

**A sincere, “Thank you!” for investing in an Admiral Lake and Pond product. We very much appreciate the confidence that you have placed in us by making this purchase.**

***Practically every User Manual ever written prefaces with, “Please read through completely before using this product” and then proceeds to thoroughly insult your intelligence. In contrast, the following is a quick read that will offer truly useful tips as well as things you should know. We promise, no 20-page tutorial stating the obvious!***

**Uses for the JetStream:** The JetStream is helpful in accomplishing a variety of lake and pond-cleaning tasks. It can be used to push off muck, detritus, leaves and other undesirables from your shore bottom. It can be used to flush out seasonal “floaties” like duckweed and filamentous algae, etc. and/or be used to freshen up areas plagued with stinky, stagnant water and replace those areas with fresh water. It can also be used as an aerator to increase oxygen, thereby reducing hydrogen sulfide and muck.

**Using the Jet Stream:** Every shoreline is different, so the following suggestions may need modifying per your individual situation and, as with any piece of equipment, using your JetStream is the best way to master it. Please read the following tips and instructions below to help you to use the JetStream most effectively and efficiently.

**Agitation:** Lake/pond muck, sticks, and leaves are practically suctioned to the bottom of the lake or pond. As such, any kind of agitation to help get debris up off the bottom and up into the water column will greatly enhance the JetStream’s effectiveness.

**The counter-flow factor:** One of the most important nuances to learn about the JetStream is the inherent counter-flow that it creates. This is a scientific cause & effect whereby the water on either side of the main central flow will run in the opposite direction. The trick to combating this counterproductive effect is to rotate the JetStream in very small increments (moving along the below-mentioned, “V” shape). Doing so will ensure that the water flowing backward from the area you just cleaned will not bring debris back into that clean area.

**Wind helps:** Whenever possible, use the JetStream on the upwind side of the area to be cleaned (with the unit pointed downwind). As always, working with Mother Nature is more effective than working against her. If your prevailing winds tend to shift from left to right from one day to the next, you may want to start the cleaning process in the center of your shoreline and work left or right depending on wind direction. Note that with any change in wind direction so too, should your JetStream positioning.

**Locomotion:** “Everybody’s doing a brand new dance now” (just checking to make sure you’re still paying attention). Like a locomotive, the JetStream can take a while (up to several minutes) to build up momentum to get the stream established and debris moving. Allowing the stream time to become established will result in much more efficient use.

**Cavitation:** The JetStream can be used in water as shallow as 18 inches. However, any shallower and you will either blow trenches in the lake bottom and/or cause *cavitation* (the mixture of air and water). This could occur via small vortices or little “tornados” that will form and allow air into the propulsion system. This drastically reduces performance. So, make sure that the JetStream is placed deep enough that cavitation does not occur. If you have a beach that is primarily shallow, you may want to consider purchasing our cavitation plate to reduce this effect.

**Trenching:** Unless you are planning on farming your lake bottom (which we can't imagine you are), you can avoid making trenches by doing two things: Not placing the JetStream too close to the bottom and/or slightly tilting the unit up, away from the bottom.

**Starting out:** The ease of placing the JetStream & stake into your lake bottom will depend upon how dense/hard-packed the bottom is. Only in the most extreme situations should it be necessary to first drive in the stake (using a rubber mallet and a block of wood so as not to damage the stake, and then placing the powerhead atop the stake). The most common way to "plant" the JetStream is to grasp either end of the unit with both hands and then use your weight to drive the stake in. To help facilitate driving the stake in, a knee can be placed on the center of the unit and a bit of wiggling will help to drive the stake in as well.

Where to start? It is recommended that you first start the cleaning process by working out from the cleanest "corner" of your shoreline, and move progressively towards the problem areas. If there are no clean areas from which to start, it's best to start the cleaning process from a single point, preferably up-wind (pointing the JetStream downwind), as working with Mother Nature is always more productive. Why wouldn't you start in the most problematic areas? This would be akin to putting an explosive in the middle of a garbage heap in an effort to clean it up (not practical!) Moreover, if your muck is more than a foot deep/thick, you mustn't immerse the JetStream in said muck as doing so may ruin the propeller.

**1)** Place the JetStream off shore and point it directly at the shoreline. How far out from the shoreline depends; you want to make sure that the flow has enough force to reach the shore and clean said area, but without causing erosion. After the JetStream has cleared a path, it should result in a clean, "V" shape, spreading out from the unit.

2) Move the JetStream towards the shore, following the downwind leg of the “V”. This will open the “V” shape until eventually it will resemble an “L” shape. Continue to place the JetStream further down the opening “line” until the JetStream is blowing parallel to the shoreline.

**Maintenance:** Your JetStream will provide years of dependable service provided that it is properly cared for. To ensure its longevity and keep it within warranty guidelines requires minimal effort on your part, however. One of the more important factors to keep in mind is that, though your unit comes equipped with a thermal shut-down feature, it relies upon unimpeded water flow - not only to provide the best performance possible - but also to also keep the motor cool. As such, it is very important to make sure that the unit remains submersed in the water during use, and to a lesser extent that the perforated screen that sits over the intake to prevent sticks and other debris from entering the Jet is kept somewhat clear. As long as the intake screen is not completely covered in debris, the motor should be fine.

It is also imperative that you use a GFI outlet that supplies the full voltage that it is ascribed to be supplying. Oftentimes, old cabins and DIY electrical work done in years past may have worked fine for dock lights, etc. but are not up to the task of much more than that. If in doubt, use of a voltmeter can establish that you are, in fact, putting out the ascribed 110 or 220 volts.

If you live in a frigid climate, it is important that your JetStream be stored in an above-freezing area over the winter. Once removed from the water, it is also a good idea to intermittently spray WD-40 or similar spray lubricant into the pump intake while running the pump for approx. 15 seconds. This will help to displace water and lubricate the bearings before storage.

### **The infamous “What not to do’s”:**

Doing the following will make your JetStream unhappy and likely damage it and/or void the warranty. So.....

1) Don't use extension cords.

- 2) Don't start the unit while laying on its side in the water. Doing so will suck in bottom debris and ruin the prop and perhaps the motor as well.
- 3) The JetStream should only be used by adults who are familiar with its operation.
- 4) The JetStream should not be run when small children are in the vicinity.
- 5) If you have an external control box, make sure that it is protected from the outdoor elements.
- 6) Do not store or leave the JetStream in temperatures below freezing. Water in the motor can freeze and void the warranty. Store in a heated environment.
- 7) Never stick hands, feet or objects into either end of the JetStream.
- 8) Finally, do not attempt to eat or stick the JetStream in your eye.

If you have any questions, suggestions, or feedback, please don't hesitate to give us a call (952-401-3792)! Customer satisfaction is our top priority!

