RLE Technologies

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Frequently Asked Questions

SeaHawk LD5000 Distance Read Water Leak Detection Panel

1. Occasionally the panel alarms on contamination or leak and I cannot locate the water leak. It can happen twice a day, or once a week. Why?

   Answer: *The most common problem is due to the location of the cable with respect to the CRAC unit (Downflow models) air supply. The Water Leak Detection Cable needs to be 6 feet from the front of the CRAC unit (Downflow models) air supply.*

2. The Water Leak Detection Cable is routed such that it has to cross over itself. Can this cause false alarms?

   Answer: *This is a concern for the LD5000. The concern is not false alarms, but locating the leak if a leak occurs at the cross over point and touches both sections of cable. The LD5000 has an averaging effect if multiple leaks occur on the cable at the same time. For LD5000 installations use a 10 foot Non-Sensing Cable (NSC-10) to jump over the other section of cable.*

3. How often should I test the system, and what is the best way to test the LD5000?

   Answer: *We recommend testing the system monthly for cable break and leak detection. First, disconnect a cable (uncouple the connector between two cables), wait for a cable break alarm on the LD5000, reconnect the cable and verify that the panel returns to normal. Second, pick a point on the reference map and place water on the cable at that point (hold a damp cloth on it). Verify that the panel alarms a leak detected at the correct distance. Remove the water, dry the cable and verify that the panel returns to normal. Pick a different point on the map every time you test.*

4. What is the difference between a leak alarm and a contamination alarm?

   Answer: *The amount of current on the cable. A leak alarm is used to indicate that there is water on the cable. A contamination alarm is used to indicate a problem with the cable that will affect the panel's ability to calculate the distance to the water leak. Typically, water on the cable will cause 300uA of electricity to flow. The LD5000 panel limits the current to approx 300uA. Contamination on the cable is caused by some foreign substance on the cable that is a poor conductor of electricity or attracts small moisture particles. Solder flux from soldering water pipes is a common contaminate. The solder flux has a tendency to be sticky and will attract dirt, water particles and other debris that cause current to flow on the cable. Contamination can cause 1 to 300 uA to flow, but typically increases slowly over time and does not decrease until the contaminated sections are cleaned or replaced. The LD5000 default leak setpoint is 150uA for 20 seconds and the contamination default setpoint is 50uA for 120 seconds. Both*

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leak and contamination setpoints and alarm times are programmable. There is no way for the LD5000 to tell for sure if the problem is a leak or contamination. Therefore, it is possible for a severe contamination to show up as a leak alarm, and a water leak to show up as a contamination alarm.

5. When do I need to remap the cable?

Answer: *The LD5000 should be remapped when the cable is rerouted or when the system is calibrated. The LD5000 should be recalibrated and remapped when a cable is replaced or when cable is added or removed from the system. Do not remap or calibrate the cable during troubleshooting.*

6. What type of preventative maintenance needs to be performed?

Answer: *There are no moving parts in the LD5000 panel or in the Water Leak Detection Cable which require maintenance. However, we recommend that the system be tested monthly and that the cable current be monitored monthly. Prior to testing the system monthly, look at the cable current (main menu -> status -> down). The cable current provides an indication of cable integrity. If there are no water leaks on the cable and the cable current is greater than 25uA, troubleshoot the system (now or in the near future) to determine which cable(s) are contaminated. The contaminated cable(s) should be removed, cleaned (or replaced), retested and reinstalled. Note that the panel will indicate a contamination alarm if the cable current exceeds the contamination setpoint (adjustable from 25uA to 300uA), but does not exceed the leak setpoint.*