

Operation Manual

Mersina Hanse 418 2022



Operation Manual

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INTERIOR

Control Panel

Yacht control panels are electronic devices for the remote control of one or more pieces of equipment including windlasses, navigation lights, and thrusters.

These devices can control the windlass, thrusters, navigation lights, alarms, video surveillance systems, windshield wipers, engines, fuel, water and oil levels, generators and other equipment.



The control panel is important because:

1. It is responsible for monitoring the health of Yacht
2. Keeping you safe

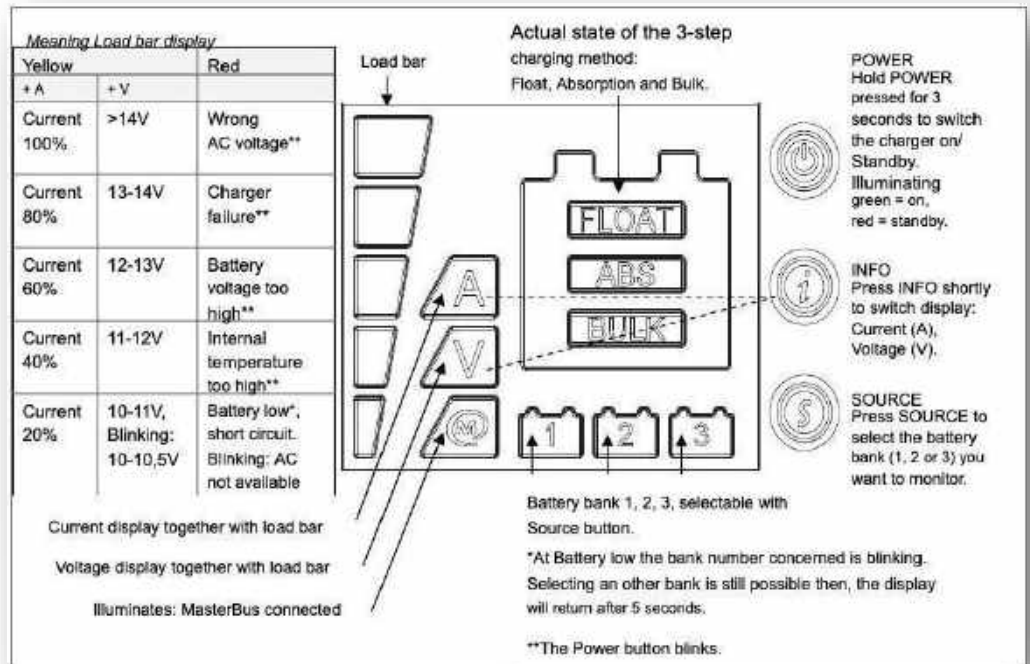
Its use is described below: The most important and unique to use are in the LEFT SIDE.

Left Side	Right Side (spare buttons)
Interior Lights	Deck Light
Navigations Lights	Deck wash pump
Anchor Lights	Pump with hose
Steaming Lights	Stern door control
Refrigerator/Freezer	Main furled control
Fresh Water Pump	Dingy winch control
Bilge Pump manual override	-
Navigations Electronics	Holding tank pump
Anchor Winch Control	-
Winches Control	-

Battery Charger Location

A battery charger or recharger is a device that stores energy in a battery by running an electric current through it. The Master volt Charge Master supplies a maximum capacity wherever you are via auto-ranging. Auto-ranging ensures perfect fully automatic operation anywhere in the world, regardless of the available mains voltage (90-265 V AC, 50 or 60 Hz).

You will find it right of the chart table and under of the couch.



Interior / Exterior Radio

Radio works by transmitting and receiving electromagnetic waves. The radio signal is an electronic current moving back and forth very quickly. A transmitter radiates this field outward via an antenna; a receiver then picks up the field and translates it to the sounds heard through the radio.

Stereo Controls



	<ul style="list-style-type: none"> Turn to adjust the volume. Press to switch between zones. Hold for at least one second to adjust the subwoofer levels. Turn to move through the menus or adjust a setting. Press to select the highlighted option.
	<ul style="list-style-type: none"> Select to open a menu. Select to return to the previous screen or menu.
	Select to change the source (<i>Selecting a Source</i> , page 1).
	<ul style="list-style-type: none"> Select to skip to the previous track, when using an applicable source. AM or FM source: <ul style="list-style-type: none"> Select to tune to the previous station. Hold for faster tuning (manual mode only). AUX source: Select to decrease the gain for the connected source. DAB source: Select to return to the previous DAB station in the ensemble. When you reach the beginning of the current ensemble, the stereo automatically changes to the last available station in the previous ensemble.
	<ul style="list-style-type: none"> Select to skip to the next track, when using an applicable source. AM or FM source: <ul style="list-style-type: none"> Select to tune to the next station. Hold for faster tuning (manual mode only). AUX source: Select to increase the gain for the connected source. DAB source: Select to advance to the next DAB station in the ensemble. When you reach the end of the current ensemble, the stereo automatically changes to the first available station in the next ensemble.
	<ul style="list-style-type: none"> Select to turn on the stereo. When the stereo is on, select to mute the stereo. Hold to turn off the stereo.
	<ul style="list-style-type: none"> Select to pause or resume. AM or FM source: <ul style="list-style-type: none"> Select to cycle through the tuning modes (auto or manual) and presets (when two or more presets are saved). Hold to save this station as a preset. DAB source: Select to scan for DAB stations.

VHF

A very high frequency (VHF) transceiver is a device that is composed of a transmitter and receiver that operates between 30 megahertz (MHz) to 300 megahertz (MHz). The wavelength of a VHF transceiver varies between 39.37 inches (1 m) to 393.70 inches (10 m), mainly depending on the frequency used.

2 PANEL DESCRIPTION

■ Panel description

- POWER/VOLUME CONTROL [VOL]** (p. 8)
 - Rotate to turn the transceiver power ON or OFF.
 - Rotate to adjust the audio level.
- SQUELCH CONTROL [SQL]** (p. 8)
 - Rotate to set the squelch threshold level.
- DISTRESS KEY [DISTRESS]** (p. 22)
 - Transmits a distress call when pushed for 5 sec.
- ENTER KEY [ENT]**
 - Sets the DSC menu, a channel comment, etc. when pushed.
- CLEAR KEY [CLR]**
 - Cancel the entered function and exits the condition when pushed.
- Function display** (p. 4)

PANEL DESCRIPTION 2

- SCANTAG CHANNEL KEY [SCAN-TAG]** (p. 13)
 - Push to start and stop the normal or priority scan when tag channels are programmed.
 - Push for 1 sec. to set the displayed channel as a tag (scanned) channel.
 - While pushing [HOLD] located on the microphone, push for 3 sec. to clear or set all tag channels in the selected channel group.
- CHANNEL UP/DOWN KEYS [▲] [▼] [U]**
 - Selects the operating channels. Set mode settings, etc. when pushed. (pgs. 6, 45)
 - Selects one of two channel groups in sequence when both keys are pushed. (p. 7)
 - International and U.S.A.* channels are available. (*U.K. version only)
 - While pushing [SCAN-TAG], push to adjust the brightness of the LCD and key backlight. (p. 10)
- CHANNEL 16/CALL CHANNEL KEY [16-C]**
 - Selects Channel 16 when pushed. (p. 6)
 - Selects call channel when pushed for 1 sec. (p. 6)
 - Push for 3 sec. to enter the call channel programming condition when the call channel is selected. (p. 9)
 - While pushing [CH/DUAL], push to enter the channel comment programming condition. (p. 10)
 - While turning power ON, push to enter set mode. (p. 45)
- CHANNEL/DUALWATCH/TRI-WATCH KEY [CH/DUAL]**
 - Push to select the regular channel. (pgs. 6, 7)
 - Push for 1 sec. to start dualwatch or tri-watch. (p. 11)
 - Push to stop dualwatch or tri-watch when either is activated. (p. 11)
- DSC MENU KEY [MENU]** (p. 14)
 - Toggles the DSC menu ON or OFF when pushed.

2 PANEL DESCRIPTION

■ Function display

- CHANNEL NUMBER READOUT**
 - Indicates the selected operating channel number.
 - *W appears when a simplex channel is selected. (p. 7)
- POWER INDICATOR** (p. 8)
 - *25W appears when high power is selected.
 - *1P appears when low power is selected.
- BUSY/TRANSMIT INDICATOR** (p. 8)
 - *BUSY appears when receiving a signal or when the squelch opens.
 - *TX appears while transmitting.
- DUPLEX INDICATOR** (p. 7)
 - Appears when a duplex channel is selected.
 - *Duplex channel has a different transmit frequency and receiving frequency.
- CHANNEL GROUP INDICATOR** (p. 7)
 - Indicates whether an International "INT" or U.S.A. "USR" channel is selected. (depends on version)
- TAG CHANNEL INDICATOR** (p. 13)
 - Appears when a tag channel is selected.
- SCAN INDICATOR**
 - Either "NORMAL SCAN" or "PRI-SCAN 16" scan type appears while scanning. (p. 13)
 - *"SQL 16" appears during dualwatch; "TRI 16" appears during tri-watch. (p. 11)
- POSITION INDICATOR**
 - Shows the GPS position data.
 - *"???" may blink every 2 sec. instead of position data when the GPS position data is invalid. In such a case, the last position data is held for up to 200 hours.
 - *"???" may blink every 2 sec. instead of position data 4 hours after the position data is input manually, up until 23.5 hours have past.
 - *A beep sounds automatically for 1 min. every 4 hours when the GPS or manually input position data has not been detected.
 - *"No Position" appears when no GPS receiver is connected and no position data is input manually.

PANEL DESCRIPTION 2

■ Microphone

- TIME ZONE INDICATOR**
 - Shows the current time data when a GPS receiver is connected.
 - *"No Time" appears when no GPS receiver is connected and no time data is input manually.
 - *"Local" appears when the offset time data is set. (p. 43)
- LOW BATTERY INDICATOR**
 - *Blinks when the battery voltage drops to approx. 11V DC or below.
- CHANNEL COMMENT INDICATOR**
 - Channel comment appears if programmed. (p. 10)
 - *More than 9-character comment scrolls automatically.
- PIT SWITCH (PTT)**
 - Push and hold to transmit; release to receive. (p. 8)
- CHANNEL UP/DOWN KEYS [▲] [▼]**
 - Push either key to change the operating memory channel, set mode settings, etc. (pgs. 6, 45)
- TRANSMIT POWER KEY [HOLD]**
 - Toggles power high and lower when pushed. (p. 8)
 - *Some channels are set to low power only.
 - While pushing [HOLD], turn power ON to toggle the microphone lock function ON and OFF. (p. 10)

3 BASIC OPERATION

■ Channel selection

◆ Channel 16

Channel 16 is the distress and safety channel. It is used for establishing initial contact with another station and for emergency communications. Channel 16 is monitored during both dualwatch and tri-watch. While standing by, you must monitor Channel 16.

- Push [16C] momentarily to select Channel 16.
- Push [CH/DUAL] to return to the condition before selecting Channel 16, or push [▲] or [▼] to select operating channel.

Push [16C]

16 25W INT TAG
CALLING 23*34, 154N
135*34, 251E
UTC 12:00

◆ Call channel

Each regular channel group has a separate before-use call channel. The call channel is monitored during tri-watch. The call channels can be programmed (p. 9) and are used to show your most often used channels in each channel group for quick recall.

- Push [16C] for 1 sec. to select the call channel of the selected channel group.
- The call channel number appears.
- Each channel group may have an independent call channel after programming a call channel.
- Push [CH/DUAL] to return to the condition before selecting the call channel, or push [▲] or [▼] to select an operating channel.

Push [16C] for 1 sec.

16 25W INT TAG
CALLING 23*34, 154N
135*34, 251E
UTC 12:00

GMDSS



The Dual Energy Power Supplies and Battery Chargers are designed and developed for charging and maintenance of voltage on lead-acid batteries and provide consistent and uninterrupted power supply (main or backup). You will find it right of the chart table and under of the couch.

General Switches

This battery master switch functions as a battery isolator and a theft deterrent device. The battery master switch is commonly used in vehicle applications, such as marine, transportation and automotive. The switch has an impact-resistant housing and has a detachable key for added security.

Service



You will find the service battery switch on the right side of the chart table and under the living room cushion.

Engine



You will find the main switch that turns off the boat's currents in the stern right cabin, next to the light.

Thruster



The switch that turns off the Retractable Thruster battery power will be found at the bow cabin, lifting the bed mattress.

Thermal Fuses

Fuses are mechanisms that are inserted into an electrical circuit in order to interrupt the supply of electricity throughout the electrical installation or in individual circuits of the installation, when large current values occur due to short circuit or overload to protect the wiring lines. Are always installed after the circuit breakers and are never installed in ground conductors. The use of these fuses is as follows:

Anchor fuse



At the image indicates fuse of the Windlass. In case the fuse has fallen, you will see the yellow plastic protruding at the position zero (0), with the use of your hand (fingers) you press the yellow plastic down so that it reaches at the position one (1). Then does an operation test to find out if everything is working properly.

Batteries Location

A battery is a device that stores chemical energy and converts it to electrical energy. The chemical reactions in a battery involve the flow of electrons from one material (electrode) to another, through an external circuit. The flow of electrons provides an electric current that can be used to do work.

Service



You will find the service batteries on the right side of the chart table and under the living room cushion.

Engine



You will find the engine battery inside the engine room.

Thruster



You will find the thruster batteries on the bow cabin under the bed.

Water System

Freshwater pumps deliver water to fixtures onboard a boat. Pressurized water systems make life aboard more comfortable by providing water "on tap" for dishwashing, showers and other applications.

Location of fresh water pump



You will find the fresh water pump at the bow cabin, under the bed.

Location water tank switch



If you want to change the water tanks, you need to go at the bow cabin under the bed, you will find the valve. When you turn it at the left side you take water from the 1st water tank and when you turn at the right side you take water from the 2nd water tank.

Location bilge pump



A bilge pump is a water pump used to remove bilge water.

You will find it on the floor and under the stairs. On this yacht the bilge pump is automatic. So keep the corresponding button always on.


Operation of toilet pumps

The toilet is one of the most used pieces of equipment on your boat. Correct operation of the toilet is essential for the safety and comfort of your crew and craft.





Open inlet and outlet seacocks (and secondary valves if fitted).

Half fill the bowl with warm fresh water.

Keeping the Flush Control Lever in the Shut () position, pump out the warm water.

Normal use

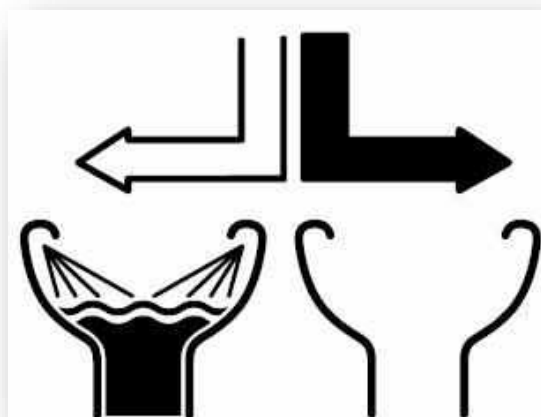
Open inlet and outlet seacocks (and secondary valves if fitted).


Before use, ensure that there is enough water in the bowl to prevent the toilet paper 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



On this boat the shower pumps are not automatics. You need to turn on and turn off the black button.

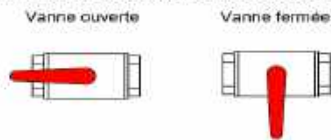
When the pump is fitted with a special negative head kit, the shower is operated by turning on the mixer valve and starting the pump by turn on the switch once. The pump will then run as normal, don't forget to switch off the shower pump after use.

Operation /Location of Waste tanks/valves

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.



A stop-and-waste valve is a fitting that attaches to your irrigation sprinkler lines, and it prevents waste from freezing. When closed, they go to waste tank until you open the valve.

As all valves, when it's vertical to the tube connected to it, it is closed and the excrement ends at the waste tanks. When it is parallel to the tube then it is open and the waste tank contents are emptied to the sea. You will find two waste valves, the 1st at the bow toilet inside the cap, and the 2nd is at the stern toilet if you look left and open the cap you will find it.



Oven/Stove



In order to turn on the oven or a hob, press the respective switch inwards and turn clockwise. Without letting go light up the hob with a lighter and hold for 5 seconds, then release. If the flame does not hold, try holding in the switch for longer. Also make sure no liquids are spilled on the hobs.

Location of gas valves inside



In case you need to insulate the gas inlet in the kitchen under the oven, opening the cupboard there is the gas outlet valve in the kitchen. When the valve is parallel to the pipe it is open and when it is perpendicular to the pipe it is closed.

Location of Gas bottles



For more safety if you want to close all system of gas you need to go outside at the starboard side and to open the locker. There, you will find the bottle gas. If you turn the valve clockwise you open the gas system and when you turn the valve from the other direction you close the gas system.

Engine

An engine is some machine that **converts energy from a fuel to some mechanical energy**, creating motion in the process.

Emergency stop



IN CASE OF EMERGENCY AND ONLY IN THIS CASE!!!

If you need to **turn off** the engine, you will be directed to the rear right cabin to have a picture of the engine as in the photo.

If you want to turn it off, you will press the red button down and rotate it to the left.

Engine oil check



If you want to check your oil, you will be directed to the rear right cabin to have a picture of the engine oil as in the photo.

Saildrive oil check



If you want to check your saildrive oil, you will be directed to the rear right cabin to have a picture of the saildrive oil as in the photo

EXTERIOR

Thruster Controller

Thrusters are designed with propellers facing in a sideways direction so when they are turned on, **they push the bow or stern of a boat sideways through the water**, in either direction. If only one thruster is used, for example in the bow, then the boat will also turn and change orientation.



To turn on the Jet Thruster you press continuously the adjacent button until the color does yellow.

After that you press right, you go right.

You press left, you go left.

ATTENTION: Do not use it continuously, it is better to use it for 2-3 second, and then you leave it.

Autopilot Operation

Autopilot

If a compatible autopilot computer is connected to the system, autopilot functionality is available in the system. The system does not allow for more than one autopilot computer on the network.

The display unit automatically detects the autopilot computer available on the network and presents settings, configuration and user options for the connected computer.

For details about installing and configuring an autopilot computer, refer to the separate manuals that come with the autopilot computer.

Safe operation with the autopilot

▲ **Warning:** An autopilot is a useful navigational aid, but DOES NOT replace a human navigator.

▲ **Warning:** Ensure the autopilot has been installed correctly, commissioned and calibrated before use.

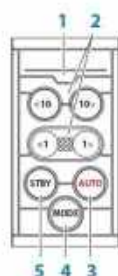
→ **Note:** You can disengage the autopilot at any time by pressing the **STBY** key on the Triton² Pilot controller.

Do not use automatic steering when:

- in heavy traffic areas or in narrow waters
- in poor visibility or extreme sea conditions
- When in areas where use of an autopilot is prohibited by law

When using an autopilot:

- Do not leave the helm unattended
- Do not place any magnetic material or equipment near the heading sensor used by the autopilot system
- Verify at regular intervals the course and position of the vessel
- Always switch to Standby mode and reduce speed in due time to avoid hazardous situations



Autopilot controller

The autopilot is controlled by the Triton² Pilot controller.

1 LED - Mode and alarm indicator

2 Port and starboard keys

In Standby mode: press to activate Non Follow Up mode (NFU).

In AUTO mode:

- Press a key to change set heading 1° or 10° to port or starboard
- For boat type set to SAIL: Press and hold both port keys or both starboard keys to start a tack/gybe

In NoDrift mode:

- Press a key to change set heading 1° or 10° to port or starboard

In Wind mode:

- Press to change set wind angle 1° or 10° to port or starboard
- Press both 1° keys to start a tack/gybe

3 AUTO key

Press to activate AUTO mode.

4 MODE key

→ **Note:** Only used when the autopilot is in AUTO or NoDrift mode.

Press once to select mode:

- For boat type set to SAIL: activates Wind mode (**A**)
- For other boat type settings: activates NoDrift mode (**B**)

Press and hold to activate NAV mode (**C**)

5 STBY key

Press to activate Standby mode.



Engine Control Panel

An engine control unit (ECU), also commonly called an engine control module (ECM), is a type of electronic control unit that controls a series of actuators on an internal combustion engine to ensure optimal engine performance.



How to turn on your engine?

You press continuously the power, and then you press the start continuously until the engine starts.

How turn off your engine?

You press continuously the stop, and then you press continuously the power.

Outboard

How to start the outboard:

1. Make sure there is plenty of gasoline/petrol in the outboard fuel tanks.
2. Open the fuel valve.
3. Open the air from the top.
4. Set the outboard to neutral.
5. Place your ignition key.
6. Set the throttle to 2/3 and
7. Pull the rope until the outboard turns.



Entries Water



This yacht has two water tanks.

When you want to refill the 1st water entry you need to go at the right side on the deck in the middle of the boat. There you will find the water cap. It writes up water.

When you want to refill the 2nd water entry you need to go at the left side on the deck in the middle of the boat. There you will find the water cap. It writes up water.

Entries Diesel



This yacht has one diesel tank.

When you want to refill it you need to go at the stern right side on the deck. There you will find the diesel cap. It writes up diesel.

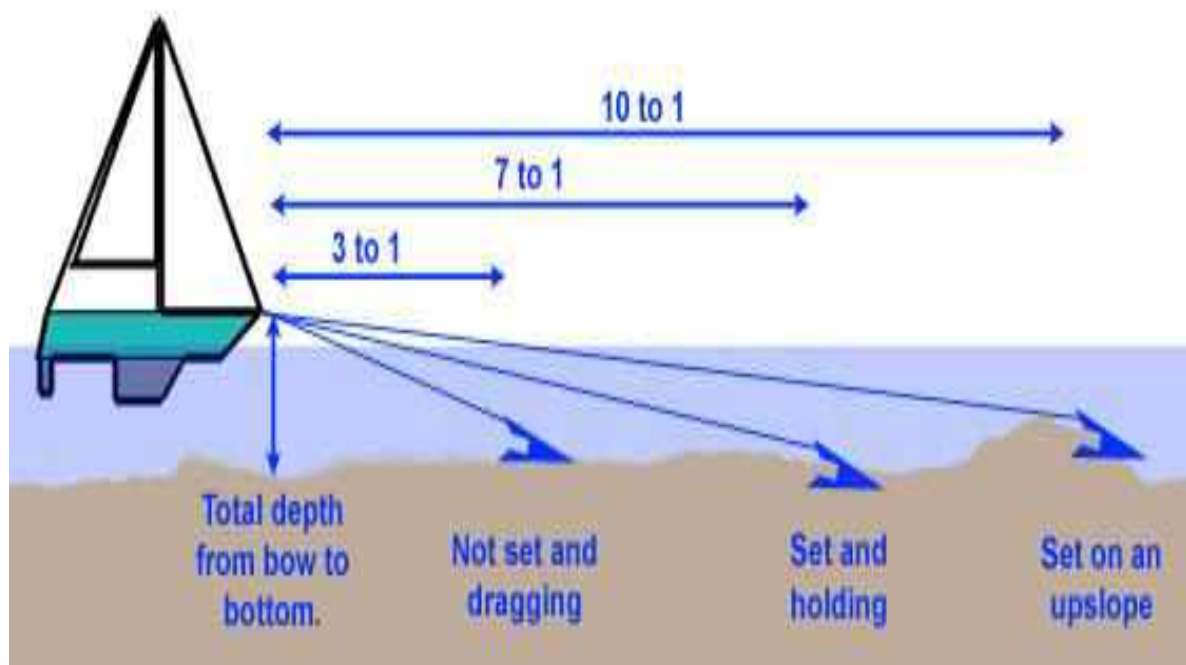
Chain marking

The boat has approximately 80 meters chain total. Every ten (10m) meters the chain marked with colors as follows:

- 10 meters **White**.
- 20 meters **Blue**.
- 30 meters **Green**.
- 40 meters **Yellow**.
- 50 meters **Red**.
- The last 10 meters are painted with full Red and secured with Rope.

ATTENTION

1. When you throw the anchor you need to be careful the bow side to do not damage it.
2. When retrieving the anchor and when the blue mark appears, the anchor will be just below 15m under the surface. Proceed slowly at this point to avoid damaging at the bow and at the bowsprit.
3. The engine must be running when you use the windlass motor.



Sails

Main Sail



On this yacht you have full batten main sail with 3 reefs, which means when you want to open the main sail you must release all reefs and pick up the main halyard. This procedure must be simultaneously. If you want to close the main sail you must take back one by one all the reefs and to release the main halyard. This procedure must be simultaneously

Genoa



On this yacht you have genoa sheets, which means when you want to open the genoa you must release the genoa sheet and to take out the genoa furling. This procedure must be simultaneously. If you want to close the genoa sail you must release the genoa sheet and to pull the furling rope. This procedure must be simultaneously.