Cirrus HYBRID

Air Sampling Fire and Smoke Detection

Cirrus Hybrid Start-Up Guide

Cirrus Hybrid Site Details

Photocopy the following pages to use for system commissioning.

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: _____

Startup

BEFORE APPLYING POWER TO THE DETECTOR, EXAMINE THE SAMPLING SYSTEM.

1) SAMPLE PIPE NETWORK:

- ☐ Piping specified correct for installation.
- ☐ Verify that ID size of pipe matches the flow calculations.
- ☐ Check for crimps, corrosion, or breaks in sample pipe.
- ☐ Proper number of sample points per detector or zone.
- ☐ Proper size SHMs used
- ☐ Proper installation. (i.e. correct pipe size, etc.)
- ☐ Sampling pipe properly anchored.
- ☐ Pipe labels placed on sampling pipe per NFPA

2) PRELIMINARY PANEL CHECK OUT:

- ☐ Remove all shipping material.(Exhaust and Fan plugs)
- ☐ Check for kinked tubing (the clear plastic tubes inside unit).
- ☐ Check for debris or loose material in pipe.
- ☐ Insure inlet ports are covered during all phases of
- ☐ construction until final connection.
- ☐ Check wiring to terminal strips.
- ☐ Check electrical connectors for proper mating.

3) WATER BOTTLE

- ☐ Install and connect the Water Cartridge using distilled water only.

4) APPLYING POWER

a) Apply DC power to unit, power LED will turn on.
b) Unit will perform an initializing sequence.
c) After initializing, perform Commissioning via PC or LCD display.

5) COMMISSIONING

For further information, please refer to the Engineers Manual supplied with each detector.

5.1) SET AIRFLOW

5.2) 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)			☐	

5.3) RECORD INPUT ASSIGNMENTS

Input Assignments

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

5.4) 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

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:_____

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