

keep a **SharpEye™** on your safety



The 40/40 Series

Flame Detectors and Accessories

The latest SharpEye 40/40 Series Flame Detectors from Spectrex provide the most comprehensive protection against hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires. The detectors provide early warning of fires at long distances with high immunity to false alarms.

The latest 40/40 series are the highest performance, most cost-effective flame detectors currently on the market. New features include a stainless steel housing with a heated window, to eliminate condensation and icing; HART capabilities for digital communications; lower power requirements; and a compact, lightweight but highly durable and weather resistant design.

The 40/40 flame detector series is highly reliable, with a newly extended 5-year warranty period and compliance with the IEC 61508 Safety Integrity requirements of SIL2.

Spectrex, a leader in the flame and gas detection industry for over 15 years, provides products that are fully certified and employed around the world in a wide range of industrial and commercial facilities.

40/40M

Multi IR Flame Detector

Detects hydrocarbon and hydrogen flames at long distances and provides the highest immunity to false alarms with its multi spectrum design. The 40/40M can detect a gasoline pan fire at 215 ft (65m), or a hydrogen flame at 100 ft (30m) in less than 5 seconds.

40/40I

Triple IR (IR3) Flame Detector

Detects hydrocarbon fuel and gas fires at long distances and provides the highest immunity to false alarms with its triple spectrum design. The IR3 can detect a 1ft² (0.1m²) gasoline pan fire at 215 ft (65m) in less than 5 seconds.

40/40L-LB

UV/IR Flame Detector

Models 40/40L (& LB) – A dual UV and IR detector, comprising an IR sensor that operates at a wavelength of 2.5-3.0 μm and a UV solar blind sensor, the 40/40L detects hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires. The UV sensor has a special logic circuit that prevents false alarms from solar radiation.

40/40UFL

Ultra Fast UV/IR Flame Detector

The new SharpEye UV-IR High-Speed Optical Flame detector 40/40UFL is designed to meet two major requirements. Fast Response Time (less than 20 msec) and High Reliability (immunity to False Alarm). The 40/40UFL detects hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires.

40/40L4-L4B

UV/IR Flame Detector

Models 40/40L4 (& L4B) - A dual UV and IR detector, comprising an IR sensor that operates at a wavelength of 4.5 μm and a solar blind UV sensor, the 40/40L detects only hydrocarbon-based fuel and gas fires.

40/40U-UB

UV Flame Detector

Detects hydrocarbon-based fuel and gas fires, invisible hydrogen flames and fires from hydrides, ammonia, silane and other organic materials with its unique UV solar blind sensor. The 40/40UB model includes a Built-in-Test (BIT) feature.

40/40R

Single IR Flame Detector

Detects hydrocarbon-based fuel and gas fires, comprising an IR sensor working at 4.5 μm wavelength for maximum sensitivity and provides immunity to false alarms from IR sources such as sunlight and IR projectors.

40/40UFI

Ultra Fast IR3 Flame Detector

An Ultra-Fast multi-spectrum IR3 Flame Detector, detects hydrocarbon fuel and gas fires at long distances, and is especially designed to detect an explosive 1 ft (0.3m) diameter gas cloud explosion in max. 50 msec at 66 ft (20m) with the highest immunity to false alarms. The 40/40UFI IR3 can also detect a 1 ft² (0.1m²) gasoline/n-Heptane pan fire at up to 300 ft (90m).

40/40 SERIES ACCESSORIES



Long Range Flame Simulators

Spectrex Flame Simulators will 'proof' test our flame detectors to verify reliable operation of detector, its outputs and the control system loop without the need for a real flame. No need for expensive scaffolding and other access problems – operates at distances up to 39.3ft/12m from detector when used with collimator attachment.

PN FS-1100 for 40/40I, 40/40UFI

PN FS-1200 for 40/40U-UB, L-LB, L4-L4B & UFL

PN FS-1400 for 40/40M

See *Flame Simulators data sheets* for more details



Tilt Mount

The Tilt Mount is an adjustable mounting bracket to allow the detector to be oriented towards the intended fire detection area to maximize coverage.

PN 40/40-001



Duct Mount

The Duct Mount allows flame detection in areas where high temperatures exist or in cases where the detector cannot be installed inside the area. It comprises a special duct arrangement with specific optical window to allow installation in high temperature duct applications. The mount can be used with all Spectrex 40/40 Series flame detectors.

PN 777650



U-Bolt/Pole Mount

The U-bolt mount is available to facilitate either 2" or 3" pipe mounting.

Material: Stainless steel

PN 789260-2 - Pipe 2" Version

PN 789260-1 - Pipe 3" Version



Air Shield

The special Air Shield, developed for SharpEye optical flame detectors, allows their installation under tough environmental conditions where they may be exposed to oil vapors, sand, dust and other particulate matter.

PN 777650



Weather Protector

The Weather Protector is designed to protect the detector from rain and snow and direct extreme temperatures from the sun.

PN 777263 Plastic (ABS conductive), red

PN 777163 Stainless steel, red epoxy



USB RS485 Harness Kit

The USB RS485 Harness Kit with RS485/USB converter, used with Spectrex Host software, enables the user to connect to any available PC or laptop to re-configure settings or perform diagnostics on all 40/40 series flame detectors

For more details, refer to manual TM777050.

PN 794079