

Specifications

Mechanical

Explosion Proof Enclosure:

NFPA (designed to meet)

Class I, Division 1 & 2 Groups B, C and D

Class II, Division 1 & 2 Groups E, F, and G

CENELEC (approved by Nemko No. Ex 96D424)

EN 50-014 & EN50-018

EEx d IIB T5, IP67

ATEX EX II 2G NEMKO 02ATEX 255

Electrical

Power: 8 VDC Max.

6 Rechargeable 1.2 VDC NiCd Batteries

Current: 2.5A Avg.

Charge 400mA for 14 Hours

Environmental

Temperature Range: -4° to 122° F

(-20° to 50° C)

Vibration Protection: 1g (10-50hz)

Physical

Dimensions: 11 x 10.1 x 3.9 in (292 x 258 x 100 mm)

Weight: 7.5 lb. (3.4 Kg)

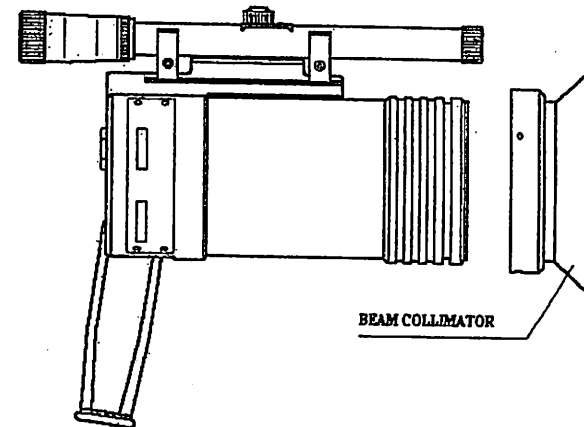
Range*

<u>Sensitivity</u>	<u>Standard</u>	<u>Extended Range</u>
50 ft (15 m)	3.8 ft (1.2 m)	7 ft (2.2 m)
100 ft (30 m)	7 ft (2.2 m)	14.5 ft (4.5 m)
150 ft (45 m)	10 ft (3.2 m)	22 ft (7m)
200 ft (60 m)	14.5 ft (4.5 m)	29 ft (9 m)

* The minimum distance from the detector is 50cm (20 inches).

* At extreme temperatures 15% Max. reduction in range.

Long Range IR³ Flame Simulator



Product Description

The SharpEye IR³ Long Range Flame simulator 20/20-310 is designed specifically for use with the IR³ flame detectors. The Flame Simulator emits IR radiation in a unique sequential pattern corresponding and recognizable by the IR³ detector as fire. This allows the IR³ detectors to be tested under real fire conditions without the associated risks of an open flame. There is a specially designed beam collimator model number 20/20-190 used for extended range.

SPECTREX INC.

218 Little Falls Road Cedar Grove, NJ 07009

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

Unpacking

In addition to the delivery form, there should be the following contents:

- Flame Simulator with built in batteries
- Battery charger
- Optional Beam Collimator
- Storage Case

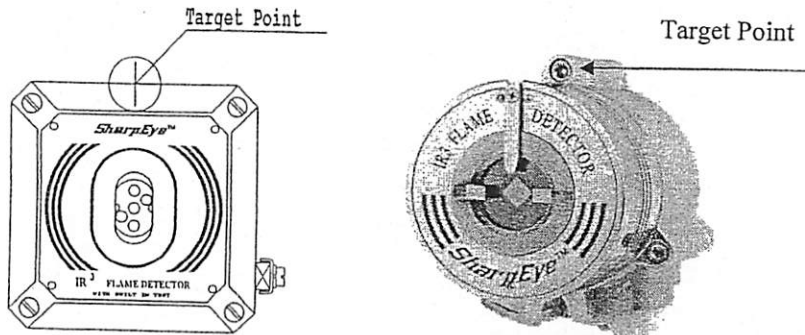
Operating Instructions

WARNING:

Do not open the Flame Simulator to charge the batteries or for any other reason in a hazardous area.

CAUTION:

The following test will simulate a real fire condition and may activate the extinguishing system or other alarms. If this is not desired, disconnect them before the test and reconnect after the simulation.



Follow these instructions to simulate a fire:

1. Aim the Flame Simulator towards the detector's "Target Point".
2. For testing keep a distance of at least 50cm (20 inches) from the detector.
3. Press the operation button once. Fire simulation will last for 20 seconds. The detector will send an alarm signal (solid red LED).
4. For another flame simulation a 20 second time lapse is required between tests.
5. Make sure the optical window is clean and keep the Flame Simulator in a safe place when not in use.

Battery Charging

The Flame Simulator uses NiCd batteries as a rechargeable power source. When the batteries are fully charged it will operate for at least 60 uses without recharging. An internal buzzer is sounded when the voltage from the batteries is lower than the required operational level.

1. Place the Flame Simulator on a table in a safe area.
2. Turn the sealed plug (next to the operation button) counter-clockwise with a suitable wrench.
3. Connect the battery charger.
4. Charge for a maximum of 14 hours.
5. Disconnect the charger.
6. Tighten the sealed plug clockwise.

Warning

Charge the simulator only when the battery is fully discharged. During activation of the flame simulator, buzzer activation indicates battery discharged.

EC Declaration of Conformity

Ref. No. 13999/20

The manufacturer or this established authorized representative in the community:

***SPECTREX INC.
218 Little Falls Road
Cedar Grove, N.J. 07009 USA***

We declare under our sole responsibility that the products listed below:

SharpEye IR3 Fire Detector	Model No's: <i>20/20-310</i>
SharpEye UV/IR Fire Detector	Model No's: <i>20/20-311</i>
SharpEye Single IR Fire Detector	Model No's: <i>20/20-312</i>
SharpEye Hydrogen Flame Detector	Model No's: <i>20/20-313</i>

Based on the EC-Type Examination Certificate:

EX II 2G

NEMKO 02ATEX255

Comply with the ATEX directive 94/9/EC, for Group II, Category 2,G, was certified by the Notified Body:

***Nemko AS
Gaustadalleen 30, 0314 Oslo, Norway***

Comply with Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014	1997 (Amendments A1 & A2 1999)
EN 50018	2000

We further declare that this product is in conformance with EMC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC, with the following harmonized norms to which conformity is declared:

EN 55011	1991
EN 50082-2	1994

Approved By:



Date: ***16 Jul 2006***

***Certification of Compliance
(C.O.C)***

Ref. No. 13999/20

We hereby certify, that all materials and/or parts furnished under the reference order, have been manufactured in accordance with your purchase order, applicable specifications, instructions and/or engineering drawings.

These units were functionally tested to our specifications and standards. Applicable test reports are on record in the inspection department file.

Description: ***Fire Simulator IR3***

Part No./Model No./Specification No.: ***20/20-310***

Serial No.(s): ***1770,1771***

Quantity: ***2***

Approved By:



Date: ***27 Jan 2013***

Spectrex Inc. - Quality Assurance

218 Little Falls Rd., Cedar Grove, NJ 07009 USA

Phone: +1(973)239-8398 Fax: +1(973)239-7614

Web-Site: www.spectrex.net Email: spectrex@spectrex.net

Factory Acceptance Test

IR3 Fire Simulator

Model: 20/20-310

Serial No.: 1770

Operational test with 20/20I, 20/20SIS, 40/40I Detector, 50 times with same battery:.....OK

Test distance without beam collimator - 4.5 meter:.....OK

Test distance with beam collimator - 9 meter:.....OK

Notes

Detector sensitivity position - 60 meter.

Operational test with 20/20MI-1 Detector, 50 times with same battery:.....OK

Test distance without beam collimator - 4.5 meter:.....OK

Test distance with beam collimator - 9 meter:..... OK

Notes

Detector sensitivity position - 40 meter.

Approvals

- ATEX EX II 2 G per EN 50014 & EN50018
EExd IIB T5 Temp = -20°C to +50°C
IP67 according to EN 60529

Nemko No.

Nemko 02ATEX255

Tested By:



Date: 27 Jan 2013