HF-24 ULTRAVIOLET FLAME DETECTOR

APPLICATION
The HF-24 is suited for use wherever there is a need for automatic detection of fires which can develop quickly or where contents have great value.

Suggested applications include:
- Petroleum Storage
- Photographic or Film Storage
- Computer Rooms
- Print Shops
- Museums

The HF-24 is not a substitute for smoke or heat detectors, but is an added level of protection against fast flaming fires only.

There is no set area for which the HF-24 Ultraviolet Detector is able to cover. The reason is that the size of the fire and the distance from this fire to the detector all affect how the detector will respond. There is one non-variable, however, and that is very small fires must have a duration of at least 7-15 seconds if within 12 feet, 20-30 seconds at 25 feet.

OPERATION
The HF-24 uses an ultraviolet detector tube which absorbs very weak ultraviolet light such as that emitted from a flame. This is detected as a train of discharge pulses creating a current. The electronic circuitry in the detector body translates this action as an alarm signal. There is a counter circuit which prevents the alarm from occurring from one-shot ultraviolet light such as lightning or cosmic flares. Additionally there are circuit refinements which limit the detection of only wave lengths from 1850 to 3000 angstroms thus ignoring visible and infrared light.

SPECIFICATIONS
Rated Voltage: 17.6 - 27.7 VDC
Working Voltage: 15 - 30 VDC
Normal Current: 200mA @ 24 VDC
Alarm Current: 250mA Maximum
Response to Ultraviolet: 1850 - 3000 Angstrom

Ambient Temperature: 14° to 122° Fahrenheit (-10° C to +50° C)

Mounting: HSC-4R, HSB series, NS4 series, NS6 series & HSC-xxx L series bases

Color: Ivory ACS

Specifications subject to change without notice.

See Reverse Side for Detection Range Graph and Wiring Diagram.

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DETECTION RANGE

A) Area of Detection

Ceiling Height

8m
7m
6m
5m
4m
3m
2m

Floor

#1: Flame from a candle or lighter
#2: Flame from a wad or newspaper, burning flame

WIRING DIAGRAMS

NS Series and HSC Series Base

HSC SERIES

COMPATIBLE
UL LISTED
CONTROL PANEL

PANEL POWER SUPPLY

NS6 SERIES

LISTED END OF LINE DEVICE

NS4 SERIES

HSB-2 Wire

UL LISTED CONTROL PANEL

PANEL POWER SUPPLY

NEGATIVE

16mA MAX. OUTPUT

16mA MAX. OUTPUT

CURRENT LIMITED AT 24VDC