

# Analogue Addressable

UL 864 Approved Fire Alarm System



The new range of intelligent Velocity Detection panels from Zeta Alarms Systems are designed to be flexible not only in their design, but also in the installation of any fire alarm system.

UL864 10th Edition approved, these multifunctioning range of panels will provide the perfect solutions for any fire alarm system configuration, just allow the system to build itself.



#### it's that simple ......

#### Description

This powerful & sophisticated analogue addressable fire alarm system comprises of 3 standard panels plus a versatile remote annunciator.

## Modular by Design, Flexibility is the key....

A wide range of Interchangeable panel modules are available, which can be quickly clipped on to din rails mounted inside each of the panels. With the plug & play RJ45 connections any of the modules can be quickly & efficiently configured to the panel.

With the ability to control the system from any of the networked panels, the systems flexibility will have the power to change your thinking.

#### **Key Features**

- TCP IP interface and alarm manager interface
- Modular by design & construction
- 4.3inch Colour touch screen display
- LED Zone front of panel indication
- Full cause & effect programming via front panel
- Up to 64 panel peer-2-peer network

# Available Panels (standard)

MMP/6 Velocity 6 port control panel - Allows up to 6 panel modules MMP/10 Velocity 10 port control panel - Allows up to 10 panel modules

MMP/26 Velocity 26 port control panel - Allows up to 26 panel modules

# **Quick Connect Internal Panel Modules**

The Velocity system also offers an impressive range of internal panel modules designed to be Din mounted inside the panels. These can be utilised in any quantity and in any configuration arrangement allowing the flexibility to build the panel(s) from the inside that the system actually requires.

## **Available Quick Connect Panel Modules**

» Single Loop Card » Network Multi

» NAC Alarm Circuit - Class A

» Multi Output Relay

» LAN - TCP/IP

» RS323 Printer

» NAC Alarm Circuit - Class B

» Multi Input Monitor

#### **Conventional Configuration**

- » Multi Zone Monitor Class A
- » Multi Zone Monitor Class B



Din Rail mounted modules fit easily and precisely inside the panel, interfacing via a simple plug & play RJ45 connections with Cat 6 cable (supplied)



Let the system be itself Let the system build itself.......



# Velocity Internal Panel Modules





#### **Single Line Circuit**

The plug-in SLC module provides power for and handles communications to the analogue addressable devices. The SLC continuously monitors the analogue values of all devices and displays this value on the control panel as a percentage of the alarm threshold value.

- Supports up to 254 addresses
- **Double Address detection**
- Soft Addressing via handheld programmer

# (Supervised SLC) (Power Limited)

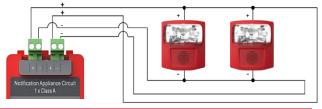
#### **VL-NCA**



#### Notification Appliance Circuit - Class A

The VL-NCA provides power for and handles communications to the conventional sounder & strobe appliances.

It has 1 Class A circuit with the ability of powering up to a maximum 1A per circuit.



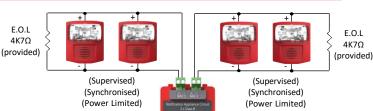
#### **VL-NCB**



#### Notification Appliance Circuit - Class B

The VL-NCB provides power for and handles communications to the conventional sounder & strobe appliances.

It has 2 Class B circuit with the ability of powering up to a maximum 1A divided across both circuits.



#### **VL-NWM**



#### **Network Module**

The VL-NWM module ensures the Velocity Detection system network has the facility to monitor, indicate and control the functions of a fire alarm installation, thus allowing signals to be distributed around a large site.

The Network will accommodate up to 64 nodes



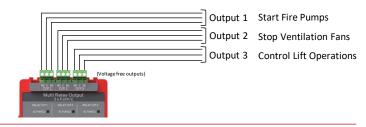
#### **VL-MRM**



#### Multi Relay Module

The VL-MRM has 3 onboard relays which can be typically used to control additional auxiliary equipment.

Each relay can be programmed to activate on alarm, supervisory, or trouble



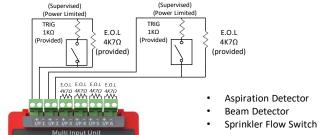
#### **VL-MIM**

#### Multi Input Module - Class B



The VL-MIM has six class B inputs that are commonly used to monitor and raise alarms from any specific ancillary equipment.

Each Input is monitored for open or short circuits and can also be programmed to give a supervisory or alarm signal when active.



# VL-232

#### Printer Module



The VL-232 is a RS232 module gives the ability to interface to RS232 serial equipment and devices.

Mostly used to connect to a desktop printer for real time event log printing



#### Conventional add-on options

#### VL-ZMA

#### Zone Monitor Module - Class A



The module has three class A zone monitors which can be typically used for conventional devices and/or for special detectors that are not available in addressable form such as UV detectors, aspiration and beam detectors etc.

Each zone input can be programmed to either give a supervisory or alarm signal when active.

#### VL-ZMB

#### Zone Monitor Module - Class B



The module has six class B zone monitor's which can be typically used for conventional devices and/or for special detectors that are not available in addressable form such as UV detectors, aspiration and beam detectors etc

Each zone input can be programmed to either give a supervisory or alarm signal when active.



# Velocity Internal Panel Modules



#### **VL-LAN**

#### TCP/IP Module

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The VL-LAN module provides the interface allowing connection into a Local area network (LAN).

#### **Data Alarm Manager**

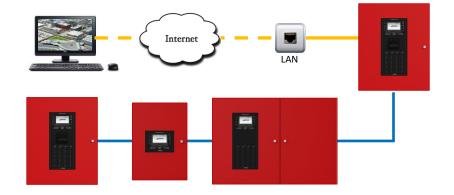
The main operating software is available in two size options, which gives the end user the option to monitor a 1–10 panel network, or a 1–64 panel network.

Configuration of the system is carried out using the Editor software. This is used for creating the system maps, devices location text and more complex setups.

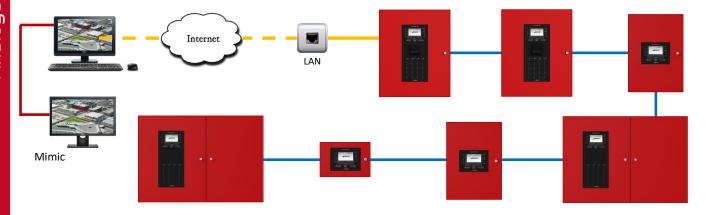
## Data Log Manager.

The Velocity Detection system can be linked via a PC graphics system called **Datalog Alarm Manager** using the VL-LAN Module required in each panel.

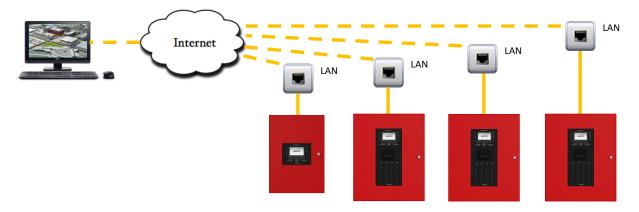
# For connection from 1-10 panels with hard wired RS485 network



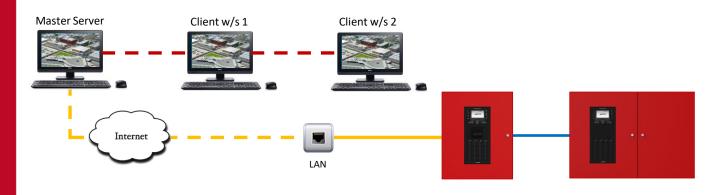
# For connection from 1-64 panels with hard wired RS485 network



## For connection with individual panels



#### Master Client Network - The Master / Client network available on request





# Velocity Internal Panel Modules



# VL-MMP/6 **Panels**

# Module Configuration Options - When mounting inside the panel



Top Row - Din Rail Mount





2 Large Modules



1 Large & 2 Small Modules



1 Large & 1 Small Module



3 Small Modules



3 Small Modules

VL-MMP/10 **Panels** 

Top Row - Din Rail Mount

Bottom Row - Din Rail Mount



3 Large & 1 Small Module Modules

2 Large & 2 Small Modules



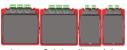
1 Large & 4 Small Modules



Bottom Row - Din Rail Mount



3 Large Modules



2 Large & 2 Small Modules



1 Large & 3 Small Modules

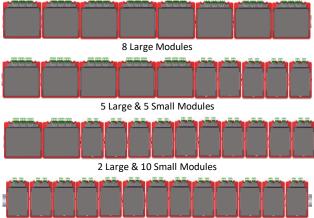


5 Small Modules

VL-MMP/26 **Panels** 



Top & Bottom Row Options - Din Rail Mount



Top Row - Din Rail Mount



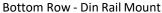


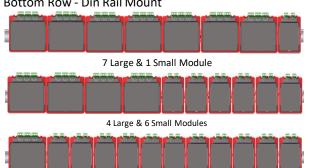


1 Large & 12 Small Modules

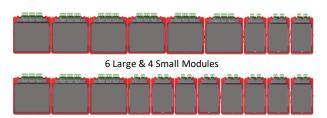
13 Small Modules 6 Large & 4 Small Modules

3 Large & 9 Small Modules





1 Large & 11 Small Modules



3 Large & 8 Small Modules



# Velocity Detection System Build



# Basic System Build from a Required Specification

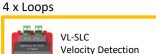
# Step 1: Review FACP Specification

EXAMPLE: Fire Alarm system required that will allow:

- 4 detection loops with a maximum of 200 devices per loop.
- 2 sounder circuits to run 6 sounder/strobes.
- 2 Repeater panels
- 3 Control outputs The panel is also required to interface with:
  - » Emergency Telephone System » HVAC system » Control a single lift

# Step 2: Calculate exactly what internal panel modules are required

## Internal Panels Module Required



Velocity Detection Loop Card Module x4

• Up to 250 devices per loop

#### 2 x Sounder Circuits



• Up to 500mA per circuit

#### 2 x Repeater Panels



• Repeater Panels require network interface

#### 3 x Control outputs



• Up to 3 Relay outputs available

# Step 3: Decide which panel is most suited to the specification requirement

# **Master Panel Requirement:**

7 x Velocity Detection Modules required (This requires a minimum of 7 plug and play ports).

Available Panels:

VL-MMP/6 Range: Not suitable, not enough ports

VL-MMP/26 Range: Suitable, the panel however will have too many ports not being used X



VL-MMP/10 Range: Suitable - no requirements for a printer or 64 Zone LED Indication

• VL-MMP/10 10 port panel • VL-MMP/10/P

10 port panel with printer

• VL-MMP/10/64 10 port panel with 64 LED indication • VL-MMP/10/P/64 10 port panel, printer & 64 LED indication

