

LeakFinderRT - PC Based Leak Noise Correlator

Operating Manual



Acoustic Leak Detection Systems

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Disclaimer

Echologics Engineering Inc. makes no warranties, expressed or implied, that the LeakfinderRT leak location system is free of errors, or is consistent with any standards, or that it will meet the user's requirements for any application. The user should not rely on this system for locating leaks in water or other fluid-filled pipes or for solving any problems whose incorrect location or solutions could result in loss of property or injury to a person. If this system is used in such a manner, it is at the user's own risk. Echologics Engineering Inc. disclaims all liability for direct or consequential damages resulting from the use of this leak location system.

INSTRUCTION TO THE USER

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Operation is subject to the following two conditions:

1. This device may not cause interference
2. This device must accept any interference, including interference that may cause undesired operation of the device.

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Safety Precautions



Before using LeakfinderRT, carefully read the following precautions and this Operating Manual.



Working with pressurized water pipes and opening of valve and meter chambers can be hazardous. You must use the appropriate tools and follow your organization's adopted safety practice.



Equipment coming into contact with drinking water in pipes may lead to contamination. You must disinfect hydrophones and their adaptors before installation and you must follow the hygiene practice adopted by your organization.



The LeakfinderRT system is designed for use on pressurized water pipes. Use of the system on pipes carrying other fluids or gases can be hazardous. If used on these pipes, you must follow the appropriate safety procedure regarding the use of electrical and electronic equipment on these pipes.



Before using the headset, turn down the volume using the receiver's control knob to avoid hearing loss or discomfort from loud noise.

Handling of Hardware



When you need to transport the hardware, package it using the padding material and box that it was shipped to you in or use similar packaging material to minimize the possibility of damage during shipping.



Handling sensors while they are powered ON can permanently damage them. Press the transmitter's power ON button only after the accelerometer has been attached to the pipe. Press the transmitter's power OFF button before detaching the sensor from the pipe.

Do not expose the hardware to excessive heat for prolonged periods, e.g., in direct sunshine or an enclosed vehicle.



Do not subject the hardware to sudden temperature change.



Do not expose the hardware to rain or excessive moisture and do not allow water or other liquids to penetrate the hardware housings.



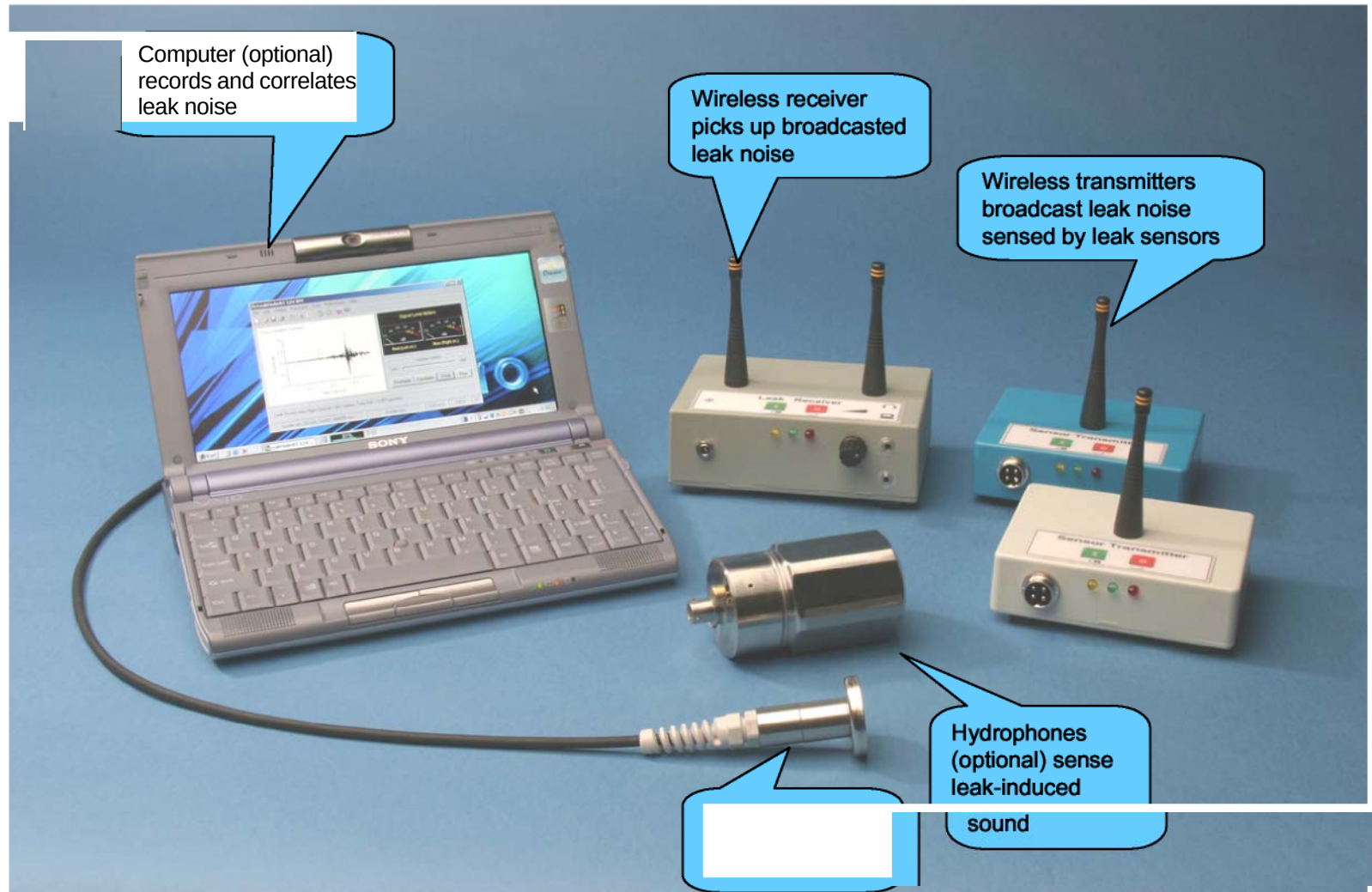
Use care when inserting or removing cable connectors. Also, keep connectors clean, e.g., by not placing them on loose soil. Rough handling can damage the connectors or their sockets.



Handling of Hardware (continued)

-  When connecting or disconnecting cable connectors, hold the connector itself – never pull or push on the cable; otherwise the connector can be damaged.
-  Immediately turn OFF the power and request service by Echologics Engineering Inc. or an authorized distributor if a hardware component: (i) has been exposed to rain or otherwise has become wet, or (ii) do not appear to operate normally and exhibit a change in performance. Do not attempt to repair the hardware yourself.
-  Do not subject hardware components to impacts, e.g., from being dropped. Do not excessively bend or twist sensor cables or cut their protective cover. Do not place heavy objects on hardware components.
-  Do not open or perform any internal or external modifications to the hardware.
-  Do not store or use the hardware in places that are subject to temperature extremes, humid, exposed to rain, dusty, or subject to high level of vibration.
-  To clean the hardware components, wipe them with a soft cloth that has been very lightly dampened with water.

Hardware components of LeakfinderRT



Accelerometers
sense leak-
induced vibration