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 (top right knob) in a clockwise direction to turn *on* the radio and adjust the volume.
- Make sure the H/L switch (bottom button far left) is in 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 are calling) marina you **BOAT** RENTALS this is houseboat # (number of your houseboat). 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

EX.08 N.RADIO - 1

Marine Radio

we receive your call late in the day, we will gladly respond first thing the next morning.

Weather

- W/X button (middle button on bottom of radio) 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.
- 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	Low house battery	Charge house battery
receiving	Radio not set on USA	Push USA/Int button
	Radio blocked by canyon	Move the houseboat to
	walls	open water
	Set on 1 watt mode	Push 1/25or Hi/Lo button
		to change to 25 watt
	Antenna has fallen down	Raise antenna

EX.08 N.RADIO - 2

YOUR HOUSEBOAT HAS TWO 60 hp OUTBOARD ENGINE...

GAUGES



Tachometer

- Monitors the engine revolutions.
- Wide-Open Throttle (WOT) should be 3500 RPM's.
- The most efficient cruising RPM will be 2800 3000 RPM

Fuel Gauges

- Key must be on for fuel level to register.
- the gauge will indicate the fuel level for your engine and generator.

12 Volt Switch Panel



- Navigation Lights
- Horn
- Depth Sounder
- Panel Lights
- Docking Lights

Horn

Push in the HORN button at the helm to operate.

NAUTICAL NOTE: When leaving a dock, signal with 1 long blast (4 seconds) and 3 short blasts (1 second each). This means you are backing astern

Back Up Camera

Camera

- Your back up camera is located just above the driving station to the left.
- The camera is powered through the inverter switch so you should have power at the camera all the time (You should never turn the *INVERTER* breakers off).
- The *ON / OFF* button is located to the far left of the camera just below the screen.
- Tt should be set for operation but if any adjustments need to be main follow the instruction on the *MENU* button.



NOTE: You should always post a look out on the back deck to make sure no one is in the water or no other water craft are in the way



- Back deck camera located at base of rail above the door on the back deck.
- If you need to adjust you can reach it from the deck just outside the back door

THROTTLE

Setting Neutral Throttle for Starting

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

- Activation alarm will sound until you push the *STATION ACTIVATION*BUTTON on the base of the shift/throttle body in-between the two shift/throttle handles
- Once this button is pushed the Activation Light should stop blinking and go solid and the alarm should stop (This means the engines are ready to start)
- Turn the key to engage starter. If the engine fails to start in 10 seconds, return key to OFF position, wait 30 seconds and try again.
- If the engine fails to start push the center button in and push the handle a few inches forward and try to restart the engine.
- Return throttle lever to center position after warm-up.

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.
- 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 hydrolocked, get word to the nearest marina and a technician will be sent out help you.

RAISING ENGINES

Electric tilt toggle is located on each engine on the Port (Left) side of the engine at the base of the cowling (cover) of the engine. (Engine Trimmed Up Pictured Below)



(Next Photo Engine Trimmed Down)



Back Deck Swim Platform & Ladder

Always keep back gate closed when underway or when not using swim ladder



Ladder is located on the lower side of swim platform



- Slide out the ladder to assist anyone getting out of the water
- Always remember to lift up and slide swim ladder back into place before moving the boat
- Always check to make sure no one is in the water before you start the engines or back the boat up

Changing the Prop

There is a spare prop, nut and wrench under the sink in the kitchen.



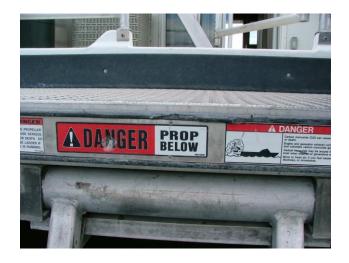
You can call Boat Rentals to change your prop if you need help

Always make sure engine are off and key is removed before changing the prop

Raise engine



- You can access the prop better from the swim platform
- 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	Put throttle in neutral
	Low battery	Charge battery from the
		Generator
	Hydrolock	Call the marina for help
Engine turns over but won't	No fuel	Squeeze primer bulb,
start		located on the fuel line
		near the engine, until
		firm.
Engine won't turn off	Engine harness has	Unplug the fuel line from
	become Unplugged at the	the engine or reconnect
	engine	the harness
No light on control	Turn off key	Reset the MMC breaker
		located in the Generator
		compart-ment on the rear
		deck

The 12-volt system includes navigational lights, water pumps, the horn and the VHF Radio. The boat is also equipped with eight inverter batteries, an engine starter batter and a generator starter battery.

Charging

- Start the Generator following Generator Starting Procedures.
- Make sure both of the inverter breakers are on at the AC panel.
- Charging is most efficient with unnecessary DC breakers off.
- The engine start batteries will charge from running the engines.

AC Breaker Panel



Top Panel

B	Galley Outlets	Microwave
B	Refrigerator	TV / Stereo
B	Stove	Cooler
B	Fan	Aft Cabin Outlets

Bottom Panel

Galley	Cabin Outlets
Inverter	Inverter
AC Compressor	Air Conditioner
AC Compressor	Air Conditioner



Water Pump

- 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.

AC Breaker

If you should lose AC power and your batteries are fully charged, reset the AC breaker located in the generator compartment to the left of the engine as you are looking down on it



When generator is running and the Inverter is on, should be 12.5 volts or greater and you should show 120 volts on the meters on the breaker panel.



The Generator must be run 6 to 8 hrs per day to keep the batteries charged.

DC Breaker

There is a 40 amp DC breaker located in the generator compartment that provides power to the helm.

If you lose power to the helm 12v system (Navigation Lights, Docking Lights etc.) go to the back deck and lift the generator hatch



On the right side of the compartment just below the generator hatch along the frame you will find a breaker labeled **40** AMP BREAKER



On the breaker just to the left of the red reset button you will find a black lever.



If this breaker is tripped the lever will be pointed almost straight down

To reset this breaker simple push the breaker back up and you should have 12v power again at the helm.

The Generator hatch is located on the back deck on the right or Starboard side of the boat just under the water slide.



Starting/Warm Up

- Turn on the blower switch. When the red light is on the blower is running
- Let Blower run for 5 minutes before starting the generator



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 Generator Selector Switch and all circuit breakers (except the inverter breakers) are OFF before starting the Generator.
- Push the start switch once and the generator will start on its own.
- If the engine fails to start, wait 20 seconds and repeat.
- You do not need to hold the start switch in order to start the generator

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 Generator selector switch from the Off position to the Ships Gen position
- You may now turn on individual breakers to provide power to your houseboat.
- Make sure you Blower Is Turned Off

NOTE: Your generator also has an ON/OFF rocker switch on the generator



You can start your generator from here in the same way if for some reason the wall start switch is not working.

NOTE: If you lose electrical power while on generator go to the generator compartment on the back deck and locate the double pull breaker and see if it is tripped. If so, push down on the breaker and then lift it up to re-energize the

system



AC Breaker Panel



Upper Panel

- Outlets
- Refrigerator
- Stove
- Fan
- Microwave
- TV / Stereo
- Aft Cabin Outlets

Lower Panel

- Galley
- Inverter
- A/C Compressor
- Cabin Outlets
- Inverter
- Air Conditioner

Inverter

The inverter panel is the 2 Magnum Energy Power Meters – One powers each of the breaker panels



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

Both Magnum Energy Power Meters need to be on in order to charge the batteries when the Generator is running or to have power at the panels

- Make sure individual inverter breakers are on
- Make sure the On/Off Charger and the On/Off Inverter is turned on, on both panels

GFI Outlets

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

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.

To Shut Down Generator

- Turn off all AC circuit breakers
- Turn the main Generator Selector Switch to the off position
- Push STOP button
- Make sure the Blower is off

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

Water Pressure

EX.08 WATER -

Water Pressure

YOUR HOUSEBOAT IS SUPPLIED WITH 60 GALLONS OF FRESH WATER.

Fresh Water Tank

The fresh water refill is located forward of the bow railings on the starboard side of the boat.



- 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 switch for Fresh Water ON at the breaker panel in the hall.

Lake Water Pressure

Turn on the Water Pump switch at the breaker panel in the hall



Faucets

The kitchen Large Faucet is lake water.



Small Faucet with black handle is fresh water.



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

EX.08 WATER -

Water Pressure

Head/Toilet

- Water pump breaker must be on.
- To fill toilet bowl with water, lift up on the foot pedal (located on the left side of the bowl) for a few seconds.
- To flush, step down on the foot pedal.
- The head empties directly into the Black water Tank.
- After flushing, make sure the pedal returns to the upright position. If not lift up on the pedal with you foot.

Note: Be sure pedal returns to the up position or flooding can occur.

Drinking Water

- Water pump breaker must be on
- Drinking water is the small faucet to the left of the sink.
- Push black lever to get drinking water



COMMON TROUBLESHOOTING

Problem	Possible Causes	Remedies
No Lake Water	WATER PRESSURE	Turn on breaker
	breaker may not be on	
	Low batteries	Charge batteries
	Lost prime	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	Turn on Breaker
	on.	

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

To Start

Make sure valve for your propane tank is on.

EX.08 WATER -

Hot Water

- Turn *on* the Water PUMP breaker located on the panel.
- Turn on the WATER HEATER switch located on the main electrical panel.

FRESH WATER GENERATOR BLOWER

WESTERBEKE

CO DETECTOR GAS ALARM

(0

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

Note: If water heater pilot light goes out, red light will stay on. If this happens, turn switch off for 15 seconds and turn switch on. Light should go out after about 15 seconds.



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	DC MAIN might not be	Turn on DC MAIN
switch does not come on	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 10 -	Allow 30 minutes to heat
	gallons of hot water	more water

EX.08 HOTWTR -

Holding Tanks

EX.08 TANKS -

Holding Tanks

YOUR HOUSEBOAT HAS BEEN EQUIPPED WITH A 170 Gallon BLACK WATER TANK AND A 170 Gallon GREY WATER TANK.

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 we will pump out your houseboat for you.
- Located in any of the ARAMARK marinas.



Self Service Pump-out

- 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.
- Your adapter fitting is located under the sink in the kitchen



Attach the pump-out hose to the fitting.





Attach the hose/fitting to the boat



EX.08 TANKS -

Holding Tanks

- Open valve on hose (if there is one) and follow the direction on the pump.
- When finished, close the valve *before* removing the hose.
- Remove the fitting from your houseboat and replace under (You can put in a trash bag if necessary)
- Hold the flushing pedal below the bowl and let water flow into the tank.
- Fill the tank with approximately 2 to 3 gallons of water.
- Put 1 cup of toilet chemical in the holding (located under the sink in the kitchen)
- Put all the hoses back and replace the cap on the WASTE opening. DONE!

Remote Station Pump-out

- See HELP PRESERVE in your Nautical Notes for locations of Remote Pumpout.
- Remove the 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
		chemical and two gallons
		of water in the head
		Leave some water in the
		bowl to trap any odor

EX.08 TANKS -

Gas/Propane

Fuel Tanks

Your houseboat has one (2) 115 gallon fuel tank located on the rear deck that services the generator and both engines. One on the wall (pictured below) and one on the deck (pictured to the right).





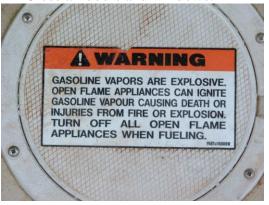
Checking Fuel Level

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

EX.08 FUEL -

Gas/Propane

Propane Tank

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



There is also a selector valve located below just below the propane gauge.

Turn this selector valve in the direction you want to draw propane from.



COMMON TROUBLESHOOTING

Problem	Possible Causes	Remedies
Propane Smell	The grill is not turned off	Turn off grill burner
	all the way	controls or valve on port
		side front deck beside
		grill
	Range not off	Make sure burner valves
		are all the way off

EX.08 FUEL -

Refrigerator

How to Start

- You refrigerator is electric like the one you have at home. It runs through an inverted circuit that runs off your batteries
- Make sure the refrigerator breaker (second breaker switch on top panel on the left) is on. Make sure inverter and inverter breakers are on
- You will have to keep your batteries charged in order for the refrigerator to function properly. (running your generator 4 to 6 hours a day is usually sufficient)



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 refrigerator will operate more efficiently if houseboat is level.
- Beach your houseboat so refrigerator side will be in the shade in the afternoon.

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.

Storage beside your upright refrigerator

There are sliding storage shelves next to your refrigerator. Be careful as they will move if you have rough water conditions

EX.08 FRIDGE -

Refrigerator

COMMON TROUBLESHOOTING

Problem	Possible Causes	Remedies
Not cooling properly	Is the refrigerator on?	Turn ON the refrigerator
		breaker and make sure
		inverter is on.
	Is there too much in your	Leave plenty of room
	refrigerator?	around items for air
		circulation.
		Put items on ice to cool
		down and then put them
		back in the refrigerator.
	Was everything cooled	Check your temperature
	down before you put it in	setting. If it is the coldest
	the refrigerator?	setting, it is as cool as
		possible. Be sure to put
	Mow hot is the outside air	perishables on the ice in
	temperature?	the cooler.

EX.08 FRIDGE -

To Light

- Confirm that 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.

If for any reason the grill will not shut down or you smell propane and all the burner knobs are off there is a propane shut down on the port side of the boat just to the left of the grill. It is located in a small white box.

Simply lift the white cover and turn the black knob to the off position. (Horizontal)



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	Turn on propane
	Propane is empty	Be sure propane is full
		and selector is turned to
		the bottle you want to use
		or in the middle to pull
		off of both bottles

EX.08 GRILL -

Heater

EX.08 HEAT -

Using the 12 Volt Propane Furnace

- Be certain the propane is on.
- Turn ON the Furnace at thermostat by pushing top level of control to the right
- 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.



To Turn Furnace Off

- At thermostat, move top level of control to the OFF position which is the far left.
- The fan will continue to run for 2-3 minutes after you have shut down the heating system.

Generator / Shore Power Usage

- After you let the Generator warm up or the Shore Power is plugged in switch the bottom 2 double breakers to the ON position.
- Check the wall mounted A/C thermostat to make sure desired temperature is set. Select Heat or Cool and put fan on Auto
- To turn off simply turn the bottom 2 double breakers on the lower panel to the left or in the off position.
- Always make sure these 2 breakers are in the off position before you start your generator



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

EX.08 HEAT -

EX.08 COOL -

HVAC Unit

Your HVAC unit is located on the back deck of your houseboat. This is a running unit so make sure you keep your children away from the fan or any moving parts.

This unit provides both Air Conditioning and Heat depending on the time of the year.





On/Off

- Generator must be running.
- Turn on Both AC Main breaker. (two double pull breakers on bottom of panel



- The thermostat is located on the main salon wall.
- Make sure both double breakers are on for the AC/Heater to work
- Adjust to Auto and set the desired temperature.
- Depending on the current temp and the desired temp it may take a while to reach



Shut Down

- Turn *off* your thermostat prior to turning off the generator.
- Turn off both of the AIR CONDITIONER breaker.

EX.08 COOL -

COMMON TROUBLESHOOTING

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

EX.08 COOL -



Always remember in order for the top panel (inverted panel) to function without the generator running batteries must be at least 11.7 volts or more to function correctly.

Microwave (Above the Oven)

- Make sure your breaker switch for the Microwave (top panel top right) is on
- Use microwave as you would at home

Coffee Maker

- Plug coffee maker into inverter plug on counter top or use the generator.
- Make sure your inverter breakers are in the on position (should always leave on)
- Turn on GALLEY breaker on the AC panel (bottom) or the inverted panel (top).
- Use the coffee maker as you would at home.

Blender, Toaster and Can Opener

- Will operate on inverter plug on the counter top or with the generator.
- Make sure your inverter breakers are in the on position (should always leave on)
- Turn on GALLEY breaker on the AC panel (bottom) or the inverted panel (top).
- Use these appliances as you would at home.

TV / DVD

- Make sure inverted breakers are on and the TV/STEREO breaker switch is on (top panel, second from top on right)
- Use remote to turn TV on
- On the receiver push the Input Select button and select what you want to do(ie CD/Aux/DVD/Tape/Radio Station)

Stereo

- Make sure TV/Stereo breaker is on
- Push power "On/Stand By" button on the receiver
- Push the Band Button on the receiver
- Select Channel FM / AM
- Select the desired channel
- Use the stereo as you would at home
- The radio stations on the lake are limited and varied by location.



I-Pod Docking Station

- Turn on inverted breaker TV/STEREO (top panel, second from top on right)
- Put I-Pod in docking station
- Select the Aux function on the receiver

Back Deck Camera

- Turn on DC Main Breaker
- Turn on ACCESSORIES Breaker
- Push POWER button on the unit at helm

COOL -