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Complete Pro Kit



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Safety and Care

***PLEASE NOTE: USE CAUTION WHEN PRESSURE TESTING. NEVER INFLATE TO MORE THAN 15 PSI. DO NOT STAND IN FRONT OR ABOVE A COMPRESSION PLUG OR ANY PLUG WHEN UNDER PRESSURE.

***PLEASE NOTE: IT IS EXTREMELY IMPORTANT TO ALWAYS TURN DOWN THE VOLUME, REMOVE HEADPHONES OR USE MUTE FUNCTION ON LT1000 WHEN MOVING EITHER THE **POOL SCOPE™**, **PIPE MIC™**, **DECKPLATE**, **SOILPROBE**, **SLIDE MIC** OR ANY COMPONENT FROM ONE LOCATION TO ANOTHER. FAILURE TO DO SO CAN CAUSE SERIOUS HEARING INJURY OR HEARING LOSS.

***AVOID STORING CABLES WITH TANGLES OR KNOTS. ALWAYS STORE CABLES IN A LOOSELY WRAPPED COIL. PLEASE USE EXTREME CARE AND KEEP THIS MANUAL HANDY FOR ALL USERS.

***LOWERING THE **POOL SCOPE™** OR THE **PIPE MIC™** TO THE BOTTOM OF A POOL AND DRAGGING ALONG THE POOL FLOOR WILL NOT DAMAGE THE UNIT.

***THE **POOL SCOPE™** AND THE **PIPE MIC™** ARE DURABLE UNITS THAT WHEN TREATED WITH CARE WILL LAST FOR MANY YEARS. EACH UNIT IS HAND BUILT IN THE U.S.A. WHILE ALL COMPONENTS ARE MADE TO USE IN HARSH ENVIRONMENTS, THE HEADPHONE, AMP OR BODY OF THE VIDEO SCOPE CAN NEVER BE SUBMERGED. DOING SO WILL VOID THE WARRANTY. ALL PRODUCTS INCLUDING THE **POOL SCOPE™** AND THE **PIPE MIC™** SHOULD BE WIPED DOWN WITH A DRY RAG BEFORE STORING.



Important Information and Introduction for the LT1000 Noise Reducing Metered Amp (Requires 2 AA batteries)

Thank you for purchasing your new LT1000. The only state of the art amp made specifically for the leak detection industry. The LT1000 can be used in conjunction with the **SLIDE MIC™, POOL SCOPE™, DECKPLATE™, PIPE MIC™, LISTENING DISC™ AND SOIL PROBE™.**

Specifications:

Input

- *Connector:* XLR Female Unbalanced
- *Noise:* EIN better than -107 dBV.
- *Input Impedance:* 3.3k Ω nom.
- *Plug-In-Power:* 12V maximum via 4.7k Ω resistor.
- *Filter Switch:* Filter capabilities below 700Hz.
- *Compatible Accessories:* LeakTronics – [PipeMic](#), [SlideMic](#), [Soil Probe](#), Listening Disc, [Flash](#), [Pool Scope](#), [DeckPlate](#)

Headphone Output

- *Connector:* 3.5mm
- *Gain:* -inf to 66dBV nom.
- *Output impedance:* 41.7 Ω .
- *Distortion:* 0.1% no load, 2% at full load.
- *Mute Switch:* Attenuation better than 60 dB when switch is ON.

Auxiliary Output

- *Connector:* 2.5mm
- *Gain:* 30 dBV constant.

Meter

- *Sense Switch:* Select high sensitivity (10:1 power ratio) or low sensitivity (1000:1 power ratio).
- *Meter Null:* Set needle to center of meter to gauge baseline noise.
- *Sensitivity:* -80 dBV.



Power

- *Batteries:* 2x AA battery.
- *Minimum voltage:* 2.25V.
- *Run Time:* Better than 8 hours.
- *Change batteries with #2 Phillips screwdriver*

Power ON/OFF, LED display:

Power ON & OFF is a simple toggle switch. Up is power on, down is power off. The LED will light up when amp is turned on and will flash when battery power is low. When battery power is very low light will go off, however amp will work. At this point, battery must be replaced as soon as possible. *****PLEASE NOTE: Mute button MUST be in off position (down) when powering LT1000 amplifier on.**

Battery installation and type:

We highly recommend using high quality alkaline battery, Energizer max or Duracell Coppertop are recommended. To install battery, remove one set screw and pivot door open by loosening other screw. Hold amp upside down, tap lightly and battery holder should pop out. If it does not come out easily, grab with fingers and edge it out, being careful not to pull too hard on two wire leads which attach battery compartment to amp. Using a flat head screwdriver, pop batteries out of holder and replace properly as marked. Gently push battery compartment back into amp, DO NOT FORCE IT. Pivot battery door closed and retighten screws.

Mute button makes it easy to go from on location to another without having to adjust volume or meter null. By placing the mute toggle switch in the up position, all sound will be muted out, until it is switched off (put in the down position).

Meter Null / Sensitivity / Meter

Meter null is an adjustment knob which is used to get a baseline for background noise. In order to use properly, with the sensitivity switch down, choose the listening device, start listening and watch the meter to see if there is any background noise. A 100 reading indicates that what you're hearing is inundated with background noise, or you're hovering over the leak itself. Starting with the meter null notch facing up, turn the null to the left to establish a noise baseline (low). You can then turn the meter to the right to get a noise baseline (high). Turning the sensitivity switch on (up) will allow for a higher and lower range.



Always be sure to turn the volume on the amplifier to the left (lowest setting) prior to each use or to powering on.

Volume

Turn to the right to increase volume, turn to left to decrease.

USEFUL TIPS: The LT1000 comes with 2 round rings located on either side to be used with the strap (included). It is important to use this feature when using around construction sites and wet locations to avoid dropping and becoming damaged.

Always carry a supply of fresh batteries. The Pool Scope™ and Pipe Mic™ has certain voltage requirements. Once the batteries fall below the required voltage, the signal to the headphones will cut out intermittently and/or distort. This is an indication that the batteries should be replaced. All troubleshooting should begin by replacing batteries with new, high quality alkaline batteries. If using noise reducing headphones, always keep replacement batteries. As the batteries in noise reducing headphones (such as Bose or JBL) expire, the signal heard will be intermittent and distorted.

Waterproof flashlight and LED light

When installing batteries in both, try to use a good quality alkaline battery. The only portion of the LED light that can be submerged is the flexible neck.

Video Scope (Please see our website to watch the videoscope demonstration at www.leaktronics.com) *DO NOT LEAVE IN DIRECT SUNLIGHT*

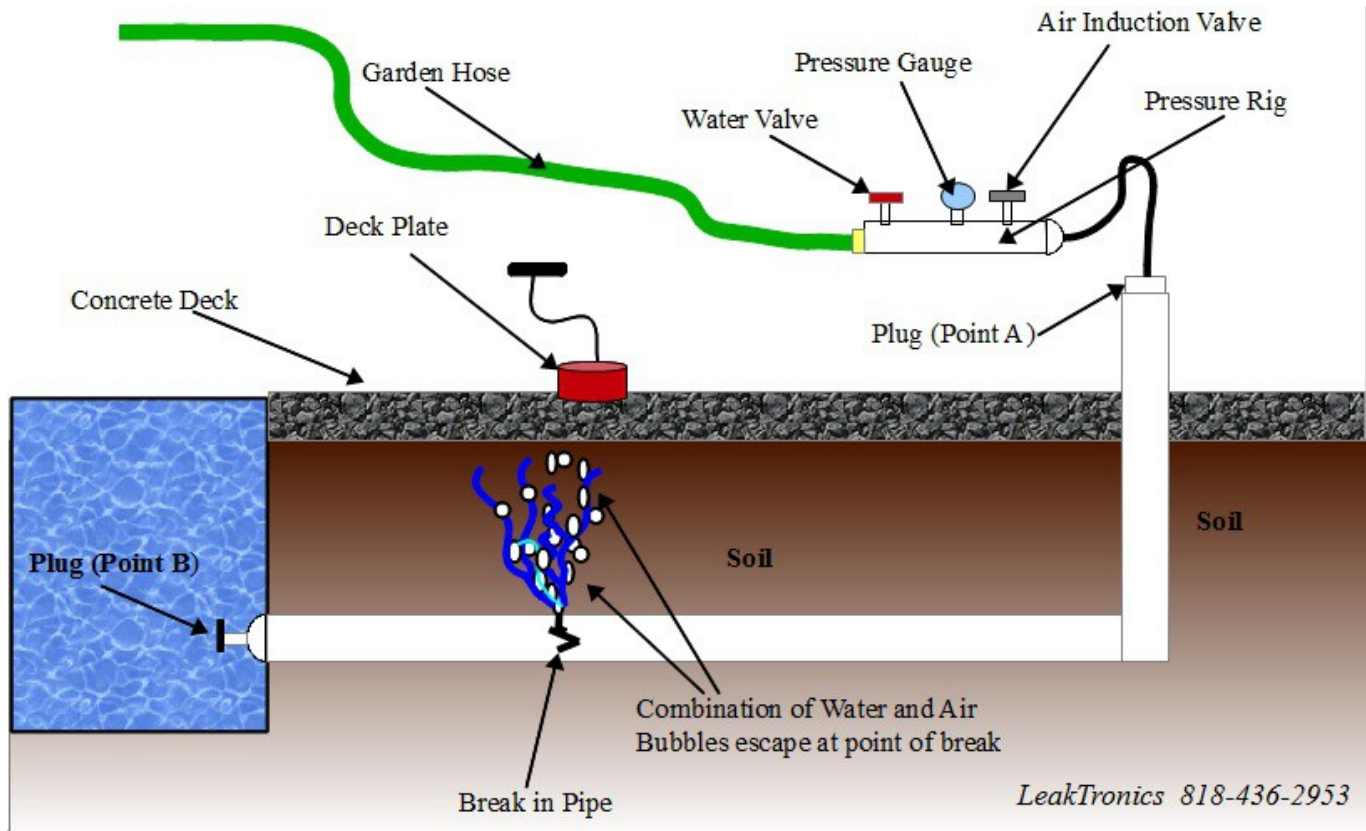
Please refer to the separate directions in your kit for battery installation and use. The attached dye injector is simple – when you see a cracked fitting, slowly put pressure on the injector to release dye in front of the camera. Watch the dye to see where it goes. The video scope is also great for dye testing light conduits without diving the pool. A common place for pool leaks are in light conduits that were partly sealed or never sealed in the first place. In many cases, the video scope will allow you to dye test light conduits without having to get into the pool with a mask and dye. First, remove the light from the niche (whenever it's in reach). The video scope is also great for looking into return lines, auto fills, cleaning lines, side suction, skimmer lines, etc. Curl the end of the scope into a horseshoe shape. Insert the camera into the niche and look for the conduit. Insert the camera head so that it is within an inch or two of the conduit. With the injector, slightly



press on the plunger and watch for dye being pulled into the conduit. Sometimes it is necessary to get as close as possible to the conduit for smaller leaks.

Pressure Rig

The most effective method for pressure testing and pinpointing leaks involves using the Leaktronics Pressure Rig along with our various components, i.e. deck plate, soil probe, listening disc, and slide mic. The LeakTronics Pressure Rig was designed to induce both air and water. This mixture is combined at the rig and evenly flows through the line being tested. When water alone is used, it is virtually impossible to hear this distinct sound. The combination of air and water is what enables the sound to be heard clearly.



Please visit the link below to view our video to learn the proper way to use the LeakTronics Pressure Rig.

[How to Use the LeakTronics Pressure Rig](#)

Pool Scope



The poolscope is the most important tool in your arsenal. Plug it into the amp. Plug in your headphones and get started. Keeping the volume of the amp at the minimum setting, drop your poolscope in the pool slowly. Holding the amp and coiled extra wire in one hand using your other hand to precisely hold the scope exactly where you want to. Since each pool is different, start at one side and work your way around listening to every fitting, light, skimmer, etc, as you get to it. When properly used, the pool scope will allow you to hear leaks in main drains, pop-up floor heads, light niches and conduits, returns, auto fill, cleaning lines, skimmer lines, skimmer seams, skimmer equalizer lines, wall fixtures, rope fittings, steps, etc.

Pipe Mic

The pipe mic (small transducer) is a unidirectional mic designed to locate leaks inside leaking pipes. Once you hear a leaking line with your pool scope, it's time to break out the pipe mic. Insert the pipe mic slowly into the pipe stopping every 6 inches and slowly turn up your volume when pipe rests. **IT IS IMPORTANT TO LOWER THE VOLUME OR MUTE THE LT1000 WHEN MOVING THE MIC.** After getting over the loudest section, pinch the wire with your fingers at the pool wall (closest to fitting). Keeping your fingers pinched on the wire, pull out the mic and lay it on the deck. The distance between your fingers and the mic head is the distance of the leak in the pipe. As in any other situation, it is always best to back up your findings with the videoscope.

Deckplate

Deck plate – The LeakTronics Deckplate is ideal for listening through concrete slabs or raised concrete walls where distinct noises are created by either house, building, or swimming pool existing pressure, or ideally using our pressure rig combo kit (using air and water to create a distinct boiling noise). With line under pressure with air, water or both, listen at 2 foot intervals, making sure to lower the volume in the headphone line, in between moving the deck plate. When leak gets louder, you can start maneuvering at smaller intervals to pinpoint leak where loudest. The Deckplate should always be wiped off with a dry rag when storing and wire should be recoiled neatly.

Troubleshooting

In the case that the pool scope or pipe mic begin to not function properly or if you experience problems, always replace the battery in the amp with a new high quality AA batteries. If you are using noise canceling headphones always replace with new batteries if



you begin to experience problems. As the batteries power fades, the signal will become intermittent and subject to interference. New batteries will solve the problem. If problems persist, test the unit with a new or another set of headphones. If a different set of headphones corrects the problem, then the headphones or headphone cable are faulty. Replace headphones. If the problem continues after replacing the headphones, contact LeakTronics for assistance.

Warranty

LeakTronics warrantys it's products from defects in workmanship for a period of two years following the date of purchase. Warranty claims or repairs can be made directly through LeakTronics. Shipping costs to LeakTronics are the responsibility of the user.