

SEATEC



AIS6 / MFR6

User Manual

Important Features at a glance

Below you will find a brief summary of the main features of your Seatec AIS6 / MFR6. Your Seatec AIS6 / MFR6 will be your reliable partner for a safe navigation at sea.



✓ Integrated AIS Receiver (only AIS6)

✓ Integrated VHF Splitter (only AIS6)

✓ AIS SART Warningssystem

✓ AIS Screen















✓ AIS List of Ships

✓ NMEA Multifunctiondisplay

SEATEC

SEATEC - AIS6 / MFR6

Thank you for choosing a device of the Seatec product range. The Seatec devices offer an extraordinary degree of reliability combined with an excellent way of use. Seatec offers exceptional technologies and highest quality standards.

Feature	AIS6	MFR6
Integrated VHF Splitter		
AIS Screen		
AIS SART Warning System		
AIS List of Ships		
Wind Display (NMEA)		
Highway (NMEA)		
Compass		

AIS6

The Seatec AIS6 offers you the possibility to receive AIS signals and display them on a brilliant, high-resolution display. The AIS targets will be displayed on a so-called “AIS radar screen”. Detailed information of the received AIS targets can be viewed on a clearly structured AIS detail list.

Another great feature of the AIS6 is the handling of the received AIS SART signals. The Seatec AIS6/MFR allows you to recognize AIS SART signals quickly. When your AIS6 receives an AIS SART signal this will be displayed visually and in the form of an acoustic warning. Many AIS SART transmitter allow to send out an AIS SART TEST signal. In order to quickly distinguish between a test and a real emergency signal, TEST signals are displayed differently (as a green symbol ref. page 19) on the AIS screen of your device.

Because of this groundbreaking technology of your Seatec device, the safety of all parties at sea is significantly increased.

The rescue manoeuvre can start immediately after receiving a “real” AIS SART signal.

MFR6

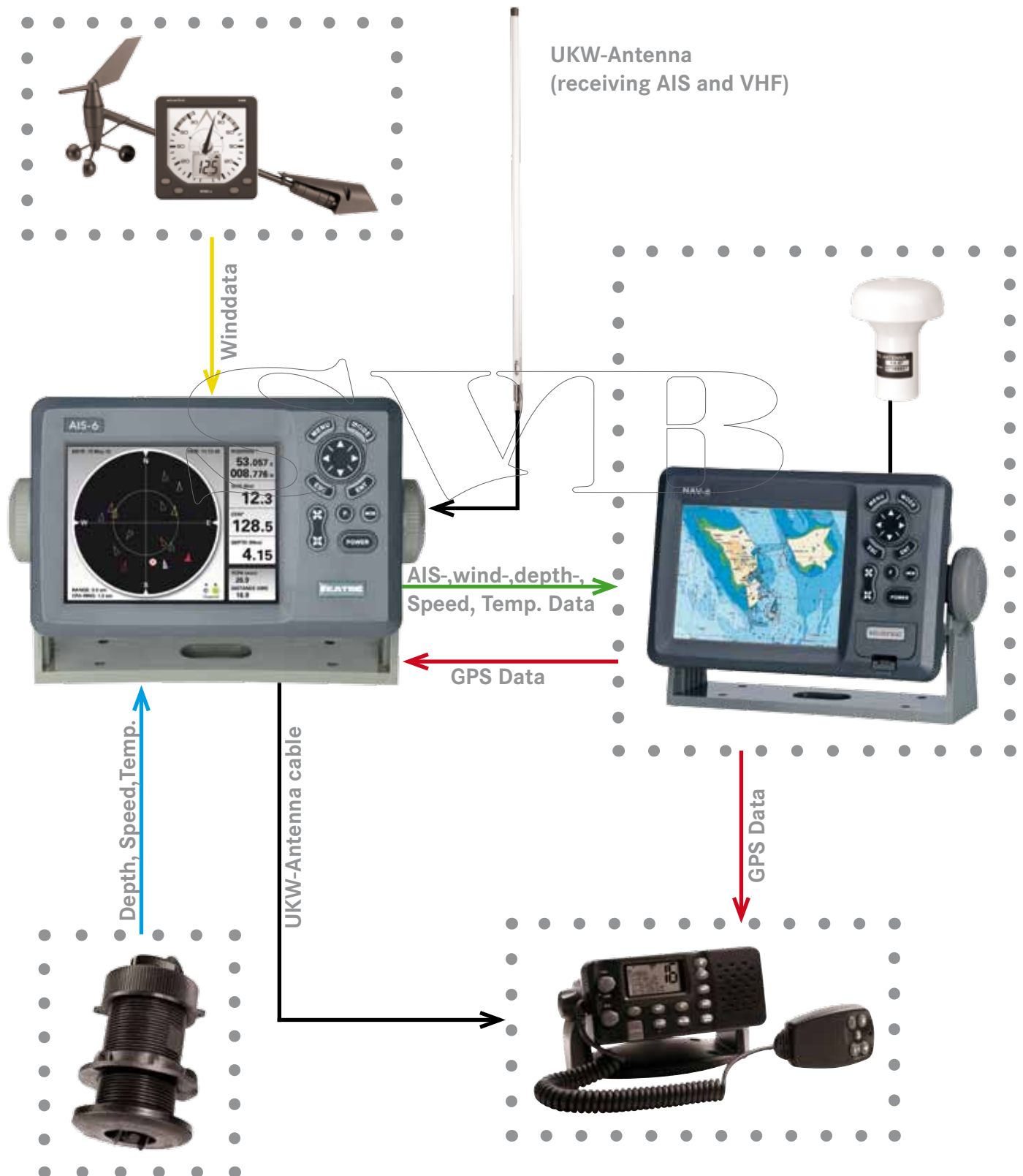
The Seatec Multifunction Repeater (MFR6) is a seamless addition to your existing navigation devices. The MFR6 displays incoming NMEA data, such as wind-, GPS-, depth-, speed-, autopilot- and AIS data. The received data will be displayed on your usual Seatec screens. You can, for example, use the MFR6 on lower deck in combination with a Seatec AIS6 placed on the flybridge.

SEATEC - AIS Applications

The Seatec AIS devices can be integrated in almost any NMEA board system so that received AIS data can be transferred to other AIS enabled devices. Seatec devices can also display other NMEA data such as depth, log, wind and autopilot data.

This turns your Seatec device into a true multi-functional display. Important data can quickly and easily be displayed. You can get a fast overview of the needed data.

The built-in VHF splitter of your AIS6 permits you to use your existing VHF antenna for both; AIS reception and for your VHF-Radio. Beneath you will find a connection example for your AIS6 device.



Directory

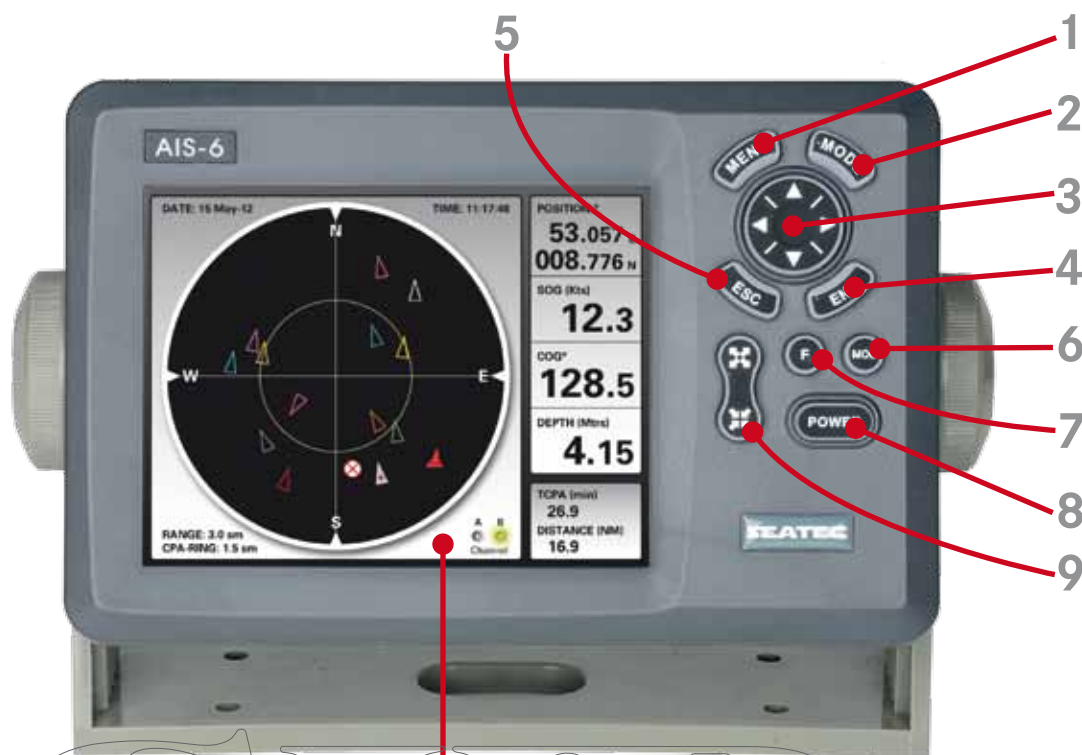
1.....	Frontview and Key´s
2.....	Backview and cable assignment
2.1.....	AIS6
2.3.....	MFR6
3.....	Screens / Views
3.1.....	AIS Screen
3.1.1.....	AIS List of Ships
3.1.2.....	AIS Menu
3.2.....	Compass
3.3.....	Wind Display
3.4.....	Highway
3.5.....	Multidata Display
4.....	Main Menu Settings
5.....	AIS SART
5.1.....	AIS SART Test
6.....	Technical Specifications



1

Front View and Key´s

The Seatec AIS devices have a variety of important functions and features. The key mapping of your AIS6 device has been optimized so that you can easily edit all settings and operate safely and quickly even on rough sea.



1. **MENU**
Press the menu key shortly to open the menu of the current screen of your device
2. **MODE**
With the mode key you can switch between different windows:
 - AIS Screen (displaying the received AIS targets)
 - Compass (shows the current course through GPS)
 - Wind indication (shows wind data received by NMEA)
 - Highway (shows autopilot data received by NMEA)
 - Multifunction display (SOG, SPD, Depth, Power)
3. **Cursor-Pad**
With the Cursor-Pad you can navigate through the menu and move the cursor on the AIS Screen.
4. **ENT**
Confirms the current selection and shows AIS details of the selected AIS target.
5. **ESC**
Closing of windows / exit of current menu.
Hint: Use ESC to move a window back (invers MODE function)
6. **MOB**
This key is not engaged
7. **F**
The function key shows the “type-of-ship” overview on your AIS screen.
8. **POWER**
Press and hold to turn the device on / off
9. **ZOOM IN / ZOOM OUT**
Zoom into/zoom out of the AIS screen
10. **Display**
Displays all information clearly and reliably

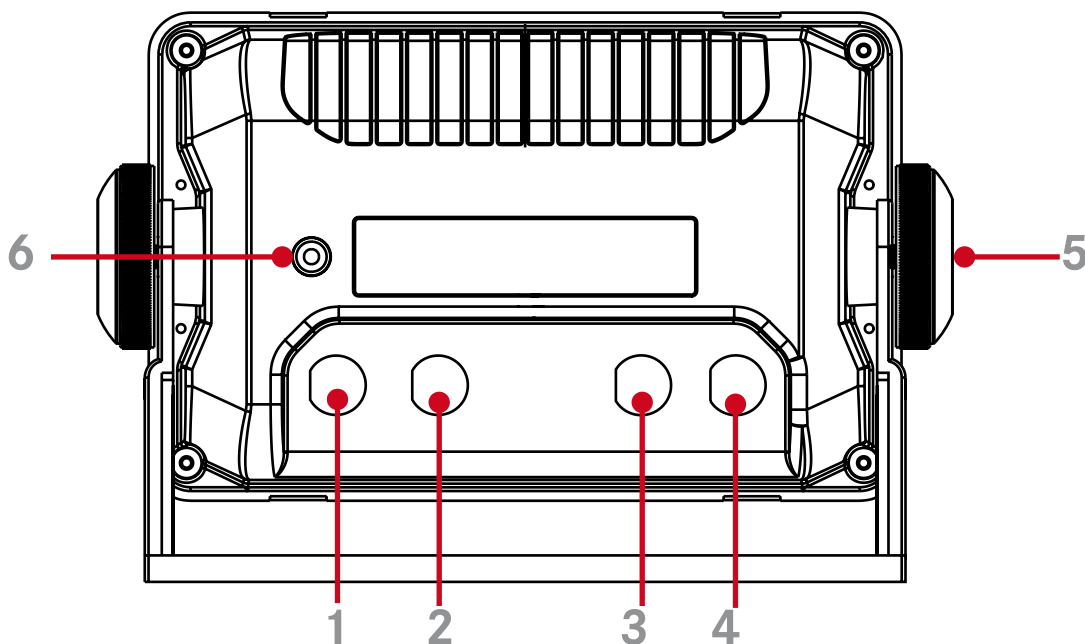
2

Back view and cable assignment

Great connectivity!

The Seatec technology is based on proven and reliable data communication methods. This includes the sending of AIS NMEA data and receiving of wind, autopilot, depth and speed data. These information can be integrated from external devices.

2.1 AIS6



1. Connection for power supply

Here you can connect the supplied 2-Pin powercable which includes a build-in 0.5A fuse.

Pin	Color	Description
1	Black	12 / 24 Volt DC
2	White	+ 12 / 24 Volt DC

2. Databale Connector

To insert or retrieve NMEA data, you need to connect the databale here.

Pin	Color	Baudrate	Description
1	Brown	4.800	NMEA Input +
2	Red	4.800	NMEA Input +
3	Orange	4.800	NMEA Input +
4	Yellow	4.800	NMEA Input +
5	Green	-	NMEA Input - (Ground)
6	Blue	38.400	NMEA Output +
7	Purple	-	Option
8	White	-	NMEA Output - (Ground)

3. VHF Antenna IN

Connect your VHF Antenna here (P/L Plug).

Hint: We recommend the VHF-Antenna RA106 (SVB-Art.: 73101)

4. VHF Antenna OUT

Connect your VHF here.

Normally you will need a P/L - P/L connection cable (SVB Art. No.: 95508).

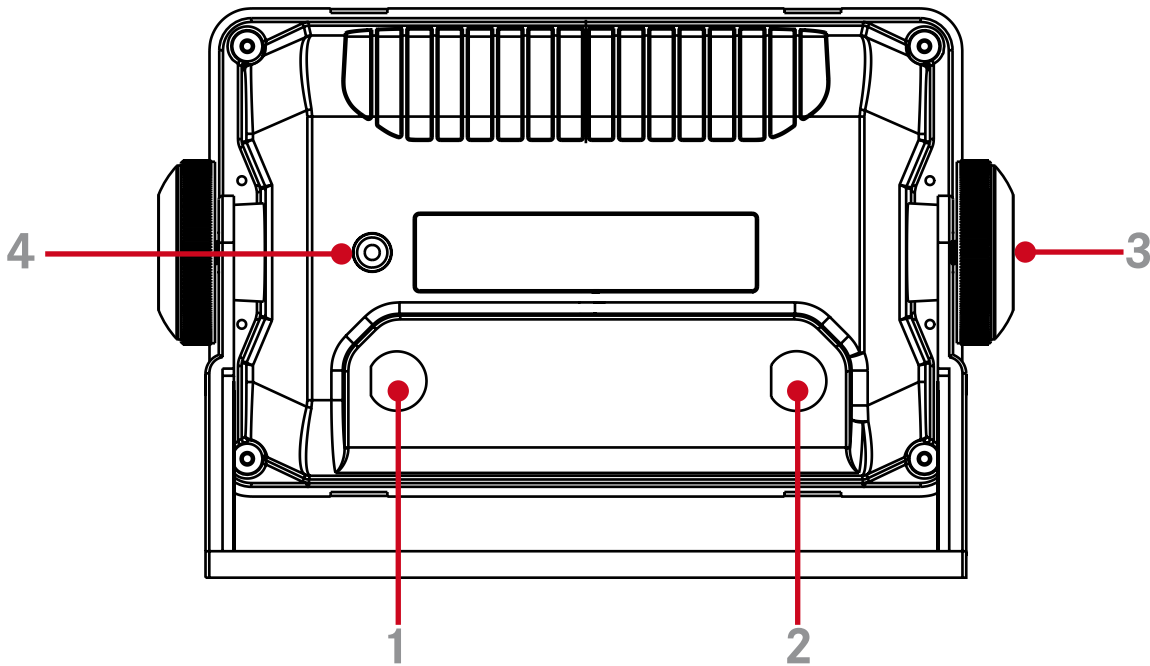
5. Thumbscrews

The two included thumbscrews are used to secure the device with the mounting bracket. This allows also an “upside-down” mounting.

6. Electrical grounding

To avoid mutual interference, the unit must be grounded.

2.3 MFR6



1. **Datatable Connector**
To insert and retrieve NMEA data, you need to connect the data cable here.

Pin	Color	Baudrate	Description
1	Brown	4.800	NMEA Input +
2	Red	4.800	NMEA Input +
3	Orange	4.800	NMEA Input +
4	Yellow	4.800	NMEA Input +
5	Green		NMEA Input - (Ground)
6	Blue	38.400	NMEA Output +
7	Purple	38.400	AIS NMEA Input +
8	White	-	NMEA Output - (Ground)

2. **Power Connector**
You can connect the supplied 2-Pin powercable which includes a build-in 0.5A, here.

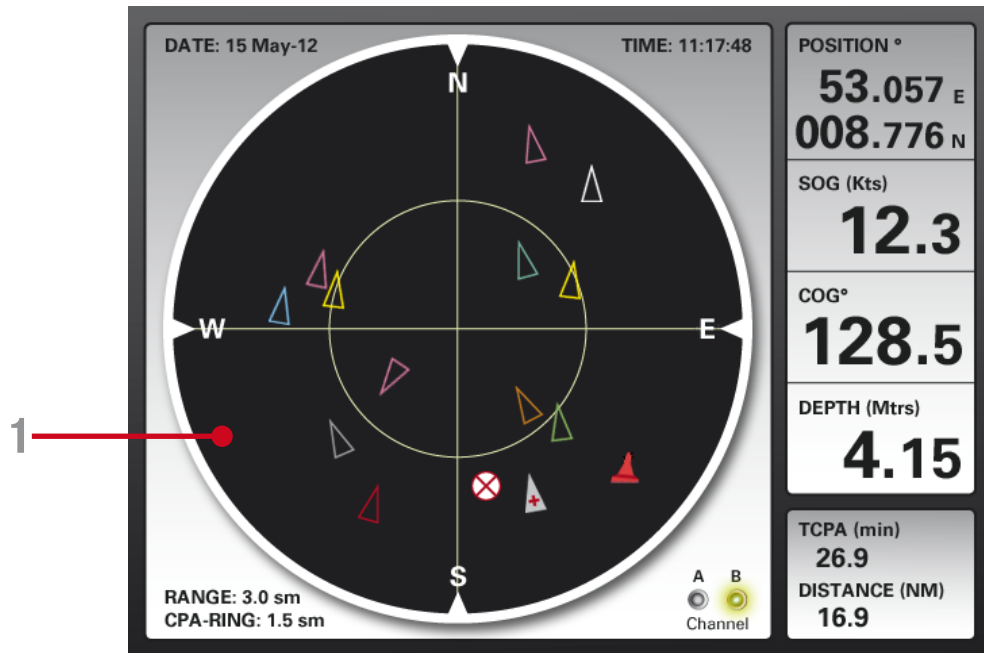
Pin	Color	Description
1	Black	- 12 / 24 Volt DC
2	White	+ 12 / 24 Volt DC

3. **Thumbscrews**
The two included thumbscrews are used to secure the device with the mounting bracket. This allows also an “upside down” mounting.
4. **Electrical grounding**
To avoid mutual interference, the unit must be grounded.

3

Screen / Views

3.1 AIS Screen



Hint: To use the AIS screen it is necessary to connect an external GPS antenna. You can use any GPS device that has a NMEA0813 output.

1. AIS Screen

This is the main screen of your Seatec AIS device. Here you will find all received AIS targets displayed on a radar-like screen.

Additional Functions:

- Press the “F” (7) button to call-up the AIS ship-type index.

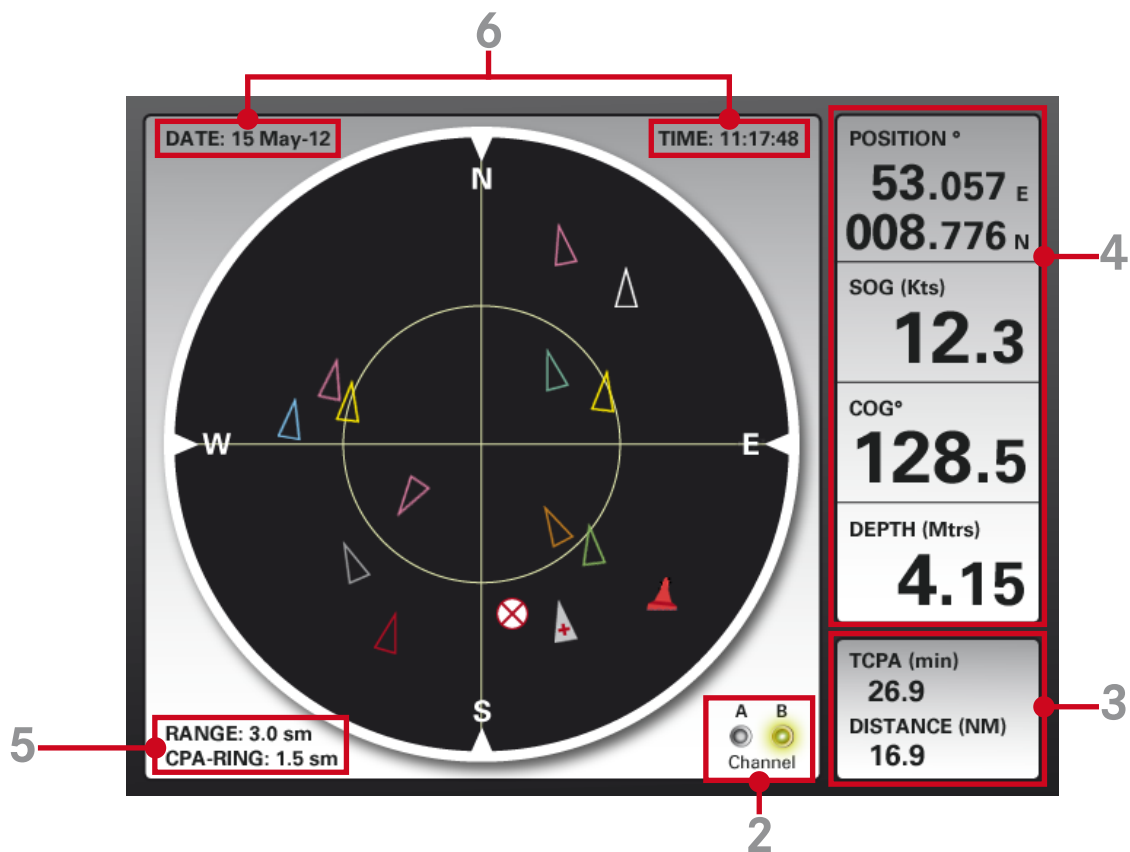
Every received signal contains information about the type of ship. On the right side you will find an overview of the AIS ship types.

SHIP-TYPE OVERVIEW	
	Cruise ship
	Cargo
	Fishing
	Tug
	Tanker
	Military
	Yacht
	Pilot
	Unknown
	SAR
	AtoN
	Basestation

- You can reduce and enlarge the display range using the Zoom IN / OUT zoom keys /. The current zoom level of your device can be seen in the lower left corner named “Range” (5).
- Move the cursor above any AIS target to show important ship information.

SHIP DATA		ENT ▶
MMSI	211000385	
POS	53.057° E	
	008°776.00° N	
SHIP-TYPE	71-Yacht	
NAME	Lesmona	

Hint: Press “ENT” (4) to open detailed informationen (ref.to chapter 3.1.1)



2. AIS Reception LED

The Seatec AIS units are equipped with virtual reception LEDs. They start blinking when a class A or B AIS signal has been received.

Class A: Signals of this class are sent mainly from commercial shipping. These signals contain more information than Class B signals.

Class B: These signals are normally transmitted by sport boats and contain basic information about the boat.

You will find a detailed list of the class A and B signals in chapter 3.1.1

Hint: Use the LED´s to check the function of the AIS receiver.

3. AIS Alarm Field

This field shows the distance (CPA) and the time (TCPA) to the next AIS alarm. For more information about AIS alarms CPA and TCPA, see chapter 3.1.2

4. Data Field

Display of basic information such as position, speed over ground (SOG), course over ground (COG) and depth (received via NMEA).

5. Range / CPA-Ring

Range shows, in which radius AIS targets are displayed.

The CPA ring indicates the radius in which a CPA alarm will be activated for an AIS target. For more information on the CPA alarm, see chapter 3.1.2

6. Date / Time

Displays the current date and time (in UTC format), which is transmitted by the GPS receiver.

3.1.1 AIS List of ships

The AIS list of ships shows all received AIS targets in one table. You can see the total number of received targets and you have access to detailed information of these targets. To open the AIS list of ships you need to be on the AIS Screen (ref. to chapter 3.1) , then press “Menu” (1) and choose the point “AIS Detail List”. Confirm your choice by pressing “ENT” (4).

AIS SHIP LIST

Received Targets: 37

No.	NATION	MMSI	NAME	DIST (NM)	SOG (Kts)	COG	TYPE
1	Germany	211xxxxx	Mars	7.0	4.7	23.05	A
2	Netherlands	244xxxxxx	Hugo	12.1	0.1	168.8	A
3	Spain	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
4	Malta	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
5	Marshall Isl.	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
6	Singapore	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
7	USA	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
8	China	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
9	Norway	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
10	India	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
11	Denmark	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
12	Netherlands	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
13	Poland	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
14	Tunisia	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
15	Cyprus	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
16	Norway	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
17	Ecuador	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
18	Bulgaria	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
19	France	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx
20	Uruguay	xxxxxxxx	xxxxxxxx	xxxx	xxxx	xxxx	xxxx

Received Targets

1. Received Targets

Shows the number of received targets.

If the number is >20 your device indicates that more AIS targets are received than could be displayed on the first page. In this case you can scroll down by using the ▼, ▲- (3) keys.

2. Columns of the AIS List of Ships

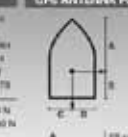
The AIS list of ships is divided neatly into the following columns:

No.	= Consecutive number of individual AIS targets. Sorted by distance.
NATION	= Shows the flag under which the AIS target moves (depends on the MMSI of the vessel)
MMSI	= Shows the MMSI of the vessel
NAME	= Displays the ship name
DIST (NM)	= Distance between your GPS position and the AIS target.
SOG (kts)	= Current speed of the AIS target (kn)
COG	= Shows the course of the AIS target
TYPE	= Displays the AIS class (A / B)

From the AIS list of ships you can choose a single target using the ▼, ▲- (3) buttons. Once you have selected the desired ship, press “ENT” (4) for detailed information about this AIS target.

AIS SHIP LIST							
Received Targets: 37							
No.	NATION	MMSI	NAME	DIST (NM)	SOG (Kts)	COG	TYPE
1	Germany	211000385	Lesmona	7.0	14.8	98.7	B
2	Netherlands	244000000	Hugo	12.1	0.1	108.8	A
3	Spain	xxxxxxx	xxxxxxx	xxxxx	xxxxx	xxxxx	xxxxx

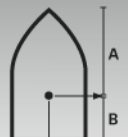
“ENT” (4)

SHIP-DATA CLASS A		GPS ANTENNA POS	
NAME	Cassandra		
COUNTRY	Germany		
SHIP-TYPE	70-Freighter		
MMSI	211xxxxxx		
CALL SIGN	HB64422T		
IMO NO	3012345678		
POS	34°44.000' N 135°21.000' E		
SOG	4.4 Kts	A	68 m
COG	98.7°	B	15 m
ROT	000°/min	C	7 m
DESTINATION	Hamburg	D	12 m
ETA	11:43	LENGTH	101 m
CPA	05.04.11	BEAM	19 m
TCPA	99.99 NM	DRAUGHT	5.8 m
NAV STATUS	00 under way using engine		

Depending on the ship class A or B (see AIS list, column “TYPE”) there are different ship information. Likewise, you can call up information about an AtoN.

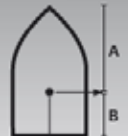
A Class A signal contains the following information:

- Ship name
- Country
- Ship typ
- MMSI
- Call-sign
- Current position
- Speed (SOG)
- Course (COG)
- CPA Alarm
- TCPA Alarm
- Position of the GPS Antenna

SHIP-DATA CLASS B		GPS ANTENNA POS	
NAME	Lesmona		
COUNTRY	Germany		
SHIP-TYPE	71-Yacht		
MMSI	211000385		
CALL SIGN	HB3145		
POS	53°057' E 008°776.00' N		
SOG	14,8 Kts	A	8 m
COG	98.7°	B	5 m
CPA	7.25 NM	C	2 m
TCPA	12.0 min	D	2 m
		LENGTH	13 m
		BEAM	4 m

Besides class B signal information, a Class A signal contains the following data:

- ROT (Rate of turn)
- Destination
- ETA (Eastimated time of arrival)
- NAV Status
 - Underway using engine
 - Moored
 - Limited maneuverability
 - At anchor
 - Not under command
 - Grounded
 - Engaged in fishing
- Length, width and draft of the vessel

SHIP-DATA CLASS A		GPS ANTENNA POS	
NAME	Cassandra		
COUNTRY	Germany		
SHIP-TYPE	70-Freighter		
MMSI	211xxxxxx		
CALL SIGN	HB64422T		
IMO NO	3012345678		
POS	34°44.000' N 135°21.000' E		
SOG	4.4 Kts	A	68 m
COG	98.7°	B	15 m
ROT	000°/min	C	7 m
DESTINATION	Hamburg	D	12 m
ETA	11:43	LENGTH	101 m
CPA	05.04.11	BEAM	19 m
TCPA	99.99 NM	DRAUGHT	5.8 m
NAV STATUS	00 under way using engine		

Information about an AtoN (Navigation support)

An AtoN can characterise different objects, such as virtual tons, drilling platforms, windparks, etc. The AtoN signal contains the following informations:

- Name of the AtoN
- Type of AtoN
Virtual (for example, virtual ton) or real (Windpark)
- Spezifikation
- MMSI of the AtoN
- Position of the AtoN
- Position of the GPS Antenna
- Dimensions of the AtoN (Lenght/Width)

AIS AtoN	
NAME	PLATFORM G17DA
TYPE OF AtoN	Real, Floating
SPECIFICATION	unkown
MMSI	211290740
POS	34°44.000' N 135°21.000' E
TIME	16:04:12
DIMENSIONS	
A	7 m
B	5 m
C	2 m
D	2 m
LENGTH	12 m
WIDTH	4 m

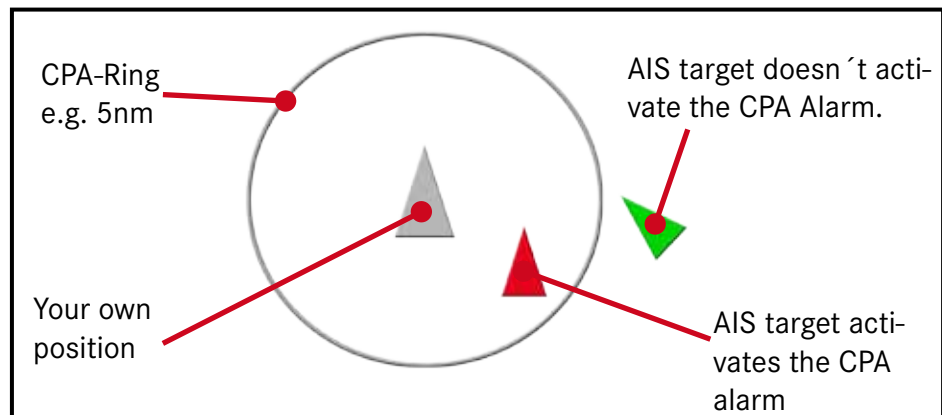
3.1.2 AIS Menu

Press the “menu” (1) button to enter the AIS menu. You can now edit the following settings:

- **CPA Limit**

Here you can adjust the radius of the CPA ring.

CPA (Closest Point of Approach) describes the distance between your current position and the AIS target before it becomes a threat to you.



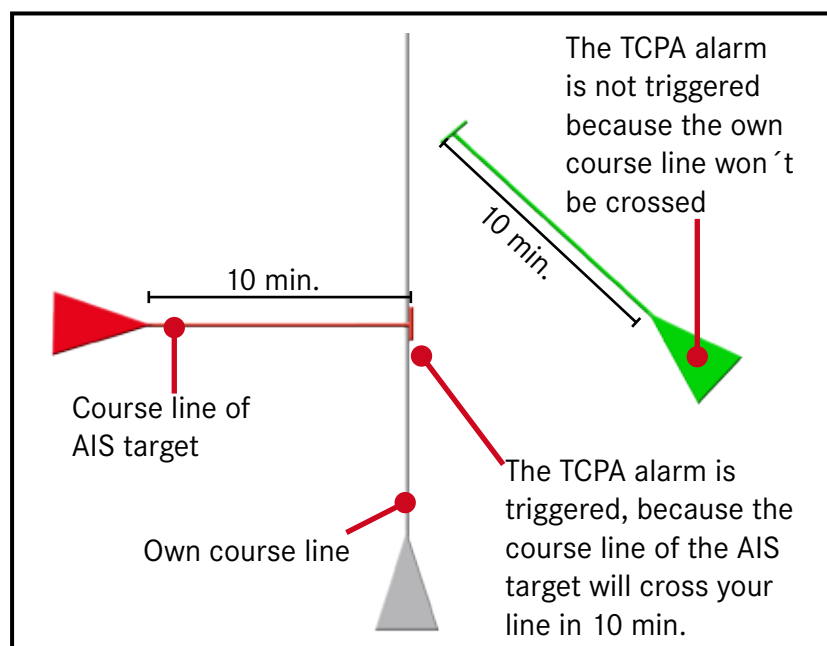
- **CPA Limit ON/OFF**

Turns the CPA alarm on or off.

- **TCPA Limit**

Here you can setup the time for the TCPA Alarm.

TCPA (Time to closest point of approach) describes the time until the next CPA becomes active.



- **TCPA Limit ON/OFF**

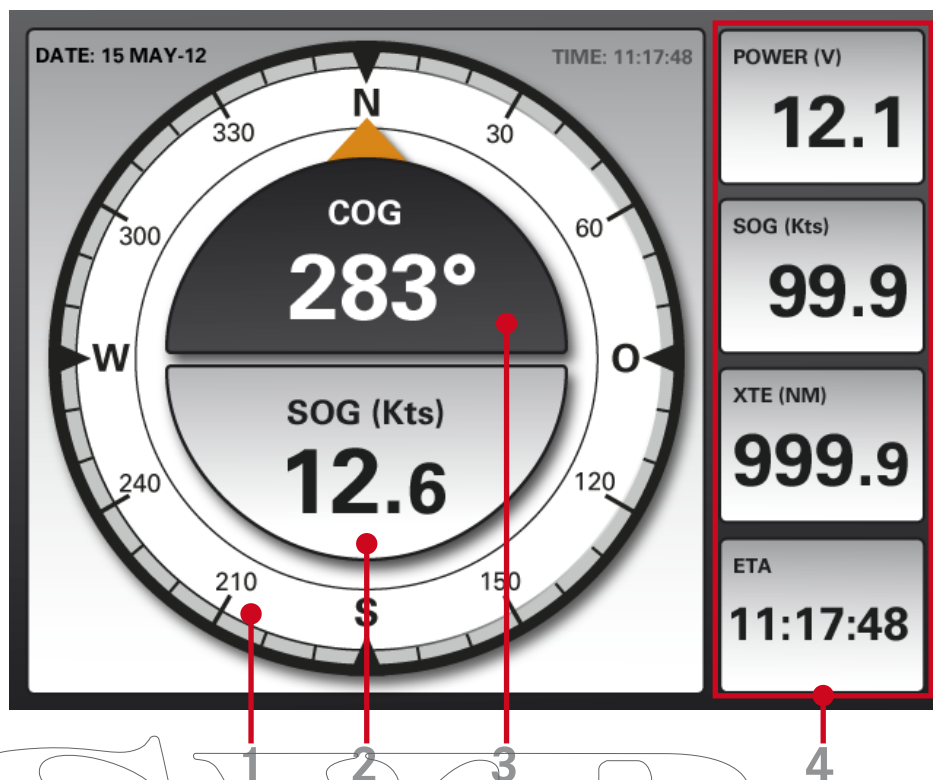
Turns the CPA alarm on or off.

- **AIS Detail List**

Here you can open the AIS list of ships (ref. to chapter 3.1.1.)

3.2 Compass

The Seatec product range offers a clear display of the compass data received from the GPS. Additionally you can display further important information on the data field.



1. **Compass**
Graphical display of the current GPS course.
2. **Speed over ground (SOG)**
Displays the current speed over ground, which is received via GPS.
3. **Course over ground (COG)**
Shows the current course over ground received by the GPS.
4. **Data field**
This display pannel can be adjusted to your preferences.

Press the menu button to get to “data field setup”. Once you confirm with ENT, a framework will surround the first data field. Use the cursor keys to choose the data field you would like to edit and press “ENT” (4).

A list from which you can select your disired data will open up.

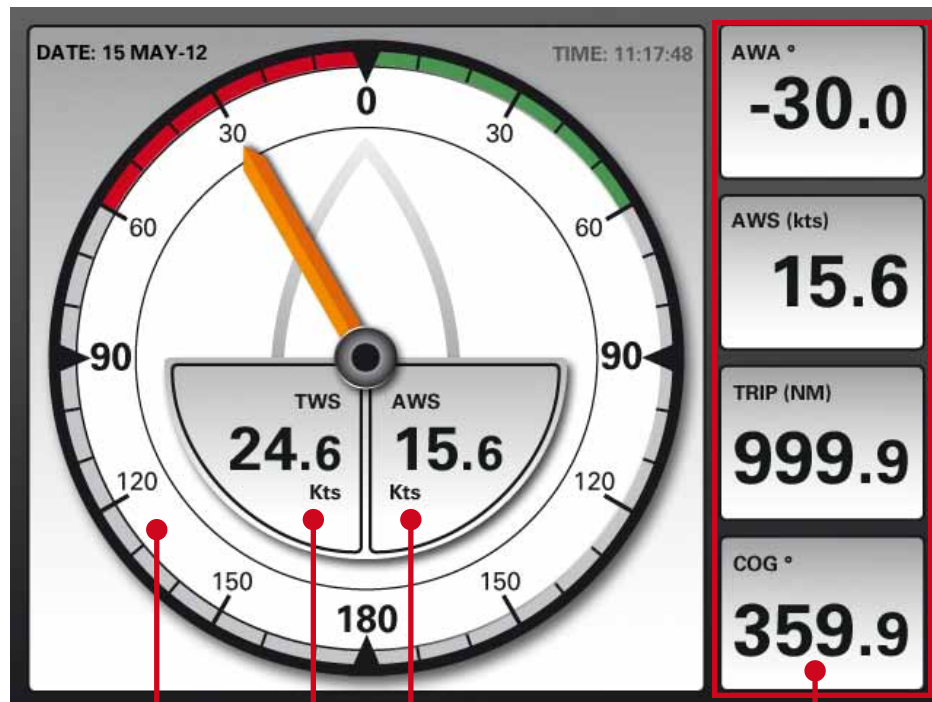
Confirm your selection with “ENT” (4).

Position	Current GPS position
TTG	Time to the next waypoint
Bearing	Bearing to the next waypoint
Range	Distance to the next WP
SOG	Speed over ground
COG	Course over ground
XTE	Course track error
ETA	Estimated time of arrival
Date Time	Date and Time by GPS (UTC)
Voltage	Power
Depth	Depth (mtr.)

Speed	Speed through water
Water Temp.	Water temperature
AWA	Apparent wind direction
AWS	Apparent wind speed
TWA	True wind direction
TWS	True wind speed
Wind Dir.	Wind direction
VMG	> True wind speed

3.3 Wind Display

Using the marine NMEA 0183 data protocol, wind data can be imported from external instruments into the Seatec devices. The received data is presented on a structured display.



1. **Wind direction**
Graphical display of the wind data received by NMEA.
2. **True wind speed (TWS)**
Shows the current true wind speed received by NMEA.
3. **Apparent wind speed (AWS)**
Apparent wind speed received by NMEA
4. **Data field**
These display panels can be adjusted to your liking.

Press the menu button to get to the point “data field setup”. Once you confirm with ENT, a framework will surround the first data field. Use the cursor keys to select the data field you would like to edit and press “ENT” (4).

A list from which you can select your desired data will open up.

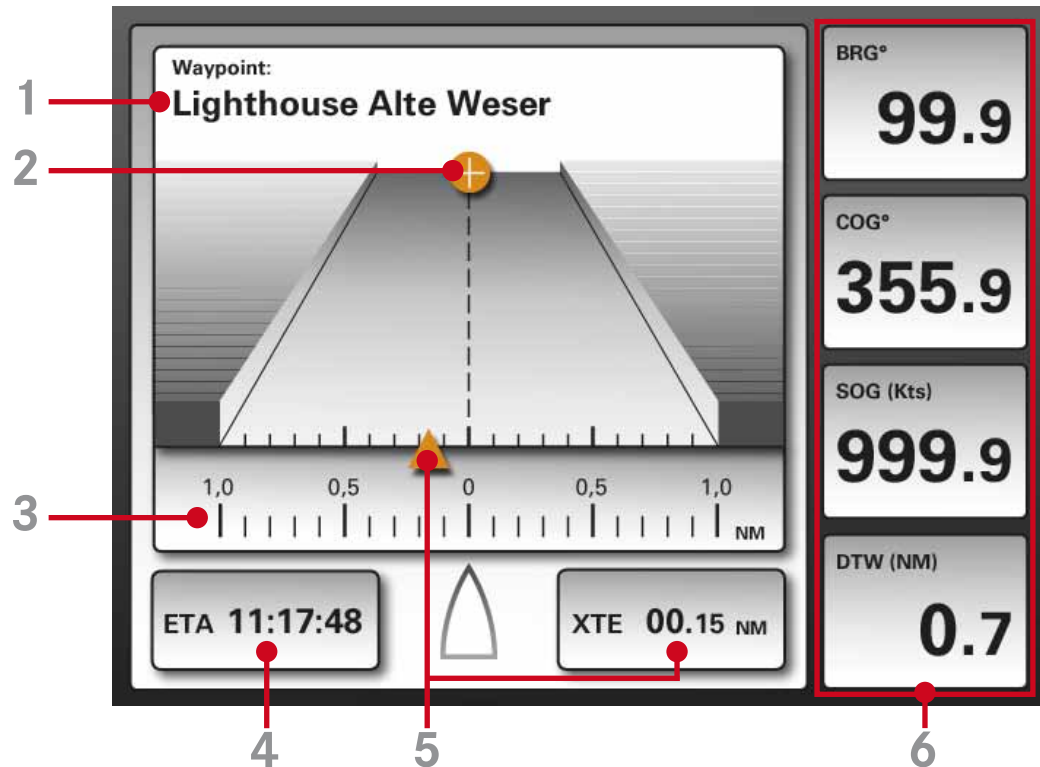
Confirm your selection with “ENT” (4).

Position	Current GPS position
TTG	Time to the next waypoint
Bearing	Bearing to the next waypoint
Range	Distance to the next WP
SOG	Speed over ground
COG	Course over ground
XTE	Course track error
ETA	Estimated time of arrival
Date Time	Date and time by GPS (UTC)
Voltage	Power
Depth	Depth (mtr.)

Speed	Speed through water
Water Temp.	Water temperature
AWA	Apparent wind direction
AWS	Apparent wind speed
TWA	True wind direction
TWS	True wind speed
Wind Dir.	Wind direction
VMG	> True wind speed

3.4 Highway

Many autopilotes offer the possibility to send data via NMEA to Seatec devices. Incoming autopilot NMEA data is represented professionally in the highway view.



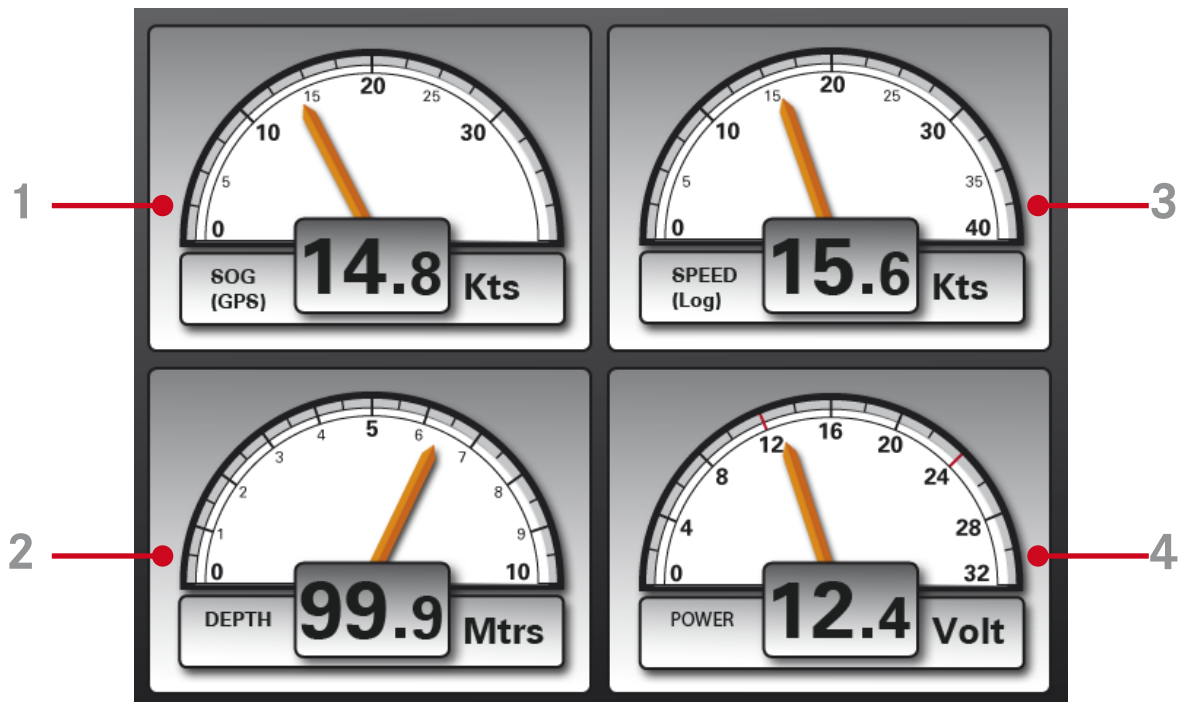
1. **Waypoint Name**
Displays the name of the waypoint, which is being driven.
2. **Next Waypoint**
Shows the position of the next waypoint.
3. **Graphical display of cross track error (XTE)**
Here you can see the current deviation of the ideal course. You can use the ZOOM (9) buttons to adjust the range.
4. **ETA (Estimated time of arrival)**
Tells you when you will reach your next waypoint.
5. **XTE (Measured cross track error)**
Here you can see the current deviation of your ideal course.
6. **Data field**
Press the menu button to get to the point "data field setup". Once you confirm with ENT, a framework sets to the first data field, use the cursor keys to choose the data field you want to edit and press "ENT" (4). There is a list that opens and from which you can select the desired data. Confirm your selection with "ENT" (4).

Position	Current GPS position
TTG	Time to the next waypoint
Bearing	Bearing to the next waypoint
Range	Distance to the next WP
SOG	Speed over ground
COG	Course over ground
XTE	Course track error
ETA	Estimated time of arrival
Date Time	Date and Time by GPS (UTC)
Voltage	Power
Depth	Depth (mtr.)

Speed	Speed through water
Water Temp.	Water temperature
AWA	Apparent wind direction
AWS	Apparent wind speed
TWA	True wind direction
TWS	True wind speed
Wind Dir.	Wind direction
VMG	> True wind speed

3.5 Multidatadisplay

The Seatec products provide incoming NMEA data such as speed over ground (SOG), water speed (log) and depth (Depth) presented in a structured data field. Moreover, the currently applied voltage is displayed on the device.



1. **Speed over ground (SOG)**
Represents the current speed over ground (SOG), which is transmitted through the GPS receiver.
2. **Depth**
Represents the current depth, which is received via the NMEA interface.
3. **Speed through water (Log)**
Displays the current speed through the water (Log), which is received via the NMEA interface.
4. **Power (Volt)**
Shows the current voltage applied to the device.

Hint: For transmitting log, depth and water temperature data, we recommend a NMEA triducer (SVB-Art.: 98515).

4

Main Menu Settings

In the main menu of Seatec AIS devices you can edit basic settings, set alarms and show incoming NMEA data sets.

To access the main menu, press the “Menu” (1) button twice. Now you have access to the following settings:

Setup

Here you can edit the following settings of your device:

- Adjustment of various units, such as knots and nautical miles
- Time and date configuration
- Turning the simulation modus on/off
- Changing the system language
- Turning the key sounds on / off
- Restore to factory defaults

Alarm

Under this menu point you have the option to configure different alarms. Press the “ENT” (4) button to switch an alarm signal on or off.

Anchor Alarm

This lets you set and monitor your position in relation to an anchor point. Until you leave this point of the distance you set an alarm will be triggered. Press the “ENT” (4) button to switch an alarm on or off.

Speed Alarm

The speed alarm can be set for speeds that is greater than a certain number of knots (high) or below a certain number of knots (low).

Timer

Sets a time until an alarm will occur.

Buzzer

You can choose between a short-, long- and constant alarm tone

Warning Message

Here you have the possibility to call a history of all received alarms.

NMEA Data

This feature allows you to show all the NMEA data, which was received via your external interface.

5

AIS SART

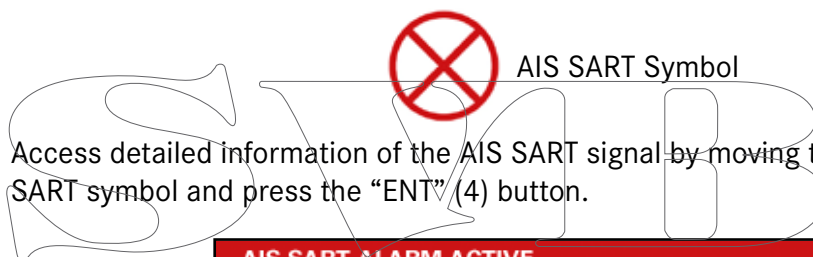
Your Seatec AIS6/MFR6 is one of the devices on the market that is capable of an acoustic and visual alert for incoming AIS SART signals. In addition to that, the position of the AIS SART signal will be displayed on the AIS screen. Therefore, you can easily navigate to the position of the AIS SART signal.

Process after an AIS SART signal was received:

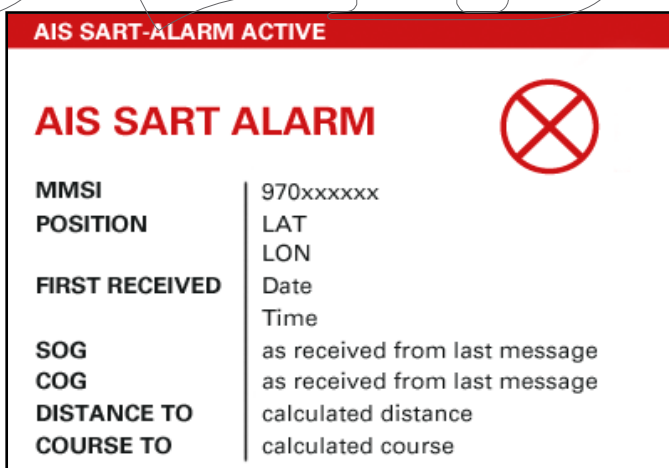
- Once an AIS SART signal was received, the following message appears on the display of your AIS6 / MFR6 and you will hear an alarm tone.



- The AIS6 / MFR6 beeps until this screen has been confirmed by pressing the “ENT” (4) key. After confirming, the window will close and the position of the AIS SART signal will be displayed on the AIS screen.



- Access detailed information of the AIS SART signal by moving the cursor over the AIS SART symbol and press the “ENT” (4) button.



This window shows the following information:

- MMSI of the AIS SART transmitter
- The position of the AIS SART transmitter
- The date and time when the AIS SART signal has been received for the first time.
- Speed over ground (SOG) of the AIS SART Signal
- Course over ground of the (COG) AIS SART Signal
- Distance between your position and the position of the AIS SART signal
- Course/direction from your position to the AIS SART Signal.

5.1 AIS SART Test

Many AIS SART transmitters have a “test” button, which checks the functioning of the transmitter. When pressing the “test” button, an “AIS-SART TEST” signal is sent out by the transmitter.

To help you distinguish between a test and a real AIS SART signal, the Seatec AIS devices display whether this signal is a test message or a real message.

Once a test message is received, an audible alarm appears accompanied by the following message:

Incoming AIS SART TEST	
MMSI	970xxxxxx
POSITION	LAT LON
FIRST RECEIVED	Date Time
SOG	as received from last message
COG	as received from last message
Press ENTER to acknowledge and quit this message	

The AIS SART TEST window contains the following information:

- MMSI of the AIS SART transmitter
- The position of the AIS SART transmitter
- The date and time when the AIS SART signal was received for the first time.
- Speed over ground (SOG) of the AIS SART Signal
- Course over ground of the (COG) AIS SART Signal

Press the “ENT” (4) button to disable the audible alarm and close the window. You can review the title and time of the received AIS SART test signal under “warnings” in the Alarm menu (ref. Chapter 4).

Once the window is closed, the AIS SART TEST signal is displayed on the AIS screen as a green symbol:



6

Technical specifications

Alarm	Timer, XTE-, Anchor-, Speed-, Voltage- and AIS Alarm
Position format	Latitude/Longitude
NMEA Data	\$-APB, \$-BOD, \$-BWC, \$-DBT, \$-GGA, \$-GLL, \$-MTW, \$-MWV, \$-RMB, \$-RMC, \$-VHW, \$-VTG, \$-WPL, \$-XTE, \$-VWR, \$-VWT, \$-MWD
Voltage	10,5 to 35 VDC, Voltage drop <300 mA at 12V
Current consumption	500 mA at 12V operating voltage
Size(incl. bracket)	1129mm (H) 199mm (W) 89mm (T) (MFR6) 150mm (H) 223mm (W) 87mm (D) (AIS6)
Weight	about 0,9 kg
Display	5,6" Colour-, TFT-Display, 640x480 Pixel
Waterproof	Display: IPX5 Antenna: IPX6
Temperature	Display: -15 °C to + 55 °C

SVMB

