SeaHawk LDCE Quick Start Guide



Thank you for purchasing a SeaHawk LDCE leak detection cable evaluator. This guide outlines device installation and operation.

If you need further assistance, please contact RLE Technologies via our website - http://www.rletech.com/ (go to the Support link) or call us at 970-484-6510, Option 2.



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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. Screw in the two lock-down screws on the front cover using a 1/16" (1.59mm) allen wrench.
- 2. Remove the two push button caps. Lift the cover and insert the battery.
- 3. Loosen the lock-down screws of the LDCE until they are flush with the bottom cover.
- 4. Replace the push-button caps for each screw you just loosened.



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 μA 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 $180\mu A$. If the reading is not close to $180\mu A$, change the battery in the LDCE and retest.