# LIMITED WARRANTY

Products manufactured by *ReadyTemp Inc.* are warranted to the original consumer only, and to be free of defects in material and workmanship for a period of **two (2) years** from the date of purchase. The Timer's warranty is through the timer's manufacturer. However, the design and use of a common timer allows for easy replacement if the timer fails. Unwanted noise or vibration is warranted for 90 days from the date of purchase. All terms of this warranty shall only be valid if the ReadyTemp cabinet has not been removed or show signs of abuse, we will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair, or if the product was not installed in accordance with printed installation and operation instructions. To obtain service under this warranty, the defective product must be returned to the distributor or dealer of *ReadyTemp Inc.* from which it was purchased and must be accompanied by a copy of the original invoice, proof of purchase and installation date, failure date. The distributor or dealer will contact the *ReadyTemp Inc.* Factory Service Department for instructions. Any defective product to be returned to the factory must be sent freight prepaid, with documentation supporting the warranty claim. This warranty is in lieu of any other warranties, expressed or implied

ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCH-ANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED IN DURATION FOR THE **TWO (2) YEAR** PERIOD SPECIFIED ABOVE IN THIS LIMITED WARRANTY. OUR OBLIGATION UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS OF THE READYTEMP HOT WATER CIRCULATING SYSTEM.

#### **Limitation of Liability**

Regardless of whether any remedy set forth in this agreement fails of its essential purpose, to the extent permitted by law, in no event will ReadyTemp Inc. be liable to you for any loss of time, inconvenience, lost profits, lost savings or incidental expenses, indirect, incidental, special or consequential damages, arising out of your use or inability to use the product or the breach of this agreement even if advised of the possibility of such damages, whether from corrosion or any other causes. ReadyTemp Inc. reserves the right to change the design in its products without any obligation to modify any previous product this warranty is in lieu of any other warranties, expressed or implied.

# **Damages**

Under no circumstances and under no legal theory, tort, contract, or otherwise, shall ReadyTemp Inc. or its suppliers or resellers be liable to you or any other person or entity in any way for any indirect, special, incidental, or consequential damages of any character including, without limitation, damages for loss of goodwill, work stoppage, or any and all other commercial damages, residential damages or losses, or for any damages of any kind or nature in excess of ReadyTemp Inc. list price for the product purchased, even if ReadyTemp Inc. shall have been informed of the possibility of such damages, or for any claim by any other party. Furthermore, some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation and exclusion may not apply to you. You assume full responsibility for the selection of any product(s) purchased from ReadyTemp Inc. To achieve your intended purposes, for the proper installation and use of any product(s) purchased from ReadyTemp Inc. And for verifying the results obtained from use of said product.



HOT WATER OPTIMIZER CONVENIENCE - COMFORT - CONTROL - EFFICIENCY

ATC 3000 ALL-IN-ONE HOT WATER CIRCULATOR • RE-CIRCULATOR • ON-DEMAND FREEZE PROTECTION



# OWNERS MANUAL

CONGRATULATIONS, and sincere thanks from the ReadyTemp Inc. family for purchasing the world's most advanced hot water recirculation / circulation / on-demand system. ReadyTemp is engineered with 21<sup>st</sup> century technology to maximize efficiency, comfort and water savings. ReadyTemp provides an instant (Ready) means of optimizing the water temperature (Temp) throughout your home, giving your entire family the convenience of instant hot water at your desired temperature and readiness. And, by using the ReadyTemp system, the conservation of our earth's precious water supply is an added benefit.

It has always been our goal to offer consumers the best technology, the highest quality in a homeowner friendly appliance that will supply many years of service and convenience to discriminating consumers. We extend our appreciation to you for incorporating the ReadyTemp Hot Water Recirculator into your household appliances, and trust that you too will want to be added to our list of satisfied customers.

Sincerely,

The ReadyTemp Family

NOTE: A small amount of water may be present inside the pump from quality control testing.

We're serious about recycling and in keeping with Green Environmentally Friendly Company guidelines, numerous types / previously used "packing materials" may have been utilized in shipment. Recycling reduces wasteful land filling and should not be mistaken as indicators of being a used product.

Please report any signs of damage or concerns of quality upon receiving your ReadyTemp by calling the number on the product label.

READYTEMP USES A **"WATER COOLED PUMP" NEVER OPERATE PUMP WITHOUT WATER.** DOING SO MAY DAMAGE UNIT AND VOID WARRANTY.

# **RAPID INSTALL STEPS**

- 1. Close Shut-Off Valves and Open faucets to release pressure
- 2. Connect hoses per labels on unit **DO NOT** strip threads

DO NOT over-tighten (just hand tight + 1/4 turn more)

- 3. Open Shut-Off Valves and Check for leaks
- 4. Open Cold Water Faucet to purge trapped air
- 5. Plug-in power cord and Raise Temperature Dial to make unit operate
- 6. Open / Close cold "Faucet" 10+ times until near silent=purges air out

PUSH BUTTON INSTALLATION

(On-Demand / Scheduled-Off Override) <u>**DO NOT**</u> CONNECT TO HOME PHONE SYSTEM (this will void warranty)

ReadyTemp is engineered with the capability of On-Demand/single-cycle activation via the RJ11 phone jack. Anytime the two middle wires on a connected phone cord makes momentary contact a pumping cycle is initiated until water at the chosen temperature set point reaches the unit.

The installation is simple and easy requiring a "NON-ILLUMINATING" (no-light) doorbell button available at home improvement / hardware stores for around \$2.00, and a 2 or 4 wire phone cord available at 99 cent stores or electronics stores.

Simply cut the connector off one end of the phone cord, strip and connect the two middle wires within the phone cord to doorbell button connection screws. Plug the opposite end of the phone cord into RJ11 phone jack on the ReadyTemp. It is easy to imagine the simplistic installation for multiple switch installation throughout your home using a 5-to-1 phone jack adapter and multiple switches wired within your home.

This momentary contact technology makes integrating and activating the system using an iOS app, or "Hey, Siri" on iPhone together with a WeMo Maker device and app+IFTTT app. Similar capabilities are also possible using an Android phone and additional app's/hardware.

# LIFECYCLE

The current record of operation without any service is 18 years. The prior record was 16 years. Consumers have proven they can **extend their systems life by running the system at least one time per week**. Rather than not using the system at all for months and months. The timer can be programmed to run based on day-of-week.

Example, program the timer to go ON at 1pm every Friday and OFF at 1:10pm.

In keeping with ReadyTemp's tradition of "industry first's" we offer printable signage.

# We strongly recommend downloading placing the below signage

in clear sight of <u>water heater</u> and water main / meter or any / <u>all shut-off valves</u> that directly affect the homes water supply. Doing so alerts person(s) that a recirculation system is installed on the property and must be turned off or power unplugged before shutting off water supply. We also recommend protecting signage with document protector or covering with clear tape to protect from moisture. Half-page sized printouts can be **downloaded at:** 

www.readytemp.com/STOP\_BEFORE\_CLOSING\_WATER\_VALVE.jpg

Own a "TANK" water heater? Download our Water Heater Purge Table at <u>http://www.ReadyTemp.com/water-heater-purge-table.pdf</u>

Purging a quart from your water heater every 3 months helps prevent sediment buildup in your water heater making it last longer and run more efficient

ReadyTemp Inc. www.ReadyTemp.com

### INSTALLATION INSTRUCTIONS

To ensure proper installation of your **OPTIMIZER-3000** unit, please read the instruction sheet completely before proceeding. Your READYTEMP unit is fully assembled upon delivery. Remove unit from the shipping container and examine the contents for any visible damage. Write the unit's Serial number on the warranty / registration card on the last page of this manual.

1. Examine the plumbing system in your home to determine the furthest fixture from the hot water heater. Test for the location of this fixture when the hot water has not been used for an hour or more. Turn the hot water faucet on at this fixture and wait until hot water arrives. If this is the fixture at the end of the line, hot water should be readily available at the other fixtures leading back to the water heater. Repeat the test at another fixture if the results prove incorrect. NOTE: Some homes may have two hot water main supply lines, requiring two READYTEMP units or a single unit on the most active line.

2. Remove all articles from under the desired plumbing fixture. Have a towel and small bucket available for any water spills. Shut the hot and cold water <u>supply valves</u> by turning both valves completely clockwise. The valves are connected to the water supply lines or tubes directly under the sink.

3. Turn the hot and cold water <u>faucets</u> to the "Open" position and allow any remaining water / pressure within the lines to drain into the sink. Make sure there is no water flow through the faucets before proceeding. If the flow of water does not stop, double check the supply valves to see if they are *completely closed*. If the flow of water continues, a possible leak in one of the supply valves may exist and will require replacement. A licensed plumbing contractor should be consulted if this becomes necessary. This is a good time to highly suggest installing good supply valves and flex lines to avoid any chance of a future leak that may occur at these new connections.

4. Disconnect the "end" of the two faucet supply lines or tubes from the <u>sink faucets adaptors</u>. An 8" crescent, or 7/8" wrench, can be used for this job. As a precaution, a small container should be placed under the sink just in case excess water is still remaining in the lines.

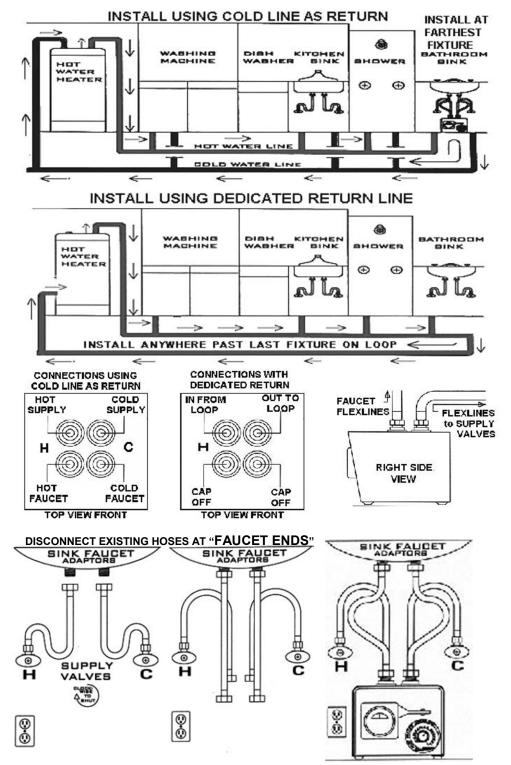
5. Find the two flex lines provided and connect one to each sink faucet adapter.

6. Set the READYTEMP unit under the sink, making sure the front of the unit faces towards you. **BE VERY CAREFUL NOT TO STRIP THE THREADS ON THE UNIT CONNECTORS**. Connect and snug/ do not over tighten the hot supply flex line to the hot supply connector, connect and tighten the cold supply flex line to the cold supply connector, connect and snug/do not over tighten the hot faucet flex line to the hot faucet connector, and finally connect and tighten the cold faucet flex line to cold faucet connector on the unit.

7. Use your wrench to tighten the connections, but do not exceed more than a half turn after they first get snug. Double check all the connections before proceeding. Turn on the hot and cold water faucets then turn on the hot and cold water supply valves to the fully opened position by turning them counter clockwise. Let the water run until the air within the lines is completely purged, then turn off the faucets. Inspect all connections for any leaks and wipe up all water from unit, floor and hands. DO NOT PROCEED WITHOUT FIXING ANY LEAKS THAT MAY BE PRESENT AT THIS TIME.

8. Find the disconnecting power cord and plug it into the machine. Plug the power cord into a 115 volt AC outlet. When installing under kitchen sink, the outlet of choice is often controlled by the garbage disposal switch and may not allow usage correctly. If this is the case consider sharing the outlet used by the dishwasher. If there is no outlet in the sink cabinet, consult a licensed electrician for installation of an outlet under the fixture.

9. Check the timer switch to make sure the unit is "ON". The pump should be starting to circulate the cold water out of the hot water lines. **BE SURE TO PURGE AIR OUT THE SYSTEM BY OPENING AND CLOSING THE COLD FAUCET WHILE UNIT IS RUNNING UNTIL NEAR SILENT OPERATION.** 



# **OPERATING INSTRUCTIONS**

#### AUTOMATIC SCHEDULED OPERATIONS:

Utilizing the supplied timer, READYTEMP<sup>®</sup> OPTIMIZER can be scheduled to have hot water ready during your chosen time periods optimizing your lifestyle and water savings.

#### MANUAL / SWITCHED OPERATION:

Wireless wall switch controllers can replace the timer as a means of operation, including X-10 home automation products to turn the unit "ON" or "OFF" manually.

#### PUSH-BUTTON / TIMER OVERRIDE / ON-DEMAND OPERATION:

By installing a momentary contact switch (doorbell button) the READYTEMP<sup>®</sup> OPTIMIZER can be operated on a single cycle basis as well as allow operation during scheduled-off time periods. Purchase any standard 2 or 4 wire phone cord. Cut one end of the phone cord off and connect the two middle wires from the phone cord to any momentary contact switch. Plug the other end of the phone cord into the phone jack on the front of the READYTEMP<sup>®</sup> OPTIMIZER.

#### WIRELESS / REMOTE CONTROL:

READYTEMP<sup>®</sup> OPTIMIZER can be operated "wirelessly" by unplugging the timer and replacing it with any number of wireless / remote outlet control or X-10 home automation devices available at most home improvement stores and the internet.

#### CONTINUOS OPERATION:

Can be set for continuous operation by removing the timer and plugging in the short white cord to where the timer was plugged. Now the unit will cycle 24 hours a day based on temperature.

#### **TEMPERATURE CONTROL:**

Turn the adjustment knob clockwise to increase the temperature cycle zone, counter clockwise to decrease. Most homeowners set their dial to between the 1 o'clock to 3 o'clock positions on the dial. Finding your homes unique delta-T "sweet spot" can be achieved by following this basic rule: If you turn on the "COLD WATER" faucet where the unit is installed and you get more then 2-3 seconds of "warmish" water then simply turn the temperature control knob counter clockwise "just a hair". Wait 1 hour for the homes plumbing to adapt to any new settings. Adjust the knob clockwise if the water from the hot water faucet is not hot enough. Setting the temperature dial "too high" will cause "hot" water to be placed into the cold line.

#### **PIPE FREEZE PROTECTION:**

READYTEMP<sup>®</sup> OPTIMIZER Installation should be just past the zone where freezing pipes occur. Initial temperature setting should be 10 – 15F higher than the space temperature where unit is installed. Place unit in continuous operation mode. Protection effectiveness can be measured by opening a cold water tap upstream from the unit and feeling how cool or warm the first-out water feels. If the water is icy cold then raise the temperature slightly and retest in 30 minutes. During off season, if system will not be used for hot water convenience, program timer to run one time per week for 5 minutes. Customers are getting as much as 17 years of service by doing this This prevents water within the pump from becoming stagnant and prolongs the life of the pump.

#### VACATIONS / DISABLED OPERATION:

When going on vacation or long periods of no hot water usage or any other time when hot water or no water will be available, simply unplug the power cord from the wall outlet.

#### PUMP CYCLES / OPERATION:

Many factors influence pumping cycles, i.e. outside temperature, length of water travel, diameter of pipes, pipes in cement slab/foundation, insulated / non-insulated pipes. Anticipating hot water usage periods accurately and using a control which best fits your lifestyle is the second part to an optimized hot water system. Person who travels a lot often find motion sensors or sound sensors to be more efficient then using a timer. With the right temperature setpoint and control type homeowners noticeably improve their lifestyle while saving thousands of gallons of water each year.

#### PRECAUTIONS

Before operating the unit, please read this instruction guide thoroughly and with understanding before handling / installing unit. Keep this guide for future use.

## **IMPORTANT SAFEGUARDS**

To avoid electrical shock, unplug main power cord before opening controller. Refer servicing to qualified personnel only. Have a dry towel at the ready when installing or uninstalling unit to wipe up any water on unit or area of installation.

When using electrical products—especially when children are present—basic safety precautions should always be followed, including;

- Operate the unit only on 120—Volt AC.
- Unplug the unit from the wall outlet when it is not going to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull it by the cord.
- Do not handle the plug or cord or unit if water is present on floor, near unit's power connections or with wet hands. Dry area's thoroughly before connecting or disconnecting to / from power outlets.
- Never operate this product if it has a damaged cord or plug; if it is not working properly; or if it has been dropped or damaged.
- Use this product only for its intended use as described in this instruction guide
- Under no circumstances should READYTEMP<sup>®</sup> OPTIMIZER's pump be allowed to run without making sure that valves in the suction and discharge lines of the pump are open allowing for circulation to exists

# WARNING: WHEN USING THIS PRODUCT PLEASE PAY CLOSE ATTENTION TO THE FOLLOWING SAFETY TIPS TO ACHIEVE THE BEST RESULTS FROM YOUR UNIT.

- READYTEMP® OPTIMIZER performs well with the hot water heater temperatures set at a minimum 120 F. Some states prohibit water heater temperatures to be set above 120 degrees F to avoid scalding. If the water heater is set below 120 degrees F, you may experience warm water at your cold water faucet.
- Turn-Off / Unplug the unit whenever the hot water heater or **water supply is shut off**. We recommend placing a 3x5 signage next to shut-off valves at the heater and main shut-off valves as referenced on Page 2 of this manual Continued use of the unit in this condition will result in damage of the pump and VOID WARRANTY.
- If a water leak occurs, follow safety instructions above before disconnecting the electrical plug from the wall outlet. Then turn-off the hot and cold water outlet valves.

# WARNING

Proprietary information: The product(s) and documentation provided hereunder are READYTEMP Inc. trade secret, patented proprietary products and information. Customer agrees not to disclose such materials to any other party and not to reverse engineer or use the products in any manner except as contemplated in this User Guide.

#### TANKLESS WATER HEATERS

NOTE: The ACT3000 does NOT work with tankless water heaters. Tankless water heaters require TL-Series hot water recirculators

COMMON QUESTION: What size wire is required for the push-button install + RJ11 phone jack?

**ANSWER**: These wires DO NOT carry any power. The controller is only measuring changes in resistance on these wires. Phone wire is acceptable. If the wires will be laid side-by-side along 220v wires then shielded wires must be used to prevent interference.