SeaHawk LDCE Quick Start Guide



Thank you for purchasing a SeaHawk LDCE leak detection cable evaluator. This guide outlines device operation. Before you use the LDCE, check the RLE website to ensure you are using the most recent version of our documentation.

If you need further assistance, contact RLE Technologies at support@rletech.com.



v03.20



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Supplies for Installation _

Included with the LDCE

Leader cable Meter leads

Available from RLE, sold separately

SeaHawk sensing cable

Available from Other Vendors

Multimeter with μA capability 9V battery to power the LDCE (battery is NOT included with LDCE)

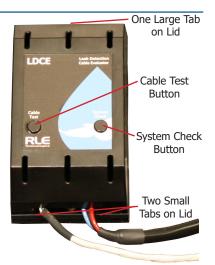
Please Note:

The LDCE can only test for cable contamination or detected leaks. It cannot test for a broken cable, and it cannot be used to verify that bulk cable has had connectors properly installed.

Install the 9V Battery

If you are using the LDCE for the first time, install the 9 volt battery (not included with the LDCE) as follows:

- 1. Remove the lid from the enclosure. The lid has one large tab at the top and two small tabs at the bottom that secure it to the sensor base. Squeeze the top of the lid to release the large tab. Pivot the top of lid out from the base and gently separate the two bottom tabs from the base. Don't get stuck on or dislodge the two black push button caps.
- 2. Insert the battery.
- 3. Replace the lid. Make sure the push button caps are still firmly in place.



Test the LDCE Battery Voltage _

If you have used the LDCE before and have never replaced the 9-volt battery, test the battery before testing the sensing cable. To test the battery:

- 1. Connect the LDCE meter leads to your multimeter, as follows:
 - Connect the red lead to the Voltage (V) input.
 - Connect the black lead to the Common (COM) input.

Important! - Do not connect the leads to the wrong inputs, or you will blow the multimeter's internal fuse.

- 2. Set the multimeter to VDC. If the multimeter is not auto-ranging, set it to the 20VDC scale.
- 3. Push the System Check button on the LDCE and note the reading on the multimeter. If it is less than 8VDC, change the LDCE's battery.



To test the LDCE's battery, connect it to the multimeter as shown.

Test the SeaHawk Sensing Cable.

The LDCE can test one cable or a string of cables, up to a total length of 5,000 feet (1,524m). To test the SeaHawk sensing cable for contamination:

- 1. Power down the SeaHawk controller. Disconnect the sensing cable to be tested and separate the white leader cable from the sensing cable.
- 2. Connect the LDCE's white leader cable to the sensing cable you wish to test.
- 3. Connect the LDCE meter leads to your multimeter.
 - Connect the blue lead to the milliamp/microamp input ($mA/\mu A$).
 - Connect the black lead to the Common (COM) input.



Connect the LDCE, the sensing cable, and the multimeter as shown.

Important! - Do not connect the leads to the wrong inputs, or you will blow the multimeter's internal fuse.

- 4. Set the multimeter to μA and to ADC. If the multimeter is not auto-ranging, set it to the $200\mu A$ scale.
- 5. Push the Cable Test button and record the meter reading. A reading of less than $25\mu A$ is acceptable. A reading greater than $25\mu A$ indicates the cable is contaminated or has detected a leak. You may need to separate mated pairs of cable into individual segments and test each section individually to isolate the problem cable.

Note: The LDCE can only test for cable contamination or a leak detected. It cannot test for a broken cable.

6. If your LDCE has been in service for some time, check the accuracy of the test current coming from the LDCE by pressing the System Check button. Ensure that your meter displays a reading of approximately $180\mu\text{A}$. If the reading is not close to $180\mu\text{A}$, change the battery in the LDCE and retest.