

Operation Manual

Oceanos Bavaria Cruiser 46

2018



Control Panel

Yacht Control Panel Overview

The yacht control panel is an essential electronic device that allows remote control of various onboard systems, including:

- ✓ **Windlass** (anchor control)
- ✓ **Thrusters** (maneuvering assistance)
- ✓ Navigation lights
- ✓ Alarms & video surveillance
- ✓ Windshield wipers
- ✓ **Engines** and fuel, water, and oil levels
- ✓ Generators and other equipment

Why the control panel is important:

- Monitors the yacht's health – Ensures all systems are functioning properly.
- Keeps you safe – Provides control over critical safety features and alerts.



▲ Scroll button – up

- **Function:** Navigates up through the menu options.



▼ Scroll button – down

- **Function:** Navigates down through the menu options.



▼ Scroll button – down

- **Function:** Moves down through menu options.



Compass Button

- **Switches the compass ON/OFF.**

The button's ON/OFF status is saved when the power supply is turned off and restored once power is switched back on.



Navigation Button

- **Function:** Switches the navigation device ON/OFF.
- **Status memory:** Button status is saved when power is off and restored when power is reapplied.
- **Malfunction:** If a fault occurs, a yellow LED flashes until the problem is cleared.



Radio Button

- **Function:** Turns the radio ON or OFF.
- **Status Memory:** The ON/OFF status is saved when the power is turned off, and restored when power is reapplied.
- **Malfunction Indicator:** If a malfunction occurs, a yellow LED will flash until the problem is resolved.



Anchor Button

- **Function:** Switches the anchor relay ON and OFF.
- **Status Memory:** The ON/OFF status is **not stored after power is switched off**—whenever power is restored, the button always defaults to **OFF**.



Bilge Pump Button

- **Function:** Switches the bilge pump ON and OFF.
- **Status Memory:** The current ON/OFF status is saved when the power is switched off and restored when power comes back on.
- **Malfunction:** If there is a fault, the **yellow LED will flash** continuously until the issue is fixed.



Switches the fresh water pump ON and OFF.

- **Button Status Memory:** The ON/OFF state is **saved** when the power supply is switched off, and is **restored** when power is turned back on.



Waste Water Pump Button

- **Function:** Toggles the waste water pump ON/OFF.
- **Status Memory:** The ON/OFF status is saved when the power is switched off and restored when power is turned back on.



Panel Button

- **Function:** Turns ON background lighting for the panel and display.
- **Lighting Duration:** Stays on for about 1 minute.
- **Auto-Off:** Lighting will turn off if you do not press the up/down scroll, acknowledgment, or panel button during this time.
- **Extend Lighting:** Press any control button to keep the lighting on longer.



Heating Button

- **Function:** Switches the heating pump ON or OFF to control the vessel's heating system.
- **Status Memory:** The ON/OFF state of this button is saved when the power is switched OFF and is automatically restored when the power is switched ON again.



Fridge Button

- **Function:** Turns the fridge ON/OFF.
- **Status Memory:** The ON/OFF state is saved when the power is switched off and restored when power resumes.
- **Malfunction Indicator:** If a fault occurs, a **yellow LED flashes** until the issue is fixed.



F1–F5 Buttons

- **Function:** Switch extra "reserve" outputs ON/OFF.
- **Use:** These are additional outputs (beyond those set by shipyards) reserved for custom equipment or accessories.
- **Status Memory:** The ON/OFF status for each button is saved when the power supply is turned off and restored when power returns.

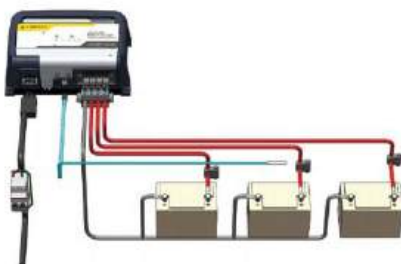
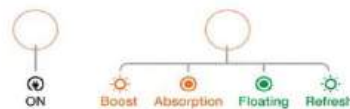
Battery Charger








Battery Charger (Cristec Charger) Overview

A **battery charger** (or recharger) is a device that **stores energy** in a battery by running an electric current through it.

The **Cristec Charger** ensures **maximum power supply** with **auto-ranging**, meaning it can adapt to different voltage inputs wherever you are.

Behind the Couch  



INDICATORS	STATE	MEANING
Green LED 1 "ON"		Charger is ON
		No or poor quality AC current Input fuse is blown Internal charger malfunction
Orange LED 2 "BOOST/ABSORPTION"	 Flashing (1 sec. ON, 1 sec. OFF)	Charger in BOOST phase (switch E = '1')
	 On fixed	Charger in ABSORPTION phase (switch E = '1')
Green LED 3 "FLOATING/REFRESH"	 On fixed	Charger in FLOATING phase
	 Flashing (1 sec. ON, 1 sec. OFF)	Charger in REFRESH phase (switch E = '1')
		Internal charger malfunction or output fuse blown

Interior / Exterior Radio

How the Radio Works

Radio communication operates by transmitting and receiving electromagnetic waves.

◆ Transmission:

- ✓ A **radio signal** is an electronic current that moves back and forth rapidly.
- ✓ A **transmitter** sends out this signal via an **antenna**.

◆ Reception:

- ✓ A **receiver** picks up the transmitted waves.
- ✓ The signal is then converted into **sound**, which is heard through the radio speaker.

⚠ **Tip:** Ensure the radio is properly tuned to the correct frequency for clear communication.

🔄 Rotary Encoder (Main Knob)

- **Turn:** Adjusts volume, navigates menus, or changes a setting.
- **Press:** Selects highlighted options or confirms settings.
- **Press and Hold:** Instantly accesses subwoofer level adjustment.



Power

- **Press:** Turns the stereo ON or OFF.
- **Press and Hold (10s):** Resets the stereo to factory settings.

☰ Menu

- **Press:** Enters menu system.
- **Press and Hold:** Returns to the previous screen or exits the menu system.

◀ Back / Previous

- **Short Press:** Selects previous track or steps down channel/frequency.
- **Press and Hold:** Rewinds current track or fast-steps in frequency/channel lists.

▶ Forward / Next

- **Short Press:** Selects next track or steps up channel/frequency.
- **Press and Hold:** Fast-forwards current track or fast-steps in lists.

🔄 Source (⏮)

- **Press:** Cycles through audio sources (AM, FM, VHF, AUX, iPod, USB, Bluetooth, SiriusXM*).

▶ Play / Pause

- **Short Press:** Plays or pauses audio; cycles tuning modes (auto/manual/preset) on radio.
- **Press and Hold:** Stores current station/channel as a preset.

🔇 Mute

- **Press:** Instantly mutes all zones.

VHF

VHF Transceiver Overview

A **Very High Frequency (VHF) transceiver** is a communication device that includes both a transmitter and a receiver, operating in the **30 MHz to 300 MHz** frequency range.

◆ Key Features:

✓ **Frequency Range:** 30 MHz – 300 MHz

✓ **Wavelength:** 1 meter (39.37 inches) to 10 meters (393.70 inches), depending on the frequency used

✓ **Used for:** Marine communication, aviation, emergency services, and broadcasting

⚠ **Tip:** Ensure the VHF radio is set to the correct **channel and frequency** for clear and effective communication.

🗨️ PTT (Push-to-Talk)

- **Function:** Press and hold to talk; release to listen.
- **Use:** Broadcast your message by holding this button, then release to receive.
- **Symbol:** Usually marked as "PTT."

🚨 DISTRESS

- **Function:** Initiates a Digital Selective Calling (DSC) distress alert.
- **Use:** In an emergency, lift the protective cover and hold the red button for 3–5 seconds to transmit your mayday, including your vessel's MMSI and—if connected—GPS position.
- **Symbol:** Red button with "DISTRESS" label, often shielded.

▲▼ Up/Down Arrows

- **Function:** Change channel up or down.
- **Use:** Press the up (▲) or down (▼) arrows to step through available channels.

⚙️ Channel Knob

- **Function:** Rotates for manual channel selection or selection within menus.
- **Use:** Turn to browse channels, select menu items, or access weather channels depending on the radio model.

← CLEAR

- **Function:** Returns to the previous screen or cancels/clears incoming DSC call.
- **Use:** Press to back out of menus, mute an incoming DSC alert, or cancel choices.



DSC

- **Function:** Accesses DSC menu and options.
- **Use:** Press to display or manage Digital Selective Calling features, return to Home screen with a second press.

(16+ or 16/9)

- **Function:** Instant access/toggle to channel 16 (distress) or 16 & 9 (hailing).
- **Use:** Press to immediately jump to Channel 16 or 9 for emergencies or hailing, then press again to return.

H/L (HI/LO Power)

- **Function:** Toggle transmit power between low and high settings.
- **Use:** Use low power (1W) for normal operations; switch to high (up to 25W) for distance or emergencies.

≡ MENU



- **Function:** Accesses configuration options and settings.
- **Use:** Press to open settings, adjust radio functions, or access advanced features [6](#).

Volume/Squelch

- **Function:** Adjusts audio volume and squelch (static threshold).
- **Use:** Rotate or toggle to fine-tune the audio level or eliminate background static by setting the squelch point just above the noise

Dual Energy Power Supplies and Battery Chargers

These units are specifically designed and developed for:

-  Charging and maintaining voltage on lead-acid batteries.
-  Providing a consistent and uninterrupted power supply (main or backup).

Location:

You will find it in the **chart table area**.



General Switches

Battery Master Switch Overview

The **battery master switch** serves two key functions:

- ✔ **Battery Isolator** – Disconnects the battery to prevent drain when not in use.
- ✔ **Theft Deterrent** – Can disable the electrical system to prevent unauthorized use.
- ◆ Features:
 - Commonly used in: Marine, transportation, and automotive applications.
 - Impact-resistant housing for durability.
 - Detachable key for added security and theft prevention.

General Switch 220V

⚡ 220V Switch Quick Guide



Service

⚡ Service Battery Switch – Quick Guide

- ✔ Located: Next to the control panel.
- ⚠ ON when using onboard systems.
- ⚠ OFF when leaving the yacht (prevents battery drain).



Engine

Engine Switch

- ✔ **Location:** Under the stairs.
- ⚠ **Before Off:** Ensure the engine is off.
- ⚠ **Turn off** when not in use (prevents battery drain).
- 🔄 **Check** connections and function regularly.



Thruster

Thruster Battery Power Switch

- ✓ **Location:** Bow cabin, inside the closet.
- ⚠ **Turn OFF** the switch when not using the yacht to prevent unnecessary battery drain.
- ⚠ **Turn ON** before operating the bow thruster.
- 🔄 **Regularly check connections and function** for safety and reliability



Thermal Fuses

Fuses: Function & Usage

Fuses are protective mechanisms placed in an electrical circuit to interrupt power supply when excessive current flows due to short circuits or overloads. Their primary purpose is to protect wiring and electrical components from damage.

⚡ Key Characteristics:

- ✓ Interrupt power in case of overload or short circuit.
- ✓ Always installed after circuit breakers for additional safety.
- ✓ Never installed in-ground conductors to avoid grounding issues.

🔧 Usage of Fuses:

- 1 Protect electrical wiring from overheating or damage.
- 2 Ensure onboard electrical safety by preventing fire hazards.
- 3 Automatically break the circuit when an excessive current surge occurs.

⚠ **Tip:** Regularly check and replace blown fuses to maintain proper electrical function on the yacht.

Anchor fuse

What to Do if the Anchor Winch Stops Working

1 Locate the Fuse

Find the **Anchor Thermal Fuse** behind the couch next to the chart table.

2 Reset the Fuse

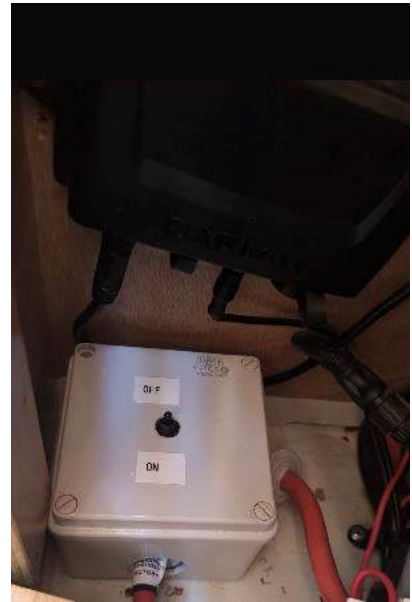
Switch the fuse **OFF**, then **ON** again.

3 Perform an Operation Test

Test the anchor winch to check if it functions properly.

4 If the Issue Persists




Inspect for **loose connections**, **battery power issues**, or a **blown fuse**.



Batteries Location

What is a Battery?

A **battery** is a device that:

-  Stores chemical energy and converts it into electrical energy.
-  Uses chemical reactions to create the flow of electrons between electrodes.
-  Generates electric current to power various devices.



Battery Locations (Bullets & Symbols)

Service Batteries Location

 **Location:** The service batteries are at the **corner of the living room, under the cushion.**

 **How to Access:**

Lift the cushion in the living room's corner to reach the batteries.

Engine Battery Location

 **Location:** The engine battery is situated **under the stairs.**

 **How to Access:**

Lift and look beneath the stairway area in the engine compartment to find the battery.



Thruster Battery

- **Location:** Bow cabin, under the bed.
- ⚠ **Access:** Keep the area clear before checking batteries.



Water System

Fresh Water Pump Location – Quick Guide

- 📍 **Location:** The freshwater pump is located in the **stern toilet, under the bath sink**.
- ✓ **How to Access:**
Open the cabinet or panel beneath the bath sink in the stern (rear) toilet area to reach the pump.



Water Tank Valve Operation

◆ Location

Go to the **stern toilet, under the bath sink** to access the water tank valve.

🔑 Valve Position

The **valve** can be found underneath the bath sink in this area.

⚙️ Operation

- When you **turn on one valve**, the other must be **closed**.
- **Open Position (✓):**
The letters on the valve are **parallel to the pipe** (open flow).
- **Closed Position (✗):**
The letters on the valve are **vertical to the pipe** (closed flow).



Location bilge pump



💧 Bilge Pump Details:

- Function: Removes bilge water from the yacht 🚤.





⚙️ Operation Tips:

- The bilge pump is **automatic** 🤖.

- Ensure the **corresponding button is always ON** .



Operation of toilet pumps

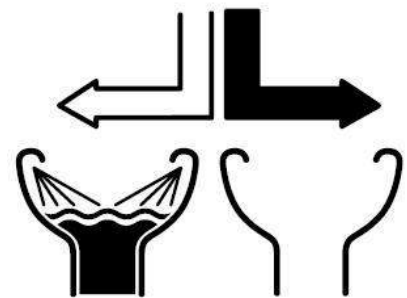
Toilet Details:


- **Importance:** One of the most used pieces of equipment on your boat .
 - **Operation:** Correct usage is crucial for:
 -  Safety of the crew²
 -  Comfort onboard
1. Open inlet and outlet seacocks (and secondary valves if fitted).
 2. Half fill the bowl with warm, fresh water.
 3. Keeping the Flush Control Lever in the Shut () position, pump out the warm water.




Normal use

Open inlet and outlet seacocks (and secondary valves if fitted). Before use, ensure that there is enough water in the bowl to prevent the toilet paper from becoming compacted at the bottom of the bowl. If the bowl is empty, move the Flush Control Lever to the Open () position and pump the handle up and down until the flushing pump is primed and water enters the bowl. Then Shut () the Flush Control. Operate the pump with long, smooth strokes for efficient and easy operation. During use, pump as necessary to keep the contents of the bowl low enough for comfort.



After use, keep the Flush Control Shut () and pump until the bowl is empty.

When the bowl is empty, Open () the Flush Control again, and continue to pump until all waste has either left the boat or reached the holding tank (allow 7 complete up/down strokes per meter (yard) length of discharge pipework).

NOTE: Do not put in: Sanitary Towels, Wet Strength Tissues, Cotton Wool, Cigarettes, Matches, Chewing Gum, or any solid objects, Petrol, Diesel, Oil, Solvents of any kind, or water more than hand hot.

Operation of shower pumps

Shower Pump Operation – Quick Guide


Automatic System


The shower pumps are automatic on this boat.


Operation


To Activate:

Press F5 on the control panel to turn on the shower area.

 If fitted with a negative head kit:

 Turn on the mixer valve.

 Start the pump by turning the switch once.

 Pump will run normally.

Important Reminder

Always switch off the shower pump after use to prevent unnecessary power consumption or possible damage.



Operation / Location of Waste Tanks / Valves

Stop-and-Waste Valve Operation

A **stop-and-waste valve** is used in irrigation systems to prevent waste from freezing and to manage wastewater. Here's how it works on the yacht:

1. Operation:

- **When the valve is vertical** to the tube, it is **closed**, and the waste goes to the waste tank.
- **When the valve is parallel** to the tube, it is **open**, and the waste is emptied into the sea.

Valve Locations

Stern Left Toilet: Inside the cap.

Stern Right Toilet: Inside the cupboard.

Bow Toilet: Inside the cupboard.

Seacocks

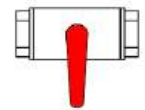
Seacocks are of the ¼-turn type:

- OPEN position: handle in the direction of the seacock body.
- CLOSED position: handle perpendicular to the seacock body.

Vanne ouverte



Vanne fermée



Oven/Stove

Turning On the Oven or Hob

To safely turn on the oven or hob, follow these steps:

1. **Press the respective switch** inwards.
2. **Turn the switch clockwise** while holding it in.
3. **Light the hob** with a lighter and **hold for 5 seconds** to ensure the flame stays on.
4. **Release the switch** after 5 seconds.
 - If the flame does not stay on, try holding the switch in for a bit longer.



Location of gas valves inside

Gas Inlet Insulation in the Kitchen

If you need to insulate the gas inlet under the oven, follow these steps:

1. **Location:** Open the cupboard under the oven to find the gas outlet valve.
2. **Operation:**
 - Parallel to the pipe: The valve is open.
 - Perpendicular to the pipe: The valve is closed.






Fridge Interior Operation

Proper Refrigerator Use

Essential for maintaining cooling efficiency, saving energy, and extending its lifespan.

Best Practices:

- ◆ Pre-cool before the trip 
 - If possible, turn on the refrigerator while connected to 220V power before departure.
- ◆ Use pre-chilled products 
 - Placing already frozen or chilled food and drinks reduces the fridge's workload.
- ◆ Minimize door openings 
 - Each time you open the door, warm air enters, increasing power consumption.



◆ Fill the fridge properly 📄

- A full fridge maintains temperature better.
- If not full, use ice packs or frozen water bottles.

◆ Set the correct level ⚙️

- Ideally, set the temperature between 4–5.

Engine

🚢 Marine Engine

A **marine engine** is a machine that:

🔋 Converts energy from fuel into mechanical energy.

🚢 This mechanical energy is used to create motion, powering boats, ships, or other watercraft.

🚨 Emergency Engine Shutdown

In case of **emergency** (and **only** in this case), follow these steps to turn off the engine:

1. **Location:** Go to the rear right cabin where you'll find a picture of the engine, similar to the one shown in the photo.

2. **Shutdown Process:**

- Press the red button down.
- Rotate the button to the left to turn off the engine.



Engine Oil Check

🛢️ Checking Engine Oil

To check your engine oil, follow these steps:





1. **Location:** Go to the **right rear cabin**, where you'll find a picture of the engine oil, similar to the one shown in the photo.

2. **Check the Oil:** Use the visual reference in the cabin to inspect the engine oil levels and condition.



Engine Control Panel








ECU Engine Operation – Compact Guide

-  **Start Engine:**
 - Hold (ON/OFF) button
 - Hold  (START) until engine starts
-  **Stop Engine:**
 - Hold  (STOP) button
 - Hold (ON/OFF) until engine stops



Thruster Controller

Bow Thruster Operation – Compact Guide

-  **Turn ON the main power switch** for the bow thruster.
 - ⚠ Turn OFF when leaving the boat.
-  **Activate control panel:**
 - Original Side-Power: press both ON buttons
 - Other types: use On/Off switch
-  **Control thruster:**
 - Press  (red) for bow to port (left)
 - Press  (green) for bow to starboard (right)
 - Footswitch/toggle controls may also be used
-  **Release controls early** to compensate for momentum.
-  Stop the thruster promptly to avoid battery drain.



Autopilot Operation

① Standby / Home

- Place autopilot in **standby mode**
- Return to the **heading screen**

② Menu / Function Key

- **Open a menu**
- Perform the specific function listed above this key

③ Display/Backlight/Power

- **Open display settings menu**
- Press **twice** to adjust the **backlight**
- **Hold** to turn off the device



① Autopilot Status Indicator

- **Standby (Yellow):**
 - "Standby" text and indicator appear **yellow** when the autopilot is not engaged (manual steering mode).
- **Heading Hold (Green):**
 - "Heading Hold" text and indicator appear **green** when the autopilot is actively holding the vessel on a set course.



Use these colors to quickly check if the autopilot is managing your direction or if manual control is required.

② Heading Trend Indicator

- **Symbol:** Typically, an arrow or bar near the heading display
- **Function:** Shows whether the vessel is trending to the left (port) or right (starboard), allowing quick assessment of changes or deviations in heading.

③ Heading Display

- **Actual Heading (in standby mode):**
 - Displays the vessel's current compass heading when the autopilot is not engaged.
- **Intended Heading (when autopilot engaged):**
 - Shows the set target heading (course) being maintained by the autopilot.

④ Rudder Position Indicator

- **Requires a rudder sensor installed**
- **Function:** Visually displays the current angle/position of the rudder.
 - Useful for safe close quarters maneuvering, docking, and ensuring the rudder is properly centered or angled as intended.
 - The indicator moves as the rudder turns, giving real-time feedback.

Location of Gas Bottles

If you need to **shut down the entire gas system** for safety, follow these steps:

- 🚶 **Go outside to the starboard side.**
- 🗝️ **Open the locker** (where the gas system is housed).
- 📍 **Locate the gas bottle** inside the locker.
- 🔄 **Turn the valve counterclockwise to close** the gas system.



Outboard



Starting the Outboard Engine

Follow these steps to start the outboard:

1. **Ensure plenty of gasoline/petrol** is in the **outboard fuel tanks**.
2. **Open the fuel valve** to allow fuel flow.
3. **Open the air valve** from the top to ensure proper airflow.
4. **Set the outboard to neutral** to prepare for starting.
5. **Place the ignition key** into the ignition slot.
6. **Set the throttle to 2/3** for optimal starting performance.
7. **Pull the rope** until the outboard starts running.

Operation Platform

To open or close the platform:

- 1 **Locate the button** on the stern port side, **just above** the cockpit shower.
- 2 **Press the button to open or close the platform as needed.**



Entry Water

Water Tank Refill Instructions

This yacht is equipped with **two water tanks**. Follow these step-by-step instructions for refilling each tank.

1 Stern Water Tank Refill

- **Location:** Stern (left side) on the deck

Steps:

- Go to the **stern left side** of the deck.
- Find the water cap labeled "**WATER.**"
- Open the cap.
- Refill the tank with **fresh water** using a hose or suitable container.
- Close and secure the cap after filling.

2 Bow Water Tank Refill

- **Location:** Bow (under the locker)



Steps:

- Move to the **bow** (front) side of the deck.
- Open the **locker** to access the water cap marked "**WATER.**"
- Open the cap.
- Fill the tank with **fresh water**.
- Securely close the cap when done.

Entry Diesel

This yacht has **one diesel tank**. Follow these steps to refill safely:

Location

- 📍 **Stern (right side) on the deck**

Steps

- Go to the **stern right side** of the deck.
- Locate the diesel cap labeled "**DIESEL.**"
- Open the cap.
- Refill the tank with **diesel fuel only**.
- Secure the cap **tightly** after refueling to prevent leaks.



Chain marking

📍 Chain Markings and Anchor Operation

The yacht has approximately 80 meters of chain, with markings every 10 meters as follows:

- 10 meters: ○ (White)
- 20 meters: ● (Blue)
- 30 meters: ● (Green)
- 40 meters: ● (Yellow)
- 50 meters: ● (Red)
- Last 10 meters: ● (Full Red, secured with rope)

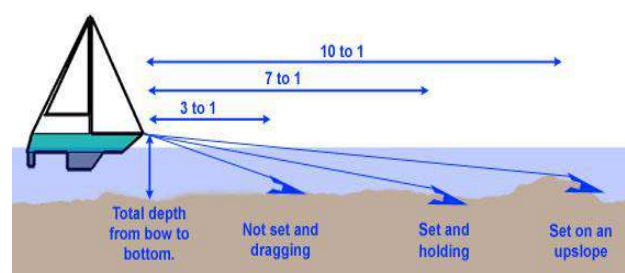
Important Attention Points:

1. When dropping the anchor:

- Be cautious not to damage the 📍 bow side while releasing the chain.

2. When retrieving the anchor:

- When the ● Blue mark appears, it means the anchor is approximately 15 meters below the surface.
- Proceed slowly at this point to avoid damage to the 📍 bow and 📍 bowsprit.




3. Windlass motor:

- Ensure the engine is running when using the windlass motor to operate the anchor chain.

Sails

Opening the Main Sail (Bullets & Symbols)

1 Set the Spigot to "OUT"

-  Go to the furling mechanism and switch the spigot to **OUT**.

2 Release the Furling Ropes

- Gradually release the **furling ropes** so the sail can unfurl.

3 Pull the Outhaul

-  At the same time, **pull the outhaul** to extend the sail.

This process must be done simultaneously to avoid sail damage!



Genoa Sail

Opening the Genoa Sail

1 Release the Genoa Sheet

- Gradually release the **genoa sheet** to allow the sail to unfurl.

2 Pull the Genoa Furling Line Out

- At the same time, **pull out the genoa furling line** to open the sail.

Important:

These actions **must be done simultaneously** to prevent damage and ensure smooth deployment.

Closing the Genoa Sail

1 Release the Genoa Furling Line

- Gradually release the **furling rope** to allow the sail to roll in.

2 Pull the Genoa Sheet

- At the same time, **pull in the genoa sheet** to assist furling.

This procedure must be done simultaneously to prevent unnecessary strain on the sail and rigging.