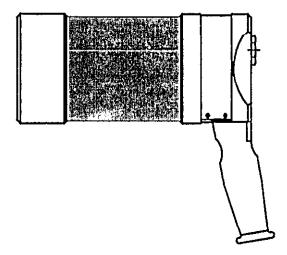
Long Range IR³ Fire Simulator



Product Description

The SharpEye IR³ Long Range Fire simulator 20/20-310 is designed specifically for use with the IR³ flame detectors. The Fire 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.



218 Little Falls Road Cedar Grove, NJ 07009 Tel: (973) 239-8398 Fax: (973) 239-7614 Long Range Triple IR Fire Simulator

Unpacking

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

- Fire Simulator with built in batteries
- Battery charger
- Optional Beam Collimator

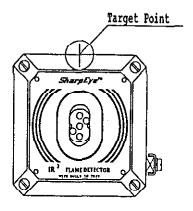
Operating Instructions

WARNING:

Do not open the Fire 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.



Page 2

Follow these instructions to simulate a fire:

- 1. Aim the Fire Simulator towards the detector.
- 2. Press the operation button once. Fire simulation will last for 20 seconds. The detector will send an alarm signal (solid red LED).
- 3. For another fire simulation a 30 second time lapse is required between tests.
- 4. Make sure the optical window is clean and keep the Fire Simulator in a safe place when not in use.

Battery Charging

The Fire Simulator uses NiCd batteries as a rechargeable power source. When the batteries are fully charged it will operate for at least 100 uses without recharging. An internal buzzer is souded when the voltage from the batteries is lower than the required operational level.

- I. Place the Fire 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.

Note: When the Fire Simulator is being charged operation is disconnected for safety.

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

Electrical

Power: 9 VDC Max.

6 Rechargeable 1.2 VDC NiCd Batteries

Current: 2.5A Avg.

Charge 400mA for 14 Hours

Environmental

Temperature Range: -40 to 1400 F

 $(-20^{\circ} \text{ to } 60^{\circ} \text{ C})$

Shock 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*

Sensitivity	Standard	Extended Range
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 (7.0 m)
200 ft (60 m)	14.5 ft (4.5 m)	29 ft (9 m)

^{*} At extreme temperatures 15% Max. Reduction