



## FAQ

### 1. How long can I leave the Xtreme Heater in my boat unmonitored?

Your Xtreme Heater is designed for unattended, fully automatic operation. That said, it is always a good idea to check on your boat periodically.

If you have suffered a power loss on your dock, you may want to check to make sure no circuit breakers have been tripped with restoration of power. You should test your Xtreme Heater annually, but otherwise your heater is maintenance free.

### 2. Can I mount my heater upside-down, to the hatch on my motor compartment?

Any of the heaters we have available can be mounted at ANY angle (upside down, sideways, etc.). The forced-air design of Xtreme Heaters makes them effective at any mounting angle, and allow you to direct the circulation toward areas of concern.

### 3. Is it ok to set my heater on the floor and not put in the screws?

Some of our customers take the heaters in and out of their boats. If you wish to do so, we suggest you use our quick-disconnect mounting bracket to secure your heater. If you choose to set your heater in the bilge without securing it, please make sure it won't fall into any collected water or moving parts of the motor.

### 4. What happens during power outages?

Your Xtreme Heater will not operate during power outages. Short power outages should not affect your boat as it takes a bit of time for the warm components to chill down to freezing temperatures.

Your Xtreme Heater will simply resume operation when power is restored. If the power is expected to remain out for an extended period, you should be prepared to winterize your boat in traditional fashion, according to the manufacturer's instructions.

## 5. How does it get power and what power source do I use?

The heater runs on normal 115V power. The 20 foot power cord with 3-prong plug easily reaches from the heater's mounting point to a circuit protected outlet inside cabin. Note that installation of a 115v outlet in the engine compartment of a gasoline powered boat is not recommended, as the outlets do not meet ABYC or Coast Guard standards for ignition protection.

## 6. Can I also put an Xtreme Heater in the cabin for extra protection? Would it be safe?

Certainly! Many of our customers use additional heaters in their cabin spaces to protect water lines, heads, etc.

Realize that the volume of your cabin is much greater than the engine spaces of the boat, so size your heater(s) accordingly. If you are using multiple Xtreme Heaters, be sure that you are not running too much amperage through a single electrical circuit on the boat. It is always a good idea to plug your heaters into outlets on separate circuit breakers to prevent overloading a single circuit.

## 7. Non-US Power. Can the Xtreme Heaters be supplied with International Power? Which countries do you support?

Xtreme Heaters are available in **220v, 50hz** for international applications. Our 220v heaters are provided with a power cord that is *not terminated*. The appropriate plug for your geography will need to be purchased separately.

## 8. Is it DC power (connects to battery) or AC (plugs into power outlet)?

All Xtreme Heaters are AC (household powered) devices.

## 9. If my boat is on a lift, how do I determine which size Xtreme Heater is right for me?

Generally speaking, you should select a *larger* Xtreme Heater for boats stored on lifts. In most areas, the water does not reach freezing temperatures, which helps protect the boat. With the

boat lifted out of the water, that benefit is lost and your boat will acclimate to the ambient air temperature.

Also, with your boat on a lift, the exhaust exit is exposed to the elements, and wind could drive cold air into the engine compartment.

## 10. At what temperature range should my compartment be when I use the heater?

There are a lot of variables that will affect your specific situation, such as the **local climate conditions, where the boat is stored**, whether or not your , and where you are **measuring temperature**, just to name a few.

Your Xtreme Heater is designed to turn on at **40°F** and off at **55°F**, which should keep your engine compartment comfortably above freezing. If you notice temperature drops **below 35°F**, you should check to see if you are losing heat through vents or other air passageways. If you find that your boat's engine compartment is well sealed from air loss, you should consider a larger or additional Xtreme Heater.

## 11. How long does it take to get hot?

Our heaters should blow warm air within 30 seconds of turning on. The exit temperature of the air is warm enough to feel with your hand, but not hot enough to burn skin or nearby materials in the engine compartment.

## 12. At what temperature should my heater turn on?

The thermostat is set at 43°F from the factory and has a +/- 3 degree tolerance, which means it so it will turn on between 43 and 46 automatically.

## 13. How can I tell if it is on?

If you purchased your heater after 2009, when your heater is plugged in to a live circuit and receiving power, the power LED on the rear of the heater should be lit.

Heaters manufactured prior to 2009, included an LED that lights when the heater is actually generating heat. These heaters can be tested with freeze spray to ensure they are operating properly.

#### 14. I placed heater in the freezer or outside to test it and it is not turning on. Why?

The Heater must be left in a stable environment for 30 to 45 minutes before it will come on. It can take this long for the metal to cool from room temperature, to the ambient temperature of your freezer, or cold outside environment.

#### 15. The light does not turn on when I plug it in, what's wrong?

You may have an earlier version of the Xtreme Heater, in which case the LED will light when the heater is activated, generating heat. Use freeze spray to test your heater for proper operation.

Alternatively, the outlet you have plugged the heater into is not active. Try plugging in another electrical appliance, and check the circuit breakers on the boat and dock to make sure there is power to the outlet.

#### 16. Is there an on/off switch?

There is no on/off switch on your Xtreme Heater. The heater operates automatically when plugged in.

#### 17. What is the best position within the bilge compartment to install the heater (low, high?)

The best location for your heater is going to be based on your specific boat and engine room configuration. Since heat rises, it is best to get the heater, and airflow to start out as low as possible in the bilge. Air will circulate throughout the engine space, but it is best to direct the airflow of the heater toward the equipment you wish to protect.

Do not install the heater where it may become submerged before bilge pumps evacuate any standing water that accumulates in the bilge. Remember, even boats on lifts or trailers can collect water from rain/snow events.

#### 18. How long will the heaters last?

Your Xtreme heater is built to last the lifetime of the boat.

#### 19. How hot does the outside of the heater get when it's running? (concerned about what's around it)

Your Xtreme Heater is designed to move heat through forced air rather than radiate it from the case. The case should never feel hot to the touch and will not get hot enough to affect surrounding equipment. The more important point here is that you want the air from the heater to freely circulate in the engine compartment. It is for this reason that we suggest clearance from other items in the bilge.

#### 20. How do I install the heater with the quick release bracket?

The quick release bracket is permanently installed on your boat with screws. Your Xtreme Heater slides into the rear of the bracket, and is secured by the quick release on the front of the bracket.

No tools are required to mount/remove your heater from the quick release bracket, once installed.

#### 21. How big is the heater?

Heater dimensions are 6" x 4" x 5 1/8" (L x W x H) for the small model, and 8" x 4" x 5 1/8" for our medium and large size heaters.

## 22. Can the Xtreme Heater plug into a regular wall socket at my house?

Our heaters will plug into any standard 3-prong outlet. Do not use "adapters" with your heater to plug it into two-prong outlets that may not be properly grounded.

## 23. Do the heaters go through any kind of cool down cycle when the heat shuts off where the fan will stay running for a couple minutes?

Xtreme Heaters do include a delay that will keep the fan running for about 10 minutes after the element has turned off. This is not a "cool down" cycle, per se, as our heating technology doesn't require one, rather it's an aid to efficiency, drawing the remaining heat in the element off and into the engine spaces rather than have it wasted by dissipating in the case.

This cycle also helps the heater return to ambient temperature more quickly for more consistent temperature control.

## 24. Can you hard wire the heater into the shore power circuitry?

Many of our customers have their heater permanently installed, and wired into the boat's breaker panel. If you are not familiar with wiring and electricity, we strongly encourage you to consult a professional to complete the job.

## 25. Does the heater keep people warm or just equipment?

Xtreme Heaters are designed to efficiently prevent freezing in the engine compartment. As such, they are designed to shut off at 55°F.

## 26. Do you have a heater that will work for an outboard engine?

Unfortunately, there is little space under the cowl of modern outboards to allow for a heater to be installed. The good news is that most outboard engines are self-draining and don't require freeze protection.

Be sure to check your owners manual to see what steps you should take to prepare your outboard motor for a freeze. We do have customers with outboard powered boats, that use our heaters to protect bait tank plumbing, heads, sinks, etc.

## 27. Can I use an extension cord or power strip for the heater?

Extension cords and power strips are not recommended for use with your heater. Power strips are not ignition protected, nor moisture resistant, and should never be placed in the engine compartment. Improperly sized extension cords can cause voltage drop to occur, and could even present a fire hazard.

If you must use an extension cord, make sure it is heavy-duty to handle the electrical load of the heater, and rated for the environment you intend to use it (i.e. outdoor, wet conditions).

Extension cords should not be used in the engine space unless also rated for fuel/oil resistance and 105°C temperatures, as ABYC standards dictate.

## 28. Is there a way I can adjust its thermostat?

The thermostat on your Xtreme Heater is fixed, sealed, and cannot be adjusted.

## 29. How do I test to see if my heater is working?

The thermostat, a round disk about ½" across, is located on the air inlet side of the heater. If you direct a blast of freeze spray toward the thermostat for 4 seconds, the heater will activate.

## 30. How do I install my heater?

Four mounting screws are included with your heater. If you wish to be able to easily remove your heater during boating season, consider our quick-release mount. Whether mounting your heater permanently, or with our quick-release mount, be sure to choose a mounting location that is above any potential areas of standing water in the bilge. For boats with a stern drive we would like to see the heater mounted towards the back of the compartment blowing to the out drive and the back of the motor. For boats with V Drives, air should be directed toward the transmission/rear of engine. On inboard powered boats, direct the airflow toward the rear of the motor and transmission.

### 31. What should I do with my old BoatSafe heater?

We have found a number of uses for old BoatSafe Heaters:

- Target Practice
- Planter – Using a drill, remove the rivets holding the top cover over the resistive heating element. Invert the cover, and fill with soil. The “5x5” vents offer terrific drainage.
- Wheel Chocks (safe for small, light vehicles only)