



FS-1010
August 3, 2021

FS-2 FLAME SIMULATOR USER'S GUIDE



DESCRIPTION

The FS-2 Flame simulator provides the means to test Fireye Flame scanners sensitive to UV or IR light energy. This can be used for all Fireye screw on axial flame scanner like Insight I, Insight II, Insight 4, Phoenix Series 2, 65UV5, 45UV5, and (48PT2 and UV1A using a pipe fitting 1" to ½" adaptor, not included).

FS-2 SPECIFICATIONS:

Supply Voltage:	85 ~ 305VAC , 47 ~ 440Hz
Power Consumption:	85mA maximum without load on the external 24VDC 235mA maximum with a 300mA load on the external 24VDC
Output Voltage:	24VDC 900mA (500mA Fuse on panel)
IR Source:	940nm and 1300nm
IR Frequencies:	Selectable frequencies: 23Hz, 46Hz, 70Hz, 101Hz and 140Hz
IR Intensity	Variable
UV Source:	185nm to 400nm
UV Frequencies:	Selectable frequencies: 23Hz, 46Hz, 70Hz, 101Hz and 140Hz
Temperature Rating:	Operating : 0 to 50°C Storage : -20°C to 80°C
Humidity:	0% TO 85% R.H. Non-condensing.
Protection Category:	Indoors use only, IP20
Unit Dimensions:	Height: 7.25", Width: 6.63", Depth: 5"
Construction:	Plastic panel
Shipping Weight:	Approx. 2.2 lbs. (1.0 Kg)



WARNING: The UV source may be harmful to the eyes: Do NOT look at it directly at the UV source. The users of this device should wear the proper UV blocking eye protection.

WARNING: The UV light may generate ozone so do NOT use this device in confined spaces. Use in well ventilated areas only!

WARNING: This UV source operates at high voltage. Do not place fingers or metal object into UV source scanner mounting tube. Potential Shock hazard!

USING THE TESTER

The Scanner under test is mounted on the light source pipe. If the scanner under test requires 24 VDC power, connect the appropriate lead to the 24 VDC source on the front face of the tester. See the appropriate product bulletin for power connection information. If scanner under test receives its bias from the flame safeguard unit, the scanner must be connected to the appropriate flame safeguard unit in conjunction with the appropriate Fireye product tester.

FIGURE 1.





Depending on the scanner type, turn on the appropriate UV or IR light source and adjust the frequency and or intensity to achieve a reasonable level of source to conduct level threshold testing or scanner frequency respond testing. Note, some scanner need to go through training / learn on phase to properly test the scanner. Some scanners are simple threshold type and just need the presence of the source (tuned on) of the absence of a source (turned off) to test the scanner.



NOTE: The FS2 Flame Simulator is designed for intermittent testing of Fireeye flame scanners. It is therefore recommended to use FS2 for periodic operation and not leave the unit powered for extended periods / continuously. Periodic usage extends the life of the light emitting devices used in the product to simulate UV. We recommend 1 to 2 hours of testing at a time to maximize life.



NOTICE

When Fireye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireye warranty, as stated in its General Terms and Conditions of Sale, pertains only to the Fireye products and not to any other equipment or to the combined system or its overall performance.

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