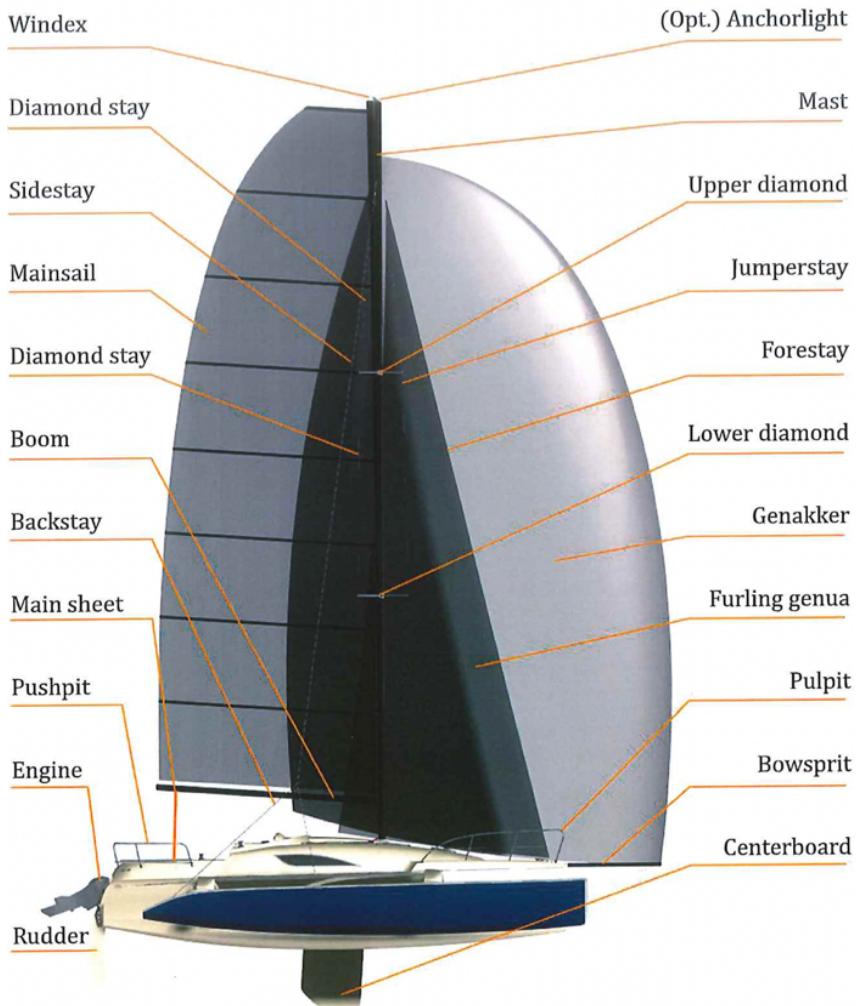


DRAGONFLY 28 **SPORT** "DON CANGREJO" MANUAL



"SAILING A TRIMARAN IS NOT DIFFICULT, JUST DIFFERENT!"

This is how Per Asmuss summarizes trimaran sailing in his book “Catamarans and Trimarans” (ISBN 3-613-50560-6).

- ✓ In gusts keel yachts are often luffed beyond the wind edge to reduce the pressure. This reflex would be fatal in our case by the centrifugal force generated. Instead, we ease the main! Reaching we bear away, thus accelerating and reducing the apparent wind!
- ✓ A keel yacht will firstly compensate gusts by heeling and you feel that it is time to reef. A lightweight trimaran converts gusts into acceleration and thus reduces the apparent wind. In order not to miss the reefing, we do this proactively to the reefing table and the maximum true wind to be expected in gusts (TWS).
- ✓ At anchor we sway more than keel yachts. We keep more distance to other anchoring vessels and reduce our sway circle by a pridle and best by a second anchor!
- ✓ Perfect harbour manoeuvres are different in our case due to the low displacement, straight outer edges, the Amas standing back astern and the lack of wheel effect.
- ✓ Over and above there are beneficial DRAGONFLY- features as SWING WING, CENTERBOARD- AND RUDDER KICK-UP, which must be handled correctly in order to prevent damages.

“Don Cangrejo” offers more than a typical charter boat: more fun, but also more ways to do it wrong. Originally, we only wanted to give boat specific information. However, our guests' heterogeneous experience prompted us to address further topics. So, you might fly over many points, but not all. No need for expensive analogous experiences 😊!

This manual was written with the kind support of Jens Quorning, and equipment manufacturers. Please respect our copyrights.

Welcome aboard!

Ernst Schacherl

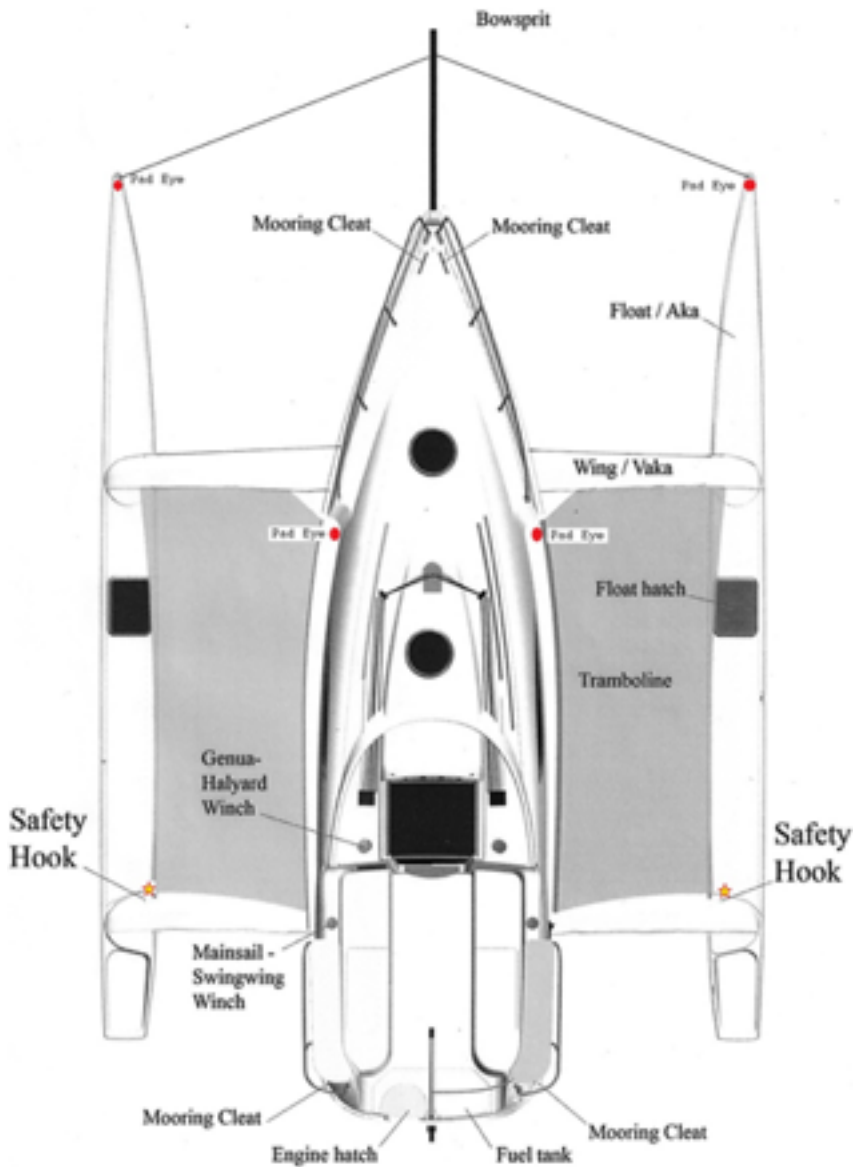
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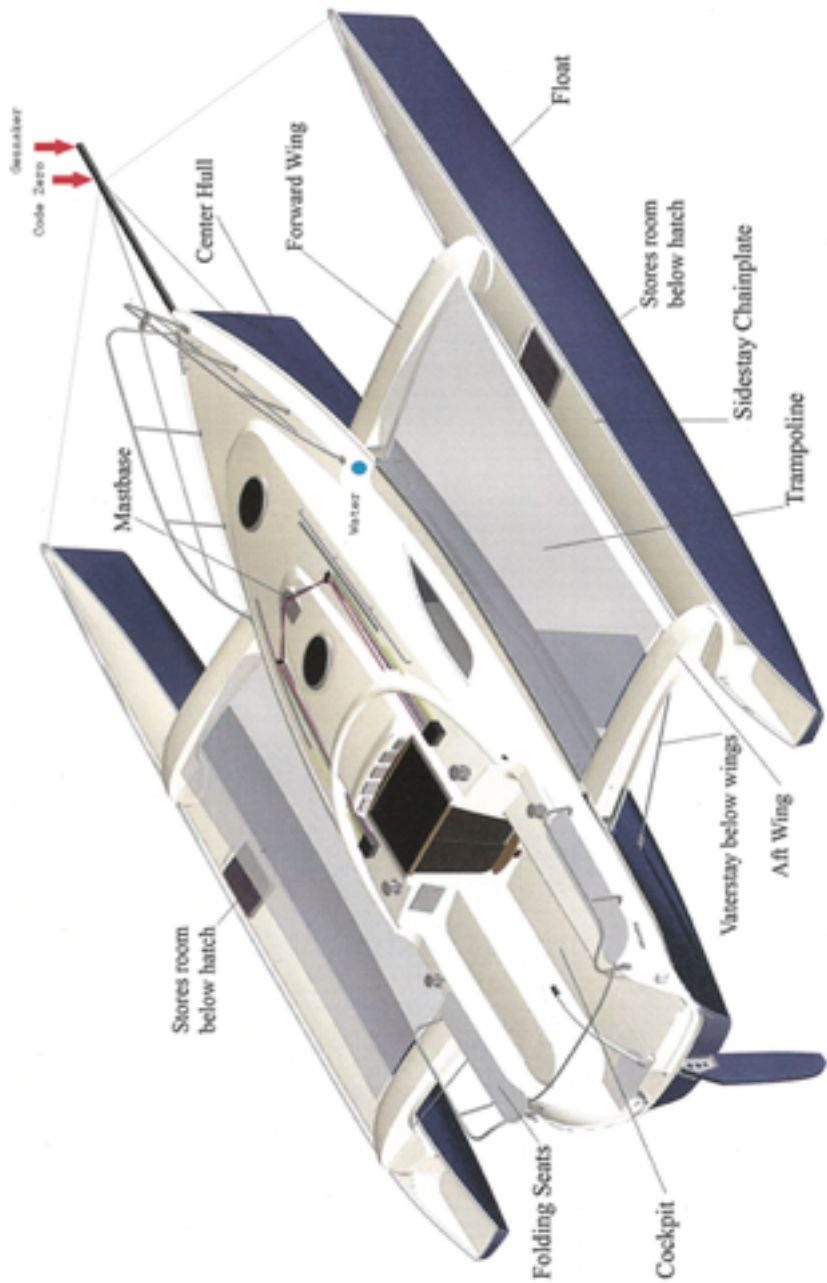
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1. SPECIFICATIONS

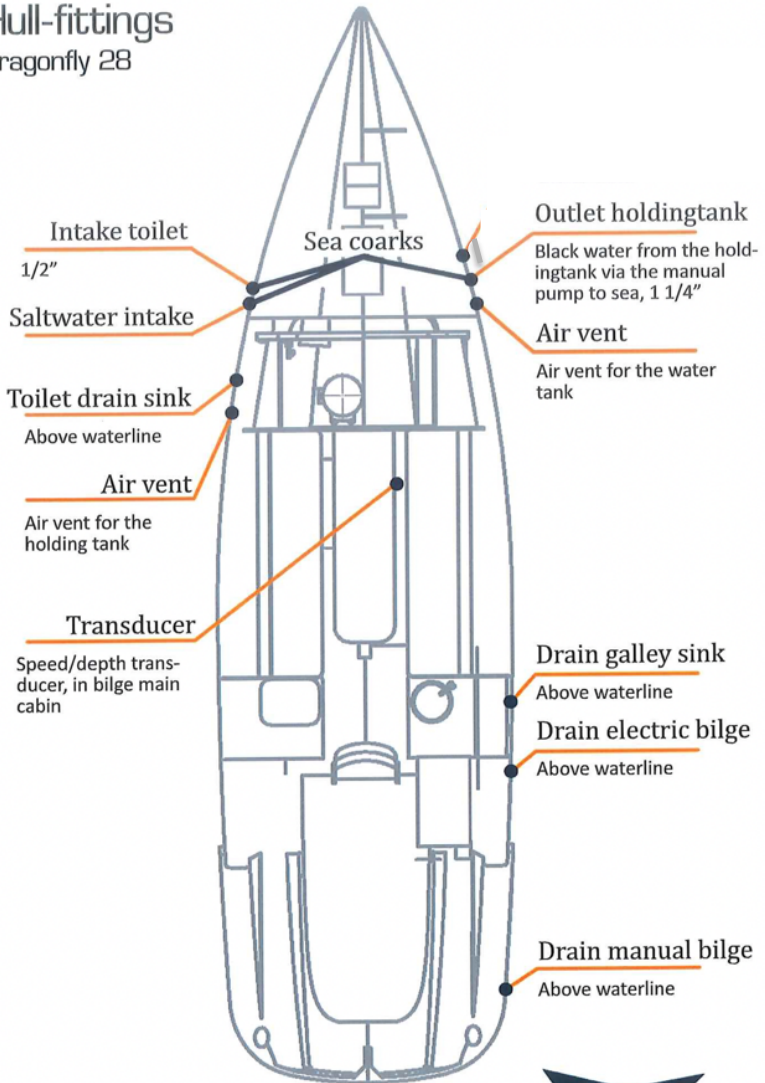
Length sailing / folded	8,90 m / 9,99 m
Beam sailing / folded	6,50 m / 2,54 m
Draft with/without centreboard and rudder	1,70 m / 0,40 m
Bowsprit length	1,90 m
Weight empty	2.000 kg
Payload incl. crew	700 kg
Water tank	90 l
Holding tank	60 l
Outboard engine 4 stroke	15 hp
Mast height over water level	15,5 m
Mainsail/ Reefs	45 / 37 / 28 / 19 m ²
Genoa, furling	22 m ²
Code Zero, furling	45 m ²
Gennaker, Sock	80 m ²
CE- Design category	B (offshore)
Name "DON CANGREJO"	O-31780
Call sign	OEX5863
MMSI	203257300





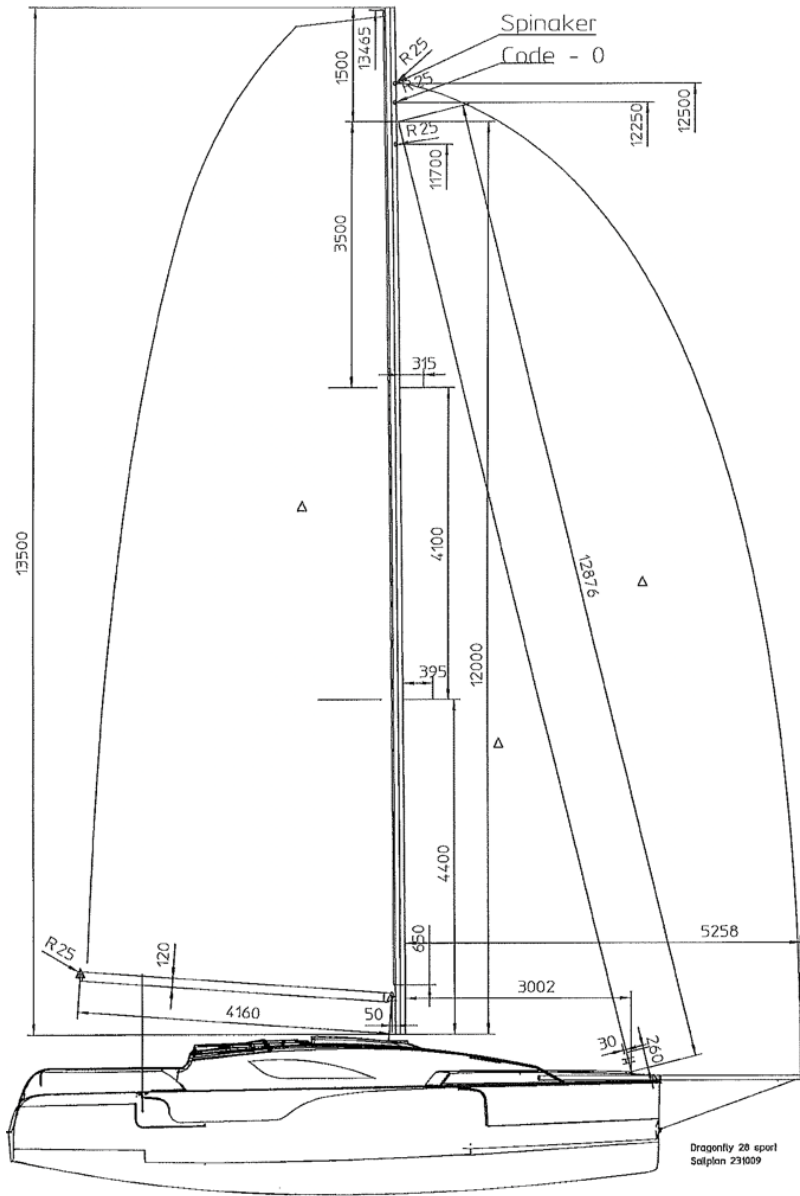
Hull-fittings

Dragonfly 28



2017





2. HINTS FOR UNTROUBLED SAILING HOLIDAYS

- ✓ NEVER FORGET TO SHACKLE THE SAFETY BRACING TO THE REAR OUTRIGGERS! Otherwise the boat could capsize.
- ✓ NEVER TRY TO OVERCOME UNFAMILIAR RESISTANCE DURING A MANOEUVRE! Stop immediately and correct the cause!
- ✓ ALWAYS HAVE A PLAN B READY, NOTABLY
 - in flowing waters (lagoons, rivers)
 - when approaching and leaving the ports
 - avoiding lee shore situations

The engine has never let us down, but it could (e.g. with a large jellyfish in the prop or with closed tank ventilation).

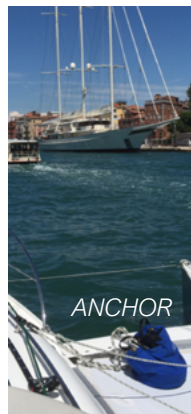
- ✓ Under motor, keep the sails and jambo anchor ready.
- ✓ Under sail, keep the engine running.
- ✓ NEVER THROW ANY "UNDIGESTED" INTO THE TOILET. USE LOCKABLE PLASTIC BAGS!

Dental floss and wet wipes block the pumps and tampons block everything!

- ✓ WITH PROBLEMS DO NOT EXPERIMENT!

A purge into the outlet won't remove a blockage but destroy the pump membrane of the waste tank and the aroma aboard ☹.

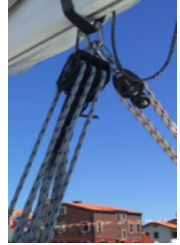
- ✓ PUMP TWELVE TIMES AFTER EACH TRANSACTION!
- ✓ Ritualize the daily pumping out of the waste water tank! Do not wait until the wastewater tank is full.
- ✓ NEVER REST ON FLAG POLE OR UPFOLDED CABIN TABLE!
They are unable to withstand. Fold the table up only for sleeping!



- ✓ Fold away the sprayhood and bimini before lowering the mainsail. This will ensure that the boom does not rub through the upper edges of the sprayhood and bimini.

- ✓ NEVER TIGHTEN DOWN THE BOOM ON THE SPRAYHOOD OR BIMINI TOP!

Otherwise, they will be worn out immediately. To prevent the tree from swaying when the main is secured, use the preventer (folded out) or the ropes provided (folded in).



- ✓ REEF PROACTIVELY ACCORDING TO REEF TABLE AND THE EXPECTED GUSTS!
- ✓ DURING REEFING ENSURE THAT ALL ROPES ARE FREE AND THE BLOCKS DON'T TOUCH THE BOOM! If not, they would crack.
- ✓ TRY THE REVERSE GEAR BEFORE BERTHING! Then you will never be without "brake".
- ✓ REVERSE ONLY WITH IDLING SPEED. Otherwise it would pull the rudder out of your hand.
- ✓ LIFT THE OUTBOARD ONLY AFTER REMOVING THE CONNECTOR TO THE TILLER! Otherwise it would be damaged.
- ✓ PROTECT THE ROLLED GENOA AND CODE ZERO AGAINST UV EVEN DURING THE VOYAGE! Each unprotected hour is one too much.
- ✓ So as to avoid crunching or cracking when folding, check before:
 - Bowsprit folded?
 - Code Zero blocks released?
 - Barberhauler blocks at the cabin roof by tightening the genoa sheets?

3. CREW LIST, LOGBOOK AND TRACK

The skipper is officially obliged to keep an up-to-date crew list. This may be informal, but must contain the personal data (name, date and place of birth, nationality, passport number, function on board).

It is up to the skipper to decide which persons he carries with him, if they are legally present.

Log-keeping is mandatory and is supervised by the authorities. All facts, activities and incidents must be presented in such a way that third parties can get an insight into the trip. The skipper can thus prevent a discussion about negligence. In the event of a collision, for example, it is relevant whether the yacht was sailing under sail or motor.

The only formal requirement is the authenticity of documents. Thus, all entries must be made in real time with a ballpoint pen and be provided with date and time, position, weather, and sail plan. Corrections must be signed. The records must be signed daily by the skipper. The logbook remains on board and of course you can make copies of your entries.

The tracks of the plotter are like the sent AIS signals additional evidence, please never deactivate the corresponding functions!

In addition to the traditional logbook, we use the iPhone App "Logbuch" by Florian Kriesche.

4. CLEARING IN AN OUT

Unlike Slovenia, Croatia is not yet a Schengen member and insists on correct entry and exit.

After crossing the base line connecting the outermost land points (even the smallest rock is included), the shortest route must be taken to a port of entry. Vice versa, when leaving the territory after crossing this line, the shortest route must be used.

The example of the journey from Portopiccolo to Croatia shows how this is implemented: Clear out and in at the picturesque Piran (Schengen border) and in Umag/Croatia in each case in an easy and comfortable way (unfolded along the side) and without any detour. You only have to pay the personal tourist tax in Croatia, the best way is online: <https://nautika.evisitor.hr/>

Excuses like "office was closed, emergency, hurry..." do not change the fact that violations cost several hundred euros and get us blacklisted. Only immediate cash payment can make it considerably cheaper.

Even in the "Schengenland" Slovenia it can be expensive if you have cleared out in Umag on your return from Croatia and enter the Marina Portoroz - without having cleared in Piran first.

5. CHECKLIST MOB MANEUVER

At a speed of 10 knots you make about 300 m in one minute!

Throw the MARKING BOY and RESCUE RING at the MOB, alarm your Crew, press the WPT/MOB-button of the plotter for 3 SECONDS and nominate the LOOK OUT TO POINT AT THE MOB PERMANENTLY.



If you are not sure about rescuing the MOB without external assistance, alarm the MRCC by pressing the DISTRESS BUTTOM AT THE DSC- CONTROLLER FOR 3 SECONDS.



Under Code Zero and Gennaker bear away quickly and save the sail in lee of the veered main. Doing so you are ready for maneuvering within some seconds.

Close reach to reach HEAVE TO might be the fastest approach to the MOB. Broad reach a Q TACK might be appropriate. Use the motor! If the main interferes take it down quickly (just fix lazy jack, let the halyard fall down).

Throw the THROW BAG and safe the MOB at the bathing ladder on SB.

Cancel the DSC alert immediately by pressing the CLEAR buttom TWICE followed by a PRIORITY BROADCAST. End the MOB Status of the plotter by pressing the MOB BUTTOM FOR 5 SECONDS.

6. WEATHER

During our sailing season we may expect prevailing sunny weather and a light breeze. But dangerous squalls may ambush us occasionally. The typical weather is indicated in the nautical guides.

Additional to marinas' weather reports we use these resources:

- ✓ Internet weather services offer attracting apps. I use „WeatherTrack“ on my iPhone.
- ✓ NAVTEX is useful at sea (without Internet coverage) providing filtered and stored relevant weather forecasts
- ✓ Coastal radio stations broadcast forecasts in English
- ✓ Fishermen' predictions and cloud observations.

INTERNET WEATHER FORECASTS:

https://meteo.hr/prognoze_e.php?section=prognoze_specp¶m=jadran&el=jadran_e

offers weather forecasts in English

http://meteo.hr/index_en.php

offers comprehensive GRIB forecasts in English.

The IMRAY MEDITERRANEAN ALMANAC contains emergency numbers, frequency overview VHF forecasts and warnings

7. THUNDERSTORMS

An announced passage of a storm front gives us a day of rest and we have been avoiding encountering a clash with a violent thunderstorm front so far.

If it is not possible to find a safe port before a local thunderstorm, we move seawards, where it usually loses its strength.

In order to reduce the probability of a direct lightning strike the yard decided not installing a lightning rod.

- ✓ Keep distance to mast, stays and metal parts

At harbour:

- ✓ Cut shore-power in order to avoid leading overvoltage into the boat.
- ✓ Disconnect the four connectors at the mast step in order to avoid destruction of the instruments. Use the covering caps.

At sea:

- ✓ Make the usual heavy weather - arrangements.
- ✓ Make yourself independent from the instruments (classic or mobile navigation)
- ✓ Start the engine and reef / save & secure the sails.

8. TO BE ON THE SAFE SIDE

We assume that you are an experienced sailor who follows all regulations. Therefore, we only provide boat-specific instructions.

- ✓ Familiarize your crew with the safety-relevant items.

Equipment	Location
1 Life Ring	PUSHPIT
1 Marker Buoy	COCKPIT PS COAMING
1 Throw Bag	COCKPIT SB COAMING
1 Fire Extinguisher	COCKPIT SB LOCKER
1 Fire Extinguisher	COCKPIT PS LOCKER
1 Fire blanket	CABIN SB CABINET
1 Shroud cutter	BELOW ASTERN BUNK
1 VHF-DSC Radio	CABIN SB ASTERN
1 AIS 650 Transceiver	AT E95 AND I70
1 EPIRB	CABIN BB CABINET
1 Personal EPIRB	COMPANION WAY NET
1 Air Pressure Horn	CABIN SB CABINET
1 Sailor's knife	COMPANION WAY NET
1 Red Parachute Signal	CABIN SB SAFETYBOX
1 Red Hand Torch	CABIN SB SAFETYBOX
1 White Hand Torch	CABIN SB SAFETYBOX
1 Flare Gun	CABIN SB SAFETYBOX
1 Portable Spotlight	CABIN SB CABINET
1 Manual bilge	COCKPIT SB ASTERN
1 Waterproof signal lamp	COMPANION WAY NET
1 COLREG 1972	WETROOM SB CABINET
1 Sealant "Leak Hero"	WETROOM SB CABINET
1 First Aid Kit	WETROOM PS CABINET
1 Liferaft	BELOW BOW BUNK
1 Lifeline per person	AT CREW
1 Life vest per person	AT CREW
1 Sea anchor	PORTSIDE-AMA, FRONT

- ✓ FOLD ONLY WITHOUT SAILS IN PORT WATERS! The SWING WING function is only intended for docking.
- ✓ NEVER CLIMB THE MAST OF THE FOLDED BOAT.
- ✓ NEVER FORGET TO SHACKLE THE SAFETY CABLE TO THE AFT WING NEXT TO THE FLOAT!
Otherwise, the boat could capsize!
- ✓ ALWAYS CLOSE THE HATCHES COMPLETELY.
Amas' hatches in vent position lead to water ingress. Front hatch in vent position would catch the genoa sheet destroying the closing lever!
- ✓ STAY ON THE CAPSIZED BOAT!
The trimaran could capsize in case of serious mistakes but remains unsinkable. In that case, you would not be able to raise it. Do NOT enter the life raft, use the SwingWing system as a lifeline.
- ✓ DON'T OVERLOAD! 400 KG FOR CREW, FOOD ARE THE LIMIT.
Speed and seaworthiness decrease with increasing load.
- ✓ SET SAILS ACCORDING TO THE REEFING TABLE!
The large sail area demands early reefing. When running you may only experience a small apparent wind, but when beating, you will feel a storm! Avoid stress always follow the table and reef early.
- ✓ Wear the comfortable automatic lifejacket with Lifelines
- ✓ Avoid staying outside the cockpit in strong winds or darkness. If necessary, use LIFELINE AND PERSONAL LOCATOR BEACON!
- ✓ Train the MOB manoeuvre according to the checklist.
- ✓ ALWAYS KEEP AN ANCHOR READY TO USE WHEN YOU ARE LIKELY TO ENCOUNTER CURRENTS OR WHEN ON A LEE SHORE.
Else you will be helpless in case of grounding or engine failure.

9. LIFE RING

At 10 knots speed the boat would move off from the MOB 300 m within 1 minute. Therefore, we suggest in using the life ring without line.



10. MOB HEAVING LINE 30 METER

- ✓ Release the button at the bag
- ✓ Keep the loop of the line with in one hand, the other hand throws the bag.



11. LIFEJACKETS

are self-inflating or manually by pulling on the lanyard or by blowing into the oral inflation tube. Don the lifejacket like a waistcoat, fasten the buckle on the waist belt and tighten by pulling on the webbing while holding the buckle fastening. Connect crotch strap and lifeline.



12. LIFELINES

Since lifelines are indispensable, the two webbing jackstays are permanently installed.



13. HAND SEARCHLIGHT

The hand searchlight is available in the cabin in the starboard shed and can be charged via 12V - cigarette lighter socket.



14. PYROTECHNICS

are in the waterproof compartment in the cabin STB, also accessible from the outside in case of capsized.



15. INFLATABLE DANBUOY

The self-inflating buoy is stored in a tube on the rear basket. Put it out and drop it overboard. It will inflate fully 1,8 metres above the water surface, the light will automatically operate upon inflation and the drogue will help reduce drifting.



16. SEA ANCHOR

We use a 15 m Jordan Series Drogue (JSD) with 20 canvas cones.



17. WATER INRUSH

In the wetroom opposite of the toilette you'll find „Leak Hero“, a ready for use, sealant which stops water intrusion in seconds and seals leaks

The sealant is applied directly to the damaged area by hand. The inflowing water does not affect the adherence and the immediate sealing effect. It is also usable under water.



The hands can be cleaned with detergent. As the paste does not harden, it can be easily removed before the final repair.

- ✓ The electric bilge pump is located under the cover of the cabin passage next to the log. It is not permanent on standby and must be switched on at the switch panel.



- ✓ The manual bilge pump is mounted in the Cockpit SB astern.



18. VHF RADIO

Excerpt of the manual stored near the VHF radio:

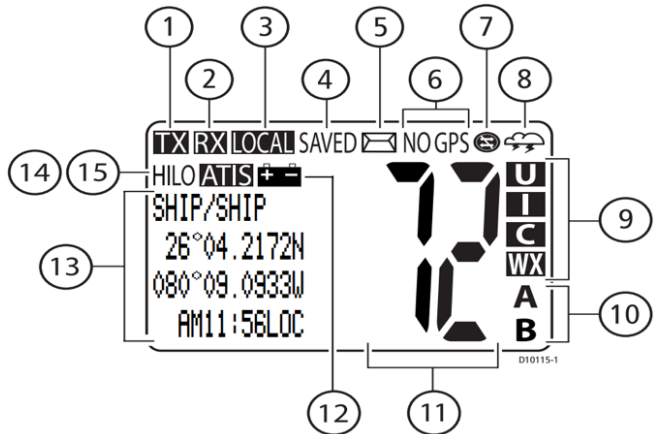
Call Sign: **Oscar Echo X-ray 5863**

MMSI: **203257300**



1. PTT Push-to-Talk key to transmit.
2. HI/LO / LOC DIST Toggle the transmit power from HI to LO.
3. 16/PLUS switch to priority channel/ change (PLUS) Channel.
4. UP/DOWN arrow keys to change the active channel number.
5. SCAN/SAVE Press and release to access the Scan Mode menu.
6. CH/OK Rotate to change the current channel number.
7. PWR/VOL Turn the radio ON and OFF and to set the volume.
8. SQ Set the squelch threshold.
9. MENU/DSC Select Menu Mode. Hold for 3 sec for DSC Mode
10. CLEAR Terminate a function, return to the latest channel.
11. DW/TRI Initiate Dual Watch mode. Press and hold for 3 seconds to initiate Tri Watch mode.
12. 16/PLUS Switch to the priority channel or change the value of the Secondary Priority (PLUS) Channel.
13. **DISTRESS** Push up the spring-loaded cover and press this key to make a DSC Distress Call.

Display:

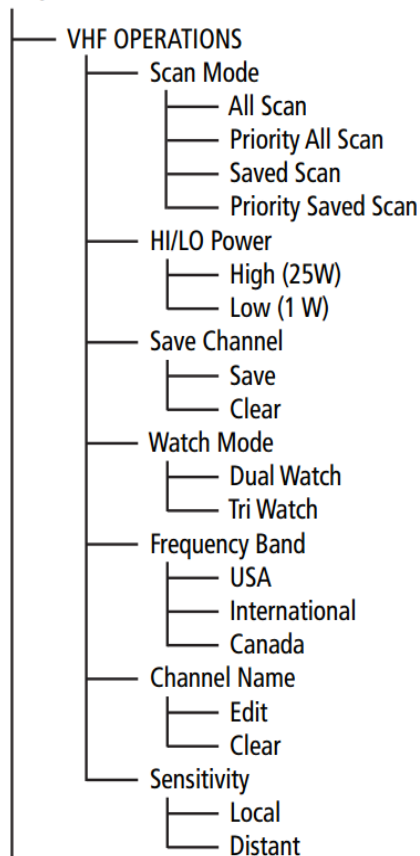


- | | |
|---------------------------------------|---|
| 1. (TX) Transmitting | Indicates that the radio is transmitting. |
| 2. (RX) Receiving | Indicates that the radio is receiving. |
| 3. (LOCAL) | Indicates Local Reception mode, which decreases sensitivity. |
| 3. (HI/LO) TX Power | Indicates whether transmit power is set for 25 watts or 1 watt. |
| 4. (SAVED) Memory | Current channel has been saved. |
| 5. DSC Call flashing | Radio has received a DSC Call. |
| 6. (NO) GPS | Positional data is or not available. |
| 7. Automatic Channel Changing Blocked | No automatically switch to the channel requested by a DSC. |
| 8.to 10. | Only available in USA |
| 11.Channel Number | Displays the current channel number. |
| 12. Batt. Voltage Alert | Battery Voltage < 10.5 or > 15.8 VDC. |
| 13. Dot Matrix Display | Radio functions, GPS position data. |
| 14. (HI, LO) Power | Indicates whether transmissions are made at 25 watts or 1 watt |
| 15. ATIS Active | Not relevant |

Menu Structure:

Following is the structure of the menu that appears when the MENU/DSC key is pressed and then immediately released

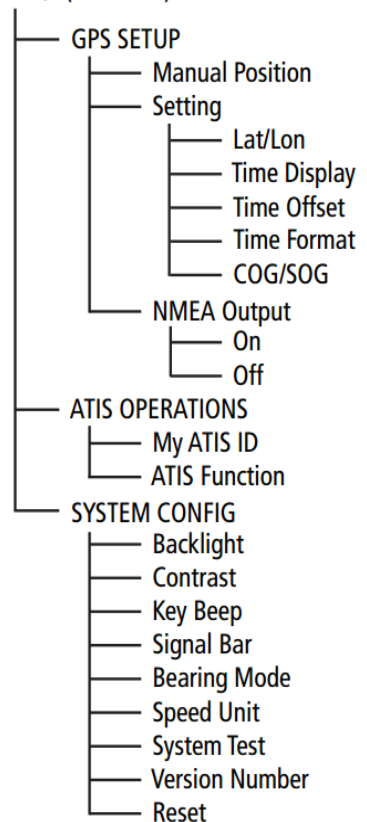
MENU



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(continued in next column)

MENU (continued)



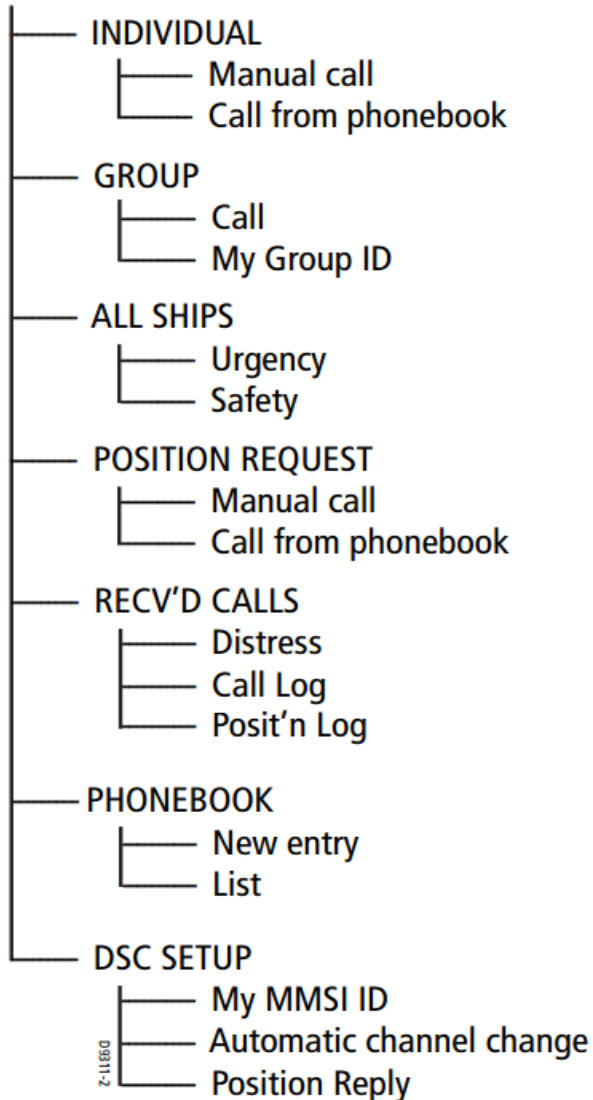
Frequently used channels: (Ray49E manual / Appendix D)

16	Distress, Safety and Calling
75, 76	Navigation
06,08,10,13,63,72	Intership, Port Operations

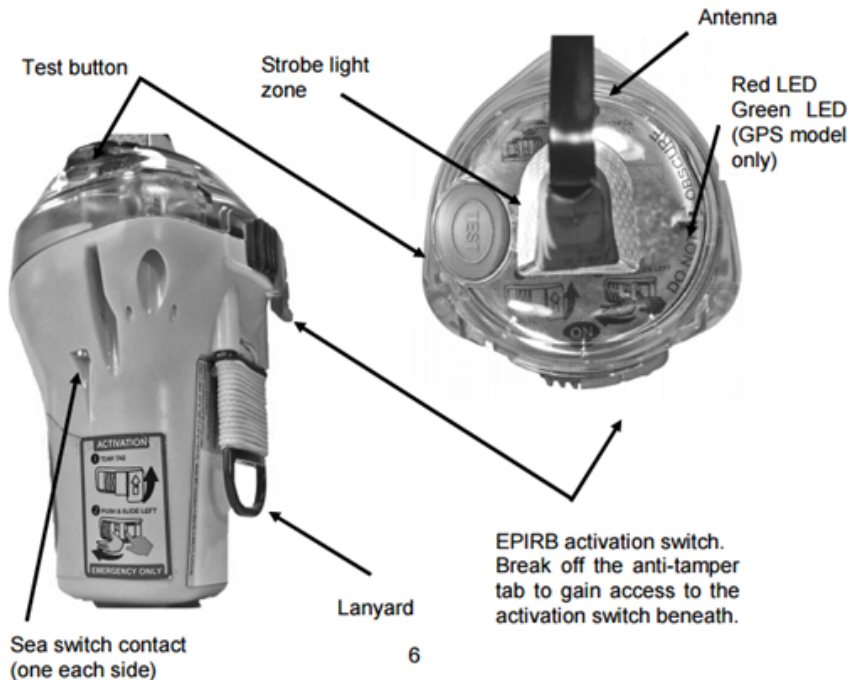
DSC-Menu:

Following is the structure of the menu that appears when the MENU/DSC key is pressed and held for 3 seconds.

DSC



19. EPIRB SEENOTFUNKBOJE



This Emergency Position Indicating Radio Beacon transmits accurate distress position continuously for 48 hours.

Further starts a high brightness LED-flashlight once the beacon is deployed.

When the EPIRB is released from its bracket it will turn on automatically if the sea switch contacts on either side of the EPIRB body are immersed in water regardless of the status of the manual activation switch. The Automatic sea water switch has a built-in time delay to ensure that it operates correctly in rough seas. The EPIRB must be in the water for at least 2 seconds before it will be automatically activated, and it has to be dry for at least 8 seconds before it will stop transmitting.

More interesting for us on our unsinkable boat is the manual activation aboard:

- ✓ Remove the EPIRB completely from the carry-safe collar to gain access to the rear facing
- ✓ Keep the EPIRB upright (hold it if necessary). Don't touch the antenna. Place the EPIRB in the open, clear of overhangs.
- ✓ Break off the anti-tamper tab by pulling it upwards
- ✓ Push the switch catch in and move the switch fully to the left "ON" position



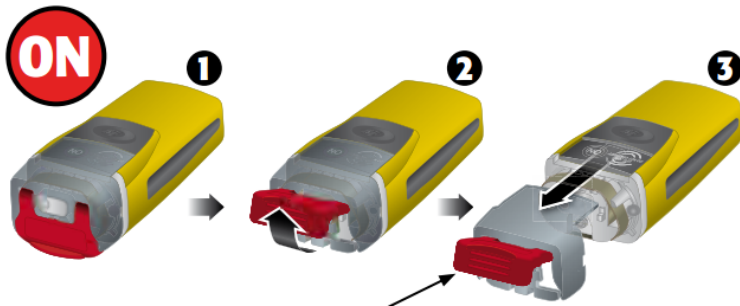
When the EPIRB is first activated the strobe light will start to flash immediately and the red LED will light. Now you have 50r 50 seconds to cancel the alert. Then the red LED will start to flash indicating that the distress transmissions have started.

Uncoil the lanyard and use it to secure the EPIRB

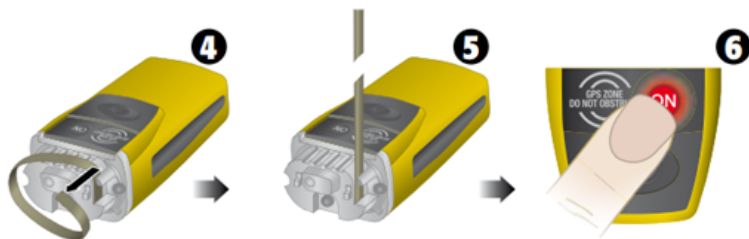
Switch off by sliding the switch to right. After water activation, dry the sea switch contacts and wait 8 seconds. The strobe will stop and the red LED will go out.

20. PLB (PERSONAL LOCATOR BEACON)

The PLB is waterproof to 10 m depth, transmits at least 24 hours and could be the final option for the MOB. With a size similar to a mobile it must be carried by the Crew as soon as she leaves the cockpit. It operates after manual activation.



Only pull in an emergency, put away the plastic cover and unfold the antenna! Pulling breaks the anti-tamper seal - cannot be reset by the user.



Press „ON“ button and the PLB will flash.

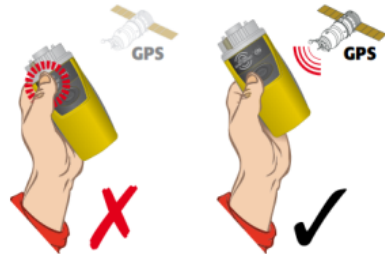
Then the alarm can be reset for 50 seconds by pressing the button „TEST“ for 5 seconds.



- ✓ The antenna must point upright and must not be touched! It must always be kept above water, as direct contact with the sea would reduce the transmission range.



- ✓ Ensure that the area marked “GPS Zone” is not obstructed or covered in any way and always has a clear view of the sky.



- ✓ Two flashes every second indicate the unit is activated and is attempting to acquire a GPS position fix.
- ✓ One flash every 3 seconds indicates that a GPS position fix has been acquired.
- ✓ A long flash followed by three rapid flashes every 50 seconds indicates that the PLB has transmitted a distress signal along with the current GPS position.
- ✓ While the PLB is active, pressing the ON button again will cause the indicator light to flash a Morse code SOS pattern. This can be used to attract attention in low light conditions. The SOS pattern is repeated four times each time ON is pressed.

To conserve battery life a maximum of 30 presses is allowed, after which this feature is disabled.

21. NAVTEX NAVIGATIONAL WARNING TELEX

NAVTEX deals with warnings, distress reports, gale warnings and weather reports. The coverage amounts at up to 100 nautical miles. The radio reception within the harbour is poor. All reports are displayed, but only messages in line with the programmed filter are stored. Please don't change! After power on, the latest received message is displayed.

NAVTEX broadcasts use following subject indicator characters:

- A Navigational warnings
- B Meteorological warnings
- D Search & rescue information
- E Meteorological forecasts
- K Messages to navigation systems like GPS
- L Navigational warnings to Rigmoves
- V Nautical warnings in addition to A
- Z No message on hand

The relevant stations and message types are programmed, do not change them!

	station	latitude	longitude	transmission UTC
Q	<u>Split</u> (HRV)	43° 30' N	16° 29' E	02:40, 06:40, 10:40, 14:40, 18:40, 22:40
U	<u>Triest</u> (ITA)	45° 41' N	13' 46' E	03:20, 07:20, 11:20, 15:20, 19:20, 23:20

MESSAGE FORMAT.

- ✓ ZCZC means start of message.
- ✓ The first character in the header is the station identification.
- ✓ The second character identifies the message type
- ✓ Then follows a two-digit serial number of the message
- ✓ Then time of origin in the format "DDHHmm UTC MMM" where DD is the date, HH hour, mm minute and MMM three-character abbreviation of month.
- ✓ After the header the word "national" or "international" indicates which channel the message was received.
- ✓ Then comes the body of the message;
- ✓ The end of the message is asserted when the characters "NNNN" are received.

OPERATION:

- ✓ STBY indicates „ready-to-receive”
- ✓ Pressing any key will turn on the backlight
- ✓ By pressing UP or DOWN you may scroll through the stored reports.
- ✓ By pressing CTRL the latest report is displayed.
- ✓ By CTRL + UP/DOWN the contrast can be adjusted.

22. INSTRUMENTS AND AUTOPILOT

Compass, binoculars with bearing compass, UKW/DSC, cabin clock, barometer and thermometer and a Raymarine network stand ready: The instruments are used under skipper's responsibly

e 95 Wide Screen – multifunction plotter

The plotter shows only at maximum zoom cartographic obstacles and cannot substitute imprinted charts.



- ✓ Always check your course by a printed chart!
- ✓ Activate every morning the track function:
Chart menu → Navigate → Start Track → pop up → Ok.
- ✓ And store your track in the evening:
Menu → Navigate → Stop Track → pop up → Save YYMMDD

AIS 650 Class B Transceiver

SUGGESTED AS OVERLAY AT THE PLOTTER MEANS ADDITIONAL SECURITY, HOWEVER, MANY SHIPS DO NOT TRANSMIT A SIGNAL.

The transmitter

is accessible from the bilge. It reports depth, speed through the water and water temperature. The depth gauge is set without offset. Do not trust it unconditionally. At depths below 5 m, reduce speed and observe the bottom!



Despite regular cleaning and anti-fouling coating, the impeller can become blocked by fouling. In this case, it can be unscrewed and cleaned. A plug is provided next to the transmitter on a ribbon.

Two i70 Multifunction colour displays

The operation of the two i70 multifunctional instrument is intuitive. Ten pages are configured. You will find out your favorites shortly.

<https://www.raymarine.com/autopilot/control-heads/p70-and-p70r/>



SPX 5 Autopilot with p70 Display and Radio Control

We use it for rudder locking (STANDBY), COG control (AUTO) and AWA control (by concurrent pressing "AUTO" and "STANDBY").



At 10° rudder position, 1t presses on the rudder suspension). You can sail with autopilot up to 20 knots TWS if you **trim the sails to neutral rudder**. Otherwise, the servomotor would need too much energy and fail in extreme cases.



As the actuator consumes up to 5 A (60W) a full battery is beneficial!

Select at the p70 instrument a medium response level "CRUISING" to reduce power consumption and attrition.

The operating instructions can be found on the starboard shelf in the wet room.

The autopilot also helps to set and release the mainsail. Allow at least 2 knots to keep on course or use STANDBY to control the rudder position only. If it does not manage to hold his course, it will change to "STANDBY". Similarly, if you order it to follow a COG or AWA. Should this happen, the quickest way to get it back is to turn the instruments off and on again.

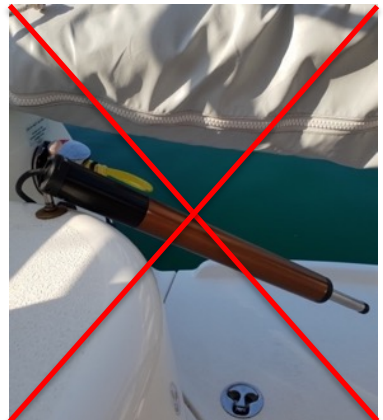
If the "Auto tack" function is activated by pressing keys "1" and "10" at the same time by mistake, a rapid waltz turn, and hectic activity will be triggered.

When you disengage the autopilot, please store it

CORRECT:

but not

WRONG:



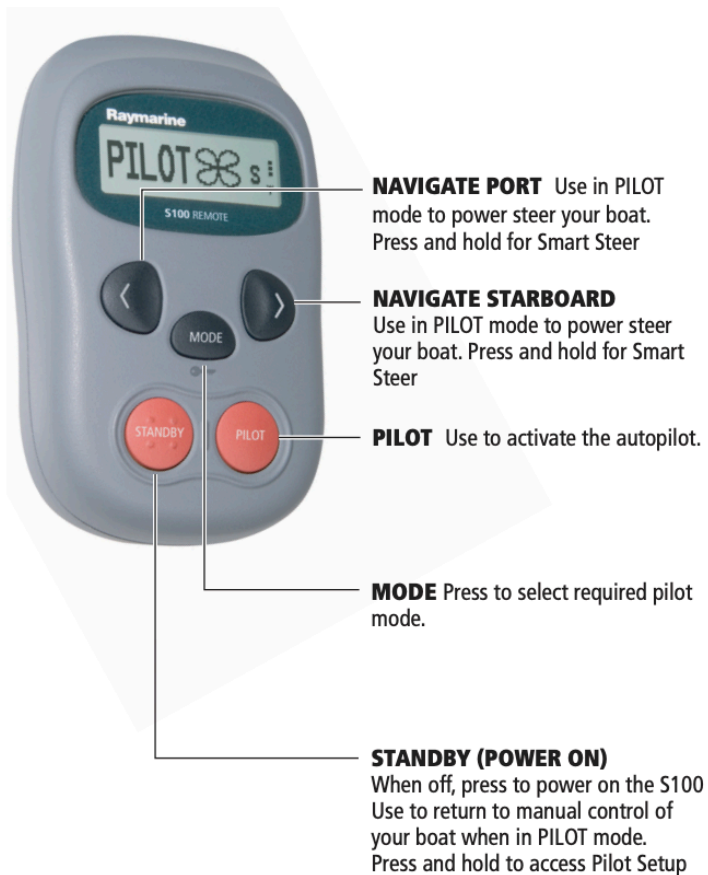
RADIO REMOTE CONTROL

(Excerpt taken) from the RAYMARINE manual:

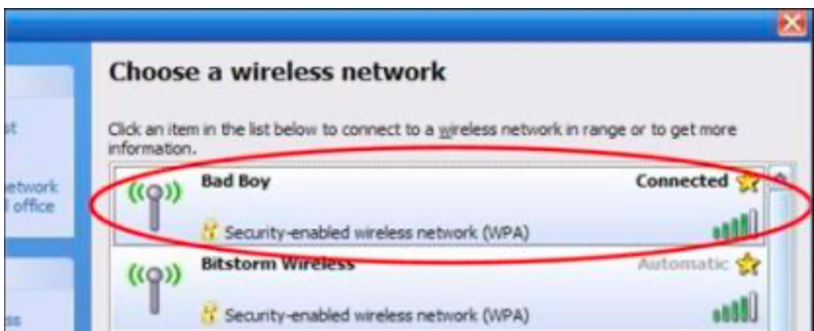
In STANDBY mode (autopilot off) the unit will turn off if no button is pressed for 5 minutes.

Activate key lock: Press and hold the mode button until the key symbol and the inscription "LOCK" is displayed. The key lock cannot be activated while the autopilot is steering your boat.

Turn off the key lock: Press the MODE and PILOT buttons in sequence. Then, the message "KEYLOCK OFF" is displayed.

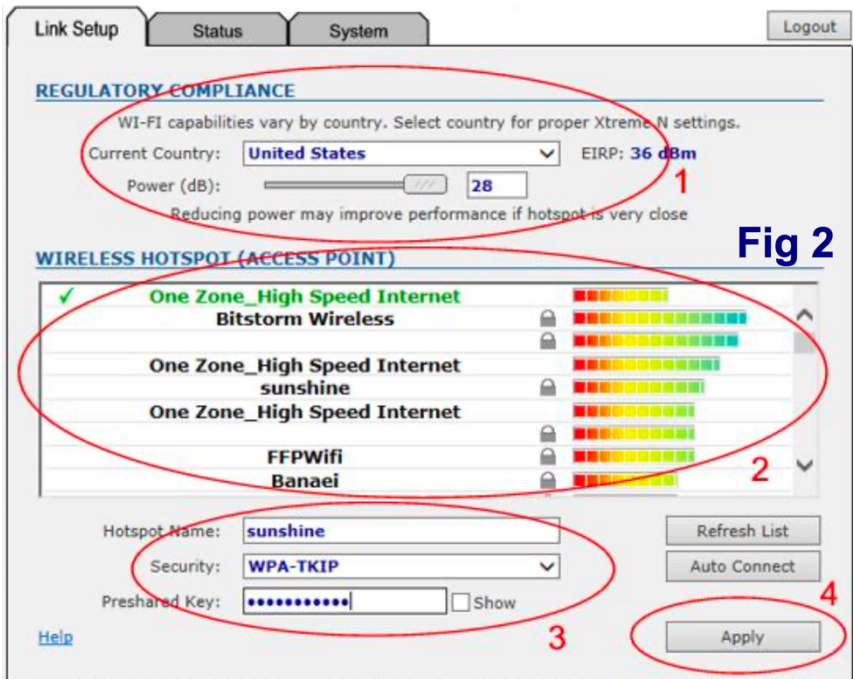


23. WLAN CATCHER & BORD WLAN (on trial)



The router is located on the cabin/wet room separation panel.

- ✓ Switch on the Catcher & Router (pull switch at the router).
- ✓ Network name: "**Bad Boy**", password: "**password**".
- ✓ Select the desired HOTSPOT.



The WLAN Catcher should remember passwords that have already been entered. Nevertheless, please make a note of tried and tested HOTSPOTS and learned passwords for us.

24. OUTBOARD ENGINE

Fuel:	Unleaded fuel 91+ Octane
Fuel tank:	25 Liters
Consumption:	2,5 Liters/h at 5 knots cruising speed (STW)
Charging current:	12A

The motor is maintained conscientiously have been thanking us by 100% reliability so far. However, generally motor problems are the most common reasons for distress at sea.

THEREFORE, HAVE A PLAN B READY (SAIL, ANCHOR)!

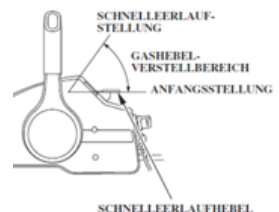
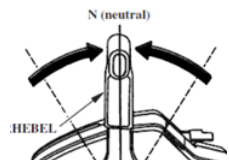
To prevent the motor from being lifted unintentionally, we have separated the servo switch from the throttle lever.

- ✓ Use it to lower the motor to the maximum before connecting it to the rudder!
- ✓ Disconnect the connecting rod between rudder and motor before lifting the motor, otherwise it will be damaged!



Extract of the HONDA - operating instructions:

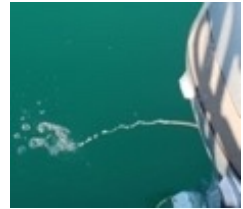
- ✓ If you turn the start key and the starter motor does not respond, check that the control lever is in neutral.
- ✓ Don't start longer than 5 seconds, if the motor won't start squeeze the priming bulb until it feels firm. This will ensure that fuel is supplied to the engine.
- ✓ To restart a warm engine, raise the fast idle lever (Throttle N). The Throttle cannot be moved away from N position unless the fast idle lever is lowered



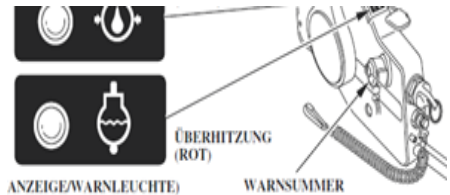
- ✓ Be sure that the fuel cap vent is open (3 turns counter clockwise).



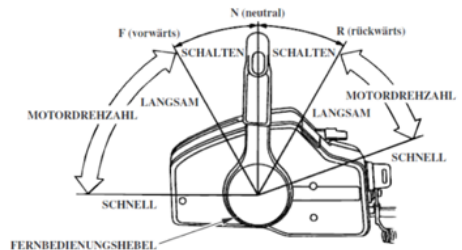
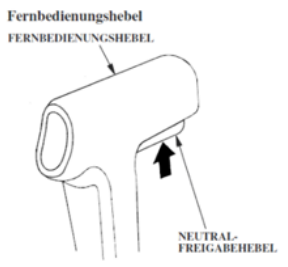
- ✓ After starting check whether that water flows out from the cooling water check hole. If not, stop and check the water intake is obstructed. Check the cooling water check hole for clogging. Do not operate the engine until the problem is corrected.



- ✓ If the engine runs hot, the protection system limits the speed, the red lamp lights up and a buzzer sounds.



- ✓ After the engine has warmed up, you can start cruising. The release lever must be pulled fully up to operate the remote control lever. After about 30° the clutch engages.



- ✓ If there is no power available, you can start the engine by hand and use the power to lower the engine. After the lifted motor has not been cooled, never let it run for more than 1 minute!

Emergency operation of the outboard lift (© Honda):

Manual Relief Valve

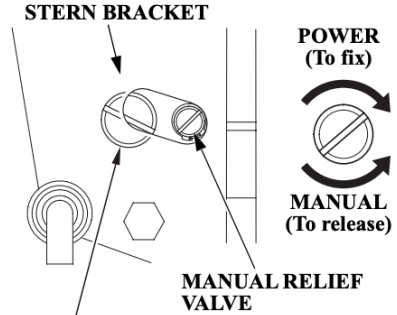
If the power tilt switch does not operate because of, for example, dead battery, the outboard motor can be tilted manually by opening the manual relief valve.

To move the outboard motor by hand, turn the manual relief valve under the stern bracket 2 and a half turns counterclockwise using a screw driver.

After moving the outboard motor, turn the screw clockwise securely.

▲WARNING

Be sure to tighten the manual relief valve securely. The outboard motor could rise when sailing in the reverse gear, resulting in an accidental injury to the passenger(s).



▲WARNING

Never loosen this screw. Hydraulic oil of the power tilt system flows out.

REMOTE CONTROL TYPE (R type)

