LEAKTRONICS
ELECTRONIC LEAK DETECTION EQUIPMENT

Phone: 818-436-2953 / www.leaktronics.com / info@leaktronics.com

FLASH Leak Detection and Line Location Kit

(Receiver sold separately)

TABLE OF CONTENTS

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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 OR REMOVE HEADPHONES WHEN MOVING EITHER THE **POOL SCOPE™, PIPE MIC™, DECKPLATE, SOILPROBE, FLASH 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.

***THE **FLASH LEAK AND LINE LOCATION SYSTEM™** IS A DURABLE UNIT 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 HEADPHONES OR LT1000 AMP CAN NEVER BE SUBMERGED. DOING SO WILL VOID THE WARRANTY.

***ALL PRODUCTS SHOULD BE WIPED DOWN WITH A DRY RAG BEFORE STORING.

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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 **FLASH LEAK AND LINE LOCATION SYSTEM™, POOL SCOPE™, DECKPLATE™, PIPE MIC™, LISTENING DISC™ AND SOIL PROBE™.**

Specifications:

Input

- *Connector:* XLR Female Unbalanced
- *Noise:* EIN better than -107 dBV.
- *Input Impedance:* 3.3kΩ nom.
- *Plug-In-Power:* 12V maximum via 4.7kΩ resistor.
- *Filter Switch:* Filterg 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:* 41.7Ω.
- *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 on position (up) 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. Gentry 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 devise, 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.

Pressure Rig and FLASH Leak Location Operation

The LeakTronics Patented F.L.A.S.H Leak Locating System finds leaks from within lines and transmits a signal at a precise location. The FLASH unit can be used to locate leaks, separations, etc, in swimming pools, plumbing, HVAC, gas lines, water mains, sewer and many other applications. It can be used in lines ranging from 1 to 60 inches. The LeakTronics FLASH can also be used for underground line location.

USEFUL TIPS: Always keep wire lubed. Loosen nut slightly and apply WD40 to line before and after each use. This will enable the wire to slide through the plug easily.

The F.L.A.S.H. Leak Locator is used by inserting the F.L.A.S.H. mic head into the line in question. Using the pipe guide included in the kit and a shop vac (not included), guide the F.L.A.S.H. mic head through the line. A push-rod may also be used to guide the F.L.A.S.H. mic head through the line. Using the pressure rig included, put the line under slight pressure, (6 pounds) and attach the F.L.A.S.H. mic to the LT1000 Amp. Plug the headphones into the LT1000 Amp and turn the LT1000 on and adjust the volume. Then, pull the F.L.A.S.H. line back slowly. The leak will be identified when you hear a distinctive jet or “whooshing” noise. Discontinue pulling the line back and unplug the

F.L.A.S.H. mic from the LT1000 Amp. Next, plug the F.L.A.S.H. mic into the F.L.A.S.H. driver and turn the driver on. The F.L.A.S.H. mic emits a 512hz signal which can then be scanned with a receiver to know the precise location. (Receiver sold separately at time of check out or with FLASH Complete Kit). The F.L.A.S.H. Line Locator is compatible with other 512hz receivers.

To use the F.L.A.S.H. Leak Location System to locate and mark underground lines, insert the F.L.A.S.H. mic head into the line and pull completely through the line. Plug the F.L.A.S.H. mic into the F.L.A.S.H. driver and turn the unit on. The F.L.A.S.H. mic signal can be located by scanning with a 512hz receiver. Mark the location of the F.L.A.S.H. mic and pull the F.L.A.S.H. mic back in 12 inch intervals. Continue pulling the F.L.A.S.H. mic line back while marking at 12 inch intervals until entire line has been located and marked.

Refer to the tutorial video on our website:
View FLASH Tutorial Video

Troubleshooting

In the case that the F.L.A.S.H. Mic begins to not function properly or if you experience problems, always replace the battery in the amp with a new high quality batteries. If you are not reading signal between the F.L.A.S.H. Mic and Receiver, replace batteries in the F.L.A.S.H. Driver. If after replacing the battery, there is still no signal, hold F.L.A.S.H. Mic head right to receiver, put in pulse mode and set to near. If pulse is not being heard, contact LeakTronics customer support. 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 electrical failure or 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.