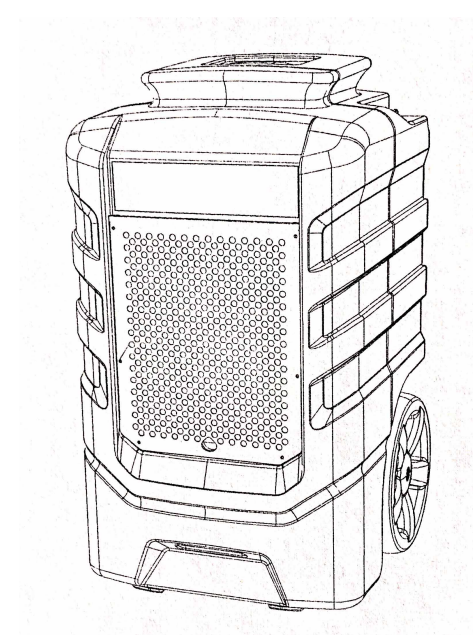# ABATEMENT TECHNOLOGIES®

AQUATRAP® LGR Dehumidifier

Model AT150RS/AT250RS

OPERATING MANUAL

READ AND STUDY MANUAL BEFORE USE

DECLARATION OF CONFORMITY

We, declare under sole responsibility that our models AT150RS and AT250RS dehumidifiers to which this declaration relates are in conformity with the following standards:

CSA Group

CAN/CSA C22.2 No.60335-2-40:17 Second Edition
- Safety of Household and Similar Electrical Appliances, Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers in conjunction with

CAN/CSA C22.2 No.60335-1:16 Second Edition
- Safety of Household and similar appliances, Part 1: General requirements.

Underwriters Laboratories Inc.

ANSI/UL 60335-2-40 Second Edition
- Safety of Household and Similar Electrical Appliances - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers in conjunction with

ANSI/UL 60335-1 Six Edition
- Safety of Household and similar appliances, Part 1: General requirements.

Abatement Technologies

Design and Development

Specifications

Model	AT150RS	AT250RS
Water Removal (90°F / 90% RH)	140Pints / 66L per day	266Pints / 126L per day
Water Removal (81°F / 60% RH)	85Pints / 40L per day	147Pints / 70L per day
Water Removal (50°F / 70% RH)	32Pints / 15L per day	69Pints / 33L per day
Operating Temp. Range	34° - 100° F	34° - 100° F
Refrigerant	R410A	R410A
Power Consumption	805 Watt	1380 Watt
Voltage / Cycle	115V / 60Hz	115V / 60Hz
Amperage	7.0A	12A
Rated Air Flow	354 cfm / 600 m³/h	413 cfm / 700 m³/h
Control Panel	Touch-pad	Touch-pad
Defrost Type	Sensor Controlled Thermodynamic Defrost	Sensor Controlled Thermodynamic Defrost
Air Filter	Pleated Filter	Pleated Filter
Water Pump	Centrifugal	Centrifugal
Housing	Rotomolded Plastic	Rotomolded Plastic
Large Wheels	Semi-pneumatic	Semi-pneumatic
Drain Hose Length	32 ft / 10m	32 ft / 10m
Cord Length	9.84 ft / 3m	9.84 ft / 3m
Height	33.5 in / 850mm	33.5 in / 850mm
Width	19.6 in / 500mm	19.6 in / 500mm
Depth	19.6 in / 500mm	19.6 in / 500mm
Use Weight	87 lbs / 39.5 kg	100 lbs / 45.5kg

Specifications are subject to change without notice. Some values are approximate.

Abatement Technologies

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- *Inspect filter.* Look for accumulated dust and dirt that would restrict airflow through the filter into the unit. If any is visible, vacuum out the debris. **Do not wash the filter**, as it will reduce the effectiveness of the electrostatic material.

Important: Replace the filter after:

- It has been vacuumed clean 3 times.
- It has been used on a mold remediation job.

Periodic Inspections (as needed)

Make sure the unit is unplugged. Remove housing, in order to locate the coil, pump and drain hose.

- Check coil and clean visible dirty
    - Vacuum both sides of the coils until clean.
- Check pump
    - Inspect and clean the pump system regularly to maintain effective operation. Remove one screw to open up the top cover, and then open up the second cover. Clean the float shaft to make sure the floating switch can operate smoothly.
- Check drain hose
    - Look for obstructions. Disconnect and clear any debris present.

Warranty

Abatement warrants to the original purchaser that if, within a period of 12 months from the date of purchase, this equipment is found to be defective either in original materials or workmanship (excluding normal usage wear and or mishandling or abuse) the faulty part will be replaced free of charge upon presentation of the appropriate evidence, provided the unit is returned to the original supplier. Shipping expenses are not covered under the warranty.

Abatement Dehumidifiers are used by professionals for the drying out of wet materials such as carpets, carpet cushions, floors, walls, building contents and more. They reduce the water in enclosed structural environments like buildings or parts of a building by removing water vapor from the air.

Safety Instructions

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Do not allow children to play with or around the operating unit.
- Keep wiring and motor dry. Never operate the unit in standing water, rain or snow, as this may create a risk of injury from electric shock.
- Do not use residential three way multiple plug adapter.
- Do not operate the unit with a damaged power cord. If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Always operate the unit with a grounded plug and with a grounded supply.
- Extension cords must be grounded and be able to deliver the appropriate voltage to the unit.
- Do not drop or throw the unit.
- Always operate the unit on a stable, level surface.
- Do not clog or block air intakes. Always to keep the filter clean.
- Do not attempt to disassemble or repair the unit if you are not qualified to do so.

How to Use Dehumidifiers

Setting Up a Drying Area

Managing the electrical consumption

The dehumidifier should be plugged into a grounded electrical outlet. In large disaster environments, the use of optional 230V to 115V converters may be helpful. This allows you to use the electricity from the electric stove or oven which in turn will leave the electricity from the wall available for your air movers. These converters will minimize tripping of electrical breakers when lots of air movers and dehumidifiers are present.

Create a closed drying chamber

The dehumidifier should be operated in an enclosed space in order to create a drying chamber. Close all doors, windows or areas that open to the outside to maximize the unit's water removal efficiency. Inside the drying chamber, air should circulate freely. Open interior doors and turn on Air Movers to increase the circulation.

Position the dehumidifier

Place the dehumidifier in the center of a room and keep it away from anything that could prevent airflow into and out of the unit.

Managing the rising temperature

The dehumidifier warms the air as it removes moisture. Room temperatures between 68°F and 84°F are favorable temperatures for drying.   In summer months while drying flooded homes, set the A/C to 68°F with the A/C blower on constant (ON). This will circulate the air in the entire home to make sure the dry air is distributed evenly.   In the winter, set the furnace to at least 65°F with the blower set to the "ON" position.

When the unit has been stored or transported in temperatures below 60°F, place the dehumidifier in the room for about an hour before operating (when possible). This will allow the unit to acclimate to the warmer ambient temperature minimizing conditions that cause the coils to freeze up thereby engaging the defrost cycle.

CAUTION!   Never operate the Aquatrap dehumidifier at temperatures above 100°F. It could damage the machine construction and internal components.

Error Messages

Message	Icon	Description
Er01	**"PUMP ON" flashing**	Problem with pump or the drain tube is kinked.
Er02	**N/A**	Check coil temperature sensor at the side of coil and the sensor cable.
Er03	**N/A**	Check ambient temperature sensor in the front of the coil and the sensor cable.

Note:
- When Er01 or Er02 error message displays, the dehumidification cycle will stop automatically. The machine will revert to STANDBY MODE but will still be on unless manually turned off. Contact Abatement Technologies for service.
- When Er03 error message displays, the dehumidification cycle is still on. Contact Abatement Technologies for service.

Indication Light:

Status	Colors	Description
Off	**N/A**	Machine is off.
On	**Red**	Machine is on.
On	**Green**	Machine dehumidification cycle is on.

Maintenance

WARNING! Always unplug any dehumidifier before performing maintenance procedures.

Before Each Use

- *Inspect the electrical cord for damage.*
- *Inspect condensate pump drain tube.* Make sure the drain tube is completely unwrapped and not kinked. Failure to do so can cause water to back up in the pump and leak out. The control panel may signal this problem by displaying "ER01

Touch Pad Keys (Cont.):

(icon)	**PURGE.** Press the PURGE key to empty water from the pump reservoir. During normal operation, the pump purges automatically whenever the reservoir is full. The display will show the PURGE ON icon. TO PURGE THE PUMP MANUALLY BEFORE TRANSPORTATION: ● Stop dehumidification using the START/STOP key, and let the unit sit for about 10 minutes. This allows water to drip from the coils. ● Press PURGE to remove residual water.
(icon)	**DISPLAY.** Press the DISPLAY key to display "TIMER" CLOCK, "TOTAL" CLOCK or "JOB" CLOCK while the machine has been turned on. Pressing the DISPLAY key will advance which clock time is displayed. Only ONE choice of clock time can be displayed at a time. ● In STANDBY MODE, the default display is "TIMER" CLOCK time. Press the DISPLAY key once to display the "TOTAL" CLOCK time. Press it again to display "JOB" CLOCK time, which shows the LAST JOB run time. ● When the dehumidifier is operating in a pre-set "TIMER" run cycle, the default CLOCK display is "TIMER" CLOCK time, which shows the remaining run time of the CURRENT JOB. Press the DISPLAY key once to display the "TOTAL" CLOCK time. Press it again to display "JOB" CLOCK time, which counts the CURRENT JOB run time. ● When the dehumidification is running continuously without a "TIMER" setting, the default CLOCK display is "JOB" CLOCK, which shows the CURRENT JOB running time. Press the DISPLAY key once to display "TIMER" CLOCK time, which reads "00:00". Press it again to display the "TOTAL" CLOCK time. ● If the DISPLAY key has not been pressed within 15 seconds, the CLOCK time will revert back to its default display. ● When error messages appear, "TIMER", "TOTAL" and "JOB" CLOCK displays disappear. Press DISPLAY key once to get the clock displays back once errors are cleared.

Operating Your Dehumidifier

Place the dehumidifier in upright position
If the dehumidifier has been laid down in a horizontal position for any time over a few minutes, you must set it upright (vertical) for 30 minutes before starting.

Connect the drainage system
You can find the hose wrapped around the back of the machine. Unwrap the entire hose and run it into a sink, toilet, drain, or bucket. Remove any kinks in the hose. Use bleach in the condensate pump once a year to keep clean.
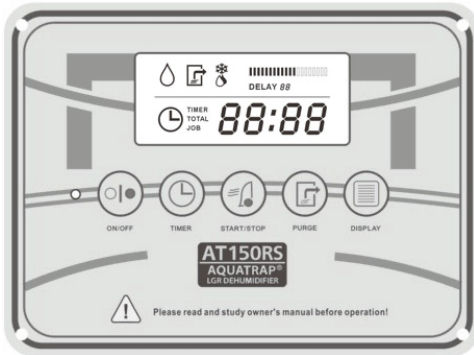
Plug in the electrical cord
The electrical cord is stored wrapped around the air outlet on the back of the unit. Unwrap the cord and plug it into a standard outlet with the correct voltage and amperage for the unit. If using an optional 230V to 115V converter that allows you to plug in multiple units at the same time using your customers' electric clothes dryer, stove or oven outlet, always check the voltage with a volt meter.

Before Transporting Your Dehumidifier
Before moving the unit, make sure the pump is empty of water. Allow the unit to sit for 10 minutes after stopping the dehumidification cycle. Push the PURGE key to clear water. See "How to Use the Touch Pad Control Panel" for more details.

How to Use the Touch Pad Control Panel

Touch pad control panel includes one LCD Display, one Indicator Light (Red/Green) and five touch pad keys for dehumidifier operations.

LCD Display:

💧	**DEHUMIDIFIER ON.**
↱	**PURGE ON.** The pump is on and pumping water out of the condensate reservoir.
❄	**DEFROST ON.** Frost forming on the coils, defrost cycle engaged.
IIIIIIIIIIII DELAY 88	**DELAY BAR AND COUNTDOWN.** See Start/Stop key.
🕐 TIMER 00:00	**"TIMER" CLOCK.** When set to show the "TIMER" CLOCK time, the "TIMER" CLOCK icon displays. The four digits indicate *HOURS and MINUTES* remaining in a user selected timed run cycle.
🕐 TOTAL 0	**"TOTAL" CLOCK.** When set to show the "TOTAL" CLOCK time, the "TOTAL" CLOCK icon displays. The digits indicate how many *DAYS the* machine has been used.
🕐 JOB 00:00	**"JOB" CLOCK**. When set to show the "JOB" CLOCK time, the "JOB" CLOCK icon displays. The four digits indicate how many *HOURS and MINUTES* are logged against either the CURRENT JOB or the LAST JOB run.

Touch Pad Keys:

⊙ǀ●	**ON/OFF.** Press the ON/OFF key to turn the machine on or off. ● When the machine is turned on, it comes on in STANDBY MODE. The red indicator light and LCD light up. LCD displays the "TIMER" CLOCK icon. Four time digits flash, which prompts the operator to either set the "TIMER" by pressing the "TIMER" KEY or to start the machine directly by pressing the "START/STOP" KEY. ● Pressing the ON/OFF key again will turn the machine off. The red indication light and LCD light go out. **Note**: In STANDBY MODE, the machine will automatically turn off if there are no other keys pressed within 15 minutes.
🕐	**TIMER.** By using the "TIMER" key, the dehumidification time can be set for a desired run time period. ● The "TIMER" time setting range is from 00:00 to 23:50. It increases by 10 minutes for every key press. ● Press the "TIMER" key without releasing; the time can be adjusted continually.
⚡	**START/STOP.** Press the START/STOP key to start or stop dehumidification. ● The dehumidification startup is designed with a compressor delay. The display reads a numerical countdown from a maximum of 90 seconds to 0. (30 second countdown for the first startup). The DELAY BAR flashes during this countdown period. ● While dehumidification is on, the display shows a "DEHUMIDIFIER ON" icon. ● The dehumidification cycle runs continuously if there is no "TIMER" set before it starts. ● Otherwise, the dehumidification cycle stops as the set "TIMER" expires. ● Pressing the START/STOP key again will stop dehumidification. The "DEHUMIDIFICATION ON" icon goes off when the dehumidification cycle is terminated.