



SimaFlame

Flame & Milliamp Tester

The EclipseSimaFlame is a multifunctional tester that simulates flame rod or UV scanner flame signals to all major brand combustion safeguard controls. It also functions as a current loop checker. SimAflame provides a variable 4-20 milliamp output and can read 4-20mA inputs at 5 signal levels indicated by lights on the front face. These functions make this tool ideal for troubleshooting combustion control systems, including the temperature control loop.

The unit is powered by 2 standard 9-volt batteries and has 2 separate connector terminals for use with standard hook-up wire. One connector is for the milliamp output and input functions and the other connector is for flame simulation. Two control knobs allow continuous adjustment of the milliamp output level and the flame signal intensity. A battery light illuminates when the switch is on and the battery power is sufficient for proper operation. The flame rod (FR) function does not use the batteries.



Part Number 49004

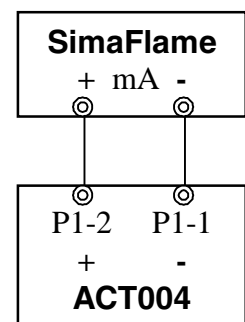
SPECIFICATIONS

POWER:	Two 9V Batteries, type 1604A
TEMPERATURE:	0°F to +120°F
MILLIAMP INDICATOR ACCURACY:	5%
MAXIMUM CURRENT LOOP RESISTANCE:	300 Ohms for 20mA
CURRENT LOOP INPUT RESISTANCE:	250 Ohms
DIMENSIONS:	4" H x 2-7/8" W x 2-3/16" D
WEIGHT:	10 ounces with batteries
CASE MATERIAL:	Phenolic Plastic

OPERATION

Milliamp Output (Current Source)

Connect wires from the +mA terminal to the device + input connector and the -mA terminal to the device - input connector. Be sure all external wires are disconnected from the device. Turn the selector switch to the OUT position (left). Adjust the 4-20mA output knob while observing the 5 signal level lights. When finished testing, turn the switch to the center off position to prevent battery drain.



OPERATION (Continued)

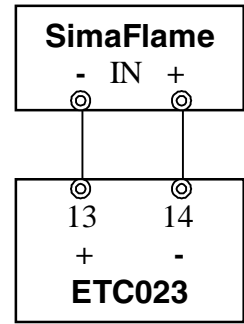
Milliamp Input (Current Read)

Connect wires from the – IN terminal to the device + output connector and the + IN terminal to the device – output connector. Turn the selector switch to the IN position (right). Adjust the device and observe the 5 signal level lights. The light will turn on when the device current is equal or above the light value.



WARNING:

Flame simulation must only be used for troubleshooting and testing by trained and qualified technicians experienced in combustion control. The flame simulator must not be used for the operation of a burner.



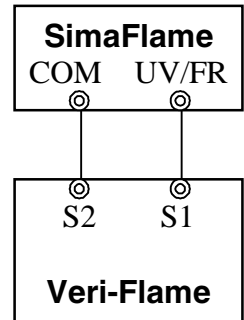
Flame Rod Simulation

Connect wires from the COM terminal to the flame amplifier common or earth connector and the UV/FR terminal to the flame amplifier flame rod connector. Be sure all external flame sensor wires are disconnected from the flame amplifier. Keep the switch in the center FR position (Bat.Off) and adjust the FLAME SIGNAL knob until the flame amplifier responds.

UV Scanner Simulation

For Eclipse, Fireye, PCI, Siemens/Landis: Connect wires from the COM terminal to the flame amplifier common connector and the UV/FR terminal to the flame amplifier UV connector. Be sure all external flame sensor wires are disconnected from the flame amplifier. Turn the selector switch to either UV position (left or right) and adjust the FLAME SIGNAL knob until the flame amplifier responds.

For Honeywell: The connection polarity must be reversed so that the UV/FR terminal attaches to the G connection and the COM terminal attaches to the UV input connection.



Units tested with the flame simulation include:

Eclipse models Veri-Flame, Peek-a-Flame, Bi-Flame, Multi-Flame

Fireye models MicroM

Honeywell series 7800 (R7849A and R7847C amplifiers)

Protection Controls (PCI) models with SS100A Flame Pak

Siemens / Landis models LFL



Eclipse Combustion



Offered By:

Power Equipment Company
2011 Williamsburg Road
Richmond, Virginia 23231
Phone (804) 236-3800
Fax (804) 236-3882

www.peconet.com