Cirrus HYBRID
Air Sampling Fire and Smoke Detection

Cirrus Hybrid Maintenance Guide

Cirrus Hybrid Site Details

Hybrid Series Single and Multiple Pipe Detectors
Refer to the Hyrbid Engineers Manual for more details

Site Name:_____ Date:_____

Address: _____ Tech:_____

_____

UPS-24 Power Supply: Yes☐   No☐

Number of pipes on Detector:_____

Detector Serial Number: _____

Display Serial Number:_____

Vacuum Pump Serial Number:_____

RS485 Network: Yes☐ No☐   TCP/IP Interface: Yes☐   No☐

Network Settings: Network #:____   Node #: ____

Number of Detectors on Network: _____

Number of Displays on Network:_____

Firmware Version: _____

Maintenance

☐ Semi-Annual:
The following maintenance procedures must be done on a semi-annual basis by a Safe Fire Detection authorized service technician.

☐ Check event log to determine any abnormalities.
☐ Inspect Pipe Network
☐ Replace water cartridge #61986SVRKT
☐ Check Alarm levels are as per specification. Verify that there is no change.
☐ Check the Sampling System airflow readings. Verify that there is no change.
☐ Check inlet integrity
☐ Check Power Supply
☐ Check Chamber LED Brightness

☐ Annual:
The following maintenance procedures must be done on an annual basis by a Safe Fire Detection authorized service technician.

☐ Cloud Chamber Filters* included with Part#:61986SVRKT
☐ Inspect Pipe Network
☐ 3 Stage Inline Filter Medium Part# RP7127
☐ Check the Sampling System airflow readings. Verify that there is no change.
☐ Replace water cartridge #61986SVRKT
☐ Check that all unit tubing is properly connected with no kinks.
☐ Check event log to determine any abnormalities.
☐ Check Alarm and Gain levels are as per installation. Verify that there is no change.
☐ Check transport time at the furthest Sampling Point on each pipe. Verify that there is no change.
☐ Inspect and Clean/Replace if necessary the inline filters
☐ Inspect and Clean/Replace if necessary the flow thermistors
☐ Inspect and Clean/Replace if necessary the cloud chamber filters/optics

AIRFLOW - Accept Airflow before recording values below.

	Current Airflow	% Fault Level	Ignore	Accepted %
Pipe 1			☐	
Pipe 2 (If used)			☐	
Pipe 3 (If used)			☐	
Pipe 4 (If used)			☐	

RECORD INPUT ASSIGNMENTS
Input Assignments

I/P 1:	☐ Normally Closed
I/P 2:	☐ Normally Closed
I/P 3:	☐ Normally Closed

RECORD OUTPUT ASSIGNMENTS
Zone One - Output Assignments

O/P 1:	Delay:	sec.	☐ Normally Closed
O/P 2:	Delay:	sec.	☐ Normally Closed
O/P 3:	Delay:	sec.	☐ Normally Closed
O/P 4:	Delay:	sec.	☐ Normally Closed
O/P 5:	Delay:	sec.	☐ Normally Closed

GAIN (SENSITIVITY) SETTINGS

PPP Alarm Level defaults:
Pre-Alarm - 0.5% **Fire 1** - 1% **Fire 2** - 1.5% and **Fire 3** - 2%.

Hybrid/CCD Alarm Level defaults:
Pre-Alarm - 300 **Fire 1** - 400 **Fire 2** - 500 and **Fire 3** - 600

Pipe One -

	LEVEL:
PRE-ALARM:	
FIRE 1:	
FIRE 2:	
FIRE 3:	

Time Zoning: ☐

Latching:

	Start Time		
	A	B	C
Mon.			
Tue.			
Wed.			
Thur.			
Fri.			
Sat.			
Sun			

Pipe Two -

	LEVEL:
PRE-ALARM:	
FIRE 1:	
FIRE 2:	
FIRE 3:	

Time Zoning: ☐

Latching:

	Start Time		
	A	B	C
Mon.			
Tue.			
Wed.			
Thur.			
Fri.			
Sat.			
Sun			

Pipe Three -

	LEVEL:
PRE-ALARM:	
FIRE 1:	
FIRE 2:	
FIRE 3:	

Time Zoning: ☐

Latching:

	Start Time		
	A	B	C
Mon.			
Tue.			
Wed.			
Thur.			
Fri.			
Sat.			
Sun			

Pipe Four -

	LEVEL:
PRE-ALARM:	
FIRE 1:	
FIRE 2:	
FIRE 3:	

Time Zoning: ☐

Latching:

	Start Time		
	A	B	C
Mon.			
Tue.			
Wed.			
Thur.			
Fri.			
Sat.			
Sun			

CAUTION:
Please use caution when igniting materials for system testing and have a fire extinguisher on hand. Always use every safety procedure. Be sure suppression systems have been deactivated prior to any testing and all safety precautions have been taken. Inform personnel and alarm company prior to any testing. After completing testing, be sure to notify personnel, reactivate suppression systems, and bring all systems back online.

SYSTEM TESTING
Test the response times by introducing smoke into the furthest hole on each zone. For units with Display, or when using PC software, response of detector can be viewed using the Real Time Graph.

NOTE:
Be sure to use the "Hold Zone" function on the zone you are testing if applicable.

Do not use Synthetic or Canned Smoke for any testing.

Methods of Testing:
Veri-Fire or Cotton Wick Smoke

NFPA Suggested Method
Test the air sampling network transport times from the furthest sample point or test point on every pipe. Per NFPA 72, transport times must not exceed 120 seconds. For NFPA 76, 60 Seconds.

There are two methods. You can use a Veri-Fire (smokeless) or a Cotton Wick (smoke) at the furthest sample or test point. Activate the Veri-Fire or place the Cotton Wick at the sample or test point until the detector senses the event. When the bar-graph reacts (not necessarily an alarm) and the percentage rises (even slightly) record the time, stop the test and remove the test device from the sample/test point.

NOTE:
To perform a successful transit time test, it is important that you see the overheat/smoke enter the pipe before you start timing. Continue introducing smoke until an increase in particle level is indicated.

	Time to first indication of particle level increase	Time to first alarm indication
Pipe 1	sec.	sec.
Pipe 2 (If used)	sec.	sec.
Pipe 3 (If used)	sec.	sec.
Pipe 4 (If used)	sec.	sec.

Customer Signature:_____

Print Name & Title:_____

Company Name:_____

Address:_____

City, State, Zip:_____

Phone:_____

Date:_____