



LION[®]
ready for action

**DIGITAL
HOSE LINE
NOZZLE &
WEIGHTED
HOSE**

[USER'S MANUAL



CAUTION

Do not fill the hose with more than 125 psi of air.
If the hose is over pressurized the over-pressurization valve will open.
The valve is very loud and the air is forceful when it opens and could cause injury.
Make sure the relief holes are pointed in a safe direction and
that all people standing by are wearing safety glasses.

Do NOT put your hand over the relief holes on the valve.

Always use an air source with a regulator.

Do not connect any hoses to the nozzle or cap assembly that are not
LION training hoses. Additional hoses for training purposes can be
purchased from LION.

Do not use the training hose for firefighting purposes.

Do not fill the training hose with water.
Do not use the nozzle or cap assembly with water.

**DO NOT CONFUSE THE TRAINING NOZZLE
WITH A REAL FIREFIGHTING NOZZLE.**

WARNING

**Improper installation, adjustment,
alteration, service or maintenance can cause
injury or property damage.**

**Read the setup, operation
and maintenance instructions
thoroughly before installing
or servicing this equipment.**

**Failure to follow these instructions
could result in property damage,
personal injury, or death.**



CAUTION

**Class 3R Laser
Do not look directly
into beam or view with
telescopic devices.**

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SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

1. HOW THE DIGITAL HOSE LINE NOZZLE WORKS

Congratulations on the purchase of your new Digital Hose Line Nozzle and Weighted Hose Assembly.

This state of the art training tool uses a real hose line nozzle modified with sound effects, a laser, and an infrared emitter to communicate with a LION ATTACK training system. The nozzle attaches to a weighted hose that can be inflated using air to simulate the weight and the behavior of a real charged fire hose. The nozzle and hose assembly work in conjunction with a LION ATTACK training system to produce a realistic training experience to learn hose line management and simulate fire emergencies where water isn't desired or possible.

The nozzle uses an internal battery to power the electronics. The battery is rechargeable using the provided charger. The bail of the nozzle turns the electronics on and off.

The weighted hose is made from a real 50 ft. (15.2 m) long fire hose that has been modified to include a flexible weighted tube inside. The weighted tube simulates the weight and distribution of the water in a charged fire hose. The weighted hose comes with a special end cap that incorporates a Schrader air valve and an overpressure valve. The Schrader valve is the same type of valve found on vehicle tires and allows the hose to be filled with pressurized air to make the hose behave like a hose charged with water. The over-pressurization valve prevents the hose from being over-pressurized.

The Digital Hose Line Nozzle interacts with LION ATTACK training systems to simulate the behavior of a real hand line. Sensors in the Attack panel receive information from the Digital Nozzle to determine where the nozzle is aiming. To successfully extinguish the fire the trainee must use an effective technique.

2. FOR YOUR SAFETY



WARNING

1. The LION laser driven extinguisher uses a Class 3R laser module. Follow all manual instructions to avoid possible exposure to laser and collateral radiation. Do NOT alter laser module in any manner.
2. Do not direct the laser at people.
3. Do NOT use this appliance within the vicinity of other electrical devices.
4. Always use in accordance with all applicable local, state, and national codes. Contact your local fire department or authority having jurisdiction for details on fire extinguisher training.
5. Do not use this appliance without reading the entire User's Manual.
6. Do NOT alter or modify this appliance in any manner. The system will not operate as designed or intended if modified.
7. Do NOT use in an explosive atmosphere. Keep the areas surrounding the appliance free and clear from combustible materials, gasoline and other flammable liquids.
8. Do NOT get the unit wet. Do NOT use in inclement weather such as rain, hail, sleet, or snow. Keep sprinklers and other water sources away from the unit.
9. Do NOT attempt to inspect or adjust the laser module at any time.
10. Always dispose of batteries properly.
11. Carefully read all of the warning and instructions regarding the batteries in this manual.
12. Do NOT attempt to recharge the internal battery in any way other than indicated in this manual. The battery should be charged using only the charger that has been provided. Use of other chargers is dangerous and will void the warranty.
13. This appliance should be thoroughly inspected on a regular basis by trained personnel.
14. Do NOT use the Digital Nozzle when the temperature is below 32 degrees F (0 degrees C).
15. Do NOT drop the nozzle or hose cap assembly.
16. When using this appliance, exercise the same precautions you would with any electrical device.
17. Any part that is removed for servicing must be replaced prior to operating the system.
18. If you are unsure of anything in these instructions, **STOP** and contact your distributor or LION for assistance.
19. This product should not be used with any power source other than what has been provided. Use of other power sources is dangerous and will void the warranty.
20. **Death, serious injury, or damage to property may occur if the above is not followed exactly.**

DISCLAIMER

Purchaser assumes all risk in the assembly and operation of this unit. Failure to follow this manual's WARNINGS and instructions can result in severe personal injury, death, or property damage. LION is not responsible for any damage, death, or injury that may arise or result from improper or misuse of this system.

3. SPECIFICATIONS

NOZZLE SPECIFICATIONS

Nozzle	Modified TFT Mid-Matic HM-VPGI Automatic Nozzle
Weight	6 lbs. (2.7 kg)
Coupling Size	1.5 in. (4 cm) NH

ELECTRICAL SPECIFICATIONS

Internal Battery	6×2/3A NiMH
Capacity	1600 mAh (11.52 Wh) per pack
Pack Voltage	7.2V

WEIGHTED HOSE ASSEMBLY SPECIFICATIONS

Coupling Size	1.5 in. (4 cm) NH
Length	50 ft. (15.2 m)
Over-pressurization valve setting	125 psi (8.6 bar)
Fill Valve Type	Schrader
Weight	80 lbs. (36.3 kg)

DISCLAIMER

Purchaser assumes all risk in the assembly and operation of this unit. Failure to follow this manual's WARNINGS and instructions can result in severe personal injury, death, or property damage. LION is not responsible for any damage, death, or injury that may arise or result from improper or misuse of this system.

4. DIGITAL HOSE LINE NOZZLE AND WEIGHTED HOSE INFORMATION

DIGITAL NOZZLE

When the bail on the nozzle is opened, the nozzle emits a laser pattern to indicate where the nozzle is pointed. The nozzle also emits an invisible IR beam which sends a signal to the ATTACK panel. The nozzle is powered by an internal battery. This battery pack can be quickly recharged.

WEIGHTED HOSE

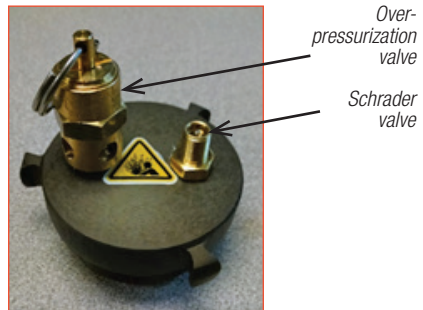
The weighted hose is made from a real 50 ft. (15.2 m) long fire hose that has been modified to include a flexible weighted tube inside. The weighted tube simulates the weight and distribution of the water in a charged fire hose.

HOSE CAP ASSEMBLY

The weighted hose comes with a special end cap that incorporates a Schrader air valve and an over-pressurization valve. The Schrader valve is the same type of valve found on vehicle tires and allows the hose to be filled with pressurized air to make the hose behave like a hose charged with water. The over-pressurization valve prevents the hose from being over-pressurized. When it's time to depressurize the hose you can pull the ring on the over pressure valve to release enough air to remove the cap assembly.



DIGITAL NOZZLE



HOSE CAP ASSEMBLY

5. SYSTEM SETUP AND INSPECTION

WARNING

Any damaged part must be replaced prior to operating the system.

Use of replacement parts that are not authorized by LION or are not original equipment parts supplied by LION will void the warranty.

Do NOT attempt to adjust or service the laser module.

Please do not attempt to change the battery. If it must be changed, please return to LION.

Unpack all parts, removing any packaging materials. Check for any visible damage that may have occurred during transportation and call LION or an authorized dealer to report any concerns.

Under abusive conditions, liquid may be ejected from the internal battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

NOTE

It is imperative that the system be kept clean and dry when not in use.

1. Do NOT use the system without reading the entire User's Manual first.
2. Make sure the nozzle is charged before you start the training. See the "Charging the Battery" section of this manual for more information.

3. Test the nozzle.
 - a. Point the nozzle away from people and open the bail to the full open position.
 - b. You should hear the speaker and see the green dots from the laser.
 - c. If you do not hear the speaker and see the laser, the battery may be dead. Verify that the battery is charged by plugging the charger into the nozzle.
 - d. Close the bail to turn the nozzle off.
4. Connect the weighted hose to the nozzle. Make sure the hose is secure.
5. Connect the end cap assembly to the hose. Make sure the cap assembly is secure.
6. Fill the hose with compressed air to the desired pressure not exceeding 125 PSI (8.6 bar). The air filled hose will behave very similar to a water filled hose at the same pressure.



STEP 3—A



STEP 5

continues >

 **CAUTION**

Do not fill the hose with more than 125 PSI (8.6 bar) of air. If the hose is over pressurized the over-pressurization valve will open. The valve is very loud and the air is forceful when it opens and could cause injury. Make sure the relief holes are pointed in a safe direction and that all people standing by are wearing safety glasses.

Do NOT put your hand over the relief holes on the valve.

Always use an air source with a regulator.

Do not connect any hoses to the nozzle or cap assembly that are not LION training hoses. Additional hoses for training purposes can be purchased from LION or an authorized dealer.

Do not use the training hose for firefighting purposes.

Do not fill the training hose with water.
Do not use the nozzle or cap assembly with water.

DO NOT CONFUSE THE TRAINING NOZZLE WITH A REAL FIREFIGHTING NOZZLE. MAKE SURE YOU TAKE ALL NECESSARY PRECAUTIONS TO NOT CONFUSE THE TRAINING NOZZLE WITH A NOZZLE INTENDED FOR FIREFIGHTING.

7. To reduce the pressure, you can bleed air from the Schrader valve or you can pull the ring on the over-pressurization valve. Be careful when you pull the ring on the valve. See the warning above.
8. Set up the ATTACK training system where desired.
 - a. Make sure the system is set to **LASER** mode.
9. The system is now ready for use.

6. TRAINING WITH THE SYSTEM

Once the Digital Hose Line Nozzle, Weighted Hose Assembly, and ATTACK system are successfully set up, they may be used for training.

1. Start the training evolution on the ATTACK panel.
2. Approach and attack the fire as you normally would with a hose line.
3. If the trainees do not aim and sweep properly the flames will not fully extinguish. Flames have the ability to rekindle or flare up if not fully extinguished.

7. SHUT DOWN OPERATION

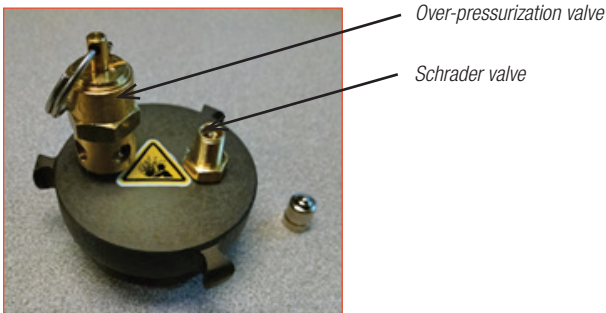
1. Close the bail on the nozzle.
2. Shut down the Attack as directed in the Attack user manual.
3. Bleed off the air pressure in the hose. This can be done either through the Schrader valve or through the over-pressurization valve.

CAUTION

The valve is very loud and the air is forceful when it opens and could cause injury. Make sure the relief holes are pointed in a safe direction and that all people standing by are wearing safety glasses.

Do NOT put your hand over the relief holes on the valve.

4. Once the pressure is bled off, you can remove the cap assembly.
5. Remove the nozzle from the hose.
6. Store the hose and cap assembly in a clean dry area where it will not be confused as equipment for fighting real fires.



STEP 6

8. CHARGING THE INTERNAL BATTERY

Read the following safety instructions and warnings before handling, or charging the nozzle.

- Avoid excessive physical shock or vibration.
 - Do NOT disassemble the nozzle.
 - Do NOT immerse the nozzle in water.
 - Keep out of reach of children.
 - Do NOT leave battery in charger over 24 hours.
 - Use only the charger provided by LION.
 - Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.
 - Do not use charger in damp or wet locations.
 - Do not damage cord. Never carry charger by cord or yank it to disconnect from outlet. Keep cord away from heat, oil and sharp edges.
 - The rechargeable batteries have a limited life of about 2 years or 1,000 cycles. If the operation time becomes extremely short after recharging, call our customer service team to have a LION Technician replace the internal battery.
 - Unplug the charger when not in use.
1. When the nozzle battery needs to be recharged, it will audibly say “low battery”.
 2. Plug the charger into an outlet.
 3. Plug the charger into the nozzle.
 4. A 5 minute charge from the “low battery” warning will run the nozzle for about 15 minutes of continuous use.
 - a. Full charge is achieved in approximately 85 minutes from the “low battery” warning.

The Digital Hose Line Nozzle battery is the nickel-metal hydride (NiMH) type. The life of the NiMH battery can be prolonged by waiting until the extinguisher audibly says low battery before recharging; however NiMH batteries DO NOT have a memory. NiMH battery lifetime is based primarily on recharge cycles so using a recharge cycle after only a few discharges will shorten the batteries life. Depending on usage, NiMH batteries can be recharged hundreds of times.

continues 

All NiMH batteries gradually lose charge over time when not in use. During long periods of storage, we recommend charging the extinguisher's battery at least every three months.

The charger can be plugged into an outlet and the extinguisher then left overnight, but LION does not recommend leaving the charger plugged in when not in use or leaving the charger connected for more than 24 hours. Leaving the charger plugged in for long periods could use recharging cycles, shortening the life of the battery.

5. Verify that the green LED is blinking, indicating that the battery is charging.
 - a. If the green light blinks, then turns off, the battery is charged.
 - b. If the LED turns off when the charger is connected, the battery pack may be damaged. Call LION or an authorized dealer for assistance.
6. When the LED stops blinking, the battery is charged.
7. Unplug the battery from the charger and the charger from the outlet.

9. MAINTENANCE INSTRUCTIONS

- Keep the system clean and dry.
- Do not inspect, adjust, or service the laser module.
- If there are any signs of damage to the hose, hose cap, or nozzle, do not use the system and contact LION immediately for further support.
- Inspect the system before each use.
- Lubrication of the nozzle should not be necessary. However, if you suspect air is entering the nozzle, contact LION for assistance.
- Store the nozzle at room temperature. To maximize the battery's shelf life, fully drain it then fully charge before storage.
- When transporting or temporarily storing the battery, the temperature range should be from -4°F to 140°F (-20°C to 60°C).
- Do not store the nozzle in a car or direct sunlight whenever possible. If stored in a hot car, the battery can be damaged or even cause a fire.
- Recharge the batteries every 6 months.

10. WARRANTY INFORMATION

All parts such as stainless steel sheet metal components and controls are covered and LION will provide replacement parts free of charge during the warranty period. The warranty period shall begin on the ship date and continue for one year.

Batteries are covered under this warranty for a period of ninety days from the ship date. Labor related to warranty repair is covered free of charge during the warranty period. Repair work, however, requires the prior approval of an authorized company official. Labor costs to the account of LION are based on a predetermined rate schedule and any repair work must be done through an authorized LION dealer. This warranty covers labor and parts related defects. This warranty does not cover neglect, accidents, misuse, or negligence on the operator's part.

CONDITIONS AND LIMITATIONS

LION warrants its products against manufacturing defects to the original purchaser only – i.e., the individual or legal entity (registered customer) whose name appears on invoice for the Digital Hose Line Nozzle and weighted Hose, provided that the purchase was made through LION or an authorized LION dealer and is subject to the following conditions and limitations:

This factory warranty is nontransferable and may not be extended whatsoever by any of our representatives.

Assembly and use must be done in accordance with the instructions included with the product and all local and national fire codes.

This Limited Warranty does not cover any damage caused by misuse, lack of maintenance, hostile environments, accident, alterations, abuse, or neglect. Parts installed by other manufacturers will void the warranty.

This Limited Warranty does not cover scratches, dents, damage to the panel, cracked or broken screens, or corrosion. Abrasive and chemical cleaners will also damage the appliance. In the first year only, this warranty extends to the repair or

replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, LION will not be responsible for replacement part expense, installation, labor or any other costs or expenses related to the reinstallation of a replacement part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in this Limited Warranty, LION's responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of LION with respect to the LION electronic appliance and any other warranties expressed or implied with respect to this product.

This limited warranty does not cover damages resulting from the use of components not supplied with the appliance.

Any damages to appliance due to weather, long periods of exposure to dampness, condensation, damaging chemicals or cleaners will not be the responsibility of LION.

The original bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from LION or authorized dealer.

LION reserves the right to have its representative inspect any product or part thereof prior to honoring any warranty claim.

LION or its representatives shall not be liable for ANY transportation charges, labor charges or duties.

11. CONTACT INFORMATION

LION

North America | South America
7200 Poe Avenue, Suite 4000
Dayton, OH 45414, U.S.A.
info@lionprotects.com
800-548-6614 (PPE)
888-428-5539 (Training)

Europe | Middle East | Asia
Industrieweg 5, 5111 ND
Baarle-Nassau, The Netherlands
infoEMEA@lionprotects.com
0031-13-507-6800

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WWW.LIONPROTECTS.COM

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