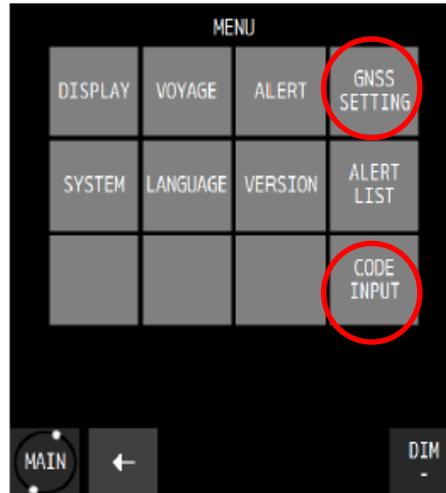
Example#8: Japan Radio Company JLR-4350

How to configure EGNOS OS

1. This procedure is protected by a password to prevent them being changed easily. The process is the following: **“MENU”** → **“CODE INPUT”** → **“1650” (to SBAS)*** → 



2. Go back to **“MENU”** → **“GNSS SETTING”** → **“SENSOR 1”** (or the one that applies) → **“SBAS”**



3. In SBAS, the following values must be introduced in the parameters:
 - “SAT SEARCH” → AUTO
 - “TYPE 0” → OFF
 - “RANGING” → OFF”

* The instruction manual indicates the “input code” necessary for each application

Example#9: Kongsberg Seapos 310/320



KONGSBERG

Model

Sub-metre accuracy

Seapos 310/320

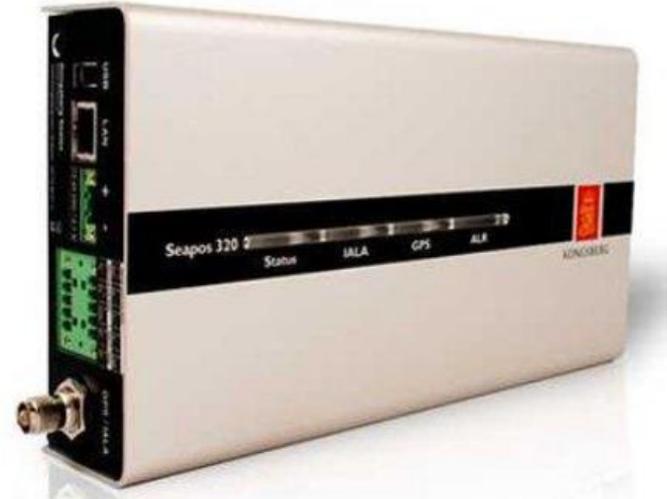
Capabilities

GNSS dual-frequency (L1, L2):

- GPS, GLONASS, BeiDou, Galileo, QZSS

SBAS corrections supported:

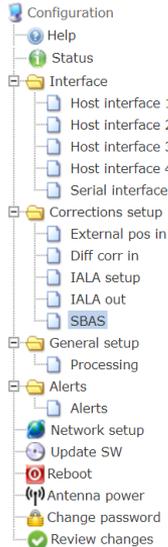
- WAAS, **EGNOS**, GAGAN, MSAS, SDCM



Example#9: Kongsberg Seapos 310/320

How to configure EGNOS OS *when using pc

1. Create the connection from PC using IP **192.168.0.61**
2. Go to **SBAS** and write '-1' which means AUTO satellites tracking
3. Go to **Ports** and configure the connection type needed
4. In **Message types** enable NMEA messages as indicated below and use the interval 1sec.
5. Select **Status** to confirm the use of EGNOS Signal.



SBAS

Track satellite id

Track satellite id

3. Go to **Ports** and configure the connection type needed
4. In **Message types** enable NMEA messages as indicated below and use the interval 1sec.

Message types

<input checked="" type="checkbox"/> DTM	<input checked="" type="checkbox"/> GGA	<input checked="" type="checkbox"/> GNS	<input checked="" type="checkbox"/> GBS	<input checked="" type="checkbox"/> HDT	<input checked="" type="checkbox"/> GLL	<input checked="" type="checkbox"/> GSA	<input checked="" type="checkbox"/> GST
<input checked="" type="checkbox"/> GSV	<input checked="" type="checkbox"/> GFA	<input checked="" type="checkbox"/> RMC	<input checked="" type="checkbox"/> VTG	<input checked="" type="checkbox"/> ZDA	<input type="checkbox"/> BLM	<input type="checkbox"/> BLS	<input type="checkbox"/> BLT

Interval (s)

General

Product: SEAPOS320

Online: Ping received

Time & Date

Unit Date (UTC): 2022-01-27

Unit Time (UTC): 15:31:06

Satellite Measurements

Receiver information:

Receiver 1 - Enabled

Receiver 1 - Type: 20

Receiver 1 - Satellites visible: 13

Receiver 1 - HDOP: 1.082209

System solution:

Lat: 40.47265N

Long: -3.45247W

Hgt: 660.87

Satellite corrections

Fixtype: 51

DGNSS fix - SBAS

Example#10: NGR-1000 / NGC-3000



Model

Sub-metre accuracy

NGR-1000, NGC-3000

Capabilities

GNSS double frequency:

- GPS (L1), GLONASS

SBAS corrections supported:

- WAAS, **EGNOS**, GAGAN, MSAS



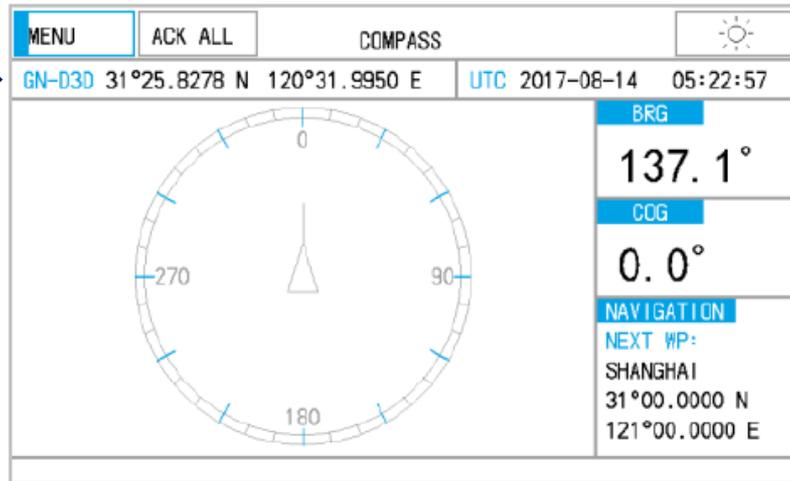
Example#10: NGR-1000 / NGC-3000

How to configure EGNOS OS

1. Turn on the device.
2. Device will automatically use **GPS**, **GPS + GLONASS** and then **SBAS**, if available.
3. When SBAS is used by the device, on top left of the main display, D2D or D3D is shown.

D2D/D3D when DGPS* is used

*EGNOS



Example#11: Raymarine AXIOM Series

Raymarine

Model

Sub-metre accuracy

Axiom™+, Axiom™ Pro, Axiom™ XL, RS150

Capabilities

GNSS multi-band:

- GPS, GLONASS, Beidou and Galileo

SBAS corrections supported:

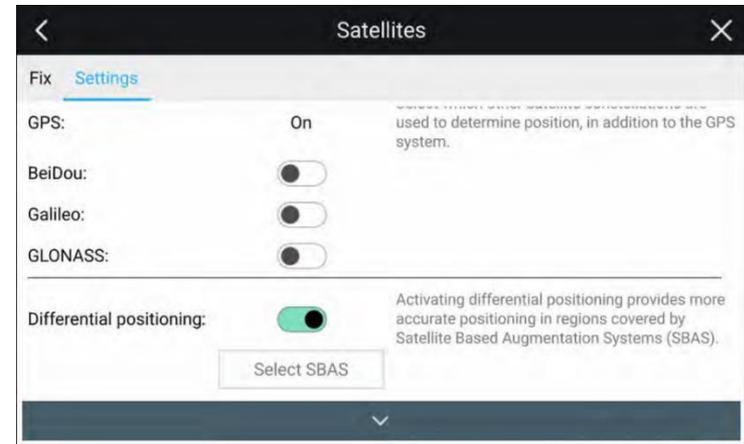
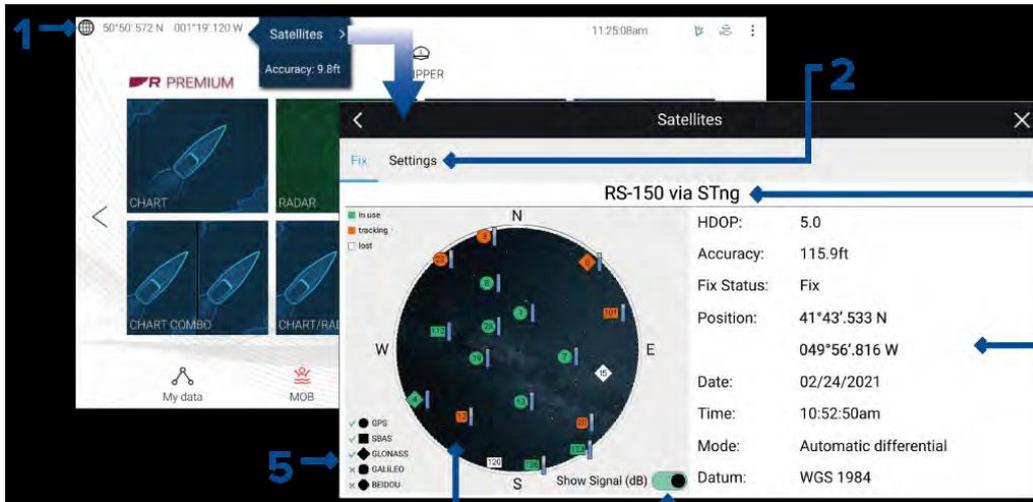
- WAAS, **EGNOS**, GAGAN, MSAS, QZSS



Example#11: Raymarine AXIOM Series How to configure EGNOS OS

Raymarine

1. Vessel's position is provided in the top left corner of the Home screen (GNSS coordinates).
2. To activate SBAS: Home screen → GNSS coordinates → Satellites → Settings → Differential Positioning ON
3. To confirm if SBAS is active, go to **Satellites** → **Fix** menu. The navigation satellites and the constellation to are depicted (left image).



Example#12: Saab R5



Model

R5

Capabilities

GNSS single frequency (L1):

- GPS, GLONASS

SBAS corrections supported:

- WAAS, **EGNOS**, MSAS
- IALA Beacon receiver option
- *RAIM functionality



*Alerting when position accuracy is below user set limit



Example#12: Saab R5 when using SAAB display

How to configure EGNOS OS (1/2)

1. If the system is set up for the first time, the **configuration wizard** will show each menu. When **System Setup** is shown, select **Navigation System DGPS** to enable EGNOS.



2. If the system is NOT set up for the first time select **Main** → **Messages** → **DGPS Messages** → **GPS/DGPS** and select **SBAS**.
3. On top of the display, an **SBAS** icon will be **green** and in R5 sensor green led is on, when using EGNOS signal.

LAT : 58° 23.8294' N
LON : 15° 41.9618' E

SBAS  13:56 UTC
RAIM: 10m



Example#12: Saab R5 when using pc How to configure EGNOS OS (2/2)

1. Create a COM connection from a PC to R5 receiver. Go to **Configure** and set up as indicated in the picture. Also enable de NMEA messages as shown., needed to provide EGNOS *PVT. *Position, Velocity, Time



SAAB R5 NAVIGATION SENSOR Version: 1.0.3

Status **Configure** Maintenance Version

GNSS

- GPS
- Glonass
- Galileo
- BeiDou
- Elevation Mask 5 [']
- RAIM Level 10 [m]
- COG Smoothing 0.00 [s]
- SOG Smoothing 0.01 [s]
- Correction Source Beacon
- Correction Age 120 [s]

Beacon

- Tuning Mode Auto
- Frequency 298.0 [kHz]
- Bitrate Auto

SBAS

- Auto Search
- PRN 1 128
- PRN 2 120
- PRN 3 124

Device Position

- Equipment Number 1
- Antenna Position Set
- Antenna Position X 0.00 [m]
- Antenna Position Y 0.00 [m]
- Antenna Position Z 0.00 [m]
- Ship Dimensions Set
- Ship Length 0.00 [m]
- Ship Width 0.00 [m]
- CCR Set
- CCR Position X 0.00 [m]
- CCR Position Y 0.00 [m]
- CCR Position Z 0.00 [m]

Interface

- LWE Id GNS170
- Eth 1 IP Address 172.16.102.17
- Eth 1 Netmask 255.255.0.0
- Eth 2 IP Address 172.17.102.17
- Eth 2 Netmask 255.255.0.0
- LAT/LON Decimals 8
- Speed Log Output 100 pulses/NM
- Heading Input Port Auto
- Local Time Offset + 01 h 00 m

Alarms

- HDOP Limit Exceeded
- Position Data Lost
- DGNS Position Data Lost
- Heading Data Lost
- RAIM Status - Caution
- RAIM Status - Unsafe
- DGNS Integrity Alert
- Sensor Malfunction

Out Ports

Port	Bitrate	Function
Out 1	38400	NMEA
Out 2	38400	NMEA
Out 3	38400	NMEA
Out 4	38400	NMEA
Out 5	38400	NMEA
Out 6	38400	NMEA
Out 7	38400	NMEA
Out 8	38400	NMEA

In Ports

Port	Bitrate	Function
In 1	9600	NMEA/RTCM
In 2	38400	NMEA/RTCM
In 3	38400	NMEA/RTCM
In 4	38400	NMEA/RTCM

2. In R5 sensor the green led is on when using EGNOS signal

Output Sentences

	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out 8	Network
DTM	-	1 Hz	-	-	-	-	-	-	-
GBS	1 Hz	-	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	-	1 Hz
GGA	1 Hz	1 Hz	1 Hz	-	1 Hz				
GLL	1 Hz	1 Hz	-	10 Hz	-	-	-	-	1 Hz
GNS	1 Hz	1 Hz	1 Hz	-	10 Hz				
GRS	1 Hz	-	-	-	-	-	-	-	-
GSA	-	-	-	-	-	-	-	-	1 Hz
GST	-	-	-	-	-	-	-	-	-
GSV	-	-	-	-	-	-	-	-	1 Hz
POS	-	-	-	-	0.5 Hz	-	-	-	-
RMC	1 Hz	-	1 Hz	-	10 Hz				
VTG	1 Hz	1 Hz	1 Hz	-	1 Hz				
ZDA	1 Hz	1 Hz	1 Hz	-	1 Hz				
PS TT,501	1 Hz	-	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	-	1 Hz

Example#13: Septentrio



Model

Sub-metre accuracy

AsteRx SB3, AsteRx SB3 Pro, PolaRx5, PolaRx5e, AsteRx, M3 Pro

Capabilities

GNSS double frequency:

- GPS (L1/L2), GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas

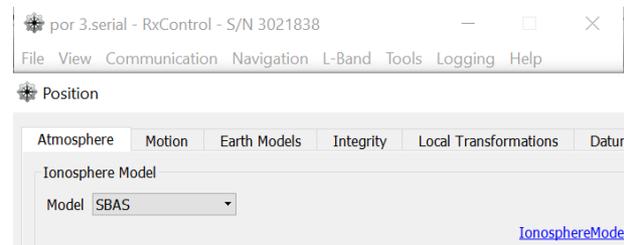
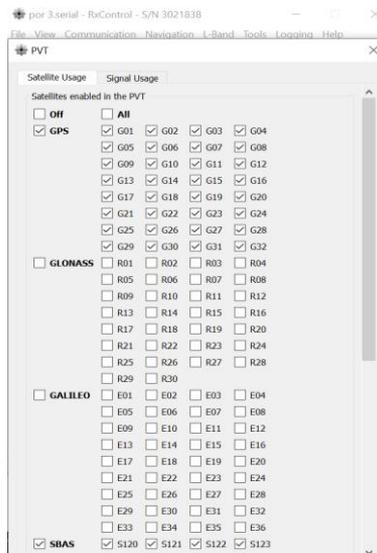
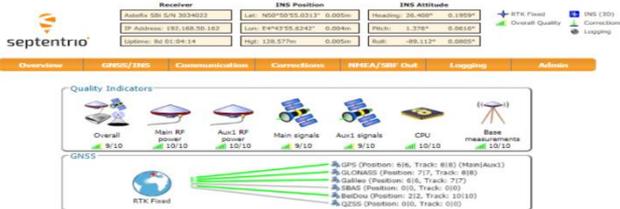
SBAS corrections supported (3 channels):

- WAAS, **EGNOS**, GAGAN, MSAS



Example#13: Septentrio How to configure EGNOS OS

1. Open the Rx control software. After connection, on the main menu select: **Navigation** → **Positioning** then select **GPS and SBAS**. **Accept**.
2. Or use the Intuitive web user interface to configure SBAS.
3. On the main menu select: **Navigation** → **Advance user settings** → ***PVT** and select **GPS and SBAS**.
*Position, Velocity, Time
4. On the main menu select: **Navigation** → **Position** and configure the receiver to use **SBAS iono model**, as well as the movement: moderate and **heavy machinery vehicle**.
5. Septentrio is ready to work using EGNOS signal.



Example#14: SIMRAD P2005

navico

SIMRAD

Model

Sub-metre accuracy

P2005 / P3007

Capabilities

GNSS double frequency:

- GPS (L1/L2)

SBAS corrections supported (3 channels):

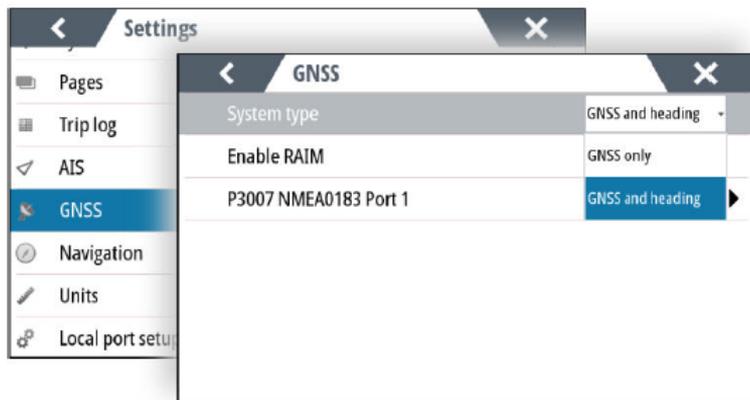
- WAAS, **EGNOS**, GAGAN, MSAS



Example#14: SIMRAD P2005

How to configure EGNOS OS

1. Turn on the device.
2. In **Main menu** select **Settings** → **GNSS** → **P2005 NMEA0183 port 1** → **DGPS mode**.
3. Enable **GPS** and **SBAS**.
4. The system will change automatically from **GPS** to **SBAS** when available and is shown on main navigation display.



Example#15: Ublox



Model

Sub-metre accuracy

M6, M8, M9, M10, MVK##

Capabilities

GNSS double frequency:

- GPS (L1/L2), GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas

SBAS corrections supported (3 channels):

- WAAS, **EGNOS**, GAGAN, MSAS

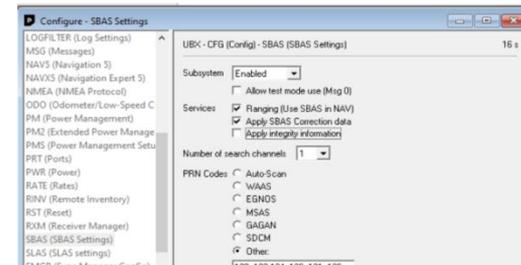
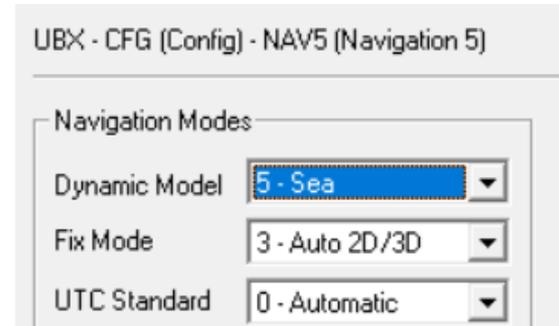
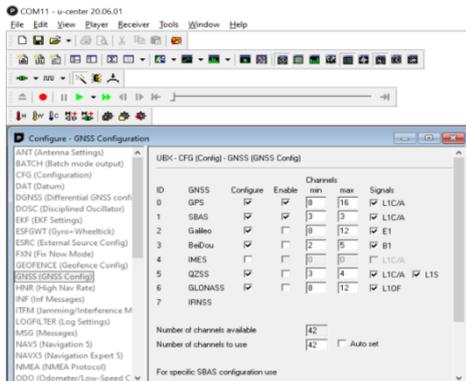


Example#15: Ublox

How to configure EGNOS OS



1. After the connection, on the quick icon menu select: **Configuration** → **GNSS Config**. Then select **GPS and SBAS**. With the quantity of channels (**GPS min 8 max 16. SBAS min & max 3**; is an auto configuration). Press **SEND**.
2. On the main menu select: **Configuration** → **NAV5**. Then select **Sea** in the **Dynamic Model**. Press **SEND**.
3. On the main menu select: **Configuration** → **SBAS**. Then select **ENABLED** in the **Subsystem**, **Apply SBAS Correction data** and the **PRN codes** select **OTHER**: insert the current GEO numbers: 123, 136 (see [operational GEOs](#)). Press **SEND**.
4. Ublox is ready to use EGNOS signal. It will indicate 3D/DGNSS.



Summary

Summary

How to access to EGNOS corrections for maritime:

To use EGNOS signal the receiver must be GPS/SBAS capable

A wide variety of manufacturers offers GPS/EGNOS capable receivers

GPS/SBAS receivers are easily configured through the display. No registration is needed as EGNOS signal is ready to use. Check PRN codes broadcasting EGNOS operational signal [in this link](#)

Summary

EGNOS & EDAS¹ provide free GPS Augmentation corrections for Maritime:

EGNOS OS is a free of charge real time SATELLITE based correction service enhancing GPS accuracy for maritime throughout Europe



1.The EGNOS Data Access Service (EDAS) offers ground-based access to EGNOS data through the Internet:

https://egnos-user-support.essp-sas.eu/new_egnos_ops/services/about-edas

Useful information about EGNOS

<https://egnos-user-support.essp-sas.eu>

EGNOS SIS availability forecast

The top part of each cell in the calendar represents the availability forecast of PRN 123, the bottom one shows the status of PRN 136.

(DECEMBER 2019)

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

■ Planned Signal Available ■ Risk of Signal Outage
■ Planned Signal Outage ■ TBC Signal Available

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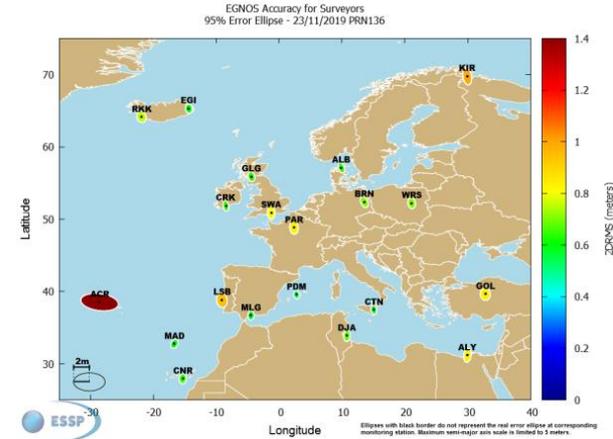
EGNOS SERVICE NOTICE
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Service Notice #15 EGNOS Space Segment Update - (In Force)

Service Notices | Friday, August 31, 2018

The EGNOS Service Notices are notifications published whenever there is any complementary information that could have a relevant impact in any of the EGNOS Service Definition Documents' contents. Hence, an EGNOS Service Notice is a temporal amendment to the EGNOS Service Definition Documents.

[service_notice_15.pdf](#)



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Corporate Video

Thank you!