

KEEP A SHARPEYE ON YOUR SAFETY



# FLAME SIMULATOR

FOR ALL SPECTREX IR3 / MULTI IR FLAME DETECTORS

Providing foolproof, full loop testing of your fire detection system and up to 33% increase in testing distance to 12m



**ABSOLUTELY SURE!** 

To be fully secure against fire, flame detector self-testing is not enough. According to most local jurisdictional authorities you need to make sure that your entire fire detection system is fully intact. That means performing a full system loop test from the detector, through the controller, and up to the actual alarm notification. The only way to do so without lighting a fire is with an external flame simulator.

THE FS-1100 FIRE SIMULATOR is the essential complimentary tool to the self-testing capabilities of your SharpEye™ IR3 Flame Detectors. It gives you the ability to fully test the operational readiness of your fire detection system, bringing fire prevention safety to a higher level.

This image is for demonstration only



# Complete End-to-End Testing Using a Flame Simulator

In addition to verifying the flame detector's viewing window cleanliness and its internal electronic operation, the FS-1100 Flame Simulator performs essential end-to-end testing of the "full system loop". It does this by simulating a fire that actually triggers the detector.

### IN DOING SO IT TESTS THE INTACTNESS OF:

- All formats of alarm output:
- Relay activation
- 0-20mA
- · RS-485 ModBus
- HART
- The detector and the system's wiring terminals
- All cabling and connections
- The fire alarm panel functionality

### Ensure All Areas Are Safe

But it's not enough that your system is in working order. Since fire detectors are line-of-sight-devices they need a 100% unobstructed view of the fire detection area, at all times. Using the Spectrex Flame Simulator you ensure that no object is obstructing the field of view, and no material is on the detector's window lens.

### FS-1100 Flame Simulator at Work

The Spectrex flame simulator emits electromagnetic radiation in a unique sequential pattern corresponding to, and recognizable as fire by your SharpEye Flame Detector. This allows the detector to be tested under "real" fire conditions, without the associated risks of an open flame.

### **KEY BENEFITS:**

- ATEX/IECEx approved for use in hazardous areas
- Long-range flame detector activation from distances of up to 40ft (12m) a 33% increase compared to previous simulator models
- Highly portable
- · Creates easy access for testing detectors in hard to reach places, without the need for scaffolding
- Powered by rechargeable lithium-ion battery
- · Operates for at least 1,000 tests without recharging
- · Easy aiming using laser diode

## **About Spectrex**

Spectrex, a global leader in the Flame and Open Path Gas Detectors field, creates unique and reliable solutions to address the needs of high-risk, high-value industries, in terms of protection against fire and explosion. With years of proven experience, and exceptional technical know how, Spectrex detectors meet the most stringent international requirements for safety, reliability, quality, and performance.



## **Technical Specifications**

The Flame Simulator Kit, Part No. 380114-1 includes the FS-1100 Flame Simulator, battery, charger and user guide TM380002 in carrying case

Detector Types	<b>Detector Sensitivity Setting</b>	Testing Distance
40/40I, 40/40M	50ft (15m)	6.6ft (2m)
40/40UFI, 20/20CTIx	100ft (30m)	19.6ft (6m)
20/20I, 20/20SI, 20/20XI	200ft (60m)	40ft (12m)
20/20MPI, 20/20MI-1	33ft (10m)	6.6ft (2m) *20/20MPI only
	65ft (20m)	8.2ft (2.5m)
	100ft (30m)	19.6ft (6m)
	132ft (40m)	26.2ft (8m)
GENERAL SPECIFICATIONS	S	
Temperature range	-4°F to +122°F (-20°C to +50°C)	
Vibration protection	1g (10-50Hz)	
Activations between charges	1,000 max.	
ELECTRICAL SPECIFICATION	NS	
Power	14.8V (4 x 3.7V rechargeable lithium-ion battery)	
Maximum current	4A	
Battery capacity	2.2AH	
Charging time	2hr at 2A	
MECHANICAL SPECIFICATIO	NS	
Dimensions	9 x 7.3 x 5.35" (230 x 185 x 136 mm)	
Weight	5.5 lb (2.5 kg)	
Enclosure	Aluminum, heavy-duty copper-free, black zinc coating	
Explosion-proof enclosure	ATEX and IECEx approved	
	Ex II 2 G D	
	Ex d ib op is IIB + H2 T5 Gb	
	Ex ib tb IIIC T135°C Db	
	-20°C to +50°C	

Specifications subject to change

For more information view manual or website www.spectrex.net

### SPECTREX INC.

### Headquaters:

218 Little Falls Road Cedar Grove, NJ 07009, USA

Tel: +1 (973) 239 8398 Fax: +1 (973) 239 7614

spectrex@spectrex.net www.spectrex.net

#### YOUR LOCAL SPECTREX OFFICE:

### Texas (USA)

**USA** 

Mr. Jay Cooley, Regional Sales Manager

16203 Park Row, Suite 150 Houston, Texas 77084,

Tel: +1 (832) 321 5229 jay@spectrex.net

#### **Europe**

Mr. Ian Buchanan, Regional Manager 6 Applecross Road

Glasgow G66 3TJ, United Kingdom

Tel: +44 (0) 141 578 0693 ian@spectrex.net

### **Far East**

Mr. Deryk Walker, Regional Sales Manager 59 Fen Ji Hu, Danshui

Taipei County 25163, Taiwan (ROC)
Tel: +886 2 8626 2893

Tel: +886 2 8626 2893 Cel: +886 926 664 232 deryk@spectrex.net