

W E L C O M E T O



LAKE POWELL™

RESORTS & MARINAS



46' EXPEDITION

HOUSEBOAT MANUAL

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MARINE RADIO



Your houseboat has come equipped with a VHF Marine Band Radio. It is located at the helm, to the right 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.

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 trouble-shooting 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 out 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.

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 INFO

Do NOT use VHF antenna as a flag pole or hang anything on the antenna.

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.

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Not transmitting or receiving	Low house battery	Charge house battery
	Radio not set on USA	Push USA/Int button
	Radio blocked by canyon walls	Move the houseboat to open water
	Set on 1 watt mode	Push 1/25or Hi/Lo button to change to 25 watt
	Antenna has fallen down	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 4800-5200 RPM's.
- The most efficient cruising RPM will be 3800-4200 RPM

Fuel Gauge

- Key must be on for fuel level to register.
- Left gauge is for both engines and the Generator

Horn

- Push in the HORN button at the helm.

NAUTICAL NOTE: When leaving a dock, signal with 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 the red light will go solid and the beeping 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 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.
- 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.
- If engine is still difficult to start, squeeze primer bulb, located on the fuel line near the engine, until firm.

Cold Start

- Same as regular start, but warm up time needs to be extended.

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.

HYDRO-LOCK

Hydro-locking of an engine occurs when water enters the engine cylinders. The starter will click, but the engine won't turn over.

Caused by

- Overloading the back deck.
- Large waves behind boat.
- Dropping lake level which increases the angle of a beached boat.

If you suspect your engine has become hydro-locked, get word to the nearest marina and a technician will be sent out to help you.

RAISING ENGINE

Electric tilt toggle is located on the left side of the engine, below the cowl (cover).

Changing the Prop

- Remove keys from ignition (to avoid someone else accidentally starting the engine).
- Raise engine.



- Unscrew lock nut.
- Remove spacer washer.
- Remove Prop.
- Reverse procedure to install the new propeller.

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Engine doesn't turn over	Is the throttle in neutral Low battery Hydrolock	Put throttle in neutral Charge battery from the Generator Call the marina for help
Engine turns over but won't start	No fuel	Squeeze primer bulb, located on the fuel line near the engine, until firm.
Engine won't turn off	Engine harness has become Unplugged at the engine	Unplug the fuel line from the engine or reconnect the harness
No light on control	Turn off key	Reset the MMC breaker located in the Generator compartment on the rear deck

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.
- Charging is most efficient with unnecessary DC breakers off.
- The engine start batteries will charge from running the engines.

DC Breaker Panel

- DC Main
- Lights
- Spreader lights
- Water pump
- Fresh water
- Water heater
- Furnace
- Accessories
- Docking lights
- Fuel transfer
- 12 Volt DC outlets
- CD Player
- Refrigerator

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 center 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.
- 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.

1. 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 down and the volts will register.

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.

HOUSEBOAT BATTERIES

Tips for Getting the Most from your Houseboat Batteries

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

they also require more time to recharge when they are discharged for too long. When the lights dim and the pumps slow, a recharge is overdue.

NOTE:

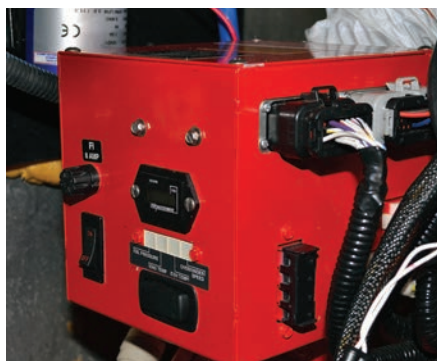
Deep Cycle batteries are used to extend the time between charging. However,

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
No DC Power DC Breaker off	House batteries low or dead	Turn on DC Breaker Start generator and Turn on BATTERY CHARGER Breaker
Cabin Light Dim	Low house battery	Start generator and Turn on BATTERY CHARGER Breaker
No Cabin Lights	CABIN LIGHTS DC breakers not on	House batteries low or dead Check Breaker Start generator and Turn on BATTERY CHARGER Breaker
No Lake Water Pressure	LAKE WATER PUMP not on Air lock	Check LAKE WATER BREAKER on DC panel HOLD down the toilet valve for 15-20 seconds
No Fresh Water Pressure	Fresh Water Empty	Refill with Potable Water at any marina

GENERATOR

The Generator is located in the starboard 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.

Press Start on toggle switch and release"

"If engine fails to start hold down STOP for 3 seconds and repeat start procedure"

NOTE: The engine won't start 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.

NOTE: Your generator also has an ON/OFF rocker switch on the generator. Turn off blower after generator starts.

AC Breaker Panel

- AC Breaker Panel
- Cabin Outlets
- Galley Outlets
- Air Conditioner
- Inverter (leave on at all times)
- Stove/Microwave
- TV / Stereo

Inverter

The inverter panel is the Magnum Control at the main AC Panel.

The stove, microwave, TV and Stereo all run off the inverter i.e. these appliances will all work without the Generator running

- Push power ON on the Magnum
- Turn on individual breakers

GENERATOR

- 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 (lake water) 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:

COMMON TROUBLESHOOTING

PROBLEM	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 on?	Check breaker on panel
	Is GFI tripped?	Reset GFI Outletdeck
Generator Shut down	Out of Fuel	Check gauges
Generator cranks but won't start	Out of Fuel	Refuel
CO Alarm beeps 4 beeps every 5 seconds	Engines/Generator running	Turn off Engines/Generator Evacuate crew out of cabin Open doors and windows Press the RESET/SILENCE
CO Alarm beeps 1 beeps every minute	System Error	Press the REST/SILENCE button for more than 15 seconds to shut off. Contact Boat Rentals to replace alarm.

WATER PRESSURE

YOUR HOUSEBOAT IS SUPPLIED WITH 60 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 as 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 Water Pump breaker on the DC panel.

Faucets

- The kitchen Large Faucet is lake water.
- Small Faucet is fresh water.
- All sinks and showers empty directly into the grey-water tank.



Head/Toilet

- Water pump breaker 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: Be sure pedal returns to the up position or flooding can occur.

WATER PRESSURE

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
No Lake Water	WATER PRESSURE breaker may not be on	LAKE WATER switch over the dinette not on
	Low batteries	Charge batteries
	Lost prime	Press down toilet flush for about a minute to restore prime
	Turn on breaker	
No fresh water	Out of water	Refill at marina with POTABLE water
	Fresh Water breaker not on	
	Low batteries	Turn on Breaker

Note: Not all boats will have a LAKE WATER SWITCH.

HOT WATER

YOUR BOAT IS EQUIPPED WITH A 10-GALLON CAPACITY WATER HEATER.

To Start

- Turn ON the DC MAIN.
- Turn ON the valve for your propane tank.
- Turn ON the WATER PUMP breaker located on the DC panel.
- Turn ON the WATER HEATER breaker located on the DC panel.
- Turn ON the WATER HEATER switch located under the main electrical panel.
- 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 will not come on nor will the water heater light.



COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Water Heater does not light	Propane may not be on	Check your propane to be sure it is on
	Propane might not be full	Check your propane to be sure it is full.
The red light on the master switch does not come on	DC MAIN might not be on	Turn on DC MAIN
	WATER HEATER breaker may not be on	TURN on WATER HEATER breaker on DC panel
	Water may already be hot	
Ran out of hot water	You only have 10 -gallons of hot water	Allow 30 minutes to heat more water

HOLDING TANKS

YOUR HOUSEBOAT HAS BEEN EQUIPPED WITH BLACK WATER AND GREY WATER TANKS THAT HAVE A 170-GALLON CAPACITY EACH.

Full Service Pumpout

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

Self Service Pumpout

- Located in any marina.
- The pumpout fittings are located on the stbd side of the boat. There are two fittings, one grey water and one black.
- Remove the cap.
- Screw the correct sized fitting into the pumpout port on your houseboat. (Fittings are located underneath kitchen sink)



- 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 inside and flush.
- Put all the hoses back and replace the cap on the WASTE opening. **DONE!**

- Attach the pumpout hose to the fitting
- Open valve and follow the direction on the pump.
- Remove the fitting from your houseboat and replace on dock.

Remote Station Pumpout

- Unscrew WASTE cap.
- Place end of hose into opening.
- Work the hand lever to pump.



COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Odor	Holding tanks are full	Pumpout 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

Location of Fuel Tanks

Your houseboat is equipped with 2 port side fuel tanks.

- Fuel fittings are located on the rear deck in front of engine covers.
- Each fuel tank holds 115 gallons.



Checking Fuel Level

- Fuel gauge is located on the helm.
- Power to the helm is required.

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: Captain and Crew must remain on board your houseboat. **Wait for Fuel Dock personnel to assist you.**

Propane Tank

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



COMMON TROUBLESHOOTING

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

REFRIGERATOR

How to Start

- Confirm that the propane is ON or that the generator is running. (See below.)
- DC main along with refrigerator breaker must be on at main panel.
- Push the ON/OFF button on the refrigerator panel ON.
- Push the mode button to choose between propane or 110V power to operate the refrigerator or set to AUTO.
- If using the generator, you must have the DC MAIN ON.
- Refer to the instructions located inside the refrigerator/freezer for more details.

Getting the most out of your freezer

- The freezer on your houseboat is not designed for deep or quick freezing.
- Coldest part of your freezer is at the bottom of the aluminum liner.
- Ice cubes can be made in the freezer if placed in direct contact with bottom of freezer.
- Cool items in fridge before placing in freezer.
- Condensation from warm items being placed in the freezer will adversely affect the operation of the freezer.

Getting the most out of your Refrigerator

- Put cold or frozen food into the refrigerator.
- Open door only when necessary.
- Use ice chest for beverages.
- Don't pack the refrigerator full, leave space for air to circulate freely.
- Cover foods with strong odor.
- Cover foods that easily absorb odor.
- The coldest areas in the refrigerator are under the cooling fins and at the bottom.
- Warmest areas are on the upper door shelves.
- The refrigerator will operate more efficiently if houseboat is level.
- Beach your houseboat so refrigerator side will be in the shade in the afternoon.
- The refrigerator will not cool as efficiently as your household refrigerator.

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Not cooling properly	Is the refrigerator on?	Turn ON the refrigerator.
	Is there too much in your refrigerator?	Check the bottles of propane to be sure they are ON and full. Leave plenty of room around items for air circulation.
	Was everything cooled down before you put it in the refrigerator?	Put items on ice to cool down and then put them back in the refrigerator.
	How hot is the outside air temperature?	Check your temperature setting. If it is the coldest setting, it is as cool as possible. Be sure to put perishables on the ice in the cooler.
Check Light Comes On	You need to reset the igniter	Turn OFF the master switch, then turn back ON at the master switch to reset
There is a clicking sound and a blinking orange light coming on from my refrigerator	You are out of propane	Switch bottles of propane and go through restart.

RANGE

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.



To Light the Oven

- Confirm that the propane is on.
- Adjust oven temp at control panel on the top of the range.
- Open oven door and find pilot light area under the bottom shelf.



To Shut Down

- Turn all knobs to OFF.

COMMON TROUBLESHOOTING

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.

GRILL

To Light

- Confirm that the propane is on.
- 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.

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Grill won't light	Propane is off Propane is empty	Turn on propane Be sure propane is full

HEATER

On

- Turn ON DC MAIN breaker on the DC panel.
- Turn ON the Furnace breaker on the DC panel.
- Be certain that the propane is on.
- Set thermostat to desired temperature.
- The fan will come on and run for 2-5 minutes before you feel heat come out of the vents.

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.



COMMON TROUBLESHOOTING

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

COOLING

On/Off

- Generator must be running.
- Turn on the AC Main breaker.
- Turn on AIR CONDITIONER Turn on AIR CONDITIONER breaker. 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.

COMMON TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Cooler won't operate	Is the generator on?	Start the generator
	Is the AC Main on?	Turn on the AC Main
	Are the AIR	Turn on AIR
	CONDITIONER breakers on?	CONDITIONER breakers

ACCESSORIES

Microwave

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

Coffee Maker

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

Blender, Toaster and 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 /DVD

- Turn on INVERTER BREAKER.
- Turn on TV/STEREO breaker on the AC panel.
- Use as you would at home.

Stereo (in the cabin)

- Turn on INVERTER breaker.
- Push power ON on the Magnum

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

A blue-toned topographic map of the Lake Powell region. The map shows the lake's shoreline, surrounding mountains, and various geographical features. Labels on the map include "POWELL RIVER", "GOOD HOPE BAY", "GLEN CANYON", "NATIONAL RECREATION AREA", "Cliff Trail", and "Wahweap Dam".

Wahweap Rental Office: 928-645-1078
Wahweap Boat Repair: 928-645-1149
Bullfrog Rental Office: 435-684-3010
Bullfrog Boat Repair: 435-684-3052
Dangling Rope: 928-691-0206
NPS Emergency: 928-608-6300
NPS Office: 928-608-6301



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