

LAUNDRY 400

OZONGUARD

Ozonguard Laundry 400
Active oxygen laundry system

User manual

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INDEX

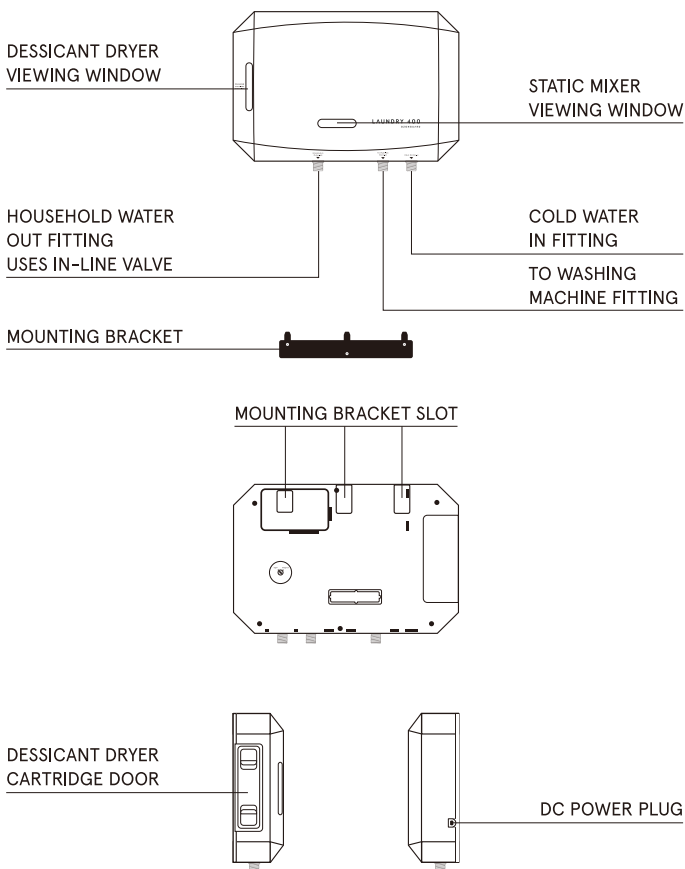
1. Content / Unit diagram	3
2. About the equipment	4
3. Specifications	4
4. Operation	5
5. Warnings	6
6. Installation	7
7. Features	8
8. FAQ's	9
9. Troubleshooting	10
10. Maintenance	12
11. Cartridge replacement indications	13
12. Warranty	14

1. CONTENT / UNIT DIAGRAM

This pack contains:

1 Ozonguard Laundry 400
1 User manual
1 Power adapter
1 Mounting bracket

3 Mounting screws
3 Dry wall anchors
1 Hose / Fittings
1 In-line valve



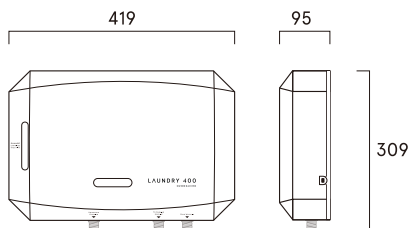
2. ABOUT THE EQUIPMENT

This is an environmentally friendly appliance designed to work with your residential washing machine, adding enhanced oxygen and Photo Catalytic Oxidizers to the cold water supply. Water treated by this equipment aids in cleaning laundry and killing bacteria without leaving residual detergent in the fabric. Many people find they are allergic to detergents used in washers and detergents create an environmental problem as they are dispersed into the waste water by washers.

The operation of this equipment is easy and convenient. Once it is properly installed, you simply operate your washing machine following the manufacturer's instructions for cold water only washing. This equipment is designed to automatically turn on as soon as the washer demands water for the wash cycle and again for any rinse cycles. You will be able to see the production of enhanced oxidation bubbles through the viewing window as it glows blue. When the water stops flowing, it will automatically turn off after one minute.

3. SPECIFICATIONS

- ~ ELECTRICAL INPUT: AC 100-240 V / 50-60 HZ
- ~ ELECTRICAL OUTPUT: DC 12 V 3A
- ~ WATER PRESSURE REQUIRED: 2,7 - 5,2 bar (40-75 PSI)
- ~ WATER OPERATING TEMPERATURE: Use cold water only
- ~ DIMENSIONS: 419mm X 309mm X 95mm
- ~ WEIGHT: 2,5 kg



4. SPECIFICATIONS

DAILY USE

Using this equipment is very easy. You simply operate your washing machine according to the instructions provided by the manufacturer. The only difference is that you **ONLY** use the cold water setting on your washer. If hot water is used it dilutes and defeats the effectiveness of the oxidizers that the equipment has introduced into the wash water.

TOP-LOAD WASHING MACHINES

When using this equipment with a top-loading washing machine, ensure that a bold or darkcolored clothing item is not in the direct line of the pouring water. It is recommended to place a white clothing item directly under the pour stream to absorb the initially high concentration of oxidizers.

NON-USE OR VACATION CARE

Operate your washer and the equipment only when you are at home. If you are on vacation or won't be using your washer for an extended period of time, you should unplug the power supplies to both the washer and the equipment and turn off the water supply. This helps avoid accidental flooding due to a water pressure surge while you are away.

STAINS

We suggest that you pre-treat stains just as you would without an equipment. However, for normally soiled laundry, you should only need a very small amount of detergent or none at all.

HOW TO TELL THE EQUIPMENT IS WORKING

You can easily tell if the equipment is operating properly by viewing the water as it flows through the clear tube behind the window on the unit. Bubbles should be visible in the water as it flows through and the window should emit a blue glow. If you do not see bubbles, please ensure that you have the proper Venturi Setting (Using the Flow Rate Dial) selected for your washing machine. High efficiency or front load washers should use the Front Load Setting, but standard-efficiency toploading washers should use the Top Load Setting. If the Top Load Setting is used on a high efficiency washer, there likely will be no bubbles and you will not experience the benefits of using the equipment.

5. WARNINGS

For your safety and the safety of the product, please read carefully the warnings below before beginning installation, cleaning or maintenance.



WARNING

~ Disconnect power before servicing.



CAUTION

~ Do not operate the unit with the cover removed.

~ This equipment is designed for residential use only and is not intended for use in a commercial or industrial setting.

~ Water treated is intended for laundry or cleaning purposes ONLY. It is not approved for drinking or ingesting.

~ This equipment is intended for use with COLD WATER ONLY, however the hot water hose should remain connected to the washer and supply faucet to prevent backflow leaks.

~ To avoid the possibility of water damage (i.e. a hose leak) it is recommended that you always turn off the water supply valves/faucets when the washing machine is not in use.

~ Risk of water leaks from ruptured hoses could occur with major water pressure surges.

~ To maintain pressure seal, maximum inlet water pressure is 75 psi.

~ Never install the equipment in areas where water may freeze. It will always maintain some water in the unit and freezing can cause damage to internal components.



CAUTION

~ This equipment is not recommended for use in homes with high iron content in their water. If your water has high iron content, consult a water quality expert for available options.

~ Your equipment can be cleaned with a damp soft cloth. Do not clean it with harsh chemicals, abrasives or cleaners.

6. INSTALLATION

ELECTRICAL REQUIREMENTS

This equipment requires a type C electrical plug of AC 100-240 V / 50-60 Hz for its transformer.

WATER REQUIREMENTS

Water pressure of 40 to 75 psi is required to operate correctly and safely. Water quality may affect the performance of the system. If you have water quality concerns, such as high iron content, consult a water filtration expert.

Some later model high efficiency washing machines require water from both the cold and hot water supplies even if a cold water cycle is selected. In this case the To Washer and Household Use outlets can be connected to supply the hot and cold water inlets on the washer, or a Y-valve can be used to connect both the cold and hot water hoses from one of the equipment outlet hose to the washing machine.

PRIOR TO INSTALLATION

1. Remove the unit from its packaging and inspect for any shipping damage.
2. Turn off the hot and cold water supplies/faucets to washing machine.
3. Remove the cold water hose from the cold water faucet.
4. Set Flow Rate Dial for type of washer. (i.e. Top Load, Front Load) by turning the dial on the rear of the unit to the correct setting. Use a flat screwdriver.
5. The equipment should be fastened to the wall, just above and behind your washing machine. It is recommended that one of the mounting holes on the equipment be mounted to a wall stud, if possible. One set of mounting screws are included. If it is not possible to mount the equipment to a wall stud, you should use "molly" type expandable screw anchors, available at your local hardware store. For any other type of mounting scenarios (concrete block, etc.) please consult your local hardware store for assistance.
6. Place your Mounting Bracket onto the wall with the tabs facing up and away from the wall, making sure it is level, mark the locations of the screw holes. If necessary, pre-drill your holes and use the supplied Wall Anchors. Fasten the Mounting Bracket to wall using the supplied screws.
7. Place your unit against the wall and gently slide the unit down into the lock position of the mounting bracket slots.
8. Connect the cold water hose from your washer to the "To Washing

Machine" fitting on the equipment. Check that the rubber washer in the hose is in place and properly tighten the hose, but DO NOT overtighten. Use a wrench to hold the hose bib secure while tightening the hose connection.

9. With the supplied hose, connect the "Cold Water In" fitting on the equipment to your cold Water Supply Faucet. Make sure rubber washers are in place and properly tighten, but DO NOT overtighten. Again, use a wrench to hold the hose bib secure on the equipment while tightening.

10. Plug the power adapter into the DC adapter plug-in on the right side of your unit and then plug the adapter into a wall outlet.

11. Ensure all hoses are properly installed and tightened, and that the power supply has been properly installed. SLOWLY turn the water supply back on and check for any leaks or drips. Gently tighten fittings if leaks are apparent, but DO NOT overtighten.



CAUTION

The hot water hose should not be disconnected from the washer. You can turn off the hot water or leave it on, but the hose must be installed to the washing machine to prevent backflow of water out of the washing machine during use.

7. FEATURES

INDICATOR LIFE

The Indicator light, viewed through the horizontal window on the front of your equipment has two states of operation.

Blue Light - Indicates normal operation.

Flashing Red Light - Indicates the tan or oxidizer generator is not operating properly. Please contact your dealer.

DESICCANT DRYER

The desiccant dryer is designed to remove moisture from the air flowing into your unit, which helps to ensure optimum performance and life from the equipment.

The desiccant dryer (Located on the left side and viewed through the vertical window) turns pink as it is used. When all of the blue beads in the dryer window have turned pink it is time to replace the dryer cartridge. Contact your dealer for a replacement cartridge. Replacement instructions can be found on page 14.

HOUSEHOLD CLEANING

The sorne water that kills bacteria and germs in your laundry can now be used for other household cleaning purposes. The "Household Water Out" fitting (Diagrams of page 3) on the bottom of your unit is for use with general household needs, such as cleaning, watering plants, washing pets or even rinsing fruits and vegetables. By using the "Household Water Out" fitting along with the In-Line Valve (included) you can have oxidized water available for most household cleaning purposes. Unfortunately, due to the nature of the oxidizers you cannot obtain water from the equipment and store it for later use. Water used for this type of cleaning needs to be used within 15-20 minutes.



WARNING

This Water is not meant to be ingested.

8. FAQ's

Do tough stains have to be pretreated?

We recommend that you continue to treat stains in the sorne manner as you did before. However, for normally soiled laundry, using the equipment will allow you to use less detergent! or no detergent! at all.

Does the equipment work with all types of water?

It will work with all typical household water qualities, but the better the quality of the water the better results you will have. If you have hard water, we recommend a water softener and the removal of chlorine will improve the unit's performance.

Is a pre-filter required?

This equipment does not require a pre-filler, though we do recommend the use of one in all applications. If your water does have high iron content we suggest the use of a prefilter specifically designed to remove iron.

What types of washing machines can work with this equipment?

It can be used with any residential washing machines.

Will it work with commercial washing machines?

This equipment is designed for residential use only, not for commercial or industrial applications.

Is this equipment only for use with washing machines?

It was designed to treat laundry water specifically. There are other appropriate applications such as cleaning floors or bathing pets which the Household Use Fitting can be used for. Water from the equipment is not intended for drinking or ingesting.

What parts will need to be replaced?

This equipment is designed to provide many years of maintenance free service. The only consumable is the desiccant dryer cartridge. If, after some time, you notice a decline in the effectiveness of the equipment, please contact your dealer for service or go to warranty.lakeindustries.com. Any pre-filters that might be used in conjunction with your unit will need to be replaced according to the time/use schedule their manufacturer recommends.

9. TROUBLESHOOTING

UNIT FAILS TO TURN ON

Hose or power connection problem. Check the power cables for secure connection and make sure the hoses are connected to the correct fittings, and that your cold water faucet is turned on.

FLASHING RED LIGHT

Oxidizing Module has failed. Contact your dealer for replacement.

NO OZONE SMELL IN LAUNDRY

Check the viewing glass for bubbles as it may be producing ozone but not injecting it into the water correctly. If bubbles are present, the Oxidizing Module may have failed. Contact your dealer for replacement.

NO BUBBLES ARE BEING CREATED

Incorrect pressure before/after Venturi or Venturi is plugged. First check for obstruction between the equipment and the washer (inlet screen to washer). Ensure house pressure at the supply valve has minimum of 40psi. If this fails to correct the problem then backflush your unit by switching the hoses on fittings and place the "Cold Water In" hose into the basin or bucket to drain to clear the Venturi. Then return hoses to proper connections.

CLOTHES ARE BEING BLEACHED

Incorrect Flow Rate Setting. Ensure you have the correct setting chosen based upon your type of washer. If your problem continues contact your dealer.

SUDS IN THE BASIN AFTER FIRST USES

Detergent or residue is being cleaned out. Run multiple washes without clothing until the problem is resolved. If problem persists contact your dealer.

DISCOLORATION OCCURS IN THE VIEWING TUBE

High Tannin levels in your water source. The use of a pre-filter is required. Contact local water specialist to find proper filter to remove Tannins.

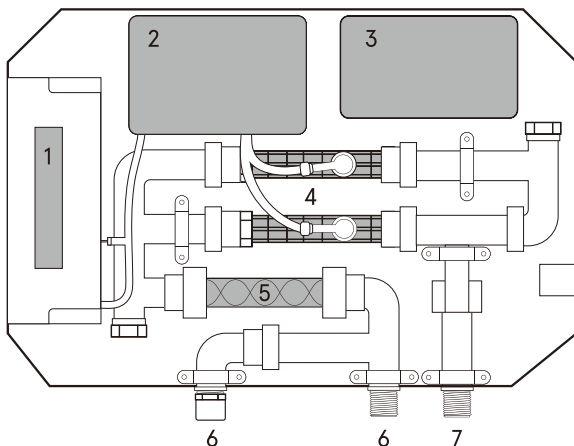
CLOTHES HAVE A RUSTY COLORED STAIN TO THEM

High Iron levels in your water source. Do not dry or bleach the clothes as it will worsen the effects. Rewash them in a clean water source before drying. The use of our pre-filter (page 16) or an Iron specific pre-filter is required.

10. MAINTENANCE

INTERNAL DIAGRAM

In case there is an issue with your equipment in which you contact customer service, this diagram will be a resource in locating the part(s) of the unit as the customer service representative guides you through troubleshooting and servicing your unit.



1. Desiccant Dryer
2. Oxidizing Module
3. Control Module
4. Venturis
5. Static Mixer
6. Water outlet
7. Water inlet

REPLACEMENT PARTS

The only part that will need standard replacement is the desiccant dryer cartridge. Below is the part number you will need when ordering a replacement from your dealer.

Desiccant Dryer Cartridge Part #: *8001

11. CARTRIDGE REPLACEMENT INDICATIONS

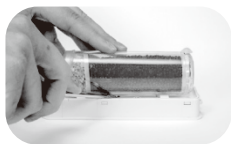
Your equipment has a desiccant dryer incorporated in it to increase the unit's efficacy and extend its life. This dryer is filled with a couple of drying agents that remove moisture from the air. One of the agents, made up of blue silica gel beads, is visible through the dryer window. As this agent becomes saturated with moisture these beads will turn pink. Once all of the beads are pink the Desiccant Dryer will need to be replaced to keep the system operating at maximum efficiency.

To replace the Desiccant Dryer, follow the instructions below:

1. Remove the door/tray on the leftside of the unit by squeezing the two slides together and pulling the dryer assembly out.



2. Use a Small Flathead Screw-driver, or other thin and stiff bladed tool, to depress the Locking Tab on the inside of the Desiccant Dryer Door under the Cartridge.



3. Continue holding the Locking Tab down and slide the Desiccant Dryer Cartridge upwards to remove it from the Desiccant Dryer Door.



4. Install a new cartridge filled with blue beads on the Desiccant Dryer Door.

5. Ensure that the small gasket is in place on the outlet of the cartridge and reinstall the Desiccant Dryer Door into the equipment.

6. To purchase additional cartridges contact your dealer.

The frequency for changing the Desiccant Dryer Cartridge will vary depending upon several factors, including amount of use of the machine and level of humidity.

12. WARRANTY

The distributor warrants the equipment for a period of two years in the event of any lack of conformity detected in it, as stipulated in the RD 1/2007 of 16 November (revised text of the General law for the consumers and users protection).

- The warranty includes the repair and replacement of defective parts by personnel authorized by the distributor or by the official technical assistance service (S.A.T.) at the place of installation or in its workshops. Labour and shipping costs are included in the warranty.
- The distributor is exempted from providing a guarantee for parts that are subject to the natural wear and tear, lack of maintenance, shocks or other lacks of conformity which are consequence of improper use of the equipment or inappropriate according to the conditions and limits of operation indicated by the manufacturer of the device. Also, the warranty loses applicability in cases of poor handling and use of the equipment or in those cases where it has been modified or repaired by personnel alien to the distribution company or official technical service.
- The parts replaced under warranty will remain under the property of the distributor.
- The distributor is responsible for the lack of conformity of the equipment when this refers to the origin, identity or suitability of the products, according to their nature and purpose.

13. NOTES

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