Safe Loading

When loading your houseboat be sure to follow these guidelines for proper floatation.

Guidelines

- Boat must sit level front to back.
- Boat must sit level side to side.
- Make sure to load your gear evenly throughout the boat.

Marine Radio

Your Houseboat has come equipped with a VHF Marine Band Radio. It is located at the helm, to the left of the steering wheel.



On/Off

- Turn the volume knob in a clockwise direction to turn on the radio.
- Make sure the H/L (high/low frequency) button is on the Hi position which can be seen on the display.

Channel 16

- Use Channel 16 for hailing and emergencies only. Never use Channel 16 for routine conversations.
- In case of an emergency, hail the National Park Service on channel 16. They monitor this channel 24 hours a day.
- To hail Boat Rentals, turn radio ON and to Channel 16, depress button on side of handheld microphone to talk, and release the button when you are finished talking. The Boat Rentals Office monitors this channel during regular business hours.

- Say "_____ (the name of the marina you are calling) BOAT RENTALS this is houseboat #
 _____ " (number of your houseboat). For example: "Bullfrog Boat Rentals, this is houseboat # S11."
- When communication is established, we will direct you to another channel. Commonly used channels are 10, 12, 68 and 72. Be sure to acknowledge that channel, before you change to the channel. Then turn to that channel, and we will continue the conversation.

Information you will need when you call us:

- 1. Your boat number.
- 2. Your exact location, if known.
- 3. Description of the problem.
- 4. Any details on the troubleshooting you have already tried.
- If you need assistance we will attempt to help you troubleshoot a problem over the radio. If we are not successful, we will dispatch a technician to help you.
- For safety, our technicians can only be dispatched if they can fix the problem and return to our docks before dark. If we receive your call late in the day, we will gladly respond first thing the next morning.

Marine Radio

Weather

- W/X button or Channel 1 on your marine radio is the weather channel.
- This channel is updated periodically by the National Weather Service.
- Be sure to check this channel regularly during your trip to keep apprised of the changing weather conditions here at Lake Powell.

Request for Assistance Card

- If for some reason you cannot reach us by Marine Radio, fill out your Request for Assistance Card located in your manual.
- Flag down a boat passing by and ask them to take it to the nearest marina for assistance.
- We will dispatch a technician out to your boat as soon as we can safely do so.

Other Information

- Do NOT use VHF antenna as a flag pole or hang anything on the antenna.
- Channel 26 is the Marine Operator.
- Marine Radios transmit line-of-sight. So if you are back in a canyon, you may have to ask assistance from another boater with a radio to help contact us if you cannot get through directly.
- Profanity over the public airways is a federal crime.
- Reminder: Your Marine Radio is not a toy and should be operated only by a responsible adult.
- A VHF marine radio is not the same as a Citizen's Band Radio. CB lingo and 10-codes are not used.

Problem	Possible Causes	Remedies
Not transmitting or receiving	 Low house battery Radio not set on USA Radio blocked by canyon walls Set on 1 watt mode Antenna has fallen down 	 Charge house battery Push USA/Int button Move the houseboat to open water Push 1/25 or Hi/Lo button to change to 25 watt Raise antenna

Engines/Helm

YOUR HOUSEBOAT HAS TWO ENGINES...

- For greater maneuverability and power.
- To provide you with a spare in case of engine failure.

Your engines are well maintained, but occasional breakdowns can occur. The *spare* is to ensure your safety and save you inconvenience. Don't let the loss of one engine delay your vacation. Proceed on your planned itinerary with the good engine and we will catch up to you as soon as possible and make necessary repairs.

GAUGES



Tachometer

- Monitors the engine revolutions.
- Wide-Open Throttle (WOT) should be 4400 RPM's.
- The most efficient cruising RPM will be 3200 RPM

Fuel Gauge

Key must be on for fuel level to register.

Engine Temp

Oil Pressure

Volts

NAUTICAL NOTE: When leaving a dock, signal with the horn 1 long blast (4 seconds) and 3 short blasts (1 second each).

THROTTLE

Setting Neutral Throttle for Starting

- Confirm that the throttle is in neutral position.
- Turn the key to first click Beeper will sound.



- Push and hold "black" command button Red light will go solid (tone will stop).
- Turn key to engage starter. If the engine fails to start in 10 seconds, return key to ON position, wait 30 seconds and try again.

IF the engine fails to start, turn the key one detent until red light flashes, push and hold the command button while pushing the throttles forward one detent. This will allow you to increase the RPM's for starting only do not bring over 2000 RPM's until warm.

- Return throttle lever to center position after warm-up.
- Red Light will be solid to indicate that the shift control is activated, and lever movement will engage prop.

GETTING UNDER WAY

From Neutral Throttle

- Return throttle to neutral position.
- Red light on controls will be solid.
- Push throttle lever forward to go forward or pull back for reverse.
- Advance throttle to increase speed.
- Always pause in neutral before changing gears.

Shut Down

- Return throttles to neutral position.
- Turn key to off.

FLYING BRIDGE CONTROLS

Operation from Upper Deck

To get power to the upper deck controls:

- Engines should be running.
- At the lower helm put engine control levers in neutral position.
- At the upper helm push the "black" transfer button.
- Red light will come on.
- Push throttle lever forward to go forward or pull back for reverse
- To transfer control back to the lower helm, set upper helm controls to neutral, then return to the lower helm and press the "black" transfer button to regain control.

Engines/Helm

Don't Drive From The Upper Deck:

- In any wakeless area, including the marina.
- When approaching a dock.
- When approaching a beach.
- In narrow channels.

In any situation that requires maneuvering your vessel, always pilot from the main helm

Note: Do not try to start the engines from the upper helm.

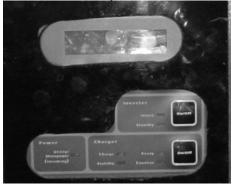
Problem	Possible Causes	Remedies
Engine doesn't turn over	Is the throttle in neutral	Put throttle in neutral
Engine turns over but won't start	Out of Fuel	Transfer fuel from the Toy Tank to the engine tank.

Houseboat Batteries

The 12-volt house system includes cabin lights and navigational lights, water pumps, the horn and the VHF Radio.

Charging

- Start the Generator following Generator Starting Procedures.
- Turn on the breaker for the inverter on the AC panel.
- The batteries will also charge directly from the engines. Operate the engines at 2000 RPM to charge
- Charging is most efficient with unnecessary DC breakers off.



<u>DC Breaker Panel</u>

- 🔊 Water heater
- 🔊 Furnace
- Lights
- Spreader lights
- Water pump
- Fresh water
- 🔊 Furnace
- 🕿 Lights
- Stereo
- 12 Volt DC outlets
- Docking Lights
- Search Light Remote
- 🔊 Fuel Transfer



Please Note:

- Turn off the Water pump breaker while underway beaching, or unbeaching. Once you are beached, leave this breaker off for an additional 15 minutes to let sand and sediment in the water settle.
- It is not necessary to switch on the bilge pump unless water is noted. The bilge pump is wired to automatically switch on when water is present.

BATTERY TEST



1. House Battery

- Located in the upper left side of the main panel is the DC volt gauge.
- Push toggle switch to position 1
- Should be between 11-13 volts when generator is not running.
- When generator is running and the Inverter is on, should be 12.5 volts or greater.

Houseboat Batteries

- The Generator must be run 6 to 8 hrs per day to keep the batteries charged
- A low battery alarm will sound and the LED on the control panel will flash when the battery's drop to 10.5 volts
- DC power will shut down at 10 volts

2. Engine or Start Battery

- Push toggle switch to position 2
- Should be 12 or greater when generator is not running.
- When generator is running, should be 12.5 or greater.

3. Generator Crank Battery

- Push toggle switch to position 3
- Should be 12 or greater when generator is not running.
- When generator is running, should be 12.5 or greater.

Remember: Each light or appliance will need to be turned on individually once the breaker is on.

Tips for Getting the Most from your Houseboat Batteries

- When generator is running ALWAYS have the AC MAIN and Inverter breakers on.
- Charge daily.

NOTE: Deep Cycle batteries are used to extend the time between charging. However, they also require more time to recharge when they are discharged for too long.

The Generator is located in the center hatch on the rear deck of your houseboat.

Starting/ Warm Up

- Turn on the blower switch
- The remote start is located on the wall of the cabin at the top of the stairs to the lower berth.



- Confirm that the MAIN Switch and all circuit breakers are OFF.
- Hold the ON switch and momentarily press the start switch till the generator starts or for 20 seconds, no longer.
- If the engine fails to start, wait 20 seconds and repeat.

NOTE: The generator is hard starting with a load on the circuit. By continually holding the starter switch, you can run down the battery or damage the starter.

- Allow the engine to warm up for 5 minutes.
- Switch the AC MAIN breaker ON.
- You may now turn on individual breakers to provide power to your houseboat.

AC Breaker Panel



- 🔊 Hot Tub
- Galley Outlets
- Cabin Outlets
- Inverter Leave on at all times)
- Air Conditioner
- Inverter (leave on at all times)
- Dishwasher
- 🔊 TV / Stereo
- 🔊 TV
- Refrigerator
- Refrigerator
- 🔊 Fan
- Stove/Microwave
- Galley outlets
- Circulation Pump
- 🔊 Bar
- Pump (Leave on when Air conditioner is on)
- Masher / Dryer
- Trash Compactor
- Galley outlets

Inverter



This boat is equipped with two inverters. The inverter control pads are located at the bottom of the main panel - one on either side of the Tank System Monitor. They run the following systems.

- < TV / Stereo
- 🕿 TV
- Refrigerator
- Refrigerator
- 🔊 Fan
- Stove/Microwave
- Galley outlets
- Circulation Pump
- 🔊 Bar
- 🔊 Pump

These appliances will all work without the Generator running.

To Start the Inverter

- Push power ON on both remotes.
- Turn on individual breakers

GFI Outlets

Some electrical outlets have a GFI breaker. Push in the *reset* button to reset.

To Shut Down Generator

- Turn off all AC circuit breakers
- Turn AC MAIN Switch to off

- Push STOP button
- TURN OFF BLOWER

Special Notes

- If your houseboat breaks anchor and/or drifts sideways onto a beach, the generator must be shut down immediately to prevent the cooling system from being fouled with sand and silt. This can cause overheating and disable your generator.
- Below deck generators are equipped with coolant (lakewater) strainers. Do not open this unit unless no water is pumping from the side of the houseboat during generator operation, or you hear excessively loud operation.

	Possible Causes	Remedies
No generator power	AC MAIN breaker off	Check breaker on
		panel
Outlet doesn't work	Is the generator on?	Start generator
	AC MAIN breaker off?	Check breaker on
		panel
	Is that area's breaker	Check breaker on
	on?	panel
	Is GFI tripped?	Reset GFI Outlet
Generator Shut down	Out of Fuel	Check gauges
Generator cranks but	Out of Fuel	Refuel
won't start		

YOUR HOUSEBOAT IS SUPPLIED WITH 135 GALLONS OF FRESH WATER.

Fresh Water Holding Tank

Fresh water refill is located on the outside starboard front corner and is marked "Shore Water Fill".



- Open only when refilling tank from a POTABLE water hose located at any marina.
- The fresh water has an on-demand pump that operates only when a faucet is turned ON.
- You must have the breaker for Fresh Water ON on the DC panel.

Lake Water Pressure

Turn on the two Water Pump breakers on the DC panel.

Faucets

The Large Kitchen Faucet is lakewater.



Small Faucet is fresh water.



All sinks and showers empty directly into the grey and black-water tanks.

Head/Toilet

- Water pump breakers must be on.
- To fill toilet bowl with water, lift up on the foot pedal for a few seconds.
- To flush, step down on the foot pedal.
- The head empties directly into the black-water Tank.
- Note make sure pedal returns to the up position. Failure to do so can cause flooding.

Problem	Possible Causes	Remedies
No Lake Water	 WATER PRESSURE breaker may not be on Low batteries 	Turn on breaker
	Lost prime	 Charge batteries Press down toilet flush for about a minute to restore prime
No fresh water	Out of water	Refill at marina with POTABLE water
	Fresh Water breaker not on.	Turn on Breaker

YOUR BOAT IS EQUIPPED WITH TWO 10-GALLON CAPACITY WATER HEATERS.

To Start

- Turn on the valve for your propane tank.
- Turn on the Water PUMP breakers located on the DC panel.
- R
- Turn on the WATER HEATER breaker located on the DC panel.
- Turn on the WATER HEATER switch located under the main electrical panel.

COMMON TROUBLESHOOTING

- The red light will be on when water heater is lighting.
- Allow approximately 30 minutes for the water to heat.

Note: If water is already hot, water heater light will not come on nor will the water heater light.



Problem	Possible Causes	Remedies
Water Heater does not	Propane may not be on	Check your propane to
light		be sure it is on
	Propane might not be	Check your propane to
	full	be sure it is full.
The red light on the	DC MAIN might not be	Turn on DC MAIN
master switch does not	on	
come on	🗢 WATER HEATER	TURN on WATER
	breaker may not be on	HEATER breaker on
		DC panel
	Water may already be	
	hot	
Ran out of hot water	You only have 20 -	Allow 30 minutes to
	gallons of hot water	heat more water

Holding Tanks

YOUR HOUSEBOAT HAS BEEN EQUIPPED WITH BLACKWATER AND GREYWATER TANKS THAT HAVE A COMBINED 700-GALLON CAPACITY.

Full Service Pumpout

- Radio into any of the Rental Docks.
- Give us an estimated time for arrival.
- We will direct you where to dock and will pump out your houseboat for you.

Self Service Pump-out

- Located in any marina.
- The pump-out fittings are located on the starboard side of the boat. There are two fittings, one grey water and one black.
- Remove the cap.



- Screw the correct sized fitting into the pump-out port on your houseboat. (Fittings are available at the dock on the pumps.)
- Attach the pump-out hose to the fitting.
- Open the valve and follow the directions on the pump.

- When finished, close the valve before removing the hose.
- Remove the fitting from your houseboat and replace on the dock.
- Place the end of the lake water hose inside the pump-out portal.
- Fill the tank with approximately 2 to 3 gallons of water.
- Empty one packet of provided chemical into the head/toilet and flush.
- Put all the hoses back and replace the cap on the WASTE opening.

Remote Station Pump-outs

- See HELP PRESERVE in your Nautical Notes for locations of Remote Pump-outs.
- Unscrew WASTE cap.
- Place end of hose into opening.
- Work the hand lever to pump.



Hot Tub Pump-out

- The Hot Tub pumps at the same location as the waste.
- Attach the pump-out hose to the fitting.
- Open the gate valve on the boat and start pumping.

Problem	Possible Causes	Remedies
Odor	Holding tanks are full	 Pump-out at the nearest marina or remote station After pumping out, add a packet of chemical and two gallons of water in the head Leave some water in the bowl to trap any odor

Gas/Propane

.Fuel Tanks

- Your houseboat has three separate and independent 115 gal fuel tanks.
- The motor fuel tanks are on the port and stbd side of the rear deck under round deck hatches.



Checking Fuel Level

- Motor fuel gauges are located on the helm.
- Power to the helm is required.
- The Toy tank gauges are located on the back deck

COMMON TROUBLESHOOTING

Refueling

- 🔊 Turn off grill.
- Turn off all propane tanks 10 minutes prior to refueling.
- Turn off all electrical breakers.
- Turn off the generator.
- Close all doors and windows.

Caution: NEVER siphon gas from your houseboat fuel tanks.

NOTE: Please have Captain and Crew remain on board your houseboat. Wait for Fuel Dock personnel to assist you.

Propane Tank

- Propane tanks are located on the of the rear deck.
- A valve is located on the top of each tank. Turn counterclockwise to open. Turn clockwise to close.

Problem	Possible Causes	Remedies
Propane Smell	 The grill is not turned off all the way Range not off 	 Turn off grill and tank unless Make sure burner valves are all the way off

How to Start

- Turn on the Inverter breakers
- Turn on the REFRIG breaker on the AC panel.
- The refrigerator on this model operates on standard 110V electricity just like the one at home.
- Refer to the instructions located inside the refrigerator/freezer for more details.
- # 4 is the recommended setting



Getting the most out of your Refrigerator

- Put cold or frozen food into the refrigerator rather than try to cool warm items.
- Open door only when necessary.
- Don't pack the refrigerator full; leave space for air to circulate freely.
- Do not overload your refrigerator.
- Cover foods with strong odors.
- Cover foods that easily absorb odor.
- The coldest areas in the refrigerator are at the bottom.
- Warmest areas are on the upper door shelves.
- The refrigerator will operate more efficiently if the houseboat is level.

Problem	Possible Causes	Remedies
Refrigerator does not Operate	 Is the Inverter Breaker ON? Is the REFIGERATOR breaker on? 	 Turn on the inverter breaker Turn on the REFRIGERATOR breaker
Motor operates for long periods	 Large amounts of food placed in the refrigerator to be cooled or frozen Hot weather or frequent door openings Tightly packed top shelf 	 The refrigerator will work better if items are cool before you put them in the refrigerator Put beverages and other frequently used items in the cooler or Bar Fridges Leave air space so
	3161	cold air can circulate around the food.

To Light the Burners

- Confirm that the propane is on.
- Inverter breaker must be on along with Stove/Microwave breaker
- Turn control knob counter clockwise to the LITE position.
- Adjust heat, with knob, to the desired flame size.

To Light the Oven

Confirm that the propane is on. Adjust oven temp at control panel on the top of the range

To Shut Down

Turn all knobs to OFF.

Problem	Possible Causes	Remedies
Burners or oven won't light	Propane is not ON or is empty	Check propane at bottle and be sure it is ON and is full.

To Light

- Confirm that propane is on.(Port side front deck)
- Open lid of grill.
- Visually check to be certain where you will light the grill.
- Turn knob to *Light* to allow propane to flow into the tube.
- Use the *igniter* to light the grill.
- Adjust flame to desired setting.

Caution: NEVER stand over the grill when lighting.

To Shut Down

- After cooking, turn setting to HIGH for a few minutes to burn any excess food or grease from the grate.
- Turn knob clockwise to shut off.
- Close lid.
- DO NOT remove lava rocks.

NEVER put wood into the grill. Doing so could cause severe damage or injury.



Problem	Possible Causes	Remedies
Grill won't light	Propane is offPropane is empty	Turn on propaneBe sure propane is full

Furnace / Fireplace

Furnace On

- Turn ON the one Furnace breaker on the DC panel.
- Be certain that the propane is on.(Port side Rear deck)
- Set thermostat to desired temperature.
- The thermostat for the downstairs unit is on the main hallway wall
- The fan will come on and run for 2-5 minutes before you feel heat come out of the vents.

Furnace Off

- At thermostat, move white switch at button to OFF.
- Turn OFF HEATER breaker at DC panel.
- The fan will continue to run for 2-3 minutes after you have shut down the heating system.



Fireplace On

- The fireplace heats the salon only
- Be certain that the propane is on.(Port side Rear deck)
- Follow the lighting instructions behind the grate on the front of the fireplace.
- Set thermostat to desired temperature.
- The thermostat is on the main hallway wall.

Fireplace Off

- Turn down thermostat.
- Shut the gas valve behind the front panel (follow shut down instructions)



Problem	Possible Causes	Remedies
Heater won't light	DC main is Off	Turn on DC MAIN
	Heater breaker is off	Turn on the HEATER
		breaker
	Thermostat is off	Turn on the thermostat
	Low battery	Charge the battery

Shut Down

- Turn off your thermostat approximately 15 minutes prior to turning off the generator.
- ✓ Turn off the AIR CONDITIONER breaker.

Turn AC Main breaker to Ship's Gen. main salon wall. Directions specific to the model on your houseboat are

on the thermo-stat. The fan may run 10-20 minutes

breakers.

before you feel warm air coming out of the vents.

COMMON TROUBLESHOOTING

Generator must be running.

Turn on AIR CONDITIONER

The thermostat is located on the

Problem	Possible Causes	Remedies
Heat pump won't operate	 Is the generator on? Is the AC Main on? Are the AIR CONDITIONER breakers on? 	 Start the generator Turn on the AC Main Turn on AIR CONDITIONER breakers

Heat Pump

On/Off

On/Off

- Generator must be running.
- Turn AC Main breaker to Ship'sGen.
- Turn on AIR CONDITIONER breakers.
- The thermostat is located on the main salon wall. Directions specific to the model on your houseboat are on the thermostat.
- The fan may run 10-20 minutes before you feel cool air coming out of the vents.
- NEVER adjust temperature more than 20° less than the current temperature inside the cabin.

Shut Down

- Turn off your thermostat approximately 15 minutes prior to turning off the generator.
- Turn off the AIR CONDITIONER breaker.



Problem	Possible Causes	Remedies
Cooler won't operate	 Is the generator on? Is the AC Main on? Are the AIR CONDITIONER breakers on? 	 Start the generator Turn on the AC Main Turn on AIR CONDITIONER breakers

Accessories

Microwave

- Turn on Inverter breaker
- Turn on Stove/MICROWAVE breaker on the AC panel.
- Use microwave as you would at home.

Blender, Toaster, Coffee Maker & Can Opener

- Generator must be running.
- Turn AC main switch to ship's Gen
- Turn on GALLEY OUTLETS breaker on the AC panel.
- Use these appliances as you would at home.

TV / VCR / DVD

- Turn on Inverter breaker
- Turn on TV / Stereo breaker on the AC panel.
- Use as you would at home.

Hot Tub

- The Hot Tub will heat and circulate water from inverter power but if jets are desired the generator must be running and the Hot Tub breaker located on the AC Main Panel in the cabin must be "ON".
- With the Tub full. Turn the propane bottles "ON" (Port Rear Deck) turn "ON" inverter breakers and the circulation pump breaker at the main AC panel in the cabin.
- Open the hatch under the tub on the port side turn the mini circulation pump "on".
- Open the hatch on the starboard side to adjust thermostat to desired temperature
- To turn jets on switch to "jet pump" and turn power "on".

- 🕿 Stereo (In the cabin)
- Turn on inverter breaker
- Turn on TV / Stereo breaker
- Push the power button on the receiver.
- The radio stations on the lake are limited and varied by location.

CD player (On the top deck)

- Turn on DC Main Breaker
- Turn on CD Player Breaker

Back Deck Camera

- Turn on DC Main Breaker
- Turn on Accessories Breaker
- Push power button on the unit



GPS/ Depth Finder

- Turn on DC Main Breaker
- Turn on Accessories Breaker
- Push power button on the unit

Fuel Transfer Pump

- Turn on DC Main Breaker
- Turn on Fuel Transfer Breaker
- Pull out Remote Fuel station Emergency shut off on back deck
- Turn on switch on transfer pump and begin fueling