# V10

## *OWNER'S MANUAL*

VIRTUE YACHTS sp. z o. o.
ul. Obwodowa 4,
11-500 Giżycko, Polska

info@virtue-yachts.com

virtue-yachts.com @virtue-yachts @virtue_yachts_com

# 1 INTRODUCTION

The *Owner's manual the motor yacht*, which you received together with a yacht, will help you to operate your yacht VIRTUE V10 safely and appropriately so you may use it with a pleasure. Manual contains the description of the yacht, its equipment and installation systems as well as practical information about their use and maintenance.

Read the information carefully before using the yacht.

This *Owner's Manual* is not a detailed guide yacht maintenance or troubleshooting. In case of difficulties, contact to your manufacturer or his dealer.
Always employ trained and competent people for maintenance or repairs.
Repairs which may impact on safety characteristics of the yacht should be evaluated, carried out and as documented by competent people.

Yacht manufacturer not responsible for the modifications made after with his consent, therefore, any modification of yacht shall be repeal entitled to guarantees.

Always keep your yacht in good condition and take into account the deterioration of that will followed over time and as a result intensive use or improper handling of the yacht.
Each yacht, regardless of how it is strong, can be severely damaged if is not properly used. Always adjusting the speed and direction of the yacht to the conditions on the waters.

This manual is for the owner is not a course for safe yachting or sailing skills.
If this is your first yacht or if you change the type, you do not know, for your own comfort and safety, make sure that you got experience in leading the yacht and its operation. Your dealer, national sailing federation or yacht club is pleased to provide you with information on local marine schools or competent instructors.

Congratulations on your purchase of VIRTUE V10. To ensure safe use and long life of the yacht, we recommend that you read this Owner's Manual carefully. All requests regarding service and warranty and post-warranty services, suggestions for corrections, etc. should be submitted to the sales department or to the dealer where the yacht was purchased.

PLEASE KEEP THIS OWNER'S MANUAL IN A SAFE PLACE
AND HAND IT OVER TO A NEW OWNER WHEN
YOU SELL THE YACHT

*With wishes of successful cruises*
*VIRTUE V10*

**)We are an intensively developing company and our yachts are constantly improved, therefore, some of the solutions and information included in this Manual might not apply to your yacht.*

# 2 STAGE OF DANGER

The manual contains serval kinds of sign, which are supposed to turn your attention to the actions and situations which may cause danger for health or life if not realized or in property damage and undesirable result or state.
The following warning labels are displayed onboard your yacht to warn you and crew of intrinsic dangers, where safety precautions and good practice need to be observed at all times.
All hazards, warnings, and notes are marked for better visibility. Please read the following instructions carefully.

**⚠ DANGER** The sign warns before appearing the highest danger, which can cause the durable damage of body or death unless the appropriate safety actions are taken.

**⚠ WARNING** The sign warns before appearing the danger, which can cause the durable damage of body or death unless the appropriate safety actions are taken.

**⚠ CAUTION** The sign warns before appearing the danger, which can cause the minor or moderate injury unless the appropriate safety actions are taken.

***NOTICE*** The sign warns of potential situation which, can cause property damage or an undesirable result or state unless the appropriate actions are taken.

The sign call for attention to clarifies or simplifies a procedure.

# 3 SAFETY RULES

The yacht was designed and built in accordance with the standards harmonized to Directive 2013/53/EU. The construction of a yacht requires meeting the guidelines of the standards, both at the design stage, technical documentation of the structure, yacht production conditions as well as the selection of appropriate materials and equipment.
All elements of the equipment, especially those permanently installed, have appropriate attestations and certificates allowing them to be used in the marine environment.

Safety at sea is ultimately governed by International Law, however local laws can and do apply within a country's waters. Yacht owners are required to exercise the appropriate regulations and codes of practice as recognized and approved in the local waters where the yacht is operating.

Remember that motor yachts, including just being on or around the yacht, can be potentially dangerous. Equipment with moving parts such as the anchor windlass etc. must only be operated by competent crew.

**⚠ DANGER**

The manufacturer and dealer are NOT RESPONSIBLE for self-installation of additional equipment or any modifications to the equipment already installed.
**Any interference with the equipment may cause damage or an accident, such as a short circuit of the electrical system, fire or flooding the yacht.**
**In each of the above cases, the yacht loses its warranty.**

## 3.1 SAILING SAFETY

Even if everything has been planned, the safety of navigation remains strongly dependent on the weather, sea conditions and the experience and knowledge of the crew.

Always check the current weather forecast (wind speed and sea conditions) before sailing and make sure that the circumstances of the sailing correspond to the design category of the yacht and that you and your crew are fit to operate the yacht in these conditions.

Before preparing the yacht for cruising, check the local water law, which may impose certain restrictions. Check bathing restrictions, speed limits and noise and exhaust emissions. Always check the water forecast before leaving sheltered waters. Avoiding extreme weather conditions whenever possible is fundamental to good sailing. Always heed storm warnings.

A motorboat helmsman's license is required to operate a motor yacht (see local regulations that specify this - they are different in different countries).

**⚠ DANGER**

Lack of appropriate qualifications of the crew may lead to serious damage to the yacht and danger to the crew.

The VIRTUE V10 is a planning yacht. Sailing on the VIRTUE V10 yacht requires adjusting the speed to prevailing weather conditions and the state of waves in the basin. Sailing at speeds near or above 50 knots on wavy waters - may result in damage for which the seller and the manufacturer are not responsible. The warranty does not cover damage caused by failure to adjust the maximum speed <50 knot, and sailing in sea condition 6°B and wave heights up to 2 meters.
The yacht is capable, up to the wave height in accordance with the design category, but submersible in accordance with European regulations, but this only increases your safety, and does not relieve you of liability for unfortunate accidents.

## Please read these instructions before cruising:

**⚠ WARNING**

Travel tips:

- → the steersman must be familiar with the safe navigation, control and handling procedures of the yacht,
- → for each person on the boat, easily accessible, certified rescue equipment in the appropriate size should be prepared,
- → the yacht must have a lifebuoy or a buoy adapted to be thrown to a person in the water,
- → you should know the maximum load capacity of the yacht. Information is provided on the nameplate with data on the maximum load capacity,
- → check the fuel supply system,
- → passengers and cargo should be distributed so that their weight is distributed evenly and that each passenger is seated properly,
- → tell someone of the direction of your cruise and the estimated time of return
- → steering the yacht under the influence of alcohol or drugs is a violation of the law,
- → familiarize yourself with the water and land terrain and the presence of tides, currents, shallows, rocks and other hazards,

## Stimulants

Never sailing under the influence of alcohol or drugs.
Alcohol or drugs weaken your focus and greatly reduce your ability to react quickly.

Instruct at least one person on board in the basics of yacht handling in case the helmsman faints or falls overboard.

In addition, in order to facilitate the procedure, it is recommended to place First Aid Instructions and Fire Safety Instructions in case of emergency.
Do not drink alcohol while sailing. The combination of noise, vibration, sun, wind and movement on the water causes fatigue.
The effects of alcohol on water are worse than on land.

**⚠ WARNING**

Stimulants and shipping not go hand in hand. Operate a boat while under the influence of drunkenness or other means is illegal and dangerous. Weakening eyesight or assessment of the situation could lead to disaster.

## 3.2 LIFE-SAVING EQUIPMENT

On the yacht should be appropriate safety equipment (life jackets, safety harnesses, etc.) as appropriate to the type of boat, weather conditions, etc. In some countries it is Required equipment.

Your yacht should be equipped with a life raft, which the helmsman should be placed in an easily accessible place.

It is the owner's responsibility to provide life-saving and safety equipment required by law for all crewmembers on board and check that all safety equipment such as the distress rockets, flares, lifejackets and life rafts ale properly intervals. If helmsman are at all unsure as to him obligations, you should procure a suitable official publication concerning safety at sea.

**⚠ WARNING** It is the responsibility of the yacht's helmsman/owner to equip the yacht with life-saving equipment such as lifejackets, a lifebuoy and a liferaft.

The crew should be familiar with the use of all equipment safety and emergency maneuvering (man overboard, towing, etc.).

### LIFE JACKETS / LIFE BUOY

It is recommended that the yacht be equipped with life jackets for 8 passengers, and additionally 4 life jackets for children.

A place for life jackets should be located in places easily accessible for passengers, e.g. in lockers under the seats / under the benches.

In the absence of (loss or damage) jackets, make sure to secure the boat with legalized life jackets of the right size for each person.

All persons should wear appropriate life-saving equipment (life belts / life jackets) when on board.
Note that in some countries there is a legal requirement to permanently wear a rescue device that meets their national requirements.

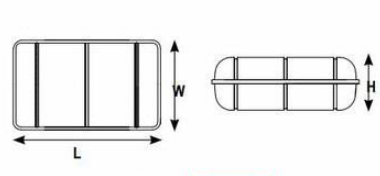
**⚠ WARNING** Read the instructions on the vest label carefully and follow them.
When checking the condition of the life jacket, make sure it fits snugly.
Try the vest before you fall into the water.

**⚠ WARNING** It is essential that children, careless people and non-swimmers wear life jackets. Children and non-swimmers require special instruction on how to use life jackets.

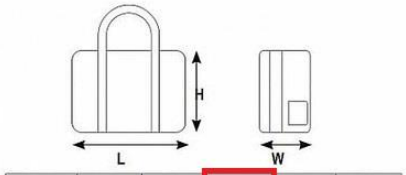
## LIFE RAFT

Every yacht over 6 m in length with design category C should be equipped with a life raft. The helmsman is responsible for the equipment with a life raft.
The manufacturer has provided a place for a life raft on the left aft platform.

Below is an example of a life raft parameters:

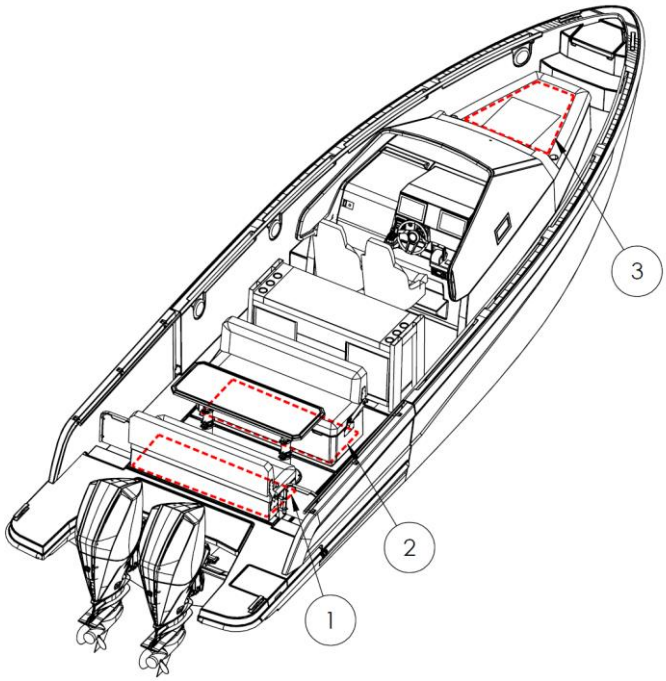



| Codigo | 78800 | 78810 | 78820 | 78830 | 78840 |
|---|---|---|---|---|---|
| Personas | 4 | 6 | 8 | 10 | 12 |
| Contenedor | | | Contenedor | | |
| Peso(kg) | 38 | 42 | 50 | 56 | 62 |
| L (mm) | 760 | 760 | 770 | 820 | 920 |
| W (mm) | 480 | 480 | 550 | 570 | 570 |
| H (mm) | 330 | 330 | 345 | 355 | 340 |




| Codigo | 78850 | 78860 | 78870 | 78880 | 78890 |
|---|---|---|---|---|---|
| Personas | 4 | 6 | 8 | 10 | 12 |
| Contenedor | | | Bolsa | | |
| Peso(kg) | 32 | 36 | 38 | 45 | 52 |
| L (mm) | 680 | 710 | 710 | 800 | 850 |
| W (mm) | 400 | 420 | 420 | 470 | 500 |
| H (mm) | 250 | 280 | 280 | 300 | 300 |

Read the liferaft manual carefully.



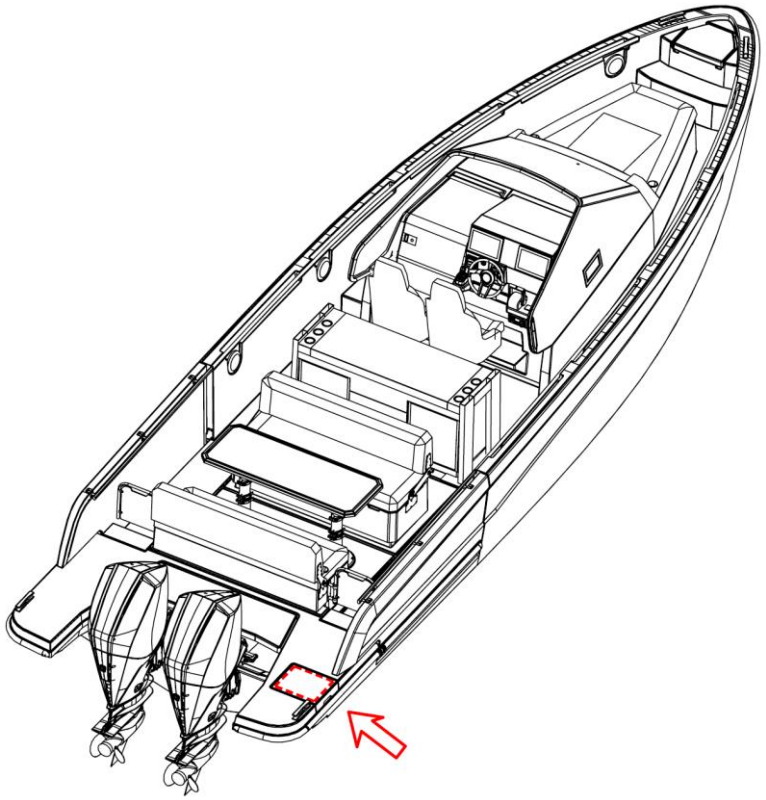

We do recommend to keep liferaft in aft sofa storage (1). Life Buoy and Life Jacketcs in front sofa (2) or in front cabin (3).

## 3.3 REBOARDING

Every yacht its designed to minimize the risk of falling overboard and facilitate reboarding.

The craft is equipped with a foldable ladder fixed on the starboard side of the aft swim platform.
The ladder is deployed by first opening the hatch covering the ladder and then pulling the ladder out. This Operation can be performed by a person in the water.

Ensure that the main engines are fully stopped before attempting to board anyone the bathing platform. Anyone assisting the recovery must suitably fitted with a safety harness before attempting to recover the man-overboard.



# 4 SAFETY ON BOARD

When moving around the yacht deck, pay special attention to the safety rules.
Pay particular attention when climbing steps/stairs.

**⚠ DANGER** It is forbidden for children under 5 years of age to stay on board and minors without parental/guardian supervision.
Be especially careful:
→ when walking on the deck while the yacht is in motion,
→ while standing on deck while the yacht is in motion.
When the yacht is moving, you must sit on the deck and hold on to the railings while the yacht is manoeuvring.

**⚠ DANGER** Sideboard doors are installed as standard. It is necessary to keep the openable terraces closed while sailing.

**⚠ DANGER** The maximum speed when people are on the front sun deck is 15 knot and the maximum wave height is 0,5 m.

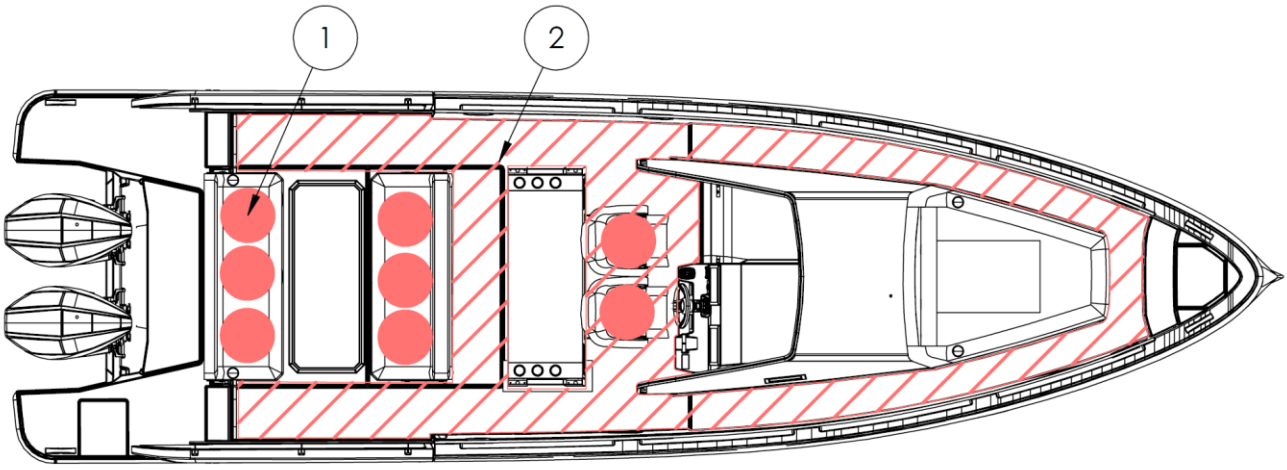
## 4.1 PASSENGERS ON BOARD

PASSENGERS BOARDING AND DISCHARGE.
Stop the engine when boarding passengers.
Moving the throttle to neutral is not sufficient.

Below are some tips that will increase the safety of shipping and passengers:

1. Hold on to the railings when moving around the yacht deck.
2. When moving around the yacht, be especially careful and pay attention to the steps, both outside and inside the yacht.

Seating positions
Place of the designated seating areas
To prevent passengers from falling overboard, it is important to make sure everyone on board respect the areas indicated in the following diagram:



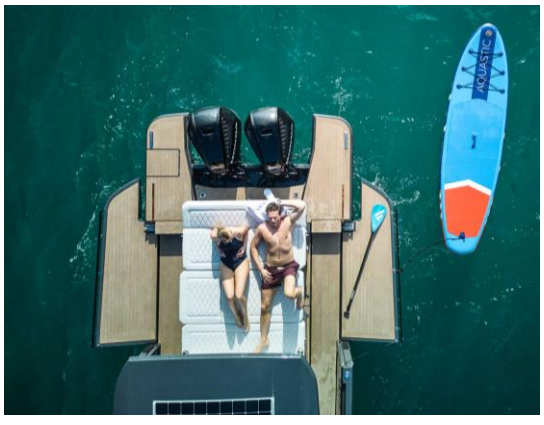

1. Designed seating areas – areas indicated with dark red circles are seats designated for passengers while underway
2. Moving area – areas where you can go when leaving the harbour and docking are highlighted in light green

**⚠ WARNING** Do not allow anyone to sit on the parts of the boat in places not intended for. In particular, seatbacks, gunwale, transom, bow, or anywhere that an unexpected acceleration or sudden stop will cause a person falls overboard or into the interior of the yacht.

Do not overload the yacht.
The helmsman of the  is responsible for passengers and cargo.
The yacht are evaluated relative to the maximum load and  capacity.
If in doubt, contact your dealer or the yacht manufacturer.

**⚠ DANGER** Always turn off the engine when the boat is near people in the water.
Even at low engine power screw can cause serious injury.

## 4.2 Foldable Side terraces



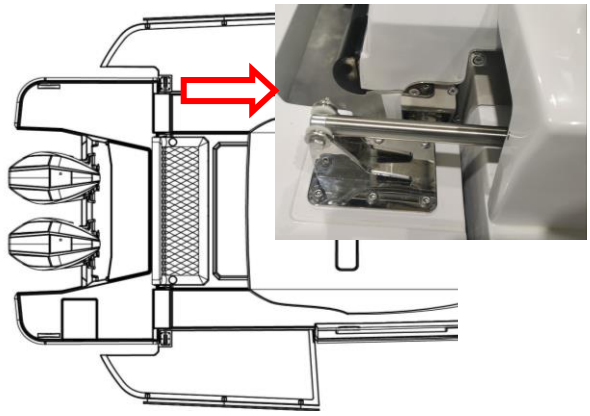
The Yacht is equipped with foldable side terraces, located at the aft deck on the booth side.

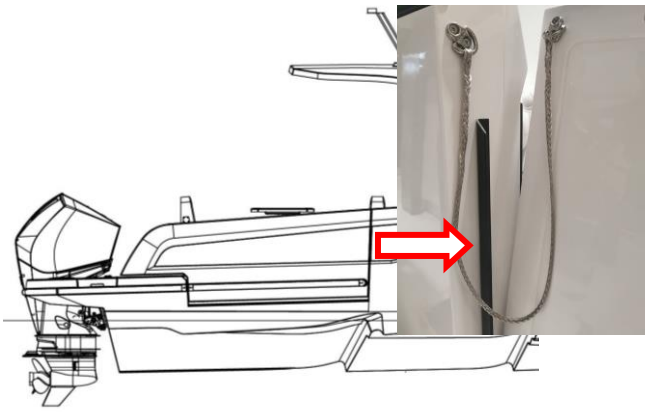
The terraces on both sides can be operated independently via the control panels on the each sides of the boats. For lowering a terrace, first push the button with arrow down.
For raising a terrace push the button with arrow up.

Side terraces should be periodically inspected, paying particular attention to:

– external and internal plating of gates
– stabilizing and supporting elements (cables), hinges and cylinder, latches
– structure around the closing/opening device - cylinder, head of actuator

If any crack/damage is found, the area around the crack should be inspected thoroughly and repaired immediately.



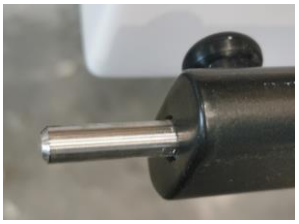


**⚠ DANGER** The maximum load on the platform is 120 kg.

Remember not to overload the platform as this may result in damage to the actuator and the fact that the tightness of the connection between the platform and the board will not be maintained.

**⚠ WARNING** Before operating the terraces make sure there are no persons near that could be injured by the movement of the terraces.

**⚠ WARNING** Secure the side terraces latches when the side terraces are in the raised position.



**⚠ DANGER** The terraces are not intended to be used in the lowered position while cruising.

# 5 IDENTYFICATION OF YACHT

## 5.1 YACHT PURPOSE

The yacht was designed and manufactured at VIRTUE YACHTS sp. z o. o. according to applicable requirements of Annex I to Recreational Craft and Personal Watercraft Directive 2013/53/EU of European Parliament.

The yacht VIRTUE V10 was put to the test according with applicable requirements of Annex I to Recreational Craft and Personal Watercraft Directive 2013/53/EU for design category C.

The design category C - defines the craft has been designed for sailing in coastal waters, bays, lakes and the rivers, where conditions up to and including be a typical wind force Beaufort Force 6° and significant wave heights up to and including to 2 metres.

## 5.2 DECLARATION OF CONFORMITY OF RECREATIONAL CRAFT

In the Declaration of Conformity, the manufacturer undertakes that the manufactured yacht meets the quality specified in Directive 2013/53/EU in all aspects. The declaration of conformity contains all the necessary information that is required by market control institutions. The list of standards harmonized with the directive, for compliance with which the yacht was manufactured, can be found on the second page of the Declaration of Conformity. The Declaration of Conformity is provided to the customer as a separate document.

## 5.3 CRAFT IDENTIFICATION NUMBER (CIN)

The yacht VIRTUE V10 has two places with the same identification number. First one is placed on the right side of a transom, second one is hidden inside the construction of a yacht in a place only known to his manufacturer. CIN is needed to identify a yacht in case it was stolen.
It is a unique sequence of numbers and letters worldwide.
Here is her example:

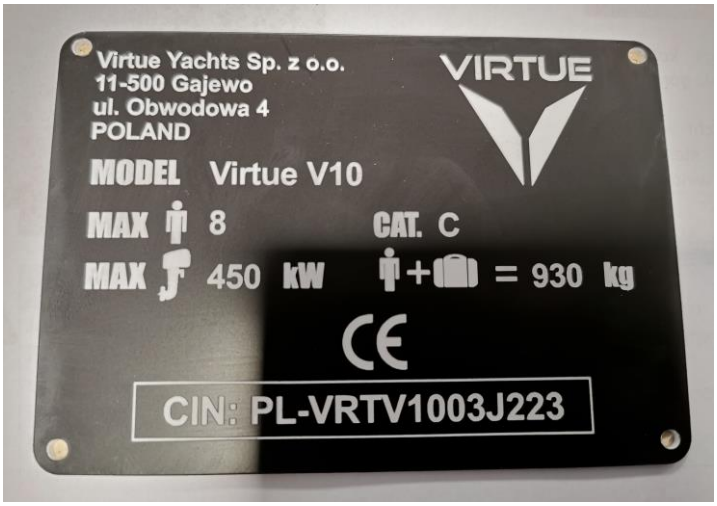
PL-V R T V 1 0 _ _ _ _ _ _

The craft identifications number includes:

PL – Country code
VRT – Manufacturer's identification
V1001 – Serial number
A – Month of production
3 – Year of production (ex. 2023 – 3, 2024 – 4)
23 – Model of year (ex. 2023 – 23, 2024 – 24)

## 5.4 BUILDER'S PLATE

The builder's plate has been placed in the cockpit of the VIRTUE V10 yacht. The nameplate is a requirement of the directive and contains the information that must be provided in the above space. Please follow it for the safety of the deposits and the yacht.




The builder's plate includes:

**C** — yacht design category

max. x 8 + — max. the load recommended by the yacht manufacturer, which includes: 8 people + personal equipment + other masses,
It does not include the mass of the contents of solid fuel and water tanks,

max. — max. power of outboard engines (kW)

CE — The CE sign is the confirmation that the yacht complies applicable requirements of Recreational Craft Directive 2013/53/UE.

**⚠ WARNING** The maximum number of people and personal equipment can not exceed the load specified by the yacht manufacturer.

**⚠ WARNING** Installation of a motor larger than specified on the nameplate is not allowed.
The Designer, Manufacturer and Distributor do not allow the possibility of changing a motor that is inconsistent with the rating plate and is not responsible for any damage, hazards, accidents and their consequences. The user bears full responsibility for compliance of the yacht's technical equipment with the data plate.

# 6 DESCRIPTION OF YACHT

## 6.1 TYPE AND YACHT CONSTRUCTION

The yacht is made of durable glass-reinforced laminate as a monolithic construction and of high class materials, guaranteeing trouble-free use of boat for years.
VIRTUE YACHTS products are applied with such technical solutions which allow to get the optimal stability, reliability and control at the swerves as well as safety at overcoming waves.

VIRTUE V10 is a motor yacht, whose basic drive are the a outboard or inboard engine, with outboard engine outboards with power from 250 hp to 600 hp.

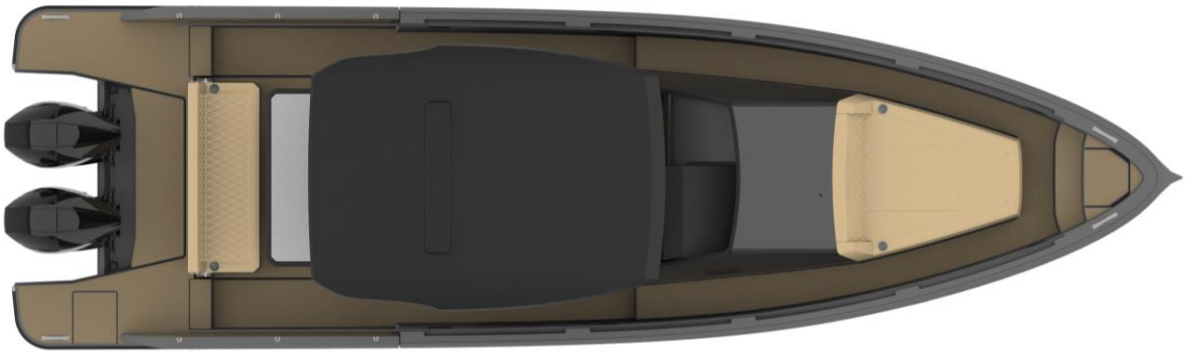
The design of the yacht is made of a plastic material and is based on the shell technology with fiberglass. The hull and deck are made in Vacuum Infusion Process. Both elements are made in sandwich construction to improve stiffness. The hull had been reinforced by solid laminate grate with sandwich bulkheads. Strengthened keel area and collision area in the bow section.

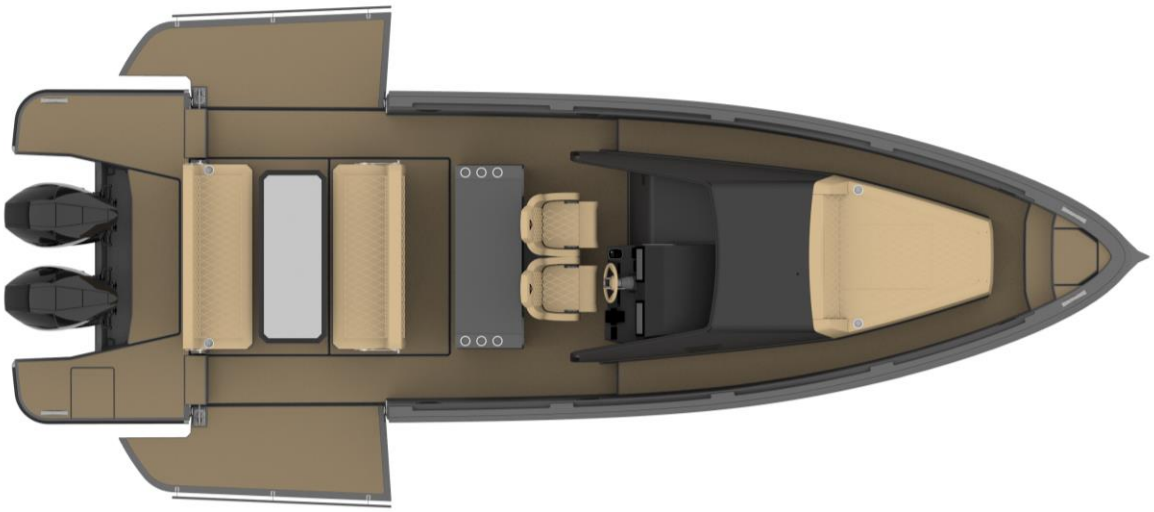
All outer parts made of laminate are protected against water and UV special layer of polyester resin called gelcoat.
All internal parts are made of laminate are protected against water with a special layer of polyester resin called topcoat.
All structural parts of the hull are joined by laminating glass-reinforced laminate or glued with polyester-glass putty, or glued with polyurethane adhesive.

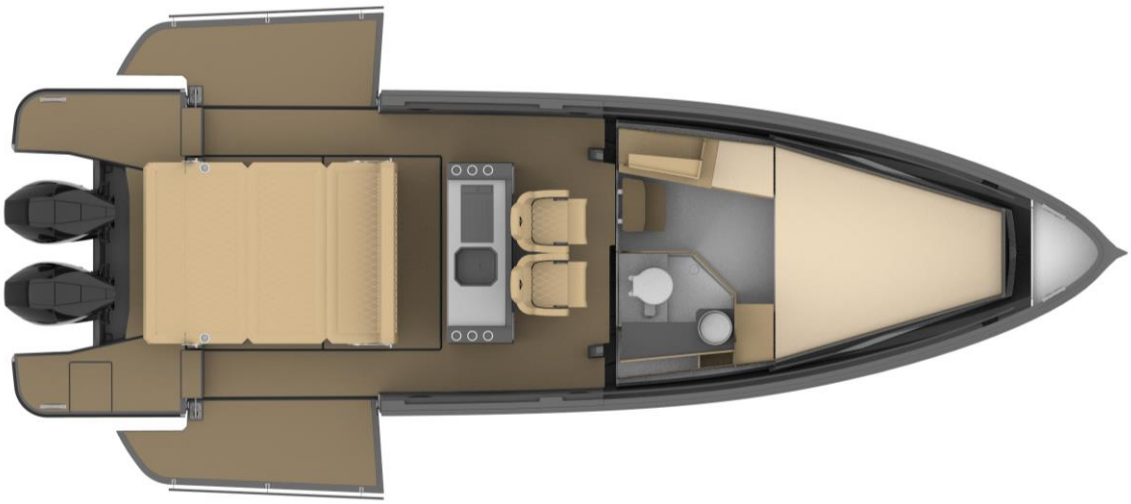
The surfaces of the deck designed for walking are covered with anti-slip soft deck or teak strip (optional).
To the interior of the yacht through to companionway.
A factory (branded) bow hatch with a diameter of approx. 50 x 50 cm., this is located in the front part of the superstructure. is an emergency exit. On the foredeck there is an anchor hatch made in deck technology with a laminate cover.
In the aft part there are seats with storage compartments

Metal fittings
All fittings and hatches are made of aluminum and stainless materials resistant to sea water (316 stainless steel). They are bolted to the plastic deck and thoroughly sealed. The places where fittings are installed have been strengthened by adding additional layers of laminate in these areas.

## 6.2 YACHT OUTLINE







## 6.3 TECHNICAL DATA

The yacht VIRTUE V10 is the construction of full-board with outboard engines.

| Parametr | |
|---|---|
| Lenght of the hull $L_H$ | 9,89 m |
| Beam of the hull $B_{max}$ | 2,90 m |
| Draft of hull (one engine/two engines) | 0,74 m / 0,84 m |
| Max. displacement (one engine/two engines) | 4970 kg / 5270 kg |
| Fuel tank capacity | 420 L |
| Maximum number of persons | 8 persons |
| Number of bunk | 2 |
| Desing category | C |
| Maximum power of engine | 250 hp / 600 hp |

## 6.4 BOAT STABILITY

The yacht fulfill the assumed, high safety criteria (stability) the assumed high safety criteria in terms of stability.

The yacht was designed as a tourist vessel for design category C.

C for 8 people for sailing on inland waters up to wind force 6B, and sheltered sea waters up to wind force 6B and wave height up to 2 m.

The VIRTUE V10 yacht has been tested and meets the essential requirements set out in Annex I to Directive 2013/53/EU, as amended for design category C.
Maximum capacity specified by the manufacturer, based on stability tests and buoyancy measurements.

**⚠ DANGER** Information about stability and freeboard, floatation and buoyancy is fulfilled only when the weight of empty yacht with equipment does not exceed 3500 kg / 3800 kg (depends from engines specification).

Remember:

→ any change in arrangement of the masses on the side (eg. The addition of a fishing tower, a change in the engine etc.) can significantly affect the stability, trim and behavior of the yacht,

→ amount of bilge water should be as small as possible,

→ stability is decreased by adding any high-mounted weight

→ gaps in bad weather, lockers, doorways should be closed to minimize the risk of flooding,

→ stability may be reduced when towing.

→ breaking waves are a serious threat to stability

**⚠ DANGER** The fulfillment of the requirement of stability and freeboard as well as buoyancy and flotation does not guarantee the yacht will not overturn or sink if all criteria of exploiting the yacht are not kept.
The helmsman of yacht is responsible for complying to proper sea practice in reference to safety of crew and yacht.

## 6.5 MAXIMUM LOAD

**⚠ WARNING** When loading the yacht, never exceed the maximum recommended load.
Always load the craft carefully and place weights correctly to maintain the design trim (approximately even keel).
Avoid placing heavy weights high up.

**⚠ DANGER** SAFETY OPERATING:
The operational safety of yacht will be ensured under the following conditions:
1. The yacht will be operated under conditions adopted for design category C.
2. The yacht will be used by the proposed in project the number of members of the crew 8 people.

The yacht will be used in accordance with the conditions specified in the User's Manual of the motor yacht.

The total mass of liquid when all permanently installed tanks are full, is :

- fuel tank - outboard engine 420 L
- water tank 60 L
- waste tank 60 L

**⚠ WARNING** Never cross the safety mass limit definite by constructor in reference to the maximum load of yacht.

Outboard engines:

| | |
|---|---|
| Total weight of yacht including crew and equipment (depends from specification) | Approx. 6200 kg |
| Weight of an empty yacht (depends from specification) without outboard engine (for transport on a trailer) | 3100 kg |
| Weight of an empty yacht including equipment (depends from specification) | 3800 kg |
| Maximum carrying capacity (8 people + luggage) | 930 kg |

## 6.6 Through Hulls, Seacocks. Openings in Hull and Deck.

The openings in deck, bottom and side may pose a danger as water can get into the boat.
All marine valves are manually operated and therefore must be inspected.
Special attention should be paid to bottom and side openings and sea valves in the hull, because their failure may cause the yacht to sink.

Bottom sea valves are operated manually, so they must be controlled.

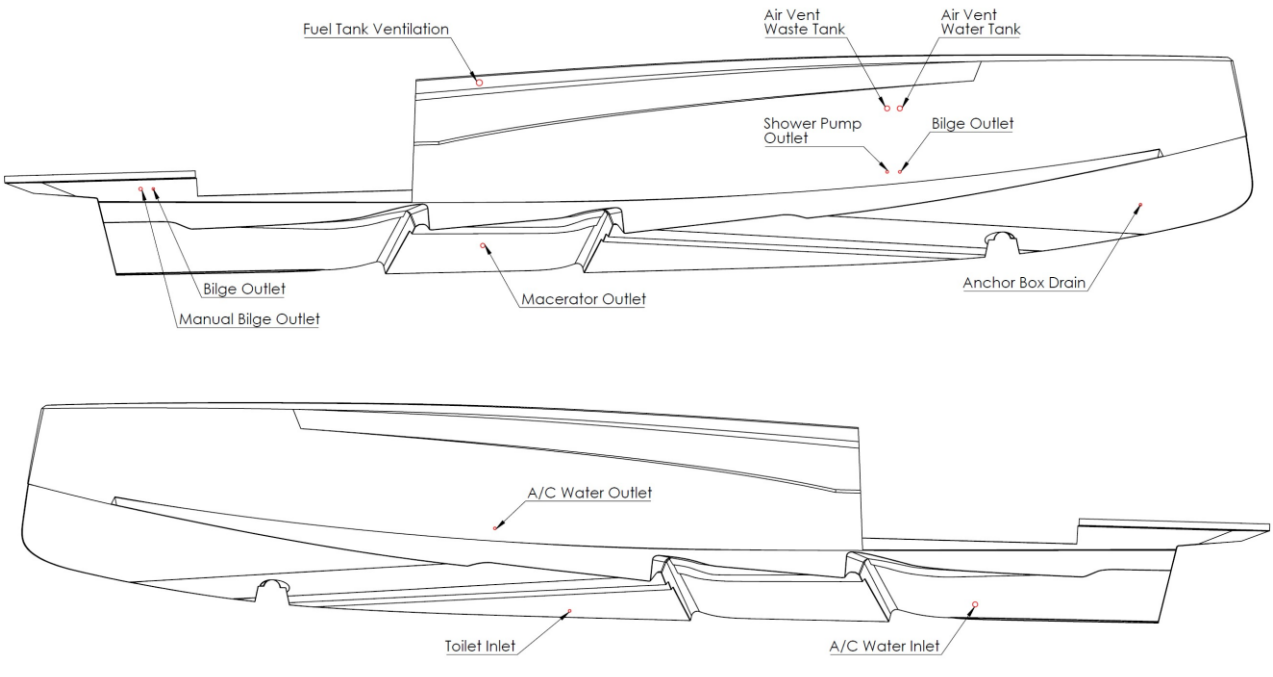
Side through hulls are located above the waterline and are for vents of e.g. a water tank or bilge pumps outlets, shower pump outlet, A/C water outlet.

Deck openings are e.g. drinking water inlet, fuel inlet, Waste connection for emptying the sewage tank.

All bottom penetrations below the waterline must be terminated with a valve.

As the valves are operated manually, their condition requires regular inspection.

The following diagrams indicate the location of these openings in hull. For Deck openings pls go to point 6.7 Place of opening

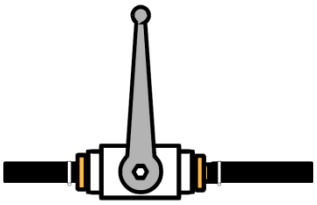


**⚠ WARNING** The technical condition of bottom passages should be monitored on an ongoing basis, and always before launching the unit after the winter period.

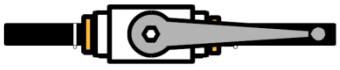
For safety reasons, the hoses ends attached to seacocks in Hull below water line are equipped with double band.
Do not change that.
The bottom passages in hull for instruments, such as sonar, have a special construction and are not closed by a valve.

**⚠ DANGER** Valves must be closed when the boat is not in use or unattended.
The closed state of the valves can be recognized by:

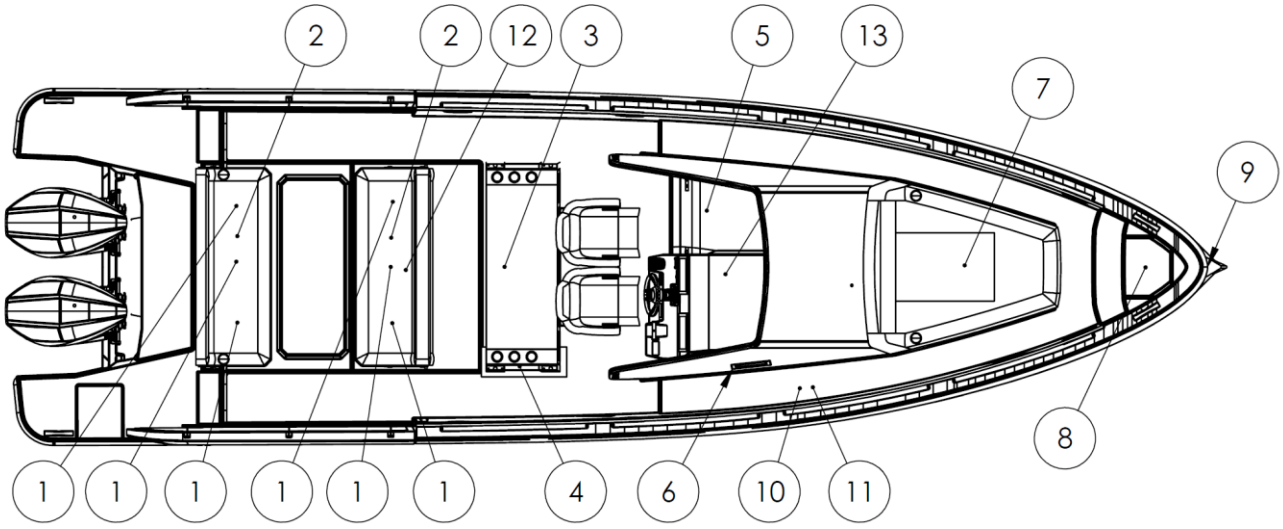
→ closed - the lever is in the position across the hose or pipe



→ open - the lever is in the position along the hose or pipe



## 6.7 PLACE OF OPENING




1. Plastic Hatches of storages in aft sofa
2. Revision to electrical actuator of Technical Hatches
3. Fuel tank inspection/valves hatch
4. Electrical panel to open Technical Hatches

5. Cabin door
6. Cabin ventilation window
7. Forehatch of Front Cabin
8. Anchor storage hatch
9. Anchor mechanism hatch
10. Waste tank outlet
11. Water tank inlet
12. Bilge pump inspection hatch
13. Bilge pump inspection hatch

To minimize the amount of water getting in to the boat:

→ Always check that the hatches are tightly closed before and after using the boat. It is recommended that you keep them closed when underway,

→ Keep windows, doors and hatches closed in rough waters and bad weather. You may keep them open in calm weather.

→ Close canopies, hatches and other openings, if water is sprayed inside through them. This can sometimes occur in certain conditions due to negative pressure or n certain speeds.

**⚠ DANGER**

The boat can sink if enough water gets into the bilge through the hatches.
Always keep the bilge inspection hatch closed when the boat is in water.
Always keep technical hatch closed when the boat is underway.

**⚠ WARNING**

Risk of personal and material damage.

The windows, doors, and aft sofa hatches are not designed to sustain pressure from rough waters and bad weather. They can cause injuries if they break or are shut with force.

Always make sure they are tightly closed when underway.
You may keep them open in calm weather.

# 7 ENGINE

The yacht can be equipped with one or two outboard engines, with a power up 250 to 600 HP.


At the same time, it should be noted that higher engine power may lead to the development of a higher than expected speed of the unit, and thus to its loss of control.

When operating the engine, follow the factory instructions provided with the engine.

**⚠ WARNING**

Always follow the rules of maintenance and service included in the owner's book by the engine manufacturer, in particular:

- → apply the suitable fuel
- → check the level of fuel tank before starting the engine,
- → after starting the engine check if the cooling water is carried away through the exhaust,
- → do not make any noise or waves in the harbor, do not exceed the speed limit,
- → follow the manufacturer's instructions while usage, maintenance and winter storage of the boat,
- → do not use the engine with power exceeding the acceptable power of the yacht.
- → control the need for periodic inspection of the engine. Failure to comply with them may threaten the safety of the user and the yacht.

**⚠ WARNING**

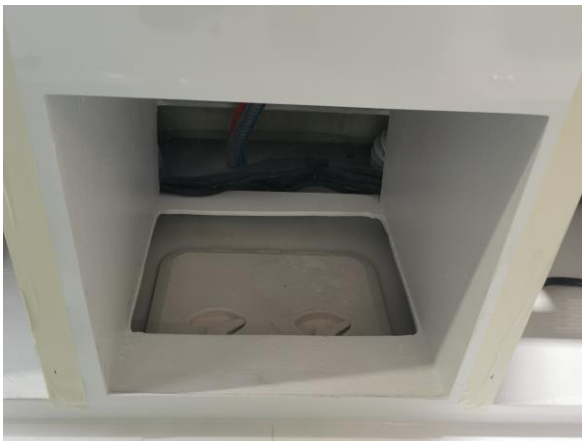
Before cruises:

- → make sure you know how to stop the engine quickly in an emergency,
- → familiarize yourself with the operation of all controls,
- → start the engine and make sure that it works properly,
- → do not let an unauthorized person control the yacht,
- → do not let the engine run if there are people in the water not far from the yacht,
- → attach the emergency ignition cable to the wrist,
- → do not use the outboard engine with its cover removed. Exposed moving parts can cause injuries.

do not disassemble or remove any covers, markings, discs, covers or other safety devices that have been fitted for your safety.

If it is necessary to stop the engine in an emergency, if it is impossible from the control station, the engine can be stopped by cutting off the fuel supply. The valves should be re-opened after the fault has been rectified.

Fuel shut-off valves are located under the floor of the galley.



**⚠ WARNING** Periodically, at least once a year, the engine cooling system, including the outboard water filter, should be inspected.

## 7.1 ENGINE PROPELLER

The applied original driving screw is adapted to the type of craft and regular working rotatory speed.
Standard: 3X15-1/4 X19-T

**⚠ DANGER**

Remember that:
The propeller of each of the engines is below the hull keel.
The lowest point of the engine spur is about 30 cm below the hull keel.

**⚠ WARNING** Approaching a shallow shore, especially astern, may damage the propeller.

The information displayed on the depth sensor installed on the yacht, depending on the model of the sensor, shows the depth under the hull at the stern or in the middle of the yacht. Depth control based on device readings does not prevent the craft from contacting the bottom or underwater obstacles.

**⚠ WARNING**

Maintenance instructions

When operating and maintaining the propeller, be sure to follow the engine operating instructions provided by the engine manufacturer and provided with the yacht Owner's manual.

Before winter storage, the driving screw should be cleaned from any growths and precisely checked. In case of deformations, humps or jags, it should be fixed. Then, the driving screw should be trimmed again.

**⚠ WARNING**

Remember that the motor propeller is a moving element and there is a high risk of objects in the water, such as ropes, nets, etc., winding up on the propeller

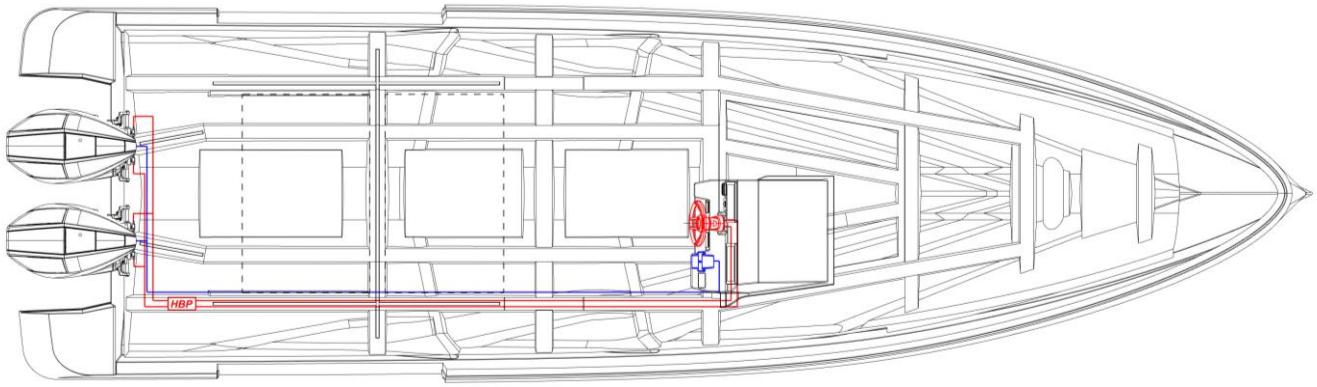
# 8 YACHT STEERING SYSTEM

The yacht is controlled by a steering wheel with a gear placed on the console in the yacht's cockpit.

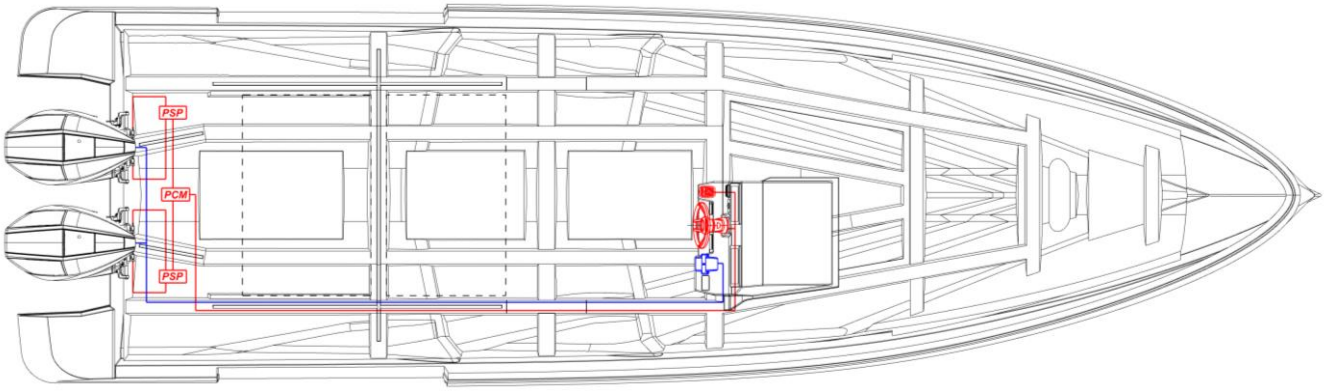
Steering with an engine is regulated with the engine throttle, which is placed on the right side in cockpit.


*Hydraulic steering system (basic version):*

*blue: gas, gear - electric control*
*red: hydraulic lines, power steering hydraulic pump,*
*HBP – power steering hydraulic pump*




*Hydraulic steering system with Optimus(Honda) system:*
*blue: gas, gear - electric control*
*red: hydraulic lines, hydraulic pump, electric control lines*
*PSP - engine control hydraulic pump*
*PCM - pump controller*




The steering wheel with the hydraulic pump is connected by two hoses to the cylinder.

The rotation of the steering wheel activates the hydraulic system of the actuator connected to the steering arm.
The hydraulic control system consists of:

→ Steering wheel,
→ Hydraulic transmission,
→ Hydraulic hoses,
→ Hydraulic cylinder,
→ The handle of the hydraulic cylinder connected to the rudder arm.

**⚠ WARNING**

Check the safety of connections on the steering wheel and the tightness of the hydraulic system.

It is the user's responsibility to check and adjust the amount and level of oil in the steering hydraulic system. Depending on the air temperature, the hydraulic oil may increase in volume and flow out through the safety valve.

The manufacturer and distributor are not responsible for oil contamination caused by leakage through the safety valve of the hydraulic system. Check that the hydraulic hoses run freely and are not kinked.

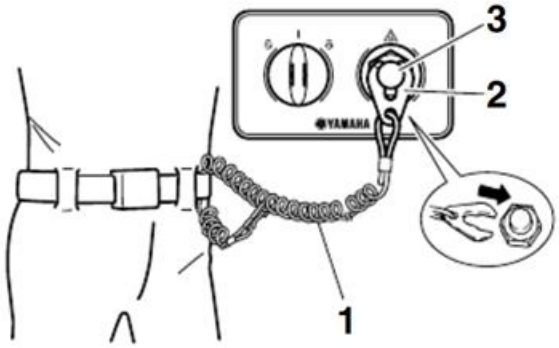
## Engine starting

1. Turn on the engine battery main switches,
2. Turn on the main switch of the life batteries,
3. Place the throttle in position N,
4. Open the fuel valve,
5. Put on the lanyard
6. Activate the engine panel with the key or button, depending on the engine model,
7. Start the engine with the START button.

*ignition switch*


*engine switch*

**Remember:**
must be attached to the helmsman (his belt, arm or leg) on one end and to the lanyard ignition switch on the other. The ignition switch panel is located next to the handle. The lanyard stop switch shuts off the engine if the helmsman moves too far from the steering position



to press the switch, e.g. if he accidentally falls overboard or if he moves too far from the steering position.

**⚠ WARNING** If the helmsman falls out of the boat, shutting down the engine immediately will greatly reduce the risk of injury or death in the event of being hit by a speeding craft.

Trimming. Changing the angle of the motor.


The switch(s) is used to change the angle of inclination of the outboard motor.
Changing the angle of inclination of the motor allows you to avoid its damage when approaching shallow shores and when transporting the boat.
We recommend keeping the motor in an upright position while cruising.

**⚠ WARNING** Please use the trim function only in justified cases, e.g. to clean the propeller from algae or other elements that accidentally got stuck in it.
The user is obliged to visually check the lifting height. The manufacturer and distributor are not responsible for any damages.

**⚠ WARNING** Before tilting the engines, raise the engine bay hatch.
Failure to do so will damage the engine cover and hatch.

Remote Control / Throttle. Changing the direction of rotation and the number of revolutions of the propeller.


The control handle has a neutral button(throttle only), which allows you to run and heat the engine before switching gears.
At the same time they have a standard safety switch that prevents starting the engine when gear is selected F/R.

The throttle installed on the helmsman's right hand is used to:
→ change the direction of driving screw rotation,
→ increase or decrease the engine rotations,

Make sure the throttle is in the neutral (N) position before starting the engine.

F - forward position: Shifting the lever from N to F will shift the vehicle into gear and the boat will slowly move forward.

N - neutral position: this is the safe position of the handle for starting the engine. In this position, the gearbox is disengaged and the engine will run at minimum speed.

R - Reverse position: Shifting the handle from N to R will shift the vehicle into gear and the boat will slowly reverse.

Fmax - position of maximum forward rotation of the engine: shifting the handle position from F to Fmax will cause the engine revolutions to increase gradually with speed. The Fmax position determines the maximum number of turns.


Rmax - position of maximum revolutions of the engine backwards: shifting the handle position from R to Rmax will cause the engine revolutions to increase gradually with speed. The Rmax position determines the maximum number of reverse turns.

**⚠ WARNING**

Remember, the steering system is not automatic. While steering the yacht, pay attention to:

→ engine work,
→ propeller power,
→ wave height,
→ direction and the strength of wind,
→ speed of yacht

*Field of Vision from helm position*

**⚠ WARNING**

For safety reasons, a helmsman of a boat should pay particular attention to:

→ angle trim of engine,
→ weight of load and its location,
→ speed,
→ sudden acceleration,
→ state of water area,
→ weather conditions, such as: rain, drizzle, fog,
→ lighting of a boat at dusk and night,
→ people and moveable elements around the steering area

## 8.1 BOW THRUSTER

The yacht have option to be equipped with a bow thruster.

The bow thruster mounted in the bow part of the yacht greatly facilitates maneuvering the yacht in the port.
Near of the thruster, is a thruster battery.

**The thruster is controlled by a joystick on the control console in the cockpit.**

To activate the thruster joystick, hold both buttons left and right and press the on button, the indicator light will turn on - the joystick is ready for use.

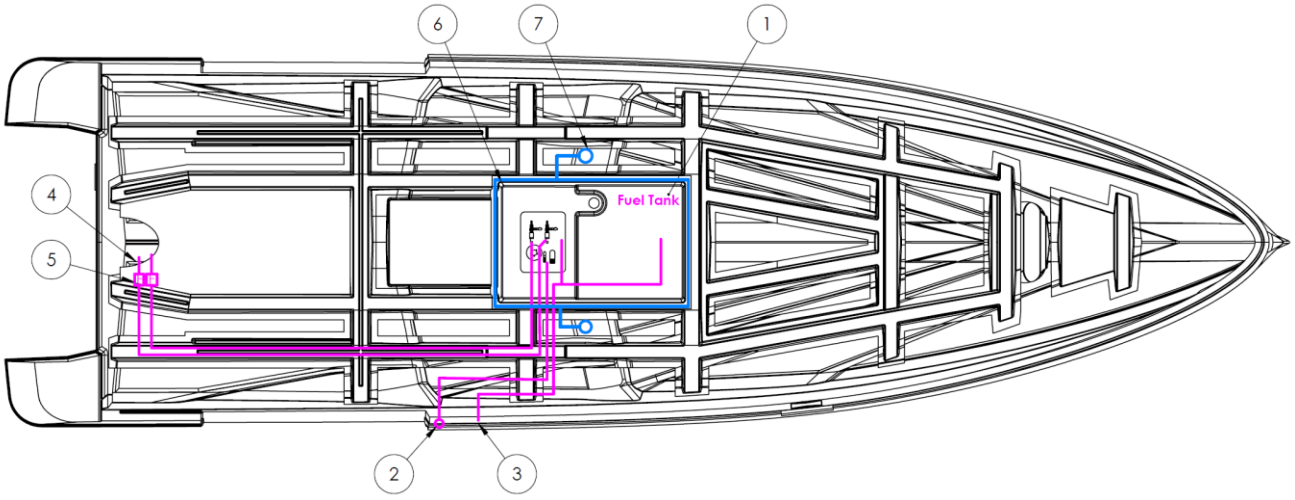
After swimming, deactivate the joystick by pressing the button once, the green light will turn off.

**⚠ DANGER** Do not move the joystick position from port to starboard and vice versa in rapid succession; doing so can damage the electric motor. Protect the bow thruster propeller so that no rope or other items can become entangled in the propeller and damage the propeller.

**⚠ DANGER** Do not use the thruster if there are people swimming or diving in the water, as it generates considerable water suction when operating

# 9 FUEL SYSTEM

The boat is equipped in integral fuel tank, mede of stainless steel capacity 420 L
The fuel tank is placed under the deck in galley/cockpit.
Fuel tank is made according to PN EN ISO 10088 and have sign CE.
Fuel system is done in Perko Technology.




The fuel system consists of:

1. Fuel tank
2. Fuel tank Inlet, with ventilation and EPA fiting
3. P-trap, Perko Ventilation system
4. Engines fuel intakes
5. Fuel filters
6. Fuel Tank Ventilation Chamber
7. Ventilations grids

**⚠ DANGER** Check regularly the fuel installation – minimum twice a year.
When you notice, that the state of fuel installation get worse or damage you should immediately change affected elements.

**⚠ DANGER** Explosion and fire hazard
Never:

→ smoke, or use open fire while fuelling or when you work over the system fuel.
→ use the open fire to check the tightness of fuel tank,
→ keep the fuel or flammable substances in tightly closed compartment,
→ cover the ventilating grids of compartment in which is the fuel tank. They should be open, that vapours of fuel could not gather

**⚠ WARNING** When you detect the leakage of fuel close the fuel valve and repairs system before starting operation.
The fuel system should be repaired by the competent person system.

**⚠ WARNING** Always
Follow to engine manufacturer instruction of service of engine
You guard against by errors and retain full rights to the guarantee.

Fuel shut-off valves are located under the floor of the galley.

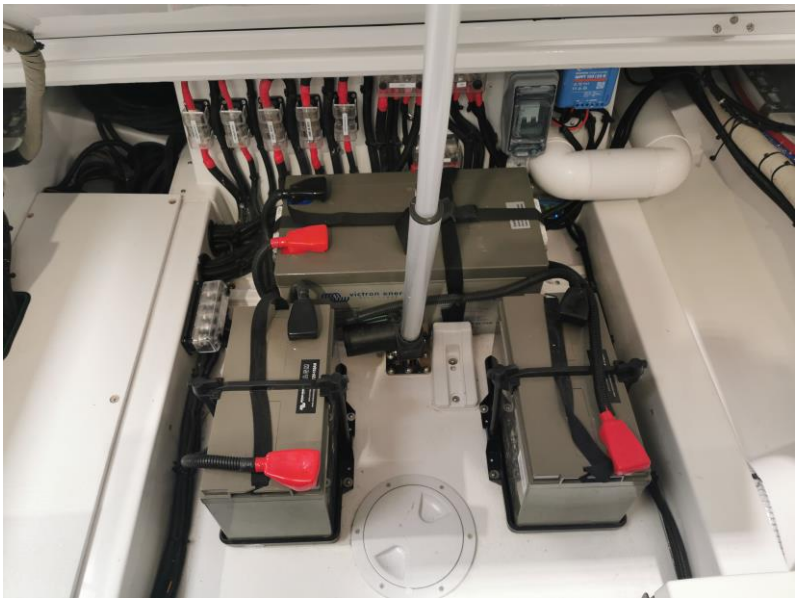
# 10 ELECTRIC INSTALATION

The yacht is equipped with electric installation of direct current = 12V and (optionally) electric installation of alternating current ≈ 230V.

## 10.1 DIRECT CURRENT

All receivers are powered by a 12 V DC network.
The yacht is equipped with batteries and main power switches, as shown in the diagram below.


The main battery switches are located in the cabin, on the dashboard panel.



The main source of energy for the yacht are GEL batteries with the following capacities:

→ engine battery 2 x 110 Ah;
→ home battery 1 x 265 Ah;
→ bow thruster 1 x 110 Ah.

The capacity of the batteries on the yacht and their number is matched to the equipment.

The batteries are located under the front aft sofa under technical hatch.

**⚠ WARNING** Before sailing, check the battery level, which can be read from the electronic battery charge panel.
The use of batteries other than maintenance-free (GEL) batteries is prohibited.

**⚠ WARNING** <u>Always:</u>

→ check the battery and its charge level before starting sailing,
→ during longer stays of the yacht in the marina, the batteries should be recharged regularly,
→ remove the battery from the yacht before wintering the yacht or before a long period in which the yacht will not be used, at the same time make sure that the batteries are regularly charged during wintering.

.

Fuses

The fuses are located in the first technical compartment. The fuse description is located under the fuses. In case of failure, open the electrical switchboard cabinet and replace the blown fuse according to the specified value. If the fuse blows again, find and remove the cause of the short circuit or call in a professional (electrician).

**⚠ WARNING**

Never:

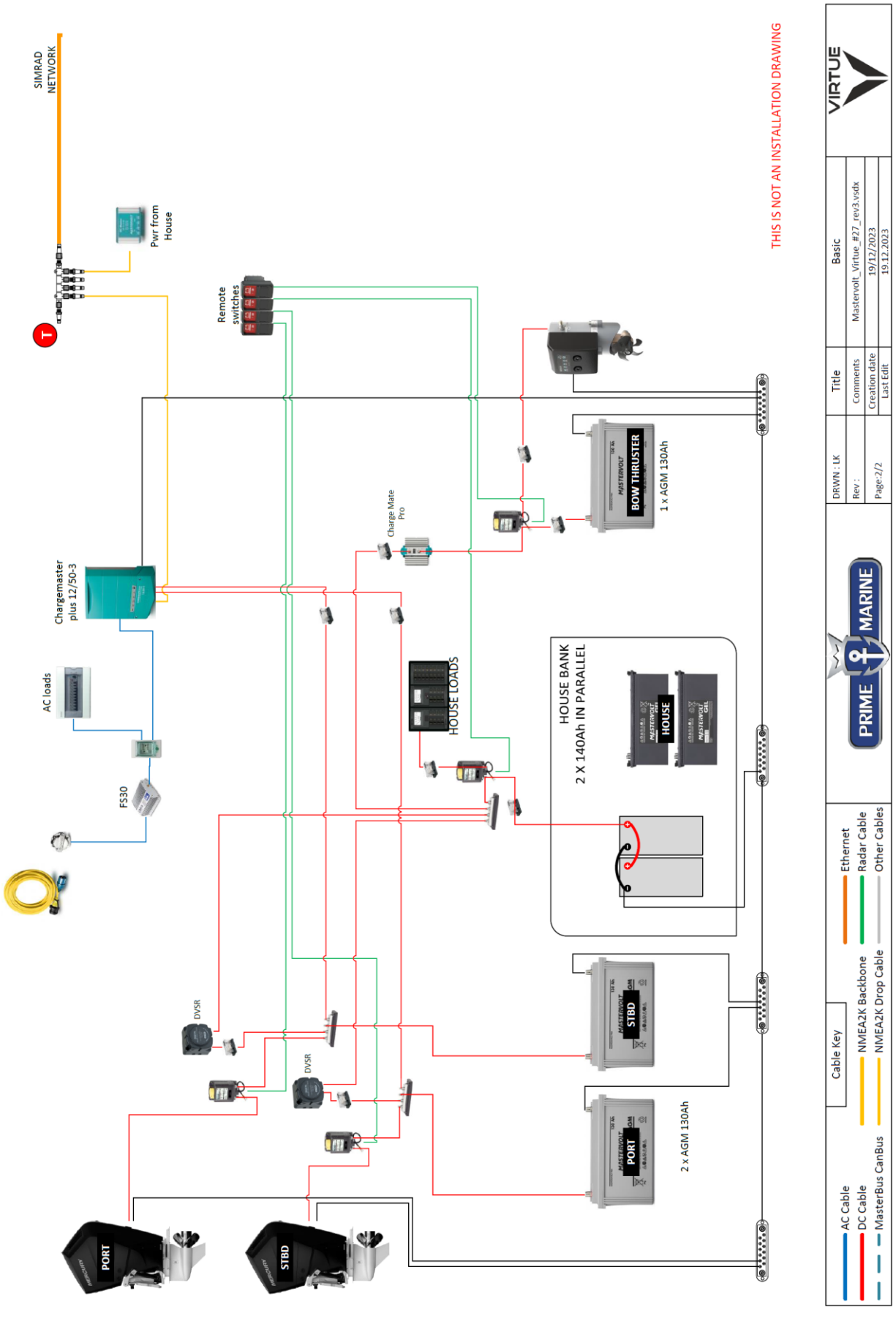
→ work on the live electric installation,
→ never open a live electrical switchboard, as it may cause a short circuit of live parts.
→ modify the craft's electric system or relevant schemes; any modifications and maintenance should be performed by a qualified marine electric technician,
→ leave the yacht unattended with the working electric system.
→ turn main switches off when boat isn´t in use

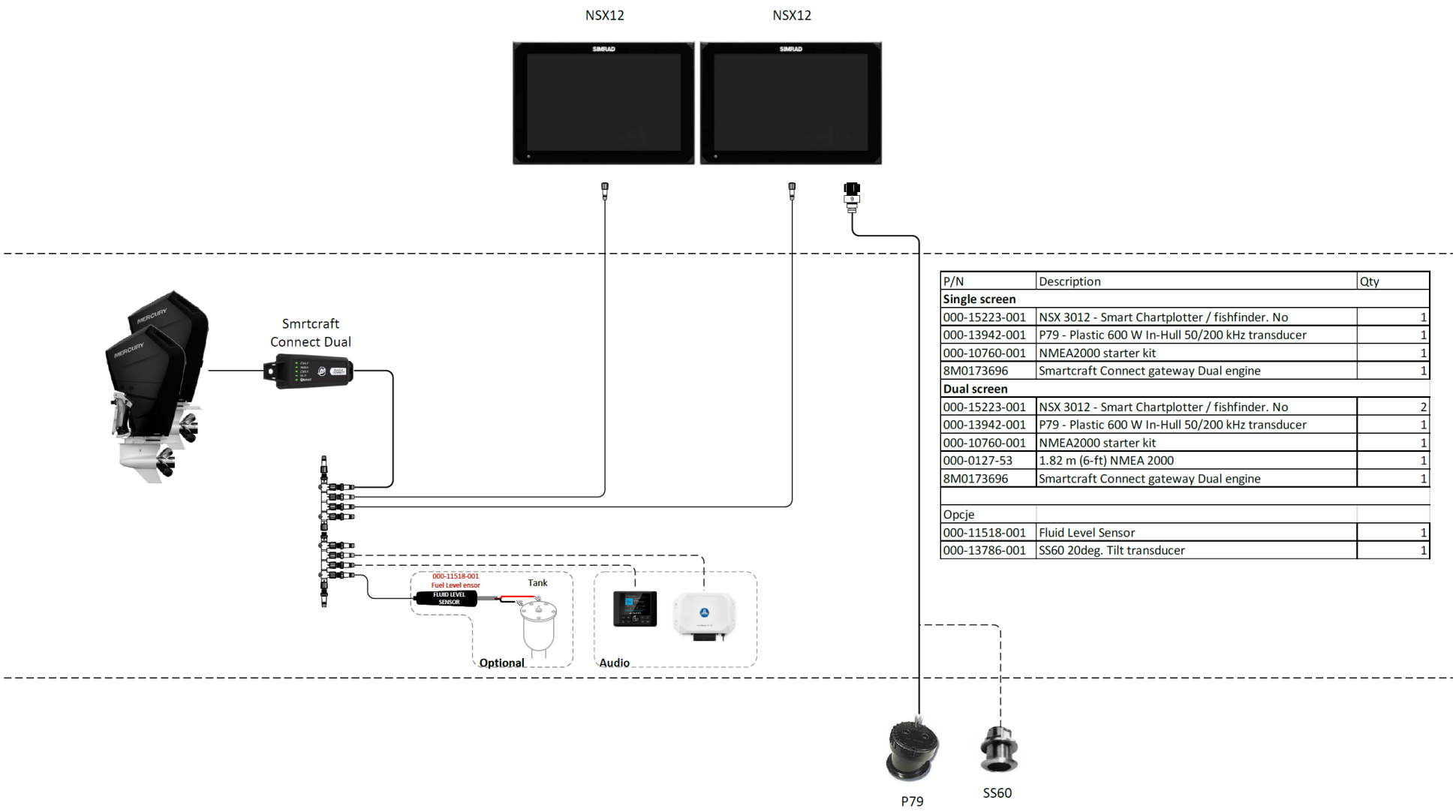
**⚠ WARNING**

Turn main switches off when boat isn´t in use.
Turn engine off before turn main switches off.

## Electrical installation scheme*

*) The electrical installation diagram depends on the equipment ordered by the customer.

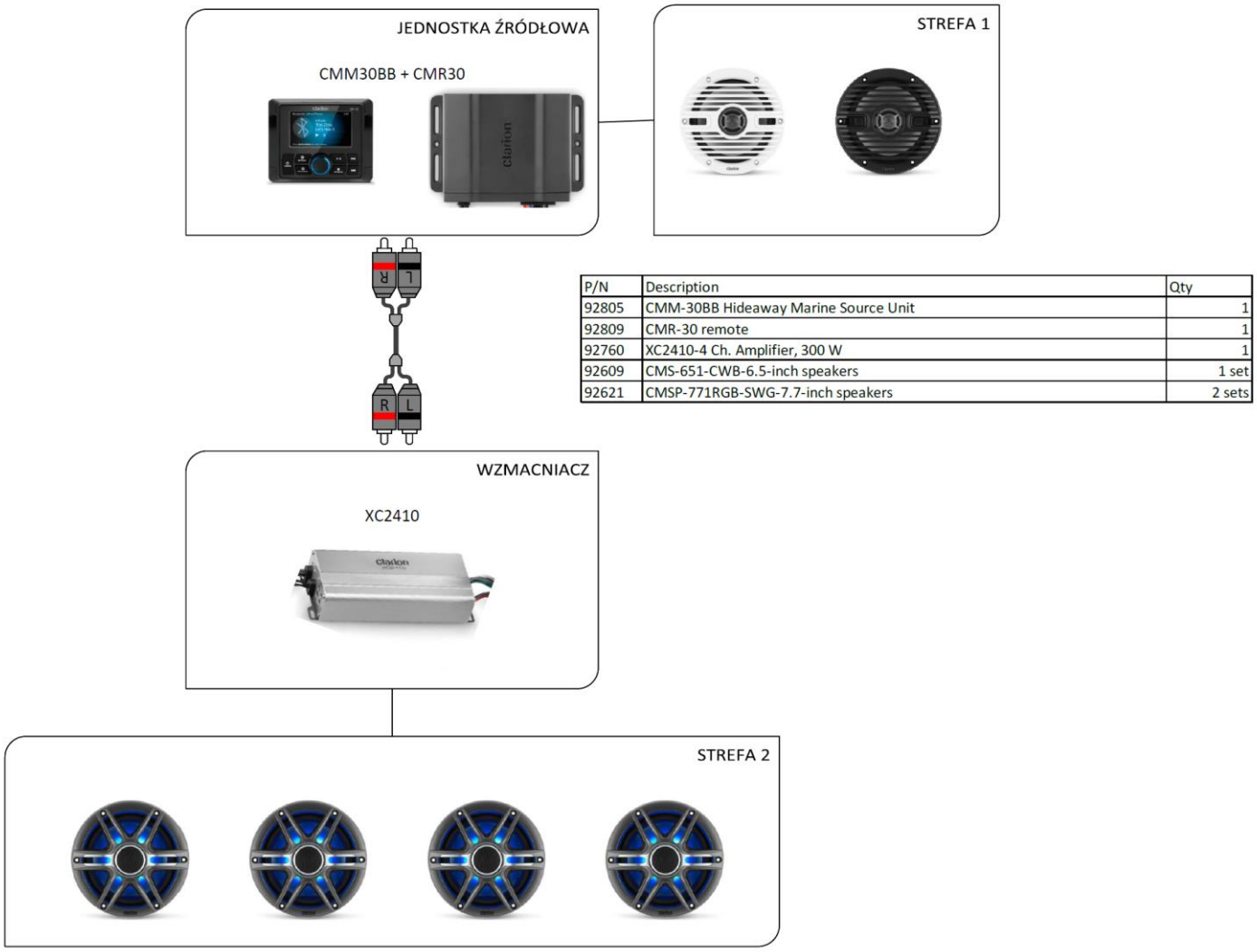





| P/N | Description | Qty |
|---|---|---|
| **Single screen** | | |
| 000-15223-001 | NSX 3012 - Smart Chartplotter / fishfinder. No | 1 |
| 000-13942-001 | P79 - Plastic 600 W In-Hull 50/200 kHz transducer | 1 |
| 000-10760-001 | NMEA2000 starter kit | 1 |
| 8M0173696 | Smartcraft Connect gateway Dual engine | 1 |
| **Dual screen** | | |
| 000-15223-001 | NSX 3012 - Smart Chartplotter / fishfinder. No | 2 |
| 000-13942-001 | P79 - Plastic 600 W In-Hull 50/200 kHz transducer | 1 |
| 000-10760-001 | NMEA2000 starter kit | 1 |
| 000-0127-53 | 1.82 m (6-ft) NMEA 2000 | 1 |
| 8M0173696 | Smartcraft Connect gateway Dual engine | 1 |
| | | |
| Opcje | | |
| 000-11518-001 | Fluid Level Sensor | 1 |
| 000-13786-001 | SS60 20deg. Tilt transducer | 1 |

| | | | | |
|---|---|---|---|---|
| SIMRAD | DRWN : LK | Title | Strona 2 | VIRTUE |
| | Rev : draft | Comments | Simrad.vsdx | |
| | Page:2/2 | Creation date | 09/12/2023 | |
| | | Last Edit | 9.12.2023 | |

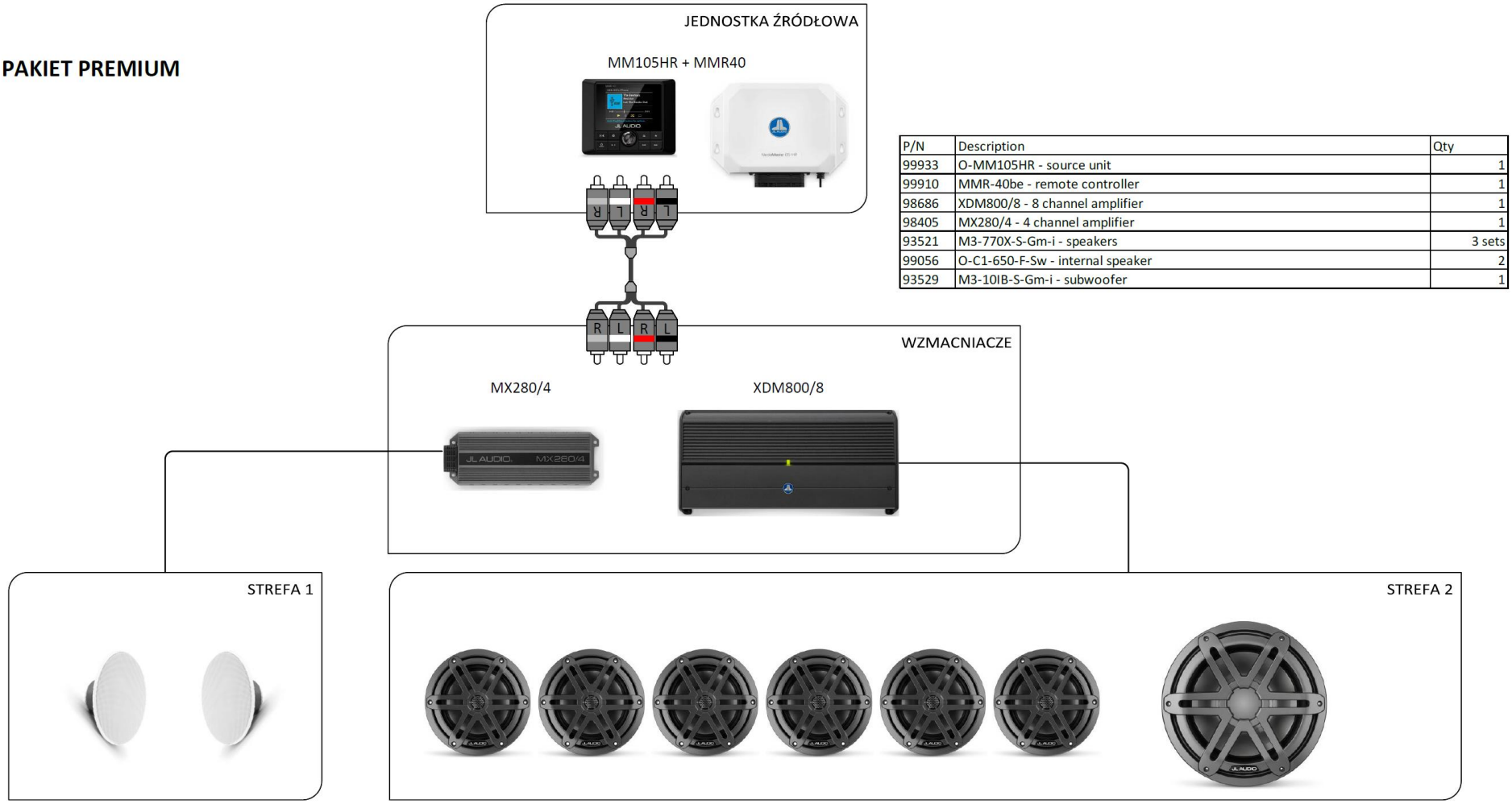
## PAKIET BASIC




| P/N | Description | Qty |
|---|---|---|
| 92805 | CMM-30BB Hideaway Marine Source Unit | 1 |
| 92809 | CMR-30 remote | 1 |
| 92760 | XC2410-4 Ch. Amplifier, 300 W | 1 |
| 92609 | CMS-651-CWB-6.5-inch speakers | 1 set |
| 92621 | CMSP-771RGB-SWG-7.7-inch speakers | 2 sets |

| | | | | |
|---|---|---|---|---|
| clarion MARINE AUDIO | DRWN : LK | Title | Strona 2 | VIRTUE |
| | Rev : draft | Comments | JL_Audio_Virtue.vsdx | |
| | Page:2/4 | Creation date | 08/12/2023 | |
| | | Last Edit | 8.12.2023 | |

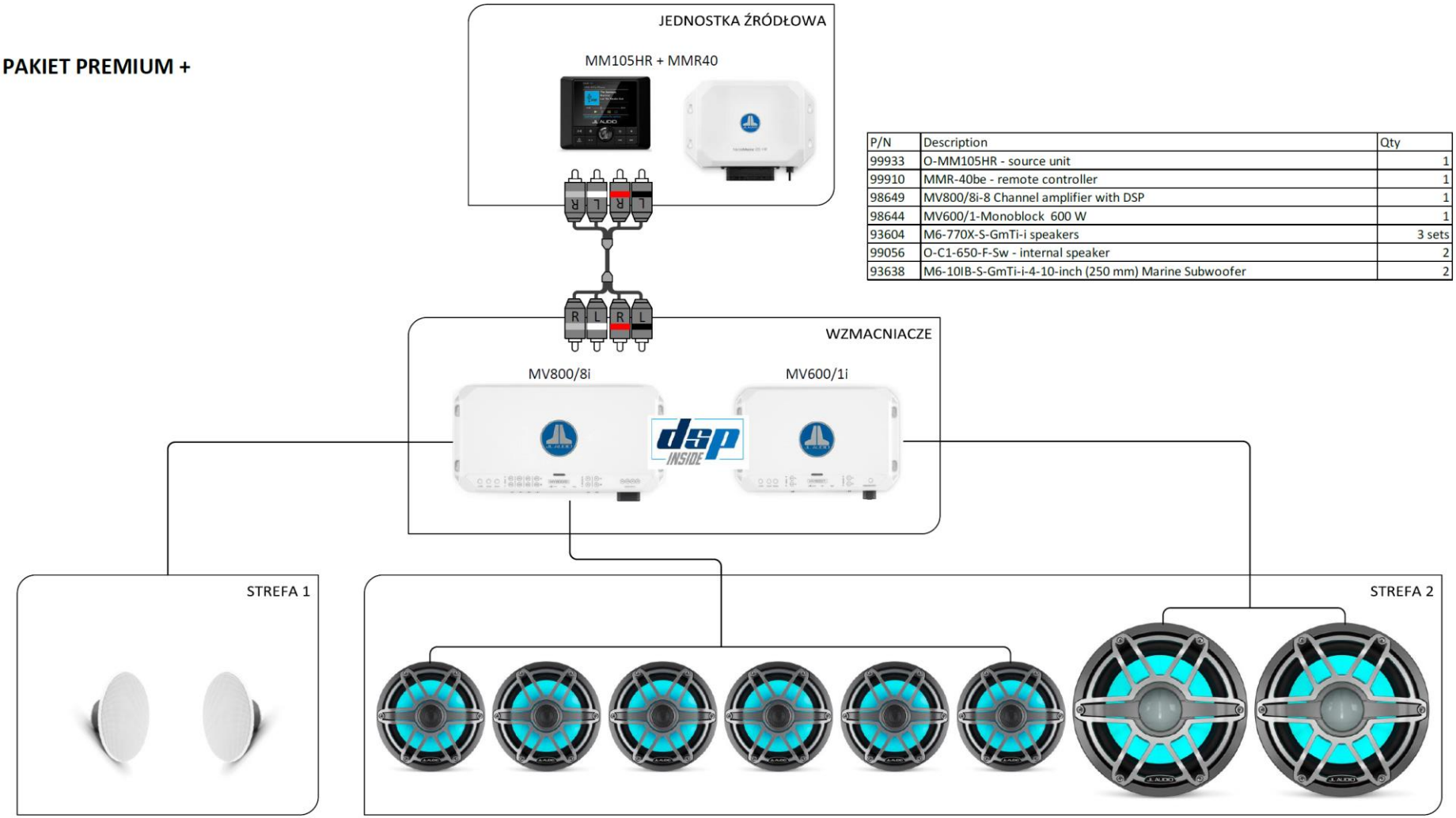
## PAKIET PREMIUM




| P/N | Description | Qty |
|---|---|---|
| 99933 | O-MM105HR - source unit | 1 |
| 99910 | MMR-40be - remote controller | 1 |
| 98686 | XDM800/8 - 8 channel amplifier | 1 |
| 98405 | MX280/4 - 4 channel amplifier | 1 |
| 93521 | M3-770X-S-Gm-i - speakers | 3 sets |
| 99056 | O-C1-650-F-Sw - internal speaker | 2 |
| 93529 | M3-10IB-S-Gm-i - subwoofer | 1 |

| | | | | |
|---|---|---|---|---|
| JL AUDIO | DRWN : LK | Title | Strona 3 | VIRTUE |
| | Rev : draft | Comments | JL_Audio_Virtue.vsdx | |
| | Page:3/4 | Creation date | 08/12/2023 | |
| | | Last Edit | 8.12.2023 | |

## PAKIET PREMIUM +




| P/N | Description | Qty |
|---|---|---|
| 99933 | O-MM105HR - source unit | 1 |
| 99910 | MMR-40be - remote controller | 1 |
| 98649 | MV800/8i-8 Channel amplifier with DSP | 1 |
| 98644 | MV600/1-Monoblock 600 W | 1 |
| 93604 | M6-770X-S-GmTi-i speakers | 3 sets |
| 99056 | O-C1-650-F-Sw - internal speaker | 2 |
| 93638 | M6-10IB-S-GmTi-i-4-10-inch (250 mm) Marine Subwoofer | 2 |

| | | | | |
|---|---|---|---|---|
| JL AUDIO | DRWN : LK | Title | Strona 6 | VIRTUE |
| | Rev : draft | Comments | JL_Audio_Virtue.vsdx | |
| | Page:4/4 | Creation date | 08/12/2023 | |
| | | Last Edit | 8.12.2023 | |

**⚠ DANGER** Remember to turn off the main power switch before starting any service work!

## 10.2 ALTERNATING CURRENT INSTALLATION 230V

The yacht is equipped with a shore socket that allows you to power the network while the yacht is in the port.

The shore charging socket is located at the stern. Charging takes place via a cable with a three-pole plug. The main consumers of energy supplied by the socket are: batteries - charging them, and 230 V sockets.

In addition, the customer can choose one of the converters, which are also in the order options, to have 230V in addition to connection at the port.

Depending on the installed power plug in the port, it may be necessary to use a converter that is not part of the yacht's equipment.
Before mooring and connecting the power supply, make sure you have a suitable 230V converter, if necessary.

The order of connecting the yacht to the onshore alternating current network:

1. Connect one end of the power cord to the stern socket,
2. Connect the other plug of the power cord to the pole with sockets on the shore,
3. Turn on the residual current protection,
4. Turn on the other fuses of the devices you intend to use.

Note: connection in the port should be done with the receivers switched off.

The order of disconnecting the yacht from the AC shore network:

1. Switch off the main residual current device and device fuses,
2. Disconnect the plug from the terminal block with sockets on the shore,
3. Remove the other end plug from the aft socket.

Note: disconnection in the port should be done with the receivers turned off.

**⚠ WARNING** The shore-power cable should be connected firstly to the socket on a yacht, and then on land. While disconnecting, start from the jetty.
The shore-power cable cannot be dipped in water, and connections should be safe from rainfalls and moisture.

**⚠ DANGER** Regularly check the cable for mechanical damage. If a damaged cable is immersed in water, it may cause an electrical short circuit and electric shock.

**⚠ CAUTION** Do not use the 230V installation for heating purposes

The shore charging system is equipped with a residual current device, i.e. a device used to protect against electric shock. 230V overload and short-circuit automatic fuses are used to protect circuits against short-circuit.

**⚠ WARNING**

Never:

→ work on the live electric installation,
→ disconnect shore-power connection when the electric installation is in use,
→ allow the shore-power cable to hang in water – it can cause an electric field which can lead to current paralysis to some nearby swimmers,
→ modify the craft's electric system or relevant schemes; any modifications and maintenance should be performed by a qualified marine electric technician,
→ leave the yacht unattended with the working electric system.

**⚠ CAUTION** Do not charge battery directly when they are connected to electrical installation.
If needed to charge them separately, disconnect them before charging.

## 10.3 ELECTRICAL ENERGY RECEIVERS

Main switch of battery.
It turns the electric circuits on or off in the case of emergency.
Depending on the circuit energized, your yacht may have multiple battery circuit breakers.


Navigation lights.
Navigation lighting is the same as positional lamps, which is: side lights, stern light, engine light, top light. They have to be switched on (in accordance with the right of road) at night when the boat moves or when it stands on anchor.

**⚠ DANGER** Never operate the yacht at night or in poor visibility without the proper lighting. Turned on proper navigation lights in accordance with COLREG protect you and the yacht.

**⚠ CAUTION** Check proper working of navigation lights before sailing and make sure that the boat has always a spare bulb of the same power.

### Fuel gauge

The fuel level in the tank can be read form the plotter on the control station.
Gauge indicates the amount of fuel tank in Liters. The exactitude of indication depends from position of boat.

### Plotter/navigation

It is used for navigation and indicates the sailing course.

### Bilge pump switch

Controls the operation of the bilge pump by turning it on or off. The bilge pump will turn on automatically if the water level in the bilge is exceeded. Use the manual switch to pump out the rest of the water if the automatic pump does not pump out to the minimum level.

### Power socket / USB

It allows you to connect devices with a low rated voltage, e.g. a mobile phone. In the electrical diagrams of a yacht, depending on the installed equipment, there is a max. load power of the circuits and do not connect devices with greater power.

### Macerator pump

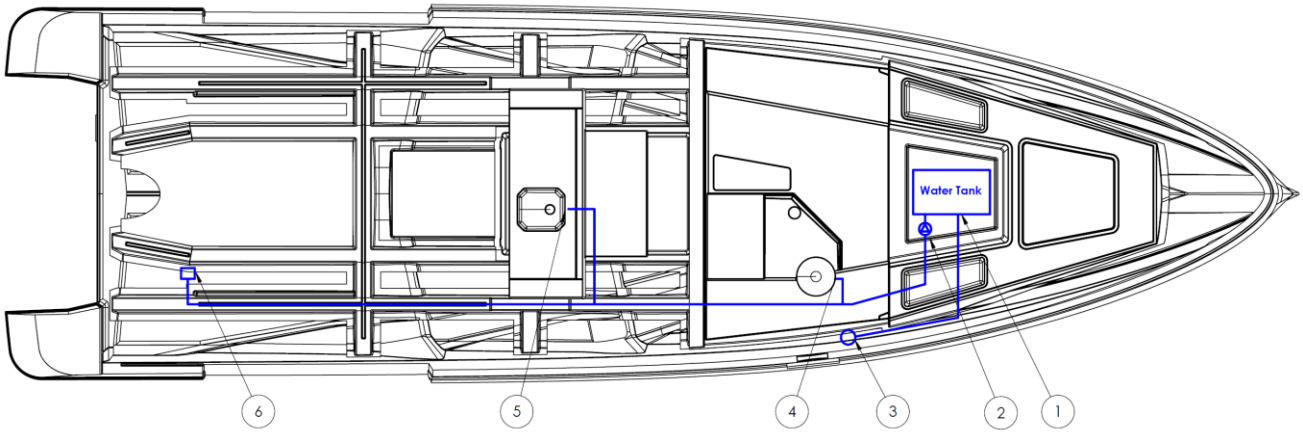
pumps and discharges faeces outside the boat through a valve in the hull (provided that it is in accordance with the water law of the water body).

# 11 WATER AND SANITARY SYSTEM

## 11.1 WATER SYSTEM

The yacht is equipped with a water tank with a capacity of approx. 60 L located in the forepeak, under the mattresses in the cabin.
The fill valve on the deck with a diameter of 38 mm supplies water through a pipe of the same diameter to the tank located under the berth.

Installation of water has been made of materials resistant to water and high temperatures.
All connections guarantee the required leak tightness.




### Fresh cold water

**Water installation including:**

1. Water Tank
2. Pump
3. Water Tank inlet
4. Tap in Bathroom
5. Tap in Galley
6. Deck Shower

**Water pumps**

The pressure water pump is located in the forepeak of the yacht (an inspection hatch in the forepeak under the bed). It is used to pump water from the tank to the taps in the galley and toilet. The pressure pump is interrupted by closing the tap.

**⚠ CAUTION**

When the water in the tank runs out, the water pump starts to run at increased speed, it does not turn off and air flows from the tap.
As soon as such symptoms occur, switch off the pump immediately using the button on the electrical panel.
Running the pump without water may damage it.

**⚠ WARNING**

Before each winter season the yacht should be disposed of whole water installation and dismantle a pressurized water pump.

**⚠ WARNING**

Before each summer season check connections and leak tightness of water installation.
BEFORE SUMMER SEASON FLUSH WATER INSTALLATION WITH CLEAN WATER WITH DISINFECTANTS.
Water in tank is not potable water.

### Shower deck / Deck wash kit

The deck shower is located aft on the starboard side.
The deck shower is supplied with water from a tank.

To use the deck shower, turn on the water pump on the electrical panel, then pull the shower out of its socket and press the valve.
If no water is running, check the water pump switch on the electrical panel / instrument panel.

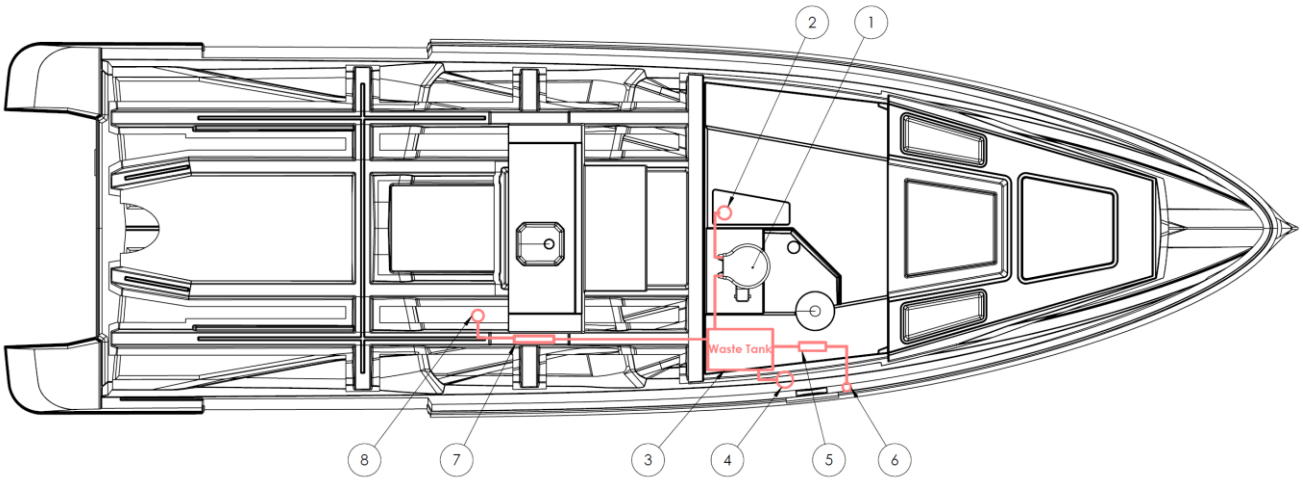
## 11.2 SANITARY SYSTEM

The yacht is equipped with a full sanitary installation with an electric sea toilet and a container for faeces.

The rules of its use and maintenance are described in the manual book of WC manufacturer.

Do not throw into the toilet items such as paper, tissues, disposable towels, they will damage and block the toilet components. Special yacht toilet paper is allowed.

The yacht has been equipped with a sanitary installation according to the following scheme:




Water installation including:

1. Electrical Toilet
2. Fresh Water Intake with Valve
3. Waste Tank
4. Waste Tank Outlet
5. Carbon Filter
6. Air Vent
7. Macerator
8. Macerator Outlet with Valve

**⚠ CAUTION** Before using the toilet make sure it is open water intake valve.

After using the toilet close water intake valve.

Marine electric toilets are equipped with separate water pumps that allow the suction of seawater through the bottom passages.
Cyclic attention should be paid to the patency of the bottom passages / water filters, which are outboard water intakes for the toilet.

**⚠ CAUTION** Use the sea toilet only during sailing (when the boat is on the water).

## 11.3 WASTE TANK

The yacht has a complete sanitary installation system, a waste tank with a capacity of 60 L is installed.
The tank can be emptied by sucking the waste out of the tank through the port plug using a vacuum method, the so-called WASTE connection or by tipping the debris overboard by moving the seacock lever and use of macerator, **but this can ONLY be 12 nautical miles from the shore. (see local regulations)**
**The Waste tank in navigable inland waters should not be emptied.**

The WASTE connection is located next to the fresh water filler, on the starboard half-deck next to the toilet window and is marked with a pictogram as in the photo.

**⚠ WARNING**

**NEVER dispose of waste in inland waters.**
**To discharge overboard is PROHIBITED in inland waters.**
Removal of waste on inland routes should take place **ONLY** in designated places on land.
There are many harbors that are prepared to collect waste.

**⚠ WARNING**

**When you use the toilet you must control the filling of black water.**

In case of full black waste water tank, it must be emptied as soon as possible through the hole at the bottom in sea or through the waste tank outlet on the deck in port.

Using fresh water tank with a fully filled waste tank may damage the water system and flood the yacht.

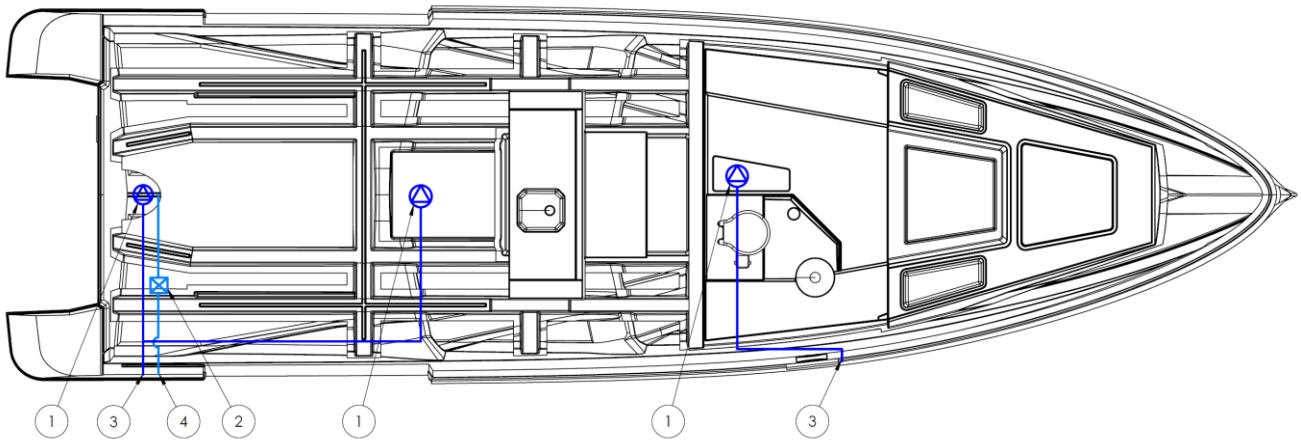
**⚠ CAUTION**

The construction of the faeces tank is made of plastic.
**It is forbidden to use strong cleaning agents, e.g. "mole".**
Strong corrosive substances can damage the construction of the faeces/waste tank.

The installation of the waste tank is equipped with a carbon filter, which is mounted on the tank's vent line. The filter is to eliminate the unpleasant odour that comes out of the vent pipe of the tank.
**Regularly pay attention to the operation of the filter and replace the carbon cartridge.**

# 12 BILGE INSTALLATION

The yacht is equipped with a double bilge drying system: the first one dries the aft peak, the second one consists of two pumps and dries the fore and middle parts of the yacht.




Water installation including:

1. Automatic bilge pump
2. Manual bilge pump
3. Automatic bilge pump outlet
4. Manual bilge pump outlet


The installed pumps with a capacity of approx. 2100 liters of water per hour 35 L water per minute . The bilge pumps can start their work automatically after the float switch located at the pump suction baskets is activated by the water inside the yacht or, if necessary, they can be turned on from the steering position.

Each time the bilge pump is turned on, the reason for the presence of water in the bilge should be checked.

**⚠ WARNING** Installed bilge installation is not intended to dry the damaged yacht.

Before each cruise, check the water level in the bilges.
Before each season check the state of connections and the tightness of bilge installation.
Check in regularly the work of the bilge pump.
Regularly remove dirt from inlet of sucking bilge pump basket.
Never use the flammable solvents to cleaning of bilge.

# 13 FIRE PROTECTION

The outbreak of fire and water flooding are the greatest danger for every vessel.

**The owner or person using the yacht is obliged to:**

→ equipment with extinguishing agents: a fire extinguisher and a fire blanket.

→ informing the crew about:

- a place for storing fire extinguishers and a fire blanket,
- how to use a fire extinguisher and a fire blanket,
- escape routes.

→ checking the serviceability of fire extinguishing equipment at regular intervals or in the case of recent use.

On the yacht requires the use of 2 ABC-type extinguishers that meet the requirements of European Standard EN3 and PED Safety Directive 2014/68 / EU, and certified fire blanket.
The extinguishing efficiency of fire extinguishers must not be less than 8A / 68B

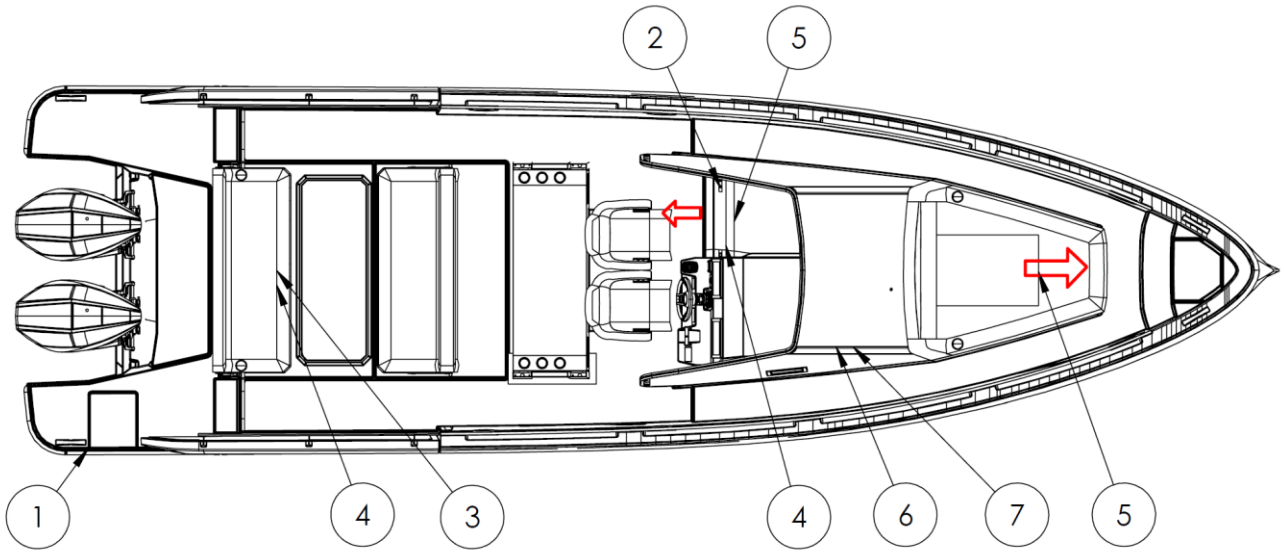
**Fire extinguishers are located: 1 under the stairs and 1 in the stern locker.**

**⚠ CAUTION**

**Please follow these rules:**

→ do not block emergency exits,
→ do not block the access to hand-operated fire extinguishers,
→ do not use gas lamps on the boat
→ do not smoke in the vicinity of fuel or gas,
→ do not replace any elements of safety equipment, such as: fuel valve, switches of electrical installation
→ do not leave the boat unattended with the heating and cooker on,
→ do not change anything on the boat (especially in the electrical and cooker installations),
→ keep bilge in order and check regularly if there is any fuel or gas leakage.

## 13.1 SAFETY FEATURES AND LOCATION OF SAFETY EQUIPMENT




1. Swim ladder
2. Main switch panel
3. Place for fire blanket (not included)
4. Fire extinguisher
5. Emergency exit
6. **Place of the carbon monoxide detector (CO)**
7. **Place of the fire alarm (smoke alarm)**

## 13.2 IN CASE OF FIRE

Operation case of fire

**⚠ WARNING** A fire on board can easily lead to explosion. Act quickly!

1. Turn off all the power sources:
   - Turn off the engine and all the main switches
   - If the boat is connected to shore-side electricity, unhook the cable
2. Make sure everyone on board is wearing a personal floatation device
3. Use the fire extinguisher or a fire blanket to put down the fire
4. If the fire starts to get out of control, evacuate the boat to save lives
5. If needed, call for help using a distress signal device.

**⚠ WARNING** DO NOT USE WATER!!!

If the fire gets in touch with the engine fuel, water can spread the fire and cause an explosion

# 14 ANCHORING, MOORING AND TOWING

The owner of a yacht / helmsman is responsible for equipping the boat with an anchor, anchor chain / anchor rope, mooring and towing lines ready to use.
The owner of a yacht / the helmsman should keep in mind all the important activities necessary to tow in a safe way.

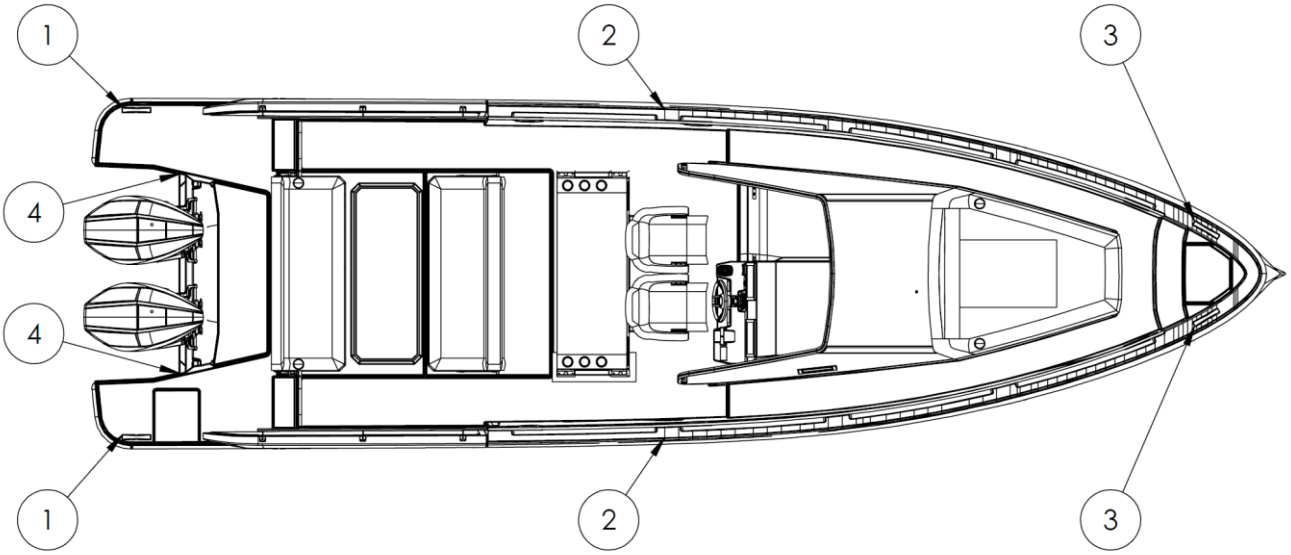
## 14.1 ANCHORAGE EQUIPMENT

The basic anchoring equipment of the yacht consist of:
→ anchor: 6 kg
→ anchor chain
Material – Stainless Steel 316
Diameter – 6 mm
Length - 50 m

**⚠ CAUTION** Before sailing helmsman should check if there is an appropriate anchor with a rope or chain. You have to pay attention to have an anchor with rope always ready to use.

## 14.2 MOORING EQUIPMENT. LOCATION OF STRONG POINTS

*Basic equipment included in the optional mooring package of the yacht:*
→ *mooring line:*
*Material - polyamide*
*Diameter - 16mm*
*Length - 2 × 8 m*
*Fenders with cloth – 6 pcs.*




1. Rear cleats
2. Middle cleats
3. Front cleats
4. Stern Eyes

## 14.3 TOWING EQUIPMENT

Before towing, fasten the towing rope to both mooring cleats on a bow. Other places on the yacht are improper to fastening the towing rope.

Recommended basic equipment that the skipper should take care of:

→ towing rope

Material - polyamide
Diameter – 16 mm
Length - 50 m

**⚠ CAUTION** The towing speed should be adapted to the conditions in order to prevent towing forces from damaging the yacht.

# 15 ENVIRONMENTAL PROTECTION

The chapter contains the indispensable information how you should protect the natural environment during sailing, as well from the crew as from the yacht side.
There are strict requirements concerning the respect of natural environment not only in many parts of Europe but also all over the world.
The owner is responsible for the knowledge of valid requirements on the particular sea area and for obeying them.

## 15.1 OIL DERIVATIVES

The leakages of fuel or oil pollutes the environment and poses a danger to wildlife.

**⚠ WARNING** **Never** pour fuel or oil out to water.
It is prohibited and you can be fined for that.

**Treat any oils / oil derivatives as chemical waste.**

**⚠ WARNING** *DO NOT LEAVE FUEL WHILE FILLING THE FUEL TANK.*

**Always**
In case of oil leakage, try to recognize its source as fastest as possible.
Remove oil derivatives wastes (used oils) in a proper way.

**Never**
Overflow fuel tank during its fuelling. All the works concerning the repair of an engine should be performed on land.
Don't take dirty bilge water overboard.
Don't store any rags to wipe oil derivatives or chemical substances. After using a rag, remove it on land according to valid regulations.

## 15.2 SEWAGE AND WASTE REMOVAL

Removing sewages into navigation waters is strictly prohibited among many water areas.

To collect garbage on the yacht, store them in durable bags. Do not throw any waste into the water, including compostable waste. The user of the yacht is responsible for the proper sorting and disposal of garbage.

The user of the yacht is required to know all the valid local rights concerning the removal of liquid sewages into navigation waters.

**⚠ WARNING** If the bilge waters are heavily polluted, avoid the operation of the automatic bilge pump so as not to illegally remove sewage.

Do not remove contaminated bilge water overboard.

Sewage removal should take place in appointed places on land.
Waste should be kept in small durable bags and throw out in appointed places on land.

# 16 CLEANING, MAINTENANCE AND PAINTING

The deck, hull and some interior parts were made of GRP.
To keep the yacht in good condition, wash the GRP Gelcoat surface regularly.
Wash the yacht with clean water with soft detergents, e.g. water with soap.
Do not use abrasive cleaning, solvents, ammonia, chlorine or acetone as these will damage the gel-coat surface.

In extreme cases, special cleaners may be used to remove sea growth or algae from the hull.
Growths and algae can worsen the efficiency of the yacht.
Do not use wire brushes, abrasive paper or paste to remove growths and algae. The arisen scratches may store dirt, growth and algae.
The hull bottom can be painted with anti-fouling.

Before painting the yacht, please consult with the manufacturer which paint is the best.

**⚠ WARNING** Cleaning or washing with solvents can cause the fire, explosion and health problems. Always wear necessary protective clothing while cleaning (gloves, goggles, protective mask).

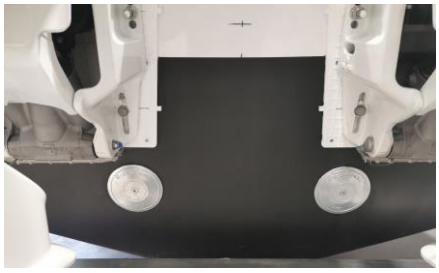
**⚠ CAUTION** Get acquainted with safety code of environment protection before painting the yacht. Get acquainted with suggestions and instructions of using products before you start using them. Follow the instructions of the paints' and varnishes' manufacturer.

## 16.1 UPHOLSTERY

Maintenance
Regular washing with a solution of warm water and mild detergents or automotive vinyl cleaners will protect the upholstery. After cleaning the upholstery, dry it to avoid mold. Upholstery covers should be thoroughly ventilated and sprayed with anti-mold agents.

**⚠ CAUTION** Be careful with household and industrial cleaning agents, they can cause damage and discoloration of the upholstery. Use dry cleaners, solvents, etc. with great care.

## 16.2 ANODES



Anodes are installed to prevent corrosion processes in the metal parts of the yacht underwater. Particularly exposed to corrosion of the laminate yacht is the screw made of metal alloy.
Electrochemical corrosion is a process that leads to the gradual destruction of the surface of metal elements, which consequently affects the safety of navigation.
Therefore, the manufacturer secured the metal elements by mounting anodes on them.

**⚠ WARNING**

You should:

Regularly check and maintain the condition of the anodes installed on the yacht. If they are 50% worn, replace them immediately.

# 17 TRANSPORT, SLIPPING, WINTERING

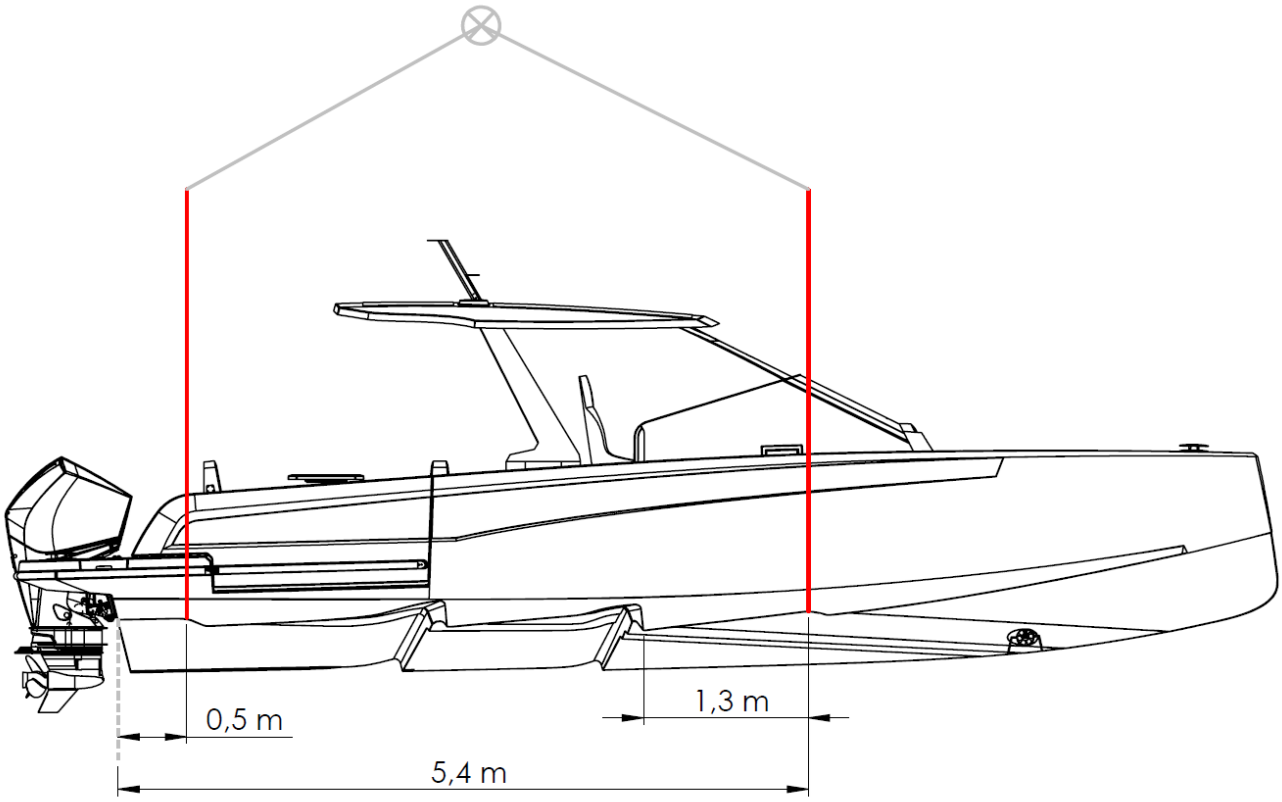
## 17.1 TRANSPORT

### Lifting

During the yacht transportation it is very important to keep the yacht in the horizontal position.

Lifting belts should be in the places appointed with the sign on a hull according to the following drawing.

Depending on the equipment of the yacht, lifting places may change about several centimeters to stern or bow.



Lifting on the traverse.

A traverse is a device that adjusts the straps during lifting so that they are at a certain spacing and do not squeeze the yacht's hull during lifting. Any other solution may cause damage to the hull.

**⚠ CAUTION**

To lift the yacht, it is advisable to use straps and a traverse with a minimum width of 3 m (the width of the boat) or straps and long crane four-point slings.
Lifting with straps without a traverse can cause the hull to be pinched by the straps and deformed, which will deform GRP outside surface and furniture and cause other damage.

**⚠ CAUTION**

Minimum traverse technical data:
- lifting capacity: 4 tons
- span: 3 m,
- height of the traverse from the roof: 2 m

**⚠ DANGER**

People presence under lifted or in yacht neighborhood is strongly prohibited

In order to protect the yacht against uncontrolled movements while being carried by the crane, ropes should be attached to the bow and stern cleats, which would enable steering the yacht when it is in the air.

VIRTUE V 10 must be transported on a truck due to its weight.

It is necessary that the side supports are located in the places of the yacht's bulkheads.

The bow should be tightly seated in the travel stop and held by attaching a tightening straps to bow cleats and stern eyes under platforms. The yacht to the trailer should be fastened with tightening straps.

*You should not carry anything extra on the yacht during its transport on a semi-trailer.*

*Please pay attention to local transport regulations and adjust the gauge to road requirements.*

## 17.2 WINTERING

At the end of the season, the owner of the yacht is responsible for preparing the yacht for wintering. The following tips will keep your yacht in good condition and help prevent nasty surprises in the spring.
The craft should be protected from direct sunlight, rain, snow and frost - freezing water in recesses, gaps, drains can cause a lot of damage. Do not leave the yacht on the water, due to the risk of damage or destruction of the hull by ice, and weather conditions such as low temperature, humidity. The yacht should be wintered on land.

- → We recommend storing the yacht in a closed heated room or at least under a roof/carport. If it is wintered in the open air, it should be covered and stored under tarpaulin (however, remember to ensure air circulation / ventilation under the cover).
- → The yacht should be wintered on a specially prepared "bed" with additional side supports.
- → Remember to always leave the yacht with the bow slightly raised for the winter. This will allow the water to drain freely from the cockpit and prevent water from getting inside.
- → Empty the cockpit interior and storage compartments of any unnecessary items accumulated during the season, then wash the entire boat with a mild detergent, including the storage compartments.
- → Remove all water from inside the boat, including the bilge.
- → All water systems must be drained; water tank, electric boiler, shower boxes and sewage tank. The water tank should be completely emptied, the hoses of the pressure water pumps should be disconnected. Water pumps cleaned of water.
- → The waste tank and electric toilets should be completely emptied and protected for the winter against freezing of residual water
- → In the case of a waste tank system with a macerator, pour the liquid into the toilets, then pump it into the sewage tank that has been emptied and previously rinsed of impurities, turn on the macerator until the liquid is sucked in, the waste discharge valve should be open.
- → The fuel tank should be completely drained. If the fuel tank is completely empty, remove any condensation from it before refilling it.
- → All internal compartment/locker covers under mattresses or locker doors and internal hatches should remain open for good ventilation of the interior.
- → Cockpit drain plugs must remain open and clear.
- → Remove lichen and impurities from the bottom of the yacht. We do not use chemicals to clean laminate surfaces, except for professional products intended for this purpose. Do not use abrasive or sharp materials such as scrapers, stiff brushes, sandpaper, etc.
- → Remove the upholstery from the yacht. If possible, store them outside the yacht. When storing mattresses, be careful that they do not become permanently deformed.
- → Soft ropes (mooring lines) should be put inside the yacht, remember to keep them dry. Leaving wet or damp items inside the yacht over the winter can cause mold to form inside the yacht.
- → Batteries should be disconnected from the installation and stored in a dry place with a positive temperature, taking care of their regular charging. When removing the batteries, be careful not to swap them and not to confuse the connectors.
- → The yacht engine during the warranty period should be prepared for wintering by an authorized engine service. Maintain the engine according to the manufacturer's instructions.

**⚠ CAUTION** The manufacturer is not responsible for damages resulting from non-compliance with the above recommendations.

# 18 REMOVING FAILURES

Do not make repairs alone, unless you are authorized; get only professional advice and information. Use only certified materials and replaceable parts.

**⚠ WARNING**

Do not interfere in the construction of the yacht nor install any additional equipment or change anything in the yacht construction.

Changes may be carried out only after consulting the yacht manufacturer and obtaining his consent in writing.
If an owner makes changes to boat construction or equipment without the manufacturer's consent, it will cause the guarantee loss.

An owner takes responsibility for any consequences of changes