# VFR-500

## **Conventional Releasing Panel**

Program Templates





## **Programming**

## **VFR-500 Standard Program Information**

The VFR-500 has 30 standard program templates which are detailed on the following pages. Selecting one of these programs will automatically program every function of the panel except custom zone and banner messages.

NOTE:

The release soak time defaults to continuous for all programs.

In the Agent suppression programs, the predischarge timer for detectors defaults to 60 seconds. The predischarge timer for manual stations defaults to 30 seconds. The abort mode defaults to UL.

Default programming allows the activation of a zone programmed as, Manual Release, to override any cross zoning and abort to activate the release output it is mapped to. Abort override can be changed in the panel programming by allowing manual release zones to be aborted.

Default programming does not allow zones programmed as Manual Release to be aborted. This can be changed in the panel programming.

## **VFR-500 Standard Program Information**

Press ENT to enter program mode.

Scroll down to see the various menu options. A blinking arrow — indicates the current option.

Users can also simply enter the option number. See the Menu Tree for a complete list and location of options Follow the on-screen instructions

NOTE: Some options have YES/NO selections. Use the up/down arrows to change selection.

To enter one of the standard programs:

- 1. Press ENT
- 2. Enter 6 or scroll down to PROGRAMMING, indicated by a flashing → and press ENT.
- 3. Enter the password. Factory default password is, 1111.
- 4. Press 1 OR ENT to select PRORGAM NUMBER.
- 5. Enter the desired program number
- 6. Press ENT
- 7. Press 1 to accept the new program
- 8. Press ENT to accept the change and update the panel

All zones and outputs are now programmed and all mapping of zones to correlating outputs is complete.

For abort functionality (available in Agent Release Mode only), pre-discharge or soak timers are required, repeat steps 1-3. Then select the desired option and follow the on-screen instructions.

Modifications to standard programs can be easily accomplished using the Viking programming tool.

The following is an explanation of how the various programs operate and information about the types of devices that are to be connected to the input (Initiating) zones and output (NAC) circuits.

If none of the standard programs are acceptable for the operation required, selecting program 0 allows the user to create a custom program. Standard programs can also me modified to create custom programs. Simply select the standard program that is closest to the operation needed. Then selecting program 0 allows the user to make changes to the previously selected program as necessary.

If zone characteristics need to be modified, including latching, output paterns, manual/auto silence behiavior. Repeat steps 1-6 above and select program 0. After the panel restarts to edit zone characteristics repeat steps 1-3 and select 6 ZONES.

The water based extinguishing programs are numbered 1-19 and 30-35. The agent extinguishing programs are numbered 20-24.

To enable Class A on zones 3 or 4:

- 1. Install IDC-6 with address 16 as described on pg. 3-23
- 2. Press ENT
- 3. Enter 8 or scroll down to PANEL SETUP, indicated by a flashing  $\rightarrow$  and press ENT
- 4. Enter the password. Factory default is 1111.
- 5. Enter 2 or scroll down to LEARN MENU, indicated by a flashing  $\rightarrow$  and press ENT
- 6. Press 1 OR ENT to select LEARN ALL

The panel will search for connected devices

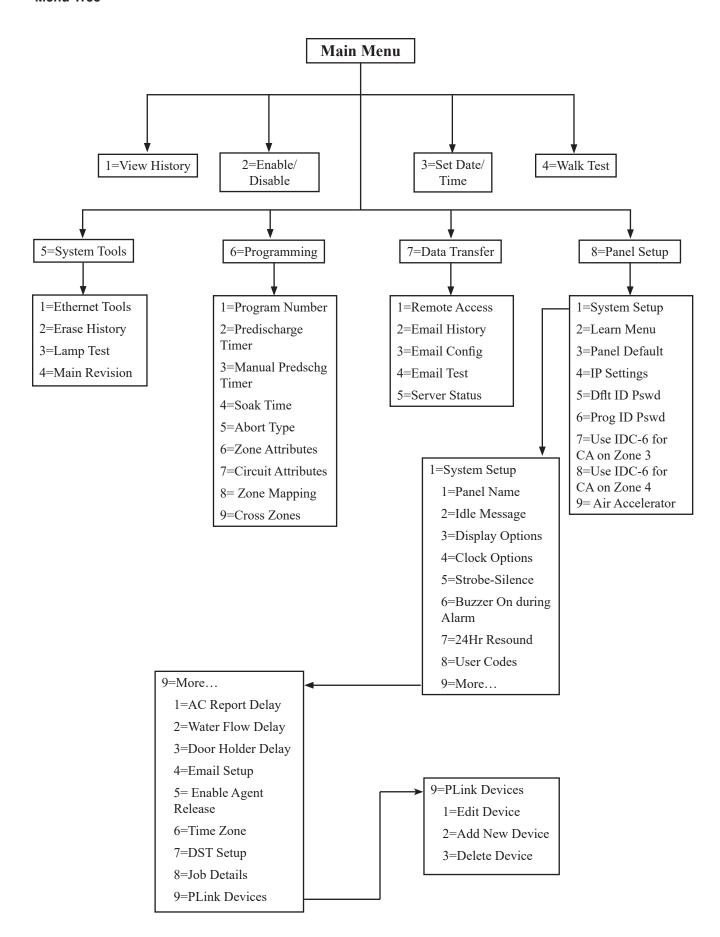
7. Press 1 or ENT to select P-LINK FOUND to review devices

### Addr 16 (IDC-6)

- 8. Press ESC to exit learn all menu
- 9. Press 1 to Accept the new devices
- 10. Press ENT to accept the change and update the panel
- 11. Press ENT
- 12. Enter 8 or scroll down to PANEL SETUP, indicated by a flashing → and press ENT
- 13. Enter the password. Factory default is 1111.
- 14. Enter 7 or scroll down to IDC6 F/CA ZONE 3, indicated by a flashing → and press ENT
- 15. Press any key to accept
- 16. Press ESC to exit PANEL SETUP menu
- 17. Press 1 to Accept
- 18. Press ENT to accept the change and update the panel

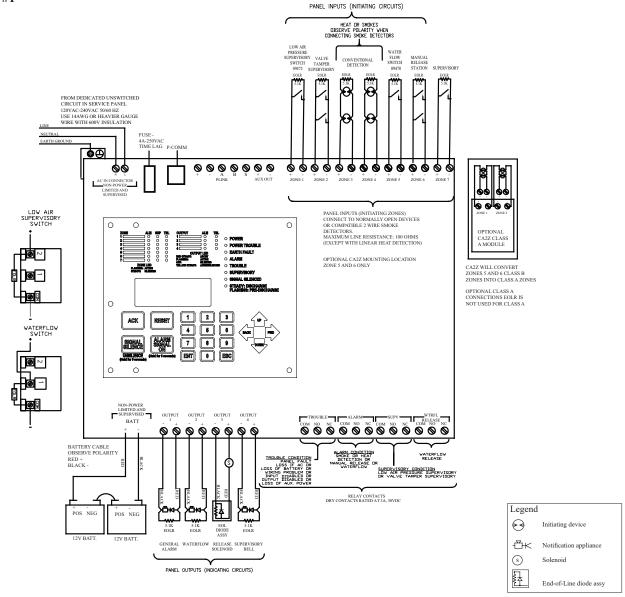
Repeat steps 11 – 18 using 8 or scroll down to IDC6 F/CA ZONE 4 to enable class A for zone 4. Zone 3 class A wiring to INPUT 3 / INPUT 4 on IDC-6 address 16 as shown on page 3-24. Zone 4 class A wiring to INPUT 5 / INPUT 6 on IDC-6 address 16. When using standard program templets IDC-6 address 16 INPUTS 1 and INPUT 2 are unused.

#### Menu Tree



## **Wiring Diagram Programs**

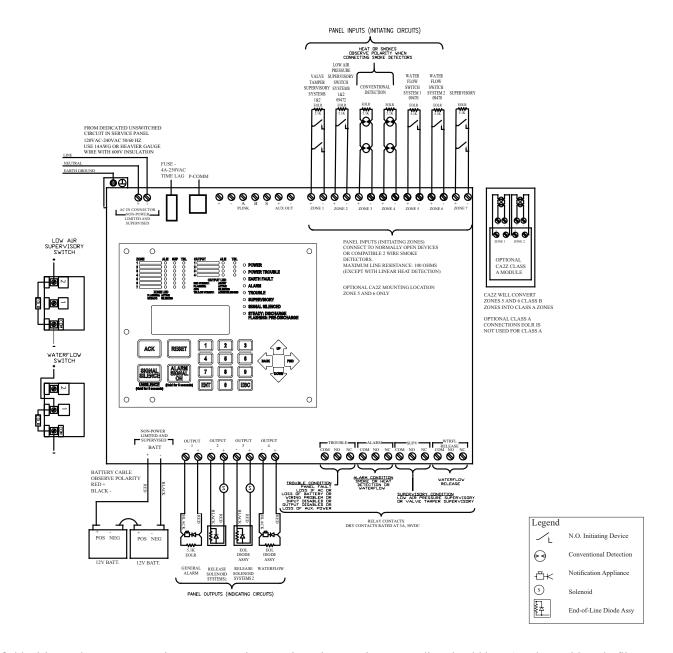
#### PROGRAM #1



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 1 to change to program 1. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

			PROGRAM #1								
		For C	One Sprinkler Sy	ystem							
Viking Sprinkler	2 Release	1. Single Interlo	cked Preaction	System with Ele	ctric Release						
System Types	Zones,	2. Deluge Syste	m with Electric	Release							
	Waterflow Zone, &	3. Non-Interloc	ked Preaction S	ystem with Elect	ric Release						
	Manual Release Zone	4. Double Interl	ocked Preaction	System with El	ectric/Pneum	atic Release					
ZONES (Initiating Circuits)											
OUTPUTS	#1	#2	#3	#4	#5	#6	#7				
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	Conventional Detection Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone					
#1 General Alarm			X	X	X	X					
#2 Waterflow					X						
#3 Release Solenoid			X	X		X					
#4 Supervisory Bell	X	X					X				
	1		ATION DESCRI								
Inputs:	<del>!</del>	Detection zones,				Supervisory	zones				
Outputs:		n, 1 Waterflow Al									
Operation:	1	Activation of Conventional Detection zone #3 or #4 or Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1 (General Alarm)									
	Activation of W	aterflow zone #5	will activate ou	tput #2 (Waterflo	w) and outpu	ıt #1 (Genera	al Alarm)				
	1	ow Air Superviso put #4 (Superviso	•	e Tamper Super	visory zone #	2 or Supervi	sory zone #7				

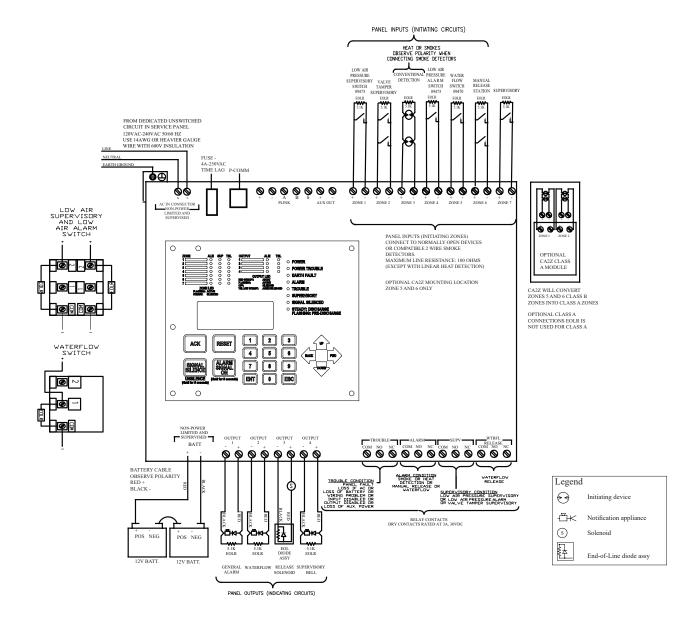
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 2 to change to program 2. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PI	ROGRAM #2		,						
	For Two Spr	inkler Systems O	perating Indepe	endantly From E	ach Other						
Viking Sprinkler	2 Split	1. Single Interlo	cked Preaction	System with Ele	ectric Releas	e					
System Types	Release	2. Deluge System	m with Electric	Release							
	Zones and 2 Waterflow	13 Non-Interlocked Preaction System with Electric Release									
	Zones										
ZONES (Initiating Circuits)											
	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS (Indicating Circuits)	Valve Tamper Supervisory Zone for Systems 1 & 2	ory Supervisory Detection Detection Zone for Zone for Zone for Zone for System 1 System 2									
#1 General Alarm		X X X X									
#2 Release Solenoid #1			X								
#3 Release Solenoid #2				X							
#4 Waterflow					X	X					
I	2.6		ION DESCRIP								
Inputs: Outputs:	<del></del>	Detection zones, n, 1 Waterflow Al			ory zones						
Operation:	<del></del>	onventional Dete			ut #2 (Relea	se Solenoid ‡	#1) and output				
	Activation of Conventional Detection zone #4 will activate output #3 (Release Solenoid #2) and output #1 (General Alarm)										
	Activation of Waterflow zone #5 or #6 will activate output #1 (General Alarm) and output #4 (Waterflow)										
		alve Tamper Supe supervisory troub		l, Low Air Supe	rvisory zone	#2 or Super	rvisory zone				

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #2 (Release Solenoid) and output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



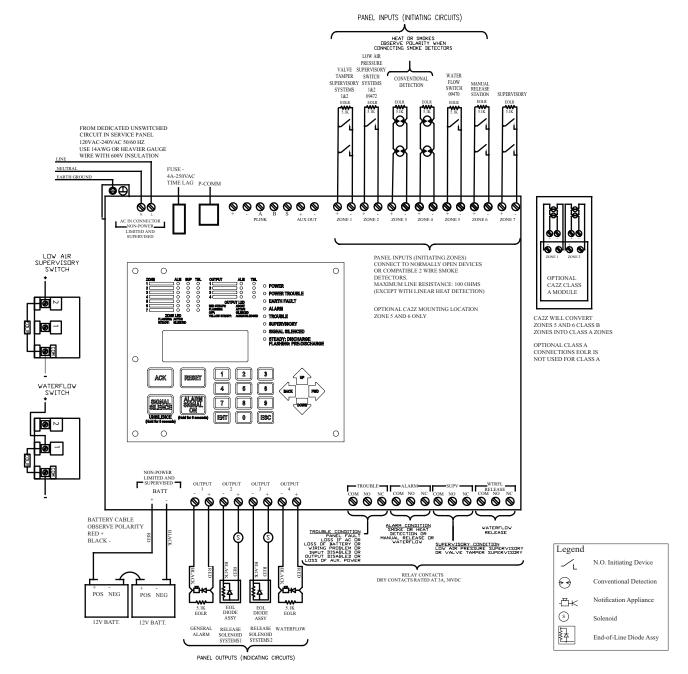
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 3 to change to program 3. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

			PROGRAM #	<b>‡3</b>						
	F	or One Sprinkle	er System							
Viking Sprinkler System Types	2 Cross Release zones, Waterflow zone, and Manual Release zone	1. Double Inte	. Double Interlocked Preaction System with Electric/Pneu-Lectric Release							
			ZONES (Initia	ting Circui	ts)			Software Zone		
OUTPUTS (Indicating	#1 #2 #3 #4 #5 #6 #7									
Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone	Release Type Zone		
#1 General Alarm		X X X								
#2 Waterflow		X								
#3 Release Solenoid			XX	XX		X		XX*		
#4 Supervisory Bell	X	X		X			X			
I	10 - 1 10		RATION DESCR		A 1	1 337 4 . (1)	1 1 1	1		
Inputs:	1 Conventional D Release zone, 3 S			I Low Air	Alarm zone,	1 waterno	ow zone, i Mai	ıuaı		
Outputs:	1 General Alarm,	1 Waterflow, 1	Release Solenoi	d, 1 Superv	isory Bell					
Operation:	Simultaneous acti activate output #3									
	Activation of Cor	ventional Detec	ction zone #3 wi	ll activate	output #1 (G	eneral Ala	rm)			
	Activation of Lov	v Air Alarm zon	e #4 will activat	e output #4	(Supervisor	ry Bell)				
	Activation of Wat	terflow zone #5	will activate out	put #2 (Wa	terflow) and	output #1	(General Alar	m)		
	Activation of Mar Alarm)	Activation of Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1 (General Alarm)								
	Activation of Lov operate output #4			e Tamper S	Supervisory 2	zone #2 or	Supervisory zo	one #7 will		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

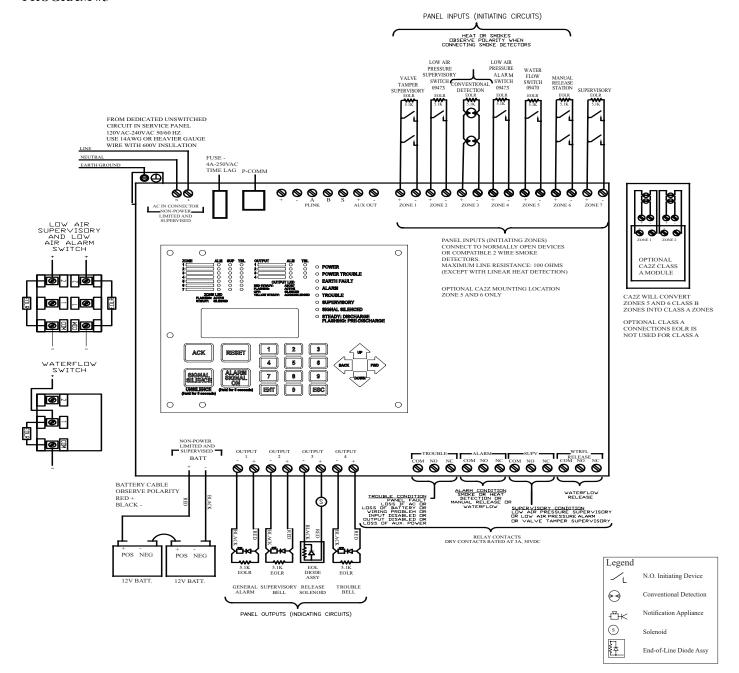
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 4 to change to program 4. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PR	OGRAM #4								
	For	Two Sprinkler Syst	tems - Operating	Simultaneously							
Viking Sprinkler	2 Dual Release	1. Single Interlock	xed Preaction Sys	stem with Electri	ic Release						
System Types	Zones,	2. Deluge System	with Electric Re	lease							
	Waterflow Zone, and Dual	3. Non-Interlocked Preaction System with Electric Release									
	Manual Release Zone	4. Double Interloc	Double Interlocked Preaction System with Electric/Pneumatic Release								
			ZONES (Init	iating Circuits)							
	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS (Indicating Circuits)	Valve Tamper Supervisory Zone for Systems 1 & 2	Low Air Supervisory Zone for Systems 1 & 2	Conventional Detection Zone for System 1	Conventional Detection Zone for System 2	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm			X	X	X	X					
#2 Release Solenoid #1			X	X		X					
#3 Release Solenoid #2			X	X		X					
#4 Waterflow					X						
	,	ODED ATI	ON DECCRIPTION	ON							
I	2.0		ON DESCRIPTI								
Inputs: Outputs:		Detection zones, 1 V 1 Waterflow, 2 Re		i Manuai Reieas	e zone, 5 Sup	ervisory zo	ones				
Operation:		nventional Detection		or Manual Palaa		ill activate	output #2				
Орегация.		d #1) and output #3					output #2				
		terflow zone #5 wil					Alarm)				
	Activation of Val	ve Tamper Supervirvisory trouble rela	sory zone #1, Lo								

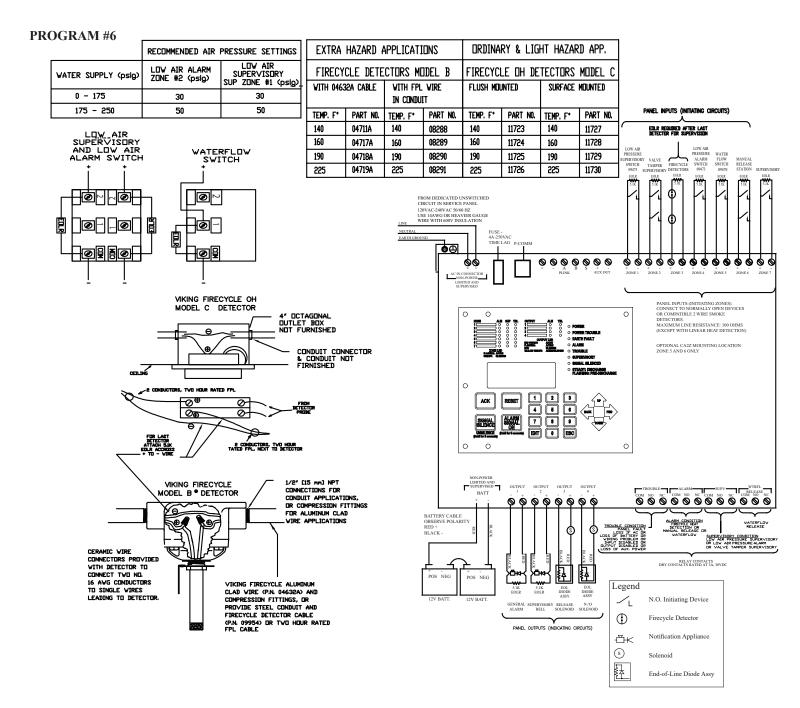
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #2 (Release Solenoid) and output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 5 to change to program 5. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PRO	OGRAM #5								
		For One Sprinkl	er System- NYC	Special							
Viking Sprinkler	Release Zone	1. Single Interlo	cked Preaction Sy	stem with E	lectric Releas	e					
System Types	and Manual	2. Deluge System	m with Electric R	elease							
	Release Zone	3. Non-Interlock	ed Preaction with	Electric Re	lease						
		4. Double Interlocked Preaction System with Electric/Pneumatic Release									
			ZONES (Initia	ting Circuits	s)						
OUTPUTS	#1 #2 #3 #4 #5 #6 #7										
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm			X		X	X					
#2 Supervisory Bell	X	X X X									
#3 Release Solenoid			X			X					
#4 Trouble Bell											
		OPERATIO	ON DESCRIPTIO	N							
Inputs:	1 Conventional I Supervisory zone	Detection zone, 1 Ves	Waterflow zone, 1	Low Air Ala	arm zone, 1 M	Ianual Rele	ease zone, 3				
Outputs:	1 General Alarm,	1 Trouble Bell, 1	Release Solenoio	l, 1 Supervis	ory Bell						
Operation:		nventional Detect d) and output #1 (		anual Releas	e zone #6 will	activate or	utput #3				
	Activation of Wa	terflow zone #5 w	rill activate output	t #1 (Genera	l Alarm)						
	Activation of Low Air Alarm zone #2, Low Air Supervisory zone #4, Valve Tamper Supervisory zone #1 or Supervisory zone #7 will activate output #2 (Supervisory Bell)										
	A trouble condition (Trouble Bell) and	on, (low battery, v d trouble relay	wire short in outpu	ıts, loss AC,	panel probler	n) will acti	vate output #4				

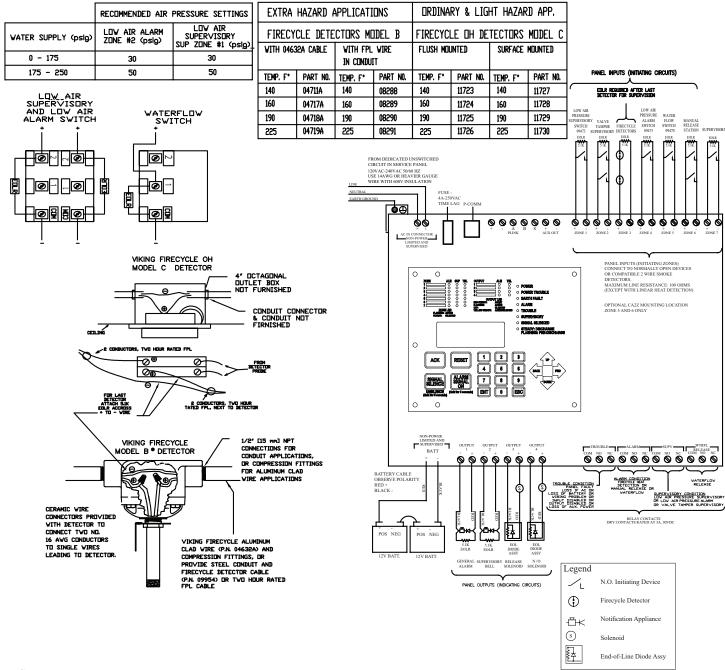
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #2 (Release Solenoid) and output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 6 to change to program 6. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the changer

			PROGRAM #6								
		For (	One Sprinkler Syst	tem							
Viking Sprinkler	Release Zone	1. FIRECYCL	E III Single Interlo	cked Preacti	on Multicycl	e System					
System Types	and Manual Release Zone	2. TINEC I CLE III SHIGIC HICHOCKCU I ICACHOH MUHICYCIC SYSICHI - IVI C SPECIAL									
			ZONES (It	nitiating Circ	uits)						
OUTPUTS	#1	#2	#3	#	#5	#6	#7				
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 3 Detector Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm		X X X									
#2 Supervisory Bell	X	X X X X									
#3 Release Solenoid		X X									
#4 N/O Solenoid			X	X	X						
Inputs:	FIRECYCLE 3	B Detector zone,	ATION DESCRIP Low Air Alarm zo		low zone,1 M	Ianual Release z	zone, 3				
Outputs:	<u> </u>		y Alarm, 1 Release	Solenoid, a	nd 1 N/O Sol	enoid					
Operation:			Detector zone #3 w #4 (N/O Solenoid		utput #1 (Ge	neral Alarm), ou	tput #3				
	Activation of I Solenoid)	ow Air Alarm z	one #4 will activat	te output #2 (	Supervisory	Bell) and outpu	t #4 (N/O				
	Activation of V	Vaterflow zone #	5 will activate out	put #1 (Gene	eral Alarm) a	nd output #4 (N	O Solenoid)				
	Activation of N Solenoid)	Manual Release 2	zone #6 will activa	ite output #1	(General Ala	rm) and output	#3 (Release				
		f FIRECYCLE 3 ease Solenoid) is	B Detector zone #3 deactivated	will start so	ak timer, whe	en timer cycle is	complete				
		ow Air Alarm z #2 (Supervisory	one #1, Valve Tam Bell)	per Supervis	ory zone#2 o	or Supervisory z	one #7 will				

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Connect EOL resistor after last FIRECYCLE 3 detector on return line to common terminal in FIRECYCLE 3 Detector zone #3.
- 9. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 10. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.
- 11. Use only Viking FIRECYCLE detectors on FIRECYCLE 3 Detector zone #3.
- 12. Refer to Viking technical data sheet F\_051304 for Firecycle single interlock multi-cycle operation.
- 13. For UL864 Approved Programming Options, see 5403789 Manual VFR-500.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 7 to change to program 7. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

			PROGRAM #	<del>*************************************</del>				
		F	or One Sprinkler	System				
Viking Sprinkler	Release Zone	1. FIRECYCL	E III Double Inter	locked Prea	action Multic	ycle Systei	m	
System Types	and Manual Release Zone	2. FIRECYCL	E III Double Inter	locked Prea	action Multic	ycle Systei	m - NYC Spec	ial
			ZONES (Initia	ating Circui	its)			Software Zone
OUTPUTS	#1	#2	#3	#4	#5	#6	#7	#8
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 3 Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone	Release Type Zone
#1 General Alarm			X		X	X		X
#2 Supervisory Bell	X	X		X			X	
#3 Release Solenoid			XX	XX		X		XX*
#4 N/O Solenoid				X	X			
Inputs:	1 FIRECYCLE Supervisory zo	E 3 Detector zon	ERATION DESCH e, 1 Low Air Aları		Vaterflow zor	ne, 1 Manu	al Release zon	e, 3
Outputs:	1 General Alar	m, 1 Supervisor	y Bell, 1 Release S	Solenoid, aı	nd 1 N/O Sol	enoid		
Operation:		#1 (General Ala	h the FIRECYCLI arm), output #2 (S					
	Activation of F	FIRECYCLE 3 I	Detector zone #3 w	vill activate	output #1 (C	General Ala	rm)	
	Activation of I Solenoid)	Low Air Alarm z	one #4 alone will	activate ou	tput #2 (Supe	ervisory Be	ell) and output	#4 (N/O
	Activation of V	Vaterflow zone #	5 will activate ou	tput #1 (Ge	neral Alarm)	and outpu	t #4 (N/O sole:	noid)
Activation of Manual Release zone #6 will activate output #1 (General Alarm) and output #3 (Release Solenoid)								
		f FIRECYCLE 3 ease Solenoid) is	3 Detector zone #3 deactivated.	will start s	soak timer, w	hen timer o	cycle is comple	ete the
		Low Air Supervi #2 (Supervisory	sory zone #1, Valv / Bell)	e Tamper S	Supervisory z	one #2 or s	Supervisory zo	ne #7 will

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

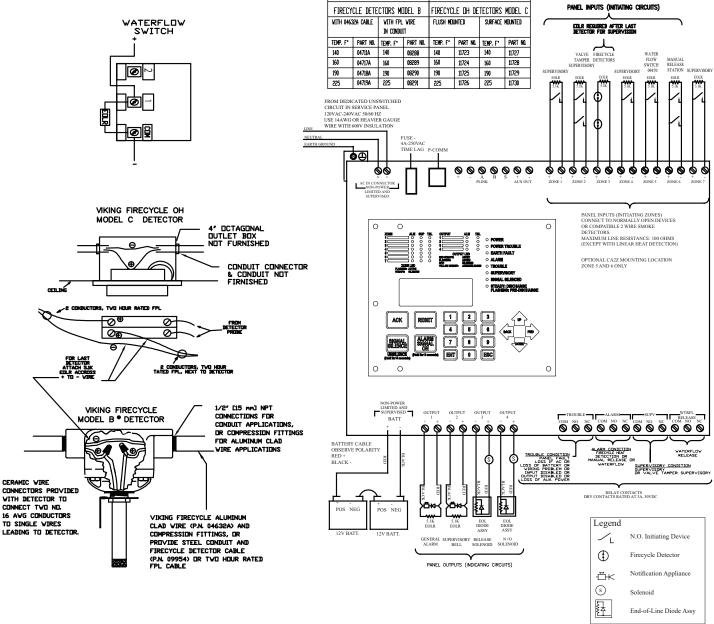
XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Connect EOL resistor after last FIRECYCLE detector on return line to common terminal in FIRECYCLE 3 Detector zone #3.
- 9. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 10. Loss of DC power below 20 volt causes output #3 (Release Solenoid) to drop out.
- 11. Use only Viking FIRECYCLE detectors on FIRECYCLE 3 Detector zone #3.
- 12. Refer to Viking technical data sheet F\_051304 for Firecycle double interlock multi-cycle operation.
- 13. For UL864 Approved Programming Options, see 5403789 Manual VFR-500.

EXTRA HAZARD APPLICATIONS

ORDINARY & LIGHT HAZARD APP.

#### **PROGRAM #8**

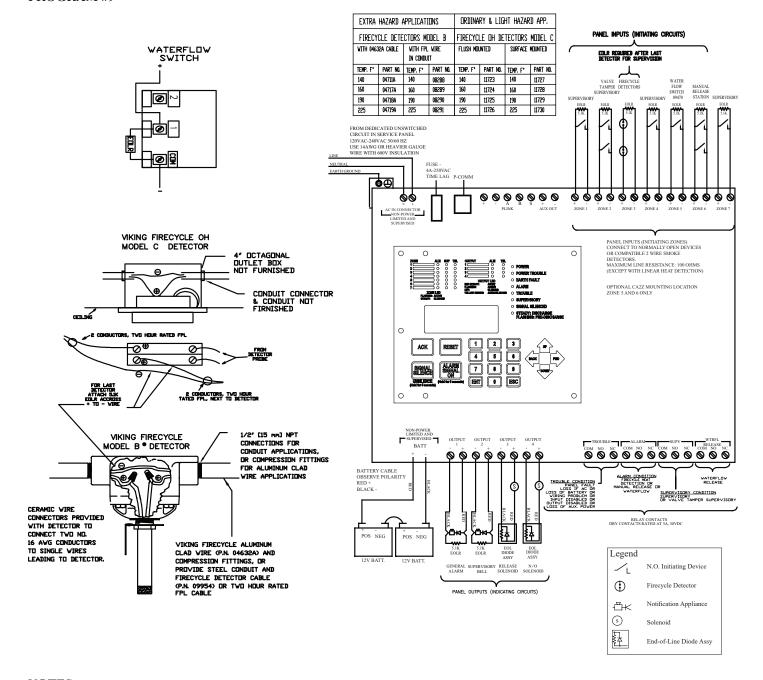


- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 8 to change to program 8. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

DDOCD AM #9

		P	ROGRAM #8								
		For Or	ne Sprinkler Systen	n							
Viking Sprinkler	1 Release Zone	i i i i i i i i i i i i i i i i i i i									
System Types	and Manual Release										
			ZONES (Initi	iating Circuits)							
OUTPUTS	#1	#2	#3	#4	#5	#6	#7				
(Indicating Circuits)	Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 3 Detector Zone	Supervisory Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm			X		X	X					
#2 Supervisory Bell	X	X X X X									
#3 Release Solenoid		X X									
#4 N/O Solenoid			X		X						
Inputs:	1 FIRECYCLE 3	1	TION DESCRIPTION, 1 Waterflow zone		lease zone, 4	Supervisory	/ zones				
Outputs:	<del></del>		Bell, 1 Release Solo				<u></u>				
Operation:	Activation of FIF (Release Solenoi		tector zone #3 will (N/O Solenoid)	activate output	t#1 (General	Alarm), out	put #3				
	Activation of Wa Solenoid)	terflow Alarm zo	one #5 will activate	e output #1 (Ge	eneral Alarm)	and output	#4 (N/O				
	Activation of Ma Solenoid)	nual Release zoi	ne #6 will activate	output #1 (Ger	neral Alarm) a	and output #	3 (Release				
	Deactivation of F output #3 (Release		Detector zone #3 wi eactivated.	ill start soak tir	ner, when tin	ner cycle is	complete the				
			1, Valve Tamper Su output #2 (Superv		e #2, Superv	isory zone #	4 or				

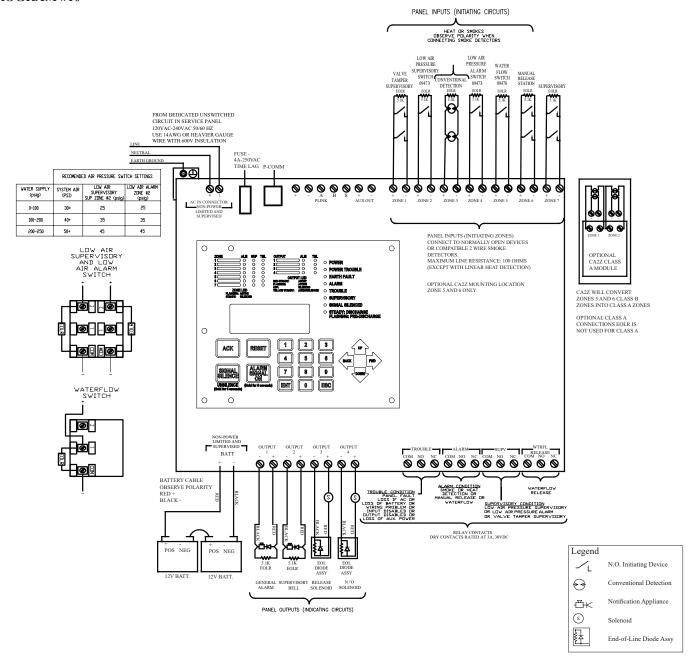
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Connect EOL resistor after last FIRECYCLE detector on return line to common terminal in FIRECYCLE 3 Detector zone #3.
- 9. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 10. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.
- 11. Use only Viking FIRECYCLE detectors on FIRECYCLE 3 Detector zone #3.
- 12. Refer to Viking technical data sheet F\_051404 for Firecycle deluge multi-cycle operation.
- 13. For UL864 Approved Programming Options, see 5403789 Manual VFR-500.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 9 to change to program 9. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		P	ROGRAM #9									
		For O	ne Sprinkler System	m								
Viking Sprinkler	1 Release Zone	1 Release Zone 1. FIRECYCLE III Wet Multicycle System										
System Types	and Manual Release Zone											
			ZONES (Init	tiating Circuits	)							
OUTPUTS	#1	#2	#3	#4	#5	#6	#7					
(Indicating Circuits)	Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 3 Detector Zone	Supervisory Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone					
#1 General Alarm			X		X	X						
#2 Supervisory Bell	X	X X X X										
#3 Release Solenoid		X X										
#4 N/O Solenoid			X		X							
			TION DESCRIPTI									
Inputs:	<del></del>		, 1 Waterflow zone				y zones					
Outputs:			Bell, 1 Release So									
Operation:	Activation of FII (Release Solenoi		tector zone #3 wil (N/O Solenoid)	l activate outp	ut #1 (Genera	al Alarm), ou	itput #3					
	Activation of Was	nterflow Alarm z	one #5 will activat	te output #1 (C	eneral Alarm	n) and outpu	t #4 (N/O					
	Activation of Ma Solenoid)	anual Release zo	ne #6 will activate	output #1 (Ge	eneral Alarm)	and output	#3 (Release					
	Deactivation of loutput #3 (Relea		Detector zone #3 w leactivated.	vill start soak t	imer, when ti	mer cycle is	complete the					
			1, Valve Tamper S e output #2 (Super		ne #2, Super	visory zone	#4 or					

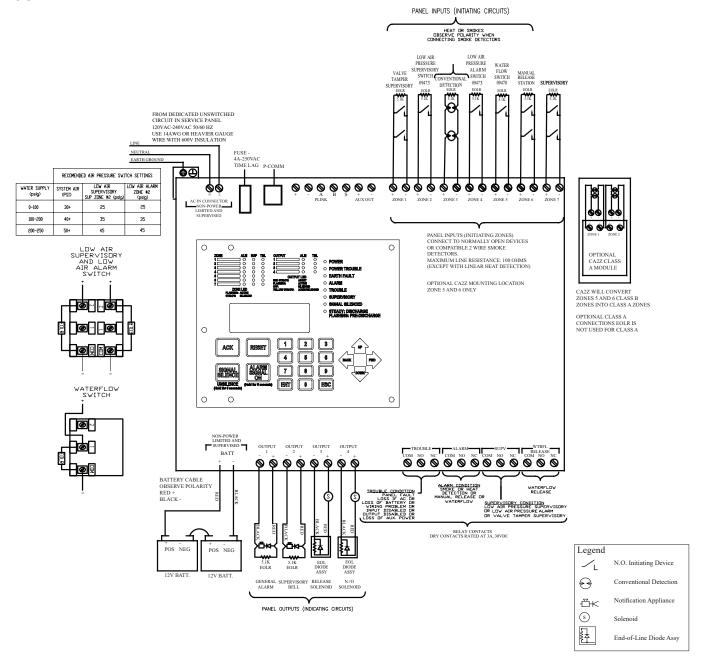
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Connect EOL resistor after last FIRECYCLE detector on return line to common terminal in FIRECYCLE 3 Detector zone #3.
- 9. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 10. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.
- 11. Use only Viking FIRECYCLE detectors on FIRECYCLE 3 Detector zone #3.
- 12. Refer to Viking technical data sheet F 051504 for Firecycle multi-cycle wet system operation.
- 13. For UL864 Approved Programming Options, see 5403789 Manual VFR-500.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 10 to change to program 10. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PRO	GRAM #10								
	For On	e Sprinkler Syste	m- SUREFIRE S	Single Interlo	ock						
Viking Sprinkler	Release Zone	1. SUREFIRE S	ingle Interlocked	d Preaction S	System						
System Types	and Manual	2. SUREFIRE S	ingle Interlocked	d Preaction S	System - NYO	C Special					
	Release Zone	3. SUREFIRE S	ingle Interlocked	d Preprimed	Preaction Sy	stem					
		4. SUREFIRE S	ingle Interlocked	d Preprimed	Preaction Sy	stem - NYC	Special				
			ZONES (Initi	ating Circuit	s)						
OUTPUTS	#1	#2	#3	#4	#5	#6	#7				
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm			X		X	X					
#2 Supervisory Bell	X	X X X X X									
#3 Release Solenoid			X			X					
#4 N/O Solenoid				X							
Inputs:	1 Conventional D Supervisory zone:	etection zone, 1 V	ON DESCRIPTION Vaterflow zone,		larm zone, 1	Manual Rel	ease zone, 3				
Outputs:	1 General Alarm,		1 Release Soleno	oid, 1 Superv	visory Bell						
Operation:	Activation of Con #1 (General Alarr	ventional Detecti				se Solenoid)	and output				
	Activation of Low	Air Alarm zone #4	will activate outp	out #2 (Superv	visory Bell) ar	nd output #4	(N/O Solenoid)				
	Activation of Wat	erflow zone #5 w	ill activate outpu	ıt #1 (Genera	al Alarm)						
	Activation of Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1 (General Alarm)										
	Activation of Valvate or #7 will activate or			ow Air Supe	ervisory zone	#2 or Super	rvisory zone				
	A trouble condition	on will prevent ou	tput #4 (N/O So	lenoid) from	activating						

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.
- 9. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.
- 10. See Viking technical data sheet F\_051604 for Surefire single interlock operation.



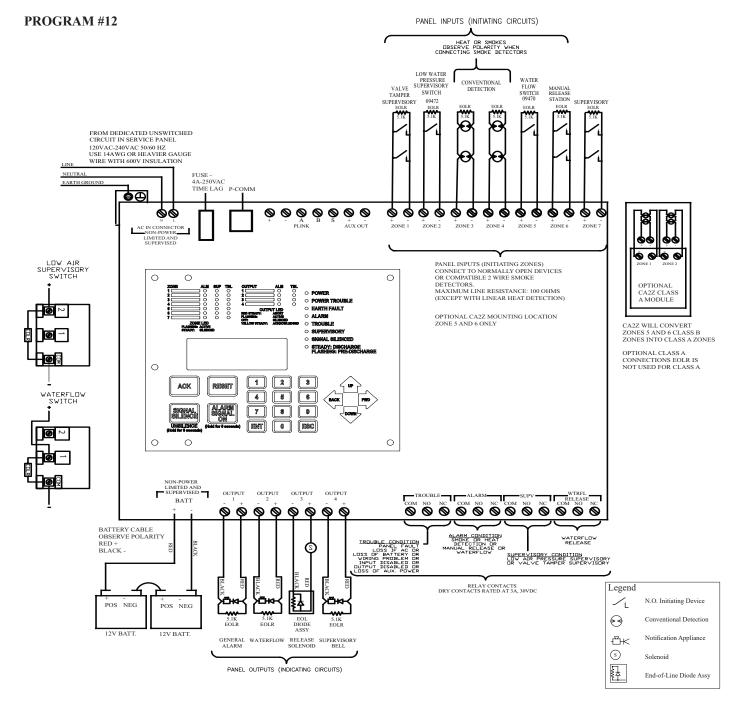
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 11 to change to program 11. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the changer

			PROGRAM	#11							
		Fo	or One Sprinkler	System							
Viking Sprinkler	2 Cross	1. SUREFIRE	E Double Interlo	cked Preact	ion System						
System Types	Release Zones	2. SUREFIRE	E Double Interlo	cked Preact	ion System -	NYC Spe	cial				
	and Manual Release Zone	3. SUREFIRE	E Double Interlo	cked Prepri	med Preaction	n System					
	11010000 20110	4. SUREFIRE	E Double Interlo			n System	- NYC Special				
			ZONES (Init	iating Circu	uits)	·		Software Zone			
OUTPUTS	#1	#2	#3	#4	#5	#6	#7	#8			
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone	Release Type Zone			
#1 General Alarm		X X X X									
#2 Supervisory Bell	X	X X X X									
#3 Release Solenoid		XX XX X X XX*									
#4 N/O Solenoid				X							
		OPE	ERATION DESC	RIPTION		,					
Inputs:	1 Conventional Supervisory zon		e, 1 Low Air Ala	rm zone, 1	Waterflow zo	one, 1 Mar	nual Release zo	one, 3			
Outputs:	1 General Alarr	n, 1 Supervisor	ry Bell, 1 Releas	e Solenoid,	1 N/O Soler	oid					
Operation:		#3 (Release So	th the Conventio lenoid), output #								
	Activation of C	onventional De	etection zone #3	will activate	te output #1 (	General A	larm)				
	Activation of L Solenoid)	ow Air Alarm	zone #4 will acti	vate output	#2 (Supervis	sory Bell)	and output #4 (	(N/O			
	Activation of W	Vaterflow zone	#6 will activate	output #1 (	General Aları	m)					
	Activation of Valve Tamper Supervisory zone #1, Low Air Supervisory zone #2 or Supervisory zone #7 will activate output #2 (Supervisory Bell)										
	Activation of M Alarm)	Ianual Release	zone #4 will act	ivate outpu	t #3 (Release	Solenoid)	and output #1	(General			
	A trouble condi	tion will preve	nt output #4 (N/	O Solenoid	) from activa	ting					

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.
- 9. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.
- 10. See Viking technical data sheet F\_051704 for Surefire double interlock operation.



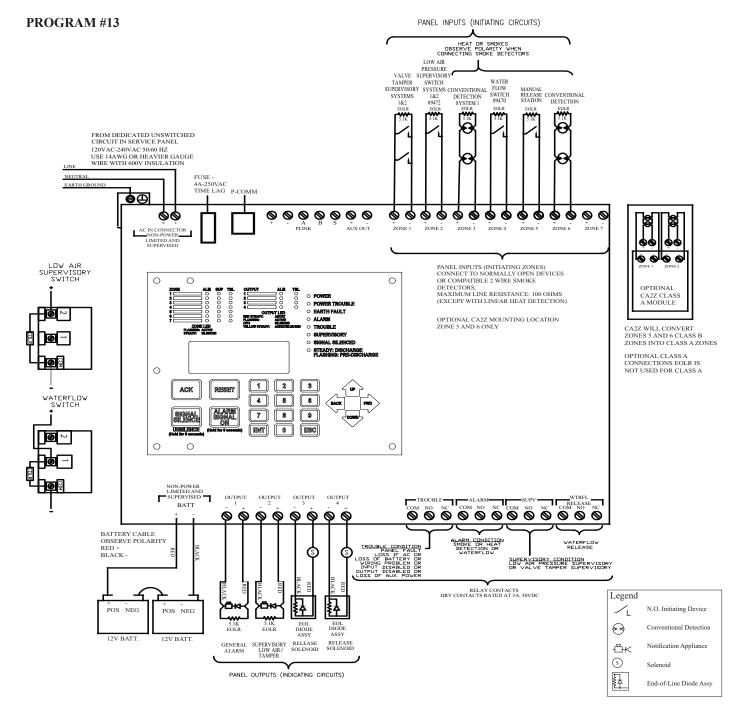
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 12 to change to program 12. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

PROGRAM #12										
For One Sprinkler System										
Viking Sprinkler System Types	2 Cross Release Zones, Waterflow	Single Interlocked Preaction System with Electric Release								
		2. Deluge System with Electric Release								
		3. Non-Interlocked Preaction system with Electric Release								
	Zone, and	4. Double Interlocked Preaction System with Electric/Pneu-Lectric Release								
	Manual									
	Release Zone	<u> </u>								
OLUTPI ITC	ZONES (Initiating Circuits)									
OUTPUTS (Indicating	#1	#2	#3	#4	#5	#6	#7	#		
Circuits)	Valve Tamper	Low Air	Conventional	Conventional	Waterflow	Manual	Supervisory	Release		
	Supervisory Zone	Supervisory Zone	Detection Zone	Detection Zone	Zone	Release Zone	Zone	Type Zone		
#1 General Alarm	Zone	Zone	X	X	X	X		X		
#2 Waterflow			A	A	X	Λ		Λ		
#3 Release Solenoid			XX	XX	Λ	X		XX*		
#4 Supervisory Bell	X	X	21.71	7171		21	X	7171		
" i Supervisory Ben   A   A   A										
		(	PERATION D	ESCRIPTION						
Inputs:	2 Conventional Detection zones, 1 Waterflow zone, 1 Manual Release zone, 3 Supervisory zones									
Outputs:	1 General Alarm, 1 Waterflow, 1 Release Solenoid, 1 Supervisory Bell									
Operation:	Simultaneous activation of both the Conventional Detection zone #3 and the Conventional Detector zone #4 will activate output #3 (Release Solenoid) and output #1 (General Alarm)									
	Activation of Conventional Detection zone #3 will activate output #1 (General Alarm)									
	Activation of Conventional Detection zone #4 will activate output #1 (General Alarm)									
	Activation of Waterflow zone #5 will activate output #2 (Waterflow) and output #1 (General Alarm)									
	Activation of Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1 (General Alarm)									
	Activation of Valve Tamper Supervisory zone #1, Low Air Supervisory zone #2 or Supervisory zone #7 will activate output #4 (Supervisory Bell)									

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

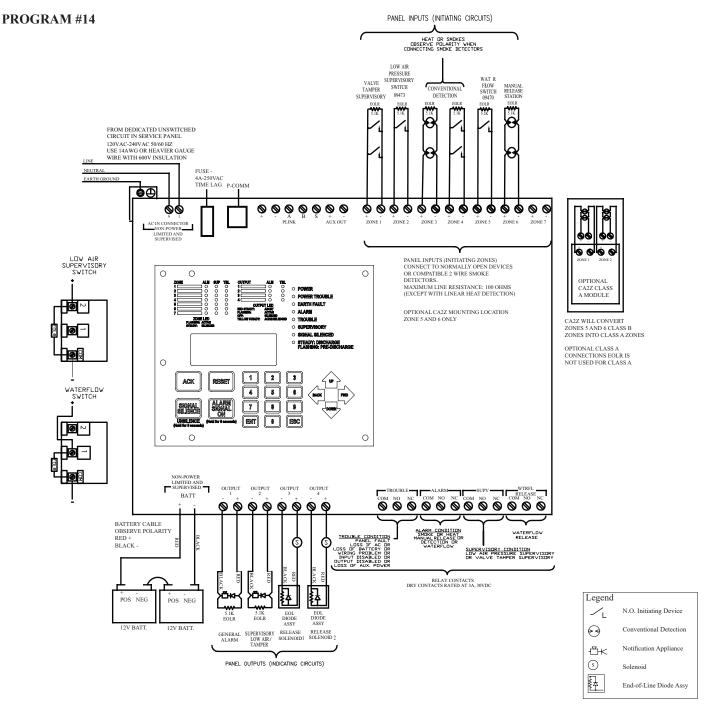
- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 13 to change to program 13. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PRO	OGRAM #13								
		For One	Sprinkler System								
Viking Sprinkler System Types (UK only)	2 Release Zones, Waterflow Zone, and Manual Release Zone	E-1 Single-interlocked preaction system with Electric-Pneumatic release									
	ZONES (Initiating Circuits)										
OUTPUTS	#1	#2	#3	#4	#5	#6	#7				
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Waterflow Zone	Manual Release Zone	Conventional Detection Zone	Unused				
#1 General Alarm			X	X	X	X					
#2 Low air/Tamper	X	X									
#3 Release Solenoid #1			X		X	X					
#4 Release Solenoid #2			X		X	X					
		OPERATION	ON DESCRIPTIC	)N							
Inputs:	2 Conventional Detection zones, 1 Waterflow zone, 1 Manual Release zone, 2 Supervisory zones										
Outputs:	1 General Alarm, 1 Low Air/Tamper, 2 Release Solenoids										
Operation:	Activation of Conventional Detection zone #3 or #6 or manual release zone #5 will activate outputs #3 and #4 (release solenoids) and output #1 (General Alarm)										
	Activation of Waterflow zone #4 will activate output #1 (General Alarm)										
	Activation of Valve Tamper supervisory zone #1 or Low air supervisory zone #2 will activate output #2 (Low Air/Tamper)										

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3 and #4. Black wire to negative terminal on panel. Red wire through solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors and solenoids.
- 8. See specific system type data page for proper pressure switch settings.
- 9. For UL864 Approved Programming Options, see page 6-102.



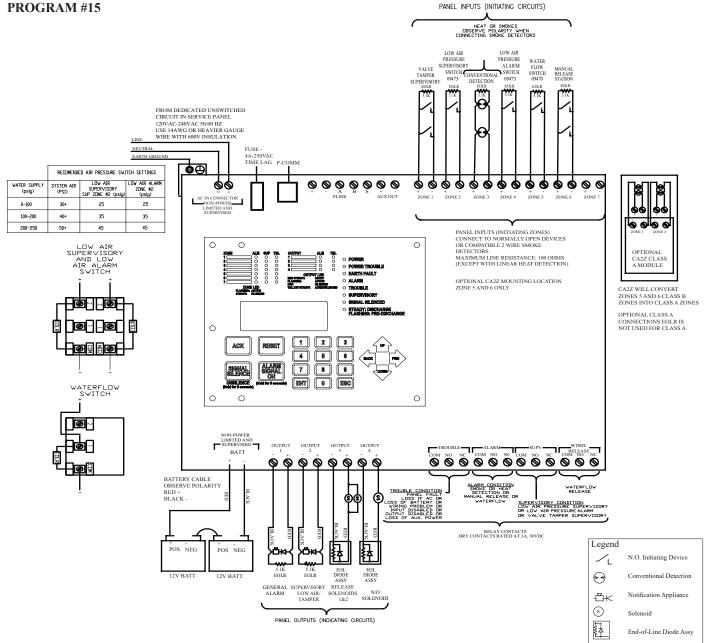
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 14 to change to program 14. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

			PROGRAM	M #14					
		]	For One Sprinkl	er System					
Viking Sprinkler System Types (UK only)	2 Cross Release Zones, Waterflow Zone, and Manual Release Zone	Release Zones, Vaterflow Zone, and Manual Release							
	ZONES (Initiating Circuits)								
OUTPUTS	#1	#2	#3	#4	#5	#6	#7	#8	
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Conventional Detection Zone	Waterflow Zone	Manual Release Zone	Unused	Release Type Zone	
#1 General Alarm			X	X	X	X		X	
#2 Supervisory Bell	X	X							
#3 Release Solenoid #1			XX	XX		X		XX*	
#4 Release Solenoid #2			XX	XX		X		XX*	
		OF	PERATION DES	SCRIPTION					
Inputs:	2 Conventional Detection zones, 1 Waterflow zone, 1 Manual Release zone, 2 Supervisory zones								
Outputs:	1 General Alarm, 1 Low Air/Tamper, 2 Release Solenoids								
Operation:	Activation of both Conventional Detection zone #3 and #4 or manual release zone #6 will activate outputs #3 and #4 (release solenoids) and output #1 (General Alarm)  Activation of Waterflow zone #3 will activate output #1 (General Alarm)								
	Activation of Walve Tamper supervisory zone #1 or Low air supervisory zone #2 will activate output #2 (Low Air/Tamper)								

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3 and #4. Black wire to negative terminal on panel. Red wire through solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors and solenoids.
- 8. See specific system type data page for proper pressure switch settings.
- 9. For UL864 Approved Programming Options, see page 6-102.

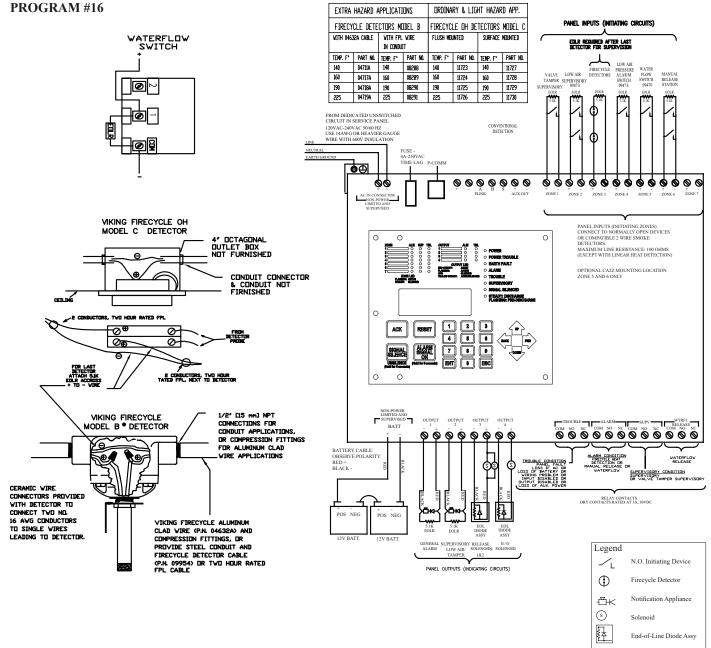


- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 15 to change to program 15. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

Note: Release solenoids #1 and #2 shall be wired in parallel and connected to output #3. the wiring shall be in conduit orotherwise protected. Any connections shall be made in a junction box. This may not conform to the monitoring for integrity requirements for NFPA 72.

		PROGRA	M #15						
		For One Sprin	kler System						
Viking Sprinkler System Types (UK only)	2 Release Zones, Waterflow Zone, and Manual Release Zone	low Zone, release ranual							
	ZONES (Initiating Circuits)								
OUTPUTS	#1	#2	#3	#4	#5	#6	#7		
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Unused		
#1 General Alarm			X		X	X			
#2 Low air/Tamper	X	X		X					
#3 Release Solenoids #1 & #2			X			X			
#4 N/O Solenoid				X					
	0	PERATION DI	ESCRIPTION						
Inputs:	1 Conventional Detection zone, 1 Low air alarm zone, 1 Waterflow zone, 1 Manual Release zone, 2 Supervisory zones								
Outputs:	1 General Alarm, 1 Low Air/Tamper, 2 Release Solenoids (single output from panel), 1 N/O solenoid								
Operation:	Activation of Conventional Detection zone #3 or manual release zone #6 will activate output #3 (release solenoids) and output #1 (General Alarm)								
	Activation of Low Air Alarm zone #4 will activate output #2 Low air/tamper and output #4 (N/O solenoid)								
	Activation of Waterflow zone #5 will activate output #1 (General Alarm)								
	Activation of Valve Tamper supervisory zone #1, Low air supervisory zone #2, or Low Air alarm zone #2 will activate output #2 (Low Air/Tamper)								
	A trouble condition will prevent output #4 (N/O) from activating								

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3 and #4. Black wire to negative terminal on panel. Red wire through solenoid to positive terminal on panel. Output #3 has 2 solenoids. These must be connected in parallel and the EOL diode is connected in series with the parallel solenoids.
- 2. Polarity is shown on indicating/release circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors and solenoids.
- 8. See specific system type data page for proper pressure switch settings.
- 9. Loss of power below 20 volts causes output #3 (release solenoids) and output #4 (N/O solenoid) to drop out.
- 10. See Viking technical data sheet F\_051604 for Surefire single interlock operation.
- 11. For UL864 Approved Programming Options, see page 6-102.

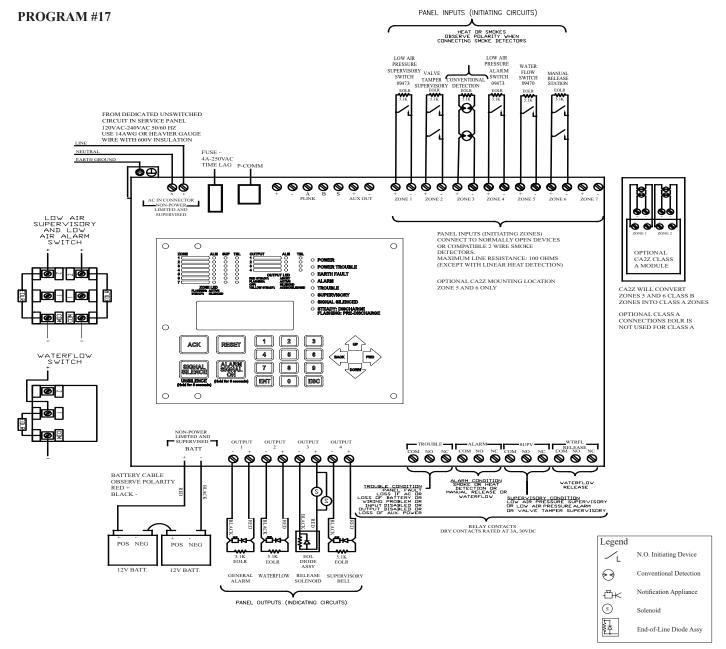


- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 16 to change to program 16. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

Note: Release solenoids #1 and #2 shall be wired in parallel and connected to output #3. the wiring shall be in conduit orotherwise protected. Any connections shall be made in a junction box. This may not conform to the monitoring for integrity requirements for NFPA 72.

		PROGRA	M #16					
		For One Sprink	der System					
Viking Sprinkler System Types (UK only)	2 Release Zones, Waterflow Zone, and Manual Release Zone  E-1 Single-interlocked Firecycle III preaction system with Electric- Pneumatic release							
			ZONES (Initi	ating Circui	ts)			
OUTPUTS	#1	#2	#3	#4	#5	#6	#7	
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Firecycle Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Unused	
#1 General Alarm			X		X	X		
#2 Low air/Tamper	X	X		X				
#3 Release Solenoids #1 & #2			X			X		
#4 N/O Solenoid			X	X	X			
Inputs:	Of 1 Firecycle Detect 2 Supervisory zon 1 General Alarm,	es	w air alarm zo					
Outputs:	solenoid							
Operation:	Activation of Fire (General Alarm),				put #3 (release	e solenoids),	output #1	
	Activation of Low (N/O solenoid)	air alarm zone	#4 will activa	ate output #2	2 (Low air/Tar	nper) and ou	ıtput #4	
	Activation of Wate solenoid)	erflow Zone #5	will activate	output #1 (G	eneral Alarm	) and output	#4 (N/O	
	Activation of man (General Alarm)	ual release zono	e #6 will activ	ate output #	3 (release solo	enoids) and	output #1	
	Deactivation of th complete, output #				oak timer. Wh	en timer cyc	le is	
	Activation of Valvalarm #2 will open				upervisory zo	ne #2, or Lo	w air	

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3 and #4. Black wire to negative terminal on panel. Red wire through solenoid to positive terminal on panel. Output #3 has 2 solenoids. These must be connected in parallel and the EOL diode is connected in series with the parallel solenoids.
- 2. Polarity is shown on indicating/release circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors and solenoids.
- 8. See specific system type data page for proper pressure switch settings.
- 9. Connect EOL resistor in SERIES after LAST Firecycle detector on return line to common terminal in Firecycle detector zone #1.
- 10. Set the soak timer to desired duration period. Factory setting is continuous. Recommended time is 60 seconds, minimum.
- 11. Loss of power below 20 volts causes output #3 (release solenoids) and output #4 (N/O solenoid) to drop out.
- 12. See Viking technical data sheet F\_051404 for Firecycle deluge multi-cycle system.
- 13. For UL864 Approved Programming Options, see page 6-102.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 17 to change to program 17. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

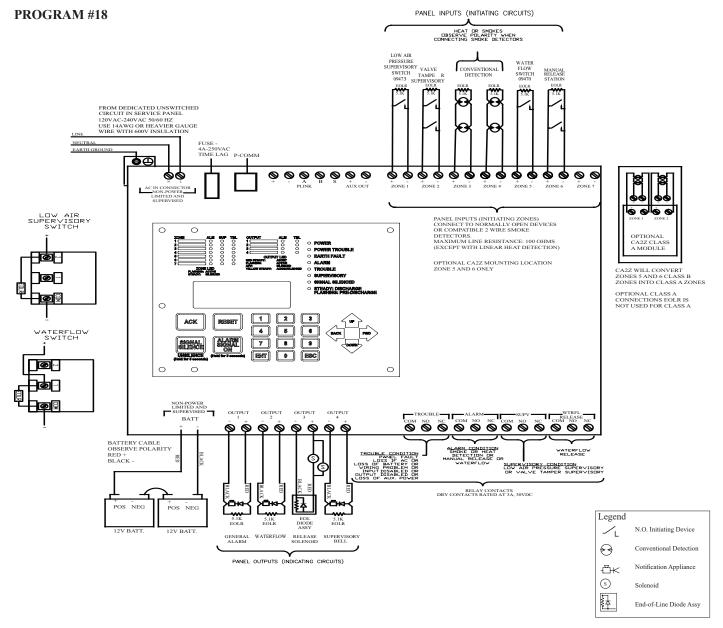
Note: Release solenoids #1 and #2 shall be wired in parallel and connected to output #3. the wiring shall be in conduit orotherwise protected. Any connections shall be made in a junction box. This may not conform to the monitoring for integrity requirements for NFPA 72.

		F	PROGRAM #17	7						
		For C	ne Sprinkler Sy	stem						
Viking Sprinkler System Types (UK Only)	2 Cross Release zones, Waterflow zone, and Manual Release zone	Release zones, Waterflow zone, and Manual						e		
		-	ZONES (Initiat	ting Circuits	)			Software Zone		
OUTPUTS	#1	#2	#3	#4	#5	#6	#7	#8		
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	Conventional Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Unused	Release Type Zone		
#1 General Alarm		X X X								
#2 Waterflow Alarm		X								
#3 Release Solenoid			XX	ХX		X		XX*		
#4 Supervisory Bell	X	X		X						
			TION DESCRI							
Inputs:	1 Conventional I Release zone, 2			th 1 Low Air	Alarm zone,	1 Waterflo	ow zone, 1	Manual		
Outputs:	1 General Alarm	, 1 Waterflow,	1 Release Solen	oid, 1 Super	visory Bell					
Operation:	Simultaneous ac will activate outple Bell)									
	Activation of Co	nventional De	tection zone #3	will activate	output #1 (G	eneral Ala	rm)			
	Activation of Lo	w Air Alarm z	one #4 will activ	ate output #	4 (Supervisor	ry Bell)				
	Activation of Wa	aterflow zone #	5 will activate of	output #2 (W	aterflow)					
	Activation of Ma (General Alarm)	Activation of Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1								
	Activation of Lo #4 (Supervisory		sory zone #1 or	Valve Tampe	r Supervisor	y zone #2	will opera	te output		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3. Black wire to negative terminal on panel Red wire through solenoid to positive terminal on panel. Output #3 has 2 solenoids. These must be connected in parallel and the EOL diode is connected in series with the parallel solenoids.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.
- 9. For UL864 Approved Programming Options, see page 6-102.



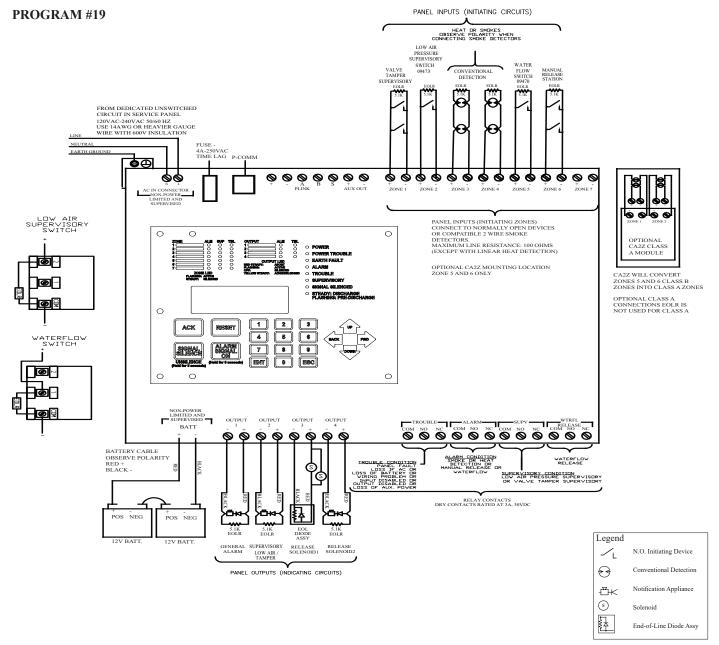
#### **NOTES:**

- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 18 to change to program 18. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

Note: Release solenoids #1 and #2 shall be wired in parallel and connected to output #3. the wiring shall be in conduit orotherwise protected. Any connections shall be made in a junction box. This may not conform to the monitoring for integrity requirements for NFPA 72.

		PROG	GRAM #18						
		For One Sp	orinkler System						
Viking Sprinkler	2 Release Zones,	1. Single Interlo	cked Preaction S	System with Elec	ctric Release				
System Types	Waterflow Zone,	2. Deluge System with Electric Release							
(UK Only)	& Manual Release Zone	3. Non-Interlock	ked Preaction Sy	stem with Electr	ric Release				
	Zone	4. Double Interl	ocked Preaction	System with Ele	ectric/Pneuma	atic Release	e		
			ZONES (Initiati	ng Circuits)					
OUTPUTS	#1	#2	#3	#4	#5	#6	#7		
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	Conventional Detection Zone	Conventional Detection Zone	Waterflow Zone	Manual Release Zone	Unused		
#1 General Alarm		X X X X							
#2 Waterflow					X				
#3 Release Solenoid			X	X		X			
#4 Supervisory Bell	X	X							
		OPERATION	DESCRIPTIO	N					
Inputs:	2 Conventional Detec	ction zones, 1 Wat	terflow zone, 1 N	Manual Release 2	zone, 2 Super	visory zone	es		
Outputs:	1 General Alarm, 1 W	Vaterflow Alarm,	Solenoid Relea	ase, 1 Supervisor	y Bell				
Operation:	l .	Activation of Conventional Detection zone #3 or #4 or Manual Release zone #6 will activate output #3 (Release Solenoid) and output #1 (General Alarm)							
	Activation of Waterflo	activation of Waterflow zone #5 will activate output #2 (Waterflow) and output #1 (General Alarm)							
	Activation of Low Ai (Supervisory Bell).	r Supervisory zor	ne #1 or Valve Ta	amper Superviso	ory zone #2 w	ill operate	output #4		

- 1.Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3. Black wire to negative terminal on panel Red wire through solenoid to positive terminal on panel. Output #3 has 2 solenoids. These must be connected in parallel and the EOL diode is connected in series with the parallel solenoids.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.
- 9. For UL864 Approved Programming Options, see page 6-102.



- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 19 to change to program 19. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

Note: Release solenoids #1 and #2 shall be wired in parallel and connected to output #3. the wiring shall be in conduit orotherwise protected. Any connections shall be made in a junction box. This may not conform to the monitoring for integrity requirements for NFPA 72.

	,	,	PROGRAM	#19						
		Fo	or One Sprinkle	System						
Viking Sprinkler	2 Cross	1. Single Interl	ocked Preaction	System with E	ectric Releas	se				
System Types	Release	2. Deluge Syst	em with Electric	Release						
(UK Only)	Zones, Waterflow	3. Non-Interloc	cked Preaction S	ystem with Elec	ctric Release					
	Zone, &	4. Double Inter	Double Interlocked Preaction System with Electric/Pneumatic Release							
	Manual									
	Release Zone									
		ZONES (Initiating Circuits)  Software Zone								
OUTPUTS	#1	#1 #2 #3 #4 #5 #6 #7 #8								
(Indicating Circuits)	Valve Tamper Supervisory Zone	Low Air Supervisory Zone	Conventional Detection Zone	Conventional Detection Zone	Waterflow Zone	Manual Release Zone	Unused	Release Type Zone		
#1 General Alarm			X	X		Х		X		
#2 Waterflow					X					
#3 Release Solenoid			XX	XX		X		XX*		
#4 Supervisory Bell	X	X								
		OPE	ERATION DESC	CRIPTION		,	-			
Inputs:	2 Conventiona	l Detection zone	es, 1 Waterflow 2	zone, 1 Manual	Release zone	, 2 Superv	isory zone	s		
Outputs:	1 General Alar	m, 1 Waterflow	Alarm, 1 Soleno	oid Release, 1 St	ipervisory B	ell				
Operation:		Activation of Conventional Detection zone #3 and #4 or Manual Release zone #6 will activate output #3 Release Solenoid) and output #1 (General Alarm)								
	Activation of Waterflow zone #5 will activate output #2 (Waterflow)									
	Activation of I (Supervisory E	Low Air Supervi Bell).	sory zone #1 or	Valve Tamper S	upervisory z	one #2 wil	l operate o	utput #4		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with solenoids on outputs #3. Black wire to negative terminal on panel. Red wire through solenoid to positive terminal on panel. Output #3 has 2 solenoids. These must be connected in parallel and the EOL diode is connected in series with the parallel solenoids.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See instruction manual for list of compatible smoke detectors.
- 8. See specific system type data page for proper pressure switch settings.
- 9. For UL864 Approved Programming Options, see page 6-102.

# **NOTICE**

The following programs are for agent or gas extinguishing systems. Selecting the Agent Release mode allows the use of a predischarge timer and an abort circuit. The timer defaults to 60 seconds for all alarm zones programmed as other than MANUAL RELEASE. The MANUAL RELEASE default timer is 30 seconds. The system offers the programmer the ability to change the default timers to shorter times.

Systems intended for the release of Halon 1301 as described in NFPA 12A, water mist systems as described in NFPA 750 clean agents as described in NFPA 2001, or fixed aerosol as described in NFPA 2010, or shall have provision for a pre-discharge notification circuit. If this signal is required to be separate and/or distinct from the evacuation signal, this can be accomplished by using the legacy method of using first and second alarms on separate zones. One shall be programmed as FIRST ALARM. It will provide a steady output upon activation of any initiating zone programmed as an alarm zone. This is the evacuation signal. If a temporal signal is required, the output pattern can be changed using the zone menu. The other notification circuit shall be programmed as SECOND ALARM. It will provide a steady output upon activation of a second initiating zone programmed as an alarm zone (cross zoned). This is when the pre-discharge timer would start and would be the predischarge signal. If a temporal signal is required, the output pattern can be changed using the zone menu (output pattern and pre release pattern need to be changed). If a separate signal for discharge were required, the second alarm pre discharge pattern can be changed in the zone menu. Zones programmed as MANUAL RELEASE will activate outputs programmed as SECOND ALARM, even if the MANUAL RELEASE zone is the first alarm zone activated. SECOND ALARM is intended to be used as a pre-discharge signal for cross zone applications.

The VFR-500 allow for 3 patterns using 1 notification circuit. The evacuation signal pattern can be set in the zone menu for the detection zones mapped to the alarm indicating output. To set the pre discharge pattern and discharge pattern select the pattern in the zone menu for the software zone for the cross zoned output.

# **A** CAUTION

The default programming does not allow the abort circuit to abort the release or stop the pre-discharge timer activated by zones programmed as MANUAL RELEASE. This can be changed in the programming to allow MANUAL RELEASE zones to be aborted.

NFPA 12 prohibits the use of abort circuits on suppression systems deploying carbon dioxide.

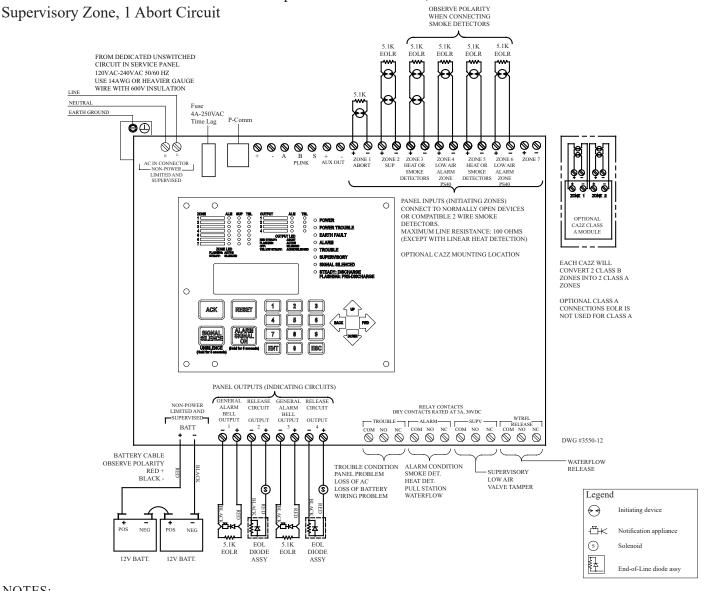
Systems designed and installed in accordance with NFPA 2001, NFPA-750, NFPA-2010, NFPA 12 A shall be provided with a mechanical manual release system.

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Wiring Diagram Program #20

Dual Hazard, 2 Detection Zones Cross-Zoned to 1 Release Circuit, 2

Other Detection Zones Cross-Zoned to A Separate Release Circuit, 1



# NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- Install EOLR (provided) on all unused circuits. 3.
- Polarity is shown on indicating circuits in an activated (off-normal) condition.
- Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage
- Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #20 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 20 to change to program 20. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Dual Hazard, 2 Detection		PROGRAM #20								
Zones Cross-Zoned to 1 Release Circuit, 2 Other		CONVENTIONAL INPUT ZONES							SOFTWARE ZONES	
Detection Zones Cross-	#1	#2	#3	#4	#5	#6	#7	#8	#9	
Zoned to a Separate Release Circuit, 1 Supervisory Circuit, 1 abort circuit										
OUTPUTS	Abort	Supervisory	Detection	Detection	Detection	Detection	Unused	Release Zone Type	Release Zone Type	
#1 ALARM INDICATING			X	X				X		
#2 RELEASE			XX	XX				XX*		
#3 ALARM INDICATING					X	X			X	
#4 RELEASE					XX	XX			XX*	

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

Description: Dual Hazard, 2 detection zones cross-zoned to 1 release circuit and 2 other detection zones cross zoned to

another release circuit

Inputs: 1 supervisory zone, 4 detection zones, 1 abort circuit

Outputs: 2 general alarm, 2 release circuit

Operation: Activation of either detection zones 3 or 4 will activate the alarm output #1

Activation of both detection circuits 3 and 4 at the same time will start the pre-discharge timer for release circuit

output #2 as well as activate the alarm output #1

Activation of either detection zones 5 or 6 will activate the alarm output #3

Activation of both detection circuits 5 and 6 at the same time will start the pre-discharge timer for release circuit

output #4 as well as activate the alarm output #3

When either zone 3 or 4 is in alarm, output 1 will operate

When both zones 3 and 4 are in alarm at the same time, the pre-discharge timer for output #2 will operate

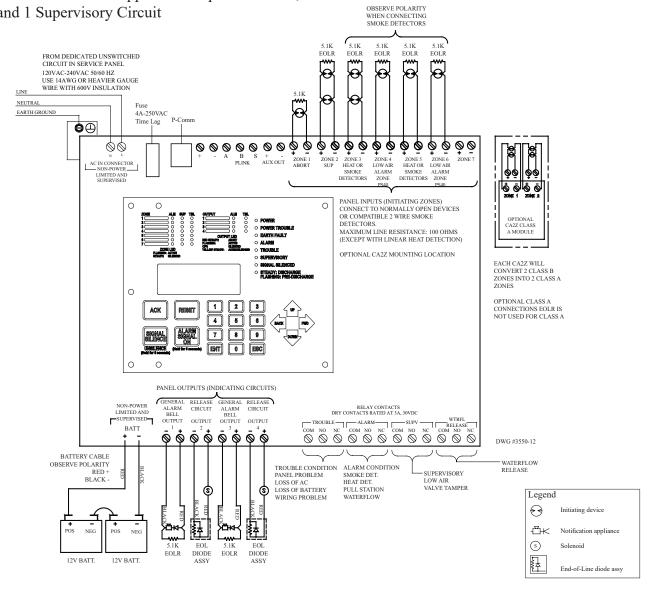
When either zone 5 or 6 is in alarm, output 3 will operate

When both zones 5 and 6 are in alarm at the same time, the pre-discharge timer for output #4 will operate

Wiring Diagram Program #21

Dual Hazard, 2 Detection Zones Mapped to 1 Release Circuit and 2 Other Detection Zones Mapped to A Separate Circuit, 1 Abort

Circuit, and 1 Supervisory Circuit



# NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- Install EOLR (provided) on all unused circuits. 3.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #21 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 21 to change to program 21. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Dual Hazard, 2 Detection		PROGRAM #21							
Zones Mapped to 1									
Release Circuit and 2 Other Detection Zones	#1	#2	#3	#4	#5	#6	#7		
Mapped to a Separate									
Release Circuit, 1									
Supervisory Circuit, 1									
Abort Circuit									
OUTPUTS	Abort	Supervisory	Detection	Detection	Detection	Detection	Unused		
#1 ALARM INDICATING			X	X					
#2 RELEASE			X	X					
#3 ALARM INDICATING					X	X			
#4 RELEASE					X	X			

Description: Dual Hazard, 2 detection zones mapped to 1 release circuit and 2 other detection zones mapped to another release

circuit

Inputs: 1 supervisory zone, 4 detection zones, 1 abort circuit

Outputs: 2 general alarm, 2 release circuit

Operation: Activation of either detection zone 3 or 4 will activate the alarm output #1 and start the pre-discharge timer for

the release circuit output #2

Activation of either detection zone 5 or 6 will activate the alarm output #3 and start the pre-discharge timer for

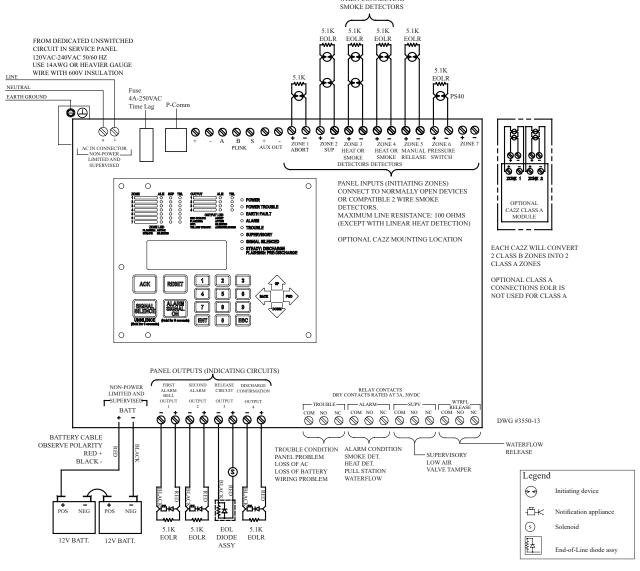
the release circuit output #2

When either zone 3 or 4 is in alarm, outputs 1 & 2 will operate When either zone 5 or 6 is in alarm, outputs 3 & 4 will operate

OBSERVE POLARITY

WHEN CONNECTING

Wiring Diagram Program #22 Single Hazard, 2 Detection Zones Cross-zoned to 1Release Circuit, 1 Manual Station and A Discharge Confirmation Zone



# NOTES:

- 1. Connect only UL Listed 24VDC devices to indicating circuits.
- 2. Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- 7. Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #22 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 22 to change to program 22. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Single Hazard, 2 Detection				PRO	OGRAM #22	2			
Zones Cross-Zoned to 1 Release Circuit, 1 Manual			CONVENTIO	NAL INPU	T ZONES			Software Zones	
Station and a Discharge Confirmation Zone	#1	#2	#3	#4	#5	#6	#7	#8	#9
OUTPUTS	Abort	Supervisory	Detection	Detection	Manual Release	Detection	Unused	Alarm	Release Zone Type
#1 1st ALARM			X	X					
#2 2nd ALARM			XX	XX	X			XX*	X
#3 RELEASE			XX	XX	X				XX*
#4 ALARM INDICATING						X			

<sup>\*</sup> Release Outputs which are Cross-Zoned and 2nd alarm need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

Description: Single Hazard, 2 detection zones cross-zoned to 1 release circuit. A manual station zone and a discharge

confirmation zone. Also first and second alarm notification circuits.

Inputs: 1 supervisory zone, 3 detection zones, 1 manual station zone, 1 abort circuit

Outputs: 3 general alarm, 1 release circuit

Operation: Activation of either detection zones 3 or 4 will activate the alarm output #1

Activation of both detection circuits 3 and 4 at the same time will activate the alarm outputs #1, #2 and start the

pre-discharge timer for the release circuit output #3

Activation of the manual release zone #5 will activate the alarm output #2 and start the manual release pre-

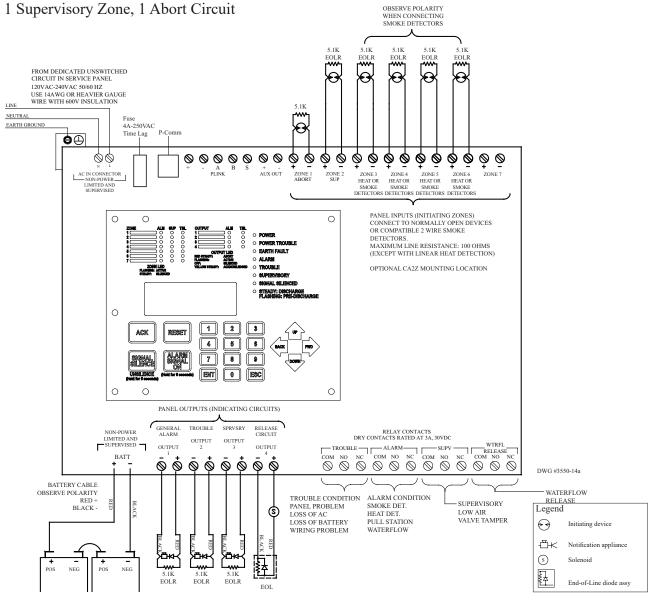
discharge timer for release circuit output #3 Activation of zone 6 will operate output #4

When either zone 3 or 4 is in alarm, output 1 will operate

When both zones 3 and 4 are in alarm at the same time, outputs #1,2 will operate and the pre-discharge timer for output #3 will start

When zone 5 is in alarm, output 2 will operate and the manual release pre-discharge timer for output #3 will start When zone 6 is in alarm, output #4 will operate

Wiring Diagram Program #23 Single Hazard, 4 Detection Zones Mapped to 1 Release Circuit, 1 Supervisory Zone, 1 Abort Circuit



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- 7. Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- 8. All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #23 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 23 to change to program 23. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Single Hazard, 4	PROGRAM #23							
Dectection Zones Mapped to 1 Release Circuit 1			CONVENTI	ONAL INPU	ΓZONES			
Supervisory Circuit, 1 Abort Circuit	#1	#2	#3	#4	#5	#6	#7	
OUTPUTS	Abort	Supervisory	Detection	Detection	Detection	Detection	Unused	
#1 ALARM INDICATING			X	X	X	X		
#2 TROUBLE								
#3 SUPERVISORY		X						
#4 RELEASE			X	X	X	X		

Description: Single Hazard, 4 detection zones mapped to 1 release
Inputs: 1 supervisory zone, 4 detection zones, 1 abort circuit
Outputs: 1 general alarm, 1 trouble, 1 supervisory, 1 release circuit

Operation: Activation of any detection zone will activate the alarm output #1 and start the pre-discharge timer for the

release circuit output #4.

Activation of the supervisory zone will operate the supervisory bell.

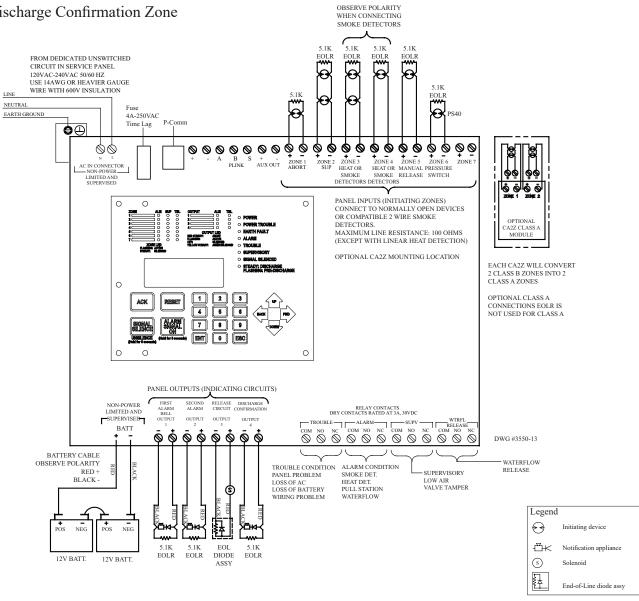
A trouble condition (low battery, wire problem, etc.) will operate the trouble bell.

When either zone 3, 4, 5, or 6 is in alarm, outputs 1 & 4 will operate

When the zone 6 supervisory zone is activated - output #3 (supervisory bell) will operate.

When the panel is in a trouble condition - output #2 (trouble bell) will operate.

Wiring Diagram Program #24 Single Hazard, 2 Detection Zones 1 Manual Station Zone and A Discharge Confirmation Zone



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- 7. Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #24 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 1 to change to program 1. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Single Hazard, 2		PROGRAM #24							
Dectection Zones, 1		CONVENTIONAL INPUT ZONES							
Manual Release Zone and A Discharge Confirmation	#1	#2	#3	#4	#5	#6	#7		
Zone									
OUTPUTS	Abort	Supervisory	Detection	Detection	Manual Release	Low Air Supervisory	Unused		
#1 ALARM INDICATING			X	X					
#2 ALARM INDICATING					X				
#3 RELEASE			X	X	X				
#4 SUPERVISORY		X				X			

Description: Single Hazard, 2 detection zones, a manual station zone and a discharge confirmation zone. Inputs: 1 supervisory zone, 1 low air zone, 2 detection zones, 1 manual station zone, 1 abort circuit

Outputs: 2 general alarm, 1 release circuit, 1 supervisory

Operation: Activation of either detection zones 3 or 4 will activate the alarm output #1 and start the pre-discharge timer for

the release circuit output #3

Activation of the manual release zone #5 will activate the alarm output #2 and start the manual release pre-

discharge timer for release circuit output #3 Activation of zone 6 will operate output #4

When either zone 3 or 4 is in alarm, output 1 will operate and the pre-discharge timer for output #3 will start. When zone 5 is in alarm, output 2 will operate and the manual release pre-discharge timer for output #3 will start.

When zone 6 is activated, output #4 will operate

# PROGRAM #25 RECOMMENDED AIR PRESSURE SETTINGS LOW AIR SUPERVISORY SUP ZONE #1 (psig) PANEL INPUTS (INITIATING CIRCUITS) LOW AIR ALARM ZONE #2 (psig) WATER SUPPLY (psig) ETLR REQUIRED AFTER LAST 0 - 175 30 175 - 250 50 50 FROM DEDICATED UNSWITCHED CIRCUIT IN SERVICE PANEL **Φ**Φ 0 0 0 0 0 0 PANEL INPUTS (INITIATING ZONES) CONNECT TO NORMALLY OPEN DEVICES OR COMPATIBLE 2 WIRE SMOKE DETECTORS. MAXIMUM LINE RESISTANCE: 100 OHMS (EXCEPT WITH LINEAR HEAT DETECTION) LOW\_AIR SUPERVISORY AND LOW AIR ALARM SWITCH 0 WATERFLOW SWITCH **⊘** ~ 0 ā 6 7 8 2 0 0 0 0000 RED + BLACK SUPERVISORY CONDITION LOW AIR PRESSURE SUPERVISOR OR LOW AIR PRESSURE ALARM OR VALVE TAMPER SUPERVISOR\* RELAY CONTACTS DRY CONTACTS RATED AT 3A, 30VDC Legend N.O. Initiating Device PANEL OUTPUTS (INDICATING CIRCUITS) ďĸ Notification Appliance s End-of-Line Diode Assy

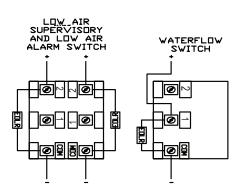
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 25 to change to program 25. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the changer

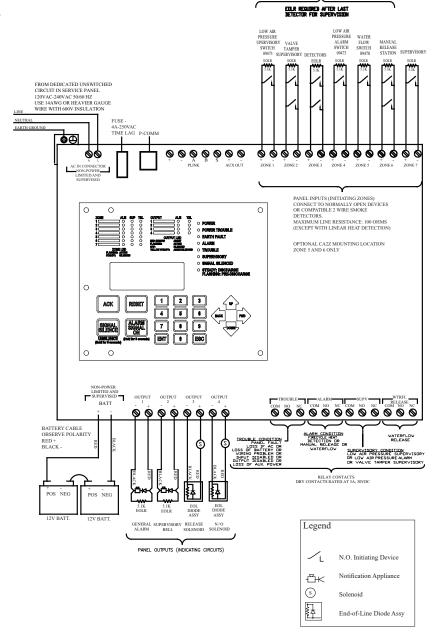
	,	· -	PROGRAM #25							
		For	One Sprinkler Syst	em			1			
Viking Sprinkler	Release Zone	1. FIRECYCL	E IV Single Interlo	cked Preacti	on Multicycl	e System				
System Types	and Manual Release Zone	12. TINDO TODE IV SHIPIC IIICHOCKCU I ICACHOH MIUHOVCIC System - N TO SDCCIAL								
		ZONES (Initiating Circuits)								
OUTPUTS	#1	#2	#3	#	#5	#6	#7			
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 4 Detector Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone			
#1 General Alarm			X		X	X				
#2 Supervisory Bell	X	X		X			X			
#3 Release Solenoid		X X								
#4 N/O Solenoid			X	X	X					
Inputs:	FIRECYCLE 4 Supervisory 20	4 Detector zone,	ATION DESCRIP' Low Air Alarm zo		low zone,1 M	Ianual Release z	zone, 3			
Outputs:	1 General Alar	m, 1 Supervisor	y Alarm, 1 Release	Solenoid, an	nd 1 N/O Sol	enoid	1			
Operation:			Detector zone #3 w #4 (N/O Solenoid		utput #1 (Ge	neral Alarm), ou	itput #3			
	Activation of I Solenoid)	Low Air Alarm z	one #4 will activat	e output #2 (	Supervisory	Bell) and outpu	t #4 (N/O			
	Activation of V	Waterflow zone #	5 will activate out	put #1 (Gene	eral Alarm) a	nd output #4 (N	O Solenoid)			
Activation of Manual Release zone #6 will activate output #1 (General Alarm) and output #3 (Release Solenoid)										
Deactivation of FIRECYCLE 4 Detector zone #3 will start soak timer, when timer cycle is complete output #3 (Release Solenoid) is deactivated							complete			
		Low Air Alarm z #2 (Supervisory	one #1, Valve Tam Bell)	per Supervis	ory zone#2 o	or Supervisory z	one #7 will			

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 9. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.

#### PROGRAM #26

	RECOMMENDED AIR	PRESSURE SETTINGS
WATER SUPPLY (pslg)	LOW AIR ALARM ZONE #2 (psig)	LOW AIR SUPERVISORY SUP ZONE #1 (pslg)
0 - 175	30	30
175 - 250	50	50





PANEL INPUTS (INITIATING CIRCUITS)

- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 26 to change to program 26. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

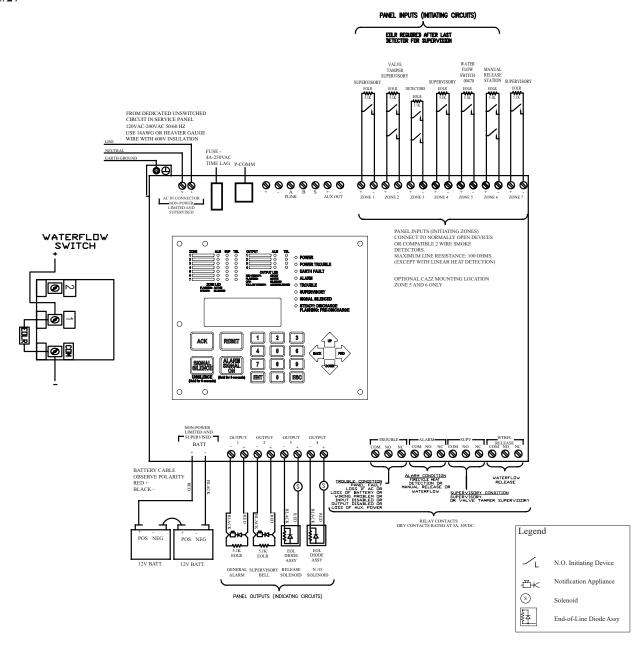
			PROGRAM #	26						
		F	or One Sprinkler S	System				1		
Viking Sprinkler	Release Zone	1. FIRECYCL	E IV Double Inter	locked Prea	action Multic	ycle Syste	m			
System Types	and Manual Release Zone	2. FIRECYCL	E IV Double Inter	locked Prea	action Multic	ycle Syste	m - NYC Spec	ial		
			ZONES (Initia	ating Circui	ts)			Software Zone		
OUTPUTS	#1 #2 #3 #4 #5 #6 #7									
(Indicating Circuits)	Low Air Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 4 Detection Zone	Low Air Alarm Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone	Release Type Zone		
#1 General Alarm		X X X X								
#2 Supervisory Bell	X	X X X X								
#3 Release Solenoid		XX XX X XX XX*								
#4 N/O Solenoid				X	X					
Inputs:	1 FIRECYCLE Supervisory zo	4 Detector zone	ERATION DESCR e, 1 Low Air Aları		Vaterflow zoi	ne, 1 Manu	al Release zon	e, 3		
Outputs:	<u> </u>		y Bell, 1 Release S	Solenoid at	nd 1 N/O Sol	enoid				
Operation:	Simultaneous a	ctivation of both #1 (General Ala	th the FIRECYCLI (Surm), output #2 (Su	E 4 Detecto	r zone #3 an	d the Low				
	Activation of F	IRECYCLE 3 I	Detector zone #3 w	vill activate	output #1 (C	General Ala	ırm)			
	Activation of L Solenoid)	ow Air Alarm z	one #4 alone will	activate ou	tput #2 (Supe	ervisory Be	ell) and output	#4 (N/O		
	Activation of V	Vaterflow zone #	5 will activate out	tput #1 (Ge	neral Alarm)	and outpu	t #4 (N/O sole	noid)		
	Activation of Manual Release zone #6 will activate output #1 (General Alarm) and output #3 (Release Solenoid)									
	Deactivation of FIRECYCLE 4 Detector zone #3 will start soak timer, when timer cycle is complete the output #3 (Release Solenoid) is deactivated.									
		ow Air Supervisory #2 (Supervisory	sory zone #1, Valv Bell)	e Tamper S	Supervisory z	one #2 or \$	Supervisory zo	ne #7 will		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 9. Loss of DC power below 20 volt causes output #3 (Release Solenoid) to drop out.

#### PROGRAM #27



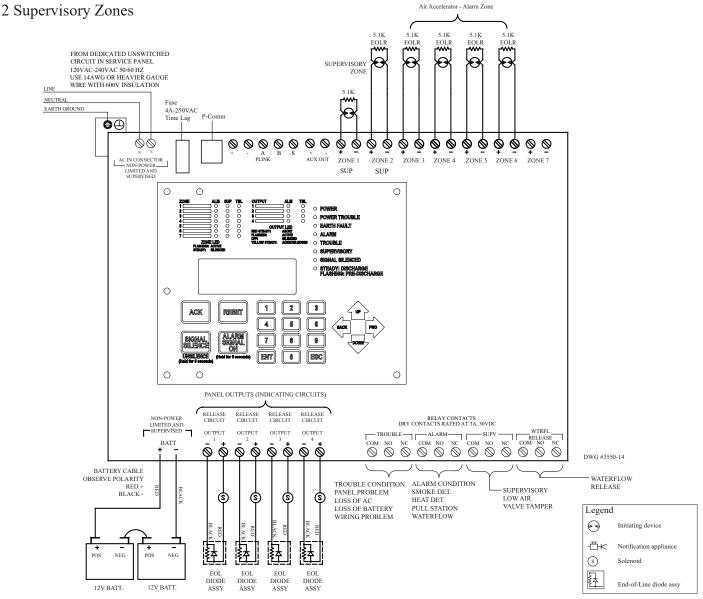
- 1. Run field wiring and ensure connections are proper by metering wires. Resistance reading should be 5.1K ohms with end-ofline resistor (EOLR) at last device. The end-of-line resistor are supplied with the panel Install EOLR on all unused circuits.
- 2. Connect one circuit at a time and apply AC power.
- 3. Connect batteries to the panel
- 4. Press ENT to enter PROGRAM mode
- 5. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 6. Enter the password. (Factory default is 1111)
- 7. Press 1 or press ENT. (1 should be the highlighted selection)
- 8. The display shows the current program number. Press 27 to change to program 27. Press ENT.
- 9. Press 1 to accept the change.
- 10. Press ENT to accept the change

		PI	ROGRAM #27								
		For Or	ne Sprinkler Systen	n							
Viking Sprinkler	1 Release Zone	1. FIRECYCLI	E IV Deluge Multion	cycle System							
System Types	and Manual Release	12. FIRECTCLE IV WEI MUNICYCIE SYSIEIII									
		ZONES (Initiating Circuits)									
OUTPUTS	#1	#2	#3	#4	#5	#6	#7				
(Indicating Circuits)	Supervisory Zone	Valve Tamper Supervisory Zone	FIRECYCLE 4 Detector Zone	Supervisory Zone	Waterflow Zone	Manual Release Zone	Supervisory Zone				
#1 General Alarm			X		X	X					
#2 Supervisory Bell	X	X		X			X				
#3 Release Solenoid			X			X					
#4 N/O Solenoid			X		X						
		OPERAT	TION DESCRIPTION	ON							
Inputs:	1 FIRECYCLE 4	Detection zone	, 1 Waterflow zone	, 1 Manual Re	lease zone, 4	Supervisory	zones /				
Outputs:	1 General Alarm,	, 1 Supervisory E	Bell, 1 Release Sole	enoid, and 1 N	O Solenoid						
Operation:	Activation of FIF (Release Solenoi		ector zone #3 will (N/O Solenoid)	activate output	t#1 (General	Alarm), out	put #3				
	Activation of Wa Solenoid)	terflow Alarm zo	one #5 will activate	e output #1 (Ge	eneral Alarm)	and output	#4 (N/O				
	Activation of Ma Solenoid)	nual Release zoi	ne #6 will activate	output #1 (Ger	neral Alarm) a	and output #	3 (Release				
	Deactivation of F output #3 (Release		Detector zone #3 wi eactivated.	ill start soak tir	ner, when tin	ner cycle is	complete the				
			1, Valve Tamper Su output #2 (Superv		e #2, Superv	isory zone #	4 or				

- 1. Connect EOL Diode assembly IN SERIES as shown with Solenoid on output #3 (Release Solenoid) and output #4 (N/O Solenoid). Black wire to negative terminal on panel and Red wire through Solenoid to positive terminal on panel.
- 2. Polarity is shown on indicating circuits in an activated (in alarm) condition.
- 3. Install EOLR (provided) on all unnused circuits.
- 4. See the instruction manual for circuit information, panel limits, and battery sizing.
- 5. For wire routing instructions through the releasing panel, see Fig 1 on page 2-7 of the instruction manual.
- 6. See instruction manual for proper programming.
- 7. See specific system type data page for proper pressure switch settings.
- 8. Set the soak timer to desired duration period. Factory setting is continuous. Recommend 60 seconds minimum.
- 9. Loss of DC power below 20 volt causes output #3 (Release Solenoid) and output #4 (N/O Solenoid) to drop out.

# Wiring Diagram Program #28

4 Alarm Zones and 4 Release Circuits mapped 1 to 1.



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- 2. Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #28 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 28 to change to program 28. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

4 Alarm Zone and 4		PROGRAM #28									
Release Circuits mapped 1		CONVENTIONAL INPUT ZONES									
to 1, 2 Supervisory Zones	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS	Supervisory	Supervisory	Detection	Detection	Detection	Detection	Unused				
#1 RELEASE			X								
#2 RELEASE				X							
#3 RELEASE					X						
#4 RELEASE						X					

Description: 4 Alarm Zone and 4 Release Outputs mapped 1 to 1 Inputs: 4 Air Accelerator - Alarm Zone, 2 Supervisory zones

Outputs: 4 release circuits

Operation: Activation of detection zone 3 will activate release output #1

Activation of detection zone 4 will activate release output #2 Activation of detection zone 5 will activate release output #3 Activation of detection zone 6 will activate release output #4

#### **NOTE: TO CHARGE SYSTEM**

After initially setting the VFR-500 to program 28 and the panel resets

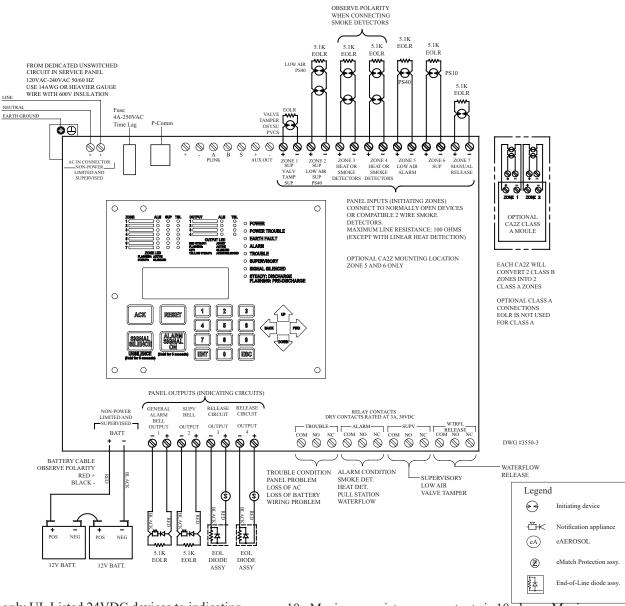
- 1. Press ENT to enter PROGRAM mode
- 2. Press 8 or scroll down to #8 Panel Setup and press ENT (The selection is indicated by a flashing arrow next to the number)
- 3. Enter the password (Factory is 1111)
- 4. Press 9 or scroll down to #9 Air Accelerator and press ENT (The selection is indicated by a flashing arrow next to the number) NOTE: The display will read: When Fill Completed Press ESC 2X to Exit and the remaining time till timeout
- 5. Charge the system to normal operating pressure.
- 6. Press ESC twice to exit Air Accelerator

NOTE: Wait 60 seconds after the system reaches normal operating pressure before testing the Air Accelerator

# **A** CAUTION

When in Air Accelerator Fill, the panel is inoperative. None of the outputs or inputs will operate. No Air Accelerator will operate. The sprinkler system will operate as a regular dry pipe system.

# Wiring Diagram Program #30 Failsafe Single Hazard Cross Zoned, -2 Alarm Zones, 1 Waterflow Zone, 2 supervisory Zones with Manual Release



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All
  other outputs are Regulated 24 VDC, Rated 3 Amp each, 3
  Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #30 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 30 to change to program 30. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Failsafe Cross				PROGRAM #3	30			
Zoned Activation With		,	SOFTWARE ZONES					
Normally Open and Normally Closed Solenoid	#1	#2	#3	#4	#5	#6	#7	#8
OUTPUTS	VALVE TAMPER SUPERVISORY	LOW AIR SUPERVISORY	CONVENTIONAL DETECTION	CONVENTIONAL DETECTION	LOW AIR ALARM	WATER FLOW	MANUAL RELEASE	RELEASE ZONE TYPE
#1 ALARM INDICATING (General Alarm)			X	X		X	X	X
#2 RELEASE NORMALLY ENERGIZED (Failsafe Solenoid, Drops Out on Any System Trouble)			X	X			X	
#3 RELEASE			XX	XX	XX Either Zone 3 & 5 or 4 & 5		X	XX*
#4 ALARM (waterflow alarm)						X		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

Inputs 2 Supervisory zones, 2 conventional detection zones, 1 Low Air Alarm zone, 1 Waterflow zone, 1 Manual release

zone.

Outputs: 1 General alarm Indicating, 1 Failsafe Release Circuit: Normally Energized. de-energizes on any system

trouble, 1 Release Circuit: Normally Not Energized, 1 Waterflow alarm output.

Operation: Output 2 is constantly energized. Any trouble condition on the panel will de-energize output 2.

Activation of supervisory zone 1 or 2 or activation of Low Air Alarm zone 5, will only create supervisory

condition on the panel.

Activation of Conventional Detection zone #3 and/or zone 4 will activate General alarm output 1 and De-

energize output 2.

Activation of either Conventional Detection zone #3 OR zone 4, AND activation of Low Air Alarm zone 5, will

energize/activate release output #3.

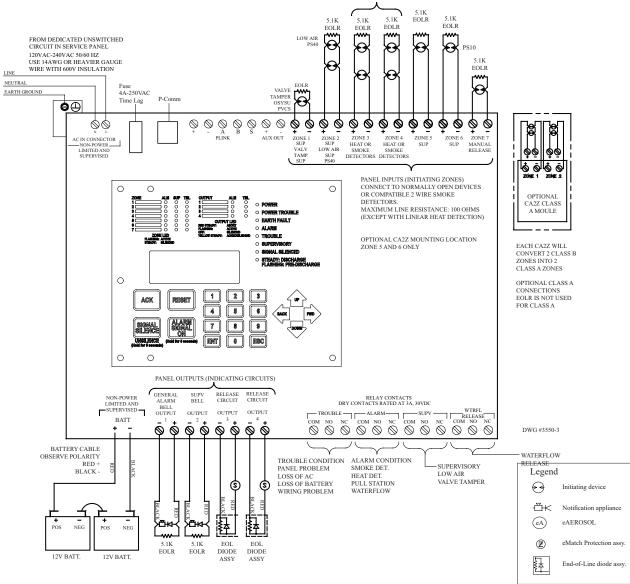
Activation of Manual Release zone #7 will activate General alarm output 1, de-energize failsafe release output 2

and energize/activate release output #3.

OBSERVE POLARITY WHEN CONNECTING SMOKE DETECTORS

# Wiring Diagram Program #31

Failsafe Single Hazard, -2 Alarm Zones, 1 Waterflow Zone, 3 supervisory Zones with Manual Release



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- 7. Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #31 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 31 to change to program 31. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Failsafe Operation		PROGRAM #31									
Single zone activation	CONVENTIONAL INPUT ZONES										
Two solenoids, one is Normally Energized	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS	VALVE TAMPER SUPERVISORY	LOW AIR SUPERVISORY	CONVENTIONAL DETECTION	CONVENTIONAL DETECTION	SUPERVISORY	WATER LOW	MANUAL RELEASE				
#1 ALARM INDICATING (General Alarm)			X	X		X	X				
#2 RELEASE NORMALLY ENERGIZED (Failsafe Solenoid, Drops Out on Any System Trouble)			X	X			X				
#3 RELEASE (Solenoid)			X	X			X				
#4 ALARM (waterflow alarm)						X					

Inputs: 3 Supervisory zones, 2 conventional detection zones, 1 Waterflow zone, 1 Manual release zone

Outputs: 1 General alarm Indicating, 1 Release Circuit: Normally Energized. Failsafe, De-energizes on any system

trouble, 1 Release Circuit: Normally Not Energized, 1 Waterflow alarm output.

Operation: Output 2 is constantly energized. Any trouble condition on the panel will de-energize output 2. Activation of

Supervisory zone 1, zone 2 or Low Diaphragm water Pressure zone 5, will create a supervisory condition on the

panel.

Activation of Conventional Detection zone 3 or zone 4, or Manual Release zone 7 will activate General alarm

output 1, De-energize output 2 and energize/activate release output 3.

Activation of Waterflow zone 6 will activate General alarm output 1 and Waterflow alarm output 4.

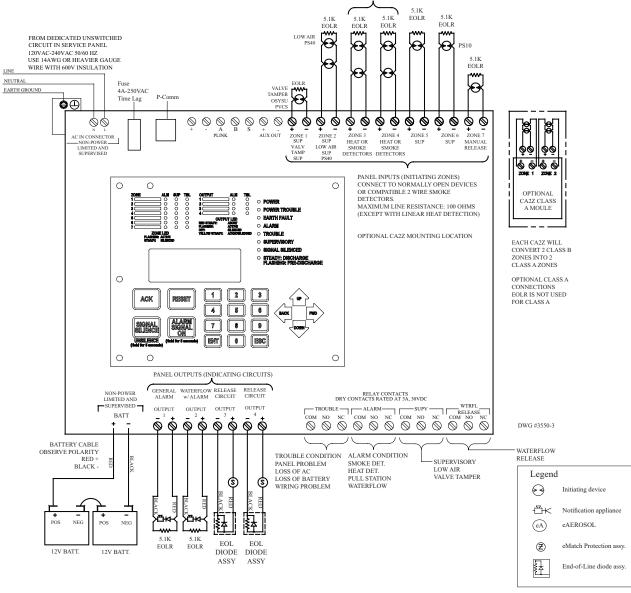
Activation of Manual Release zone #7 will activate General alarm output 1, de-energize failsafe release output 2

and energize/activate release output #3.

# Wiring Diagram Program #32

Double Interlock with Redundant Solenoids Crossed Zone - 3 Supervisory zones, 2 OBSERVE POLARITY WHEN CONNECTING SMOKE DETECTORS

Detection zones, 1 Waterflow zone, 1 Manual Release zone



# NOTES:

- Connect only UL Listed 24VDC devices to indicating
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- Install EOLR (provided) on all unused circuits. 3.
- Polarity is shown on indicating circuits in an activated (off-normal) condition.
- Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #32 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 32 to change to program 32. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Double Interlock with		PROGRAM #32									
Redundant Solenoids Cross Zoned Activation		CONVENTIONAL INPUT ZONES SOFTWARE ZO									
Zoned Activation	#1	#2	#3	#4	#5	#6	#7	#8	#9		
OUTPUTS	Low Air Supervisory	Valve Tamper	Conventional Detection	Conventional Detection	Low Air Alarm	Waterflow	Manual Release	Release Zone Type	Release Zone Type		
#1 GENERAL ALARM			X	X		X	X	X	X		
#2 WATERFLOW ALARM						X					
#3 RELEASE SOLENOID			XX	XX	XX Either Zones 3 &5 or 4&5		X	XX*	XX*		
#4 RELEASE SOLENOID			XX	XX	XX Either Zones 3 &5 or 4&5		X	XX*	XX*		

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Software Zone in order to work properly. The Software Zone Number will be displayed upon a release.

XX = Cross-Zoned

Inputs: 3 Supervisory zones, 2 Detection zones, 1 Waterflow zone, 1 Manual Release zone

Outputs: 1 General Alarm, 1 Waterflow, 2 Release Solenoids

Operation: Activation of any supervisory zone or Low Air Alarm zone will create a supervisory condition on the panel, no

outputs will activate

Activation of Conventional Detection zone 3 and/or 4 will activate General Alarm output 1

Activation of either Conventional Detection zone 3 OR 4 AND Low Air Alarm zone 5 will activate General

Alarm output 1 and Release Solenoid outputs 3 and 4.

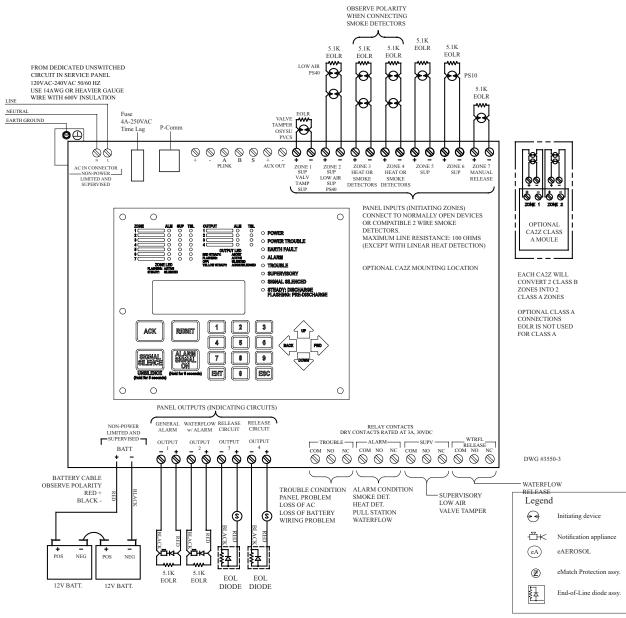
Activation of Waterflow zone 6 will activate General alarm output 1 and Waterflow output 2.

Activation of Manual Release zone #7 will activate General Alarm output 1 and Release Solenoid outputs 3 and

4.

# Wiring Diagram Program #33

# Redundant Solenoids Single Interlock with Single Zone Activation



#### NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All
  other outputs are Regulated 24 VDC, Rated 3 Amp each, 3
  Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #33 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 33 to change to program 33. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Redundant Solenoids		PROGRAM #33									
Single Interlock with Single		ZONES									
Zone Activation	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS	Low Air Supervisory	Valve Tamper	Conventional Detection	Conventional Detection	Low Air Alarm	Waterflow	Manual Release				
#1 GENERAL ALARM			X	X		X	X				
#2 WATERFLOW ALARM						X					
#3 RELEASE SOLENOID			X	X			X				
#4 RELEASE SOLENOID			X	X			X				

Inputs: 3 Supervisory zones, 2 Detection zones, 1 Waterflow zone, 1 Manual Release zone

Outputs: 1 General Alarm, 1 Waterflow, 2 Release Solenoids

Operation: Activation of any supervisory zone or Low Air Alarm zone will create a supervisory condition on the panel, no

outputs will activate

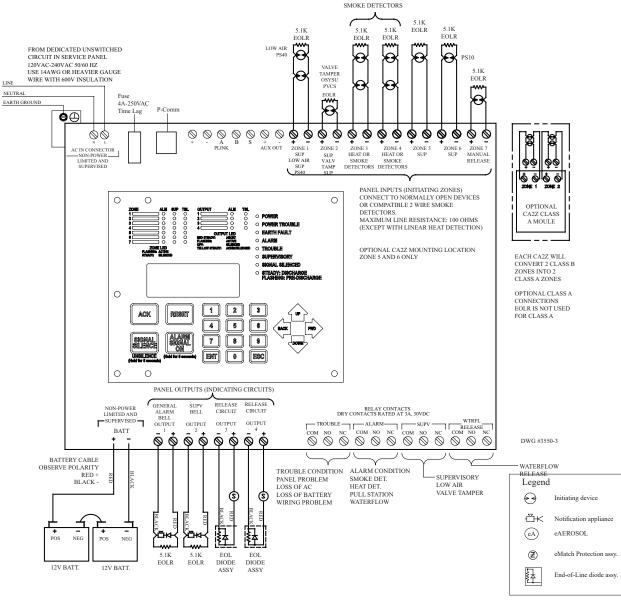
Activation of Conventional Detection zone 3 and/or 4 and/or Manual Release zone 7 will activate General

Alarm output 1 and Release Solenoid outputs 3 and 4

Activation of Waterflow zone 6 will activate General alarm output 1 and Waterflow output 2

OBSERVE POLARITY

# Wiring Diagram Program #34 Single Hazard Latching Solenoid with Remote reset



# NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits.
- Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- 7. Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #34 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 1 to change to program 1. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Single Zone Activation:			PI	ROGRAM #34							
Latching Solenoid Remote Solenoid Reset		ZONES									
Remote Solenoid Reset	#1	#2	#3	#4	#5	#6	#7				
OUTPUTS	Low Air Supervisory	Valve Tamper	Conventional Detection	Conventional Detection	Valve Reset Supervisory	Waterflow	Manual Release				
#1 GENERAL ALARM	Supervisory	ramper	X	X	Supervisory		X				
#2 RELEASE SOLENOID (2 second pulse)			X	X			X				
#3 SOLENOID RESET (2 second pulse)					X						
#4 WATERFLOW BELL						X					

Inputs: 2 Supervisory zones, 2 conventional detection zones, 1 Waterflow zone, 1 Manual release zone, 1 Valve Reset

zone

Outputs: 1 General alarm Indicating, 1 Release circuit, 1 Valve Reset circuit, 1 Waterflow Bell Operation: Activation of Supervisory zone 1 or 2 will create a supervisory condition on the panel

Activation of Conventional Detection zone 3 or 4 will activate General alarm output 1 and temporarily activate

release output 2 for two seconds

Activation of Valve Reset zone 5 will temporarily activate release output 3 to reset the solenoid on the preaction

valve and create a supervisory condition

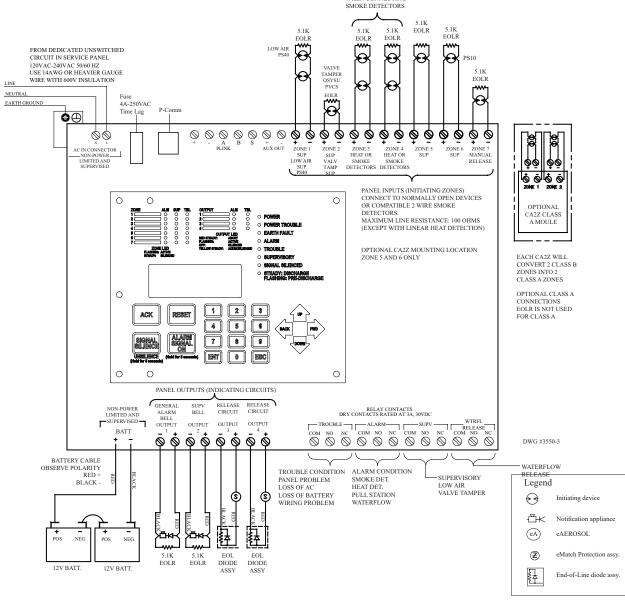
Activation of Waterflow zone 6 will activate the waterflow bell output 4

Activation of Manual Release zone #7 will activate General alarm output 1 and temporarily energize release

output #2

OBSERVE POLARITY

# Wiring Diagram Program #35 Single Hazard Latching Solenoid Cross Zoned with Remote reset



# NOTES:

- Connect only UL Listed 24VDC devices to indicating circuits
- 2. Connect EOL Diode assembly IN SERIES with solenoid on release circuit
- 3. Install EOLR (provided) on all unused circuits.
- 4 Polarity is shown on indicating circuits in an activated (off-normal) condition.
- 5. Polarity reverses when output is activated.
- Maximum current per output is 3 Amp. Maximum voltage is 33VDC.
- Outputs identified as Release are Special Application. All other outputs are Regulated 24 VDC, Rated 3 Amp each, 3 Amp total for all 4 circuits.
- 8. All initiating and NAC/Release circuits are supervised and power limited. See Main Board Wiring Specifications for wire routing instructions. All frequencies are continuous.
- 9. Refer to Appendix A for test and maintenance information

10. Maximum resistance on outputs is 10 ohms. Maximum resistance on outputs programmed as releasing, is 1 divided by current requirements of solenoid.

See Appendix C for smoke detector compatibility data.

# Program #35 Mode

- 1. Apply power to panel.
- 2. Press ENT to enter PROGRAM mode
- 3. Press 6 or scroll down to #6 and press ENT, (The selection is indicated by a flashing arrow next to the number.
- 4. Enter the password. (Factory default is 1111)
- 5. Press 1 or press ENT. (1 should be the highlighted selection)
- 6. The display shows the current program number. Press 1 to change to program 1. Press ENT.
- 7. Press 1 to accept the change.
- 8. Press ENT to accept the change.

Latching Solenoid				PROGRAN	Л #35					
Cross Zoned		CONVENTIONAL INPUT ZONES								
	#1	#2	#3	#4	#5	#6	#7	#8		
OUTPUTS	VALVE TAMPER SUPERVISORY	LOW AIR SUPERVISORY	CONVENTIONAL DETECTION	LOW AIR ALARM	VALVE RESET SUPERVISORY	WATER FLOW	MANUAL RELEASE	RELEASE ZONE TYPE		
#1 GENERAL ALARM			X				X	X		
#2 RELEASE SOLENOID (2 second pulse)			XX	XX			X	XX*		
#3 SOLENOID RESET (2 second pulse)					X					
#4 WATERFLOW BELL						X				

<sup>\*</sup> Release Outputs which are Cross-Zoned need a Pseudo Zone in order to work properly. The Pseudo Zone Number will be displayed upon a release.

XX = Cross-Zoned

Inputs: 2 Supervisory zones, 1 conventional detection zone, 1 Low Air Alarm zone, 1 Waterflow zone, 1 Manual release

zone, 1 Valve reset zone

Outputs: 1 General alarm Indicating, 1 Release circuit, 1 Valve Reset circuit, 1 Waterflow Bell

Operation: Activation of Conventional Detection zone #3 and Low Air Alarm zone #4 at the same time or activation of

Manual Release zone #7 will activate and energize release output #2

Activation of Low Air Alarm zone 4 will create a supervisory condition on the panel

Activation of Valve Reset zone 5 will reset the solenoid on the preaction valve for two seconds

Activation of Waterflow zone 6 will activate the waterflow bell output 4

	CUSTOM PROGRAM												
		CONVENTIONAL ZONES											
	#1	#1 #2 #3 #4 #5 #6 #7											
OUTPUTS													
#1													
#2													
#3													
#4													

