WL380 QUICK START GUIDE

⚠ **WARNING!** ***Only trained and qualified technicians should attempt to install, maintain, or service Waterlogic equipment. Failure to follow all instructions in this manual could result in death, serious personal injury, or severe property damage.***

⚠ **DANGER!** ***ELECTRICAL SHOCK HAZARD. UNPLUG OR ISOLATE FROM ELECTRICAL SOURCE.***
Only qualified personnel who have read and understand this entire manual should attempt to install, or service this unit, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.

1) Unpack the ***WL380*** and set on hard level surface as close as possible to electrical and water supply. Ensure adequate clearance to allow for proper air movement and heat exchange (4" min).

2) Remove the filters and flush (follow instructions on filter). Reinstall filters. Always ensure proper filtration to meet local water conditions and service requirements.

3) Establish 40–60 psi 0.5 gal/min potable water supply. An accessible shut off and leak protection is recommended. Always use a pressure regulator.

4) Connect power cord to 120 VAC - 60 Hz 15 Amp GGCI protected outlet.

5) Turn on the RED power switch. GREEN switch MUST remain OFF until the WL380 tanks are filled or the hot tank overload will trip.

   ⚠ **CAUTION!** ***NEVER TURN ON HEATER BEFORE FILLING HOT TANK.***
   Green Compressor/Heater Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank.

6) Fill the hot and cold tanks by dispensing until a steady stream of water flows from each.

7) Turn ON the green power switch to activate the heater and refrigeration systems.

   It will take approximately 10 minutes to heat 1.6 liters of water in the hot tank and 45 minutes to chill the water to the cold tank to set point temperatures. A warm condenser coil on the back of the unit indicates the refrigeration system is exchanging heat and operating properly.

⚠ **WARNING!** ***VERY HOT WATER CAN BURN OR SCALD.***
Hot water should be dispensed carefully into insulated container to avoid injury.

8) Function check for flow, temperature, taste, and odor to ensure customer expectations are met. Inspect and check all connections for leaks/drips and clean unit and area before leaving.

PRE-INSTALLATION PROCEDURES

⚠ **DANGER!** ***ELECTRICAL SHOCK HAZARD. UNPLUG OR ISOLATE FROM ELECTRICAL SOURCE.***
Only qualified personnel who have read and understand this entire manual should attempt to install, or service this unit, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.

⚠ **WARNING!** ***ALWAYS SANITIZE BEFORE USE.***
Sanitize before use to eliminate any potential microbiological contaminates and avoid taste/odor issues.

Material and Tools Needed:

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
- Phillips Screwdriver. Temperature Gauge.
- Water Pitcher or Container to collect water from the faucet
- 5-gallon container or drain basin
- Sanitizer - Household Bleach (5.25% Sodium Hypochlorite)
- 1/4" O.D. Plastic Tubing, at least 4 feet in length, and assorted 1/4" quick connect fittings.
- TDS Meter and Test Strips for measuring chlorine. - Optional
- 1/8" NPT Female Thread to 1/4" Compression Fitting (Used to connect hose to drain fittings)

1. Unpack the ***Waterlogic WL380*** and check exterior for damage. Dispose of packaging properly.

⚠ **WARNING!** ***WL380 IS HEAVY.*** *Use proper lifting aids and handling techniques to avoid injury. Use assistance as single person lift could cause injury. Always drain before handling and transporting and handling to reduce the weight of the unit.*

2. Open the front lower panel on tower (1 screw at center bottom) or top lid (2 screws at rear) to access the filter sump of the table top model.

Flush Filters

⚠ **CAUTION!** ***FILTER FLUSH REQUIRED.***
WL380 contains a carbon filter that must be flushed before use to avoid contaminating with carbon fines. Never rinse or flush filters through solenoids or tanks.

3. Remove the filter(s).

4. Flush thoroughly (at least 2 gallons) with fresh water to clear carbon fines. Test outlet water with TDS (Total Dissolved Solids) Meter to determine exact flushing volume required. See instructions on filter or manufacturers recommendations for more specific requirements.

5. Use an extra filter sump with cartridge (media) removed as tool to mix and introduce sanitizer or remove filter cartridge (media) from the sump by unscrewing head from body (reverse or left hand thread) and set filter cartridge aside for installation after sanitization is complete.

Firewall UV System Functional Test

⚠ **WARNING!** ***ULTRAVIOLET RADIATION.*** *Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Do not remove from housing when light is on. Always disconnect lamp before removing from the housing.*

6. Turn on red power switch. Check that UV light ignites by looking reflection of light on finger just below the tip of the faucet. The blue glow around Firewall housing indicates that the lamp is lit.

7. Disconnect the UV lamp connector and verify the Firewall UV lamp alarm annunciates for 20 seconds and status LED goes out. Reconnect and cycle power off for 10 seconds. Reboot to clear alarm and reactive the Firewall system.

Sanitize

Sanitize using a household bleach solution or other approved cleaner throughout the cold and ambient water circuits. Follow all instructions on the sanitizer and flush with fresh water through the faucet until taste and odor is acceptable.

⚠ **WARNING!** ***USE PROPER PERSONAL PROTECTIVE EQUIPMENT***
Always ensure proper ventilation and use proper personal protective equipment such as gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each chemical product. Take all necessary precautions to prevent sanitizer from contacting eyes, clothing, and any other surfaces in could damage.

⚠ **CAUTION!** ***USE SANITIZER COMPATIBLE WITH STAINLESS STEEL AND ACETAL PLASTIC.***
Do not allow the sanitizer solution to remain in the system for more then 10-15 minutes unless otherwise directed by the sanitizer manufacturer.

8. We recommend using a household bleach solution (Sodium Hypochlorite 5 - 10% Concentration). Concentration should be 1 teaspoon = 5 ml = ½ cap full for every 2 Liters (appx ½ gallon) of water.

9. Remove sump and pour ½ cap (5 ml) for table top or 1 cap (10ml) for tower of household bleach solution into filter sump and feed into ambient and cold circuits by first dispensing 3 seconds of ambient and then dispensing out 500 ml (approximately 16 oz.) of cold water or until sanitizer is mixed into cold tank. Ensure green switch (compressor/heater) is OFF.

Flush the Sanitizer from the Machine

10. Reinstall carbon filter(s) or filter cartridge(s) and place a pitcher, catch basin, or other container under the faucet of the **WL380** to collect flush water. 5-gallon bucket is needed if no drain accessible.

11. Flush the cold and ambient circuit. Run several gallons of water through the faucet by dispensing cold water to dilute and remove the sanitizer from the circuit. You may use chlorine test strips to evaluate the water or use odor/taste. Once the sanitizer odor/taste has been flushed out of the cold side of the machine, flush the ambient circuit.

Note: *There is a 1 minute maximum continuous dispense timer as safeguard. Release and reapply if timeout occurs during dispensing process.*

12. The sanitization process for the cold and ambient circuits is now complete.

Fill the Hot Tank

13. Press and hold the hot dispense icons (middle and bottom) simultaneously to fill the hot tank. A steady stream of water will dispense from the faucet once the hot tank is full.

⚠ **WARNING!** ***HOT CIRCUIT IS NOT SANITIZED. WATER MUST EXCEED 171º F (77 º C)***

Water in the hot circuit is not sanitary until the temperature over 171ºF (77 º C) for 5 minutes. DO NOT ingest and avoid contact until hot water until heater has sanitized the tank.

Cold Water / Compressor Test

14. Switch on the green power switch (turns on the compressor and heater). Always ensure tanks are full of water before turning on the heater or the heater overload (high limit) will open and require manual reset. Once the compressor starts, the heat exchange process will begin and you should be able to feel the discharge of heat at the condensing coil (rear grill) of the machine. Heat exchange is a signal that the refrigeration system is working. The compressor will become hot to touch and a slight vibration will indicate it is on.

15. The cold tank set temperature is 41°F (5° C) and it should take about 45 minutes for the unit to chill down to the default set point temperature of 41°F (5° C) assuming inlet water of 75ºF (24° C) and proper ventilation and environment.

16. Once the machine reaches its target temperature, the compressor will shut off. Draw a glass of cold water and verify it is has been chilled to proper temperature with a thermometer.

⚠ **WARNING!** ***VERY HOT WATER CAN BURN OR SCALD.***

Hot water should be dispensed carefully into insulated container to avoid injury.

Hot Water / Heater Test

17. Always ensure tanks are full of water before turning on the heater or the overload (high limit) will open and require manual reset. It will take the heater approximately 10 minutes to heat the water from ambient 75ºF (24° C) to the factory set point of 189°F (87°C). Dispense a cup of hot water and measure temperature with thermometer to verify.

Extra Hot Water Test

18. Select the extra hot cycle icon until it lights and hold for 2 seconds. Release and the icon should begin to flash indicating the extra hot cycle is activated. Icon will continue to flash while water in hot tank heats to the extra hot temperature of 203º F (95º C). Icon will stop flashing once tank has reaches 203º F (95º C). This should take a minute or two for heater to elevate temperature in the tank 14º F (10º C). Dispense a cup of hot water and verify with thermometer.

Drain the *WL380* for Transport

19. Drain the ***WL380*** for transportation per the Draining Instructions in this manual.

⚠ **WARNING!** ***STORE AND TRANSPORT UNIT EMPTY. ALWAYS SANITIZE BEFORE REUSE.***

The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth).

WL380 DRAINING INSTRUCTIONS

⚠ **WARNING!** ***WL380 IS A HEAVY OBJECT. USE PROPER LIFTING AIDS AND HANDLING TECHNIQUEST TO AVOID INJURY.*** *Single person lift could cause injury. Always drain before handling to reduce weight.*

Draining Notes

We recommend that you drain both the hot and cold tanks in the WL380 before moving or storing. The cold-water circuit of the ***WL380*** consists of either a 2-liter cold tank in the table top (mini) or 4-liter cold tank in the tower (free standing). Cold tanks have outlet solenoids that seal the circuit and must be manually vented to drain properly. Remove the cold tank outlet line before the cold outlet solenoid valve to break the vacuum and vent the cold tank. This will vent the cold tank and allow air to replace the water as it drains and ensure proper drainage. The ***WL380*** has front facing cold and hot tank drain ports for easy access. The table top front panel must be opened to access the drain ports. The hot tank has a vent line that is open to atmosphere through the faucet.

Prior to draining the hot tank, turn OFF the green compressor/heater switch, and dispense 2 liters of hot water from the machine. This will cool the tank and help prevent exposing personnel and equipment (drains, catch basin, etc.) to scalding hot water.

⚠ **WARNING!** ***VERY HOT WATER CAN BURN OR SCALD.***
Hot water should be dispensed carefully into properly insulated container to avoid injury.

Disable Cold and Hot Tanks – Cool Hot Tank if necessary

1. Turn off the green power switch to disable the heater and compressor.
2. Dispense 2 liters of water through the hot tank to cool the water temperature in the hot tank.

Turn off Water Supply and Bleed Water Pressure

3. Isolate the unit from feed water by turning off the supply valve.
4. Dispense cold still water to relieve any pressure built up in the system.
5. Remove the water supply line from the unit.
6. Install dust cap or plug into water supply line bulkhead fitting of the tower.

Drain the Cold Still Water Tanks and Circuit

7. Open lower front panel hatch panel by removing the lower center locking/retaining screw and carefully lower the front panel from its catch. The panel will then pull out and can be removed from the unit by pulling out of two plastic retainer clips at the bottom.
8. Remove top cover (lid) to access top of cold tank. Vent the cold tank by removing the cold tank outlet line before the cold outlet solenoid valve to break the vacuum and vent the circuit.
9. Remove the cold tank drain line cap and drain the 2 liters (mini) or 4 liters (tower) into container.

Drain the Hot Water Tank

10. Remove the hot tank drain cap from the unit.
11. Drain 1.6 liters of hot water into suitable container.

Reassemble the Unit

12. Reinstall cold outlet line and all drain caps.
13. Install top cover and lower front panel and tighten the locking screws to secure.

INSTALLATION PROCEDURES

Safety and Installation Guidelines

Ensure all Local, State, and Federal Laws and Codes including health and safety guidelines are met when installing ***Waterlogic*** Equipment. Only qualified service technicians should attempt installation and service of ***Waterlogic*** Equipment.

⚠ **WARNING!** ***ELECTRICAL SHOCK HAZARD.*** *Always unplug (isolate from power supply) to prevent electrical shock except where electrical tests are specified.*

⚠ **WARNING!** ***IMPROPER SUPPLY OR CONNECTION CAN RESULT IS RISK OF SHOCK.***
Connect to a 15 amp 120V 60Hz properly grounded outlet (GFCI is recommended). Ensure polarity is correct and always use a 3-prong outlet. Consult a qualified electrician if you have any questions.

⚠ **WARNING!** ***USE ONLY Waterlogic SUPPLIED POWER CORD (EL-5001-A).*** *Locate system within 5 feet of power supply. Never use an extension cord or adapter. Do not use a damaged power cord or plug. Keep power cord out of heavy traffic areas and away from heat sources. Do not, under any circumstances, remove ground prong or alter the power cord. Never pull the power plug from the outlet with a wet hand or allow the plug to get wet. Failure to use the supplied power cord will void UL Certification and Warranty.*

⚠ **CAUTION!** ***INDOOR USE ONLY.*** *Never exposed to direct sunlight, heat sources, or ambient air temperature above 97°F (36°C) or below 50°F (10°C). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 2-inches. Installs where the ambient temperature exceeds 80°F, require a minimum of 4-inches clearance for proper heat dissipation and efficient operation.*

⚠ **CAUTION!** ***USE A WATER PRESSURE REGULATOR. Waterlogic*** *will not be responsible for injury or damage caused by excessive water pressure. Operating pressure must be 40 psi to 60 psi. Be aware any of potential pressure surges caused by building/municipal pumping stations.*

⚠ **CAUTION!** ***USE UV STABLIIZED SUPPLY LINES.*** *Feed the unit with a potable ambient or cold water supply only. Feed water over 105° F (40°C) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible.*

⚠ **WARNING!** ***STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE USE.***
The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use to eliminate any potential microbiological contaminates

WL380 can be combined with RO Filtration Systems. RO will require a drain connection. Refer to all applicable plumbing codes and standards in your area for these requirements (air gap connections and back flow prevention may be necessary).

All Pre-Installation and Sanitization Procedures as prescribed in this manual must be performed before installing the ***WL380***.

Always install indoors and place the ***Waterlogic WL380*** on a firm, flat and stable surface. Add reinforcing bracket or anchor is necessary to ensure unit is stable and avoid tipping injury.

Attach the potable water supply line to the 1/4" feed water inlet bulkhead fitting on the back of the unit. ***Waterlogic*** requires the use of a water pressure regulator. Water feed pressure must be controlled between 40-60 psi. Turn on the water supply and check for leaks.

1. Check to ensure that both the red and green power switches are in the *O=OFF* position.
   NOTE: Switches have internal LED that illuminates when placed in *I=ON* position.
2. Connect the ***Waterlogic*** power cord to the back of the ***WL380*** and to proper power supply.
3. Turn the Red Power Switch to I=ON position. The four front LED's should illuminate green.

   ⚠ **CAUTION!** ***NEVER TURN ON HEATER BEFORE FILLING HOT TANK.***
   Green Compressor/Heater Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank.
4. Verify that the Firewall UV Purification System is operating as expected. No alarm annunciated and Firewall Purification status light is illuminated green.
5. Prime the Ambient Circuit. Holding a container under the dispensing faucet, select the ambient button until it illuminates and hold until continuous flow water is dispensed. Release the ambient dispense icon and the back light will go off and the solenoid will close to stop flow.
6. Prime the Cold Circuit. Holding a container under the dispensing faucet, press and hold the cold dispensing button until a continuous flow of water is obtained. Once a continuous flow is obtained, release the dispensing button. Cold tank is now full.
7. Prime the Hot Tank. Holding a container under the dispensing faucet, press the hot dispense icons (middle and bottom) simultaneously until they both light and hold until a continuous flow of water is obtained from the faucet. Release stop dispense. Hot tank is now full.
8. Move the ***Waterlogic WL380*** into its final operating position. Be sure that a minimum of 2" clearance is maintained around both the sides and the back of the unit. This is important to allow proper airflow and heat exchange of refrigeration system.
9. Level unit using the adjustable feet if necessary. Never install on incline and attach support bracket or tie back to wall or floor if needed to secure and prevent accidental tipping.
10. Turn the green compressor switch to I=ON position. Check compressor operation. This can be done by listening to the unit when the green compressor switch is turned on and/or feeling the compressor for vibration. All tanks must be full.

11. Cold water should drop approximately one degree every 1-1/2 minutes. Condenser will be warm to touch indicating cooling system is exchanging heat.

12. The hot water will heat rapidly and should reach set point in about 10 minutes.

13. When the unit has reached its Hot Temp Set Point, the heater will cycle off. When the unit has reached its Cold Temp Set Point Temperature, the compressor will cycle off.

14. Select the extra hot cycle icon until it lights and hold for 2 seconds. Release and the icon should begin to flash indicating the extra hot cycle is activated. Icon will continue to flash while water in hot tank heats to the extra hot temperature of 203° F (95° C). Icon will stop flashing once tank has reaches 203° F (95° C). This should take a minute or two for heater to elevate temperature in the tank 14° F (10° C). Dispense a cup of hot water and verify with thermometer.

15. Once the unit is at the target temperature(s), sample the water to ensure water meets expectations and additional rinsing or adjustment is not required.

16. **Verify Settings** (refer to Programming Instructions for more details):
    - **Cold Temp Set** = 41° F (5° C) – Do not turn down past 36°F to avoid freezing risk.
    - **Hot Temp Set** = 189° F (87° C) – Not Adjustable.
    - **Extra Hot Temp Set** = 203° F (95° C) – Not Adjustable.
    - **BioCote Surface Protection** = Always enabled to help protect surfaces.
    - **Leak Detector** = Enabled – WL380 comes with built in leak tray in the base with leak detector pins. Water in tray will activate leak detection alarm and shut off inlet solenoid to prevent leaks.
    - **Energy Saver Mode** = On – Unit comes set with energy saver or sleep mode enabled. Heater will be disabled after 3 hours of machine inactivity (no icons selected). Turn Energy Saver Off by moving dip switch on front printed circuit board (PCB).

17. Recheck unit for any leaks. External Leak Protection is always recommended.

18. Review operation and functions with the customer and ensure that water flow, taste, smell, and temperature meets or exceeds their expectations. Be sure to note the Energy Saver Feature if it is enabled to avoid unnecessary service calls. Ensure the user understands the Firewall Purification system and review the benefits of our exclusive purification technology.