

LDCE Quick Start Guide



Thank you for purchasing the SeaHawk Leak Detection Cable Evaluator (LDCE). This guide describes how to install the and use the LDCE to test RLE's leak detection cable.

If you need further assistance, contact RLE Technologies on our website at <http://www.rletech.com/> (go to the **Support Link**) or by calling **970.484.6510, Option 2.**



1 Supplies for Installation

Included with the LDCE

- ◆ LDCE unit with leak detection leader cable and meter leads

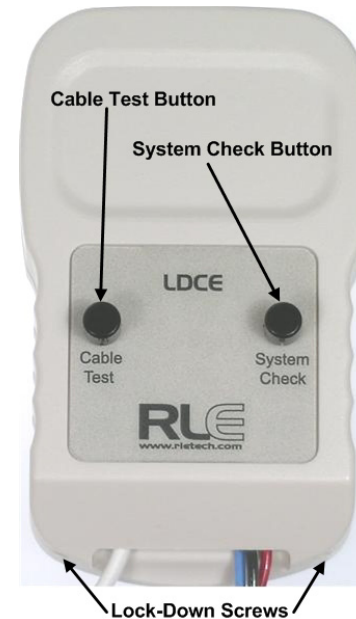
Sold Separately

- ◆ SeaHawk Leak Detection Cable (available from RLE)
- ◆ Multi-meter with μ A capability
- ◆ 9V battery to power the LDCE (battery **not** included with LDCE)

2 Installing the 9-Volt 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. Remove the two push button caps. Lift the cover and insert the battery.
- 2 Loosen the lock-down screws of the LDCE until they are flush with the bottom cover. Replace the push-button caps for each screw you just loosened.



3 Testing the LDCE Battery Voltage

If you have used the LDCE before and have not replaced the 9-volt battery, test the battery before testing the leak detection cable (sensing cable). To test the battery:

- 1 Connect the LDCE meter leads to your multi-meter, 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 internal fuse in your multi-meter.

- 2 Set the multi-meter as follows:
 - ◆ Set to VDC.
 - ◆ If the multi-meter is not auto-ranging, set it to the 20 VDC scale.

The proper connection to a multi-meter to test the LDCE's battery is shown here:



- 3 Push the System Check button on the LDCE and note the reading on the multi-meter. If it is less than 8VDC, change the battery by opening the battery compartment as described in section 2 of this quick start guide.

4 Testing the Leak Detection Cable

To perform maintenance and troubleshooting tests on SeaHawk leak detection cable (sensing cable):

- 1 Power down the SeaHawk controller and disconnect the sensing cable to be tested. Also disconnect the sensing cable from the white leader cable.
- 2 Connect the LDCE's white leader cable to the sensing cable.

Note: The LDCE can test one cable or a string of cables, up to a total length of 5,000 feet (1,524m).
- 3 Connect the LDCE meter leads to your multi-meter, as follows:
 - ◆ Connect the Blue lead to the milliamp/microamp input (mA/μA).
 - ◆ Connect the Black lead to the Common (COM) input.

IMPORTANT Do not connect the leads to the wrong inputs, or you will blow the internal fuse in your multi-meter.

- 4 Set the multi-meter as follows:
 - ◆ Set to μA.
 - ◆ Set to ADC.
 - ◆ If the multi-meter is not auto-ranging, set it to the 200μA scale.

The proper connection to a multi-meter to test leak detection cable is shown here:



- 5 Push the Cable Test button and record the meter reading. A reading of less than 25μA is acceptable. A reading greater than 25μA indicates the cable is contaminated (or has detected a leak). It may be necessary to separate mated pairs of cable 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 180μA. If the reading is not close to 180μA, change the battery in the LDCE and retest for the proper value.

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