



waterworks

3 ENHANCED OXYGEN LAUNDRY SOLUTION



USER MANUAL

Models:

LM003

LM510 Plus

(Pictured Above)

clean with the
power of nature



11,505,887

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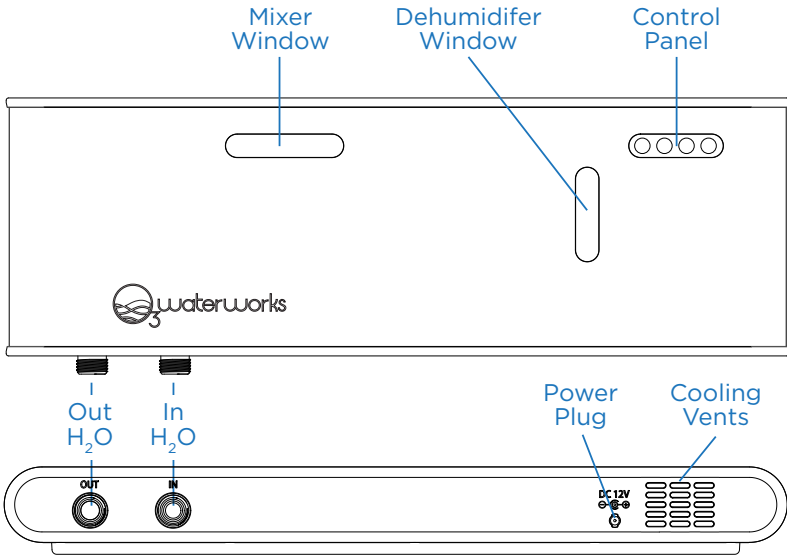
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Manufactured by:
o3waterworks, LLC.
207 Byers Creek Road
Suite A
Mooresville, NC 28117

For support, contact:
support@o3waterworks.com

Model: LM510

PRODUCT OVERVIEW



Normal Mode (Blue)

Choose for normal everyday loads. Ok to mix colors and whites.

Boost Mode (Green)

Choose for heavily soiled items and white loads.

No O₃ Mode (Orange)

Choose to run washing machine without enhanced oxygen.

Dehumidifier (Red)

Run dehumidifier cycle when desiccant balls inside window are no longer blue. It is normal for the balls to appear pink when new.



MULTI-FUNCTION REMOTE CONTROL

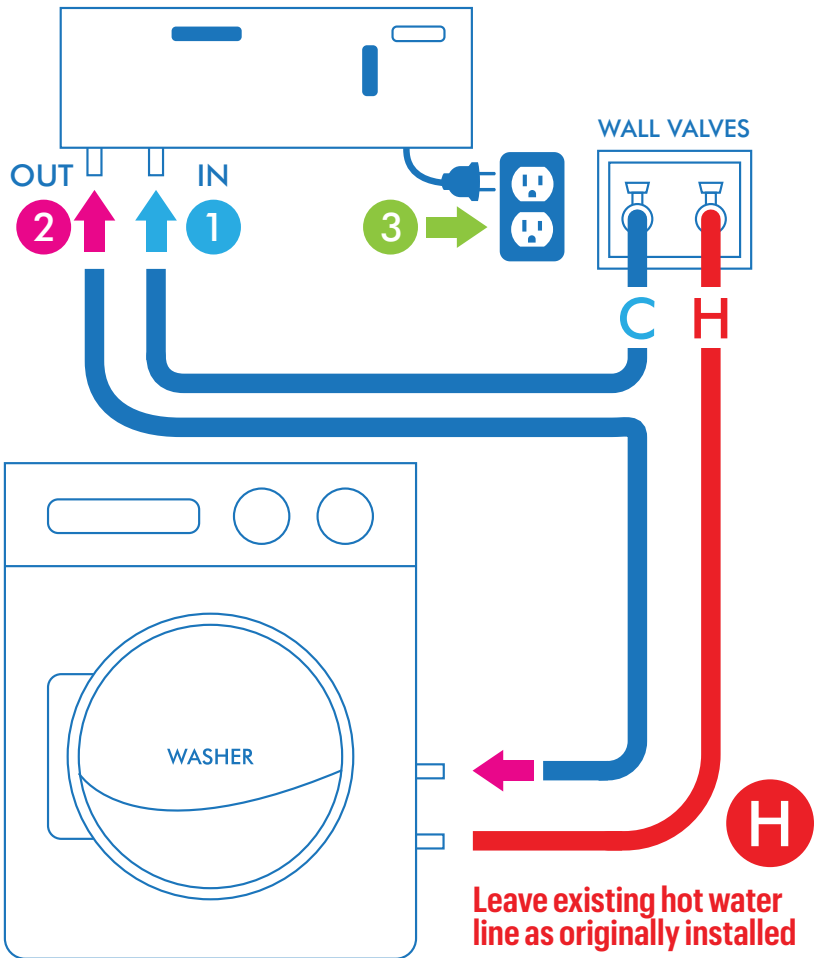
Use for convenience or installations where the unit needs to be mounted in a location that is not easily accessible



STANDARD INSTALLATION

No plumber or electrician required

- 1** Connect new hose from cold water supply tap to O₃ waterworks unit IN fitting
- 2** Connect new hose from OUT fitting to cold water IN fitting behind washing machine
- 3** Plug power pack cord into standard 120v electrical wall outlet



INSTALLATION WITH STEAM DRYER

No plumber or electrician required

1

Connect new hose from one side of installed y splitter connected to cold water supply tap to 3/8" waterworks unit IN fitting

2

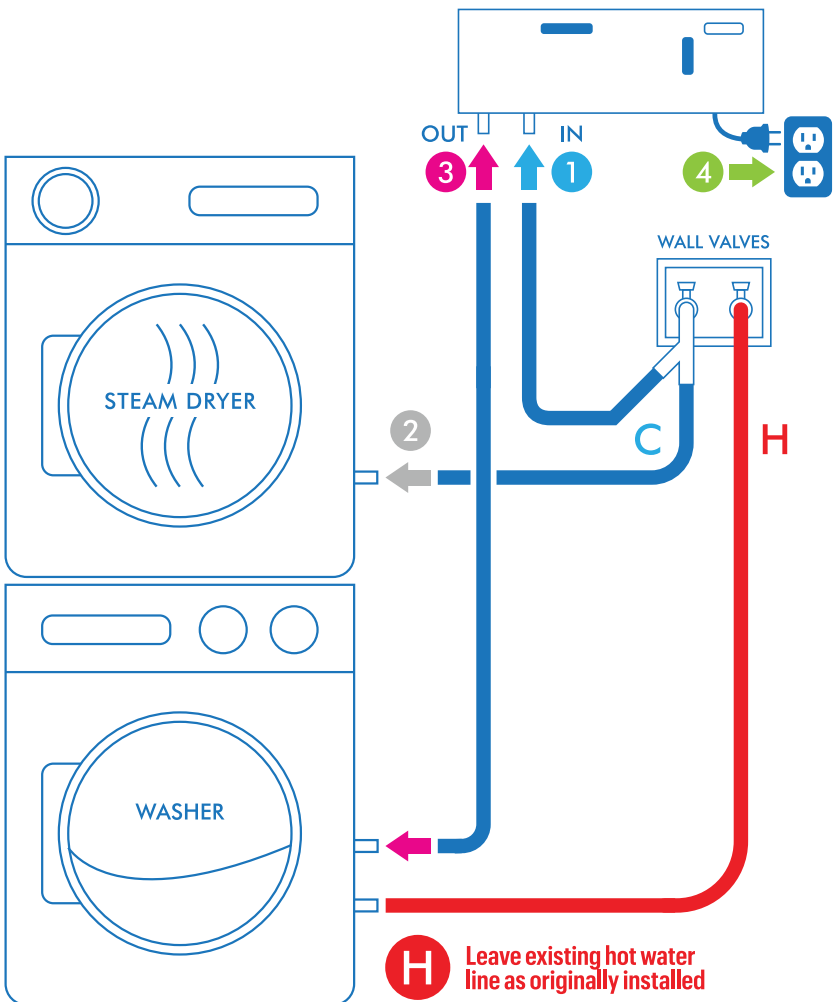
Connect existing hose from other side of installed y splitter connected to cold water supply tap to steam dryer unit IN fitting

3

Connect new hose from OUT fitting to cold water IN fitting behind washing machine

4

Plug power pack cord into standard 120v electrical wall outlet



INSTALLATION WITH SPLITTER

For LM510 Plus Models

Use when water pressure is not strong enough to activate bubbles, or can't see bubbles in mixer

1

Connect splitter to OUT fitting, 1 line to cold water IN fitting and 1 to hot water IN on washing machine.

2

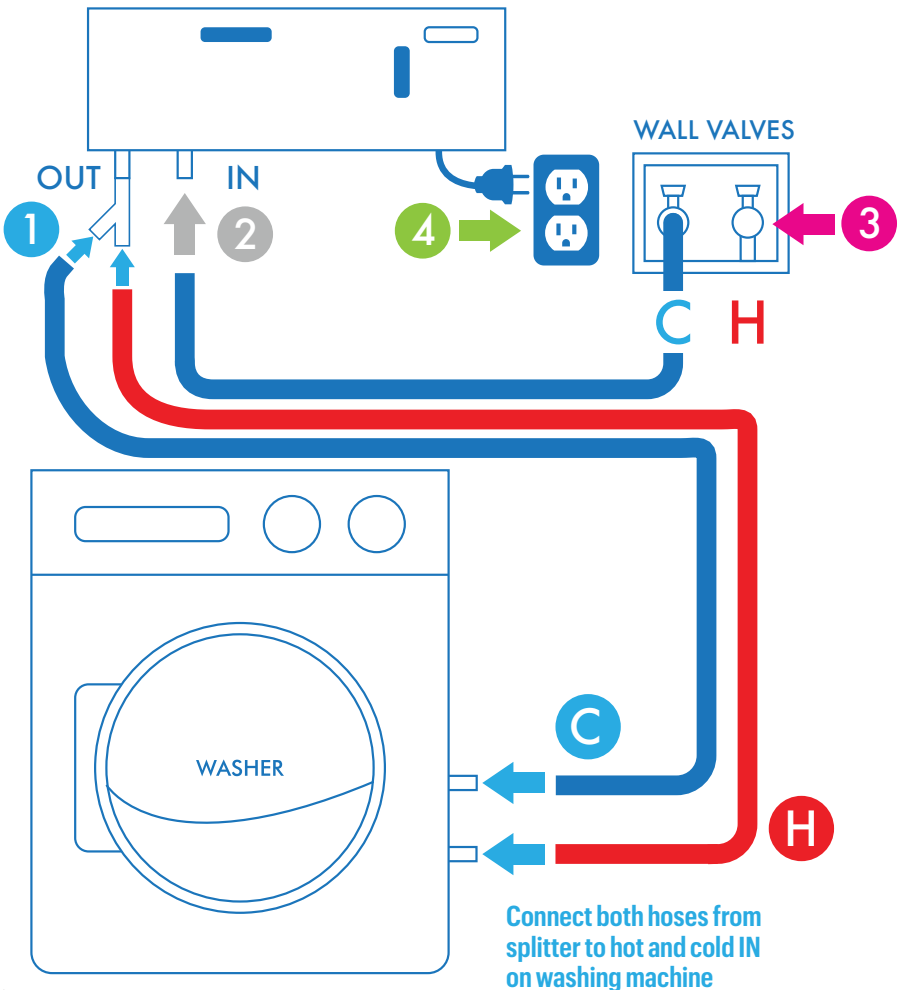
Connect hose from cold water supply tap to o3waterworks unit IN fitting

3

Turn off hot water from wall supply valve.

4

Plug power pack cord into standard 120v electrical wall outlet



INSTALLATION WITH SPLITTER

For LM510 Plus Models

Use with an accessory hose to fill larger receptacles with ozonated water.

1

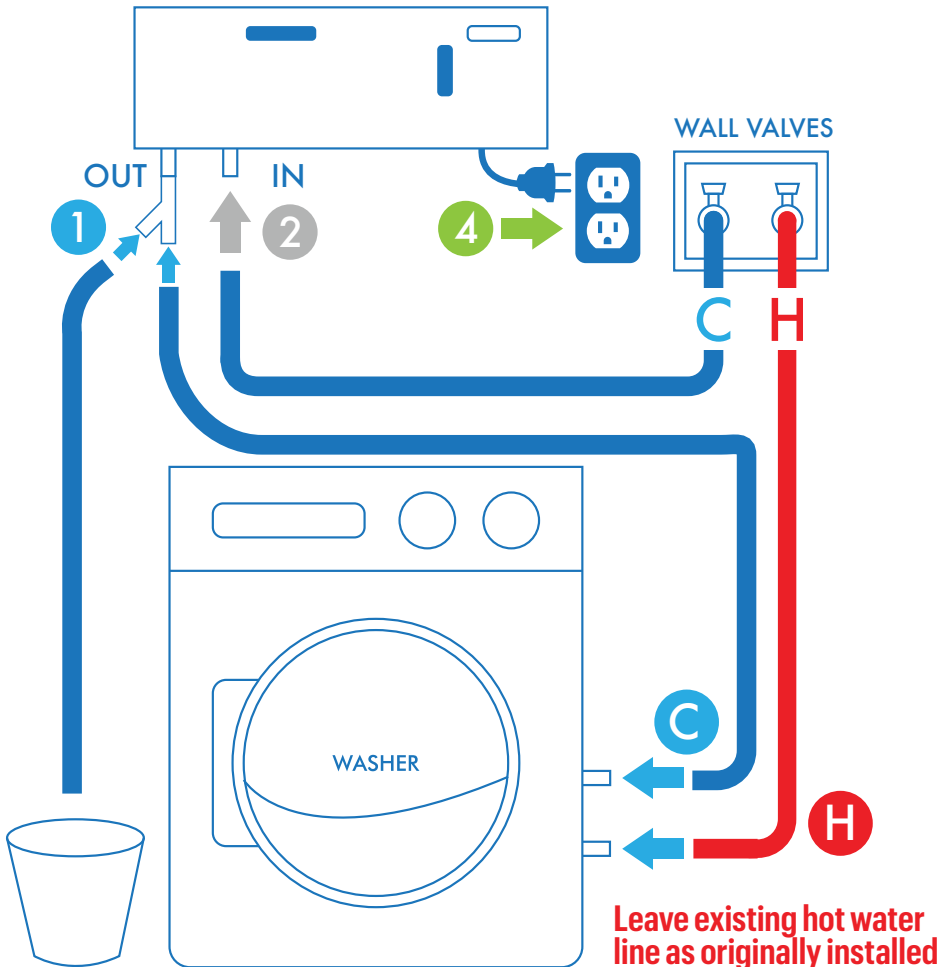
Connect splitter to OUT fitting, 1 line to cold water IN fitting and 1 as an accessory hose.

2

Connect hose from cold water supply tap to o3waterworks unit IN fitting

3

Plug power pack cord into standard 120v electrical wall outlet



INSTALLATION INSTRUCTIONS

For Drywall Applications

(estimated install
time 15-20 mins)

Parts Included:



Stainless steel
Hose (x2)



Wall Bracket



Anchors (x3)



Splitter
(LM510
Plus Only)



12v DC Power
Adaptor

Tools required:



Spirit Level



Phillips Screwdriver



Adjustable Wrench

1. Position the included paper template on the wall, where the O₃ waterworks unit will be mounted.
2. Ensure that the paper template is straight using a spirit level. Use tape to temporarily secure it against the wall.
3. Mark the 3 screw locations on the template for the included metal Wall Bracket. For drywall installations, use the included wall anchors, and continue to step 4. If you are mounting to studs or a masonry wall, you will need to use hardware suitable for those installation types (not included).



Warning: (Be sure to avoid any plumbing or electrical lines that may be concealed inside the wall.)

4. Secure the Wall Mounting Bracket to the wall using the included screws.
5. Lay the O₃ waterworks unit face down onto a non-scratch surface.
6. Turn off the water supply valves connected to your washing machine. Using an adjustable wrench, disconnect the existing hose from the cold water supply, and from the back of the washing machine. Connect the supplied stainless steel hose from the cold water supply to the IN fitting on the bottom of the O₃ waterworks unit.
7. Connect the second included supply hose from the OUT fitting under the O₃ waterworks unit to the cold water IN fitting on the washing machine. Do not over-tighten.

NOTE: *Leave the hot water supply hose connected to the wall valves and the washing machine as normally configured.*

8. With the hoses attached and water supply valves turned off, lift the O₃waterworks unit and lower down onto the Wall Bracket until firmly seated. Straighten hoses making sure they are pointing straight down from the O₃waterworks unit with no kinks or excessive twists in the lines.
9. Turn the water supply valves back on, and carefully check all connections, ensuring that there are no leaks around the hose fittings. If any leaks are visible, turn the water supply back off, disconnect the hose that is leaking, and reattach, ensuring that the threads are properly aligned. If the fitting continues to leak, use plumbers tape or putty to achieve a tight seal. Once there are no leaks in the system, continue to step 10.
10. Plug the included 12V DC Power Adapter into a nearby 120V wall outlet, and plug the male end of the adapter into the bottom of the O₃waterworks unit. Ensure that the plug is fully seated in the unit and twist a 1/4 turn to lock it in place. When connected, the unit will power on and emit an audible 'beep', notifying you that it is in Standby Mode. There is no power button, the unit will automatically power on and activate the system when the washing machine begins the wash cycle.

TIP: *Remember to re-install the drain hose that you may have removed during installation.*

HOW IT WORKS

How does the O₃ waterworks system work?

The O₃waterworks system pulls oxygen from the air in your room and introduces an electrical current. The electricity turns a portion of the O₂ molecules into O₃ and dissolves them into the water moving through the system. This is enhanced oxygen or aqueous ozone. Ozone is the 2nd most powerful oxidizer currently known. The O₃ compound then attaches to the contaminates in the washing machine during both the wash and rinse cycle and breaks them down so they can be rinsed away. The effect of enhanced oxygen only lasts about 20 minutes. Enhanced oxygen molecules break down naturally back into oxygen (O₂) without any byproducts or pollution.

OPERATING INSTRUCTIONS



When you begin the wash cycle on your washing machine, the o3waterworks system will automatically start in "Normal Mode" and deliver the factory preset amount of enhanced oxygen into your washing machine. This setting is good for delicates, colors and whites.



You can use "Boost Mode" for increased enhanced oxygen by pressing the white shirt icon button (second from left). This is great for getting your whites whiter, or for heavily soiled laundry such as pet bedding, or anything else that needs an extra Boost of cleaning.



If you would like to run the O3waterworks system without any enhanced oxygen, press the "NO O3" button (3rd from left). This will run your laundry without any of the benefits of enhanced oxygen. The system will automatically go back to "Normal Mode" setting of enhanced oxygen the next time the unit is operated.



If you see the balls in the dehumidifier window begin turning pink, press the "Dehumidifier" button (far right). An automatic cycle that regenerates the desiccant in the dehumidifier will begin. The desiccant keeps the enhanced oxygen generator operating at optimal condition. During this cycle, a small internal blower motor will run periodically. The dryer cycle will run automatically if the sensor detects more than 50% humidity while using Boost Mode. To stop the dryer cycle from running automatically, press and hold 'Boost' and 'No O3' buttons for 5 seconds.

Changing the Factory Preset O3 Mode:

The system can be set to automatically start on "Boost Mode" by changing the factory preset. Press and hold down the Boost button for 5 seconds until you hear 5 beeps and see the button light up, then let go. This operation can be done from either the touch control panel, or from the remote control. To change the factory preset back to "Normal Mode", press and hold the Normal Mode button down for 5 seconds until you hear 5 beeps, and see the button light up.

Is the O₃ waterworks system safe for colors?

Yes. Most colored fabrics are safe to be laundered even in the powerful "Boost" mode setting. However, on rare occasions, organic based dyes and dyes with improper colorfastness have been known to fade. For top load washers where the drum does not spin when water is filling, there is an increased chance of color fading to occur. If you have this type of washer you can do the following to reduce this occurrence: Try Normal mode instead of Boost, Place white towels on top of the load where the water enters the drum, use the no o₃ mode for any fabrics that may be of risk.

What setting should I use, "Normal" or "Boost"?

The factory preset mode is for "Normal" enhanced oxygen. You can use it for any or all laundry needs. You can mix your pre-washed colors and whites together. You can choose "Boost mode" for when you want to have increased enhanced oxygen for heavily soiled items like pet beddings, cleaning towels, sports gear, etc.

Do I need to use hot or warm water like I normally do?

No. With the O₃ waterworks laundry system you no longer need to use heated water. The enhanced oxygen actually works better in colder water than in heated water so you can stop wasting money heating water for all your laundry needs.

Do I need to separate colors and whites?

No. you can wash colors and whites together as long as the colors have been previously washed. For new clothing that has never been washed previous it is always best to wash separately or with like colors the first time.

Should I use the extra rinse cycle?

Yes. It is recommended to use the cold water extra rinse cycle, if your washer has this feature. This is especially useful for low flow high efficiency machines that use very little water in the wash and rinse cycle.

Do I need to use laundry detergents?

No. With the O₃ waterworks laundry system you no longer need to use detergents or fabric softeners. Choose “Boost Mode” when you need an extra *Boost* of cleaning power. You can use traditional laundry bleach along with the normal or boost mode when extra whitening is desired.

Can I still use my laundry detergent if I want to?

Yes. You can still use your laundry detergent along with the enhanced oxygen the O₃ waterworks system delivers. If you still prefer the scent of your traditional detergent, you can use less. Do not use detergents containing enzymes. Enzymes will bond with the o₃ and render both ineffective resulting in less cleaning ability.

Note: *If you would like to use fabric softeners, it is recommended to use them in the dryer, instead of the washing machine.*

Can I still use fabric softeners in the wash cycle or in the dryer?

Yes. Using enhanced oxygen to clean clothes leaves fabrics not only cleaner, but softer compared to chemical detergents and fabric softeners. Pile tests show that fabrics washed in enhanced oxygen stack thicker and fluffier without the use of detergents or fabric softeners. If you like the added fragrance of detergents or fabric softeners, you may continue to use them in your washing machine, but it is recommended to use much less, and only to use fabric softeners in the dryer.

I can smell the enhanced oxygen while the machine is running, is it bad for me?

No. The ozone levels generated by the O₃ waterworks system are not high enough to be harmful to the respiratory system of humans or pets. You may notice the smell of ozone during operation, this is normal, and lets you know that the system is working. The enhanced oxygen created by the O₃ waterworks system is the same compound created by lightning in thunderstorms, which is often why people say their laundry has a fresh, natural rain smell. This smell will dissipate once the clothes are dry, leaving a fresh, clean smell, free of chemical perfumes.

How is this better for my family's health?

The O₃ waterworks laundry system replaces the need for laundry detergents. In traditional laundry machines, these chemical detergents never completely wash away from the fibers of the clothing and end up leaching into your body's largest organ: your skin. It is known that many of these chemicals used in detergents are known to be toxic, and cause cancer and birth defects. Some of these chemicals, such as NPE (Nonylphenol Ethoxylate), are banned throughout Canada and Europe, yet are readily used in the USA.

How will I save money using the O₃ waterworks system?

By using the O₃ waterworks laundry system, you no longer need to spend money on the electricity to heat water, or expensive chemical detergents. According to the Department of Energy and American Laundry Association, an average family of 4, doing 8 loads per week, will save approximately \$665 per year.

How does the O₃ waterworks system reduce pollution?

The O₃ waterworks laundry system can help reduce pollution in the following ways:

Eliminating the need for chemical detergents, so they are not introduced into local water resources.

Eliminating the need for heated water during the laundry process, which contributes to minimizing the environmental impact of energy providers (Gas, Coal, Nuclear).

The enhanced oxygen in the O₃ waterworks laundry system does not cause as much wear and tear on clothing fibers as traditional detergents. These tiny fibers break away from clothing and are flushed into the local wastewater system, which can eventually end up in the nearby aquatic environments. The greatest source of these plastic microfibers comes from the traditional laundry process. Approximately 11,000 loads of laundry are started every second in the USA, which contributes to a significant amount of microfiber pollution in our wastewater.

It is estimated that there are more than 700 million plastic laundry jugs thrown away into landfills across America every year. If we never needed these chemical detergents to begin with then we would prevent this waste from occurring.

Is the water from the O₃ waterworks system potable?

No. It is not recommended for the treated water from the O₃ waterworks system to be ingested. This is because it has not been tested or certified to perform as a water purifier for drinking purposes.

Can the water from the O₃ waterworks system be used for washing pets?

Yes. It is ok for the treated water from the O₃ waterworks system to be used for cleaning pets.

What is the mixer window for?

The O₃ waterworks unit has a site window to show where the enhanced oxygen is being mixed into the water stream. You should see bubbles through this window. When the “Normal Mode” is running the site window will have a blue LED backlight. When “NO O₃ Mode” is active, there will be no backlight illuminated, because the enhanced oxygen treatment is off for the duration of that wash cycle.

Why is there less dryer lint after using the O₃ waterworks system?

The O₃ waterworks system uses enhanced oxygen as the cleaning agent, which bonds with the organic contaminants in your clothing. As a result, the fibers in your clothing are damaged less than when using chemical detergents. The increased lint that you see when you do laundry using chemical detergents is the noticeable result of more damage occurring to the clothes.

Does this system work with well, soft or hard water?

The O₃ waterworks laundry system works well with most water chemistries. In some cases, it may be advisable to use a home pre-filter or conditioner to better protect all water related appliances and fixtures, as it can increase their performance

FREQUENTLY ASKED QUESTIONS

Do I need a plumber or electrician to install?

No. The O₃waterworks laundry system installs on the wall, near your washing machine. It comes with a simple to install mounting bracket, and set of water hoses. It plugs into your standard 120 volt outlet, and draws less than 3 amps. Installation normally takes around 20 minutes.

Can I use this system with any washing machine?

Yes. You can use the O₃waterworks laundry system with residential washing machines, regardless of loading style (front load, top-load) or whether it has high-efficiency (HE) capability.

My washing machine is in a tight closet stacked on top of the dryer. Can I still use the O₃waterworks machine?

Yes. The system comes with a premium radio frequency based remote control, so you can control the system even when installed behind the washer and dryer, in a tight location out of site. The remote signal can even pass through walls. To disable the radio frequency transmission which only occurs when pressing a button on the remote, you can remove the battery from the remote. The wall based system only has a receiver, no transmitter.

Do I need to buy another washing machine hose?

No. The O₃waterworks system comes with two 4' long braided stainless steel hoses. Use one to connect the O₃waterworks unit to the cold water supply valve and use the other to connect the O₃waterworks unit to the cold water IN of your washing machine.

FREQUENTLY ASKED QUESTIONS

Is using enhanced oxygen for washing clothes a new technology?

No. Actually, many hospitals and major brand hotels have been using a similar type of technology for nearly 20 years. O₃ waterworks has re-engineered this expensive and complicated industrial process, and turned it into a convenient, yet effective tool for residential use.

Is O₃ waterworks an American company?

Yes. O₃ waterworks is a fully American-owned company. The customer service center is in America. The manufacturing of the product is overseas.

Does this system require any maintenance or parts later?

No. The O₃ waterworks system is designed to be ultra-convenient and efficient. It does not need any maintenance, replacement filters or parts for the life of the appliance.

The manufacturer warrants this item against defects in materials and workmanship for a period of one (1) year from the date of original retail purchase. This warranty applies only to the original purchaser, for residential use. This warranty does not apply to any damage on the product by accident, misuse, or modified, improper installation or by affixing accessories not produced by the manufacturer. The manufacturer is not accountable whatsoever for product installation. There is no further expressed warranty. The manufacturer shall not be legally responsible for incidental, consequential or special damages, or damage that may have occurred to articles being laundered. Not all textiles are manufactured with color fast dyes. The manufacturer disclaims any and all implied warranties.

For parts, accessories, or any other inquiries,
contact our customer service team via email:

support@o3waterworks.com

TROUBLESHOOTING GUIDE

Problem	Possible cause	Solution
I turned on my washer and no water is running, or I can't see the bubbles in the backlit site window.	Water is not being supplied to the washing machine, or water pressure is not enough to activate the venturi injector.	Make sure both Hot and Cold water supply hoses are attached to the washing machine, not kinked, and that water supply valves located on the wall are turned on. Some washing machines require heated water even if selected to only run cold. In this case a Y-splitter may be needed to run 2 cold water lines from the "OUT" fitting of the O ₃ waterworks unit. This is a common part available at your local hardware store and included with the LM510 Plus model.
	Water is running through the O ₃ waterworks system but it has no power or lights on.	The power cord is not plugged in. The outlet where the power cord is plugged in has no power. The transformer on the power cord has failed.
I cannot smell any ozone when doing the laundry.	The hot water cycle is being used.	If running hot water there will be little to no ozone added into the wash cycle. Only run cold water as directed through the O ₃ waterworks system.
	The oxidizing module may have failed.	Contact support@o3waterworks.com for parts replacement.
The clothes are not coming out as clean as I was expecting	Not enough water is being used.	Use the cold water extra rinse cycle for added cleaning power. Some Hi-efficiency washing machines use very little water which produces less cleaning power.
	The washing machine water valve injectors may have failed.	Replace water valve injectors on washing machine.
	Washing machine filter screens may be clogged and reducing water flow resulting in no bubbles.	Clean washing machine filters or screens.
	Hot water is being used by mistake.	Check that you are using cold water only on the washing machine settings.
Stains not coming out as well as expected	Pre-wash stain removing treatment has not been used.	The O ₃ waterworks system may still require stain pre-treatment. We suggest to use an oxi stain pretreatment product. Using an extra cold water rinse cycle will also provide an additional level of cleaning and stain removal.

TROUBLESHOOTING GUIDE

Problem	Possible cause	Solution
Humming or motor noise from O ₃ waterworks system when laundry machine and system are not operating	The built-in dehumidifier is running up to a 2 hour cycle.	<p>This is a normal function. The system will automatically run a dehumidifier cycle to keep the oxidizing module running at optimal performance. This will occur automatically when needed, or can be manually chosen when the site window shows dryer agent balls which are not blue in color. Press the far right button to manually run the dehumidifier.</p> <p>If the humming or motor noise continues for much more than 2 hours, or doesn't stop, contact our support team at support@o3waterworks.com</p>
Front load washer smells like mold or mildew	Front load machines commonly have this problem due to lack of air flow and build up of bacteria in normal laundering.	The O ₃ waterworks system will remove the mold and mildew causing these smells after a few wash cycles. If you have this problem then run the washing machine without clothes a few times with full cold water loads and extra rinse cycle on.
Remote control does not work	The battery has failed.	Press any button on the remote and look for red indicator light towards the top of the remote. If the indicator light does not turn on then replace the battery (CR2032).
	The remote needs to be re-paired with the O ₃ waterworks system's built-in receiver.	If the remote control red indicator lights up, but does not operate the unit, try re-pairing the remote. Press and hold down both Normal Mode button and Boost Mode button (left two buttons) on the unit at the same time, until you hear 5 beeps and three buttons light up, then let go of the buttons. Wait until the buttons light turns off, then immediately press and hold any button on the remote until the light on the unit turns back on.
	If the battery is OK and remote pairing failed to resolve the problem then there may be a problem with the remote.	Contact support@o3waterworks.com for service.
Automatic Dryer cycle runs too frequently	The rooms relative humidity is frequently over 50%	Disable automatic dryer function by pressing the 'Boost' and 'No O ₃ ' buttons on the control panel. You can still manually run the dryer function by pressing the dryer button on the control panel when you see the desiccant balls no longer blue in color.



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