

# Fire Alarm Routing Equipment (FARE)



Vigilon panel



Compact panel



Repeat panel



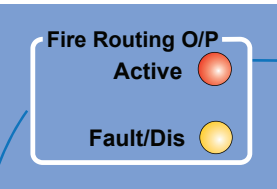
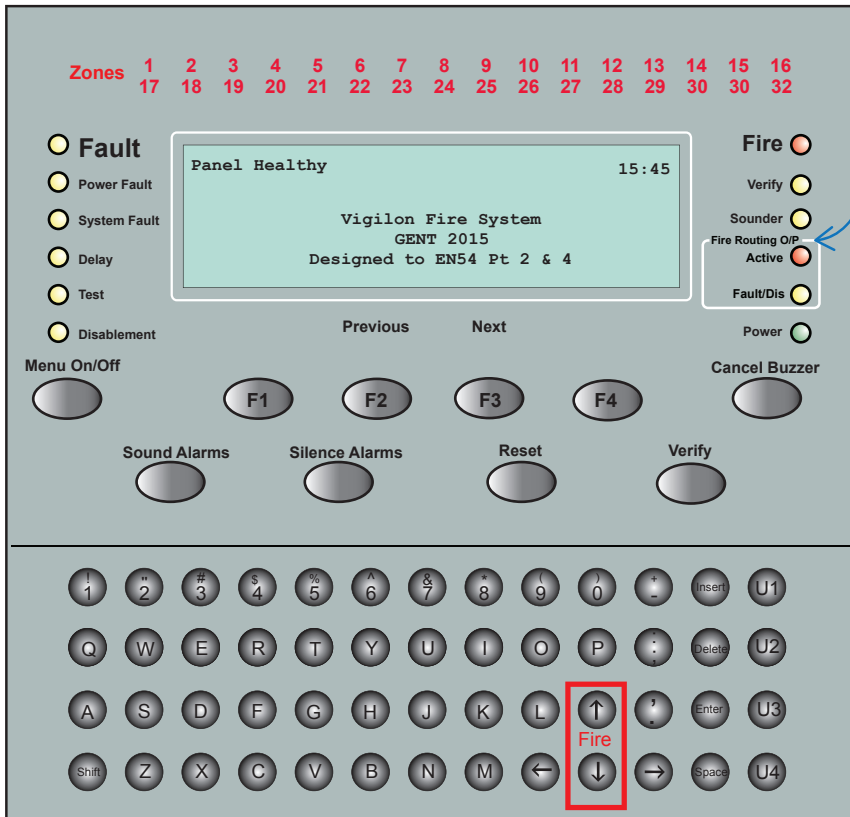
Network Node



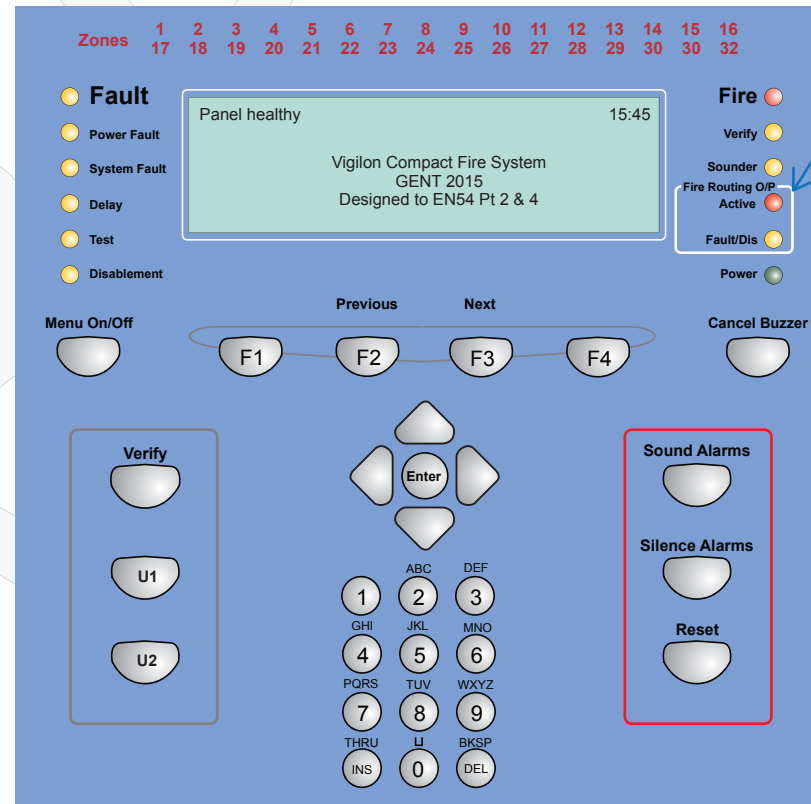
Compact node



EN Vigilon 4/6 loop panel, Network Node and Repeat panel



EN Vigilon Compact panel and Compact Node



# EN54 information

## Optional functions with requirements of European standard

The Vigilon panel complies with the requirements of EN54-2 : 1997. In addition to the basic requirements of the standard the panel conforms to the following optional clauses:

### **Fire Alarm Routing Equipment (FARE)**

Clause Description

7.9 Control of FARE (options with requirements) sub clause:

7.9.1 Output to FARE

### **Fire Protection Equipment (FPE)**




Clause Description

7.10 Output to FPE (options with requirements) sub clause:

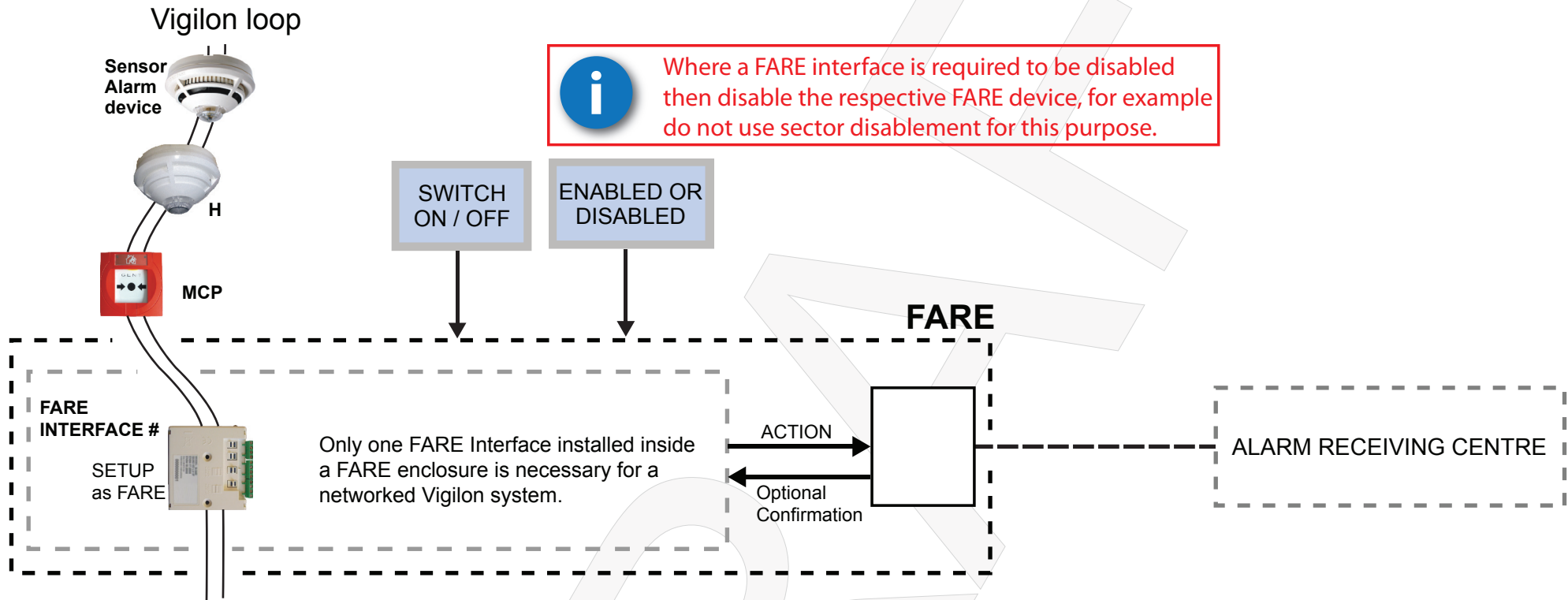
7.10.1 Output Type A

# Description of indications



<i>Indicators</i>		<i>Description</i>
Fire Routing O/P	Fault/Dis  (Amber)	<i>When illuminated steady (always with the FAULT light) it indicates that there is a fault at the Fire Alarm Routing Equipment).</i>
	Fault/Dis  (Amber)	<i>When illuminated flashing (always with the DISABLEMENT light) it indicates the Output to Fire Alarm Routing Equipment is disabled.</i>
	Active  (Red)	<i>When illuminated it indicates the Output to the Fire Alarm Routing Equipment is active.</i>

# Fire Alarm Routing Equipment



# FARE Interface can be a LV Interface unit S4-34420 as shown, but can also be a S4-34450.

Other interface units can be configured as FARE, these include S4-34440-02, S4-34440-12, S4-34401 or S4-34404

The optional confirmation input is advised, however is not part of this compliance certification.

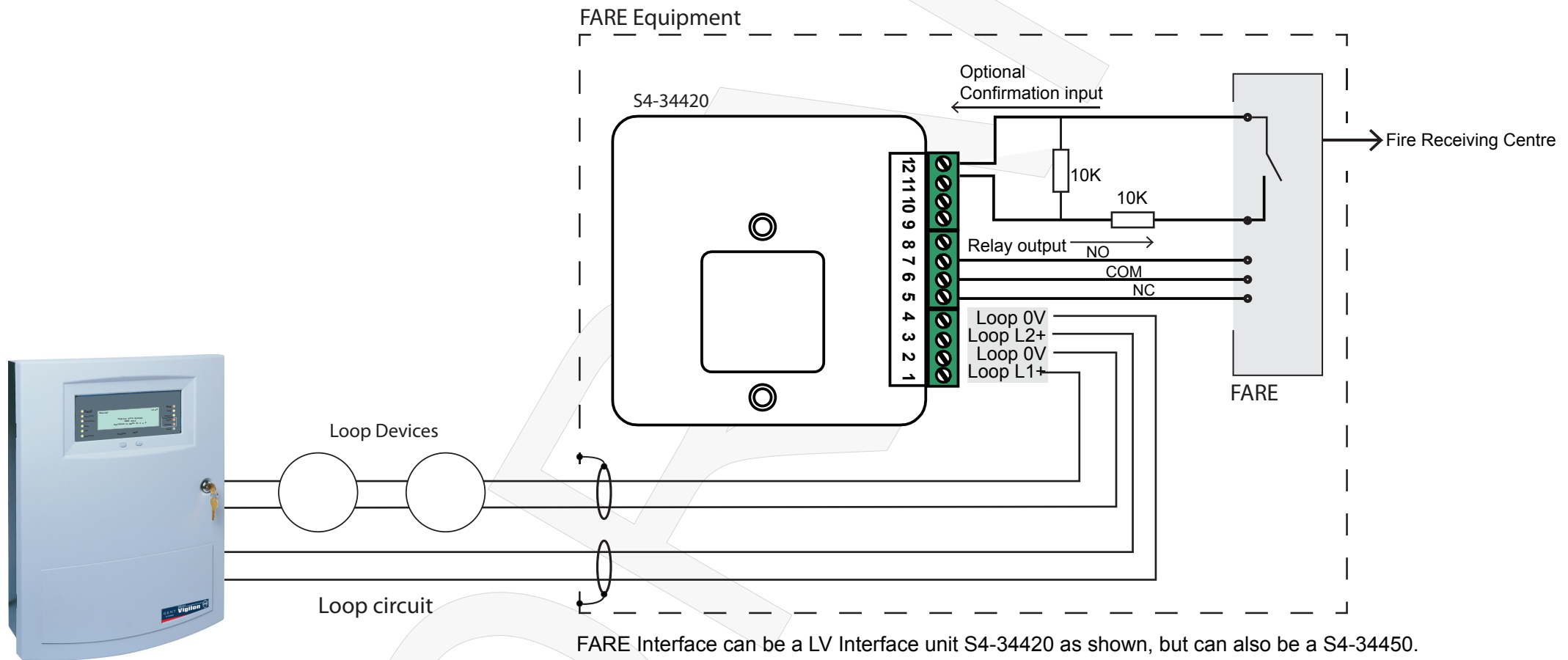
# Wiring Fire Alarm Routing Equipment

A standard interface unit can be configured for FARE application, its relay output is used to initiate an output to signal Fire Alarm Receiving centre in the event of fire detection in a connected Vigilon system.

The FARE Interface output is not and must not be affected by the SOUND ALARMS operation at any networked Vigilon panel, the output is affected by the RESET operation.



One FARE Interface is required to be installed inside a FARE enclosure for compliance.  
Only one FARE interface is necessary in a networked Vigilon system.



FARE Interface can be a LV Interface unit S4-34420 as shown, but can also be a S4-34450.

Other interface units can be configured as FARE, these include S4-34440-02, S4-34440-12, S4-34401 and S4-34404

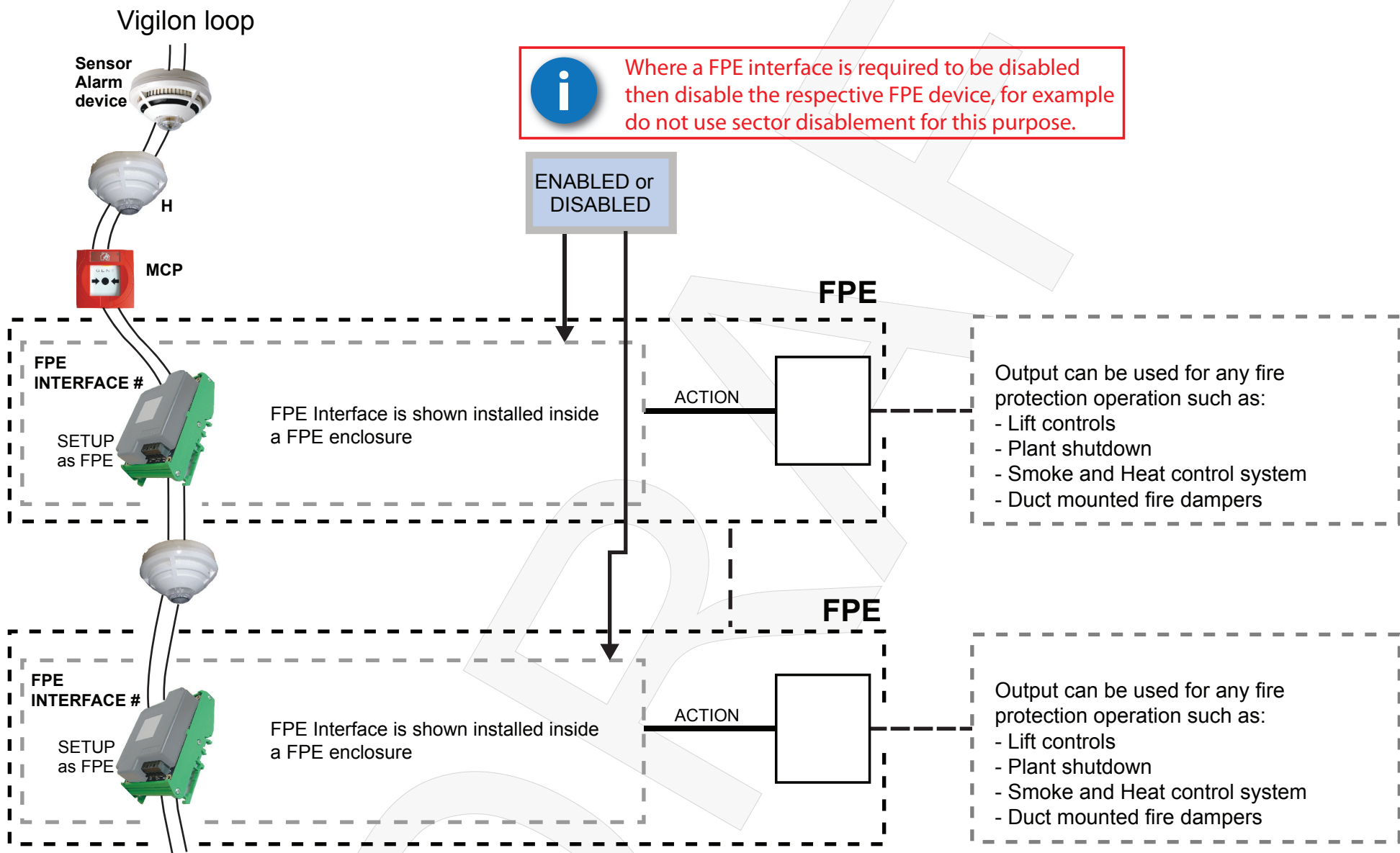
The optional confirmation input is advised, however is not part of this compliance certification.

# Fire Protection Equipment



Where a FPE interface is required to be disabled then disable the respective FPE device, for example do not use sector disablement for this purpose.

ENABLED or DISABLED



# FPE Interface can be a MV Interface unit S4-34411 as shown, but can be also be a S4-34415 or S4-34420

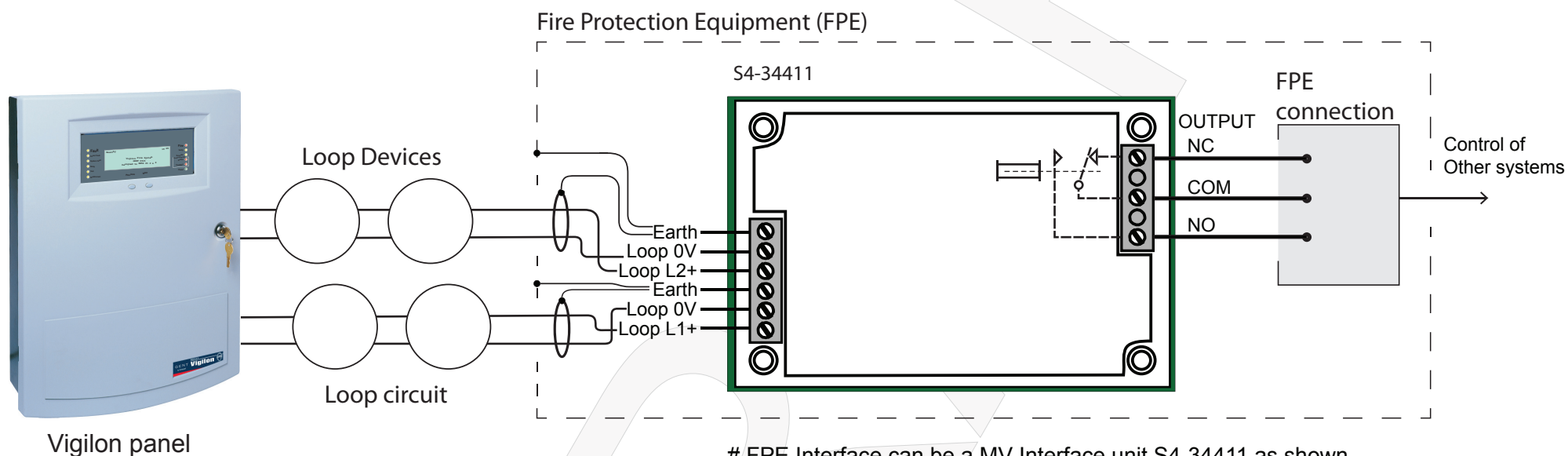
Other interface units can be configured as FPE, these include S4-34440-02, S4-34440-12, S4-34401 and S4-34404

# Wiring Fire Protection Equipment

A standard interface unit can be configured for FPE operation, its relay output can be used for any fire protection operation, such as for Lift control and Plant shutdown.

The FPE Interface output is not and must not be affected by the SOUND ALARMS operation at any networked Vigilon panel, the output is affected by the RESET operation.

**i** There can be a number of FPE interface units installed in a standalone Vigilon system for Fire Protection Equipment applications.



# FPE Interface can be a MV Interface unit S4-34411 as shown, but can be also be a S4-34415 or S4-34420

Other interface units can be configured as FPE, these include: S4-34440-02, S4-34440-12, S4-34401 and S4-34404

# How to Configure an Interface Unit for **Fire Alarm Routing Equipment (FARE)** or **Fire Protection Equipment (FPE)** application

Use Commissioning tool V1.31 or higher to configure interface units for FARE and FPE applications.

The screenshot shows the 'Device Configuration' window. On the left, a list of devices is shown, with 'Lp 4 Device 5 LOOP INTERFACE' selected and highlighted in a red box. The main configuration area is divided into several sections:

- Loop Map:** Shows loop numbers (4, 5, 0) and options for 'On Spur' and 'On Sub'.
- Device Setup:** Includes 'Device Label', 'Sounder', 'Tee Breaker', 'Slave Led', 'Monitored Line', and 'Slave Relay' checkboxes, along with 'Delete', 'Insert', and 'Change' buttons.
- Device Type:** A dropdown menu set to 'Interface Unit'.
- Device Selection:** A dropdown menu set to 'Loop Powered'.
- Device States:** Includes 'Timeblock States' (T/Blk On, T/Blk Off) and 'Allocation' (Channel, Digital).
- Device Loop Configuration:** Includes 'Zone', 'Group', 'Time Block', and 'Gain' fields, and checkboxes for 'Fire routing output' (checked) and 'Fire protection equipment'.
- Sector:** A grid of 32 sectors (1-32) with checkboxes. The 'Integral Sounder Mode' checkbox is checked, and the 'Clear All Sectors' button is visible.

## Requirements

Fire Alarm Routing Equipment (FARE) and Fire Protection Equipment (FPE) requires Vigilon panel to have cards:

- MCC at V5.53 or higher
- LPC at V4.49 or higher

① Select one compatible interface for FARE application: S4-34420 or S4-34450, see also # or select one compatible interface unit for FPE application: S4-34411, S4-34415, S4-34420 or S4-34450, see also #.

② The chosen interface can be configured for FARE or FPE by selecting the required check box.

👁 When an interface is identified as a FPE or FARE device then all its OUTPUTS are automatically placed in PLANT Sector 32 as default.

The Interface can be reconfigured to be in PLANT Sector 29, 30 or 31. Other Sectors can be used in place of PLANT sector but they must be managed for their operation with Sound and Silence alarms.

# - Other interface units that can be configured for FARE or FPR include S4-34440-02, S4-34440-12, S4-34401 and S4-34404.

# Fire Alarm Routing Equipment operation

## How to configure an interface for FARE operation

1. Select a compatible Interface unit in Device setting *tree view* of Commissioning tool 1.31 or higher and then set it for Fire Alarm Routing Equipment application:

Fire routing output

Note the Interface is placed in Plant sector 32 by default, it can be reconfigured to be in another Sector.

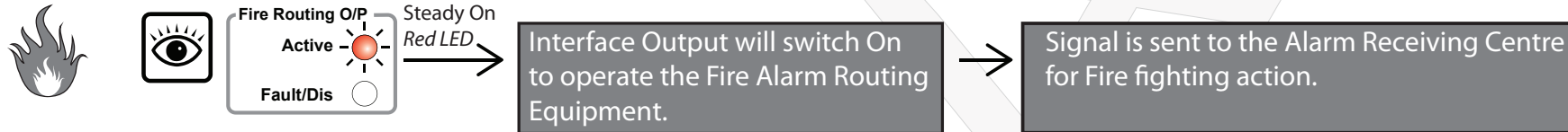
2. Configure Sector and Sector linking actions using the Commissioning tool for the required Outputs to operate in the event of a fire detection.



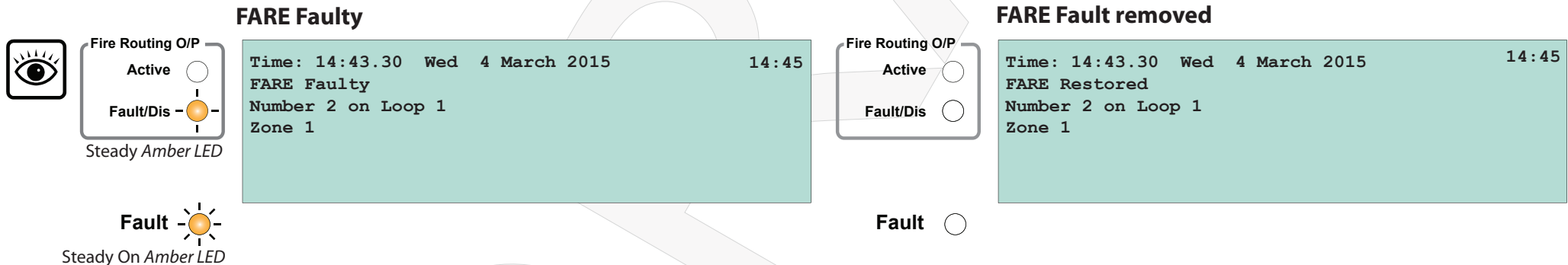
The FARE Interface output must not be affected by the SOUND ALARMS button when it is operated at the panel.

## FARE operation

In the event of a Fire and if FARE is configured then FARE operation will be as follows:



## How a short circuit or signal transmission fault at FARE is displayed at a Vigilon panel



# Fire Alarm Routing Equipment controls

## How to view information about FARE Interface from a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above, select from panel menu:

[Info] → <etc> → [UserCode] → [Status] → <etc> → <etc> → <etc> → <etc> → <etc> → [FARE] → [E]

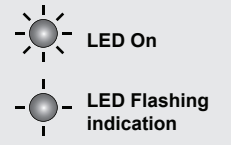


```
FARE Loop 1, Device 2 14:45
```



There is only likely to be one FARE device in a Vigilon System that is used to signal Fire Receiving Centre.

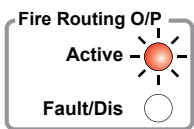
This information shows that Device 2 on Loop 1 of the Vigilon panel is a FARE Interface Unit.



## How to manually switch On FARE from a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above you can manually switch FARE. Select from the panel menu:

[Control] → <etc> → [FARE] → [Off] / [On] → [E]

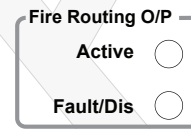


Steady On  
Red LED

### FARE Switched ON indications

```
FARE activated 14:45  
Number 2 on Loop 1  
Zone 1
```

### FARE Switched OFF indications

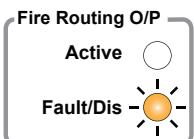


```
FARE deactivated 14:45  
Number 2 on Loop 1  
Zone 1
```

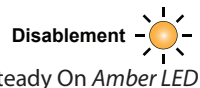
## How to manually Disable / Enable FARE from a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above you can Disable or Enable FARE. Select from the panel menu:

[Control] → [Enable] / [Disable] → <etc> → <etc> → <etc> → [FARE] → [E]



Flashing  
Amber LED



Steady On Amber LED

### FARE Disabled indications

```
Time: 14:43.10 Wed 4 March 2015 14:45  
FARE Disabled  
Number 2 on Loop 1  
Zone 1
```



### FARE Enabled indications

```
Time: 14:43.30 Wed 4 March 2015 14:45  
FARE Enabled  
Number 2 on Loop 1  
Zone 1
```

Disablement

# Fire Protection Equipment operation

## How to configure an interface for FPE operation

1. Select a compatible interface under Device settings *tree view* of Commissioning tool V1.31 or higher and then set it for Fire Protection Equipment application:

Fire protection equipment

Note the Interface is placed in Plant sector 32 by default, it can be reconfigured to be in another Sector.

2. Configure Sector and Sector linking action to site requirement using the Commissioning tool for correct operation of Outputs in the event of fire detection.



The FPE Interface output must not be affected by the SOUND ALARMS button when it is operated at the panel.

## FPE operation

In the event of a Fire and if FPE is configured the following will happen:



FPE Interface Output operates



Signal is sent to connected system(s)

## How to manually switch On / Off / Pulse FPE Outputs from a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above, select from the panel menu:

[Control] → <etc> → <etc> → <etc> → <etc> → <etc> → [Digital] → <etc> → Select [On] / [Off] / [Pulse] → <etc> → [Device] → [Loop] → [E]



Card x Successful

14:45

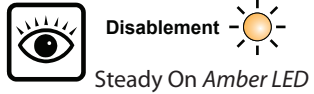
# Fire Protection Equipment controls

## How to manually Disable / Enable FPE from a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above, you can Enable or Disable FPE. Select from panel menu:

[Control] → [Enable] / [Disable] → <etc> → <etc> → <etc> → [FPE] → [E]

### FPE Disabled indications



```
Time: 14:43.10 Wed 4 March 2015 14:45
Device Disabled at Card 1
```

### FPE Enabled indications



```
Time: 14:43.30 Wed 4 March 2015 14:45
FPE Enabled at Card 1
```

## How to view information about FPE Interface at a Vigilon panel

Using the Vigilon panel keyboard and assuming you are at Access level 2 or above you can find which interface units are configured for FPE. Select from panel menu:

[Info] → <etc> → [UserCode] → [Status] → <etc> → <etc> → <etc> → <etc> → <etc> → <etc> → [FPE] → [E]



```
FPE 1: 6, 8 14:45
```

This information shows Devices 6 and 8 on Loop Card 1 are FPE interfaces.

# Commissioning a FARE device

When commissioning a Fire alarm system having a FARE interface ensure a fault or activation event is created at the FARE device and check the device event is recognised at other panels in a network.

DRAFT