



**LION**<sup>®</sup>  
ready for action

# REALISTIC FIRE TRAINING TOOLS & SCENARIOS

Digital Fire, Live Fire, HAZMAT, Clean Smoke  
Rescue Mannequins & Custom Builds

**FLEXIBLE, REPEATABLE & COST-EFFECTIVE SOLUTIONS**



# THE LION APPROACH

**A**t LION, we were convinced there was a more efficient and effective way to conduct fire extinguisher and safety training.

We set out to create firefighter training and public education tools that alleviated the problems many had often experienced — setting up for training was costly and time consuming, and clean up was equally frustrating. We sought to make products that provided safe, hands-on training that resembled true-to-life situations as closely as possible.

At LION, we understand the importance of training and we are committed to properly preparing trainees for the real thing. We understand that realism during training exercises helps prepare trainees for when it really matters.

Since the development of our first fire extinguisher training system, we have committed ourselves to utilizing smart technology and high quality, durable construction in product design and implementation. This passion has led us to develop the world's most advanced fire safety and emergency training products.

LION is a culture of innovation with a commitment to enhancing first responder readiness. We are the world's largest provider of fire and safety training tools and full-scale, multidisciplinary firefighter training complexes. We offer the most complete array of highly differentiated products and services to ensure that first responders are truly ready for action.

At LION, our primary driver is the passion our customers have for the critical roles they play in keeping citizens, workers, and firefighters safe through good training. We share this passion and have made it our mission to provide *the best training tools possible* to help our clients achieve their training goals.





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# // ATTACK™

## DIGITAL FIRE TRAINING SYSTEM

The ATTACK Digital Fire Training System combines digital flames, sound and smoke to create a range of fire conditions that respond directly to hose line application. Train with a seat of fire in acquired structures, training towers or any other location where live fire isn't possible or practical.

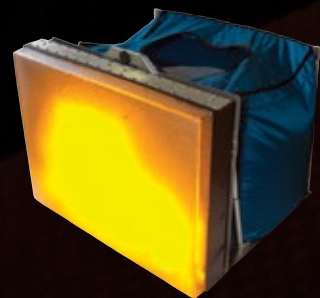
The ATTACK includes everything you'll need for digital fire training. The waterproof panel uses five thermal sensors along with self-generating digital flames and sound effects to provide an interactive training experience. The panel senses where a hose line hits the panel and varies the flames in response. The Attack includes a remote control to allow instructors to start and stop evolutions at the push of a button and customize the scenario. The system's available smoke generation produces a smoky environment relative to the size of the fire to create realistic fire conditions.

The system is tough enough to handle any hose line in your training arsenal. It enables instructors to run repeatable and variable evolutions with push-button start and stop.

With the ATTACK your training is done when each firefighter has learned the skill, not when the fire is out of fuel.

### Training Opportunities

- Create basic or intense fire scenarios with extension where live fire isn't possible.
- Use the ATTACK to train on fundamentals so you can make the most of live-fire burns.
- Introduce new firefighters to fire and smoke conditions in a safe environment.
- Change the location and characteristics of the fire between evolutions and prevent training from becoming too predictable.
- Simulate fire conditions where getting water on the fire isn't the primary objective but the size and location of the fire is still an important element. Add more realism to drills such as Vent Enter Search, RIT Operations and Search and Rescue. Challenge trainees to maintain situational awareness, identify the location of the fire and if not extinguish, confine the fire while other critical operations take place.



"In addition to the ATTACK'S realistic flames, the system's audio and smoke generation further enhance the realism of the training experience."

MICHAEL P. GARRAHY  
Chief // Rocky Hill Fire Department

## Digital Nozzle and Weighted Hose Line



Conduct training evolutions where flowing water isn't possible by using the ATTACK in conjunction with the Digital Nozzle and Weighted Hose Line. LION Digital Nozzles are made using actual fire hose nozzles, which are outfitted with lasers that interact with the Attack's digital flames.

### Training Opportunities

- Train in hospitals, schools, nursing homes, large manufacturing sites, or any other place where flowing water isn't permitted. Bring your firefighters to the very places they are tasked with protecting.
- Spend more time training and less time setting up, stretching and repacking hose.
- Flow water in acquired structures without the prep time that live burns require and without damaging the structure.
- Train on hose line advancement without taking an engine out of service.
- Prepare your firefighters for a wide range of emergency situations by exposing them to an infinite number of training sites. Challenge veteran firefighters who have your training tower memorized.
- Teach new trainees the fundamentals of hand line advancement technique before moving on to flowing water and live fire.



LIVE FIRE  
EXTINGUISHER  
TRAINING SYSTEM

# // I.T.S. XTREME™

I.T.S. Xtreme's flame response system determines where the trainee is aiming and sweeping the SmartExtinguisher® and automatically varies the flames in response, providing a realistic and safe training experience. With intelligent props and multiple class of fire and difficulty settings, it is possible to provide countless training scenarios without the cost and cleanup associated with dry-chemical or CO<sub>2</sub> extinguishers. Propane-fed flames, intelligent props, as well as class of fire and difficulty level settings make I.T.S. Xtreme the world's most advanced live fire extinguisher training system.

Class A, B or C fires can be selected at four different difficulty levels and props can be used to create realistic flame patterns, further enhancing the training experience.

## I.T.S. Xtreme Features

### > ENHANCED FLAME

The I.T.S. Xtreme training system generates large, intense flames, allowing trainees to really feel the heat, enhancing the realism of the training experience.

### > FLARE-UP FEATURE

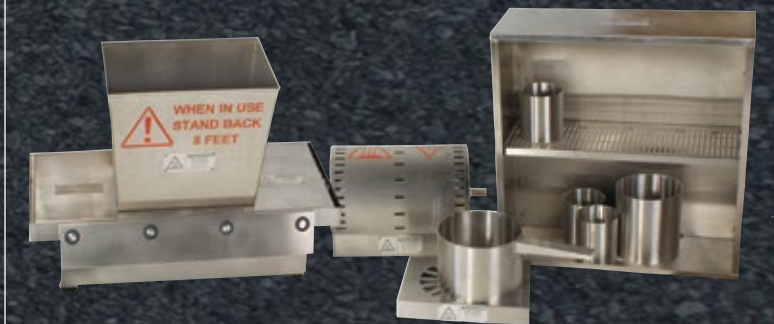
The I.T.S. Xtreme training system has a flare-up button which can be pressed to reignite the flames at any time to further challenge trainees.

### > PROP ENABLED

Stainless steel props can be used with the I.T.S. Xtreme training system to simulate different fire scenarios. Optional Trash Can (Class A), Stove Top (Class B), Paint Locker (Class B) and Motor (Class C) Props are available.

## I.T.S. Xtreme Advantages

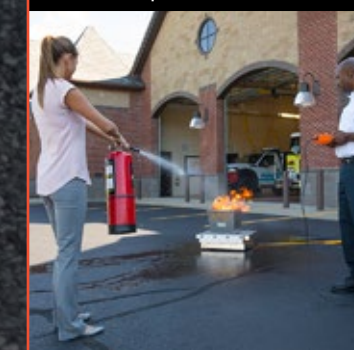
- Makes training easy and reduces costs significantly with the LION rechargeable training extinguishers.
- Grades users making it easy to monitor improvement and proficiency.



"This unit is exponentially easier to setup, use and maintain than previous methods."  
CLINT SANCHEZ  
Inspector // Baton  
Rouge Fire Department



> Trash Can Prop



> Motor Prop



> Stove Top Prop



Through the use of innovative, patented technology, the Intelligent Training System (I.T.S.) provides clean, safe and cost effective extinguisher training. The Intelligent Training System senses where the trainee aims and sweeps the SmartExtinguisher® training extinguisher and varies the flames automatically, putting the fire out only when the proper technique is used.



"I have tried nearly every way imaginable to safely instruct our citizens in the practice of utilizing a portable fire extinguisher. The LION I.T.S. is by far the safest, most efficient, economical and environmentally friendly way to conduct a fire extinguisher training class."

JESSIE KRIEBEL  
Captain Fire Inspector //  
City of Taylor Department of Fire  
& EMS

**The Smart-Extinguishers are recharged quickly and easily with only compressed air and water.**

### Intelligent Training System Features

> **CLEAN**

Eliminates the discharge of any dry-chemical or CO<sub>2</sub>. I.T.S. utilizes clean burning propane.

> **SAFE**

Has sensors that automatically shut off the flames if the system is bumped, knocked or set up improperly. Flames go out instantly when the safety switch is released.

> **EFFECTIVE**

Provides a realistic and engaging training experience.

### Intelligent Training System Advantages

- Makes training easy and reduces costs significantly with LION rechargeable training extinguishers.
- Grades users making it easy to monitor improvement and proficiency. Trains more people more effectively in less time.



> I.T.S. handheld controller



> Clean burning propane



# // MAGNUM

HOSE LINE &  
FIRE EXTINGUISHER  
TRAINING SYSTEM



## 2.8 MILLION BTU AND SMART CONTROLS FOR ENHANCED FIRE TRAINING

**C**an your trainees handle the MAGNUM Fire Training System? With an output of 2.8 million BTU, your trainees feel the heat of MAGNUM'S intense flames for full scale hands-on training. MAGNUM is designed to handle a hose line, fire extinguisher, or virtually anything in your fire arsenal. Reinforced construction and rugged components allow you to run evolution

after evolution of advanced fire extinguisher and hose line training. Training this intense has never been so simple. Built-in wheels and easy set up allow you to quickly create challenging training scenarios that are endlessly repeatable. Smart Controls shut down the propane and auto-ignition only if the fire is knocked out completely for accurate and

## MAGNUM IS TOUGH ENOUGH TO HANDLE A HOSE LINE — SMART ENOUGH TO BE A LION PRODUCT

comprehensive training. Stainless steel props can be used with MAGNUM to simulate different fire scenarios. Available props include a computer monitor prop, an electric motor prop and a trash can prop.

"I am pleased to say that it has delivered all that it was advertised to do... with the system nearly paying for itself the very first year!"

**JAMIE DUKE**  
Senior Health and Safety Specialist // Valero Wilmington Refinery



# // BULLSEYE™

DIGITAL FIRE  
EXTINGUISHER  
TRAINING SYSTEM

Integrated smoke and sound make your trainees feel as though they're reacting to a real fire. The BullsEye system senses where the user aims and sweeps a laser-driven training extinguisher and automatically varies the digital flames in response. Train countless individuals without the cost or mess of actual extinguishers using our patented technology.

The BullsEye can also sense which type of extinguisher the trainee is using and how far they are from the base of the fire, and will only respond if they have chosen correctly. The integrated **training record collection system** makes it easy to monitor user's improvement and proficiency. Easily export records via USB for printing certificates and sharing training data. Training opportunities are endless and can now take place anywhere from inside your firehouse to businesses in your community.



## The BullsEye Advantage

### > CLEAN

The BullsEye extinguisher uses a conical laser to accurately replicate discharge, eliminating time consuming clean up. The BullsEye system can also be used with the air/water SmartExtinguisher®.

### > SAFE

LED driven digital flames and a laser extinguisher provide a completely safe and environmentally friendly training experience in any space.

### > EFFECTIVE

The patented control system accurately measures the path of the extinguisher for an engaging training experience. The system also detects how far away the trainee is from the fire and what class of extinguisher they are using. The flames will respond only if the trainee is using the proper extinguisher and technique. Use with countless trainees without recharging any extinguishers. For example, if a trainee chooses a CO<sub>2</sub> extinguisher for a Class A fire, the extinguisher will knock down the flames, but will not extinguish the fire.



### > REALISTIC

Sound effects, a timed discharge, and accurate weight closely simulate actual extinguishers. The panel's self-generating digital flames and sound mimic the patterns and sounds of a real incipient stage fire. Smoke generation is tied to the size of fire and time since ignition. Train in the actual work environment for added realism.



## THE BULLSEYE: NOW WITH INTEGRATED SMOKE

The BullsEye is equipped with wireless technology that will allow it to work with most LION Smoke Generators. Instructors can control the smoke settings manually, or set the system to produce an appropriate amount of smoke relative to the size of the fire and time since ignition. Creating a smoky environment for your trainees creates a sense of urgency and adds to the realism of hands-on training.



"We look forward to the additional educational opportunities our BullsEye will provide and the lives and property that will be saved from the people who are trained."

MICHAEL D. CASAGRANDE  
Captain // Kankakee Fire  
Department





# // R.A.C.E. STATION

EMERGENCY RESPONSE  
TRAINING PROP

The R.A.C.E. Station expands your training beyond basic fire extinguisher training by incorporating all the elements of response to a fire. The R.A.C.E. Station includes a pull station, strobe light, smoke detector, annunciator, and an interactive 9-1-1 phone that allow your students to practice emergency response from start to finish. Reinforce the R.A.C.E. method (Rescue, Alert, Confine, Extinguish) and enable your students to make good decisions in an emergency based on their observations.

The R.A.C.E. Station recreates the stressful environment of an actual emergency. Trainees see simulated flames and the strobe light flash, hear the horn and fire sounds, and see the training smoke. Upon discovery of a simulated fire, trainees can put R.A.C.E. to the test by alerting with the emergency phone and/or pull station before attempting to extinguish the fire. When faced with a number of decisions to make before the fire grows out of control, R.A.C.E. training helps them respond quickly and accurately.

## How it Works

The R.A.C.E. Station communicates wirelessly with the BullsEye™ Digital Fire Extinguisher Training System for a seamless training experience. Using the tablet control, the system records if the trainee responds using the correct R.A.C.E. method and how long it takes them to complete each step. Customize training scenarios to your location's specific response plan. The R.A.C.E. Station can also be used with other LION training tools or as a standalone unit.

## Training Opportunities

The R.A.C.E. Station is ideal for training anywhere a real fire emergency may occur. Challenge your trainees to locate the nearest extinguisher by placing the R.A.C.E. Station in that location. Train in a variety of places and easily change the location of the R.A.C.E. Station between evolutions. Teach students both how to respond to emergencies at work and at home by using the smoke detector and interactive emergency phone. When used in conjunction with the BullsEye, trainees can learn how to extinguish class A, B, and C fires using a wide range of extinguisher types.

## Features/Benefits

### > REALISTIC

By including sound, smoke and training extinguishers, trainees will be exposed to the same conditions they will face in a real fire emergency.

### > EFFECTIVE

Hands-on training teaches muscle memory that will allow trainees to respond and make decisions quickly during a real emergency.

### > COMPREHENSIVE

Prepare your trainees with the tools they need to respond completely to an incipient stage fire from the moment they see it.

### > TRANSPORTABLE

The R.A.C.E. Station is lightweight and designed to be transported easily between training locations. Set up the R.A.C.E. Station in your training location where the alarm and extinguisher are actually located.



> Electric Cutoff Prop



# // FIRE SAFETY TRAILERS



"Everyone that visits the trailer is amazed how realistic the fire and smoke simulations are. Adults love the fire extinguisher training in the kitchen and the children are learning so much about what to do if they woke up to their smoke detector sounding. I know that countless lives may be saved because of the use of this trailer."

TIFFANY BRADBURY  
Fire Prevention Specialist

Roanoke Fire-EMS



# FIRE PREVENTION EDUCATION — FOR ALL AGES

Provide important fire safety lessons for children with LION Hazard Recognition props. Train adults with simulated fire situations that are intense and realistic, yet completely safe.

## KITCHEN FIRE SCENARIO



Target all age groups with the Kitchen Fire Scenario for hands-on emergency response and hazard recognition training for children and adults. Teach your community how to recognize dangers in the home and stay safe. For more advanced training, interactive SmartProps create a fire emergency. The SmartProps are designed to appear as normal household appliances and accessories, but with one push of a button by the instructor, the simulated kitchen emergency escalates as smoke fills the kitchen and the heat from the “fire” rapidly intensifies. Laser-driven extinguishers that communicate with the props in real time provide hands-on fire safety lessons.

## SEVERE WEATHER SCENARIO



Life-threatening weather emergencies can occur with little or no notice. The optional Severe Weather Package, an add-on to the Kitchen Fire Scenario, broadcasts realistic severe weather alerts and teaches the trainees how to react if faced with an extreme weather event. Weather simulations incorporate actual news broadcasts with surround-sound effects for hurricane, earthquake, flood, and tornado safety education. The LION Severe Weather Package teaches critical life-saving steps in a highly realistic training environment.

## INDUSTRIAL ROOM FIRE SCENARIO



Teach occupational safety and response in the Industrial Room Fire Scenario using fire safety props including interchangeable HazMat placards, a chemical drum prop, leaking cylinder prop, lock-out tag-out station and smoking outlet prop. For emergency response training, a simulated sparking electrical panel ignites a parts washer creating a smoky Class B fire. Trainees can pull the fire alarm, secure the power and attempt to use a training extinguisher to put out the flames keeping their evacuation path in mind.

## BEDROOM SCENARIO



Educate your community on the importance of Exit Drills In The Home (E.D.I.T.H.) in the Bedroom Scenario. Activate the heated door and watch smoke enter from under the door jamb. Show how to feel for heat and block the smoke with a pillow or towel and then evacuate to safety using the window and escape ladder. The bedroom scenario features an interactive emergency phone, an automatic smoke detector and a smoking outlet. Trainees can dial for help and use a BullsEye laser extinguisher to put out the flames before the fire grows too large. The optional Interactive Bedroom Package adds a smoking air conditioner and trash can, sound and fire effects for added education and realism.

> Fire safety trailer



## FIRE SAFETY SMARTPROPS™

LION SmartProps are fully interactive, self-contained fire safety education tools designed to help you make the most of your fire prevention program. These props can be utilized anywhere, from the interior of your fire department, a public school, or in any training facility. SmartProps feature integrated digital flames, training smoke and sound effects that respond directly to the trainee’s actions for realistic fire prevention training.

Choose from our wide range of educational tools designed to educate adults, children and employees in any setting. LION engineers can modify SmartProps to be integrated into any training environment to meet your community’s needs.

### Additional Training Opportunities

- SmartProps can be used to retrofit your existing fire safety trailer to add realism and a hands-on element.
- LION SmartProps are compatible with our Fire Safety Trailers, allowing you to upgrade your trailer and refresh your training opportunities each year — additional props can be added at any time to escalate the intensity of your hands-on training scenarios.

## SMARTSTOVE™ SMARTPROP



At first glance, the SmartStove appears to be an ordinary kitchen stove, but when the instructor presses the start button on the wireless controller a smoldering oven fire ignites. If the trainee acts quickly and turns off the oven without opening the door, the fire will slowly go out. If the trainee hesitates, the oven fire quickly ignites the pan on the stove-top and the prop-controlled smoke detector alarms.

## TRASHCAN SMARTPROP



The TrashCan SmartProp erupts with smoke and digital flames when the instructor presses the start button or can be ignited from a nearby fully involved SmartStove. Trainees must aim and sweep properly to knock down the fire and keep it from rekindling. The flames, smoke and sound effects respond directly to the trainee’s actions.

## PARTS WASHER SMARTPROP



The Parts Washer SmartProp ignites creating a smoky, simulated Class B fire. The trainee must react quickly to put out the fire, aiming and sweeping properly with the laser-driven training extinguisher. Integrated digital flames, smoke and sound effects combine to create a realistic industrial training prop.



### The most reliable smoke generator is now cordless

The LION VICO Smoke Generator is the perfect addition to your training arsenal, allowing firefighters to conduct training anywhere — no cords required. Expand your training capabilities to include specialized training scenarios in locations without power. Quickly add smoke to the upper floors of your training tower, vehicle extrication drills and remote locations.

#### Features/Advantages

**CORDLESS** // The VICO Smoke Generator is battery operated, making it perfect for training in locations where it is inconvenient or even impossible to use power.

**PORTABLE** // The VICO's interchangeable battery allows instructors to easily add smoke to upper floors in their training towers, vehicles, or outside training grounds where power isn't available or easily accessible.

**ZERO HEAT-UP TIME** // The VICO instantly heats smoke liquid to the ideal temperature. Simply press the button for instant smoke.

**LONG-LASTING BATTERY** // The VICO can be run continuously for 20 minutes and much longer when using smoke intermittently, producing the same high quality smoke during the first and last minutes of training. The battery can be easily changed out in the field for uninterrupted training.

**EASY OPERATION** // Push button, single gloved-hand operation. The VICO requires no configuration or programming. Users can adjust smoke density and create smoke bursts or set the output to continuous run.

**LIGHTWEIGHT** // The VICO weighs only 17 pounds, making it light enough for single hand operation.



### Training Opportunities

- Add smoke to vehicle extrication drills.
- Use in conjunction with a Rescue Mannequin for victim extrication drills and search and rescue training.
- Conduct Urban Search and Rescue training.
- Use VICO in conjunction with our ETNA Smoke Generator to easily add smoke to secondary rooms and floors of your training tower.
- Add realism to public education drills, such as evacuation training.
- Conduct hazard recognition and response training.
- Add realism to maritime and aviation drills.



> Vehicle extrication drill



> Add realism to drills



> Add smoke to secondary rooms

VICO and ETNA



# // SMOKE GENERATORS

LION Smoke Generators use smart controls to continuously produce the best smoke possible for fire and emergency services training. Built on steel chassis with all metal structural components, these smoke generators are built to handle the toughest training demands.

LION Smoke Liquid has been developed to produce a dense, thick smoke with an extended hang-time. Advanced sensors and controls enable LION Smoke Generators to produce a continuous supply of smoke without recharging or reheating.

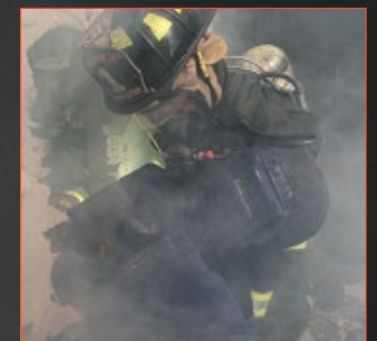
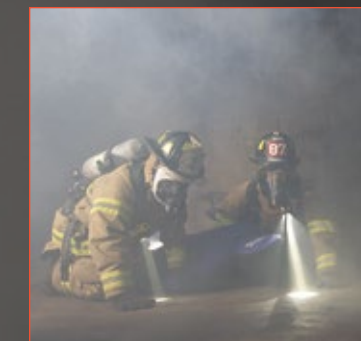
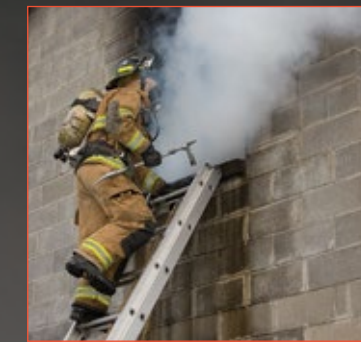
Whether you are doing search and rescue, ventilation or initial fire attack drills, LION Smoke Generators don't stop until your training is done.



"After 26 years in the fire service and 10 years working in the training division; this is the best smoke generator I have ever encountered."  
GREGORY RUSSELL  
Chief //  
Joint Base Elmendorf-Richardson  
Fire Emergency Services

## Training Opportunities

- The high volume of continuous smoke is ideal for horizontal or vertical ventilation drills and helps show the effects of Positive Pressure Ventilation.
- Challenge firefighters to find victims in low visibility during search and rescue or thermal imaging drills.
- Quickly fill buildings with dense smoke for large area search drills.
- Create a zero visibility environment in seconds for mask confidence training.



## ETNA™ Smoke Generator

With built-in handles, steel chassis and rubberized feet, the ETNA Smoke Generator is portable enough to be easily moved, but tough enough to handle the demands of firefighter training. Smart controls and an integrated smoke liquid tank enable the ETNA to produce smoke continuously for hours.



# // RESCUE MANNEQUINS

INTERACTIVE  
TRAINING MANNEQUINS



The Rescue Mannequins are tough enough to take intense fire training and smart enough to interact with rescuers. Built with rugged, abrasion resistant materials, Jeff and Thomas can handle your toughest training requirements. Internal weighted padding and a flexible design provide uniform weight distribution and realistic feel. The interactive built-in VoiceBox gives your victim a voice and adds realism to the scenario. Record messages for continuous or sound activated playback. Jeff and Thomas can cough, call out for help, or direct rescuers to find additional victims.

### Jeff

The Jeff Rescue Mannequin is constructed with crush-resistant materials, a rugged uni-shell covering, Drag Rescue Device (DRD) strap and removable boots that can withstand a full range of intense training scenarios. Jeff's internal weighted padding provides even weight distribution and feels like a real victim. Flexible joints enable a full range of mobility without pinch points. The programmable VoiceBox is located in the head for ease of access.

### Thomas

Create victim removal scenarios with the Thomas Rescue Mannequin. Simulate a variety of serious bodily injuries including torso impalement or a severed arm or leg. The built-in VoiceBox gives your victim a voice and adds interactivity to the scenario.

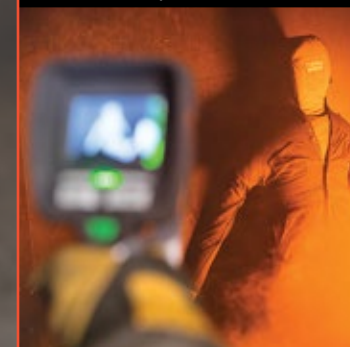
### Thermal Mannequin

Conduct TIC training using a real heat signature. Most mannequins don't have heat signatures, but LION Thermal Manikins are 20–30°F over ambient room temperature.



Thomas Rescue Mannequin

> Thermal Mannequin



> Interactive, programmable VoiceBox



"When minutes and even seconds count in a rescue, the LION Rescue Mannequin has to be the best piece of equipment to train with."

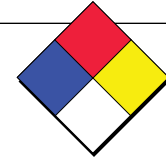
DAN JAQUITH

Training and Safety Officer // Chatfield Fire Department





GAS DETECTION  
TRAINING SYSTEM



# // GASTRAINER™

## Conduct hands-on Gas Detector Training with GasTrainer™

**G**asTrainer uses GasSource emitters and sensor technology to simulate chemical and explosive gas emission sources. The rugged handheld meter reads the electronic emissions of four different “gases”, with customizable alarm levels and intensity settings.

GasTrainer allows for comprehensive gas monitoring and response training for both fire service professionals and safety personnel. Simulated gas sources can be set up in work areas, chemical storage facilities, and near HVAC equipment where HazMat dangers can actually exist. Students learn how different gases behave, how to locate emission sources, and how to establish safety perimeters in the event of a hazardous situation. Using the hand held Instructor Unit, a trainer can set alarm levels, adjust the gas being monitored and even manually increase or decrease gas readings to provide additional training challenges.

Set the scene with the HazMat Placard Kit which includes a full set of DOT placards and the NFPA diamond. Expand your training with the HazardTank™ and Leaking Propane Tank compressed gas cylinder props that create an electronic hissing noise when the valves are opened.



“Our tactical officers were able to see a real response to the entrance of a simulated hazardous material in a confined area. We could not simulate the concentration of such a hazard prior to our acquisition of this tool.”  
RICHARD SHOAF, SR.  
VP Operations // Safety Training and Consultations Int'l

▼ Leaking Propane Tank



▼ HazardTank



▼ HazMat Placard Kit



# // ADVANCED FIRE TRAINING PROPS



## Intense flames, real heat and interchangeable props for effective training

ION's Advanced Fire Training Systems are designed to provide realistic live fire training suited to your specific needs. By providing an array of interchangeable props that range from a small scale paint locker, stove fire or dumpster fire to an aircraft wing or helicopter, we can help you meet your training goal, whatever it may be. All of our full-intensity training equipment is operated using the universal Pilot Module, meaning that you can easily customize and add to your selection of training props without excessive costs.

"We have many new and veteran firefighters that come and use our Vehicle Fire Training Prop to train, and they all rave about how excellent it is."

**CHIEF DUANE FRY**  
Director of Fire Technology  
and the Emergency Medical Services  
Program //  
Shasta College







**◀ AIRCRAFT WING FIRE TRAINING PROP**

The Aircraft Wing Fire Training Prop is designed for realistic emergency aircraft fire and rescue response training at an airport or training facility. Based on a Boeing 737 or Airbus A320 wing configuration, the Aircraft Wing Fire Training Prop provides multiple scenarios to train ARFF responders the proper approach and attack techniques.



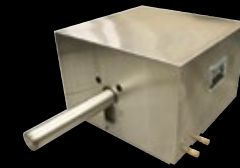
**HELIROTOR FIRE TRAINING PROP**

The Helicopter Fire Training Prop is a portable live fire system and features moveable main rotors as well as functional cockpit and cabin doors. Modular pilot and burn trays can be used to create cockpit and cabin fire scenarios while integrated burners create weapon and engine fires that challenge firefighters with high heat and intense flames.

**// Advanced Fire Training Props**

These interchangeable props offer full-intensity training scenarios with interactive features such as a functional burner valve on the Stove Fire Training Prop and operational lid on the Trash Bin Fire Training Prop. LION Modular Fire Training Props allow you to cost-effectively create additional scenarios to meet your specific training objectives.

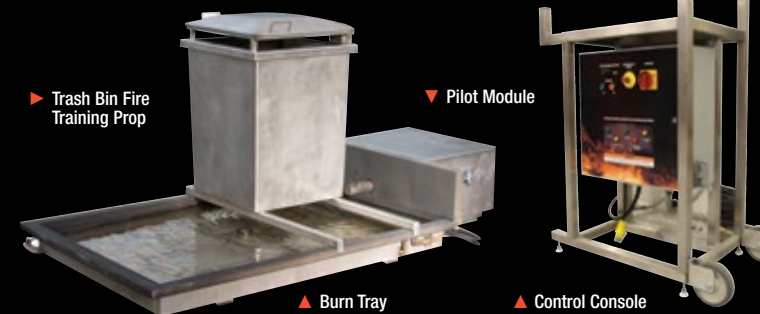
LION offers a wide range of Advanced Fire Training Props. Though they vary in size and scope, the Pilot Module is at the heart of each. The stainless steel Pilot Module acts as the brain of the system and connects to the Control Console, which allows the instructor to safely stop and start evolutions. The Pilot Module also houses the forced air pilot system, which guarantees reliable ignition, even under the most demanding circumstances.



▲ Pilot Module

A variety of props connect directly to the Pilot Module, including the Helicopter, Aircraft Wing, Pressure Vessel, Stove, and Dumpster Fire Training Props. The Pilot Module makes it easy for instructors to add additional props to their training arsenal over time to meet their evolving training objectives.

Another component of the Advanced Fire Training Props is the Burn Tray. The



▶ Trash Bin Fire Training Prop

▼ Pilot Module

▲ Burn Tray

▲ Control Console

Burn Tray, which allows for multiple burn zones and more intense flames, can be connected to the Pilot Module to expand training capabilities. Use the Burn Tray to simulate a fuel spill, or add larger props such as the Vehicle, Pipe and Valve Assembly (Christmas Tree) and Electric Motor Fire Training Props.

LION's Advanced Fire Training Props are made of the most robust and rugged materials and are designed to stand up to any fire department's rigorous training. Props are easily interchanged for versatile and diverse training opportunities. Additional props can be added to your collection at any time, allowing instructors to easily refresh their training capabilities.



**PRESSURE VESSEL FIRE TRAINING PROP**

The Pressure Vessel Fire Training Prop is a portable training tool with intense flames, real heat and smart controls. Train firefighters to reduce the chance of a BLEVE with the built-in multiple zone burner system. With a functioning vapor service valve, firefighters can practice approaching the tank while shielded by hose lines to secure the fuel and extinguish the fire.



**VEHICLE FIRE TRAINING PROP**

The LION Vehicle Fire Training Prop is a heavy-duty training tool with intense flames, real heat and smart controls. Ignite the propane-based flames and have full command of each evolution with the instructor's controller. Create passenger compartment, engine, wheel-well and trunk fires at the push of a button.



# // TRAINING STRUCTURES & FACILITIES



LION Training Structures and Centers employ intense fire scenarios, heavy-duty infrastructure and comprehensive safety networks to ensure you accomplish your training objectives safely and effectively. Choose from custom fire training props, containers, fixed structures, and complexes for the training environment best for your organization. LION craftsmanship is second to none, allowing thousands of trainees over decades to benefit from your prop or structure. Our smart technology and constant innovation provide you with the most up to date training methods and techniques for unparalleled realism and effectiveness in your training.



LION's extensive experience allows us to apply our smart technology to any product. Our portfolio includes solutions for marine, aviation, exterior and interior firefighting, mining, and more. We can transform your training objective into reality, whether your organization needs a large prop, one or more containers, a mobile training unit, a fixed facility, an upgrade to your current facility, or an entire training complex.

> Marine Fire Training Facility, FDNY Training Center, New York, NY  
Contains Smart Class A, Gas-Based and digital fires



# // TRAINING OPPORTUNITIES

## TRAINING STRUCTURES & FACILITIES

**A**t LION, we pride ourselves on our ability to design and execute training projects that keep our customers and their end training goals in mind. Our focus is on our clients and their trainees, which has allowed us to provide numerous organizations with training sites they can be proud of for years to come.

Our capabilities allow us to design and build a wide range of training solutions, from the largest training centers in the world that boast over 50 fires, to single training containers and mobile fire training props. However you envision your ideal training environment, LION can make it a reality.



## PROJECT REFERENCES

LION can design and build training solutions for every training specialty. Examples of our project deliveries include:



### AVIATION FIRE TRAINING

**T**he Swedish Air Force asked us to design a fighter jet that could accurately simulate the intensity of a fighter jet fire. LION designed a custom mobile prop that accurately recreated the extremely large flames caused by jet fuel explosions.



### STRUCTURAL FIRE TRAINING

**L**ION provides all the tools necessary to train both new and advanced firefighters on sizing up structures, initial fire attack, fire behavior, ventilation, water supply, hose stream application, search and rescue, firefighter survival, and FAST. While training towers come to mind most frequently when discussing structural firefighting, LION has designed mobile units and containers to accomplish the same training objectives.



### MINING FIRE TRAINING

**A**lpha Natural Resources of Julian, West Virginia approached LION with the unique need to prepare a large number of miners for the pressing dangers present in their field. Alpha Natural Resources was especially eager to provide realistic hands-on training after the recent disasters that have befallen their industry. Their 10-acre complex includes a man-trip, conveyer belt, and a vehicle fire training prop.



### FIRE BEHAVIOR TRAINING

**T**he Hong Kong Fire Department needed a way to train in their crowded city without emissions. We designed a mobile training unit with an afterburner to accomplish this. The training unit is comprised of two containers — one for training, and the other for controls and the afterburner. The Hong Kong FD can use these containers in any location in the city. They need only transport the containers individually, and connect them at the training site.



### HAZMAT FIRE TRAINING

**H**azmat training is often best accomplished with a mobile training prop, such as the Mobile Training Hazmat Tank LION has delivered to multiple clients across the world, including CEEMP, Inc. of San Juan, Puerto Rico. This training tank is portable, and resembles a real tank. It provides a multitude of training opportunities including cracks, punctures, ruptures, leaking valves and faulty acid, chlorine and gasoline domes.



### MARINE FIRE TRAINING

**O**ne of LION's most recent large-scale projects was the construction of a full size marine ship trainer for the FDNY training campus on Randall's Island in New York. The ship was constructed out of training containers and included both gas-based and digital fire technology.

FDNY will use the ship to train firefighters on a variety of marine firefighting tactics including battling deck, control room, engine room, and mess hall fires.



### TRANSPORTATION FIRE TRAINING

**E**xpose your firefighters to the unique challenges of fighting fires in a public transportation setting, or in vehicles themselves. Transportation emergencies can range from single vehicle accidents to large scale, mass casualty incidents in subways, train stations and other hubs of mass transportation. Are your firefighters prepared to face the full range of transportation related calls that may come their way?



### OIL & GAS FIRE TRAINING

**F**irst responders need realistic hands-on training in order to properly assess and respond to hazardous liquefied petroleum gas fire or fires at oil wells and tank batteries. LION systems create realistic training challenges which allow emergency responders to develop the knowledge and skills necessary to safely and effectively manage these hazardous fires.



# // FIRE TECHNOLOGY

Choosing LION as your training tool provider means that you're not limited to gas-based fires for your training. In addition to the intense flames and repeatable evolutions that propane fueled fires provide, LION also offers our own digital and Smart Class A fire technologies.

## Smart Class A

LION Smart Class A Technology uses dual combustion technology to create repeatable fires using both gas and wood. Smart Class A is a two part system that allows instructors to burn up to 100 lbs. of Class A material using propane or natural gas. This system allows trainees to completely extinguish the Class A fire and then reignite it almost immediately utilizing the propane burner for countless evolutions, decreasing downtime and maximizing training.

After an evolution has finished, smoke is captured in a chamber through ventilation and is burned a second time with propane gas, resulting in air that is 99.5% clean at the end. This technology allows organizations to meet clean air requirements while conducting effective and highly repeatable training.



## Smart Class A Technology Advantages

- Create repeatable evolutions with Class A materials
- Realistically recreate the heat & smoke of real fire
- Meet clean air requirements using the afterburner



## Digital Fire Technology

LION Digital Fire Technology allows instructors to give their trainees realistic hands-on training when or where live-fire isn't possible. This is a great solution for areas where live burns are no longer feasible, or as a way to acclimate new firefighters or reinforce skills with veteran firefighters in a safe environment. This patented technology features self-generating digital flames that respond directly to hose line application for effective training. If a firefighter fails to use proper hose line advancement and stream management techniques, the flames will grow in response. Digital fire technology is tough enough to be used with anything in your firefighting arsenal, including a hose line. Challenge your trainees to fight digital flames for realistic, intense hands-on training. Because every fire situation is different, digital fire technology allows you to create drills in nearly any environment. Recreate the seat of a fire for realistic hands-on suppression and hose line training. Firefighters can gain valuable experience with water application and suppression without the expense, down time or mess associated with live-fire evolutions.

## Digital Fire Technology Advantages

- Realistic, reliable, repeatable evolutions
- Allows firefighters to train in any location
- Minimal preparation required, allowing firefighters to spend more time training



# // TRAINING STRUCTURES & FACILITIES



No job is too big or small for our team. LION is proud to have been involved in the creation of the largest training centers in the world, while at the same time engineering single, portable props for training solutions of any size. Work side by side with LION to identify your training objectives and custom design a tool to meet your needs.

We have built an excellent reputation in developing innovative and safe products and services for emergency services personnel from all industries and professions. Our experience in overseeing the construction of new training sites and the rebuilding of existing training facilities has given us the ability to deliver complete turnkey projects.

Our technological advances set us apart and provide a realistic yet safe training environment. We're passionate about building the world's best fire training structures and centers, and we're committed to helping you every step of the way.

Victorian Emergency Management  
Training Center  
Metropolitan Fire Brigade, Melbourne, AU





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