LIFE IONIZERS™

CONSUMER'S GUIDE
to Water Ionizers

by Leo R. McDevitt III

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Why Use This Guide?

There are many water ionizer companies competing for your attention. These companies generate business from "sponsored" review sites some of which are even owned by the actual water ionizer company and provide compensation to those sites for referring business to them. There are so many sources of information about ionizers that it can be difficult to find useful unbiased information. LIFE Ionizers™ created this book in an effort to provide accurate, non biased information about their product line in order for the reader to make an informed decision about which ionizer is right for them. Much of the information found within this guide may also be found on the many review sites. The purpose of creating this guide was to condense the information online into one easy to read book.

LIFE Ionizers™ believes that it is in it's best interest to provide sound advice to consumers about it's products. A company's reputation has a huge bearing on an individual's decision to do business with them or not. Regardless of the unit you settle on, a water ionizer is a significant investment and it is our goal to ensure your investment is based upon solid reliable information.

This guide will explain the technologies used in water ionizers, and look at the pros and cons of each ionizer. The product quality will be discussed as well as the

respective industry certifications (such as Underwriters Laboratories, NSF, etc.) These are a useful references when evaluating the quality of water ionizers because they set industry standards for quality that a manufacturer must adhere to. Other industry standards (such as ISO 9001 and WQA) require that a company meet certain standards in it's day-to-day business operations. Knowing which companies comply with these standards will help the savvy shopper avoid dealing with "fly-by-night" operations. LIFE Ionizers™ is proud of the numerous certifications it holds as proof of their commitment to the quality of their product, their manufacturing facilities and their Company.

The first step in choosing an ionizer is to select those models that fit your needs and individual lifestyle. Taking this first step allows one to "narrow the field" of ionizers being considered for purchase. Ease of use is a critical feature of any ionizer, and factors that make a particular ionizer useful to one person, may make that ionizer a poor choice for someone with different needs.

The proper ionizer should be easy to use, fit the individual needs it was chosen for, and be easy to maintain. Identifying your needs first will save you time when comparing ionizers.

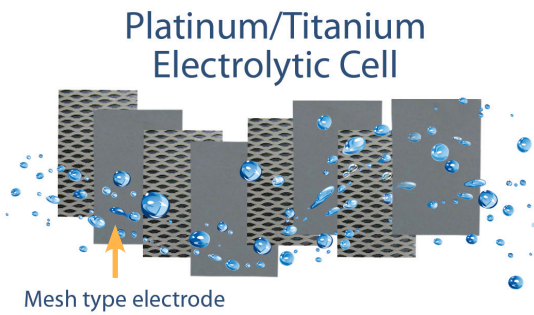
Understanding Ionizer Technology

How Ionizers Work

Water ionizers process tap water, remove toxins and impurities from water, and then electrically charge (or ionize) the water to turn it into healthy alkaline mineral water. A water ionizer uses a process known as electrolysis to ionize the water. This process also micro-clusters the water. This means that the number of water molecules cluster together are about half of tap water and hydrate the cells more efficiently. A water ionizer is the only reliable and cost-effective way to make alkaline mineral water at home.

Filtering is the first step used to remove harmful contaminants in the water; the filter removes compounds like chlorine, trihalomethanes, phenols, sediment, odor and organic waste. The quality of water going into an ionizer will have an impact on the quality of the water coming out of the ionizer. LIFE Ionizers™ provides a free analysis of a customer's local water supply in order to customize their ionizer's filters. Water quality varies widely from region to region, and proper filtration is necessary to ensure the water going into the ionizer is well purified. Ionizer systems that are not properly configured for a customer's water run the risk performing poorly, and may even be damaged by contaminants that their "one size fits all" filter did not remove.

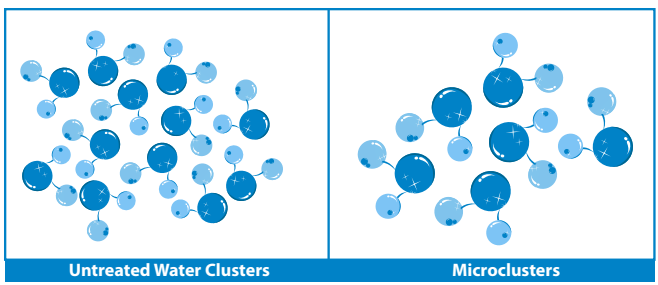
After filtration, the filtered water passes into the electrolysis chamber. The water flows over platinum-coated titanium plates which are charged with a precisely calibrated electric current. The electrically charged plates then ionize the water molecules, and since there are both negative and positive charges present in the plates, the water is split into negatively charged water that contains negatively charged hydroxyl ions (-OH) and positively charged water which contains positively charged hydrogen ions (+H).



The two types of water produced are referred to as alkaline water and acidic water. The alkaline mineral water is rich in –OH hydroxyl ions, which is consumed for its powerful antioxidant properties. The Acid water which has positively charged hydrogen ions (+H) is used for washing and sanitizing.

It is important to note that healthy, beneficial minerals are retained in alkaline water, which is necessary as you cannot ionize pure water. Some skeptics of ionized

water point to the fact that you cannot ionize pure water. This is correct because ionizers use minerals dissolved in the water to conduct electricity. The trace minerals are what allow the ionizers to produce ionized alkaline mineral water. Unhealthy minerals like fluoride are removed through the acidic water faucet of the ionizer. It is these minerals that provide the acidic water with its useful sanitizing properties.



The ionization process affects the way that water molecules group together or "cluster". Water is crystal even in liquid form—obviously in liquid form its crystals are too small to see. These tiny crystals are formed when water molecules cluster together in groups. Commonly available tap and bottled water have large clusters with about 11-16 molecules per cluster. Alkaline mineral water has much smaller clusters with 5-6 molecules per cluster. This water is known as "microclustered" water and is also referred to as structured water, reduced or hexagonal water by scientists. Microclustered water has a lower surface tension than regular water. The surface

tension of water determines how much resistance it will have while passing through cell wall membranes in the body. Microclustered water is easier for your body to absorb, which results in improved hydration and nutrient transport to your cells as well as allowing the water to efficiently remove wastes from the cells.

The Importance of Filtration

In order to properly ionize water, toxins and impurities must be removed, and the water must be left with the "healthy" minerals so that it can accept an electrical charge and thus become ionized. In order to be effective, a filter must be designed to remove any contaminant it encounters. The problem is that water quality varies widely, making it difficult to predict the effectiveness of any standard filter.

There are two approaches to filtration in use today. The first, a "one size fits all" filter, is designed to have a "layer" of filter media to handle all potential impurities that the filter may encounter *under any circumstances*. The problem with having many layers is that each layer will have to be thin in order to "fit" all those layers in the filter cartridge.

Custom made filters have filter media that is specifically designed to filter water from a specific source. The difference between the two is similar to the difference between a general practitioner and a specialist. Both are

doctors, but the general practitioner is only useful for basic needs like a check up, where the specialist is the doctor you go see when you need help with a specific problem. LIFE Ionizers™ insists upon custom designed filtration in order to ensure the safety, reliability and effectiveness of its ionizer systems to work in conjunction with the specific contaminants found in the water that their customer has in their home.

Comparing Filters

Since the effectiveness of the filtration is so important to the overall quality of the water an ionizer produces, it makes sense to look at how well the leading ionizers filter water. LIFE Ionizers contracted with the independent ETR Certified Labs® to evaluate water samples that had been taken from ionizers made by Enagic®, Jupiter, LIFE Ionizers™, and Tyent. A sample of the tap water used for the testing was also analyzed to establish a baseline. At the time of testing each ionizer was the top of the line model made by each manufacturer.

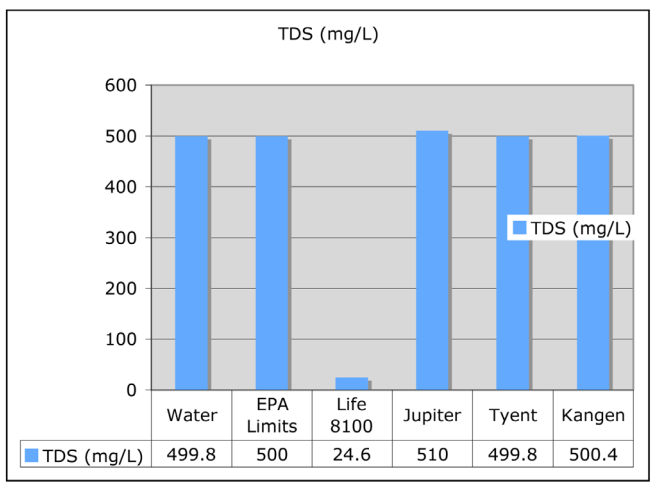
Total Dissolved Solids

Total Dissolved Solids (TDS) is a measurement of how much "stuff" is dissolved in water. TDS measures both organic materials like bacteria and inorganic materials such as heavy metals that can be found in water. The chart below shows the TDS of the tap water tested and the EPA limits for TDS in tap water. The water used in

this test was in pretty bad shape. EPA limits for dissolved solids are 500mg/L, and the test sample used was only .2mg/L below the legal limit:

The troubling thing about this chart is that only one ionizer, the LIFE 8100, was able to meaningfully reduce the TDS found in the sample tap water.

The reason the LIFE system was so much more effective than the others is that the filter system was custom designed to treat the water it was being used to filter.

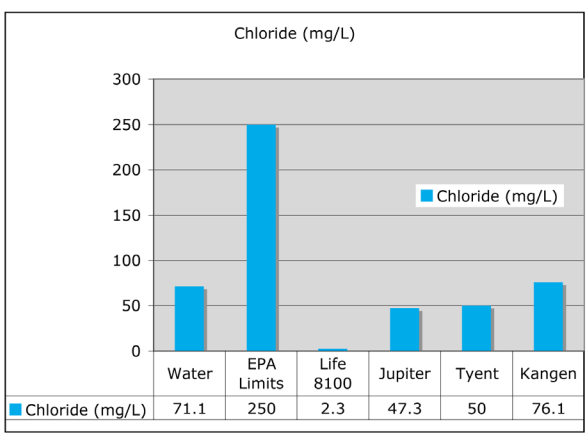


What got through?

The TDS chart shows that a lot of "stuff" escaped filtration in the Jupiter®, Kangen®, and Tyent filters (Jupiter's filter seems to make matters worse!) Many of the solids that were not filtered can pose significant health risks. This section looks at four common solids found in the tested water that can pose significant health and safety risks if consumed. The four contaminents examined here are chlorine, water hardness, sodium, and sulfates.

Chlorine

Chlorine is commonly used to sanitize tap water; it is used because it is effective at killing live matter (such as viruses and bacteria) that can make people sick. The problem is, chlorine does not stop being effective at killing when it enters the body. All ionizers tested reduced chlorine to very acceptable levels, well below EPA limits.

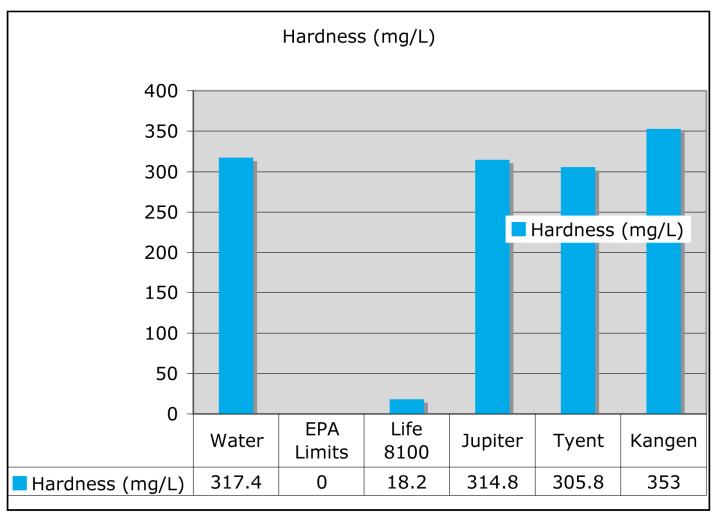


	Water	EPA Limits	Life 8100	Jupiter	Tyent	Kangen
Chloride (mg/L)	71.1	250	2.3	47.3	50	76.1

Water Hardness

The U.S Geological survey states that about 85% of the U.S has hard water. Water "hardness" refers to the amount of dissolved minerals (mostly calcium and magnesium) found in water. The hardness of most tap water leads to many people not drinking it due to taste or concern for their health.

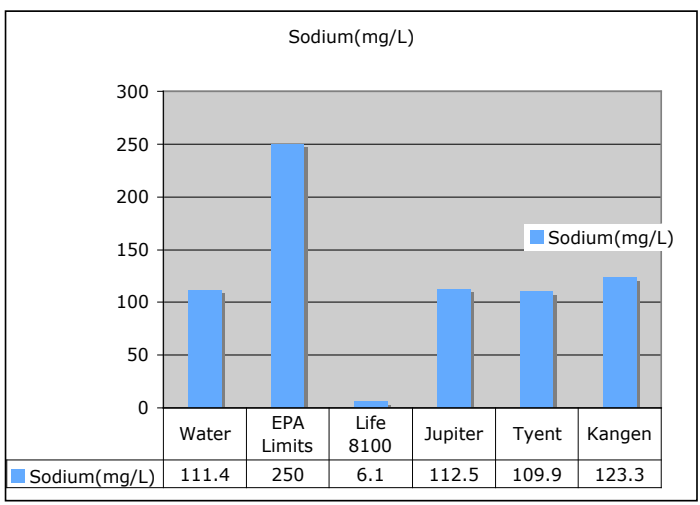
Most of the machines tested had very little impact on water hardness and the Kangen® machine actually appears to have made it worse! The EPA has no standard for water hardness, which is why the EPA limit on the chart is zero.



	Water	EPA Limits	Life 8100	Jupiter	Tyent	Kangen
Hardness (mg/L)	317.4	0	18.2	314.8	305.8	353

Sodium

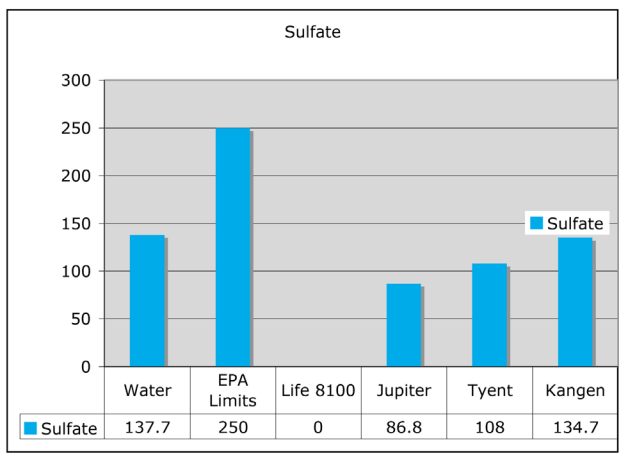
Sodium has been linked to health problems such as high blood pressure, and people on low sodium diets must carefully monitor the amount of sodium they consume each day. All of the machines tested reduced sodium to levels below the EPA limit. However the Life Ionizer® system reduced the sodium levels far more than any of the other machines tested. For people on low sodium diets, the LIFE Ionizer® clearly outperforms the competition where it matters most.



	Water	EPA Limits	Life 8100	Jupiter	Tyent	Kangen
Sodium(mg/L)	111.4	250	6.1	112.5	109.9	123.3

Sulfate

Sulfates are commonly used as a preservative in food and it is found in nearly all naturally occurring water. People not used to high levels of sulfates may become sick when drinking high sulfate water. As a rule, water with sulfate levels higher than 400mg/l should not be used to prepare baby food. High sulfate levels are corrosive to plumbing, and will elevate levels of other dissolved solids in water as a result. Most of the ionizers reduced sulfates somewhat, but the LIFE Ionizer® was the only one to eliminate them completely.



	Water	EPA Limits	Life 8100	Jupiter	Tyent	Kangen
Sulfate	137.7	250	0	86.8	108	134.7

The Kangen® ionizer was out-performed in this filtration test by all the other ionizers tested, and it had little or no effect on the sulfite levels found in the sample tap water. Worse yet is the fact that Kangen® actually uses calcium sulfite in their filters!

Filtration Technology

The difference in filter performance in the machines tested can be accounted for by the difference in the number of filters used, and the type of filtration utilized. Most ionizers use multiple filters to reduce contaminants as much as possible. The exception to this rule is Kangen® which uses only one filter. The single filter may explain why the Kangen® ionizer was outperformed by the other ionizers that were tested.

The materials used in the filter construction have a significant impact on the quality of the water that an ionizer produces. The Kangen® Enagic ionizer uses a filter that contains calcium sulfite, and the water test provided by ETR Labs® for LIFE Ionizers™ revealed that the Kangen® machine was the least effective at removing this dangerous compound. The Kangen® machine's filter also proved itself ineffective against hard water.

The exceptional performance illustrated by ETR Labs® on the LIFE Ionizer® system, is the result of their Vitamin C Ceramic Filter Technology™ (patent pending). Vitamin C has a long history of being used in sensitive applications to filter water where the introduction of impurities would have disastrous consequences, such as research and medical dialysis. The reason Vitamin C Filter Technology™ is rare in the ionizer industry is the significant cost of developing and building Vitamin C filters. Most companies prefer to stick with older filter technology because of the high costs associated with Vitamin C

Filter Technology™. AlkaFresh™ is the only other ionizer brand to use the Vitamin C Filter Technology™ which is licensed from EarthTrade Water, Inc.™, the manufacturers of Life Ionizers™.

Ionizer Plates

Water ionization occurs when the water travels over an ionizer's electrically charged plates. Ionizer plates are made of titanium, and coated with platinum. The ability of an ionizer's plates to ionize water is controlled by three factors:

1. The quality of the incoming water.
2. The surface area of the plates.
3. The amount of electrical power available to the plates.

Some manufacturers such as Kangen® tout the size of the plates in their ionizer as a selling point, insinuating that "more is better". While this statement was true about 5 years ago, the development of LIFE MESH Technology™, found in many modern ionizers, increases water contact time thereby increasing the ionization process. It is a well known fact that "the shortest distance between two points is a straight line". With the development of LIFE MESH Technology™, the water travels a longer distance than the flat plate technology. Since the water remains in contact with the MESH plate for a much longer time period than it does with traditional flat plates this results in a higher pH values and lower –ORP readings.

Most ionizers available today contain between 5 and 9 plates of either the flat or MESH variety. The plates in an ionizer are the very expensive heart of the machine (platinum and titanium are rare and expensive). The quality of the plates in an ionizer is largely dictated by the thickness of platinum they are coated with. Manufacturers coat the titanium plates with platinum using one of two methods; they either spray the plates, or dip the plates in platinum. Dipping produces the thickest coat of platinum, with the best plates being double dipped. Jupiter/IonWays spray their platinum onto their plates which produces a coat that is only 0.10 microns thick. Life Ionizers™ double dip their plates and achieves a thickness of 0.25 microns, which is 250% thicker platinum than the Jupiter machine. The best way to determine if the ionizer you are looking at has high quality plates is to see how long the manufacturer warranties them for. For example, LIFE Ionizers™ stands solidly behind their plates by offering a lifetime warranty on their new 2011 9000 series machines. Jupiter/IonWays by comparison only offer a five year warranty on their plates.

Power

The method used to power an ionizer will determine its effectiveness and how long it will last.

In recent years, many ionizer manufacturers have been moving away from conventional electrical transformers to power their systems by adopting a more recent technology called Switched Mode Power System (SMPS). This new technology was originally developed to power sensitive electrical devices such as PC computers, Plasma and HD TVs when it was found that conventional transformer power supplies were not as effective in delivering power to the ionizer plates. SMPS technology offers several benefits to ionizers that should weigh heavily in any purchase decision. SMPS powered ionizers will produce higher pH readings and lower –ORP readings while using less power than conventional transformers, weigh less and last longer, thereby allowing longer warranties.

Another advantage of SMPS power supplies is that they provide adjustable amperage settings. The power sent to ionizer's plates must be properly matched to the hardness of the water being ionized in order for an ionizer to reach its best pH and –ORP levels. Modern SMPS powered ionizers will provide several different amperage settings which can be used to compensate for variations in water quality. Consumers with hard water supplies should make sure the ionizer they buy can effectively treat the water they have. Since water quality varies widely, the best way to assess your local water quality is to use the EPA's Local Drinking Water Information website. Most, but not all manufacturers offer SMPS technology and adjustable amperage. LIFE Ionizers™ takes the process one step further by analyzing their customer's water report. This water analysis is used to custom configure

pre-filtration for their ionizers in order to ensure optimum performance. The combination of custom pre-filtration and adjustable amperage levels ensures that LIFE's Ionizers™ perform at their peak potential for the water being treated.

The last advantage of SMPS Technology that will be discussed here is that SMPS power supplies generate less heat. Heat is considered to be the #1 killer of sensitive electronics, thus SMPS powered ionizers are likely to last a lot longer than conventionally powered units.

LIFE UV Light Technology™

Research has proven conclusively that UV light kills bacteria, while other research suggests that UV light may also destroy many VOC compounds that are dissolved in water. Water municipalities have long used chlorination to kill bacteria in their water supplies, but recent research points to the danger posed by chloramines, which are compounds made of chlorine and ammonia that are produced when the chlorine comes into contact and kills the bacteria. As a result, municipalities are beginning to adopt UV light treatment systems to treat their water, and limit the use of chlorine to sanitize water. Bacteria levels found in drinking water supplies will fluctuate throughout the year, with higher levels seen during periods of high rainfall. The surge in bacteria is usually caused by sewage and wastewater discharges that wind up contaminating drinking supplies.

Only one company has incorporated UV light technology into their ionizers. LIFE Ionizers™ offer LIFE UV Light Technology™ as an option on their top of the line ionizers. Research indicates that children and the elderly are most at risk from illness coming from water-borne pathogens. For consumers living in areas with wastewater problems, LIFE Ionizers™ offers the only additional protection in the industry against the deadly bacteria and viruses that can permeate drinking water.

Chemical Additives: Danger, DO NOT Drink!

Earlier in this book, it was mentioned that ionizers rely on the presence of some dissolved solids in the water for ionization to occur. The ionization process adds calcium and magnesium (and sometimes sodium!) to water, which is necessary as pure water does not conduct electricity! Modern technology such as MESH plate and SMPS power supplies are commonly used to build ionizers that produce consistently good pH and –ORP readings without the need for additional chemicals to support the ionization process. Buyers should be aware that chemical additives are not necessary to achieve satisfactory pH and –ORP levels in modern ionizers, but there are some ionizers still utilizing this older technology and require additives to ensure adequate pH and –ORP.

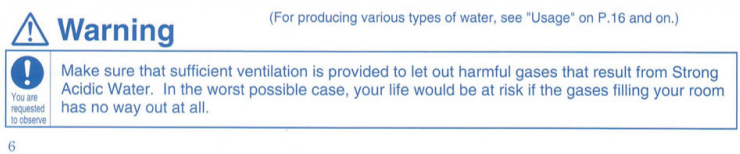
Unfortunately, one of the ionizers reviewed in this guide uses chemical additives to achieve satisfactory pH and –ORP levels. The Enagic® Kangen® has two ports for adding

chemicals that must be purchased from Enagic® in order for their system to produce alkaline or acid water at its highest levels. In order to produce acid water, the SD-501 uses a solution of Sodium Chloride (table salt) and Sodium hypochlorite (bleach). Enagic® warns users in it's user manual not to use their machine to produce acid water using the solution in poorly-ventilated areas because their machine will emit poisonous gases while doing so. The warning suggests that you may die if the gases produced by their machine are not properly ventilated.

Kangen® Poison Gas Warning

A separate chemical called calcium glycerophosphate is added to the SD-501 in order to produce alkaline water. Calcium glycerophosphate is commonly used as a pain reliever in medicines and is considered a safe substance to handle. Even though it is safe to use, the need for

the calcium glycerophosphate additive means Kangen® owners have to include additives and pay extra in order to get the best performance from their ionizer. No other ionizer reviewed in this guide requires the use of additional chemicals in order to work well.



Cleaning Your Ionizer

All ionizers reviewed here, and any worth considering, will feature self-cleaning functions which ensures optimal performance. Ionizers self-clean by reversing the polarity of the current normally supplied to the ionizer's plates. The reversed current causes the plates to repel the mineral scale that has built up with use. Buyers with hard water should know that the effectiveness of the self-cleaning mode varies with each manufacturer, and some companies will void their warranty if their machines are used with hard water. LIFE Ionizers™ utilizes "reverse action dual cleaning (RADC™) technology as well as offering a unique anti-scale system that compensates for the challenges caused by hard water.

The filters used in your ionizer need to be replaced at regular intervals as they become filled with impurities during regular use. Most ionizers require that the filters be replaced about every six months for the primary and at 12 months for the secondary. The cost of filter

replacement varies from $59 to $89 for the ionizers referenced in this guide. The only exception to the six month rule is LIFE Ionizers™; as their inclusion of the custom pre-filtration extends the life of their ionizer's internal filters to 8 months by removing most of the impurities before they even enter the ionizer and contaminate the internal filters. LIFE replacement filters are moderately priced around $39 to $49 each.

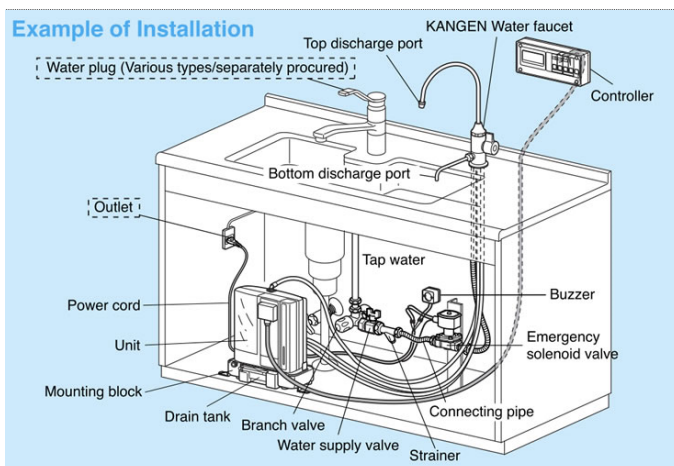
Countertop vs. Under the Counter Ionizers

Some ionizers work better under the counter than others. Companies that offer a wide range of models to choose from will offer models designed specifically to work under the counter, such as the LIFE 9000 series. There are two very important things to look for in an under the counter ionizer.

- ***Access to Controls*** – Can you run the ionizer from the countertop?
- ***Appearance of Controls*** – Do the countertop controls look nice?

It is pointless to purchase an under the counter ionizer that has no controls on the actual faucet. Some of the conversion kits for Jupiter/IonWays have been developed in this manner. The faucet controls the flow of water only, it does not provide any way to turn the ionizer on or to choose the type of water you want. Jupiter's controls are not as convenient as the controls found on better units such as Life Ionizers™ under counter units.

The controls for an under the counter ionizer should not detract from the appearance of the counter it is installed under. Buyers will find that appearance can vary widely between the different models available. Most under counter ionizers will have their controls embedded into the countertop faucet, the exception is the Kangen® SD 501U, which puts the controls in a separate unit that must be mounted to the wall. Buyers concerned about the appearance of their installed ionizer may find that splitting the controls and the faucet detracts from the appearance of the final installation.



Commercial Ionizers

There are very few commercial grade ionizers available today. Businesses such as doctor's offices, restaurants, and other commercial establishments will have high volume needs for both alkaline and acid water (used as a disinfectant). Where acid water is used to destroy germs in medical settings, it is imperative to make sure it is strong enough (low pH and high positive ORP) in order to be completely effective against viruses, funguses, molds, and bacteria. Many small businesses could meet their volume requirements with a high end consumer model such as the LIFE 9000 Series (3-4 liters per minute). Businesses with greater needs such as medical offices and restaurants should consider larger models that can handle high demand. Industry leaders Life Ionizers™ and Enagic® both offer semi-commercial ionizers that designed to meet the needs of a business such as a restaurant. The LIFE LC-11 offers all of LIFE's cutting edge technology in an ionizer that can deliver 4-5L/min. The Enagic® Ionizer also uses the same technology that Enagic® uses in its consumer models.

LIFE Ionizers™ is the only company in the home ionizer market to provide a full line of commercial ionizers that produce between 1000 and 4000 Liters/minute of strong acid or alkaline water for use in larger scale bottled drinking water, manufacturing and agricultural applications.

Going Beyond Ions: Energy Frequency Technology

Cutting edge research in the fields of quantum physics and theoretical chemistry has provided insight into the way that energy is converted into forms that are usable for chemical transformations in matter. Molecules, atoms, and subatomic particles are said to be in an "excited state" by quantum physicists when the energy present in the matter exceeds the "ground state" of that matter. Quantum biology reveals that energies applied to matter at the quantum level have a profound transformative effect on that matter while it is in the excited state.

Energy Frequency Technology™ (EFT), found only in LIFE Ionizers™, harnesses quantum technology to apply 205 different energy signatures associated with good health and well being to the water produced by its ionizers. Use of the EFT system on water neutralizes any negative energy put in water by fluoride, arsenic, herbicide, and pesticide frequencies that may be in the water. The Technology utilizes Nano Crystal Technology with embedded frequencies.

The use of EFT technology in LIFE Ionizers™ has been shown to improve the water treated by ionization. Testing performed by LIFE Ionizers™ revealed that water treated with EFT had increased positive effects on the body's energy field, revealing that the application of EFT has a definite positive effect on water and in turn on the body.

How To Choose An Ionizer

Know Your Water

There is an old adage in the computer industry that goes "garbage in, garbage out". This is also true for ionizers since the water going into the ionizer affects the quality of the water coming out. Have your water tested to find out what condition it is in so you can select an ionizer suited for your water with the correct pre-filtration. Bear in mind that some company's ionizers can't be used with hard water, and will void their warranty. Other ionizers such as Enagic's® can't filter out "metallic ions or salinity present in original (tap) water." [Source: Enagic® LevelLuk SD 501 TYH-401NF Standard Specifications]

Only Life Ionizers™ reviews the water quality reports to help you select the correct pre-filtration. The analysis of your water is included with the purchase of any LIFE Ionizer®. Life Ionizers™ is the only company to provide custom pre-filtration with every ionizer purchase.

Know Your Needs

If you are investing in your ionizer for health reasons make sure the ionizer you get produces strong alkaline water, with very low –ORP levels and strong acid water for washing needs. Buyers who want to ensure they get

water with the strongest alkaline water should focus on high-end ionizer models, since they will deliver the best alkalinalization performance.

The Enagic® Ionizers add chemicals to the water so that their machine produces high and low pH ratings. The directions warn you that this water can be dangerous. People on low sodium diets should make sure that their ionizer reduces sodium, and any other harmful contaminants to acceptable levels for their diet.

Some manufacturers claim high flow rates as a selling point of their ionizers. While flow rate is an important consideration for commercial usage, it is not a major factor for residential use. For normal home usage, all of the ionizers reviewed in this guide will fill a glass or a water bottle in about the same time. Considering ionizer flow rates is important if you are going to use a lot of water daily, but won't make any difference in normal household use. Flow rate should be at best a minor consideration in your purchase unless you plan on high volume usage.

Know The Company You Are Doing Business With

You are going to depend on the company that built your ionizer in the future when you have questions, require technical support and need to reorder replacement components such as filters. Investigate the companies via the Better Business Bureau (BBB). It is best to look at the rating

of the company as some companies may have more resolved consumer issues, but they also may sell thousands of ionizers while other companies have sold only a few hundred a year with less consumer complaints. The BBB website will also indicate the number of years in business which is a very important consideration when making your investment.

Review the industry certifications the company has earned. Some certifications such as Underwriter's Laboratory (UL) and National Safety Foundation (NSF) ensure the safety of products; others like ANSI, WQA, CE, CB and ISO ensure the company is operating according to standards that are used by Fortune 500® companies. The Korean Food and Drug Administration (KFDA) certifies ionizers for use as medical devices in their country. LIFE Ionizers™ boasts all of the above certifications and is the only company to have achieved this.

Know Where You Are Going To Place Your Ionizer

If you are buying a countertop model, keep in mind that the ionizer should be near the sink, and that it will take up as much room as a coffee maker. The best way to ensure that your new ionizer will fit is to measure the space ahead of time. You will also need to factor in space for your customized pre filters.

For under the counter installations, make sure that there is space under the counter for the ionizer and its filters. Since the ionizer will be out of sight, the aesthetic design is not important. The design and appeal of the faucet and access to the ionizer controls are the important factors to consider with an under the counter installation. Make sure the ionizer controls are part of the faucet control, and that they are easy to use and the displays are easy to read. There is no point in buying an under the counter ionizer that forces you to go under the counter to use it.

Warning: Some companies' under the counter conversion kits may not be legal for use in some states. Be sure to check if their conversion kit is legal for use in your state! Life Ionizers™ under counter ionizers are certified by the WQA to be lead-free compliant according to NSF/ANSI standards. No other company has this certification.

Long Time Concerns

Ongoing Costs of Ownership

Chemical Additives - Avoid ionizers that require the use of additional chemicals to reach satisfactory pH and –ORP levels. The use of chemicals should not be tolerated and can even be life threatening!

Routine Maintenance - Keeping your ionizer operating at peak efficiency over the long term requires maintenance. Better quality ionizers will have a self cleaning function that will maintain their performance. For users with older technology ionizers in hard water areas, they may need to take additional steps, including running chemical cleaners through their ionizer on a regular basis. This guide recommends you stay away from the use of additional chemicals whenever possible.

LIFE uses a proprietary technology called Reverse Action Dual Cleaning (RADC) which goes beyond the usual reverse-cycle cleaning used in all other ionizers.

The RADC system was designed to address the challenges presented by hard water. RADC alleviates the need to pass chemicals through your ionizer for correct maintenance.

Changing the Filters **-** Pre-filters and internal filters should be changed at regular intervals. Most ionizers require their primary filters to be changed every 6 months—with the exception of LIFE Ionizers™ which are changed every 8 months. The two months extra of usage that LIFE filters provide reduce the long term cost of filtration by 25% versus filters that only last six months. Ionizers with multiple internal filters will need their secondary filter changed about once a year. All ionizer manufacturers have updated their ionizers to multiple filters except Enagic®, which uses only a single filter. While their single filter may seem like a cost savings, it fails to filter out some contaminants completely.

When you change your filters, even the best ionizers will benefit from a thorough cleaning. This can be achieved by using a cleaning cartridge supplied by the manufacturer. This cleaner cartridge will ensure that the internal parts of the ionizer are thoroughly cleansed.

After the Sale

Return Policy – You have made the investment and your ionizer arrives— now what? The good news is that all manufacturers reviewed in this guide provide installation and set up support. Most companies offer a 30 to 60 day return policy with the exception of Enagic®, which will only accept returns for three days from date of receipt. Make sure you understand the company's return policy before you make the investment.

Warranty – Does the company stand behind their product by offering an excellent warranty program? Most companies only warranty their top of the line ionizers for 5 years. Jupiter and Enagic® offer a 5 year warranty on parts and labor. KYK warranty their parts and labor for 5 years and their plates for life while LIFE Ionizers™ is the only company that provides a lifetime warranty on parts and labor on their top of the line models.

When you decide on your ionizer, do your due diligence to ensure the company will be around to service your ionizer and provide replacement filters for years to come. EarthTrade Water, Inc.™, the manufacturer of Life Ionizers™, has been manufacturing and distributing ionizers worldwide for 14 years. In tough economic times, smaller companies tend to fail in competitive industries. IonWays, which distributes Jupiter ionizers, and has only been around a few years, are closing their doors as this guide is being written. A company's track record is a sure sign of their ability to support your warranty for many years down the road. Check the Better Business Bureau; look at their professional endorsements, read their customer testimonials and online reviews if they have any. All of these points are important considerations before you part with your hard earned money.

References

LIFE Ionizers - http://www.LifeIonizers.com/

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UV Light Effect on Bacteria - http://www.ehow.com/how-does_5188035_uv-light-kill-bacteria_.html

Kangen® Poison Gas Warning - http://www.youtube.com/watch?v=KyAzXrrHDKE&feature=player_embedded

Better Business Bureau - http://www.bbb.org/

Physician's Desktop Reference - http://www.pdrhealth.com/home/home.aspx

Multi-Level Marketing Pyramid - http://www.ukskeptics.com/article.php?dir=articles&article=is_multi_level_marketing_pyramid_selling.php

HOW TO USE THIS GUIDE

The Consumer's Guide to Water Ionizers is written to help the health conscious consumer make an informed choice when shopping for a water ionizer. The guide examines the technology used in water ionizers from the point of view of an ionizer owner.

Two types of advice are given in this book. Buyer's advice includes information on getting the right filtration system for your water, and choosing the technology and features that fit your lifestyle. Ownership considerations that are discussed include cleaning, maintenance, and filter replacement are intended to familiarize you with the things you need to do to keep your ionizer working and what the costs of ownership are.

If you are new to shopping for a water ionizer, you will want to start from the beginning of the book to learn about how ionizers work and become familiar with the technologies used in ionizers. If you are already familiar with water ionizer technology, you may wish to start at chapter 3: How to compare ionizers. Either way, you can quickly find the information you need in order to make a smart investment.

List Price - $7.97 USD