

SeaHawk LD300 Quick Start Guide



Thank you for purchasing a SeaHawk LD300 single-zone leak detection controller. 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.

SeaHawk

v2.2
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RLE Technologies

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Supplies for Installation

Included with the LD300

15 foot (4.57m) leader cable
End-of-line terminator (EOL)
Wall mounting hardware

Available from RLE, sold separately

SeaHawk sensing cable, up to 300 feet (91.4m)
100-240V to 5VDC power supply (WA-DC-5-ST)

Mount the Device

Remove the cover from the LD300 to expose the mounting holes. Use the provided hardware to mount the LD300 in the desired location.

Connect the Sensing Cable

Leader cable is used to connect sensing cable to the LD300, since sensing cable cannot connect directly to the device.

1. Insert the four stripped wires of the leader cable into the appropriate slots in the Cable Input terminal block at the bottom right corner of the LD300:
 - White wire: insert into pinout labeled **W**
 - Black wire: insert into pinout labeled **B**
 - Green wire: insert into pinout labeled **G**
 - Red wire: insert into pinout labeled **R**

2. Unscrew the EOL from the end of the leader cable.
3. Attach the length of sensing cable to the leader cable.
4. Route the sensing cable according to your cable layout diagram.
5. Secure the EOL to the unoccupied end of the sensing cable.

Connect the Relay Outputs

The LD300 can be used as a stand-alone device, but it does have two Form C relay outputs that communicate leak and fault status to another device or system. If you wish to use the relay outputs, wire them at this time.

Connect the Power and Wiring Connections

The LD300 requires a 5 VDC power supply. To avoid product damage or personal injury, wire power to the slots labeled + and - in the DC IN terminal blocks. Establish all wiring connections, including sensing cable, relay outputs, and power before you activate the board's power supply.

Program Jumpers

The LD300 has two sets of three-pin jumpers. JP1 is used to configure the sensitivity of the leak setting. JP2 configures the relay outputs. If you change the jumpers, you must cycle power to the LD300 in order for it to recognize the change.

JP1		
Set the leak sensitivity		
Jumper spans top two pins		High sensitivity - most sensitive - system alarms with .5" (13mm) wetted cable
Jumper is not installed		Medium sensitivity - system alarms with 2" (51mm) wetted cable
Jumper spans bottom two pins		Low sensitivity - least sensitive - system alarms with 6" (152mm) wetted cable
JP2		
Relay Output Configuration		
Jumper spans top two pins		Relay is supervised - the relay remains ON until either power is disabled or an alarm is detected - at which time the relay turns OFF.
Jumper spans bottom two pins		Relay is non-supervised - the relay remains OFF until an alarm is detected - at which time the relay turns ON.

LED

The LD300 has one LED, which is used to report a variety of device conditions.

Power On / Normal - The LED is on and displays a solid green color during normal operation, with no alarm present.

Cable Break - The LED flashes twice and then pauses for two seconds. This pattern repeats itself as long as the cable break is present.

Leak - The LED flashes constantly, one second on, one second off. This pattern repeats itself as long as the leak is present.

Test the System

If the LD300 is already connected to a BMS or NMS, notify monitoring personnel before you begin testing the system.

To verify the LD300's functionality, test three points within the length of sensing cable - one at the beginning, one in the middle of the length, and another near the end of the length of cable.

There are a variety of ways to simulate a leak.

- Pour a small puddle of water on the cable while it rests on the floor.
- Dunk the cable in a cup of water.
- Wet a paper towel or rag and wrap it loosely around the cable. This is popular if the cable is used in pipe applications. Be careful to wrap the wet cloth loosely around the cable. Do not put pressure on the cable.

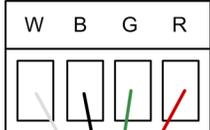
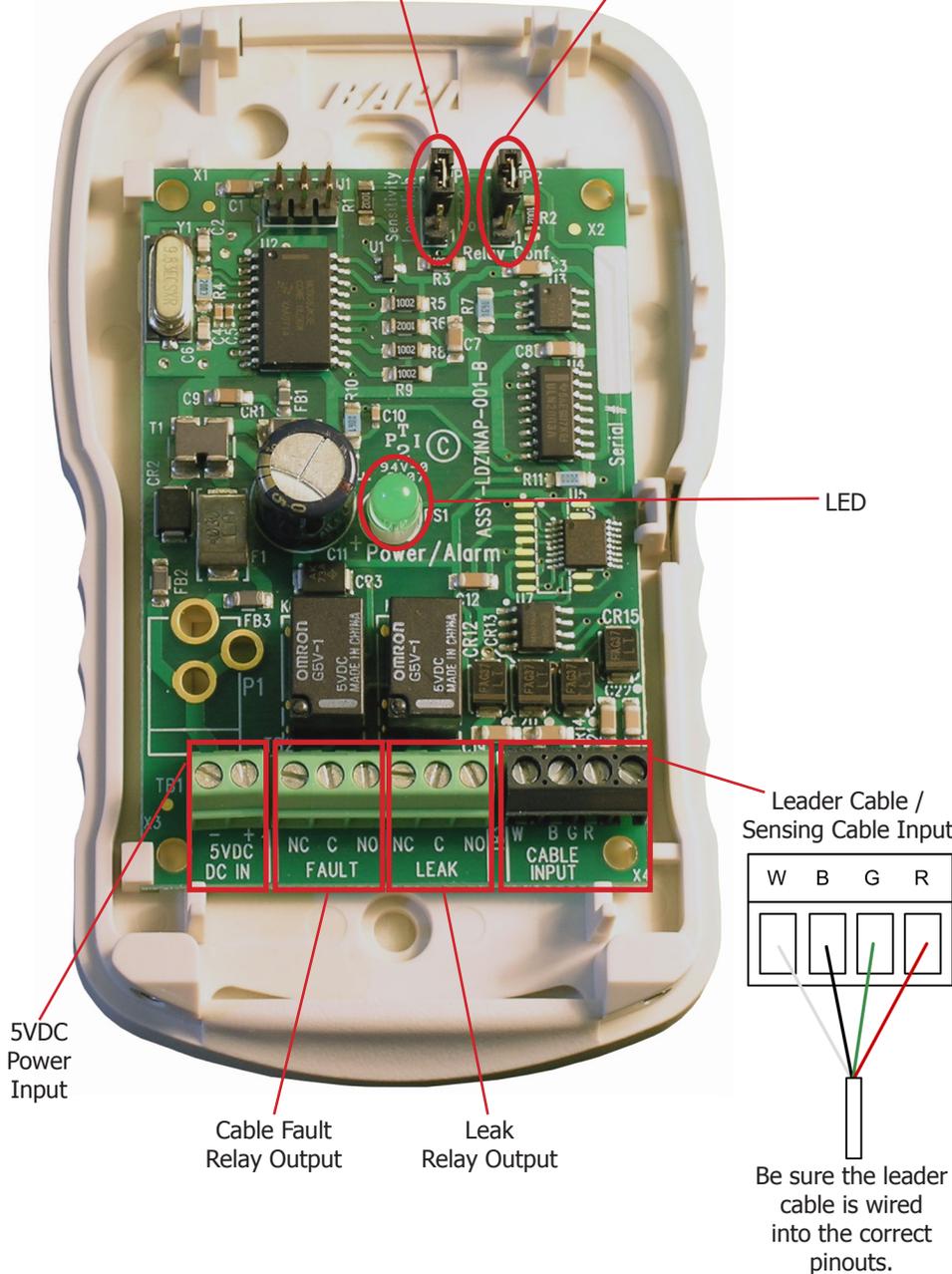
IMPORTANT - To avoid inaccurate readings, do not grip the cable with your hand.

Remove all simulated leak sources and return the system to its normal operating state.

To test the cable fault alarm, remove the end-of-line terminator (EOL) from the end of the sensing cable. This will cause a cable break, which should be reported appropriately by the LD300. Once the cable break alarm is verified, reapply the EOL and ensure the system returns to its normal operating state.

JP1
Leak Sensitivity
Top - Most sensitive
No Jumper - Medium sensitivity
Bottom - Least sensitive

JP2
Relay Output Configuration
Top - Supervised
Bottom - Non-supervised



Be sure the leader cable is wired into the correct pinouts.