



# ADLI V2

## Addressable Loop Interface

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## INSTALLATION / PROGRAMMING MANUAL

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### GENERAL DESCRIPTION

The ADLI V2 is an Addressable Loop interface which allows a conventional ORION / ORION-EX V2 panel to be integrated in any of GFE's analogue addressable systems, allowing the addressable panel to monitor and control the status of the conventional panel. An 8 way DIL Switch is provided to set the module's address and to configure the advanced features.

### MAIN FEATURES

- Fast activation response
- Three status LEDs
- Remote sound / Silence alarms
- Remote reset
- Low power consumption
- Automatic conventional panel recognition
- Fault and fire status report
- Different analogue values for zone, panel and supply faults for easier troubleshooting
- Programmable number of addresses to report (for ORION conventional panel)
- Programmable extinguishing, pre-release delay, sounder and disablements status report using 4 additional addresses reporting as I/Os (ORION-EX V2 panel only)

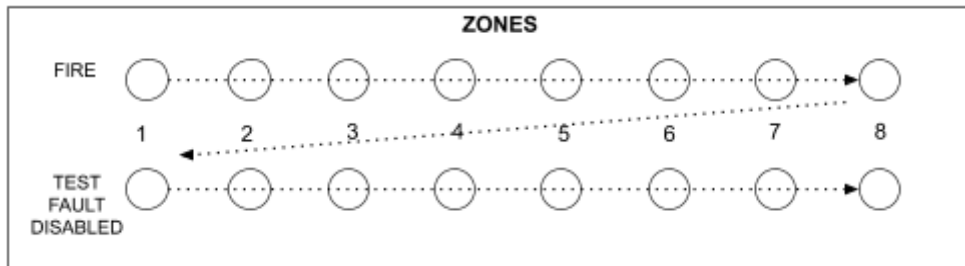
### IMPORTANT SAFETY NOTES

- This equipment must only be installed and maintained by a suitably qualified and technically competent person.
- A basic knowledge and training in the installation of Fire and Extinguish Detection systems is assumed.
- The fire detection system should be designed by a suitably qualified person with reference to the local Regulations and Guidance from the Fire Officer where applicable.

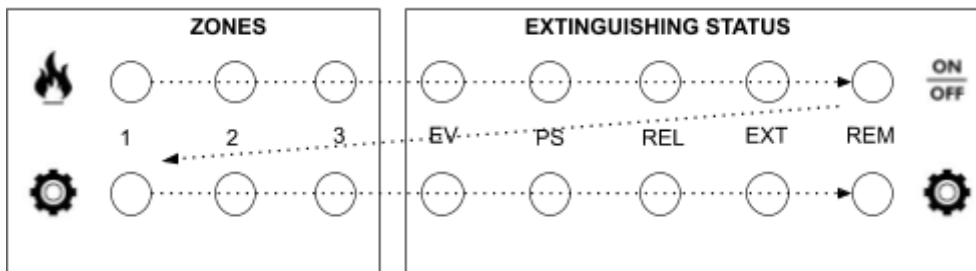


## COMPATIBILITY NOTE

ADLI V2 module is only compatible with **ORION / ORION-EX V2** panels that exhibit the following sequential LED pattern during RESET:



ORION LED pattern



ORION-EX V2 LED pattern

## REPORTING DETAILS



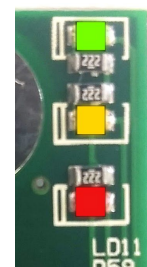
ADLI V2

## STATUS LEDS

**GREEN LED** - This LED will flash every time the addresses associated with the module are polled by the addressable panel.

**YELLOW LED** - This LED will be lit whenever there is a fault condition associated to the conventional panel.

**RED LED** - This LED will be lit whenever there is a FIRE condition present on the conventional panel. Please note that, if the conventional panel is in TEST mode, no fire condition will be reported to the addressable panel.





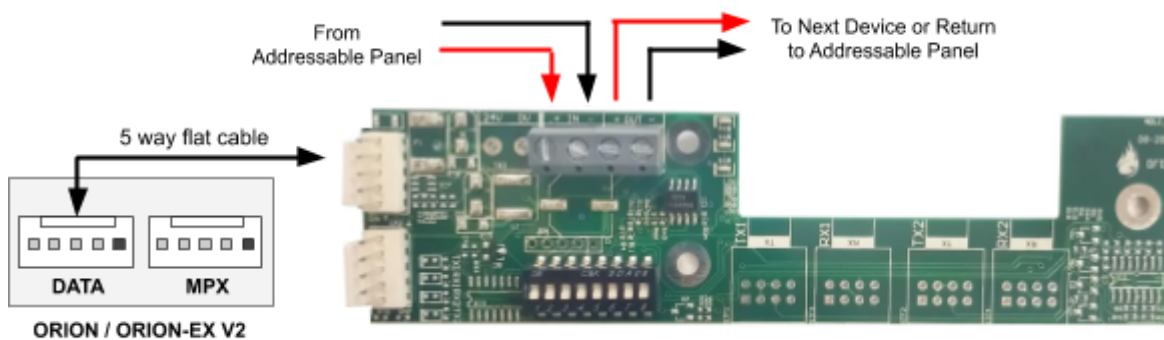
## REPORTED ANALOGUE VALUES

The ADLI V2 reports different analogue values depending on the status and type of fault present on the conventional panel, allowing a faster troubleshooting.

The table below describes the different analogue values reported to the addressable panel.

	REPORTED ANALOGUE VALUE
NORMAL OPERATION	16
ZONE FAULT	4
PANEL FAULT	8
CONVENTIONAL PANEL POWER SUPPLY FAULT	2
FIRE CONDITION / ACTIVATED CONDITION	64

## CONNECTING THE ADLI V2



## ADDRESS D.I.L. SWITCH CONFIGURATION



**Switches 1-7:** Used to address the module.

**Switch 8:** Not used (Special function on programming mode).

## ADDRESS SETTINGS

The ADLI V2 can assume from one to eight consecutive addresses depending on the programmed settings (refer to ADVANCED PROGRAMMABLE FEATURES section of this manual) and the type of conventional panel that it is connected to, ORION or ORION-EX V2.

If connected to an ORION conventional panel, the ADLI V2 assumes only one address, by default, but can be configured to assume one address per zone. If it is configured to have one address per zone, the ADLI V2 will assume 2 / 4 / 8 consecutive addresses, starting from the address that is set on the D.I.L. switch. Every address set reports to the analogue addressable panel as a ZONE MONITOR UNIT.

If connected to an ORION-EX V2, the ADLI V2 assumes, by default, four consecutive addresses, one per each fire detection zone. If the I/O REPORT advanced programmable feature is set to ACTIVE, then the module will assume four additional consecutive addresses reporting as I/O to the analogue addressable panel (for additional details refer to ADVANCED PROGRAMMABLE FEATURES section of this manual).



01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
121	122	123	124	125			



## ADVANCED PROGRAMMABLE FEATURES

### PROGRAMMING MODE D.I.L. SWITCH CONFIGURATION

In order to set the module in programming mode first POWER OFF your module then set DIL switches 1 to 7 to OFF and switch 8 to the ON position, as indicated on the image below. Finally POWER ON your module.



**Switches 1-7:** Used to select programming parameter and assigned value

**Switch 8:** Programming Mode

When in programming mode the 2 LEDs (Green and Red) will flash alternatively. The unit will remain in programming mode while SW 8 is in the ON position. When switch 8 goes from ON to the OFF position the settings indicated on switches 1 through 7 will be recorded on the non-volatile memory of the module. If a new parameter has been accepted, the Green LED will flash 4 times. When programming is not accepted the Red indicator will remain on for an extra 3 seconds.

### PROGRAMMABLE OPTIONS

#### NUMBER OF ADDRESSES TO REPORT

**NOTE:** *This configuration will only have effect when the ADLI V2 is to be used with an ORION Conventional Fire Detection Panel.*

This programmable feature allows the user to configure the ADLI V2 to report to the addressable panel with only one address or with one address per zone. The address/addresses configured will report as ZONE MONITOR UNITS (ZMU).

When the ADLI V2 is configured to report with **ONE ADDRESS ONLY**, it will only assume one address on the loop and any fault or fire condition present on the conventional panel will be reported on that same address.

If the ADLI V2 is configured to report with **2 / 4 / 8 ADDRESSES**, it will assume 2 / 4 / 8 consecutive addresses on the loop (e. g. if the configuration is 4 addresses and the D.I.L. switch addressing is set to address number one, the ADLI V2 will report on addresses number 1, 2, 3 and 4), one per each zone of the ORION conventional panel. Any fault or fire condition present on one of the conventional panel zones will be reported to the addressable panel on it's associated address. Any other conventional panel fault will be reported on the first address set on the D.I.L. switch.

#### REMOTE RESET / SILENCE SOUNDERS

This programmable feature allows the ORION / ORION-EX V2 panel to be controlled remotely from any of GFE's analogue addressable panels, allowing the user to SILENCE / RESOUND Alarms (EVACUATION) and reset the panel from the addressable panel.

If this function is set to not active, the sounders can still be activated from the addressable panel but it will not be possible to silence the sounder nor perform a remote reset.

This function is ACTIVE by default to ORION panel and NOT ACTIVE by default to ORION-EX V2 panel.



## I/O REPORT

**NOTE:** This configuration will only have effect when the ADLI V2 is to be used with an ORION-EX V2 Conventional Extinguishing Panel.

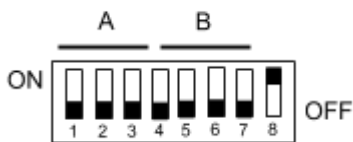
This programmable feature allows the user to configure the ADLI V2 to report the state of ORION-EX V2 **S1 sounder, Pre-release delay, REM and general disablement LED**, using four additional consecutive addresses reporting as Input/Outputs (I/O) to the addressable address.

An Output activation command from the addressable panel to the first I/O (S1 sounder) will activate the evacuation on the ORION-EX V2 conventional panel.

This allows, if more than one conventional panel is connected to an addressable panel through an ADLI V2 module, to activate an evacuation individually on each conventional panel via, e.g., a call point activating a I/O group containing the S1 sounder I/O address.

## PROGRAMMING ADLI V2

In order to program the different functions available use switches 1 through 7 as shown below:



**A** – The first 3 switches select the function to be programmed.

**B** – Switches 4 through 7 select the value for the function to be programmed.

The table below shows the available functions and correspondent values, as well as the D.I.L. Switch configuration needed to obtain the desired Output configuration:



FUNCTION				VALUE				
DIL SWITCH	SW1	SW2	SW3	DIL SWITCH	SW4	SW5	SW6	SW7
NUMBER OF ADDRESSES TO REPORT (ORION PANEL ONLY)	ON	OFF	OFF	ONE ADDRESS (Default)	OFF	OFF	OFF	OFF
				TWO ADDRESSES (to be used with ORION 2 ZONES)	ON	OFF	OFF	OFF
				FOUR ADDRESSES (to be used with ORION 4 ZONES)	OFF	ON	OFF	OFF
				EIGHT ADDRESSES (to be used with ORION 8 ZONES)	ON	ON	OFF	OFF
REMOTE RESET / SILENCE SOUNDERS	OFF	ON	OFF	NOT ACTIVE (Default for ORION-EX V2)	OFF	OFF	OFF	OFF
				ACTIVE (Default for ORION)	ON	OFF	OFF	OFF
I/O REPORT (ORION-EX V2 PANEL ONLY)	ON	ON	OFF	DO NOT REPORT I/Os (Default)	OFF	OFF	OFF	OFF
				REPORT I/Os	ON	OFF	OFF	OFF



## STEP BY STEP ADVANCED FEATURES CONFIGURATION EXAMPLE

### NUMBER OF ADDRESSES TO REPORT FUNCTION

Let's assume that the ADLI V2 is to be used with an ORION Conventional Fire Detection Panel with 8 fire detection zones, and the desired configuration is to report one address per zone.

**STEP 1:** Remove power from the ORION panel and assure that the module is connected to the panel with the 5 way flat cable.

**STEP 2:** Set D.I.L. Switches 1 to 7 to OFF position and D.I.L. Switch 8 to ON position.

**STEP 3:** Power up the Panel. The two LEDs flashing alternatively on the module indicates that the module is in programming mode.

**STEP 4:** Set the D.I.L. Switches 1 to 3 to NUMBER OF ADDRESSES REPORT (SW1: ON, SW2: OFF & SW3: OFF).

**STEP 5:** Set the D.I.L. Switches 4 to 7 to EIGHT ADDRESSES (SW4: ON, SW5: ON, SW6: OFF & SW7: OFF).

**STEP 6:** Set the Switch 8 to OFF position. The Green LED will flash 4 times. The module is now programmed to report to the analogue addressable panel with 8 addresses.

**STEP 7:** Configure the desired address on the ADLI V2 and reset the ORION panel.

TECHNICAL SPECIFICATIONS	
PRIMARY SUPPLY VOLTAGE - IN	Powered by conventional panel - 28.5V DC
SUPPLY CURRENT	3 mA (quiescent) - 4.5 mA (Alarm or Fault)
MAX. HUMIDITY	95 % RH Non-Condensing
OPERATING TEMPERATURE	0°C to 40°C
DIMENSIONS	135 (L) x 36 (W) x 13 (H) mm
WEIGHT	20 g

## GLOBAL FIRE EQUIPMENT S.A.

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