

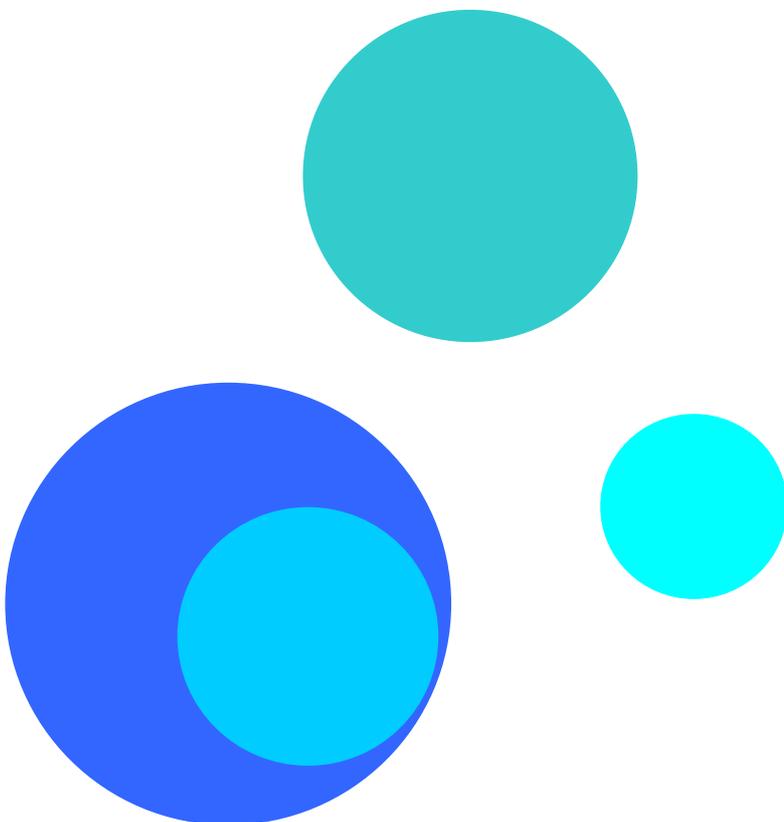
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TechLiner

Water leak sensor for swimming pool liners

User Manual



Discover your TechLiner

The TechLiner is a detection system that makes it possible to locate holes, even of very small size, in the liners of inground swimming pools. It can work only in pools covered with a liner or a non electricity-conducting coating.

The TechLiner is made of:

- a control box (detector)
- a transmitter
- an earth electrode
- a sensor



How does the TechLiner work?

A liner is a plastic film which is an excellent electrical insulator. In a normal situation, there should be no electric connection between water and ground as the liner is inserted between them. If the liner is pierced, a weak current will be able to slightly pass through even a very small hole. The detector works by measuring the electric currents in the swimming pool, which intensify near the leak.

Prepare your TechLiner

The transmitter is at the end of the yellow cable. It must be placed in the swimming pool a few meters from the point of detection. The yellow cable is connected to the yellow terminal of the detector labelled "EMETTEUR".

The ground electrode is a metal peg, which must be knocked into the ground. Connect it to the alligator clip which is at the end of the black cable. The other end of this cable should be connected to the detector terminal labelled "TERRE". Verify that the contacts are clean, without rust or oxidation. The ground should be loose and wet. Avoid stony and dry places, which are poor electricity conductors. If your ground is dry, it can be improved the result by watering the area where the ground electrode has been knocked in.

Install the sensor at the end of the pole of the pool brush. Connect the cable of the sensor to the detector plug.

Starting to use your TechLiner

Plunge the sensor into water and wait about thirty seconds. Then switch the detector on.

As soon as it is powered, the detector emits 2 beeps, then again a double beep after a silence of approximately 5 seconds. During this time, the detector carries out its calibration by analyzing the electric characteristics of the area of the swimming pool where the sensor is located. During calibration, it must be kept motionless, close to the inner surface you want to inspect.

Wait about thirty seconds, then switch the detector off and on again before a further calibration.

The detector emits fast and regular beeps, approximately 6 per second, until it measures an electric current. When one of the arms of the detector approaches a leak, the rhythm slows down. The leak will be located only by one of the two branches, because the TechLiner works by analyzing the difference between the two branches. If by any chance, the leak is exactly between the branches, it will not be located.

Watch the video on our web site www.TechLiner.info to see how the TechLiner behaves in real conditions.

Note: if the battery is weak, the detector will sound a repetitive and falling tone. In this case, put in a new 9V battery (6LR type).

First use: take in hand the TechLiner

We provide you with a kit to become familiarized with the TechLiner system. It consists of an electric wire, a second ground electrode and an alligator clip. With this kit you will be able to simulate a leak.

Knock the second earth electrode into the ground, not far from the first one. Strip an end of the wire a few centimetres and connect it to the second ground electrode using the alligator clip. Strip the other end 1 or 2 mm, and plunge it into water. This wire allows the passage of the current between ground and water, as would do a hole in the liner. By the sensor moving to the end of the wire, you will hear the change of rhythm in the detector. This shows how the sensor reacts when one of the branches approaches a leak.

Using the TechLiner in your swimming pool

To carry out research, start by completely cleaning the swimming pool. Stop the filtration system, and switch off the equipment which can cause electric disturbances in the vicinity. If possible, cut the general circuit breaker and remove the metal scales and objects which are likely to make electrical contact between ground and water. Install and connect the detector as explained above.

Scan the whole surface of the liner by moving the sensor slowly. The holes are more often in the corners and at the angles or junction of the different stripes on the liner rather than on the plain parts.

It may happen that the detector indicates a current near elements like skimmers and floodlights. This does not necessarily mean that there is a leak, but that there is conduction between water and ground by metal parts such as the fastening screws.

If you move the ground electrode or the transmitter, or if you go away from the starting zone, you must make a new calibration. You just have to switch off the detector and switch it on again. In the same way, if you think that the rhythm of the detector is not as fast and regular as it should be, make a new calibration.

Advice for storage

Wash the sensor in clean water after use. Keep your TechLiner in a clean and dry place.

