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General Description

Combining the art of graphic annunciation with environmental sensing, AquaALERT introduces a practical solution to your water detection and environmental monitoring needs. The “LW-Series” is a proven system that will signal you of abnormal conditions and provide you with its geographical location. This enables you to identify a minor event before it becomes a major problem.

The AquaALERT System consists of water sensing cable run along pipes or within subfloor spaces, using microprocessor-based controls and graphic annunciation, to quickly identify problems and their location. The AquaALERT sensor is easy to use and is available in 100’ rolls. When installed according to the instructions, it can be run along almost any surface without the need of special tools or training.

It improves your safety and reliability factor as it will monitor water intrusion, high/low humidity, high temperatures, individual smoke detectors, UPS status condition and anything else considered critical to your facilities operation.

The response is quick, giving accurate information about the location and nature of each alarm.

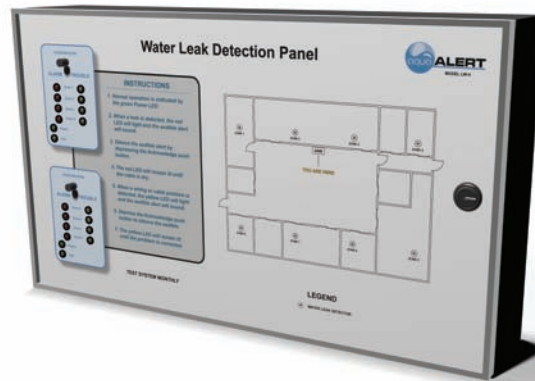
Operation

The LW Series Water Detection System contains fully supervised detection zones. The circuit must be terminated at the end of the line with a 15K Ohm, 1/2 Watt resistor.

Normal (standby) operation is indicated by a green “Power” LED.

An Alarm condition occurs when water comes into contact with the Water Detection Sensor. A Trouble condition occurs when the wiring to the Sensor is broken, or if the wires within the Sensor itself (cable) are broken.

When an Alarm condition occurs, the Red LED will light, the sonalert will sound, and the auxiliary relay contact will operate. The sonalert can be silenced by operating the momentary Acknowledge switch. The Red LED will remain lit until the Alarm condition is corrected. At that time, the LED will reset itself. The sequence is the same for a Trouble condition, except that a Yellow LED will be illuminated. Multiple Zone Units have subsequent alarm features. All Water Detection sensor runs will be indicated on the graphic plan, and can be color coded.



Model LW-4/4



WATER DETECTION GRAPHIC SYSTEM

Architect / Engineer Specification

The contractor shall provide a combination zone water detection system and graphic annunciator display panel. The system shall be as manufactured by AquaALERT, a division of Light Engineered Displays, Inc, or equal. Spot detectors and footage measuring systems are not acceptable. System will be U.L. Listed.

An audible alarm shall be provided for indication of water detection alarm and shall be equipped with a silence feature. The system shall provide for subsequent audible alarm for each zone. The zones shall supervise the water sensing conductors for continuity. Pulsed AC supervision shall be utilized to minimize cable deterioration by electrolysis. A system power supply shall be included and operate at 115 vac/12 vdc, with provisions for a 12 volt gel cell battery. Upon loss of normal power, the system will continue to operate from the battery pack. Battery charging and transfer shall be automatic. Alarm and Trouble indicators shall be provided for each zone. Common Alarm and Trouble relays shall be provided for connection to remote equipment.

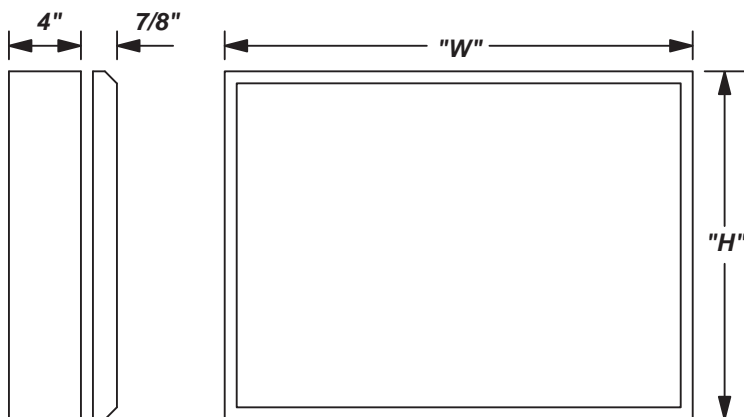
The system will include, and be integral with, a graphic display which is also capable of smoke detector annunciation. The system shall include color coded floor plan of the hazard area and depict the entire routing of the water detection cable. Upon Alarm, the respective zone LED shall indicate, geographically, the location of the water intrusion.

The cable shall be installed in the underfloor on the concrete slab and permanently secured. The cable shall be routed to provide perimeter coverage of each air conditioner. The detection cable shall also be routed to follow the path of all water lines. Zoning shall be designed for the simplest reference by area.

The water detection cable shall be constructed of two individually insulated conductors surrounded by a tough monofilament braided sheath. Rayon shall be used to insulate the conductors to provide for quick absorption of the fluid, yet allow the cable to dry easily. The cable shall be decay and corrosion resistant and shall not require replacement after exposure to liquids. The cable design shall allow a "cut to fit" installation. Any damaged section, regardless of its length, may be spliced in place.

Technical Specifications

- 1. Power Input
115 VAC, 60 HZ - "Power" LED
- 2. Battery
12 VDC, Gel Cell - Built-In Charger
- 3. Operating
12 VDC Filtered & Regulated Voltages:
3 VAC 54 HZ Detection Loop
- 4. Outputs
Alarm LED, Trouble LED, Sonalert & Form-C Contacts for Alarm & Trouble Conditions



Backbox

Graphic Door

MODEL	ZONES	WIDTH x HEIGHT
LW-1	1	18" x 9"
LW-4	4	23 7/8" x 14"
LW-8	8	23 7/8" x 24 1/2"
LW-12	12	23 7/8" x 35"

NOTE: Units May Be Mounted Vertical or Horizontal

For Semi-flush mounting, add 3" to overall "W" and "H" dimensions.

Additional Zones may be added to each enclosure size (such as the LW-4/4 shown on front). Consult factory for details.