#### Returns

If you believe you have a defective product you must contact your dealer immediately upon discovering a problem to receive an RMA approval number

All returns MUST have the proper return material authorization (RMA) documentation stating the apparent defect, along with pertinent installation and final application details. Returns lacking these documents may not be processed.

If your FST was purchased prior to 04/2021 to receive an RMA approval number contact *Fire Suppression Solutions LLC- 262-777-8700* or send an email to support@firess,us, returns prior to Fire Suppression Solutions LLC becoming the US Distributor will be handled on a case-by-case basis.

No returns will be accepted without an RMA approval number.

## Exclusive U.S. Distributor



262-777-8700

support@firess.us • www.firess.us

Inspected By:			Date:	
Unit Serial Number:				
Accessories Included:	☐ Case	Bracket	☐ Wall Box	

# Fire Suppression Solutions LLC Fire Suppression Tool (FST)

# Operations Manual FST v4



Product Information, usage, preparation, and deployment guidelines for users of the Fire Suppression Tool (FST) v4



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Copies of this manual can be downloaded by scanning the QR code below



# **Limited Warranty**

LIMITED WARRANTY FROM DATE OF PURCHASE, AND LIMITATION OF LIABILITY.

GREENPORT FST AEROSOL PRODUCTS ARE TO BE OPERATED ONLY BY
TRAINED PERSONNEL.

The manufacturer of the GreenPort Portable Fire Suppression Tool (FST) (distributed by Fire Suppression Solutions LLC) provides a two-year limited warranty against defects in materials and workmanship. Supplier is providing no warranty for the Products. However, Supplier will assist the purchaser in obtaining a replacement product or refund from the manufacturer during the warranty period for any defective Product in accordance with the RMA procedures outlined below.

Limitations of Coverage: Manufacturer's original warranty assumes use, installation, and maintenance in accordance with the Product's documentation. The warranty does not cover damage or loss of performance due to improper installation, faulty or inappropriate preparation, abuse, vandalism, excessive wear and tear or abrasion, excessive physical shock, exposure to harmful chemicals, exposure to extremes of temperature, improper maintenance, usage by un-trained personnel or any use outside those defined in the Product's documentation.

SUPPLIER IS OFFERING NO WARRANTIES, CONDITIONS, REPRESENTATIONS OR GUARANTEES OF ANY KIND, EITHER EXPRESSED OR IMPLIED BY LAW OR CUSTOM, REGARDING THE PRODUCTS, INCLUDING WITHOUT LIMITATION THOSE REGARDING MERCHANTABILITY, FITNESS FOR PURPOSE, CORRESPOND-ENCE TO SAMPLE, CONDITION OR QUALITY.

Disclaimer of Responsibility: Neither the Supplier nor its directors, officers, employees, or agents shall be held liable for any improper or incorrect use of the Products and assume no responsibility for anyone's use of the Products. In no event shall the Supplier be liable for any direct, incidental, special, exemplary, consequential, or punitive damages.

(Including, but not limited to, personal injury or death; procurement of substitute goods or services; loss of use, data, profits or savings; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of the Products, even if advised of the possibility of such damage. This disclaimer of liability applies to any damages or injury, including but not limited to those caused by any failure of performance, error, omission, interruption, deletion, defect, delay in operation whether for breach of contract, tortuous behavior, negligence or under any other cause of action.

Limitation on Liability: If, despite the other limitations set out above, for any reason the Supplier becomes liable to the purchaser or any other party for damages or other liabilities incurred in connection with the Products then the Supplier's aggregate liability for all damages, injury, and liability incurred by the Supplier in connection with the particular Products shall be limited to the current replacement cost of the particular Product that gives rise to the claim for damages.

Indemnification: By taking delivery of the Products, the purchaser agrees to defend, indemnify, and hold harmless GreenEx Fire Suppression Solutions BV and/or Fire Suppression Solutions LLC, its contributors, any entity jointly created by them, the irrespective affiliates and the irrespective directors, officers, employees, and agents from and against all claims and expenses, including attorneys' fees, arising out of the use of the Products.

## First Aid Procedures

The components in the aerosol are nontoxic and are stable under normal conditions. It is not known to be a carcinogen. Exposure to the aerosol may cause slight side effects that should be attended to immediately.

#### **EYE CONTACT**

Exposure to the aerosol may cause slight eye irritation. Avoid rubbing the eyes. Remove any contact lenses, lift eyelids and rinse with large amounts of water or normal saline. If any conditions continue, consult a physician.

#### **SKIN CONTACT**

Exposure to the aerosol can cause mild skin irritation, including slight reddening of the skin. Wash affected area with soap or mild detergent and water until no evidence of chemical remain. If any conditions continue, consult a physician.

#### INGESTION

If somehow, the metal casing is opened and the product inside is ingested, the following is recommended. Remove by gastric lavage or emesis. Maintain blood pressure and airway. Give oxygen if respiration is depressed. Do not perform lavage or emesis if victim is unconscious. Get medical attention immediately.

#### INHALATION

Remove from exposure area to fresh air immediately. Treat the same as mild smoke inhalation. If condition worsens, as with any smoke inhalation, contact a physician.

# Thank you for your Purchase

From everyone at Fire Suppression Solutions LLC, thank you for purchasing the Greenport Portable Fire Suppression Tool (FST) v4 distributed by Fire Suppressions Solutions LLC.

Your new Portable Fire Suppression Tool is the most efficient and advanced aerosol fire suppression tool on the market today. Correct and timely usage of the Portable Fire Suppression Tool (FST) v4 from Fire Suppression Solutions LLC can prevent and / or significantly reduce the damage caused by fires.

Additionally, the Portable Fire Suppression Tool (FST) v4 allows its user the ability to mitigate the danger posed by flash-over and back-draft to firefighters and first responders.

While no device can prevent or totally suppress the harmful effects of a fire, our Portable Fire Suppression Tool (FST) v4 is a unique way to combat fires and represents a giant advance in fire-suppression technology from water or other chemical-based methods.

The Portable Fire Suppression Tool (FST) v4 is a small, portable unit that contains potassium based chemical components. It is designed to be a first-use method to combat class A, B, C, and K fires. When the device is deployed at the scene of a fire, the Portable Fire Suppression Tool (FST) v4 releases a cloud of aerosol containing the potassium components, interrupting the chain reaction in the flame.

When utilized and deployed according to the instructions in this Operation Manual, it provides an effective method of fire suppression that minimizes the risks posed by more traditional methods of firefighting.

Please use this Operation Manual as the source of information for storing, using, and disposing of your new Portable Fire Suppression Tool (FST) v4.

Best Regards,

☐IRE Suppression Solutions LLC and

GreenEx Fire Suppression Solutions BV

# How the Fire Suppression Solutions Fire Suppression Tool (FST) v4 works

The Fire Suppression Solutions (FST) v4 is a portable fire suppression device. It is not a fire extinguisher and not intended to replace any fire extinguishers that are required by NFPA 10. The unit consists of a steel housing containing chemical agents that form the aerosol, separated by an insulating barrier; a handle for ease of transportation and deployment and a securing pin that is used to activate the Fire Suppression Solutions (FST) v4.

The Fire Suppression Solutions (FST) v4 is an active fire suppression system utilizing an environmentally safe condensed aerosol that, when deployed, has the appearance of smoke.

When the unit is deployed and its aerosol is released, the aerosol drastically reduces the heat of the room immediately. The aerosol absorbs the flames' energy interrupting the thermal activity from the chemical reaction taking place without removing oxygen from the enclosure.

The Fire Suppression Solutions (FST) v4 is significantly different from  $CO_2$ , dry chemical, and water-based fire prevention systems. Its condensed aerosol (SFE) works simultaneously on the fire tetrahedron (heat, fuel and the fire's chemical reaction) without affecting oxygen levels. When used in accordance with these instructions, deployment of The GREENPORT FST v4 poses no risk to occupants and first responders and will effectively minimize any of the fire's collateral and environmental damage.

The device inhibits the fire from obtaining the oxygen radicals it needs to continue burning and spreading further. Once activated by the user, the potassium-based compounds (called S.F.E.) inside the body of the Fire Suppression Solutions (FST) v4 are heated, turning the solid compounds into an aerosol that can spread rapidly throughout the area containing fire.

One Fire Suppression Solutions (FST) v4 generally can effectively suppress a fire in a room that measures up to 5,300 cubic feet, if the room does not have any greatly open spaces. Once deployed, the device discharges the aerosol for approximately 30 seconds. The unit's aerosol can remain suspended for up to 45 minutes, depending on how enclosed the room is.

If deployed properly, the Fire Suppression Solutions (FST) v4's aerosol interrupts the chemical reaction of the fire, stop-ping it completely or greatly slowing the rate at which the structure and/or contents burn. The use of The Fire Suppression Solutions (FST) v4 will lower the temperature in the affected space by literally hundreds of degrees in less than 1 minute, making it safer and easier for trained firefighting personnel and first responders to control the spread of the fire in other areas of the structure.

# Warnings and Guidelines

All personnel that may come into contact with the aerosol are suggested to wear protective clothing, including mouth/nose covers to prevent aerosol and carcinogen inhalation, protective goggles, face shield or other face protection, fireproof gloves and suitable protective body covering. A SCBA face mask is acceptable.

#### **Environmental**

#### **DISPOSAL**

The used Fire Suppression Solutions (FST) v4 has a Lithium-Ion battery inside of the handle, behind the battery hatch. Remove the battery before disposing the rest of the Fire Suppression Solutions (FST) v4.

For help or assistance on removing the battery, please call Fire Suppression Solutions LLC **262-777-8700**.

#### **GLOBAL WARMING IMPACT**

The Fire Suppression Solutions (FST) v4 does not pose any global warming threats. It measures zero on both the Ozone Depletion Potential and Global Warming Potential scales.

# Clean Up Following Deployment

#### The GreenPort FST Unit

The used Fire Suppression Solutions (FST) v4 has a Lithium-lon battery inside of the handle., behind the battery hatch. Remove the battery before disposing the rest of the Fire Suppression Solutions (FST) v4. The Fire Suppression Solutions (FST) v4 without the battery can be disposed according to the normal disposal procedures for other fire related materials.

#### THE AEROSOL RESIDUE

If the aerosol leaves behind a layer of dust or film, if needed it can be removed with a damp cloth or broom and dustpan. If needed, wash the affected area thoroughly with water.

#### **FIRE EQUIPMENT**

Clean protective clothing and other firefighting equipment exposed to the aerosol in the normal manner.

# After Using Fire Suppression Solutions Fire Suppression Tool (FST) v4

# CAUTION AFTER PULLING THE IGNITER PIN - DO NOT HOLD ON TO UNIT.

Always throw the GreenPort Portable Fire Suppression Tool (FST) v4 Away from you, and towards the seat of the fire immediately.

#### In The Affected Area

Do not enter the treated area until the Fire Suppression Solutions (FST) v4 has discharged completely. It is advisable to allow the aerosol adequate time to treat the fire and dissipate before entering the space.

The area should be ventilated following use. The affected area should be treated with water after the Fire Suppression Solutions (FST) v4 device has been utilized to eliminate any hotspots that could be remaining.

Those personnel who enter the space where a Fire Suppression Solutions (FST) v4 has been deployed should wear protective breathing gear to prevent the inhalation of the aerosol. Treat any persons exposed to the aerosol for extended periods of time the same as you would for smoke inhalation. Remove the victim to fresh air and allow them to breathe normally. The aerosol is non-toxic to humans and pets alike.

Follow the recommended procedures for safety, first aid, and cleanup in the Warnings and Guidelines section of this Operation Manual.

While the FST is a safe and effective method of fire suppression, it is important to always follow the following guidelines when using the FST. Firefighters or other fire prevention officials should use the FST devices only in accordance with their department's local rules or guidelines. This manual is not intended to replace any fire department's standard operating procedures.

Persons who do not have experience or training in firefighting or fire prevention should only use the Fire Suppression Solutions (FST) v4 if he or she has received thorough instructions on the use of the Fire Suppression Solutions (FST). Never approach a fire or enter a burning structure under any circum-stances. Contact your local fire department for assistance.

**FIREFIGHTER NOTE**: Positive Pressure Ventilation (PPV) will diminish the effective concentrations of the aerosol. PPV will reduce the knock down time. Fire Suppression Solutions (FST) v4 devices work best in contained areas. PPV should only be used when a fire is completely knocked down and water supply is available.

It is advisable to always have one or more Fire Suppression Solutions (FST) v4 devices ready for use and that units are centrally located, to avoid delay in locating one when at a fire scene.

# Before Using the Fire Suppression Solutions Fire Suppression Tool (FST) v4

#### Who Should Use The Fire Suppression Solutions (FST) v4

Only those personnel who are trained and are familiar with the operation of the Fire Suppression Solutions (FST) v4 should use it. All operators should read and understand this Operation Manual prior to use.

#### Inspections

All Fire Suppression Solutions (FST) v4 units should receive an inspection once per year. This inspection and replacement should only be performed by the distributor or qualified trained personnel.

Inspectors should make sure that the Fire Suppression Solutions (FST) v4 is not damaged in any way and there is no evidence of use or deployment.

Never take apart the Fire Suppression Solutions (FST) v4.

ALWAYS leave the "R" Pin in place until it has been determined the device is required to fight a fire. If the device has been damaged in any way, it should not be deployed. Should the Igniter pin become detached accidentally from the unit, immediately throw the unit away from yourself and any person in the vicinity. At this point, the 8 second countdown until ignition has begun and CANNOT be reset. The unit will deploy its aerosol after the 8 second countdown.

#### Storage

Keep the Fire Suppression Solutions (FST) in its original case whenever possible and store it in a place that is not exposed to extreme heat or humidity. Avoid contact with heat, sparks, flames, and other heat sources. Do not drill, solder or cut the unit. Keep it away from oxidizing agents, strong acids and strong bases. The FIRE SUPPRESSION SOLUTIONS (FST)v4 will normally be safe for its intended use for a period of 15 years when stored properly.

# Deploying The Fire Suppression Solutions Fire Suppression Tool (FST) v4

### **Preparing for Deployment**

All first responders should assess the situation and decide as to whether to use the Fire Suppression Solutions (FST) v4. Since every fire is different, first responders should use their judgment as to where and when to deploy the Fire Suppression Solutions (FST) v4. The Fire Suppression Solutions (FST) v4 will achieve maximum results if the fire room is enclosed and is deployed near the seat of the fire.

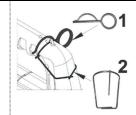
Announce to any public safety personnel or bystanders that the Fire Suppression Solutions (FST) v4 is being deployed and advise them to keep a safe distance (2' from where the unit will land).

# Fire Suppression Solutions Fire Suppression Tool (FST) v4 – Quick Start Guide

The Fire Suppression Solutions (FST) v4 is equipped with 2 (two) types of pins.

This guide will explain how the "R" Pin (1) is used in conjunction with the NEW Igniter Pin (2)

The New Igniter Pin was added to prevent wrong sequence activation.



# Fire Suppression Solutions Fire Suppression Tool (FST) v4

#### Locate the GreenPort FST

Evaluate the scene and decide the safest place to deploy the GreenPort FST that is nearest to the seat of the fire.



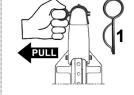
When the decision to deploy the GreenPort FST has been made and you are in position, firmly grasp the "R" Pin (1) and pull is straight out of the unit.

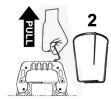
Removing the "R" Pin (1) unlocks the Igniter Pin so it can be used to deploy the unit.

After removing the "R" Pin (1), firmly grasp the Igniter Pin (2) and pull it straight out of the unit.

Once the Igniter Pin (2) has been removed the 8 second countdown until deployment process will begin, and the LED (3) on the handle will begin to blink.

Once the Igniter Pin (2) has been pulled activation CANNOT be stopped.







YOU MUST DEPLOY THE UNIT (4) AFTER PULLING THE IGNITER PIN (2).

Immediately throw the unit into the structure near the seat of the fire.



After deploying the GreenPort Portable Fire Suppresion Tool (FST) make sure all efforts are maintained to ensure a closed fire room to catain the aerosol. **Do Not Ventilate at this point. Allow the FST time to do its job.** 

# Fire Suppression Solutions Fire Suppression Tool (FST) v4 – Quick Start Guide

- Once the Igniter pin has been pulled the device is now activated and will begin dispersing the aerosol in 8 seconds.
- After the igniter pin has been pulled, the LED on the handle will be activated. DO NOT
   ATTEMPT to prevent the activation of the device. Never attempt to retrieve a device that has been activated or to re-install the activation pin.
- Make sure that the person deploying the device can accurately throw the unit to-ward the intended target location. It is best to stand or kneel when throwing the device, aiming for level ground.
- Throw the Fire Suppression Solutions (FST) v4 at or near the base of the fire, taking care to keep the device away from persons in the area, if possible.
- After deploying the Fire Suppression Solutions (FST) v4, make sure all efforts are
   maintained to ensure a closed fire room to contain the aerosol. Do not ventilate at this point. Allow the Fire Suppression Solutions (FST) v4 time to do its job.
- Overhaul as usual and look for hotspots.
- The Fire Suppression Solutions (FST) v4 aerosol will continue discharging for approximately 35 seconds.