Horizon
Yacht Charters
British Virgin Islands

Information & operations manual for Helia 44 2018 ‘Amatheia’

Welcome

Welcome to Horizon Yacht Charters and your Fountaine Pajot Helia 44 ‘Amatheia’.

We hope you had a pleasant journey and are looking forward to a fantastic holiday and some of the finest sailing in the world here in the British Virgin Islands.

This manual is here to guide you through the in’s and out’s of your yacht. Please take the time to read this manual and don’t hesitate to ask any of our professional, friendly staff if you have any questions.

All the yachts in the Horizon fleet are maintained to the highest standards so that you may enjoy a trouble-free vacation, on a beautiful yacht. Please remember that these yachts are all privately owned, and we ask that you care for it like it was your own.

Best wishes for a great vacation,

Sylvia and Andrew
Directors

Office Hours:
Monday – Sunday 08:30 – 17:30
Telephone: *(284) 494 8787*
Duty Manager: *(284) 542 8788 (Technical questions, damage reports and emergencies)*

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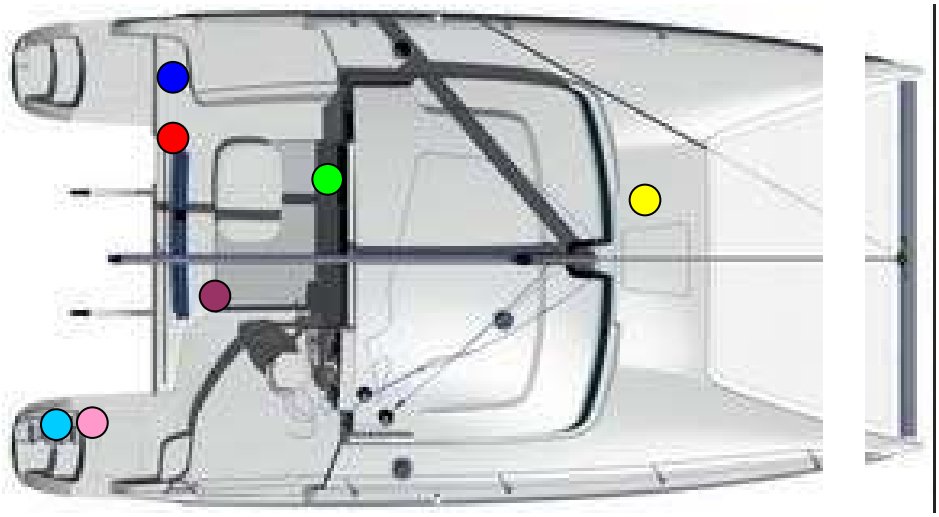
1. Yacht specifications



Length	43' 8”
Beam	24' 3”
Draft	3' 9”
Fuel	125 gallons
Water	185 gallons
Engine	2 x 40 hp Volvo Penta D2-40
Generator	11.5KW Onan MDKBM

Location of:

- **Fresh water refill** (foredeck)
- **Diesel refill** (port aft cockpit)
- **Manual bilge pump** (aft of stbd cockpit seat)
- **Propane tank** (under fwd cockpit seat)
- **Windlass breaker** (stbd eng compartment)
- **Emergency start switch** (stbd eng compartment)
- **Diesel cut off valves** (under port aft berth)

2. 12-volt panel

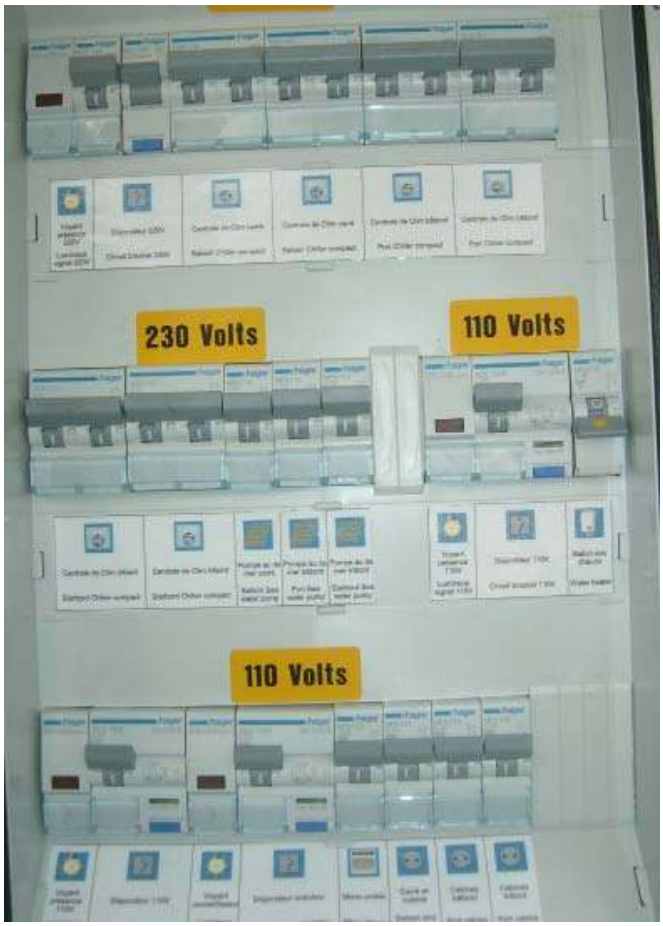
The following list corresponds with the photo below and tells you what each switch does from top to bottom, left column first.

1. Navigation lights
2. Steaming lights
3. Masthead light
4. Deck floodlight
5. Navigation instruments
6. Hull light (salon and cabin lights etc)
7. Fridge
8. Fresh water pump
9. Sea water pump
10. Port bilge pump – leave in the Auto position
11. Stbd bilge pump – leave in the Auto position
12. Port Eng bilge pump – leave in the Auto position
13. Stbd Eng bilge pump – leave in the Auto position
14. Fridge 2
15. Courtesy lights
16. Propane detector and WIFI
17. Propane solenoid
18. Not in use

110v Breakers

The 110v breakers are in the starboard engine compartment. Note: There is no Generator / Shore power selector switch. The process is fully automated.

The 110-volt outlets will operate whilst you are plugged in to shore power or running the generator. Ensure that the 110v breakers are on when using the 110v outlets. The only breaker that is left off is the water heater.



3. Inverter / Charger

Warning: Leaving the Inverter turned on will severely deplete the house batteries. For that reason, it is better to run the engines at the same time. If you have the Generator running, you do not need the Inverter.

When on shore power, ensure that the toggle switch on **BOTH** the battery charger **and** the Digital Multi Control are set to 'Charger only'.

TO USE THE INVERTER:

1. Start the yacht's engines and bring the rpm up to 1400 **IN NEUTRAL.**
2. Move the switch on the battery charger / inverter to 'On'
3. Move the toggle switch on the Digital Multi Control to 'On'. The 'Inverter On' light above the switch will then illuminate.
4. All the 110v outlets are now live.
5. **Switch off the inverter when you are finished with it to prevent your house batteries from depleting.**
6. Run the engine for ten minutes after the inverter is switched off and check the battery levels 15 minutes after the engine is turned off.

4. Engine start procedure.

- Make sure engine is in neutral.
- Press the On/Off switch to turn the ignition panel on.
- Press the start button until the engine is running.
- When the engine is running, check you have water coming out of the exhaust.
- To stop the engine, push the **STOP** button and hold until the engine has stopped and then push the **OFF** button.

There is an emergency parallel switch in the starboard engine compartment. It enables the engine battery to be combined with the house bank if the engine start battery is too low. **If you need to use this switch, please call Horizon first.**

Should you hear an engine alarm during operation, check which symbol appears on the tachometer and immediately shut down the engine-CALL HORIZON.

All our yacht engines run with diesel fuel. There is a diesel filler cap on the transom which is clearly marked "DIESEL" DO NOT PUT WATER IN HERE.

5. Daily Engine Checks

- Check the oil level using the yellow dip stick located to the right-hand side of the engine. The level should be at least halfway between the empty and full marks. To add oil, open the oil filler cap on the top of the engine.
- To the rear of the engine is the seawater filter, **do not** remove the cap.
- To the rear of the engine is the engine coolant reservoir. The coolant level should be between the maximum and minimum lines.
- Check for any engine leaks or bilge water below engine.
- Check the belt for any damage and correct tension.

KEEP HANDS CLEAR OF ALL MOVING PARTS.

ANY PROBLEMS CALL HORIZON

6. Generator

Do not run the generator when underway. Note: There is no Generator / Shore power selector switch. The process is fully automated.

Amatheia is fitted with its own generator which will run the 110v outlets, the air conditioning and will also charge the batteries in place of the engine. The generator is in the starboard forward deck locker and the start panel is inside the saloon below the 12V panel.

The reset breaker for the generator is located on the left side of the generator, towards the back.

Main breakers for the generator

- To use the 110v sockets you must switch on the 110v outlet switches in the starboard engine compartment.
- The water heater will work when the generator is running but this is not usually needed. Hot water is primarily generated by running the main engines.

To start the generator:

- Make sure all the 110v systems (especially the air conditioning) have been switched off prior to starting the generator.
- Press and hold the 'Start' button.
- After a slight delay the light on the switch will flash and go green, you will hear the generator start.
- Allow the generator to warm up for 5 minutes and then gradually load up the system, adding one load (air conditioner) every 5 minutes.

Stopping the generator

- **Allow the Generator to cool down for 5 mins under no load before shutting it down.**
- Press and hold the ‘Stop’ switch. The generator will shut down.

7. Air conditioning

The air conditioning unit will operate when the vessel is plugged in to shore power or when the generator is running. Each cabin has its own individual air con unit and there are 2 units located in the saloon.

Operate the air conditioning as follows:

- Switch on the power button.
- Select “cool” via the mode button.
- Select your base temperature using the temperature controls. **Do not set the temperature below 70 degrees F (22 degrees C), otherwise the unit may freeze up.**
- Select fan strength using the fan control.

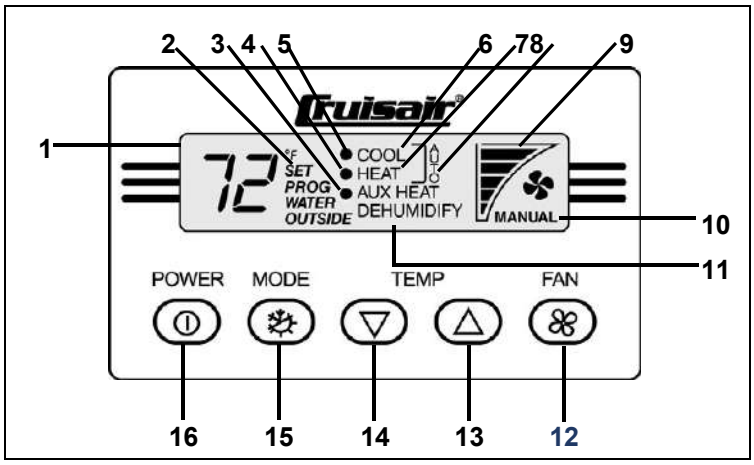


Diagram Description of Control Display Panel and Indicators

1	**Data Display** - Large LCD readout displays current temperature, set point, programmed values and error messages.	9	**Fan Speed Indicator** - A row of five bars indicate the current fan speed, with more bars indicating a higher fan speed and fewer bars indicating a lower fan speed.
2	**Set Point Indicator** - Display shows SET when set point is being adjusted. Normally display defaults to inside temperature.	10	**Fan Mode Indicator** - The word MANUAL displays when the fan is running in Manual Fan Mode. The word MANUAL does not display when the fan is running in Automatic Fan Mode.
3	**Aux Heating Indicator and Aux Heat Mode Indicator (optional)** - A solid dot displays next to the words AUX HEAT when the electric heater is on and running in Aux Heat mode. The words AUX HEAT display when you are in Aux Heat mode. (Press the MODE button to select the optional Aux Heat Mode.) See Programmable Function “23: Aux Heat Enabled/Disabled” on page 12.	11	**Dehumidify Mode Indicator** - The word DEHUMIDIFY displays when you are in Dehumidification Mode. It flashes if optional humidity sensor is connected and operating in the Cooling Mode. (Press the MODE button to select Dehumidification Mode.)
4	**Heating Indicator** - A solid dot displays next to the word HEAT when the compressor is on and running in Heat mode.	12	**FAN Button** - Press to select Manual or Automatic Fan Mode, indicated by the word MANUAL displaying or not displaying. In Manual Fan Mode, additional presses of the FAN button will adjust fan speed higher, then lower, then back to Automatic. In Automatic Fan Mode, fan speed is controlled by the microprocessor as a function of the difference between set point and inside temperature. See Programmable Function “4: Fan Response Differential” on page 9.
5	**Cooling Indicator** - A solid dot displays next to the word COOL when the compressor is on and running in Cool mode.	13	**UP Button** - Press to adjust set point up. In programming mode press to scroll through program modes and adjust values.
6	**Cool Mode Indicator** - The word COOL displays when you are in Cool mode. (Press the MODE button to select Cool Mode.)	14	**DOWN Button** - Press to adjust set point down. In programming mode press to scroll through program modes and adjust values.
7	**Heat Mode Indicator** - The word HEAT displays when you are in Heat mode. (Press the MODE button to select Heat Mode.)	15	**MODE Button** - Press to cycle through the modes of operation (refer to indicators). Mode sequence selections are COOL, HEAT, AUTO, AUX HEAT (optional), and DEHUMIDIFY.
8	**AUTO Mode Indicator** - A bracket and the word AUTO display to the right of the words COOL and HEAT when you are in Auto Mode. If optional Aux Heat is enabled (see Programmable Function “23: Aux Heat Enabled/Disabled” on page 12), a bracket and the word AUTO display to the right of the words COOL and AUX HEAT. (Press the MODE button to select Auto Mode.)	16	**POWER Button** - Press to turn the system on and off. Note that the Data Display remains on in the Off mode. You can continue to adjust set point, display temperature readings and activate the manual fan to circulate air while the system is in the Off Mode.

AC troubleshooting:

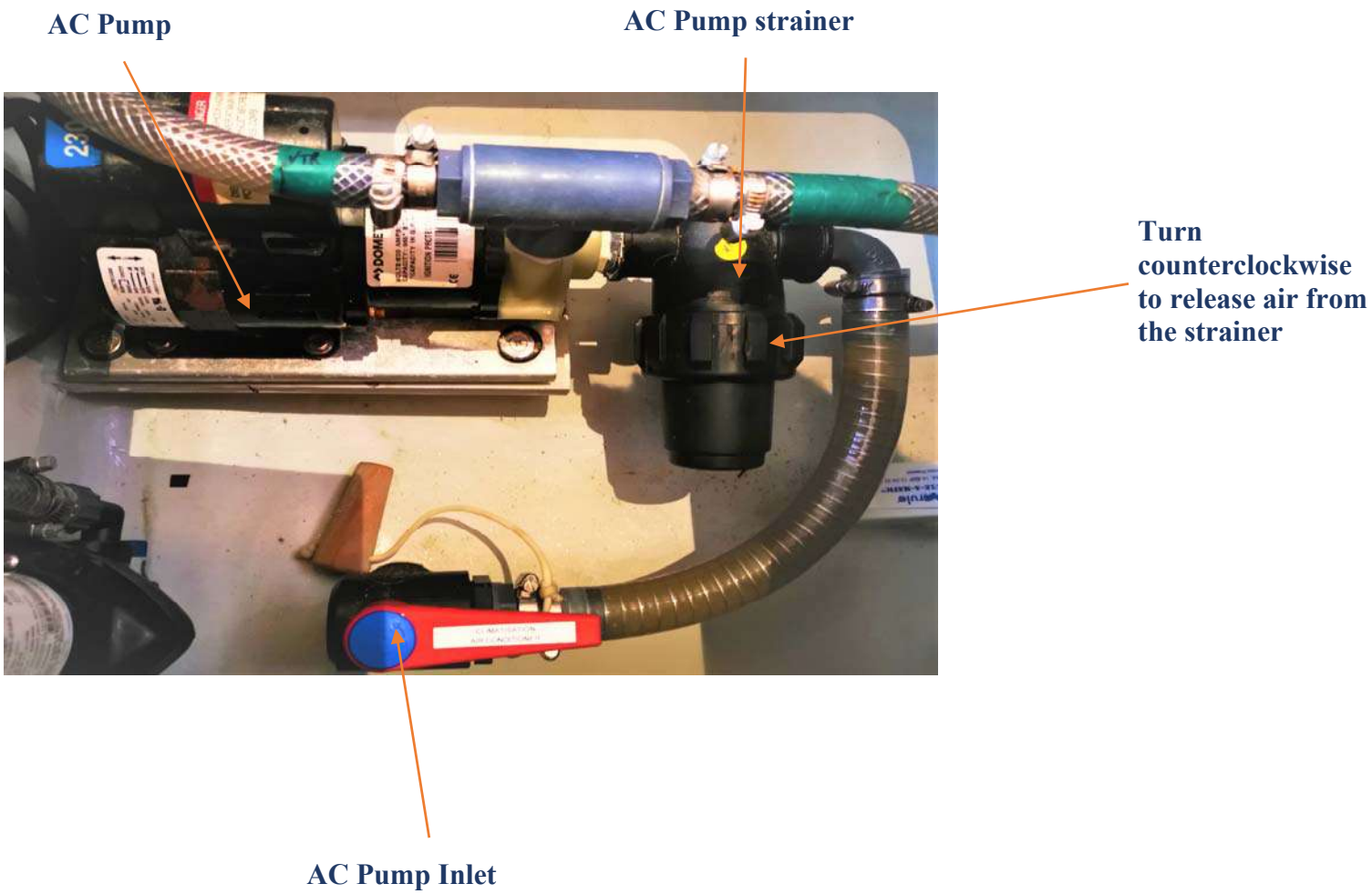
Iced up unit: You can tell a unit is iced up when it is running but there is no air coming out of the AC vent. You can also look at the actual unit, it will be covered in ice. Turn off unit and let defrost.

Unit not cooling: Check temperature settings. Ensure mode is set to cool.

HPF (Hight pressure fault): The AC units on the Altair are water cooled. A high-pressure fault means that there is air in the system (lack of water flow). Check the sides of the vessel and make sure water is coming out of the AC outlets on the hull. If there is no raw water flow the unit will need bleeding.

Bleeding AC unit: Bleeding the unit means letting the air out the system until there is a steady flow of water to cool unit. On Altair the unit is bled from the AC pump strainer. First turn the unit on to restart the Air conditioning pump. Give the cap on the strainer a few turns counterclockwise until you start hearing air and water coming out the top (*do not take the strainer all the way off*). Once there is a steady flow of water tighten the cap on the strainer and check that water is coming out the side of the vessel.

Speak to the manager on duty before attempting to bleed AC-Unit.



Load up the generator with one air conditioning unit every five minutes so that the generator does not overload.

Note: If all the air conditioning units fail to turn on, check the reset breaker on the left side of the generator

Reset button

8. Instruments

Located at the helm position are 2 **Garmin GMI 20 multi units**, a **Garmin GHC 20 Autopilot** and a **Garmin GHS 10i VHF handset**.

Located at the nav station is a **Garmin GPSmap 7410 Touchscreen chartplotter**.

9. VHF Procedure

Using the VHF radio:

Familiarize yourself with the method for switching channels, and with the squelch and volume controls on your radio. Most radios have a button to instantly select Channel 16 – ensure you understand how this operates or you could end up speaking on Ch. 16 when you think you are on some other channel.

1. Make sure the radio is switched on, volume quite high power to high unless the station you are calling is very close.
2. Squelch up until loud hissing, and then back a little until the noise *just* stops.
3. Select the channel for calling (Channel 16, unless specified otherwise).
4. Press switch on microphone when speaking. Release immediately.

If no response, wait two minutes and repeat the call. If still no response, wait a further two minutes before trying again. If calling on Channel 16, it is very important to switch to a working channel after the contact is established. Do no use Channel 16 for your conversations – this channel is for hailing and distress only.

Channels to use:

16 Hailing and Distress.
74 Contact Horizon Yacht Charters (when in range).
12 Yacht Charter Companies working channel – assigned for yacht breakdown servicing and emergency only.
68 Marinas and Yacht Clubs – for lunch/dinner reservations etc.
06 Ship to Ship – along with Channel 68 and 77 can be used for contact between boats.

In the event your vessel is involved in a nonlife threatening incident with an object or with another vessel, it is important that you contact the Horizon Office immediately at 494 8787 or 542 8788. Please remember to get as much information as possible about your location, the other vessel's description and what damage was done to your vessel so that we can best assist you.

Failure to report any accidents or incidents in a timely manner may result in nullification of your hull damage insurance.

Types of emergency:
In the unlikely event that you are involved in an emergency stay calm and follow these steps. You will also have an Emergency Procedure card next to your VHF.

Distress: "MAYDAY, MAYDAY, MAYDAY." This is an International Distress signal and an imperative call for assistance. It is used only when a life or vessel is in grave and imminent danger.

Mayday Relay: used to summon help for a vessel which is either too far offshore to contact the coastguard directly, without radio capabilities or whose radio has been damaged or destroyed.

Urgency: "PAN-PAN, PAN-PAN, PAN-PAN" This is the International Urgency Signal and is used when a vessel or person is in some jeopardy but is not considered to be in grave and imminent danger.

Medical emergency: "PAN-PAN MEDICO, PAN-PAN MEDICO, PAN-PAN MEDICO" (Pronounced med-ick-oh). This is an International Urgency Signal that should be used when medical advice is needed.

Safety: "SECURITE, SECURITE, SECURITE" (Pronounced Say-cure-it-tay). This is an International Safety Signal and is a message about some aspect of navigational safety or a weather warning.

How to issue an emergency message
Select Channel 16 and press transmit button on handset.

Say slowly and clearly 'MAYDAY, MAYDAY, MAYDAY, CALLING ALL STATIONS.

This is…. (vessel name) ….' and repeat vessel name 3 times.

Give position – vessel's position in degrees of latitude and longitude or nautical miles from, and bearing to, a navigational landmark.

Describe emergency – list the problem, the type of assistance needed; number of passengers aboard (boat length, hull colour and type is also useful).

Wait 1 minute for a response, repeat message.

ALTERNATIVELY: Dial either 767 (SOS) or 999 from any BVI cell phone or call 494- HELP (4357).

Amatheia is fitted a **Garmin GHS 10i VHF** handset at the helm. The speaker with volume control is located below the nav desk.

GHS 10i

GHS 10 speaker, below nav desk

Fusion MS-RA205 stereo with Bluetooth, USB and Aux inputs located at the nav desk.

10. Batteries

The systems on your yacht are all 12 volts except for the Air conditioning, battery charger and hot water heater. The batteries will need to be recharged as often as you deplete them. Conserving power will result in less time needed for charging, so turn off systems that you are not using.

Your batteries will charge when the engine is running at 1400rpms or more whether sitting at a mooring or motoring to a destination, or when the generator is running. Check the battery levels and make note of them before charging.

Run the engines at 1400rpms or more (or the generator) for a minimum of 1-1 1/2hrs **twice daily.**

Shut the motor off. Wait 15 minutes before checking the battery levels, (directly after turning off the motor they will remain in an excited state for about 10 minutes).

The House system should come to rest at 12.8 v. and then slowly get lower. When the system gets to 12.2 you should start planning to re-charge the batteries soon.

Amatheia's house battery bank is isolated from the engine start battery and the house battery's have a capacity of 430Ahrs

The batteries are in the starboard engine compartment. They do not require any checks whilst on charter.

11. Anchoring & the windlass

Setting your anchor:

Preparation:

- Establish a non-verbal communication system between helmsperson and windlass operator, as with the noise of the engine and wind, verbal communication proves difficult.
- Shorten the painter so that it cannot go under the yacht and wrap around the prop.

Location:

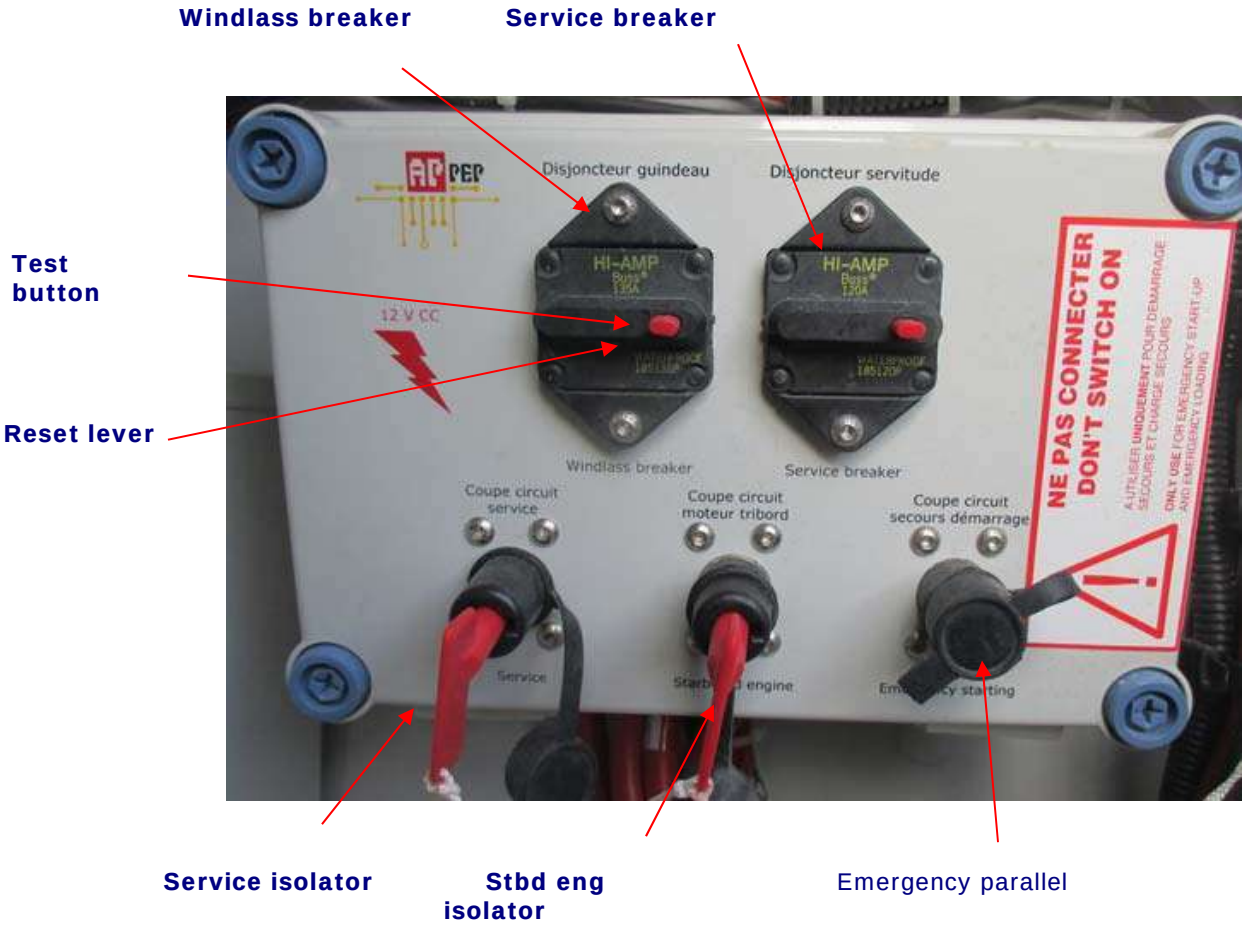
- Choose a clear area to anchor in and you can see the bottom. A white bottom is sand and perfect for anchoring. A brown or green bottom will be grass, rock or coral. Only anchor in sand. Maximum depth would be 1/5th of your anchor rode. Remember the depth is set from the bottom of your keel so keel draft should be added to the reading of your depth gauge.
- Anchoring on a lee shore is not recommended and would recommend using both your primary and secondary anchor if you choose to anchor off a lee shore. (see below)

Action:

- Always have your engine revs increased to @ 1400 rpms before windlass operator touches the windlass remote. The windlass needs optimum energy to operate correctly.
- Minimum scope is 5:1. In heavy weather you may want to increase that, always ensuring your swing area is clear of any obstacles.
- Use the elements; approach from downwind or current, whichever prevails.
- Have the anchor ready to deploy. This may require you to slack the chain and manually push the anchor slightly overboard so that it will go deploy when you press down on the remote.
- Once the yacht is stationary use the electric windlass to drop the anchor to the sea floor. The elements will push you back and away from the anchor. Keep deploying chain until you have acquired the correct scope. Attach the snubbing line.
- Always attach the snubbing line before setting the anchor with the engine and whilst you are anchored. The snubbing line protects the windlass and it is important that you attach the snubber every time you set the anchor. Attach the hook around the chain link (the hook is too big to go through the link) and cleat off the bitter end of the line to a bow cleat. Pay out enough chain so that the snubbing line becomes taut.
- If the hook falls of the chain, it means that there is not enough tension on the line. You may need to hold slight tension on the snubbing line as you deploy more chain until the snubber takes the load of the anchorage. Engage reverse, slowly building up to 1500 rpm to really drive your anchor into the sand. Take transits as you set the anchor so that you know that the anchor is not dragging.
- It is always advisable to snorkel the anchor and ensure it is bedded in correctly and not just lying on its side or hooked on a rock.

Retrieving Primary Anchor:

- Never use the windlass to pull the yacht to the anchor. The windlass operator should point in the direction of the anchor chain so that the helmsman can move slowly in that direction. As soon as there is some slack on the anchor chain the bowman tells the helmsman to put the engine in neutral and then increase RPMs. Bowman then retrieves all the slack chain. When the chain becomes taut then you repeat the process from the beginning. Ensure the anchor does not swing into the bow of the yacht.



Manual operation of the windlass

If you lose power to your windlass, start the engine and fast idle the engine at 1400rpms **in neutral**, to make sure you have not just got a low battery voltage. Then make sure the windlass breaker is not tripped in the starboard engine compartment. If you still have no power, you can operate the windlass manually.

To drop the anchor, secure the windlass handle onto the top hole on the windlass (shown in the picture above).

Turn it counterclockwise to loosen the wing nut. Your anchor is now ready to drop.

Remove the safety line or safety pinto release the anchor, keeping hands and feet clear. Control the rate the chain pays out by tightening or loosening the gypsy with the handle. When you have paid out enough chain – 5 to 8 times the water depth, turn the handle clockwise to tighten the gypsy. Increase revs to 1500 rpm, to set the anchor in reverse. If you drag, pay out more chain, and re-try 1500 rpm in reverse. When the anchor is set, fit the anchor bridle then release the more chain on the gypsy as above, so that the load is taken up on the bridle.

Electric Winch

The right hand of the three winches at the helm can be operated manually or electrically. **Extreme care should be taken if using the winch electrically as accidental damage or injury can easily occur.**

Electric / manual winch

12. Picking up a mooring buoy

- Ensure the dinghy painter is tied off short on the bow or amidships and is clear of the prop.

- Approach the mooring buoy, keeping the bow into the wind or current, whichever prevails.

- Have a crew member on the bow to pick up the mooring pennant with the boat hook.

- The bowman will direct the helmsman to the mooring, using the already established non-verbal communication system. Once at the mooring, inspect the buoy and pennant for any signs of wear and tear; if you are unsure about a mooring buoy's integrity, choose another location to moor up.

- The bowman should ready a line to a bow cleat to slip through the eye of the mooring pennant. This line is then shortened and brought back to the same cleat.

- Once set your mooring buoy will be attached either on the port or starboard cleat and the yacht will be head to wind. Remember to centralize the wheel and lock in place to avoid the yacht sailing around the buoy.

- Next attach a second back up line to the mooring. Attach a line from the opposite bow cleat and if possible, attach it directly to the mooring buoy. It is always easier to do this from the dinghy. Do not try to make the lines of equal length, the first line should be taking all the weight of the boat.

- To depart, release the back up line first. Slowly motor the boat forward to create slack, release the line from the cleat and allow the pennant to slip from the line into the water. Fall back with the wind or current and be careful not to foul your prop on the pennant.

- **Remember to tie your dinghy away from the stern whenever you are maneuvering in close quarters**.

13. Bilge Pumps

Your yacht is equipped with one manual and four electric bilge pumps. There is an electric pump in each hull and one in each engine compartment. The electric pumps are operated by float switches and are automatic. In the event of failure of the float switches they can be overridden by using the switches on the 12v panel. The manual pump is in the cockpit and is shown in the photo below.

Main bilge pump

Eng compartment bilge pump

Manual bilge pump (hose inside cockpit locker)

14. Fresh water system

Amatheia is equipped with two interconnected water tanks with a total capacity of 185 gallons.
Before filling the tanks let the water run from the hose for a while before placing the end into the filler that is located on the foredeck. Please ensure that the correct fillers are used, NOT the holding tanks or the diesel fill.

To use the freshwater system, turn on the freshwater breaker on the 12v panel and open a faucet. When the tank runs out of water the pump will run at high speed and the faucet will start to cough air. As soon as you hear the pump running continuously, check to see if anyone is using water. If not, switch off the pump immediately to prevent the pump from drawing more air into the system or the pump overheating.

15. Heads

- **Nothing is to be put down the head unless it has been digested first.**
- Amatheia is fitted with three electric heads, with a switch by the head sink.
- Prior to use, hold the left side of the switch to add water.
- To flush hold the right side of the switch for 12 to 15 seconds.
- Wherever possible please use the heads ashore as this keeps our waters nice and clean.
- **Blocked heads will be cleared at a cost to you of $150.00 sewage fee, plus a technician's fee of $75 per hour and the call out fee**.

Head switch

16. Showers

Your yacht has a hot & cold, fresh-water shower in the heads and at the deck shower on the transom.

If the engine has been running, the hot water can be very hot – be cautious!

To use the showers, the fresh-water pump must be activated on the 12V panel.

The head showers drain into a sump box which has an automatic float switch and pump, so the water will be pumped out automatically.

Transom Shower

17. Refrigeration

Amatheia has a 12v refrigerator and separate freezer inside and a 12V cockpit fridge. This system is designed to run 24hrs a day if you wish. To ensure that they do not fail there are two things you should do.

- Firstly, keep your batteries charged. If the level goes below 12v the system will malfunction. Refer to section 12 for charging instructions.
- Secondly, do not puncture the cold plate in your fridge! **Do not chip at the ice or use any other sharp items in the fridge**. If something is frozen to the side of the fridge do not force it away. Pour warm water on it if you need to melt the ice.

There is a thermostat in each fridge. It is a white dial with numbers on it going from 1-7. Putting 7 at the apex of the dial is the coldest setting. Keep it on this setting until it is too cold. Then you can turn the system down or off if you wish. Or if it is not cold enough, augment the system with ice.

Ask one of our staff for a deck cooler if you would like one for storing your drinks. It will keep the drinks cooler and the refrigeration colder, as people will not be going in it every 5 minutes for a drink.

Please note that we are in the tropics and we cannot guarantee that items will remain frozen when placed in the fridge and that fruit, vegetables and other fresh produce may have a shortened shelf life.

Two drawer fridge **Freezer** **Cockpit fridge**

18. Propane and stove

The propane tank locker is located under the forward cockpit seat.

To use:

- Press the switch located on the 12V panel. This opens the solenoid on the tank.
- To light, turn the knob you want 90 degrees clockwise, push the knob in and light the burner with the electric igniter button.
- Hold the knob in for 5-10 seconds, then release. Make sure that the flame goes all the way around. Reduce any wind that may hinder this.
- If you cannot get it to light, check the manual shut offs - there are three. One on the propane tank itself and two in the galley under the sink. Make sure these are all open and try again.

The 12v solenoid system is USCG approved device. You do not need to shut any manual valves unless you wish.

Gas shut off valves under sink

Three burner stove

Gas safety

All our yachts are fitted with propane detectors. On Amatheia, the display is located to the left of the 12V panel. The propane 'sniffer' has been placed in the bilge (propane is heavier than air and so will sink into the bilge). The detectors are sensitive to several types of gas and will trigger the alarm. The alarm can also be triggered if there is moisture in the bilge. If the alarm sounds it does not necessarily mean that the propane system is leaking, so don't panic!!

If the alarm goes off, follow these steps:

- Close the valve on the propane tank.
- Check the stove and surrounding area for propane smell.
- If detected, open all the bilges and hatches. Point the boat downwind and use the manual bilge pump to pump out the bilges.
- Call Horizon immediately

Under no circumstances should you use the electrical bilge pumps or any other electrical system if you suspect a gas leak.

19. BBQ

- When using the BBQ, tie your dinghy off at the side of the yacht, not off the stern.
- Never use the BBQ while sailing.
- Never use the BBQ on a dock.
- Never change propane tanks when using the BBQ.
- Make sure someone is always tending the BBQ when hot.
- Call us if you have too much food.

Fire Safety

Please read instructions for all safety equipment before setting off.

Prevention is the best answer to fire safety.

- Always switch off the safety solenoid when stove is not in use.
- Never leave the stove or oven burning unattended.
- Never change propane tanks whilst barbequing.
- Never smoke below decks.
- Never smoke when changing propane tanks.
- Safely store any flammable liquids (for example charcoal lighter fuel).
- Keep matches away from children.

Engine compartment fire:

In the event of a fire, do not open the engine hatch, as opening this will allow more air to enter the compartment and thus feed the fire. There are automatic fire extinguishers located in each engine room. Should there be a need to manually fight an engine fire then removing the mattress in each aft cabin will reveal an access hole for a fire extinguisher to be used.

- Pull the yellow key out
- Press down on the red button until all the contents of the extinguisher have been discharged.

Open fire:

- Pull out the yellow safety tab.
- Point the extinguisher at the base of the fire and press down on the red button to discharge contents.
- Generously cover the base of the fire and surrounding area to ensure the fire is under control and cannot spread. Continue discharging extinguisher until the fire is out.

Galley fire:

- Take the fire blanket out of its container.
- Ensure hands and limbs are protected from the fire by the blanket.
- Carefully lay the blanket over the fire, laying the blanket away from you always protecting yourself from the flame.
- Once in place leave the blanket until all heat has gone from the scene of the fire, this way you can be sure that the fire has gone out and will not re-ignite.

21. Dinghy & Outboard

The driver of the dinghy must be over 18 and must at all times be wearing the kill cord. Never operate the dinghy under the influence of alcohol or drugs.

- Always tow your dinghy on a short line while motoring and a long line while sailing, always tow with the engine leg up as it gives you an extra half knot.

- Most of the time it is fine to leave the outboard on the dinghy, but if conditions are very rough, the outboard needs to be mounted on the push-pit.

- When going ashore for an evening's entertainment allocate a dinghy captain, someone who will bring the whole crew back to the boat safely, allowing the rest of the crew to enjoy various local cocktails and concoctions.

- To start the engine, lower the motor into the water using the lever on the starboard side of the engine. The lever position corresponds to the motor position, up and fwd for towing and back and down for driving. Check you are in neutral and **the safety cord is in place**. For starting an engine that has been at rest for 3 or more hrs use the choke. Pull the choke out and set a few revs with the throttle. Do not twist the throttle trying to prime the engine. You will only flood it. Face the engine and pull the start cord and push the choke back in as soon as it runs. If it runs for a second but cuts out, try again without the choke.

- To stop the engine, press the button on top of the kill cord, or pull the kill cord out.

- Keep the kill cord with you to prevent anyone from borrowing it. You have been provided a dinghy lock and cable. Use them.

- Do not drag the dinghy onto a beach; anchor it off or put it on a dock with a stern anchor to prevent damage from going under or hitting the dock.

- Do not speed in and around other yachts, speeding fines have been introduced.

- At night, an all-round white light must be displayed along with red & green side lights, and it is always a good idea to have a flashlight with you, to show the way, and warn other vessels of your presence.

- Wear the life preservers provided in the cockpit lockers when in the dinghy.

- GAS to OIL ratio, 1 Gall = 3 ounces.

Outboard Engine - 15HP 2 stroke

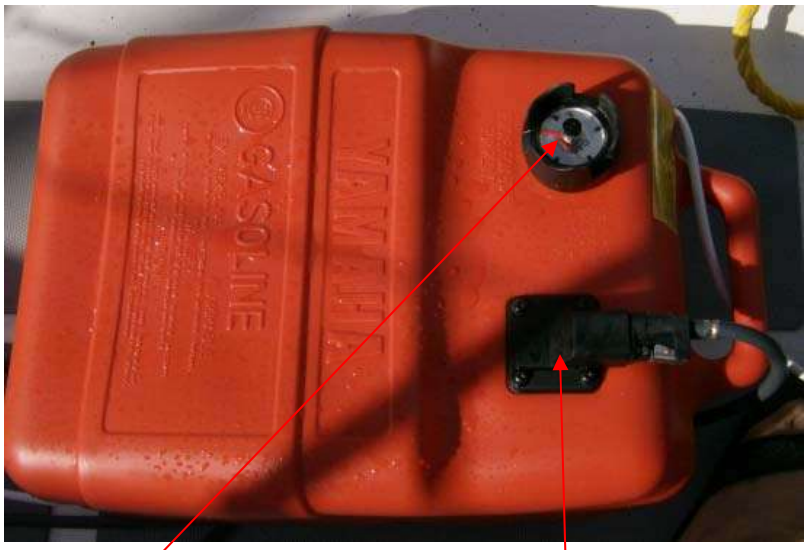
Pull cord

Choke

Shift lever

Kill cord

Eng tilt lever



Fuel vent – make sure this is always slightly open when using the dinghy.

Fuel line connection; make sure this is securely attached.