

EXOCET ESSENTIAL

USER INTERFACE CASE STUDIES



DASHBOARDS



Navigation

Wind

TWA	TWS	TWD
-48°	17.5 kn	026°T
AWA	AWS	
-23°	33.5 kn	

[Wind Settings](#)

Heading & Speed

Heading	Boat Speed	Leeway Signed
078°T	19.1 kn	-4.3°
COG	SOG	VMG
074°T	19.2 kn	12.8 kn

[Leeway Settings](#)

Performance

	Polar	Polar Ratio
Boat Speed	17.0 kn	95%
VMG	10.5 kn	87%

Polar Target (VMG)	
Boat Speed	15.0 kn
TWA	53°

[Performance Settings](#)

Position

Latitude
28.411377°

Longitude
14.934840°

Attitude

Heel
11.1°

Trim
1.0°

Navigation Waypoint

BTW	DTW	ETA Date
003°T	5.1 NM	2025-02-04
WP ID	TTW	ETA Time
WP13	15:06:50	02:29:18

Environment

CURD	Depth	Baro Pressure
000°T	10.2 m	1019.7 hPa
CURS	Sea Temp	Air Temp
0.0 kn	18.5°C	25.6°C

[Current Settings](#)

Settings

Direction data reference :

True

Changes the reference (true north or magnetic north) of the direction data: Heading, COG, TWD, BTW, CURD

NAVIGATION

Pilot



B&G Pilot

Mode Stop
 User Target --'
 Offset 0'

< 10 10 >
 < 1 1 >

Stby Mode Auto

Heading 083 °T
 TWA -54'
 Rudder Angle -0.0'

[Advanced Settings](#)

Regulation Performance

On / Off

Awa regulation	Heel regulation	Speed regulation
Target <input type="text" value="25"/>	Target <input type="text" value="11"/>	Target <input type="text" value="20,5"/>
Awa Signed 25'	Heel Signed 11.2'	BoatSpeed 20.3 kn
Offset Awa 0.0'	Offset Heel 0.0'	Offset Speed 0.0'

Offset Range (°)

Upwind/Downwind TWA Limit (°)

Offset Signed 0'
 Alarm Offset Limit

TWA Corrected Target --'
 Alarm TWA Limit

Offset Historic 0.0'

[Advanced Settings](#)

Polar Tracking

On / Off

TWA mode

Speed mode

TWA reference --'
 Speed reference -- kn

[Advanced Settings](#)

Heel Safety

On / Off

Max heel upwind

Max heel downwind

Heel Signed 11.2'
 Offset Signed 0.0'

[Advanced Settings](#)

Presets

New preset

Preset selection :
 Default

Apply preset

Current settings are different

[Advanced Settings](#)

PILOT

Dampings

Wind

	True Wind		Apparent Wind	
	Raw	Damped	Origin	Back-calculated
TWD	26°	025° ^T	AWA -28°	-28.4°
TWS	17.7 ^{kn}	17.6 ^{kn}	AWS 34.2 ^{kn}	33.8 ^{kn}

True Wind Damping (s) : [8; 20]

The true wind is filtered on its speed (TWS) and its direction (TWD). During tacks (TWA < 30°) and gybes (TWA > 160°), the damping of the true wind uses a time constant of 20s in order to have a more stable wind. True Wind Angle (TWA) is calculated from TWD and boat course. It is then reactive to the change of course. The apparent wind is back-calculated from the damped true wind. It thus takes into account the wind correction tables.

Heading & Attitude

	Raw	Damped
Heading	082° ^T	082° ^T
Trim	0.9°	1.0°
Heel	11.2°	11.1°
Yaw Rate	0.0°/s	0.0°/s

Heading Damping (s) : 0.2 [0.1; 0.3]

Trim Damping (s) : 0.5 [0.5; 1]

Heel Damping (s) : 0.5 [0.5; 2]

Yaw Rate Damping (s) : 0.2 [0.1; 0.3]

Boat Speed & Leeway

	Raw	Damped
Boat Speed	20.3 ^{kn}	20.2 ^{kn}
Leeway	-3.8°	-3.9°

Boat Speed Damping (s) : 0.5 [0.5; 2]

Leeway Damping (s) : 2 [0.5; 2]

GPS

	Raw	Damped
COG	078° ^T	078° ^T
SOG	20.3 ^{kn}	20.2 ^{kn}

COG Damping (s) : 1 [0.5; 2]

SOG Damping (s) : 1 [0.5; 2]

Documentation

This page groups together the filtering of Exocet piloting and navigation data. The data exported by the Exocet (NMEA2000, NMEA0183) is this filtered data. Wind, Heading, Heel, Yaw Rate and Boat Speed data is used by the pilot :

- B&G pilot - Heading mode: Heading, Yaw Rate, Boat Speed.
- B&G pilot - TWA mode: Wind.

The weaker the damping, the more the pilot follows the wind variations. The higher the damping, the straighter the trajectory. Setting advice: Strong wind = 15s / Low wind = 10s.

- Exocet pilot overlay - Regulation Performance: Heel, Boat Speed, Wind
- Exocet pilot overlay - Heel Safety: Heel

DAMPINGS

INPUTS / OUTPUTS

Inputs/Outputs

Compass

Source: SBG

Auto SBG Compass 3 Compass 4

Heading 081°T
Heel 11.1°
Trim 1.0°

[Configuration](#)

Boat speed

Source: GPS

Auto SBG GPS Speedo

Boat speed 20.1 kn

[Configuration](#)

GPS

Source: GPS 2

Auto GPS 2 GPS 3 GPS 4 GPS 5

COG 077°T
SOG 20.1 kn
Latitude 28.4°
Longitude 14.9°

[Configuration](#)

MHU

Source: MHU 1

Auto MHU 1 MHU 2

Angle -27°
Speed 34.0 kn

[Configuration](#)

Mast rotation

Source: Manual

Auto Mast Rot 1 Mast Rot 2

Rotation 0°

Manual

Mast rotation (°)

[Configuration](#)

Environment

Depth sensor
Sea thermometer
Air thermometer
Barometer
Magnetic variation

[Configuration](#)

Navigation software

Performance Data
Navigation Waypoint
Current

[Configuration](#)

Pilot

B&G H5000 pilot
Exocet EXOS

[Configuration](#)

Appendages & Rig

Rudder angle sensor
Forestay loadcell

[Configuration](#)

Battery

Battery monitor

Voltage 13.1 V
Current -5.4 A
State of charge 83.0%

[Configuration](#)

Outputs

Alert buzzer
NMEA0183 UDP
NMEA0183 Serial
NMEA2000

[Configuration](#)

EXTERNAL DEVICES

External devices



H5000 analogue expansion



Configuration

H5000 serial expansion



Configuration

Blink keypad



Night mode




STATUS AND SETTING




Status and settings

System

Hardware	Status and load	● ▾
Software	Health indicators	● ▾
Interfaces	Status and load	● ▾

Data extreme values (min and max): 

System logs: 

Alerts

Show icon in header:

Enable alert popup:

Date and time

Show in header:

System date and time: Feb 3, 2025 9:57:22 AM

GPSD sync: 8112

NTP sync: NO

Date and time format: UTC


Exocet administration


Product: EXOCET ESSENTIAL

Serial number: 2000020001910001

Hardware revision: 8

Software revision: EXOCET-ESSENTIAL_2024-09_001-01

Hardware interfaces : 

Activation keys: 

Network



IP Address: 192.168.30.30



Subnet mask: 255.255.255.0


Gateway: 192.168.30.1

Configuration

Loaded configuration: EXOCET-ESSENTIAL_2024-09_001-01.img

Configuration:  

Data settings:  

Manage user files: 


Default decimals for data display:

Data recorder

Show icon in header:

Records space: 1.4 %

Record files: 11.2 %

Download PSM Decoder software: 

Exocet Cloud

Show icon in header:

Enable transmission:

Restore state on startup:

Connectivity throughput: High Low










































Transmission status: Transmission status ▾

RECORDS



55 records archived

Delete selected records

<input type="checkbox"/>	Actions	Begin ↓	End	Duration	Size
<input type="checkbox"/>	  	06/02/2036 07:01:47	06/02/2036 10:18:11	3:16:23	0.81 MB
<input type="checkbox"/>	  	06/02/2036 06:28:16	06/02/2036 06:53:35	0:25:19	3.19 MB
<input type="checkbox"/>	  	06/02/2036 06:27:27	06/02/2036 06:28:16	0:00:48	0.88 MB
<input type="checkbox"/>	  	06/02/2036 06:27:26	06/02/2036 06:28:16	0:00:49	0.88 MB
<input type="checkbox"/>	  	06/02/2036 06:27:26	06/02/2036 06:28:16	0:00:49	0.88 MB
<input type="checkbox"/>	  	03/02/2025 08:56:20	03/02/2025 09:19:35	0:23:14	3.03 MB
<input type="checkbox"/>	  	03/02/2025 00:00:00	03/02/2025 08:54:31	8:54:30	52.48 MB
<input type="checkbox"/>	  	02/02/2025 00:00:00	03/02/2025 00:00:00	23:59:59	139.81 MB
<input type="checkbox"/>	  	01/02/2025 00:00:00	02/02/2025 00:00:00	23:59:59	139.72 MB
<input type="checkbox"/>	  	31/01/2025 00:00:00	01/02/2025 00:00:00	23:59:59	139.42 MB
<input type="checkbox"/>	  	30/01/2025 00:00:00	31/01/2025 00:00:00	23:59:59	139.69 MB
<input type="checkbox"/>	  	29/01/2025 00:00:00	30/01/2025 00:00:00	23:59:59	139.35 MB
<input type="checkbox"/>	  	28/01/2025 00:00:00	29/01/2025 00:00:00	23:59:59	139.80 MB
<input type="checkbox"/>	  	27/01/2025 00:00:00	28/01/2025 00:00:00	23:59:59	140.64 MB

ALERTS



Alerts



Display: Detail Compact Table

Show levels: Alarm Warning Not triggered

1 Sensors integrity

2 Sensors difference

3 Pilot integrity

4 Navigation integrity

12 Exocet system

1 Compass

1 Boat Speed sensor

1 Air thermometer

1 Barometer

1 Depth sensor

1 Magnetic variation

1 Sea thermometer

1 GPS

1 Mast Rotation

1 MHU

1 Rudder angle sensor

3 Exocet EXOS

3 B&G Pilot

4 Current data

4 Leeway calculation

4 Performance data

4 Wind calculation

12 Bus Load Can 1

42

31%

12 Bus Load Can 2

64

60%

12 COM1 Rx Load

24.2

20.1%

12 COM2 Rx Load

4.4

3.6%

12 COM3 Rx Load

8

7.3%

12 COM4 Rx Load

11.8

8.6%

12 COM5 Rx Load

20.6

15.1%

12 COM6 Rx Load

0

0.0%

12 Low power voltage

Alert on status True

False



PIXEL SUR **MER**