# Addendum to ID3000 Manuals

## 1 Introduction

Panel software version 4.33 introduces the following enhancements:

a. Support for SMART multi-criteria sensors.

b. Support for device coincidence across a range of cells.

c. Improved operation for printer paper advance.

## 2 Changes to Panel Configuration Manual

The following sections of manual 997-506-000-2 are modified as a result of this software enhancement.

### Section 4.2 changes

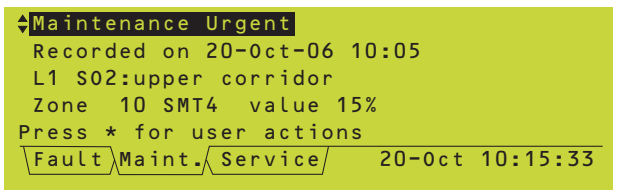
'MAINT. *(access level 3 only unless Maintenance Urgent)*' is added to the list of tabs, below AUX. Also, 'TECH. ALARM' has a higher priority than 'PRE-ALARM'.

### Section 4.3 changes

Add:

'**Maint Tab**


This displays the maintenance status of any SMART, Optiplex and VIEW sensors installed on the loops (if arrows are displayed then more than one message exists). If the panel is connected to an ID²net network and more than one panel contains sensors requiring maintenance, an option to choose the panel is provided.



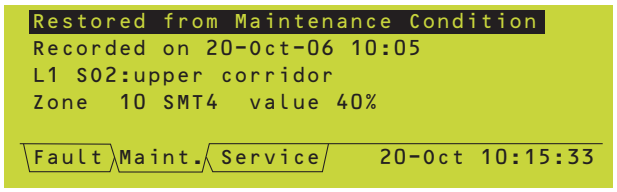

There are four status messages:

a. Maintenance Urgent. Indicates drift limit condition and is accompanied by a SENSOR FAULT fault message.

b. Maintenance Alert. Indicates drift limit or continuous IR saturation condition. Maintenance Alert is also displayed in respect of any Optiplex or VIEW sensors.

c. 6 months to cell life expiration (SMART4 only).

d. IR light saturation condition (SMART4 only).




If a sensor returns from a maintenance condition to its normal state, the display is as shown opposite.

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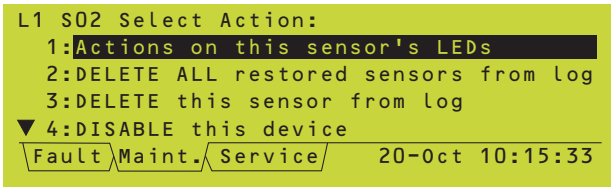
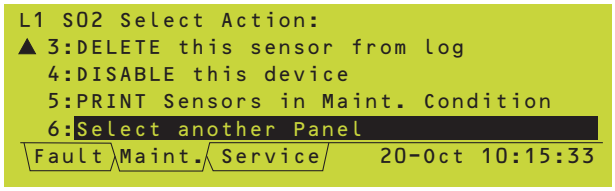



From the 'Maint.' tab, when the status of an individual sensor is displayed, press the ✱ pushbutton to display a Select Action menu (the illustrations opposite cover all possible options - in practice not all options may be present, see below for details). The options are:

a. Actions on this sensors's LEDs. The LED can be set to OFF, 1-second pulsing, or ON STEADY. This option is always available.

b. DELETE ALL restored sensors from log. The maintenance status is stored in a log (capacity 100 records per panel). This option delete records from the log for all sensors that are in the 'Restored from Maintenance Condition' state. Available provided at least one sensor is in this state.

**Note:** Use the Historic & Data Log Tool (supplied with the Windows Support Tool) to access the log.

c. DELETE this sensor from log. Available only if the current sensor is in the 'Restored from Maintenance Condition' state.

d. DISABLE THIS DEVICE. Always available, may be ENABLE THIS DEVICE depending upon disablement status of current sensor.

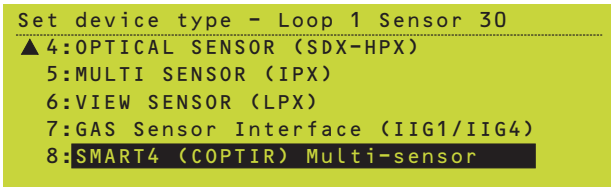
e. PRINT Sensors in Maint. condition. Always available.

f. Select another Panel. Displays the Select Panel option. Only available if the panel is connected to an ID²net and more than one panel contains sensors requiring maintenance.'

## Section 4.4.3 changes

Updated menu structure, see next page.

## Section 5.1.2.1 changes




Add the following device type:

'SMT4 Optical/thermal/infra-red/ carbon monoxide SMART4'

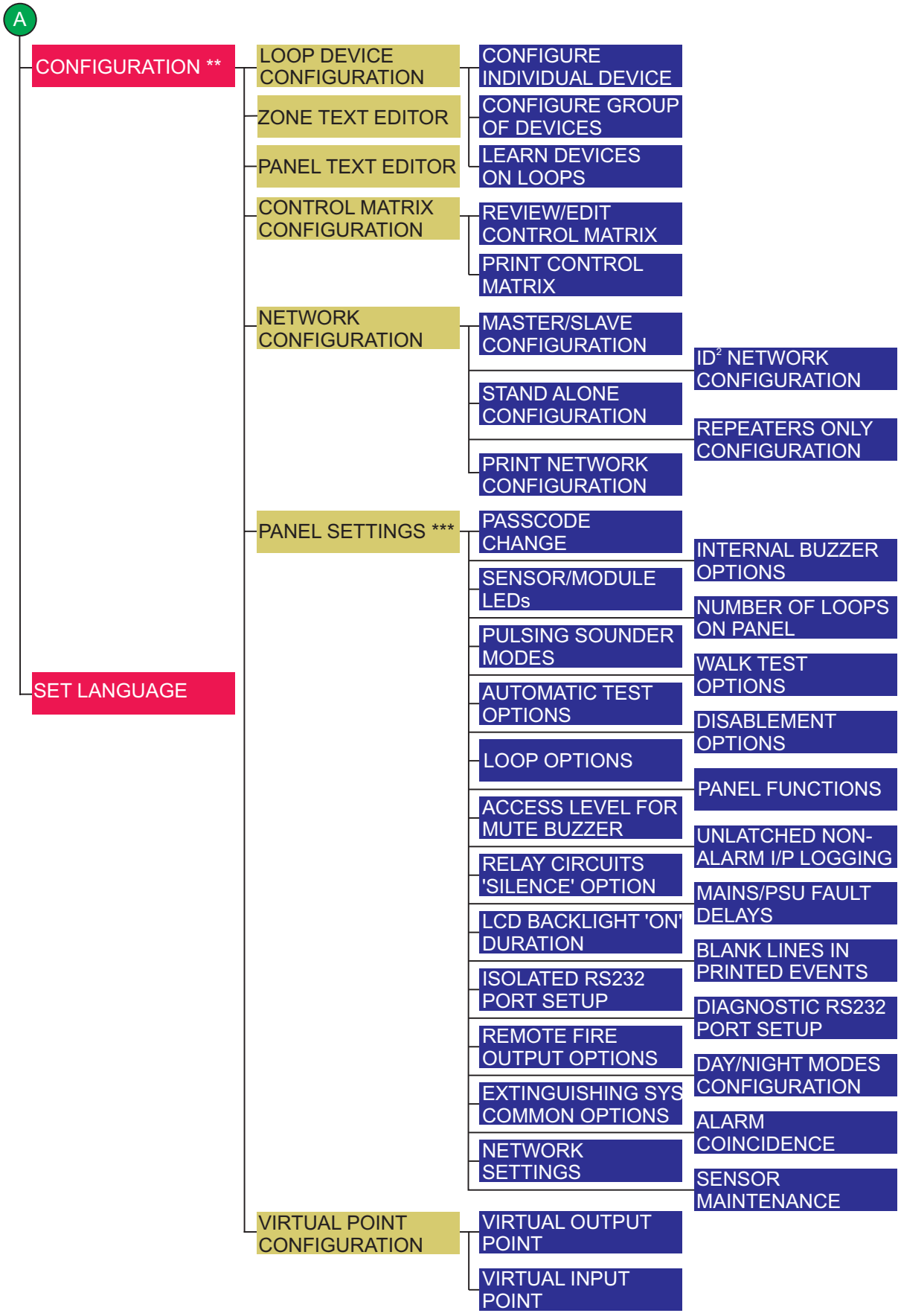
## Section 5.1.2.4 changes

Replace each 'except MULTI' with 'except MULTI and SMART'.

Change the cross-reference for Gas sensors from 5.1.3.3 to 5.1.3.4.

Add:

'Further information about SMART sensors sensitivity is given in **Section 5.1.3.3**.

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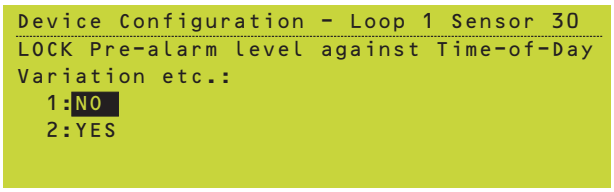


To the Pre-alarm description, add the illustration opposite and the following text:

'The option to Lock the Pre-alarm level is then provided:

a. If NO (default) is chosen and Time-of-Day is used to vary the alarm sensitivity (Section 5.1.2.7), Pre-alarm sensitivity changes with Time-of-Day by the same amount that is set for Alarm. Also, for MULTI/SMART sensors, Pre-alarm is ignored at those times when Thermal-only mode L6 is in operation for Alarms as a result of a Control Matrix rule or Time-of-Day.

b. If YES is chosen, the Pre-alarm sensitivity remains fixed at the selected level. Also, for MULTI/SMART sensors, Pre-alarm is no longer ignored at those times when Thermal-only mode is in operation for Alarms. A '#' symbol is displayed beside the Pre-alarm value.'

## Section 5.1.3 changes

Rename this section 'VIEW, MULTI, SMART and Gas Sensor Interface Sensitivities'.

In Section 5.1.3.2., replace the last sentence of 'Sensitivity (including Optiplex)' by the following:

'In Thermal-Only mode (L6), Pre-alarm applies to both smoke and heat, unless L6 is linked to Time-of-Day or Day Mode with Lock Pre-alarm monitoring not set, in which case there is NO Pre-alarm in L6 mode.'

New Section 5.1.3.3:

'SMART Sensors

The system supports Self-optimising Multi-criteria Alarm Recognition Technology (SMART) sensors.

The SMART4 (abbreviated to SMT4) sensor has the capability for carbon monoxide, photoelectronic (optical), infra-red and thermal detection.

This sensor has a thermal-only mode as described on the previous page for Optiplex.

The Alarm and Pre-alarm levels and defaults are as described for Optiplex, and the verification delays are the same as for a MULTI sensor.'

Renumber existing 5.1.3.3 as 5.1.3.4

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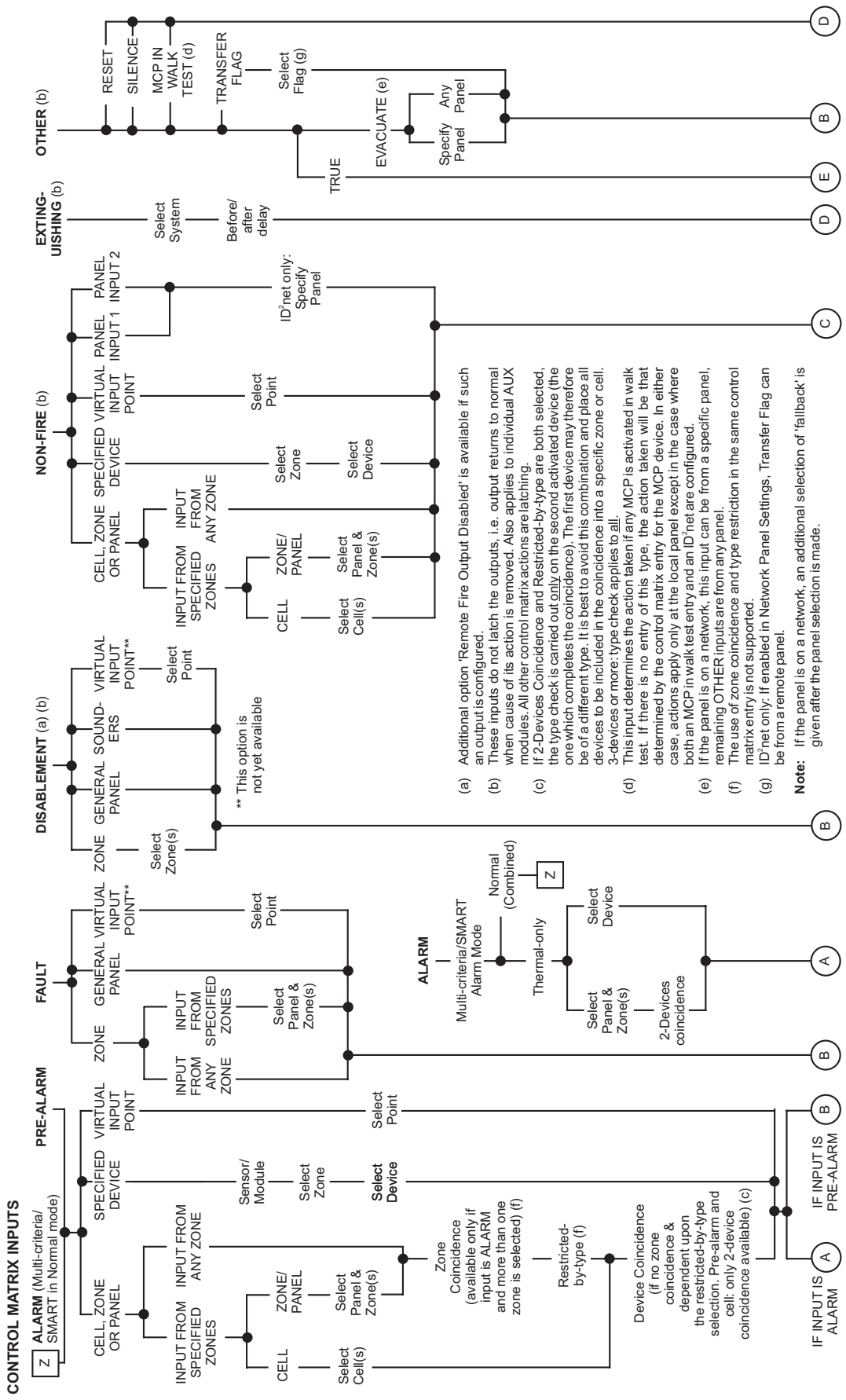
## Section 7.2 changes

The illustration now shows the Thermal Alarm option to the Control Matrix input.




(a) Additional option 'Remote Fire Output Disabled' is available if such an output is configured.

(b) These inputs do not latch the outputs, i.e. output returns to normal when cause of its action is removed. Also applies to individual AUX modules. All other control matrix actions are latching.

(c) If 2-Devices Coincidence and Restricted-by-type are both selected, the type check is carried out only on the second activated device (the one which completes the coincidence). The first device may therefore be of a different type. It is best to avoid this combination and place all devices to be included in the coincidence into a specific zone or cell. 3-devices or more: type check applies to all.

(d) This input determines the action taken if any MCP is activated in walk test. If there is no entry of this type, the action taken will be that determined by the control matrix entry for the MCP device. In either case, actions apply only at the local panel except in the case where both an MCP in walk test entry and an ID²net are configured.

(e) If the panel is on a network, this input can be from a specific panel, remaining OTHER inputs are from any panel.

(f) The use of zone coincidence and type restriction in the same control matrix entry is not supported.

(g) ID²net only: If enabled in Network Panel Settings, Transfer Flag can be from a remote panel.

**Note:** If the panel is on a network, an additional selection of 'fallback' is given after the panel selection is made.

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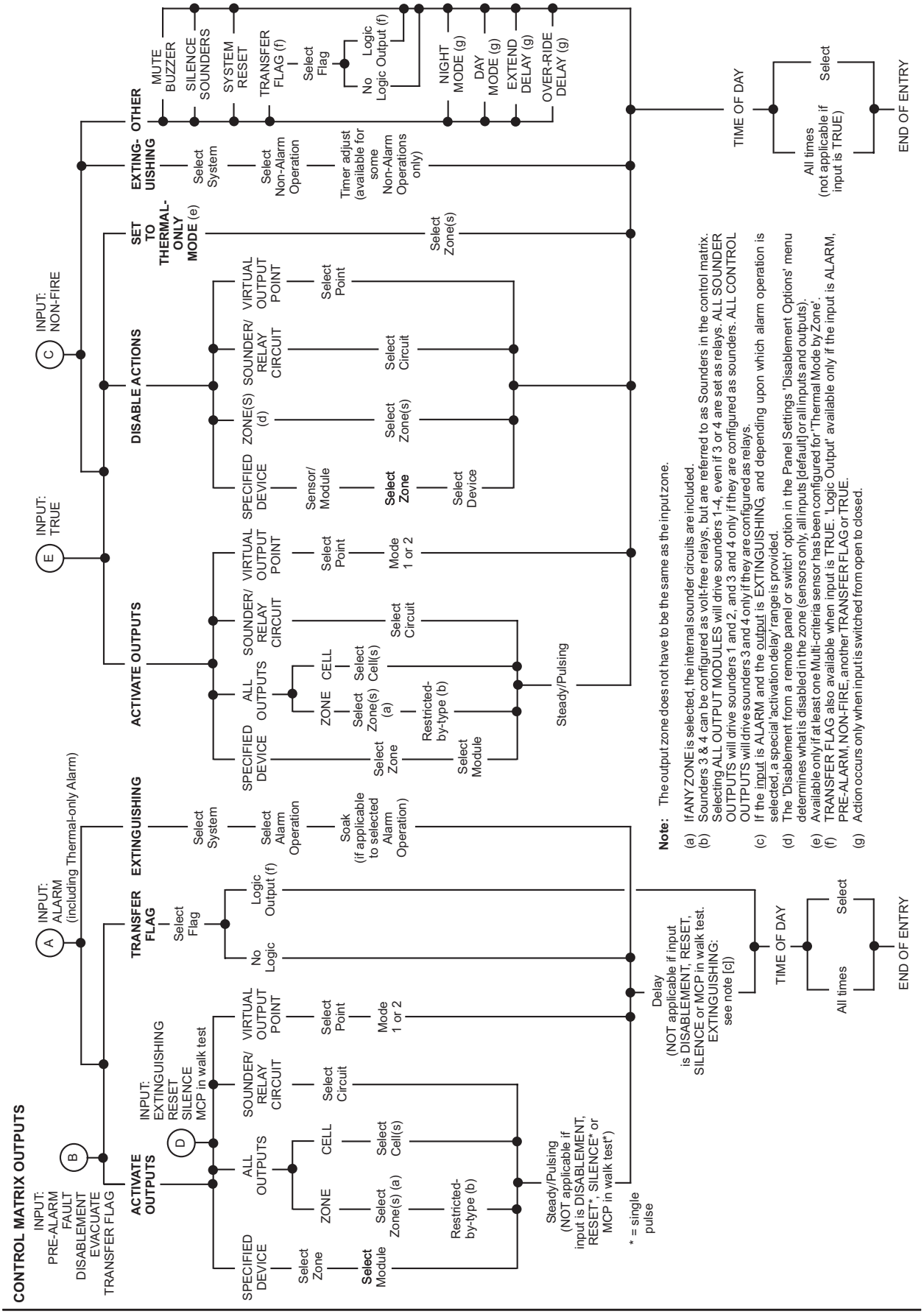
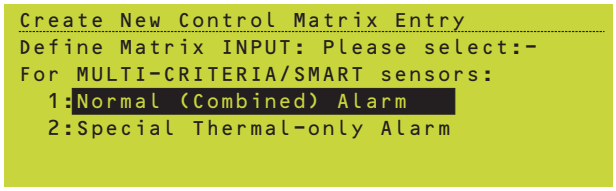
## Section 7.3 changes

The illustration now includes Thermal Alarm as a possible input option 'A'.



## Section 7.6.1.1 changes

The illustration at left goes before the current first illustration. The first sentence is replaced by the paragraphs below:




'The first display allows definition of the effect of alarms from Multi-criteria sensors that have a thermal-only mode:

a. If the first option is selected, then the Control Matrix input will be activated by any alarm from the sensor.

b. If the second option is selected, then the Control Matrix input will be activated only by a **thermal** alarm. Any Control Matrix rules for which the input is normal alarm from the device will also be activated. This option applies only to Optiplex and SMART sensors.

To define the ALARM input:

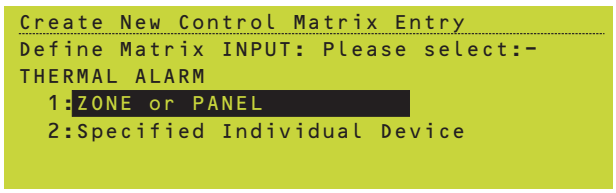
a. For Multi-critera sensors in Normal alarm and for all other types of sensor, follow steps 1 to 12 below.

b. For Multi-critera sensors in Thermal-only alarm, refer to the description at the end of this section.'

Step 8 'Device Coincidence' add a note:

**'Note:** For device coincidence to occur the devices in alarm must normally be in the same zone or cell. However, **for cells only** the devices can be in a range of cells if the panel setting is so configured (see **Section 11.21**).'

At the end of Section 7.6.1.1, add the illustration at left, and the following description:




'THERMAL-ONLY ALARM

The Multi-criteria sensors can be selected by zone (Any or specified) or by individual device.

Device coincidence is available BUT ONLY FOR 2 DEVICES. No other options are provided.'

## Section 7.6.2.7 changes

Change 'all Optiplex sensors' to 'all Multi-criteria sensors'.

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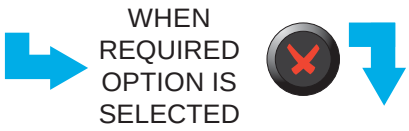


```
Panel Settings
Operation of COINCIDENCE for Control
Matrix Input Rules with RANGE OF CELLS:
  1:Must be in same CELL
  2:Coincidence spans RANGE of CELLs
```

## Section 11.21 changes

Add the illustration shown opposite and the following text to the end of this section:

'Select the scope of Device Coincidence when the Control Matrix input zone selection is a range of cells:

a. Two or more devices in alarm in the same cell. This is the default.

b. Two or more devices in alarm within the selected range of cells.'

## Section 13.1 changes

Add:

'SMART sensors are described in **Section 5.1.3.3**.'

## Section 13.2 changes

In alarm verification delays table replace 'MULTI' by 'MULTI & SMART'.

# 3 Changes to Installation & Commissioning Manual

The following sections of manual 997-274-000-4 are modified as a result of this software enhancement.

## Section 8.1 changes

Add the following to the routine testing:

‘(f) the competent person should enter access level 3 to check whether a ‘Maint.’ tab is present and, if so, investigate the messages displayed there.’

## Appendix 1 Section 1.1.8 changes

Change the following message:

**OPTIPLEX sensor setup fault**

to

**‘Incompatible or faulty sensor installed’**

and the action to:

‘For IPX sensors, replace by SDX751TEM or equivalent. For other MULTI and SMART sensors, replace (sensor is faulty).’

Add the following message:

**‘SENSOR FAULT**

For VIEW, MULTI (Optiplex), or SMART sensors: analogue reading is below the Chamber fault threshold, or below the Maintenance Urgent threshold, or a Maintenance Alert has existed for longer than 100 days without any action being taken. For HEAT, ION, OPT or GAS the analogue reading is below the Chamber fault threshold. Action: Notify the service engineer.’

# 4 Changes to Operating Manual

The following sections of manual 997-505-000-2 are modified as a result of this software enhancement. (A copy of the next page should be left with the customer’s copy of the Operating Manual).

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# AMENDMENTS TO OPERATING MANUAL

## Section 2.1 changes

In the description of the keypad, the sentence 'When the panel status is normal, down arrow advances the printer paper' is replaced by:

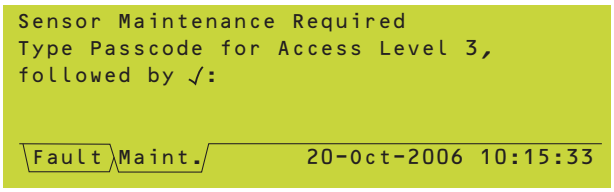
'Press and hold ▼ to advance the printer paper (maximum of 20 lines are advanced for a single press of this pushbutton).'

## Section 5.2 changes

'MAINT.' is added to the list of tabs, below AUX. Also, 'TECH. ALARM' has a higher priority than 'PRE-ALARM'.

Add:

'If the Maint tab is displayed, contact your fire system servicing company.'



# 1 Introduction

Software version 4.35 introduces two new features:

a. An enhancement to the Control Matrix logic operations which provides an option to prevent a Control Matrix rule from activating its outputs if a defined previous rule has activated. This involves:

i Modification to the manner in which transfer flags operate to allow a transfer flag to latch by being fed back into itself. This description is additional to the information contained in Section 7.9 of the Panel Configuration Manual.

**Note:** Section 7.9 of the Panel Configuration Manual defines the logic precedence rule, details various restrictions concerning logic operations and provides examples. **It is assumed that the reader is familiar with the content of that section.**

ii An additional panel setting to resolve the case where the inputs to two rules activate simultaneously but only one rule is required to activate its outputs. This description is additional to the information contained in Section 11.11 of the Panel Configuration Manual.

b. The Display Active Control Matrix Rules option now also displays active flag numbers in addition to the rule numbers. This information is additional to the information contained in Section 12.3 or 12.4 of the Panel Configuration Manual.

Example - Lockout

| RULE | INPUT STATEMENT | OUTPUT STATEMENT |
|---|---|---|
| 1 | Zone 1 | Flag 11 [AND] |
| 2 | Zone 2 | Flag 12 [AND] |
| 3 | Zone 3 | Flag 13 [AND] |
| 4 | Zone 4 | Flag 14 [AND] |
| 5 | Zone 5 | Flag 15 [AND] |
| 6 | Flag 11 | Flag 11 [OR] |
| 7 | Flag 12 | Flag 12 [OR] |
| 8 | Flag 13 | Flag 13 [OR] |
| 9 | Flag 14 | Flag 14 [OR] |
| 10 | Flag 15 | Flag 15 [OR] |
| 11 | Flag 11 | Flag 100 [OR] |
| 12 | Flag 12 | Flag 100 [OR] |
| 13 | Flag 13 | Flag 100 [OR] |
| 14 | Flag 14 | Flag 100 [OR] |
| 15 | Flag 15 | Flag 100 [OR] |
| 16 | Flag 100 | Flag 11 [AND-NOT] |
| 17 | Flag 100 | Flag 12 [AND-NOT] |
| 18 | Flag 100 | Flag 13 [AND-NOT] |
| 19 | Flag 100 | Flag 14 [AND-NOT] |
| 20 | Flag 100 | Flag 15 [AND-NOT] |
| 21* | Flag 11 | Activate Control Module 1 |
| 22* | Flag 12 | Activate Control Module 2 |
| 23* | Flag 13 | Activate Control Module 3 |
| 24* | Flag 14 | Activate Control Module 4 |
| 25* | Flag 15 | Activate Control Module 5 |

* These rules can be on a different panel from rules 1-20.

**Note:** The zone numbers, flag numbers and module numbers used in the example are arbitrary, and the rules can be entered into the Control Matrix in any order (rule numbers are given in the example solely so that they can be referred to in the manual).

# 2 Logic Operation Enhancement

## 2.1 Control Matrix

The example shows how to configure the Control Matrix so that a rule will only operate if certain other rules have not already operated.

In this example there are five zones. An alarm in any zone will operate a specific control module, e.g. an alarm in zone 3 will operate control module 3. After this has occurred, a subsequent alarm in any of the other zones does not result in the corresponding control module operating. The output from zone 3 remains active until the panel is reset.

More than one group of inputs and outputs can be configured to operate in this mutually-exclusive manner, but for each the rules **must** be configured as follows:

**1** A single unique transfer flag must be allocated to each input required to operate in the manner described above. These flags must be local to the panel in which these rules are programmed. In this example, flags 11 to 15 correspond to zones 1 to 5. Any input could be used instead of a zone, with additional flags if required e.g. to OR two non-adjacent zones, or zones from different panels.

**2** For each of the inputs, a rule of the type 'input sets flag *n* [AND]' must be set. See rules 1 to 5 in the example.

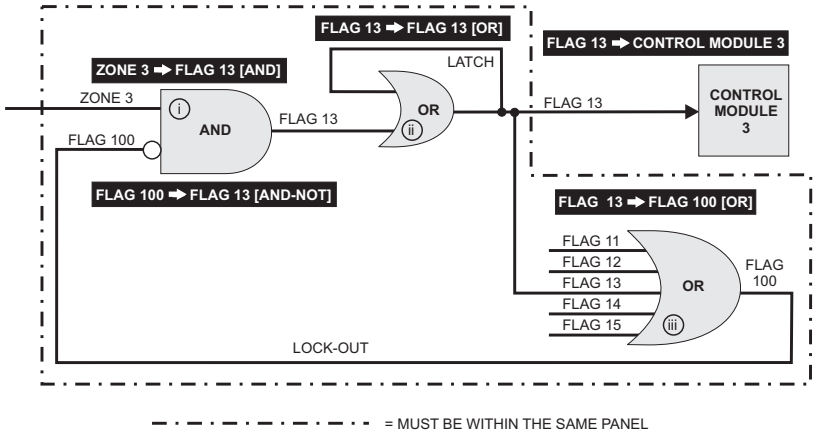
**3** A flag must be allocated for lock out (see illustration and subsequent text for definition of lock out) - in this example it is flag 100. This flag must be local to the panel in which these rules are programmed.

**4** To implement lock out, each input requires rules of the following types to be configured: 'flag *n* sets flag *n* [OR]' (see rules 6 to 10), 'flag *n* sets lock out flag [OR]' (see rules 11 to 15) and 'lock out flag sets flag *n* [AND-NOT]'. See rules 16 to 20 in the example.

**Note:** The panel does not implement lock out unless at least one rule of the type 'flag *n* sets flag *n* [OR]' is configured.

**5** Configure rules to drive the outputs (additional flags can be used if required). See rules 21 to 25 in the example.

**Note**: Rules of steps 2 and 4 (Rules 1-20 in the example) must all be in the same panel (it does not have to be the panel at which the inputs or monitored, nor the panel from which the outputs are driven).




```
Control Matrix Configuration
▲INPUT: ALARM:
 ZONE 3
 OUTPUT:
▼TRANSFER FLAG no.13 [AND]
✓=edit/delete *=new entry X=cancel
```

```
Control Matrix Configuration
▲INPUT:
 TRANSFER FLAG no.13
 OUTPUT:
▼TRANSFER FLAG no.13 [OR]
✓=edit/delete *=new entry X=cancel
```

```
Control Matrix Configuration
▲INPUT:
 TRANSFER FLAG no.13
 OUTPUT:
▼TRANSFER FLAG no.100 [OR]
✓=edit/delete *=new entry X=cancel
```

```
Control Matrix Configuration
▲INPUT:
 TRANSFER FLAG no.100
 OUTPUT:
▼TRANSFER FLAG no.13 [AND-NOT]
✓=edit/delete *=new entry X=cancel
```

The illustration shows the effect on zone 3 - the corresponding Control Matrix rule for each step is shown in inverse text:

i If zone 3 detects an alarm, flag 13 is subsequently set if, and only if, flag 100 is not already set.

ii If flag 13 is set, then to prevent the Control Matrix from processing inputs associated with zones 1, 2, 4 or 5, flag 13 is latched by an OR logic operation and then used to set flag 100.

iii Flag 100 is set if **any** of flags 11 to 15 are set (corresponding to zones 1 to 5). Thus:

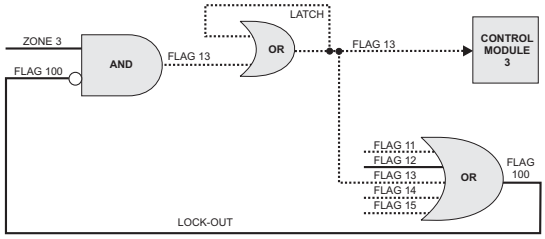
a. If zone 1, 2, 4 or 5 is already in alarm, then flag 100 prevents flag 13 from being set and thus control module 3 does not operate.

b. If zones 1, 2, 4 or 5 are not in alarm, then flag 100 is not set, allowing flag 13 to be set and control module 3 to operate. Flag 13 then sets flag 100 (see ii above), which then prevents flags 11, 12, 14 and 15 being set.

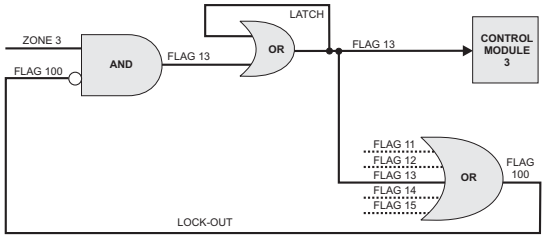
The locked out state is latched until the panel is reset.

To ensure that the panel does not begin processing another input BEFORE the locked out state occurs, the panel will process a number of flag-type rules in sequence, i.e. it is looking to see if a lock-out is configured. The number is pre-set, but can be adjusted if necessary (refer to **Section 2.2**).

solid lines = active
dotted line = inactive




a - zone 2 (flag 12) in alarm first




b - zone 3 in alarm first

## 2.2 Panel Settings - Unlatched Non-alarm Input Logging

```
Panel Settings
Maximum depth of recursion allowed into
Control Matrix, during processing of
latching FLAG rules (1-20): 5
```

Additional option:

Only available if a Control Matrix rule of the format 'flag *n* sets flag *n* [OR]' exists (see **Section 2.1**). Sets the number of flag-type rules processed in sequence by the panel before it starts processing another input, i.e. the panel is looking to see if a lock-out is configured. This should not normally need changing from its default (5).

To determine the optimum setting for this parameter, count the highest possible number of **sequential** steps involving **flag** outputs, in this panel's control matrix, from the initial alarm input **until the lock-out flag** (flag 100 in the example given in **Section 2.1**) has been reached. There is no need to count steps which do not progress towards the lock-out flag. In the example the applicable steps are rule 3 followed by rule 13, thus the parameter need only be set to 2.

It is not harmful to *slightly* over-specify the parameter; leaving it at its default (5) normally gives satisfactory performance. If set too low, the panel may start processing another input before detecting the lock out. If set too high, the panel may perform unnecessary processing of Control Matrix flags, slightly delaying the reporting of subsequent alarms.

# 3 Display Flags

In addition to active Control Matrix rules:

```
Display Active Control Matrix Rules
    1   3   5  14  17  20  21  22
   23  24 F12 F100
```

This display also shows active transfer flags (F12 and F100 in the example).

# 1 Introduction

Software version 4.37 introduces Module Reset Mode. This enhancement affects two options:

a. The bad poll log. The information in this document replaces that contained in Section 12.2 or 12.3 of the Panel Configuration Manual.

b. The loop options panel settings. The information in this document is additional to that contained in Section 11.8 of the Panel Configuration Manual.

## 1.1 Loop Options

Add the following options:

```
Panel Settings
Module Reset Mode Options
Max. no. of operations per 24 hours
(0-63; 0=disable option): 0
```

**1** Module Reset Mode. This allows a number of events to be set, within a 24hr period, whereby power is momentarily removed from the loops to perform a reset of the loop devices. The mode is disabled by default (set to 0). Any value above 0 enables the mode; it is strongly recommended that this option be set to no greater than 4. This option should only be set in consultation with Technical Support.


**EN54-2: 7.1.3**
**Setting Module Reset Mode above 0 may result, in exceptional cases, in the time to indication of a fire alarm condition exceeding 10s.**

**Note:** The following options are only displayed if Module Reset Mode is enabled. It is recommended that these settings are not changed from their defaults without first seeking advice from the manufacturer.

```
Panel Settings
Module Reset Mode Options
Max. no. of operations per 24 hours
(0-63; 0=disable option): 1
Duration of 0 Volts Reset:
(seconds: 1-30): 7
```

**2** This defines the length of time that the loop is switched to zero volts when restarting modules.

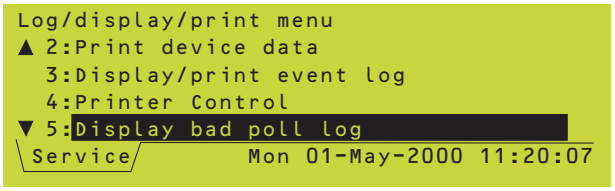
```
Panel Settings
(0-63; 0=disable option): 1
Duration of 0 Volts Reset:
(seconds: 1-30):  7
Duration of fault hold-off period:
(seconds: 1-60): 20
```

**3** This defines the length of time, following restoration of power to the loop and resumption of polling, that module faults are ignored awaiting recovery of modules.

```
Panel Settings
Duration of fault hold-off period:
(seconds: 1-60):  20
Duration of unconditional fault
monitoring period after Module Reset:
(seconds: 1-120): 30
```

**4** This defines the length of time, following the second period, that any observed missing modules are regarded as genuine faults without any second recovery being attempted.

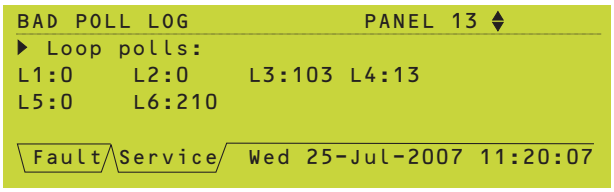
## 1.2 Bad Poll Log



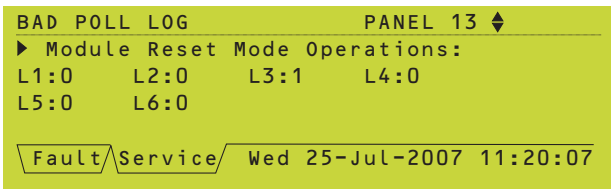

Replace with new description below:

Access level 3A.

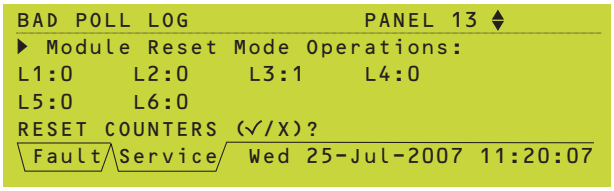
**Note:** On network (not Master/Slave) a panel selection menu is first displayed. If the selected panel is off-line, a COMMS LOSS message is displayed.



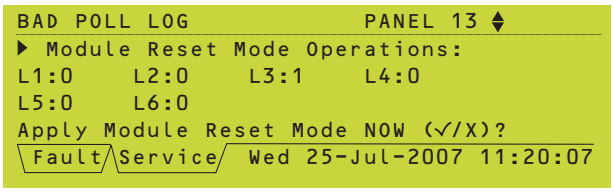

The first display identifies the number of bad polls for each loop. The arrows allow selection of bad poll logs for other panels. If there are no faults, all indications will show '0'.




Use the right arrow to display the number of Module Reset Mode (**Section 1.1**) operations per loop since the last time the counters were reset (or the panel was powered on). It does not show the number of times in the current day. If a reset operation is currently in progress, the counter is not incremented until the operation is complete, nor is it incremented if the operation fails (i.e. a missing module remains missing).




Press the tick button to display the RESET COUNTERS prompt. This option clears the Loop Polls and Module Reset Mode counts.




If the Module Reset Mode Operations display is present and NO is chosen in response to the RESET COUNTERS option, **and** if modules remain missing, the option to perform a manual Module Reset Mode operation is provided. This operates only on the selected panel, and on **all** loops of that panel that have missing modules. It is not included in the daily maximum configured in the panel settings, and can be selected even if Module Reset Mode is disabled in these settings.

# 1 Introduction

Software version 4.51 introduces single-fault tolerant network status message and control action filtering as a configurable option. This enhancement enables the network to be partitioned so that control panels and repeaters located in each geographical area (sector) respond only to events and control actions raised within the same sector; network events and control actions occurring outside this sector are 'filtered' out, i.e. ignored. This ability to impose restrictions on what panels do, or do not need to respond to, is known as network event filtering. In essence, this allows a large network, providing fire cover for a number of related but separate sites or buildings, to comprise a number of continuously-cabled but operationally autonomous sub-networks.

However, the system has the flexibility to allow control panels to be configured as 'supervisors' which allows them to have visibility of network event messages and respond to events from other sectors, in the same way that any node behaves on a non-filtered network. The selection of sectors able to be monitored by a supervisor panel is part of the network configuration process.

This addendum describes the additional configuration options for enabling network filtering operation on a single-fault tolerant network.

Filtering is not available with the Master/Slave networking option.

## 1.1 Off-line Configuration Tool

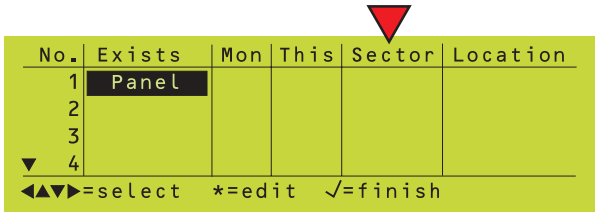
As with earlier versions of panel software, the recommended method of configuring a single-fault tolerant network is by using the Windows™ Configuration Tool (WCT) v. 2.14, or later.

If the WCT is used to download panel configurations some local editing is still required at each panel as with previous versions of panel software. This procedure has not changed with the introduction of network filtering.

# 2 System Configuration

Panels and repeaters are assigned to a single-fault tolerant network in the same way as with earlier versions of panel software. The procedure described below addresses the changes to the configuration menu options to incorporate network event filtering. The procedure is based on the assumption that network event filtering is being implemented via each control panel's user controls and not downloading the configuration using the WCT.

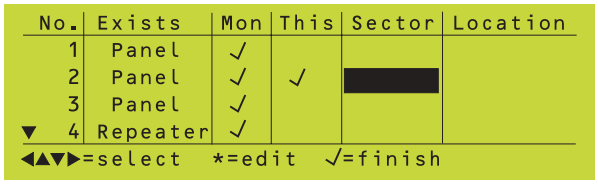
## 2.1 Assigning Nodes to Sectors



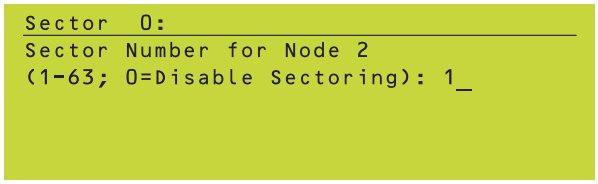

The network configuration table, shown at left, includes a column for assigning nodes to network-event filtering groups, known as 'sectors'.

The maximum number of sectors configurable on a single-fault tolerant network is 63. Any number of nodes can be assigned to a sector. Nodes can be allocated to any sector, in any order, and any number of nodes can be assigned.

Edit the configuration table to add panels and repeaters to the network as described in the Panel Configuration manual. If network event filtering is required the following additional steps need to be taken:




i To assign each node to a sector, place the cursor in the Sector column of the first node to be assigned and press the '*' key. In the example illustrated here the local panel, node 2, is selected.

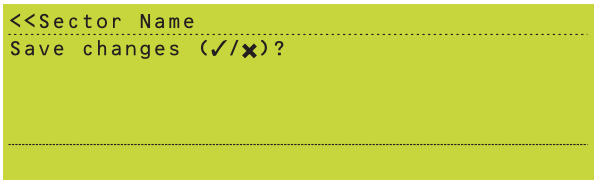



ii A screen, typical of the one shown here, prompts for the entry of the node number. Enter a valid number (must be between 1 and 63) and press the 'tick' button.

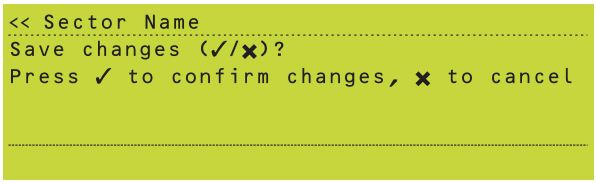
**Note:** The sector default value is '0' and is shown at the top of the display. This value can be entered to disable network event filtering operation, if required.

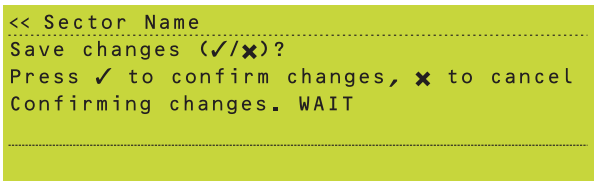

iii In this example number '1' was entered, and all other nodes have been allocated to sector 1. Every network node is initially assigned to the same sector, but this can easily be changed by repeating these steps when editing the other nodes. Remember: this has to be done at every panel on the network.


iv You are now prompted to enter a sector name using the panel's virtual keypad which is now displayed. Enter a name (up to 32 characters including spaces) and press the 'tick' button.




vi After entering the sector name, press the 'tick' button twice to confirm that it is correct. If not correct, press the 'x' button to cancel and repeat the procedure, as required.





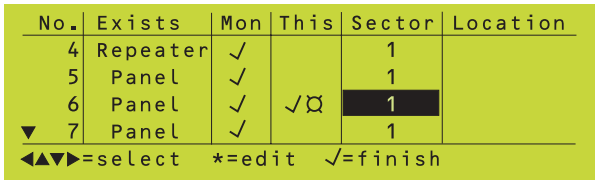
vii When programming the local panel, i.e. the panel at which the controls are currently being used, once a sector number has been assigned a further prompt is displayed to ask whether the panel is to be configured as a 'supervisor', as shown at left. This selection can only be made at each panel as part of the process of assigning it to a sector. Therefore, this prompt is displayed each time a local panel is assigned to a sector.

Select 'Yes' or 'No' as appropriate.


viii If 'Yes' is selected the 'Include SECTOR information in ALARM and PREALARM display?' prompt is displayed.

Selecting this option will add a line of text, for alarm or pre-alarm events, as follows: at the top of the middle area of the display, to identify the sector of the originating alarm event or below the zone reference for pre-alarm events. This additional line displaces the panel number and name reference down one line. The panel's navigation buttons are used to display 'hidden' information: use the 'UP' and 'DOWN' arrow buttons for 'Alarm' events and the 'LEFT' and 'RIGHT' arrow buttons to toggle the last line between zone text and device text for pre-alarm events.

Select 'Yes' or 'No' as appropriate.

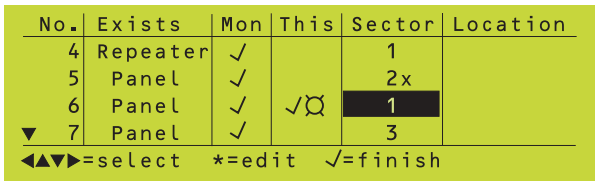



ix The appearance of the symbol '¤' next to the tick in the 'This' column indicates that the panel, in this example node 6, is a supervisor. Panels can only be made a supervisor at the 'local' panel and cannot be done remotely.

**Note:** Repeaters with a network node ID can be assigned to a sector but cannot be made a supervisor.


x When programming other nodes to different sectors, if the local panel was made a supervisor a further question is asked: 'Make Sector n accessible to this panel?'. There are three choices: 'No', 'Yes' and 'ALL Sectors'. If 'Yes' is selected the node currently being edited will be made visible to the local panel (the local panel is a supervisor!). Selecting the option 'No' means that the local panel will not receive any information about alarms or pre-alarms from that sector. Selecting 'ALL Sectors' enables the local panel to have visibility of every sector on the network. However, selecting this option does not mean that every sector is accessible to every other sector. This is a setting for the local panel only.

Select the appropriate option. The configuration table re-appears with a different sector number against the node that has been edited. If the sector is not accessible to this panel an 'x' appears to the right of the sector reference. In this example, nodes 5 and 7 have been assigned to sectors 2 and 3 respectively, with only sector 3 accessible to this panel.




**Note:** All nodes assigned to sector 3 will be accessible to this panel. As more nodes are assigned to this sector they are automatically accessible to this panel.

xi Move to the next node and repeat the procedure of assigning nodes to a different sector, as applicable, until every node, not remaining in sector 1, has been re-assigned.

xii With all nodes now assigned to sectors for this panel, move to the next panel on the network and repeat this procedure, remembering that the other panels, in each case, will need to be treated as the 'local' panel when configuring the network options.

## 2.2 Fault Messages

If the entire system is being configured from the panel menus, one at a time, then until all the panels have been configured to agree one or more instance of the following fault message will more than likely be reported:

***Sector Assignment Error, Panel n***

Where n is the number of the panel deemed to be at fault. Once a valid configuration at all nodes has taken place and each sector has been reset, these faults should stop being reported.

# 3 User Actions at Supervisor Panel

This section describes the way a supervisor panel displays filtered network events and the menu options the user is offered to respond to them.

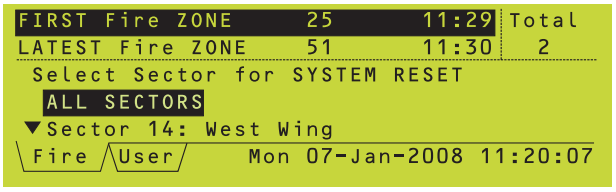
A supervisor panel can have knowledge of sectors that are in an off-normal state other than its own. Off-normal categories include:

- Fire
- Pre-alarm
- Fault
- Evacuate

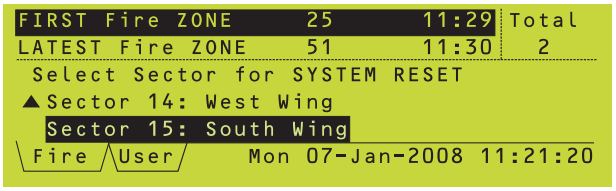
**Note:** Disablement and Test are not considered as off-normal states for filtering puposes.

## 3.1 RESET Action

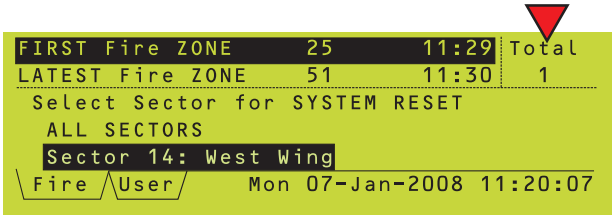
Only those sectors that are accessible to the supervisor and are in an off-normal state are displayed at the panel.




When two or more sectors are in the off-normal state and the RESET button is pressed, a menu is displayed to prompt for selection of a specific sector or all sectors to be reset. The example illustrated shows ‘All Sectors’ as selected. Use the ‘down’ arrow to navigate to the desired sector, e.g. Sector 15, and then press the tick button to select.



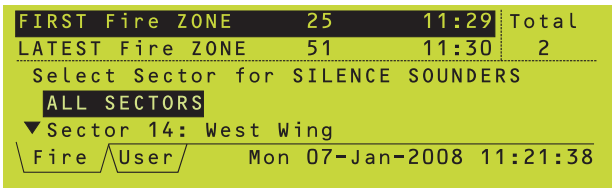

If the selection made is *one* rather than *All,* the Reset is not performed at the supervisor panel but the selected sector reference is removed from the supervisor panel’s display, resulting in a partial reset being performed. The ‘Zones in Alarm’ total will decrement accordingly.




This option is displayed until only the last sector remains to be reset.

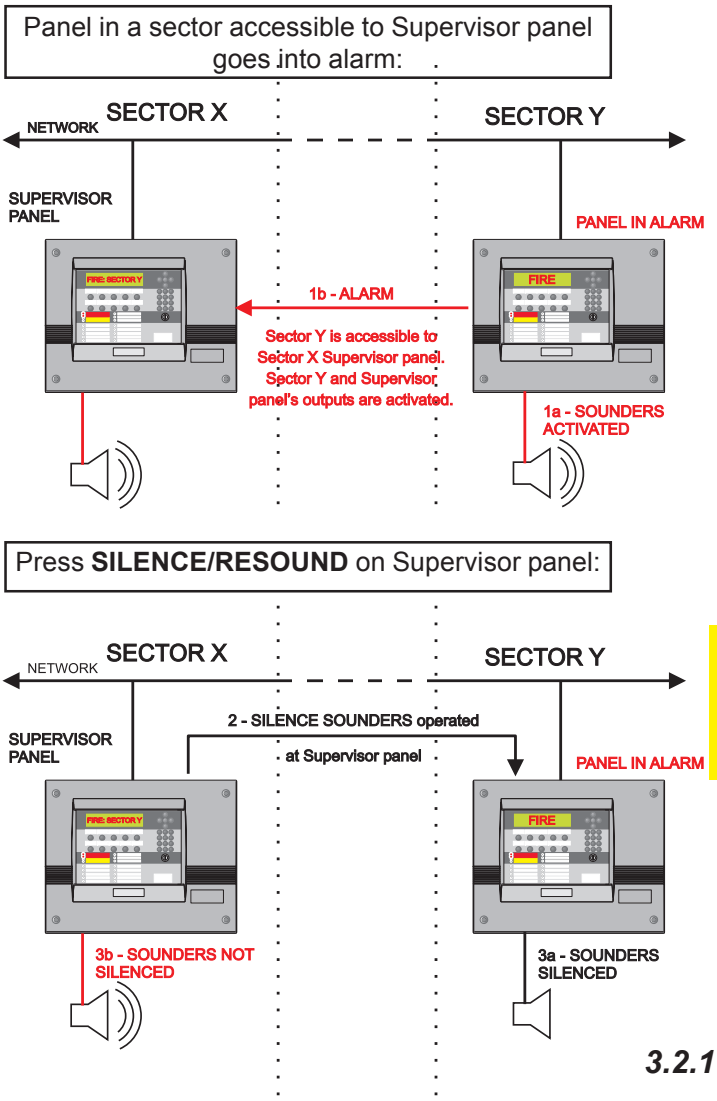
## 3.2 SILENCE SOUNDERS

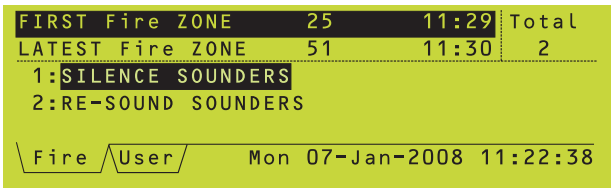
**CAUTION: there is potential ambiguity in the way SILENCE SOUNDERS operates in a filtered environment.**




Pressing the SILENCE/RESOUND pushbutton at a supervisor panel when two or more sectors are in the in off-normal status displays a menu typically as shown at left.

The filtering ‘scope’ of the SILENCE command is based on the sector where sounders are located and NOT on the sector in which the originating alarm is located. For example, if the




user selects a sector which does not include the local supervisor panel (i.e. the panel at which the SILENCE/RESOUND button is being pressed) no sounders will be silenced at the local panel. This means that any active sounders attached to the supervisor panel, and activated as a result of an alarm from the sector now being silenced, will continue to sound. This is best shown in the following example:

With reference to the illustration at left, any alarm event in sector Y is visible to the supervisor panel in sector X. The sounders are activated in sectors Y and X. Pressing the SILENCE/RESOUND pushbutton on the supervisor panel in sector X, silences the sounders in sector Y but leaving its own sounders still activated.

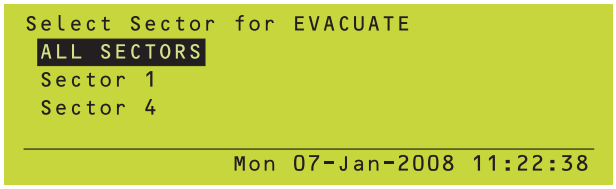
**Use caution when configuring the operation of sounders of a supervisor panel assigned to a sector other than the one in which the originating alarm occurs.**

### *3.2.1 SILENCE or RESOUND*

Furthermore, after SILENCE/RESOUND has been operated in some sectors, but not all, then if SILENCE/RESOUND is pressed at a Supervisor panel there is further ambiguity because this control normally has a toggling function: SILENCE - RESOUND. In this case, the menu at left is displayed. Make the appropriate selection.

**Note:** This menu only appears if appropriate. After selection, a further sector selection menu may appear, depending on whether more than one sector is capable of being silenced or re-sounded.

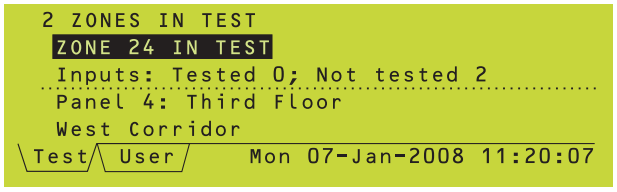
## 3.3 Evacuate




Pressing the EVACUATE button at a supervisor panel all sectors available to that supervisor are listed, as in the typical example at left. Select a sector or all sectors from the list. The Evacuate tab is displayed.

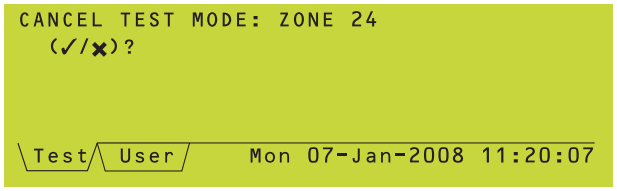
Once EVACUATE has been operated, the same sector menu operations for SILENCE will apply as in the case of ALARM, except there is no RE-SOUND option.

## 3.4 Zone Test



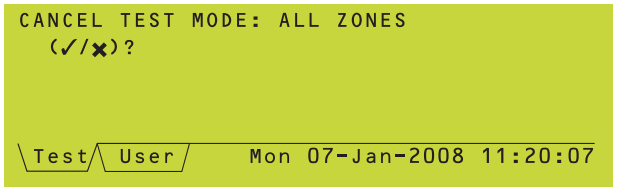

Network filtering has no effect on the way zones are selected to perform zone walk testing. However, to avoid ambiguity in network-event filtering mode walk test can either be cancelled one zone at a time or, as with previous software versions, all zones may be selected for cancellation. This change also applies to non-Supervisor panels if they are part of an event-filtered network.

Zone 24 currently in test. Press the '*' button to end walk test:



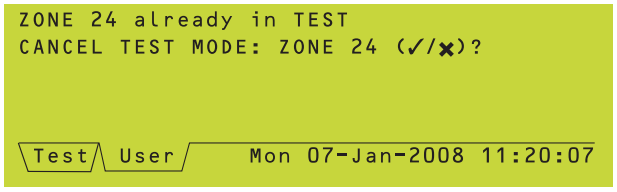

If more than one zone is in walk test and with the Test tab on top, pressing the '*' button the zone currently in test is prompted for selection. In this example, zone 24 is currently in walk test so this zone is offered for test ending. If you end walk test for one zone the other zone(s) remain in walk test.

Ending testing through the Zone Walk Test menu:



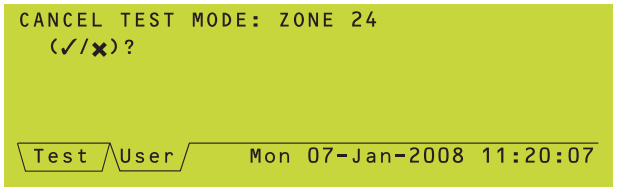

Alternatively, selection of zones to cancel testing may be accessed through the Test/ Zone Walk Test user menu. When this option is first selected, and before any zone is selected, the 'Cancel Test Mode: All Zones' prompt is displayed, shown at left, as with previous software versions. Press the tick button to cancel the testing of all zones.

Selecting 'No' now prompts for selection of a specific zone:




Alternatively, by not selecting all zones when more than one zone is in test a menu, typically as shown at left, is displayed after selecting the zone but not before as in previous software versions.

Selecting 'Yes' prompts for selection of the only zone in walk test:




If only one zone is in test, the menu appears before selecting the zone, as in previous software versions.

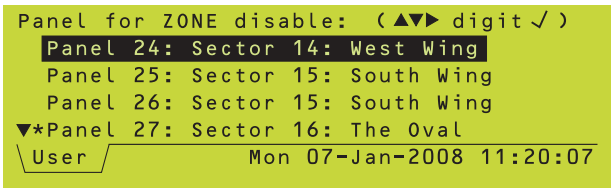
## 3.5 DISABLE ALL SOUNDERS

In a network event filtering environment using network zones there is a function where activating this option from a supervisor panel all sectors to which the supervisor has access have all their sounders disabled. The converse action initiated by pressing the '*' pushbutton with the DISABLE tab on top has the same effect and scope.

There is no menu option for filtering which sector(s) are to be silenced.

## 3.6 User Selection of Panel

There are a number of instances in the existing operation of an ID²net system where a menu is offered to select a panel. At Supervisor panels only it is possible to view the sector to which any panel is assigned.




Where menu options prompt for a panel selection, press the right arrow pushbutton to toggle between panel text and sector information display. The typical example shown at left is offered when selecting zone disable in a network filtering environment.

**Note:** The '*' symbol indicates that this panel is a Supervisor.

# 1 Introduction

Panel Software version 4.54 introduces the following features:

1 Synchronized pulsing of sounders now available across a loop, panel or over single-fault-tolerant networked panels. Refer to Section 2 of this addendum.

2 Selecting the RS485 card for third-party protocol communications where an RS232 card is not fitted is now permitted. *Functions in Half-Duplex mode only and requires a compatible RS485 transceiver at the host end. Refer to Section 3 of this addendum.*

3 Enable/disable appended panel listing of third-party host messages resulting from actions such as RESET, SILENCE SOUNDERS, MUTE BUZZER, EVACUATE and SILENCE SOUNDERS, etc. at a Supervisor panel on a single-fault tolerant network employing event message filtering.

4 Panel can be configured to ignore third-party requests for time re-synchronization.

5 New 'Disable/Enable' menu option 'All Outputs, All Panels'. This option is now available whether a panel is in Panel Zones or Network Zones network configuration mode.

6 Option added to re-instate the RESET action at the end of Zone Walk Test function.

7 Added individual zone sounder output disablement information to support MIMIC operations.

Sounder Synchronization is not available across Master/Slave networks.

This addendum describes the additional configuration options for enabling these new features.

## 1.1 Compatibility Issues

This feature will only be configurable when the following installation requirements are met:

i Panel software at version 4.54, or later

ii LIB* software at version 13.02, or later

iii Enhanced protocol-compatible loop sounders if sounder synchronization is required.

* Includes the two loop circuits on the Base PCB.

## 1.2 Off-line Configuration Tool

As with earlier versions of panel software, the recommended method of configuring fire alarm

control panels with these new features is by using the Windows™ Configuration Tool (WCT) v. 2.17e, or later.

If the WCT is used to download panel configurations some local editing is still required at each panel as with previous versions of panel software. This procedure has not changed with the introduction of synchronized pulsing of sounders.

## 2 Disable/Enable 'All Outputs, All Panels' Option

**This is a change to the Operating Manual, Section 7.3**

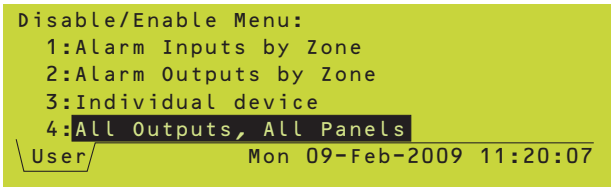
The Disable/Enable menu has an additional option 'All Outputs, All Panels'. This option is already available to panels in Network Zones mode. This option is now available with Panel Zones configuration mode.

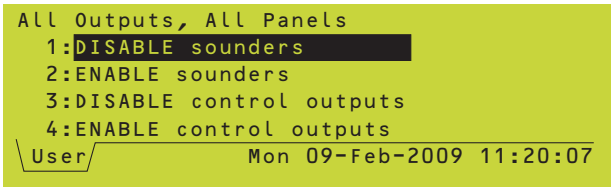
Selecting option 4: All Outputs, All panels it is possible to:

a. Disable or enable all sounders

b. Disable or enable all control outputs

In the case of a sectored network system, the scope of 'All Panels' extends only to the local sector or sectors which the originating panel has visibility.



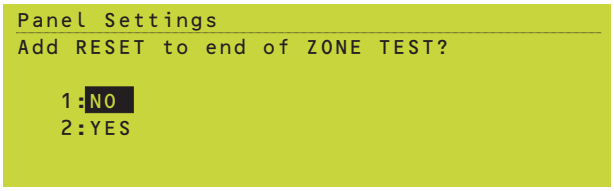




## 3 End of Zone Test - RESET

**These are changes to the Panel Configuration Manual**

With panel software v.4.54 an additional option is configurable from the Walk Test Options menu, as described below:

Prior to panel software version 4.32 a RESET operation was performed automatically at the end of a Zone Test function. This function is provided for compatibility with certain external systems, otherwise it is not needed.

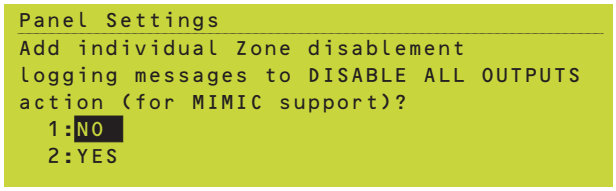



By default, a Zone Test function is not followed by a reset action. Software version 4.54, or later, allows this feature to be re-instated. To re-instate this function, go to ***'6: Panel Settings'*** and select ***'6: Walk Test Options'***. Step through the options until the 'Add RESET to end of ZONE TEST' option is displayed. Select 'YES'.

On a network this procedure must be carried out at every panel.

# 4 MIMIC Support: Disable All Sounders

With panel software v.4.54 an additional option is configurable from the Disablement Options menu, as described below:




The DISABLE ALL ZONES, ALL SOUNDERS operation now supports the indication of disabled sounder outputs, by zone, at the MIMIC panel. To slect this function go to ***'6: Panel Settings'*** and select ***'8: Disablement Options'*** and step through until the screen at left is displayed.. The default is NO. This option is only applicable to Network Zones mode and will not appear in Panel Zones mode. This option must be configured at each panel.

**Note:** With stand-alone panels when the Disable Outputs by Zone function is selected, followed by ALL ZONES, only the 'Sounder' options are available - not the 'Controls' options. However, control outputs may still be disabled on a zone-by-zone, including range of zones, basis.

With VdS systems this function also covers the 'Akustik AB' key on the FBF panel.

# Appendix 4

# Sounder Synchronization

This is a new appendix to the Panel Configuration Manual (997-506-000-X) which describes the new, configurable sounder synchronization function.

## 1 Introduction

When implementing this feature for a new or existing installation, the following configuration measures will need to be taken:

a. Upgrade of all panels' main CPU software to version 4.54, or later.

b. Upgrade of Baseboard loop circuits and all LIB card CPU software to version 13.02, or later.

c. Setting in each panel the 'Synchronize Sounders using Enhanced Protocol' global option or using the Windows™ Configuration Tool to enable this feature.

d. Ensure that all sounders that are not able to support the enhanced protocol (using the option described later in this addendum or using the Windows™ Configuration Tool) are excluded. Failure to do this will result in faults.

e. Select the pulsing rate if the default of 1 sec ON/1 sec OFF is not required. Identify and select the sounders to use the alternative rate (as described later in this addendum) or using the Windows™ Configuration Tool.

f. Configure the required control matrix rules with the pulsing sounders option.

Only modules of type SOUNDER (software code BELL) will participate in synchronized pulsing commands. Sensors cannot be selected to participate in a synchronized operation.

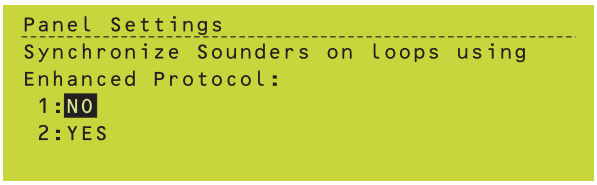
Only sounders, sounder bases or sounder/strobes compatible with the enhanced loop protocol will allow implementation of this feature. Where there is a mix of compatible and non-compatible sounder devices (still must be type BELL) on an installation, the non-compatible devices MUST be explicitly excluded from Synchronized Pulsing, even if their outputs are not set to PULSE.

Any device configured as output STEADY or device type CTRL will not participate in synchronized operations and will function in exactly the same way as with earlier versions of panel software.

## 1.1 Option Enablement

A menu is provided to configure the synchronization of pulsing sounders and is accessed via the Configuration menu (access level 3A passcode is required). This option is a global enablement, i.e. once selected all panel loops will be affected by this change.

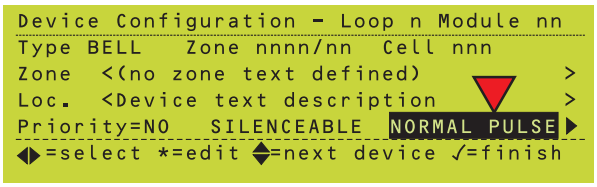
**Note:** If this feature is not enabled the panel will revert to the existing strategy using CLIP polls and none of the actions described in this document will be implemented.



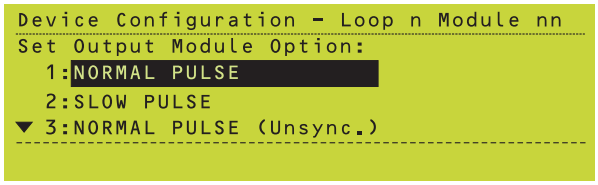

**Note:** This option can also be accessed via the ***Panel Settings/Loop Options*** configuration menu.

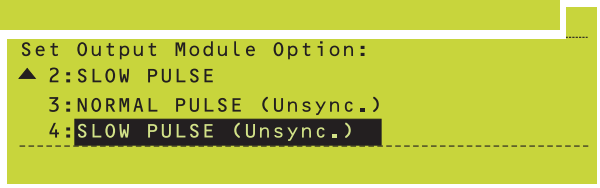
1 From the ***6: Configuration*** menu, under ***6: Panel Settings*** select ***5: Pulsing Sounder Modes.***

**Note:** To avoid compatibility issues the default selection is NO. To enable sounder synchronization select YES. If this is applied at a site with 'earlier' type sounders, i.e. they are not capable of supporting the enhanced protocol, they **must** be excluded to avoid fault messages.



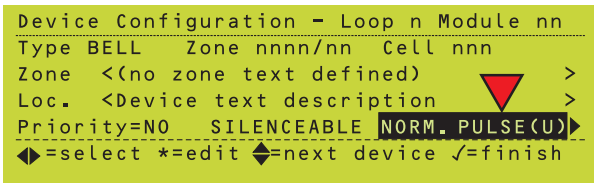

2 To do this use the panel controls to navigate to the following panel configuration menu: ***6: Configuration/1: Loop Device Configuration/1: Configure Individual Device***.

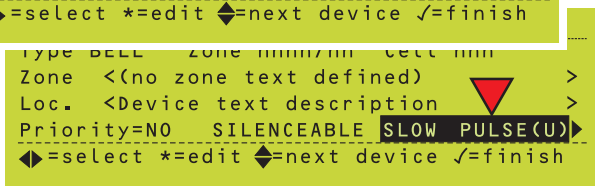



3 With only type BELL devices selected move the cursor to the PULSING options field (highlighted in example at left) and press the STAR pushbutton to display further options as follows:

- NORMAL PULSE
- SLOW PULSE
- NORMAL PULSE (Unsync.)
- SLOW PULSE (Unsync.).




4 Select the desired option. The new selection replaces the previous mode when the ***Configure Individual Device*** screen is re-displayed. Selecting either of the 'Unsynchronized' options results in the display typically as in the examples shown to the left.

## 1.2 Control Matrix Issues

If any panel configuration has a Control Matrix rule calling for PULSING, it is **essential** that all non-compatible sounder devices, i.e. those

that do not recognize the enhanced protocol, must be configured with one of the Unsynchronized settings. This action must be taken even if these sounders are never to be included in the PULSING rules.

### 1.3 Networking Issues

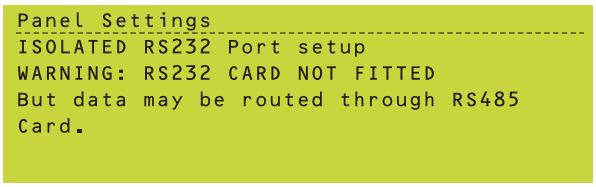
When invoked on a single-fault tolerant network the pulsing synchronization feature is applied across the entire network regardless of sector divisions.

Sounder synchronization is not supported on RS485-based Master/Slave network systems.

## 2 Third-party Protocol Changes

### 2.1 Panel Listing

A supervisor panel on a network configured for network event message filtering, when communicating with a third-party host, provides a list of those panels included in the selection of the following 'panel to host' actions: RESET, SILENCE SOUNDERS, MUTE BUZZER, EVACUATE, RE-SOUND SOUNDERS, OVERRIDE INVESTIGATION DELAY, EXTEND INVESTIGATION DELAY, SOUNDER DELAYS OFF (IMMEDIATE mode), SOUNDER DELAYS ON (DELAYED mode), DAY MODE, NIGHT MODE, ÜE TEST (VdS only). This action may be disabled.




The option, accessed through the Isolated RS232 Port menu, is displayed only if the panel is a Supervisor on a single-fault tolerant network employing event message filtering (also referred to as 'sectoring').

Select the Isolated RS232 Port menu and step through the options until the screen at left is displayed.

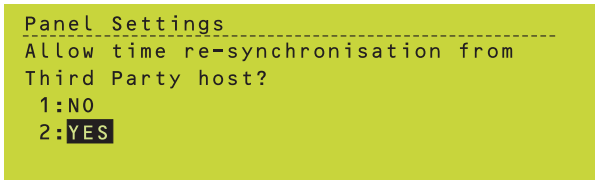
The default is YES. Select NO when the third-party host cannot support this feature.

### 2.1 Time Re-synchronization Request

The control panel can receive time-re-synchronization requests from the third-party host. This option allows the panel to be configured to accept or ignore these requests.

If the panel (or the entire system if a network) has **never** had the time and date set, either manually or via a message from the third-party host, since it was powered-on, it will still accept

the **first** instance of a time-synchronization request from the host, even if the option is set to NO. It will not accept subsequent such messages




Select the Isolated RS232 Port menu and step through the options until the screen at left is displayed. Select YES to allow panel responses to time re-synchronization requests from the third-party host or NO to ignore these requests.

The default is YES.

**These are changes to the Panel Configuration Manual, Sections 5.1.4.8 & Section 11.16, respectively, resulting from the sounder synchronization enhancement.**

**Module Pulse Options**

Added to the first note: 'However, with panels software 4.54, or later, **and** LIB software 13.02, or later, this is no longer a limitation. Refer to Appendix 4 for further information.'

Isolated RS232 Port Set-up. After the second note added: 'With panel software 4.52, or later, and Isolated RS485 card may be used for 3rd party comms.'

Bullet point 4: added 'If using an Isolated RS485 card only HALF DUPLEX is selectable.'

# Appendix 5

# Third- Party Protocol Using RS485

This is a new appendix to the Panel Configuration Manual which describes the new, configurable RS485 third-party protocol function.

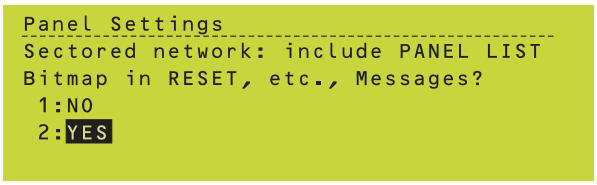
## 1 Introduction

When configured, this feature allows transmission of the third-party protocol through a plug-in RS485 card, as opposed to the standard operation through an RS232 card. This is a point-to-point implementation only.

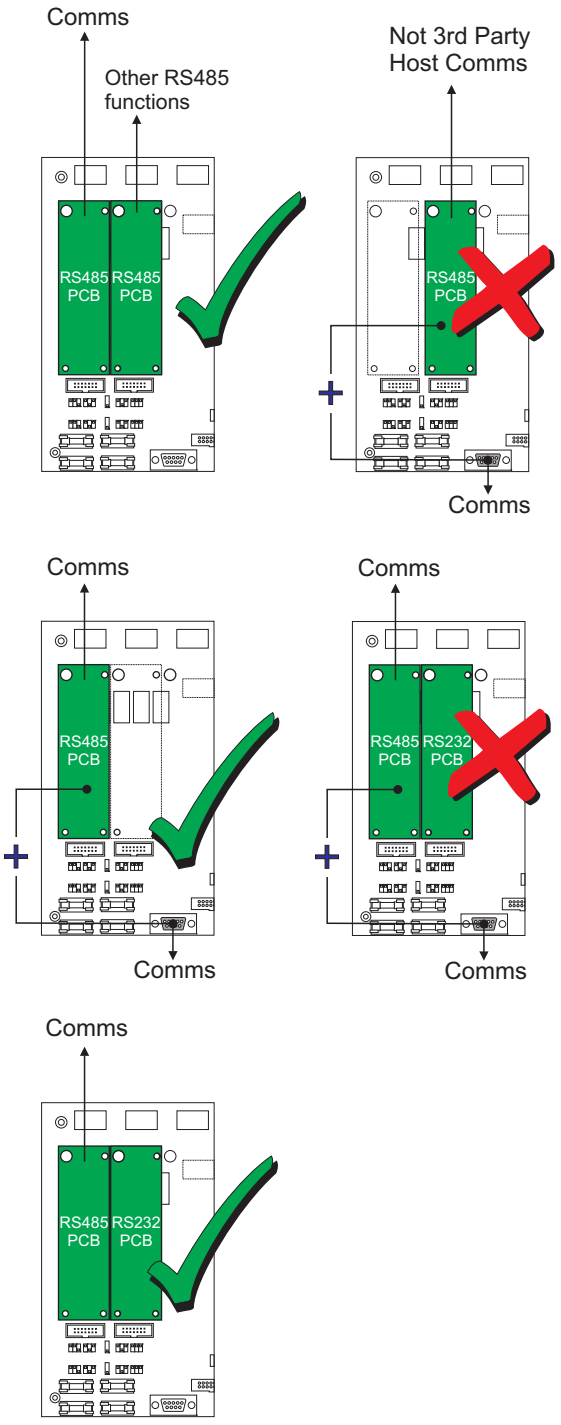
The number of third-party protocol channels on any one panel is still limited to two. If two channels are in use, one of them MUST be via the built-in, non-isolated (diagnostic) RS232 port D-type connector (located on the lower edge of the Base PCB). The function of this RS232 port is always FULL DUPLEX. The other channel may be either RS232 or RS485. However, it is not possible for both cards to be used for third-party protocol comms on the same panel.

Only HALF DUPLEX is supported in RS485 third-party protocol mode.

When configuring the third-party protocol from the panel menus if no RS232 card is fitted, but an RS485 card is available, the warning at left is displayed:




Installation may proceed, therefore, without a ‘missing card’ fault message being given. If the link through the RS485 card is monitored any failure of data flow will generate the usual Terminal Link fault message. The RS485 card may be fitted in either slot.




**Incorrect connections could result in damage to the comms port of the PC. The panel's RS232 connector P1 is NOT an isolated port.**

## 1.1 RS485 Third-Party Protocol Configuration

To successfully configure third-party protocol operations through an RS485 card make sure the following requirements are adhered to:

i. A maximum of two RS485 cards may be fitted - DO NOT fit an RS232 card when an RS485 card is used for the second third-party protocol comms channel.

ii If two RS485 cards are fitted connect the third-party host to the left-hand card.

iii Ensure that a suitable interface and driver is provided at the host end.

iv Only one host system may be connected to a panel - the protocol is 'point-to-point' and not 'multi-drop'.

v The mode must be set to HALF DUPLEX. The default data rate is set to 9600 baud.

vi With only one RS485 card fitted configured either for RS485 repeater or Master/Slave network any attempt to configure the RS485 for third-party protocol comms will generate a fault. If two RS485 cards are fitted the panel software automatically selects the appropriate comms position (A or B) for each application: COMMS A for third-party protocol and COMMS B for Repeater or Master/ Slave network. Ensure that each application, where used, is correctly wired.

vii The presence or absence of a secondary third-party protocol channel through the non-isolated port on the Base PCB will not be an issue.

The illustrations at left show the available comms connection options using an RS485 card and/or non-isolated RS232 port on the Base board. Also shown, are combinations that must be avoided.

**CAUTION**: **Direct connection of a PC to the panel's RS232 connector P1 will cause an earth fault with potential damage to the PC. Either use an isolated RS232 link or (temporarily) disable the fault monitoring circuit (refer to the WCT Manual). If an earth fault already exists (LED next to link JP1 illuminated yellow), DO NOT connect additional equipment likely to cause earth faults as damage may result (i.e. inhibiting the monitoring will not protect the equipment).**

# 1 Introduction

Panel Software version 4.63 introduces compliance with the operational changes required by the Construction Products Directive (CPD). The panel can also be configured to meet the requirement of EN54 Part 13 whereby the sounder circuits are monitored for partial-open and partial-short circuits.

In addition, the panel function now conforms to the changes resulting from EN54 Part 2, paragraph 9.4.2 amendment A1 which states that separate, continuously-visable indications of ALL individual sounder disablements must be provided. However, compliance with this requirement in hardware would necessitate a significant amount of product re-design, so a method of meeting this requirement has been devised via panel software only. The panel default setting satisfies this requirement in that the disablement of individual sounder or control outputs are disallowed; the disable/enable menu options have changed to allow only the selection of ALL outputs.

Networking - this common disablement requirement applies to the network as a whole and not to panels independently.

In compliance with EN54 Part 13 the features described below are provided:

**1** The panel can be configured so that it continuously monitors the sounder circuit outputs for partial-open and partial-short circuits. This function requires the new Processor PCB (PN: 124-360) and new Base PCB (PN: 124-361) to be fitted. Refer to the Installation & Commissioning Manual (PN: 997-274-000-6) for more details.

**2** The panel continuously monitors the impedance of the battery wiring. If the impedance exceeds the limit a fault is indicated. Refer to the Installation & Commissioning Manual (PN: 997-274-000-6) for more details.

This addendum describes the additional panel configuration options for accessing or enabling these new features.

Sections 4, 5 and 6 of this document describe other functions that have been included to meet the requirements of EN54-2. Descriptions of the features offered by these additional functions are given in those sections.

## 1.1 Compatibility Issues

These features will only be configurable when the following installation requirements are met:

i Panel software at version 4.63, or later

ii LIB* software at version 13.02, or later

iii Processor PCB (PN: 124-360, Iss 01, or later)

iv Base PCB (PN: 124-361, Iss 01, or later)

* Includes the two loop circuits on the Base PCB.

Panel Software version 4.63

## 1.2 Off-line Configuration Tool

**If panel software 4.5x, or earlier is used with the new Processor PCB a system fault will occur. The fault tab will appear with the 'Number of Faults = 0' and the System Fault LED will light.**

Not all features described in this document are configurable using the Windows™ Configuration Tool (WCT).

As with earlier versions of panel software, the recommended method of configuring fire alarm control panels with these new features is by using the WCT v. 2.18, or later.

If the WCT is used to download panel configurations some local editing is still required at each panel as with previous versions of panel software. This procedure has not changed.

## 1.3 EN54 Functions

**This is a change to the Panel Cofiguration Manual, Section 1.6 EN54 Functions**

The declaration of conformity with the requirements of EN54-2 has changed. The panel now conforms with the EN54-2 options with requirements as listed in the table below:

| Options | Clause |
|---|---|
| **Indications**: | |
| Fault signal from fire protection equipment | 7.10.4 |
| Recording of the number of entries into fire alarm condition | 7.13 |
| Fault signals from points | 8.3 |
| **Controls:** | |
| Delay to Outputs | 7.11.1 |
| Manual or automatic switching of delays to outputs | 7.11.2 |
| Dependency on more than one alarm signal, Type B | 7.12.2 |
| Dependency on more than one alarm signal, Type C | 7.12.3 |
| Disablement of each address point | 9.5 |
| Test condition | 10 |
| **Outputs:** | |
| Fire alarm device(s) | 7.8 |
| Fire alarm routing equipment | 7.9.1 |
| Fire alarm routing equipment with alarm confimation | 7.9.2 |
| Automatic fire protection equipment: Type A | 7.10.1 |
| Automatic fire protection equipment: Type C | 7.10.3 |
| Fault warning routing equipment | 8.9 |

## 2 Sounder Circuit Supervision

There is a new sounder circuit fault message which can only be displayed when the later Processor and Base PCBs are fitted.

| Base PCB PN: | Processor PCB PN: | OK? |
|---|---|---|
| 124-301 | 124-360 | Yes |
| 124-361 | 124-360 | Yes[1] |
| 124-361 | 124-302 | Yes |

[1] Only combination where a 'Sounder Circuits: CPU Fault' message can occur.

At power up the new Processor PCB (PN: 124-360) establishes which type Base PCB is fitted. If the latest Base PCB (PN: 124-361) is present the Processor PCB monitors the Sounder circuit supervision CPU located on the Base PCB.

If the Sounder Circuit supervision CPU develops a fault and the Processor PCB is unable, after three successive attempts, to reset it the following fault message is displayed:

**'Sounder Circuits: CPU Fault'**

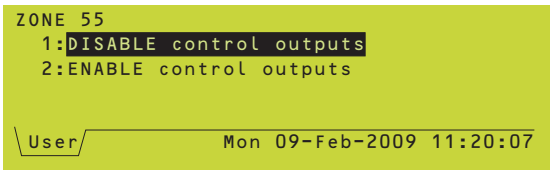
**Action:** Power the panel down and up again. If problem persists replace the Base PCB.

## 3 Disable Sounders

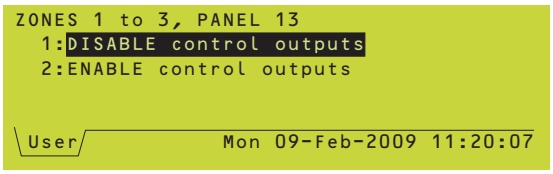
**These are changes to the Operating Manual, Section 7.3**

There are new restrictions with the selection of sounders for a disablement function. When accessing the ***2: Disable/Enable/2: Alarm Ouputs by Zone*** menus there are restrictions to the available options when disabling outputs by zone. If a specific zone or range of zones is selected, or ALL zones if the panel is on a network, the disable and enable sounder options are not displayed. Instead, the following typical menu options are displayed:

Selection of a specific zone:

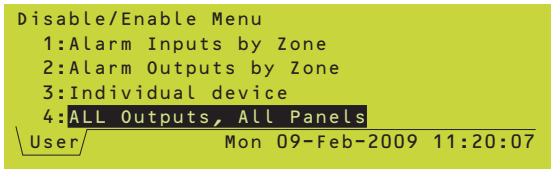



Selection of a range of zones:

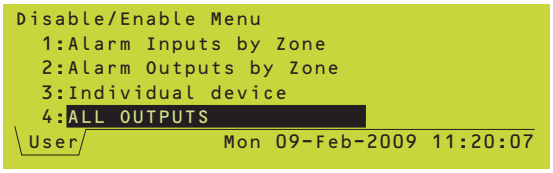



To disable or enable sounders a new menu option ***2: Disable/Enable/4: ALL Outputs, All Panels*** is available. Select ALL OUTPUTS (for stand-alone panels) or ALL Outputs, All Panels (for networked panels). The next Disable/Enable menu displays various options including the selection of sounders.

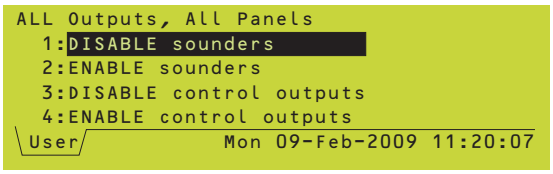
Menu option with a networked panel:



Menu option with a stand-alone panel:

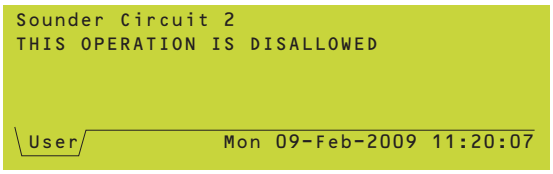



Disable/Enable menu with sounder options:




If the option ***3: Individual Device*** is selected from the main Disable/Enable menu and an individual device or sounder is selected the operation aborts to the top-level menu with the typical warning messages displayed.

**Note:** Similar restrictions apply if the * key is pressed from the Disable tab on a zone or device which is already disabled.



# 4 Device Coincidence

This feature satisfies the requirements of EN54-2: paragraph 7.12.2 Type B dependency (Option with Requirement) in that a panel configuration option is provided to enable a fire alarm condition of the panel, or system, to be deferred until certain coincidence criteria have been satisfied. This applies to sensors only.

**Note:** This feature operates completely independently of any coincidence requirements, already provided for in earlier versions of panel software, applied against Control-by-Event (CBE) or Control Matrix rules in the panel.

To better explain how this differs from the existing arrangement: with CBE rules,coincidence criteria rules are checked after the system has been put into an alarm state. With this new feature, the panel (or system) has not yet entered an alarm state, having only entered a pre-alarm state - an alarm state will only be entered once the required coincidence rules are satisfied.

## 4.1 Using Coincidence Levels

The following possible coincidence levels, or rules, may be applied to any sensor, or ALL sensors, in a fire alarm system:

1 None - the system goes into alarm status immediately.

2 Two or more sensors *in same zone*.

3 Two or more sensors *in different zones but in same panel*.

4 Two or more sensors *in same or different zones and in same panel*.

5 Two or more sensors *in different zones, in the same or different panels (network systems only)*.

6 Two or more sensors *in same or different zones, in the same or different panels (network systems only)*.

The default is ‘1’ - i.e. no coincidence rules.

### Coincidence Limitations

Coincidence levels cannot be applied to modules. For input modules the effective coincidence level is always ‘1’, i.e. NONE. An alarm input from the module puts the system immediately into alarm.

Coincidence levels of *more than two* devices, or zones, and coincidence levels involving *combinations of different device types* are not supported in this software release.

## 4.2 ‘First Alarm’ Status

If a sensor, or sensors, has/have gone into alarm status but the coincidence level associated with this/these device(s) is not yet satisfied then it/they is/are placed in FIRST FIRE status. FIRST FIRE status is reported at the panel as for a PRE-ALARM; with all indications on the LCD and other visual and audible annunciations and any CBE actions configured for PRE-ALARM. The red

any CBE actions configured for PRE-ALARM. The red FIRE LED annunciator will not be lit.

The panel treats the FIRST ALARM status input exactly the same as a PRE-ALARM input, even though this status is not the result of a sensor's analogue value having not attained the level of FIRE.

A system may be reset at any time while a FIRST FIRE status condition exists. However, if the sensor(s) still registers an alarm input then the FIRST ALARM will be reinstated after the reset.

**IMPORTANT** - if a sensor input returns to normal while the system is in FIRST FIRE status, a RETURN FROM FIRE event is logged; the sensor remains in FIRST FIRE state and subsequently **may be promoted to FIRE status before a reset has been achieved**.

## 4.3 'First Fire' to 'Fire' Status

Once a coincidence requirement has been satisfied, or a sensor (or module) for which no coincidence requirement is programmed has gone into Alarm state, then all sensors that are currently in the FIRST FIRE state, even those that are not included in the coincidence rule, are promoted immediately to full FIRE state. In short, it is not possible for sensors in FIRST FIRE state and devices in full FIRE state to exist simultaneously in the same system, except in different sectors of a network configured for network event filtering).

**Note:** Any delays set up in the CBE will not take effect until the promotion of FIRST FIRE status to full FIRE state.

### FIRE Event Logging

FIRE events are logged at the time of promotion to full FIRE state - the device whose alarm completed the coincidence rule criteria is logged as the first FIRE on the LCD and the other promoted sensors immediately afterwards. This ensures that logging of fire alarm events does not pre-date the transition of the system into Fire status.

## 4.4 Coincidence Conflicts

When two sensors are *both* in FIRST FIRE state and their *individual* coincidence configurations do not agree as to whether coincidence criteria has been confirmed, the ruling is as follows:

- If *either* of the sensor's configuration states that a coincidence is satisfied, then that coincidence *is* satisfied.

With reference to the tables below left, this can be illustrated using a number of scenarios:

| Sensor | Zone | Coincidence Level |
|---|---|---|
| 11 | 1 | 2: Two in same zone |
| 12 | 1 | 3: Two in different zones |
| 13 | 1 | 2: Two in same zone |
| 14 | 1 | 3: Two in different zones |
| 15 | 2 | 2: Two in same zone |
| 16 | 2 | 3: Two in different zones |

**First Scenario** - sensors 11 and 12 report a FIRE condition.

Result - **FIRE**

Reason - As both sensors are in the same zone, then Sensor 12 coincidence criteria are not satisfied; sensor 11 coincidence criteria are satisfied.

| Sensor | Zone | Coincidence Level |
|---|---|---|
| 11 | 1 | 2: Two in same zone |
| 12 | 1 | 3: Two in different zones |
| 13 | 1 | 2: Two in same zone |
| 14 | 1 | 3: Two in different zones |
| 15 | 2 | 2: Two in same zone |
| 16 | 2 | 3: Two in different zones |

**Second Scenario** - sensors 11 and 13 report a FIRE condition.

Result - **FIRE**

Reason - As both sensors are in the same zone, then Sensor 11 and 13 coincidence criteria are satisfied.

| Sensor | Zone | Coincidence Level |
|---|---|---|
| 11 | 1 | 2: Two in same zone |
| 12 | 1 | 3: Two in different zones |
| 13 | 1 | 2: Two in same zone |
| 14 | 1 | 3: Two in different zones |
| 15 | 2 | 2: Two in same zone |
| 16 | 2 | 3: Two in different zones |

**Third Scenario** - sensors 12 and 14 report a FIRE condition.

Result - **FIRST FIRE**

Reason - Neither sensor's coincidence criteria are satisfied, hence coincidence is not satisfied.

| Sensor | Zone | Coincidence Level |
|---|---|---|
| 11 | 1 | 2: Two in same zone |
| 12 | 1 | 3: Two in different zones |
| 13 | 1 | 2: Two in same zone |
| 14 | 1 | 3: Two in different zones |
| 15 | 2 | 2: Two in same zone |
| 16 | 2 | 3: Two in different zones |

**Fourth Scenario** - sensors 11 and 15 report a FIRE condition.

Result - **FIRST FIRE**

Reason - As the sensors are in different zones, neither sensor's coincidence criteria are satisfied, hence coincidence is not satisfied.

| Sensor | Zone | Coincidence Level |
|---|---|---|
| 11 | 1 | 2: Two in same zone |
| 12 | 1 | 3: Two in different zones |
| 13 | 1 | 2: Two in same zone |
| 14 | 1 | 3: Two in different zones |
| 15 | 2 | 2: Two in same zone |
| 16 | 2 | 3: Two in different zones |

**Fifth Scenario** - sensors 11 and 16 report a FIRE condition.

Result - **FIRE**

Reason - As the sensors are in different zones, sensor 11 coincidence criteria are not satisfied; sensor 16 coincidence criteria are satisfied, hence coincidence is satisfied.

**Note:** The shaded rows above indicate the sensors/ zones that are in an alarm state.

**Important:**

It is strongly recommended that coincidence levels must not be mixed in this way within a system as it can lead to confusion as to what constitutes a confirmed fire.

**These are changes to the Panel Configuration Manual, Section 5.1.1**

## 4.5 Device Coincidence - Configuration

To configure the coincidence level for sensors, navigate to the ***6:Configuration/Loop Device Configuration/ Configure Individual Device*** panel menu. Once a sensor has been selected and the main configuration is displayed, press the right-arrow push-button repeatedly until the following typical display is reached:

```
Device Configuration - Loop n Sensor nn
Type MULT  Zone   nn  Cell   n
Zone  <(no zone text defined)          >
Loc.  <Device text description         >
Alarm Coincidence: NONE
◆▶=select *=edit ▲▼=next device ✓=finish
```

The default coincidence level, NONE, is high-lighted. Press the 'star' push-button to edit the selected sensor's coincidence level. The following options (spread over two screens) are selectable:

```
Device Configuration - Loop n Sensor nn
Set Coincidence Level required to
confirm Alarm on this Device:
    1: NONE
    2: >1 Device in Zone
  ▼ 3: >1 Zone in Panel
```

```
Device Configuration - Loop n Sensor nn
Set Coincidence Level required to
confirm Alarm on this Device:
  ▲ 4: >1 Device in Panel
    5: >1 Zone in System
    6: >1 Device in System
```

Select the appropriate device/zone coincidence option.

### Caution

When the level is changed from the default of NONE to any of the other selectable levels, then on the first, and only the first, time this selection is made the following warning message is displayed briefly:

```
Device Configuration - Loop n Sensor nn
CAUTION: This setting will cause Alarm
Confirmation and action from this
Device to be deferred.
```

# 5 Sounder Operation after 'SILENCE SOUNDERS'

**These are changes to the Panel Configuration Manual, Section 11 - Panel Settings.**

Access Level 3A.

The response by the panel to the detection of a new alarm after the sounders have been silenced, may now be configured as follows:

1 Always Re-sound

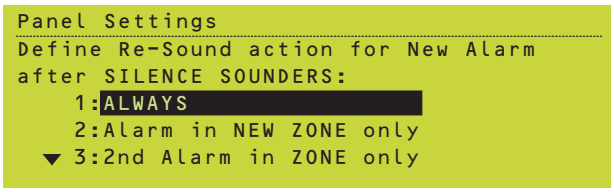
2 Re-sound only when the new alarm is in a new zone not previously in alarm state.

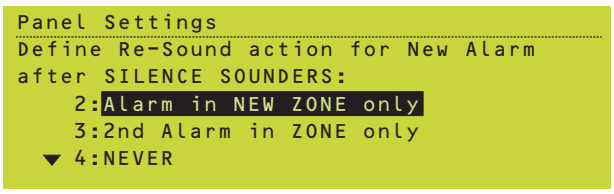
3 Re-sound only when the new alarm is in a zone already in alarm state.

4 Never re-sound.

## 5.1 Configure 'Sounder Operation'

Enter the access level 3A passcode and navigate to the following panel configuration menu: ***6:Configuration/ 6:Panel Settings/10:Panel Functions***. Step through the menus until the 'Define Re-sound...' option is displayed:




Make the desired selection. Press the 'tick' pushbutton to confirm selection.

# 6 Configuration of Fault Routing Output Using a Zone Module

**Panel Configuration Manual, Section 5.1.4. Change Device Configuration - Modules refers.**

A monitored fault routing output can be set up using a sounder output configured as a fault relay output, an input module (M710-CZ) and an RTU01 Routing Termination Unit. The connection between the input module and the third-party fault routing equipment is monitored by the RTU01 which is located at the fault routing equipment end of the monitored circuit.

The contol panel back box has provision for mounting the module internally; threaded fixing points allow the module to be fitted in either of two positions at the bottom of the box (either side of the standby batteries). The M710-CZ module uses an address on the loop and can be configured (using the panel menus or off-line configuration tool) to provide a fault indication should a comms fault occur between the zone monitor module and the RTU01.

## 6.1 Configuring the Fault Routing Output

When configuring the M710-CZ module it is displayed in the panel menus as a ZMX device type. The module is to be configured as a fault routing output with short- and open-circuit supervision enabled. To configure the fault routing output function for this module, access the ***6: Configuration/Loop Device Configuration/Configure Individual Device*** menu. The following typical screeen is displayed:

```
Device Configuration - Loop n Sensor nn
Type ZMX   Zone   nn  Cell   n
Zone  <Fault Relay Output              >
Loc.  <Device text description         >
Supervision: ALARM=OFF S/C=ON  O/C=ON  ▶
◀▶=select *=edit ▲▼=next device ✓=finish
```

In the above screen appropriate zone text for the fault relay output has been entered to clearly identify the function of this zone monitor module.

It is essential that this module is configured exactly as follows:

ALARM = OFF

S/C = ON

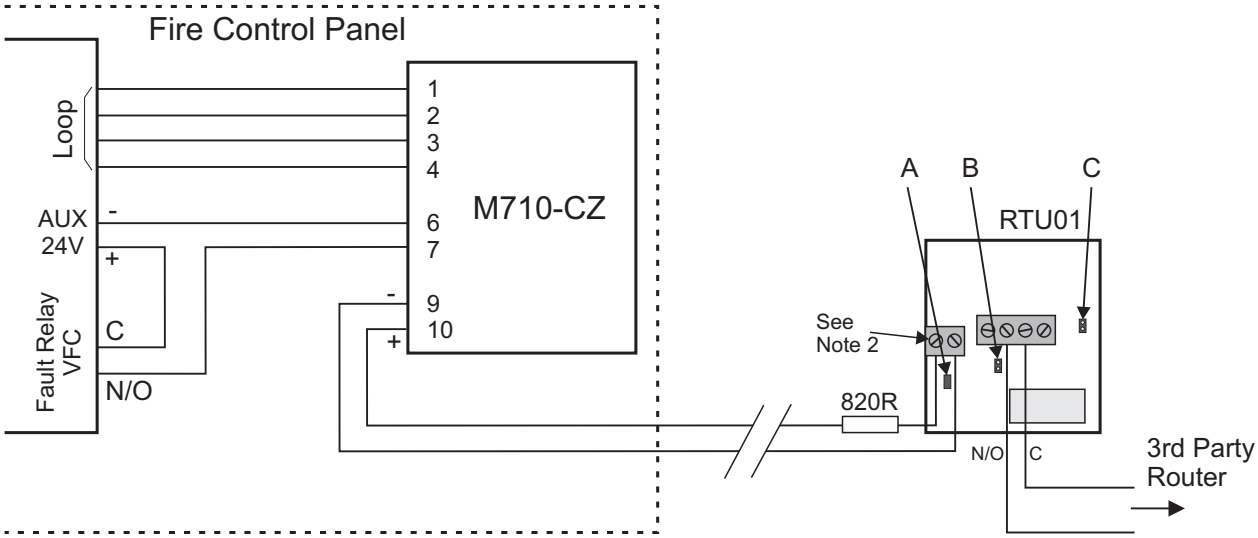
O/C = ON

To prevent an ‘extra fault’ indication at the panel in the event of the control module activation due to a fault routing transmission fault, a rule in the control matrix rule needs to be created as follows:

INPUT = FAULT - general panel fault

OUTPUT = Loop ‘n’ Module ‘m’ (individual reference to this specific zone monitor module).

The diagram below shows the wiring connections that are required between the fire control panel, conventional zone module and the RTU01 PCB.




RTU01 Unit - links

Link A - fitted

Link B - not fitted

Link C - not fitted.

**Notes:**

1 To avoid a fault condition, the 820R resistor must be in line with the connection to the + terminal of the RTU01 PCB 2-way connector.

2 If the module reports open-circuit faults for the FRM, fit the end-of-line capacitor supplied with the M710-CZ module across the + and - terminals of the RTU01.

# Appendix 1 - VdS 2540 Options with Requirements

In addition to satisfying the requirements of EN54-2 Options with Requirements, the table below defines whether the CIE is configurable in accordance with the mandatory or optional requirements of VdS 2540.

| EN54-2 Option | Description | VdS 2540 Option | C.I.E. Configurable? |
|---|---|---|---|
| | INDICATIONS | | |
| 7.10.4 | Fault signal from fire protection equipment | Required | Yes |
| 7.13 | Alarm counter | Required | Yes |
| 8.3 | Fault signals from points | Optional | Yes |
| 8.4 | Total loss of power supply | Optional | No |
| | CONTROLS | | |
| 7.11.1 | Delays to outputs | Optional | Yes |
| 7.11.2 | Manual or automatic switching of delays to outputs | Optional | Yes |
| 7.12.1 | Dependency on more than one alarm signal: Type A | Optional | No |
| 7.12.2 | Dependency on more than one alarm signal: Type B | Required | Yes |
| 7.12.3 | Dependency on more than one alarm signal: Type C | Prohibited | Yes |
| 9.5 | Disablement of each address point | Optional | Yes |
| 10 | Test condition | Required | Yes |
| | OUTPUTS | | |
| 7.8 | Fire alarm device(s) | Required | Yes |
| 7.9.1 | Fire alarm routing equipment | Required | Yes |
| 7.9.2 | Fire alarm routing equipment with alarm confirmation | Required | Yes |
| 7.10.1 | Automatic fire protection equipment: Type A | Optional | Yes |
| 7.10.2 | Automatic fire protection equipment: Type B | Optional | No |
| 7.10.3 | Automatic fire protection equipment: Type C | Required | Yes |
| 8.9 | Fault warning routing equipment | Required | Yes |
| 11 | Standardized I/O interface[1] | Required | Yes |

[1] Interface meets VdS 2540 which requires DIN 14675 & 4662, but not full EN54-2, 11.

## A1 Fault Signal From CIE

This is a VdS 2540 requirement. The CIE provides for this EN54-2 option.

The CIE comprises a volt-free contact relay configured as a dedicated fault output. Refer to **Section 5.7.2 Cables and Wiring** and **Section 7.4.7 Fault Relay Wiring** of the Installation & Commissioning Manual for further details.

## A2 Alarm Counter

The CIE can record a maximum number of 65,535 alarm events. Once this value is reached the counter no longer increments. The CIE provides a facility, at access level 4, to manually clear the alarm counter.

## A3 Fault Signals from Points

This is an optional VdS 2540 requirement. The CIE provides a configurable option. Refer to Section 5.3.5 Fault Event Display of the Operating Manual for further details.

## A4 Total Loss of Power Supply

This is an optional VdS 2540 requirement. The CIE does not allow this EN54-2 option to be configured.

## A5 Delays to Outputs

This is an optional VdS 2540 requirement. The CIE allows this EN54-2 option to be configured. Refer to the CIE Panel Configuration Manual, **Sections 3.11 Time of Day, 3.15 Delays** and **7.4 Output Modes**.

With Type B applications, if an input module is used to provide a return signal from the external system, the module must be configured as a type MON to prevent this input overriding Day/Night Mode switched delays.

## A6 Manual or Automatic Switching of Delays to Outputs

This is an optional VdS 2540 requirement. The CIE does not allow this EN 54-2 option to be configured.

## A7 Dependency on More Than One Alarm Signal: Type A

This is an optional VdS 2540 requirement. The CIE does not allow this EN 54-2 option to be configured.

## A8 Dependency on More Than One Alarm Signal: Type B

This is also a VdS 2540 requirement. The CIE allows this EN54-2 option to be configured.

For further details, refer to **Section 4 Coincidence** of this document.

## A9 Dependency on More Than One Alarm Signal: Type C

**This requirement is prohibited under VdS 2540**.

The CIE does not allow this EN54-2 option to be configured.

## A10 Disablement of Each Address Point

This is an optional VdS 2540 requirement. The CIE complies with this EN54-2 option requirement.

For further details, refer to **Section 7.4 Individual Device** of the Operating Manual.

## A11 Test Condition

This is also a VdS 2540 requirement. The CIE complies, using an access level 3 passcode, with this EN54-2 option requirement.

For further details, refer to **Section 6.3 Control Output Tests** of the Operating Manual.

## A12 Fire Alarm Device(s)

This is also a VdS 2540 requirement. To satisfy the requirements of EN54-2 7.8 the CIE is provided with the required access level 2 controls as described in the following user documentation:

7.8a - Refer to **Section 4.3 Silence/Resound Sounders** of the Operating Manual.

7.8b - Refer to **Section 4.3 Silence/Resound Sounders** of the Operating Manual.

7.8d - Refer to **Section 5 Sounder Operation after 'SILENCE SOUNDERS'** of this document.

## A13 Fire Alarm Routing Equipment (7.9.1)

This is also a VdS 2540 requirement. The CIE allows this EN54-2 option to be configured.

A dedicated fire output (transfer) relay is provided by the CIE. In addition, the internal sounder/relay circuits are configurable as remote fire outputs. The CIE provides an LED to indicate when the fire relay or any configured remote fire outputs are active. Refer to **Section 2 Panel Controls & Indicators** of the Operating Manual and **Section 11.18 Remote Fire Output Options** of the Panel Configuration Manual.

## A14 Fire Alarm Routing Equipment with Alarm Confirmation (7.9.2)

This is also a VdS 2540 requirement. The CIE allows this EN54-2 option to be configured.

The CIE allows a remote fire output (transfer) to be configured. In addition, a fire output active condition, using a return signal from the remote fire signal routing equipment, can be configured using digital input circuit 2. With the panel function set to VdS mode activation of a fire alarm routing equipment return signal drives this indicator. More details can be found in the appropriate, translated product manuals.

## A15 Automatic Fire Protection: Type A

This is an optional VdS 2540 requirement. The CIE does **not** allow this EN54-2 option to be configured.

## A16 Automatic Fire Protection: Type B

This is an optional VdS 2540 requirement. The CIE allows this EN54-2 option to be configured. Refer to Appendix 2 of this document.

## A17 Automatic Fire Protection: Type C

This is also a VdS 2540 requirement. The CIE allows this EN54-2 option to be configured.Refer to Appendix 2 of this document.

## A18 Fault Warning Routing Equipment

This is also a VdS 2540 requirement. The CIE allows this EN54-2 option to be configured.

The CIE may be configured to provide a fault signal to external equipment, such as a fault transmission router. Refer to Section 6 of this document for further details.

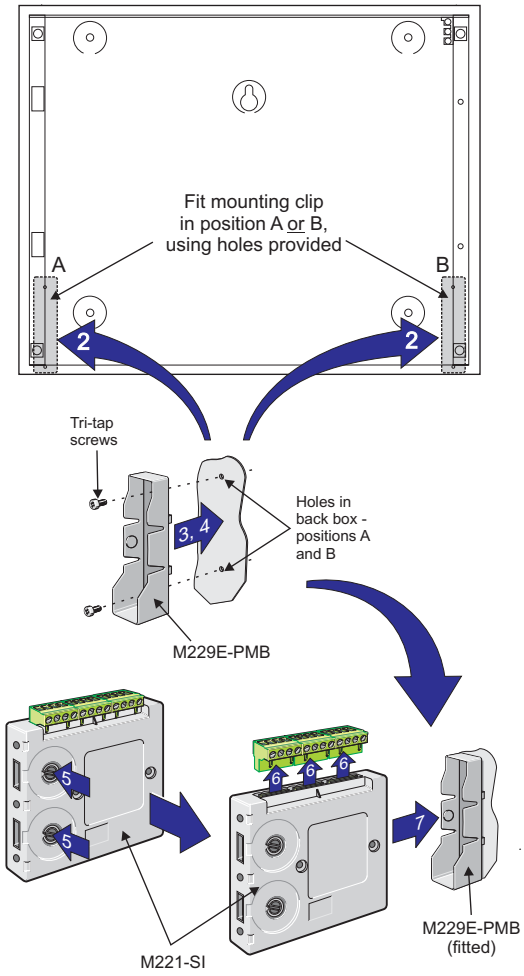
## A19 Standardized I/O Interface

This is also a VdS 2540 requirement. The CIE does not fully support the requirements of EN54 Section 11. However, it does meet the requirements of VdS 2540 which requires the ability to connect to an FBF (fire brigade panel). More details can be found in the appropriate, translated product manuals.

# Appendix 2 - Module M221-SI Interface to Extinguishing Release Control Equipment (SST)

The M221-SI Module Kit (PN: 020-877) is used to interface a fire control panel with approved fire extinguishant release control equipment (SST). The module must be mounted in the fire control panel internally using the mounting clip and screws provided. Connection to the fire control panel and SST equipment is also described in this document.

With reference to the standard back box illustrated at left, proceed as follows:




1 Remove the cover from the fire control panel (refer to the panel user documentation).

2 Locate the module on the back face of the back box, close to the bottom - use position ‘A’ or ‘B’.

3 Having selected the mounting position, offer the module mounting clip to the pair of holes provided - ensure that it is the correct way up (see drawing).

4 Secure the clip using the two M4 x6mm tri-tap screws provided.

5 Set the rotary address switch to an address other than 0, while making sure that a duplicate address is not set.

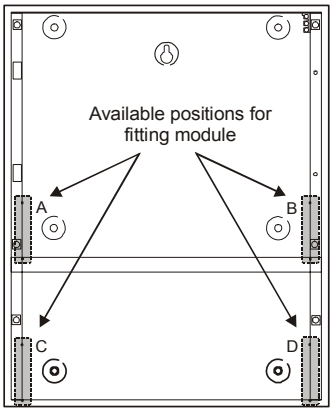
6 Remove the three wiring connectors from the module until required for making wiring connections (see overleaf for details).

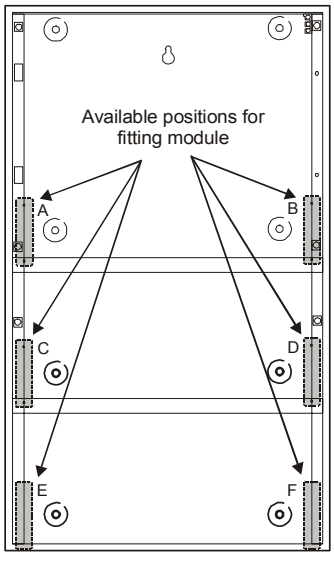
7 With the module correctly orientated, insert it into the fitted mounting clip.

8 Refer overleaf for details on the module wiring connections

### Extended & Double-extended Back Boxes

The drawings below show all the location options for fitting the M221-SI module when using the extended or double-extended back boxes.



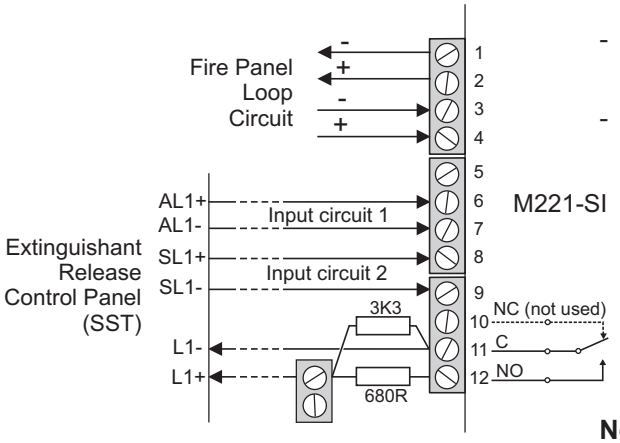



## M221-SI Wiring Procedure

The extinguishing system communicates with the panel using an M221-SI monitor module (2 inputs/1 output) on the loop (or can be a separate spur). The module provides the control and status indication interface between the fire control panel and the extinguishant release control panel.

Make the following wiring connections to the M221-SI module:

- Loop wiring - connectors 1, 2, 3 and 4
- First input - connectors 6, 7 (connected to AL1+ and AL1-)
- Second input - connectors 8, 9 (connected to SL1+ and SL1-)
- Output - connectors 11(C), 12 (NO) (connected to L1- and L1+).




**Note:** To avoid an extinguishing system fault indication an unused input must have a 3K3 EOL resistor fitted.

The M221-SI module output circuit must have two resistors (a 680R and a 3K3) connected as shown below. Use a wiring termination block to connect the 'L1+' and one end of each resistor across the module's 'C' and 'NO' relay (11 and 12) contacts. The 'NC' connection (10) is not used in this application.

# 1 Introduction

Panel Software version 5.03 introduces the following features:

**1** Compatibility with the Loop Diagnostics/ Mapping Tool (LDT)

**2** Time-of-Day Variation and Thermal-only Mode

**3** Sensor Blink /Zone Test Pulsing Mode LED Colours.

**4** Lamp Test - Addition to display of Software Versions

This addendum describes the additional configuration options for enabling these new features.

## 1.1 Compatibility Issues

These features will only be configurable when the following installation requirements are met:

i Panel software at version 5.03, or later

ii LIB* software at version 14.01, or later

iii Advanced protocol-compatible loop devices (if in doubt check with your supplier).

* Includes the two loop circuits on the Base PCB.

## 1.2 Off-line Configuration Tool

As with earlier versions of panel software, the recommended method of configuring fire alarm control panels with these new features is by using the Windows™ Configuration Tool (WCT) v. 3.02, or later.

If the WCT is used to download panel configurations some local editing is still required at each panel as with previous versions of panel software. This procedure has not changed with the introduction of the features described within this document.

## 2 Loop Diagnostic / Mapping Tool (LDT) Support

Panel software v. 5.03 supports the loop diagnostic/mapping, PC-based tool (LDT). The LDT requires the panel to be at user access level 3 and the RS232 port of the panel set to third-party protocol mode before any attempt is made to launch it. Connection to the PC may be achieved either using an Isolated RS232 PCB or the 9-pin diagnostic RS232 port provided on the Base PCB.

This addendum provides no instructions on how to use the LDT as this is covered by the manual supplied with it.

There are certain conditions which need to be met before the panel is able to work successfully with the LDT and these are described as follows:

a. The panel requires at least one Advanced protocol device to have been configured in its database. It is important to understand that the device(s) **must** be configured - not just connected - to allow the LDT to connect to the panel successfully.

b. The LDT cannot connect while the panel is still performing its auto-configue of Advanced protocol devices (a progress bar is displayed during this activity) unless the reason for this auto-configure activity is due to the ending of a previous LDT session.

Once the above conditions have been met and having entered the access level 3 password the user has a 2-minute window in which to launch the LDT (see notes at left).

**CAUTION** - once the LDT is successfully launched it takes over complete control of the fire control panel. This means that all the normal functions of the panel, including alarm and network support, are suspended. During this 'suspended' period the following message is displayed on the panel LCD:

```
PRODUCT NAME OPERATION SUSPENDED
LOOP MAPPING TOOL IN OPERATION
```

**Note:** At the end of an LDT session, because the LDT will have disturbed the loop devices' normal settings, the panel usually enters an Advanced protocol auto-configure mode (progress bar is displayed). However, it is possible to re-connect the LDT during this time to map another loop, for example.

### Helpful Notes on Starting the LDT

The recommended approach to starting the LDT is to go into the panel menus and then enter the access level 3 passcode. The user now has a 2-minute 'window' to get the LDT up and running. Should this 'window' be missed, the password is cleared and the user will need to re-enter it.

If the panel is currently running auto-configure at the time the password is entered and this is still running 2 minutes later, then this 'window' will have been missed. Re-enter the password and try again.

## 3 Time-of-Day Variation and Thermal-only Mode

The Pre-alarm condition is handled differently for Advanced protocol sensors if there is a programmed Time-of-Day (TOD) variation of Alarm sensitivity. If the TOD variation is for **lower** sensitivity, i.e. the normal use of this feature, then two pre-alam options are available:

a. **Lock Pre-alarm** - the pre-alarm threshold remains unchanged throughout the TOD active period.

b. **Do not Lock Pre-alarm** - the pre-alarm threshold is changed to the normal (unvaried) alarm threshold, at the same time periods as when the alarm threshold is moved to its lower sensitivity in Day Mode or other specified times.

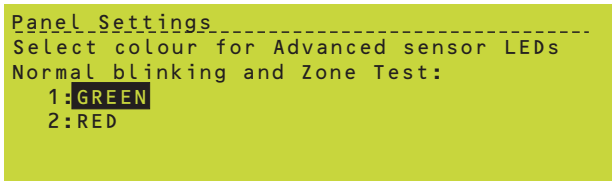
Note that if the TOD variation is set for higher sensitivity during specified times the pre-alarm threshold is always 'locked' and remains unchanged throughout.

## 4 Sensor Blink Colour & Zone Test Pulsing Mode Colour

**Panel Configuration Manual, Section 11.2 LED Blinking Mode**

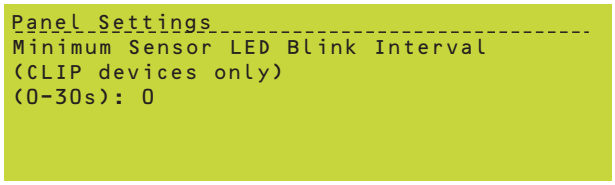
Sensor blink and Zone Test pulsing LED colour modes can be set to RED to make them compatible in appearance with CLIP devices, except VIEW sensors, which only blink in red.

**1** To access this configurable option enter an access level 3A passcode and then from the **6: Panel Settings /3: Sensor/Module LEDs** menu step through until the screen below is displayed:




**2** Select the desired colour and exit; the selection is saved on exiting this menu. With sensors, the colour change takes effect immediately. However, with modules the change takes effect only after the panel or loop device(s) are next powered on.

As a result of the above new option the Panel Settings/Minimum Sensor LED Blink interval menu now has an additional line to confirm that it is only valid for CLIP devices, as shown below:



# 4 Lamp Test Update

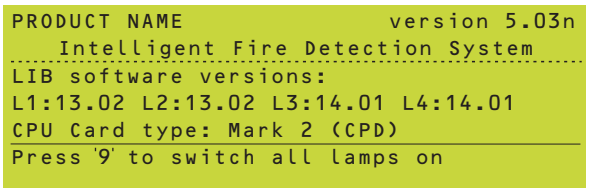
**Operating Manual, Section 6.4 Lamp Test**

The Lamp Test function can now display the type of CPU card in the panel: a pre-CPD variant (referred to as a Mark 1) or a CPD-compliant version (referred to as a Mark 2).

Both CPU cards support Advanced protocol. However, if the Mark 1 CPU card is fitted then the restriction of VIEW sensor devices only in the address range 1 to 75, on any loop and on a panel that contains any Advanced device is imposed. There is no such restriction with the Mark 2 CPU card.

This information is displayed after a few seconds and appears below the second line of LIB versions have been shown (if the panel has more than 4 loops).

An example of each CPU card type is given below (in these examples only 4 loop cards are shown as being fitted):

# 1 Introduction

ID3000 Panel Software version 5.04 introduces the following features:

**1** Opal 'Master Switch' function for loop protocol selection.

**2** Improved message support for the disablement of Remote Fire Outputs.

This document describes the additional configuration option for enabling Opal loop protocol through the panel menus. An overview of the improvements to remote fire outputs' disablement messages in supporting network repeaters or third-party equipment via the third-party protocol is also provided.

## 1.1 Compatibility Issues

These features areonly fully available when the following installation requirements are met:

i Panel software at version 5.04, or later

ii All LIB* software at version 14.01, or later.

iii Advanced protocol-compatible loop devices (if in doubt check with your supplier).

* Includes the two loop circuits on the Base PCB.

## 1.2 Off-line Configuration Tool

As with earlier versions of ID3000 panel software, the recommended method of configuring fire alarm control panels with these new features is by using the Windows™ Configuration Tool (WCT) v. 3.03, or later.

**When using the WCT, ensure that the method of enabling Opal protocol is completely understood. The WCT contains an automatic setting (capable of being manually changed) which overrides the need to use the panel configuration option described in this document.**

If the WCT is used to download panel configurations some local editing may still be required at each panel, as with previous versions of panel software. This procedure has not changed with the introduction of the features described within this document.

# 2 Opal 'Master Switch' Function

The Opal 'Master Switch' (OMS) is provided as a means of selecting the appropriate loop protocol via the panel menus, either for new installations or to meet legacy site support requirements.

To do this the user is required to enter the level 3A passcode to access the Panel Settings configuration menu.

**Enabling Opal Protocol**

Opal protocol may be enabled as described below before performing any learn operations.

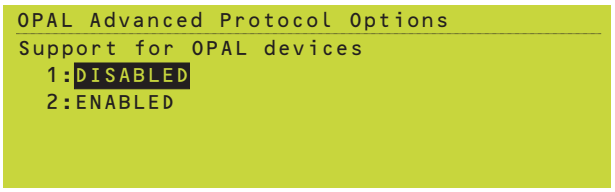
This procedure describes enabling Opal protocol though the panel menus.

## 2.1 Procedure

**Changes to Panel Configuration Manual, Section 11.**


From the Configuration menu select the OPAL Advanced Protocol Options menu item; this menu only appears if the panel has no Opal devices configured or if only CLIP devices have been configured.

**Note:** It is not necessary to set this option if the intention is to download a configuration file containing Opal devices using the WCT. The panel will accept the file and automatically switch to Opal protocol for the relevent devices - regardless of the setting of the OMS. Thereafter, it will not be possible to access the OMS and its setting prior to downlaoding the configuration is, therefore, irrelevent.

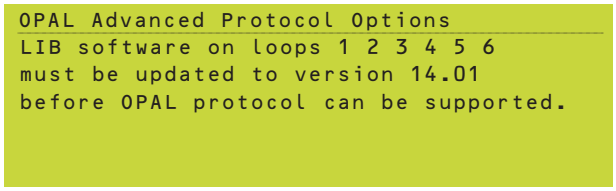



If this option is selected AND LIB software v.14.01 is installed on all LIBs (including the two Baseboard LIB circuits), then this menu is displayed - Opal protocol is disabled by default.

With ENABLED selected, the panel configuration menus allow the selection of Opal protocol devices when installing a single loop device or when auto-learning devices on the loop.

Leaving the setting at DISABLED the configuration option menus do not permit the selection of Opal protocol devices.

**Note:** As long as no Opal devices have been configured on any loop this 'switch' can be changed freely between ENABLED and DISABLED. As soon as one or more Opal protocol devices have been configured, either from the panel menus or via the WCT, this switch is no longer accessible and it is no longer possible to select DISABLED. However, the switch becomes accessible again if all Opal protocol devices are removed or if all the devices are changed to CLIP protocol.




**Incompatible LIB Software Case**

If any of the panel's LIBs are configured with software prior to version 14.01 a cautionary message is displayed for five seconds listing the loops that require LIB software updates.

In the example given here, loops 1 to 6 all require LIB software updates to version 14.01* to enable Opal protocol to be supported.

* This implies that version 14.01, or later, is acceptible.

If upgrading the software on a non-configured panel the fault message '*Incompatible Device & LIB s/w*' is displayed, contact technical support for assistance.

This fault can be cleared temporarily until LIB software updates have been carried out by configuring at least one CLIP device. As a result the Opal switch will not be accessible, nor will it be possible to configure Opal devices from the panel menus until the LIBs have been update to v14.01, or later, software. Moreover, if an attempt is made to download a configuration file from the WCT **which contains any Opal devices**, the panel will again display this fault message.

## 3 Remote Fire Output Disablement - Improved Support

Where a fire alarm control system has more than one remote fire output configured the FIRE O/P DISABLE pushbutton on each panel may be used to disable or enable all of these circuits simultaneously. Alternatively, the outputs may be disabled or enabled individually via the panel's user menus.

In a network, individual control od circuits onremote panels isonly available on ID²Net systems.

Note that the FIRE O/P DISABLED LED is lit only if ALL the remote fire output circuits are disabled. However, the common DISABLEMENT LED is lit if there are any disablements and individual items are listed on the display.

ID3000 Panel software v. 5.04 offers additional message support for individual remote fire output disablements, irrespective of which method described above is used. This enhancement particularly benefits disablement information requirements in support of network repeaters, connected via a Network Gateway Unit (NGU), and external systems connected via third party protocol.

# 1 Introduction

Panel Software version 5.05 introduces the following enhancements:

**1** Extended feature support of up to 40 OPAL/ TC800 Advanced and CLIP loop devices and the logging or display of any device's parameters or serial number.

**2** Introduction of optional specific 'nuisance environment' settings (Application Numbers) for SMART 4/ MCS4 multi-criteria sensors.

**3** OPAL/TC800 Advanced sensor: configurable remote LED function.

**4** Configurable individual sensor internal LED colour change when global LED colour setting is GREEN.

**5** Single-fault-tolerant network sectoring functions in support of German FBF panels and remote fire output testing.

The various features offered by OPAL/TC800 Advanced protocol devices now supported by this version of panel software are described in this document in the following sections.

## 1.1 Compatibility Issues

These features are only fully available when the following installation requirements are met:

i Panel software at version 5.05, or later

ii All LIB* software at version 14.01, or later.

iii Advanced protocol-compatible loop devices (if in doubt check with your supplier).

* Includes the two loop circuits on the Base PCB.

## 1.2 Off-line Configuration Tool

As with earlier versions of panel software, the recommended method of configuring fire alarm control panels with these new features is by using the Windows™ Configuration Tool (WCT) v. 3.05, or later.

**When using the WCT, ensure that the method of enabling OPAL/TC800 Advanced protocol is completely understood. The WCT contains an automatic setting (capable of being manually changed) which overrides the need to use the panel configuration option described in this document.**

If the WCT is used to download panel configurations some local editing may still be required at each panel, as with previous versions of panel software. This procedure has not changed with the introduction of the features described within this document.

# 2 OPAL/TC800 Advanced Protocol- Additional Features

Panel software version 5.05 introduces a number of performance enhancements and user-configurable features, as follows:

a. Improvement in the time taken for the auto-configuration process; this depends on which CPU card is fitted and/or whether this is a first or subsequent auto-configuration activity. See Section *3* for more details.

   Up to 40 CLIP devices can now be supported on a mixed protocol loop. Support is also included for 2- and 3-channel multi-modules - the additional CLIP addresses which are reserved to support these modules do not count towards the 40-device limit. Capability introduced to drive LEDs 2 and 3 of these modules; the yellow and green elements of the tri-colour LEDs are supported, although they cannot be controlled directly by user intervention.

   The new types of ZMX zone monitor modules (M710-CZR, M710-CZ) are supported in OPAL protocol.

b. Synchronisation of sounders across panels on a peer-to-peer network. See Section 4 for more details.

c. Specific ‘nuisance environment’ settings (Application Numbers) for SMART 4/ MCS4 multi-criteria sensors are configurable. See Section 5 for more details.

d. Support for sensor remote LED in a ‘follow the sensor internal LED’ mode, or as an output driven from a control matrix rule. See Section 6 for more details.

e. Individual OPAL/ TC800 Advanced sensor and module LED colour selection. See Section 7 for more details.

f. Log/Display additional device information at user access Level 3, or higher. See Section 8 for more details.

g. Limiting menu choices on RESET, SILENCE and EVACUATE pushbuttons or FIRE O/P DISABLE pushbutton at a supervisor panel on a sectored, single-fault-tolerant network. See Section 9 for more details.

h. German VdS Standard only - Improved support for panels, with or without an FBF, over single-fault-tolerant network sectors. Configuration of testing up to two ÜE circuits from different FBF panels on a sectored network. Not described in this document.

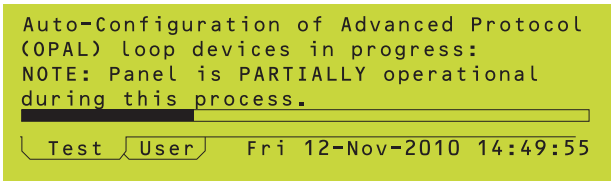
# 3 OPAL/TC800 Advanced Auto-configuration Procedure

When a panel has the new CPU card fitted (PN: 124-360) the OPAL/TC800 Advanced auto-configuration method has changed in that it is completed in two passes; thereby allowing the panel to offer some fire cover before this process is completely finished. Pass 1 will take about 20 to 25 minutes the first time it is performed for a completely new installation. Subsequent passes through this process will take less time, in the order of five to six minutes, even after a complete power down of the panel.

When the previous CPU card (PN: 124-302) is fitted this procedure has remained unchanged in that only one auto-configuration pass is carried out.

For the duration of pass 1 the LCD still displays a progress bar, visable at all user access levels, which will clear after completion. However, it is possible to carry out any other panel-related commissioning tasks, while this is in progress, by pressing the CHANGE TABS pushbutton to display the panel user menus.

Any re-tries required, resulting from any suspected faults, will be carried out with a 'blank' progress bar displayed - re-tries on pass 1 faults will only take a few seconds.




Pass 2 is a background check and does not affect the fire cover of the panel, although some panel functions may exhibit slightly slower responses than normal.

Pass 2 starts as soon as pass 1, and any re-tries, are completed. A progress bar is displayed but this is only available at user access Level 3, or higher.

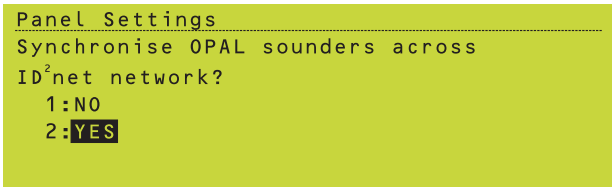
**This is a change to the Panel Cofiguration Manual, Section 11.4 Pulsing Sounder Modes**

# 4 Synchronise Sounder Patterns Across Network

This option is only displayed when the panel is operating OPAL/ TC800 Advanced protocol **and** is configured as part of an single-fault-tolerant network.

The configuration option Pulsing Sounder Modes, located under the Panel Settings menu, allows this function to be enabled/disabled. Available only at user access Level 3A.

Having accessed the *Panel Settings* menu scroll down to select '***5: Pulsing Sounder Modes***'. Step through the options until the screen below is displayed:




To enable synchronised sounder pulsing select 'Yes'. The default setting is 'No'.

However, take care not to select the previous menu option '*Synchronise Sounders on Loop using Enhanced Protocol*' as this is not applicable to OPAL/ TC800 Advanced protocol; it being provided for a synchronised pulsing solution for earlier CLIP-only systems (this feature was introduced with panel software version 4.54).

Initially, for a period of a few seconds, non-synchronised pulsing will occur before synchronised pulsing is fully implemented.

**Note:** It is strongly recommended that if this option is not required it should not be selected. By **not** selecting this option, when it is not required, will shorten the non-synchronised phase in any single, networked panel, thereby permitting sounder synchronisation at the panel to be established more quickly.

# 5 SMART 4/ MCS4 Multi-criteria Devices - Application Number

**This is a change to the Panel Configuration Manual, Section 5.1.2 Change Device Configuration - Sensors**

This option is accessible from the Individual Device Configuration screen. With the appropriate SMART 4/ MCS4 sensor selected, press the 'right arrow' key repeatedly until the typical device configuation screen, as shown below, is displayed:

```
Device Configuration - Loop n Sensor nn
Type SMT4*   Zone   nn  Cell   n
Zone  <(no zone text defined)          >
Loc.  <Device text description         >
SMART*4 Application no.: 1             ▶
◀▶=select *=edit ▲▼=next device ✓=finish
```

```
Device Configuration - Loop n Sensor nn
Type MCS4*   Zone   nn  Cell   n
Zone  <(no zone text defined)          >
Loc.  <Device text description         >
MCS*4 Application no.: 1               ▶
◀▶=select *=edit ▲▼=next device ✓=finish
```

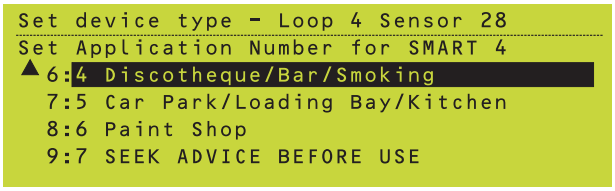
* Note that the correct multi-criteria device type (SMT4 OR MCS4) is displayed when accessing this configuration menu on the panel.

By default, this function is disabled as careful consideration is required before selection of any of the application numbers. The sensitivity of various criteria alarm thresholds is modified to accomodate the requirements of the different 'nuisance' environments. **The selection of one of these must be in agreement with the appropriate authority and local fire officer**. This option is clearly labelled in the menu as '7 SEEK ADVICE BEFORE USE'.

With the appropriate device configuration screen displayed press the '*' key to select the application number which has the closest description of the 'nuisance environment' causing the incidence of a false alarm condition. Menus for SMART 4 and MCS4 devices display the same options, as below:

```
Set device type - Loop 4 Sensor 28
Set Application Number for SMART 4
  1:Default: No Application
  2:0 Shower/Boiler Room
  3:1 Dormitory/Smoking Room
▼ 4:2 Insect/Attic/Heavy Manuf./Strobes
```

```
Set device type - Loop 4 Sensor 28
Set Application Number for SMART 4
▲ 4:2 Insect/Attic/Heavy Manuf./Strobes
  5:3 Dust/AHU/Lift Motor
  6:4 Discotheque/Bar/Smoking
▼ 7:5 Car Park/Loading Bay/Kitchen
```




Take care when selecting the application number as the first number, i.e. to the left of each colon is the list position, whereas, the number to the right of the colon is the required number.

For guidance, a table describing each application number and its corresponding nuisance environment is provided below. Select the desired application number.

| Application Number | Possible 'Nuisance' Environment: Application Details | Recommended Alarm Threshold setting |
|---|---|---|
| NONE | - Vacuum cleaning - dust causing photo sensor only alarm. Default configuration: no effect. | 4 |
| 0 | - Hotel bedroom near shower. Steam and ROR in heat from sensor near bathroom door<br>- Boiler rooms. Dust and ROR heat causing false alarms. Heat response changed. | 4<br>4 |
| 1 | - Student dormitories, smoking hotel rooms. Small appliance cooking/cig. smoke | 5 |
| 2 | - Insect alarms. Uses Photo element only.<br>- Condensation in attics and similar unheated spaces, e.g. pump houses, service intake rooms, etc. Uses Photo element only.<br>- Heavy manufacturing. Photo element alarms from dust/dirt (may also include welding)<br>- Strobes in industrial areas. Photo element alarms from dazzling light/welding. | 5<br>5<br>5<br>4 |
| 3 | - Dusty environments (and settled dust turbulence in the chamber before drift alarm reached. Uses Photo element only.<br>- AHU rooms and lift motor rooms. False alarm from 'dust burst' reduction. | 5<br>5 |
| 4 | - Synthetic smoke in discotheques and dazzling lights from strobes. Photo sensor alarm threshold raised to maximum; CO enhancement significantly reduced.<br>- Bar areas - photo sensor alarm from steam from glass washers/cigarette smoke.<br>- Smoking areas - alarm from photo and CO sensors' response due to cigarettes, etc. | 5<br>5<br>5 |
| 5 | - Car parks and loading bays with trucks with upward exhaust pipes or poor operating engines. Includes traffic build-up in cities. Alarm from Photo, CO ROR heat sensors.<br>- Kitchens including industrial, canteens and retirement homes - Photo alarms from burning food and ROR alarms from ovens being opened. | 5<br>5 |
| 6 | - Paint shops and repair shops. Alarm from photo and ROR sensor elements. This Application may include welding and vehicles running inside building. | 5 |
| 7 (*) | - Extremely long-lasting optical-only stimulus (special disco fog, anti-burglar smoke, misty/ /foggy area, etc.). Long lasting (>10 minutes) optical stimulus which is not caused by an incipient fire. | 5 |

* **APPLICATION 7 WARNING - This setting must be treated with EXTREME CAUTION** - Do not select without consulting your local fire officer. For further information regarding this setting, contact Technical Support or your Regional Sales Manager.

**Note:** Selection options 'NONE' and '0' are not the same.

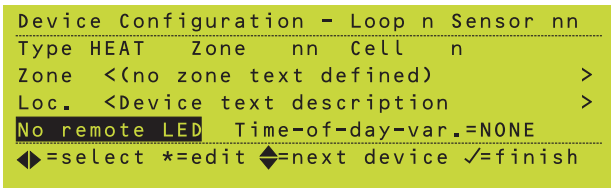
# 6 Sensor Remote LED Operation

**This is a change to the Panel Configuration Manual, Section 5.1.2 Change Device Configuration - Sensors**

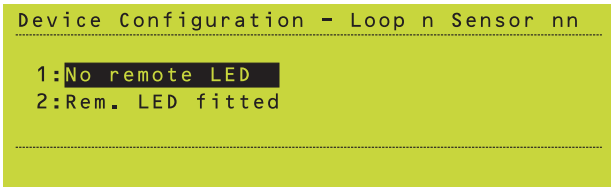
Add new sub-section ***5.1.2.11 Sensor Remote LED Operation*** as follows:

'An option is now provided to enable the function of an OPAL/TC80 Advanced sensor's remote LED (not all OPAL/TC800 Advanced sensors have these). The action of a remote LED is undefined, by default, if not configured using either method described below.

**Option 1**: Enabling the remote LED function via the the Change Device Configuration edit screen. With the appropriate sensor selected, repeatedly press the 'right arrow' key until the 'No remote LED' field is displayed, as below:




Press the '*' key to edit. The screen below is displayed:




Press the '2' key to select the sensor remote LED function. Upon selection the previous screen is re-displayed; 'Rem. LED fitted' now replaces 'No remote LED'.

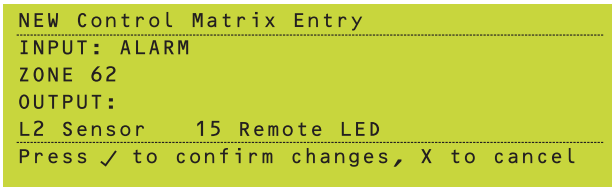
Note that there are differences between the operation of internal and remote LEDs. The remote LED is activated only for an alarm condition and not for other panel states. However, these LEDs can be tested by the user. If the panel is configured so that the internal LED mode changes from steady to blinking when the alarm input data drop below the alarm threshold, the remote LED does not operate in the same way; it remains steady and contines to do so until the panel is reset.

**Option 2**: Configuring the remote LED action independently of the internal LED operation, using one or more Control Matrix rules.

At user access Level 3, create a new Control Matrix rule with an input capable of activating an output, e.g. an alarm, and an individual sensor (not its zone) as the output. Refer to ***Section 7.6 Defining a Control Matrix Entry*** of the Panel Configuration Manual for creating the new rule.

Note that if the LED operation is controlled by such a control matrix rule then it takes precedence over the 'follow internal LED' mode of operation. The activation of the remote LED is treated as non-silenceable and, therefore, remains active until the panel is reset. Activating the remote LED using a control matrix rule also means that defining the 'remote LED fitted' case is not necessary, as the panel assumes that this is the selected application.

A typical new control matrix rule for sensor remote LED activation is shown below:



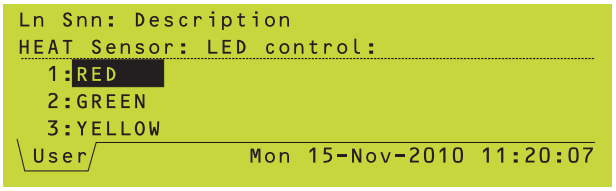

**This is a change to the Operating Manual, Section 8.2 Log/Display Device Data**

### Testing the Remote LED

To ensure that when device testing is carried out the remote LEDs are included, for each device with a remote LED the procedure described here first needs to be carried out.

The Operating Manual, ***Section 8.2 Log/ Display Device Data***, step 5 describes how to do this with the following addition. After Step 5 of this sub-section add:

'If the ON STEADY option is selected the user is then prompted to select the remote LED colour, as shown below:




Select RED (default). This ensures that the remote LED is tested together with all internal red LEDs.'

# 7 Sensor LED - Set Individual Colour

**This is a change to the Panel Configuration Manual, Section 5.1.2.8 LED Blink Options**

The global panel LED colour setting may be overriden for individual sensors by scrolling through the Change Device Configuration screens until the LED Blink Mode editing screen is displayed, typically as shown below:

```
Device Configuration - Loop n Sensor nn
Type HEAT   Zone   nn  Cell   n
Zone  <(no zone text defined)          >
Loc.  <Device text description         >
LED BLINK MODE Follow Panel Setting
◆▶=select *=edit ▲▼=next device ✓=finish
```

Press the '*' key to edit the LED blink mode. If the global LED colour is set to GREEN the following options are displayed (over two screens):

```
Device Configuration - Loop n Sensor nn
LED BLINK MODE
  1:Follow Panel Setting
  2:Always BLINK GREEN
▼ 3:Always NON-BLINK
```

```
Device Configuration - Loop n Sensor nn
LED BLINK MODE
▲ 2:Always BLINK GREEN
  3:Always NON-BLINK
  4:Always BLINK RED
```

However, if the global LED colour is set to RED a reduced list of options are presented, as shown below:

```
Device Configuration - Loop n Sensor nn
LED BLINK MODE
  1:Follow Panel Setting
  2:Always BLINK RED
  3:Always NON-BLINK
```

Note that a BLINK GREEN option is not included.

# 8 Log/ Display Additional Information

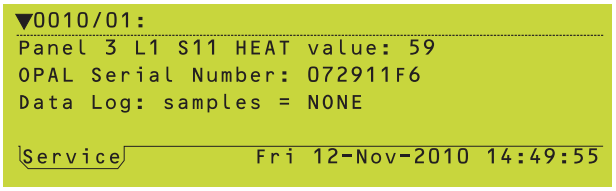
**This is a change to the Panel Configuration Manual, Section 12 User Menu at Level 3 Access.**

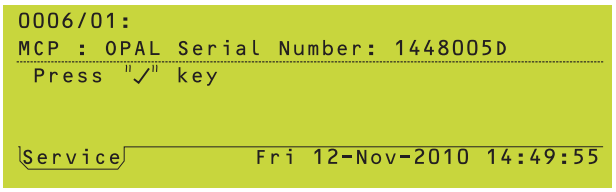
Add the following new sub-section to Section 12 User Menu at user access Level 3 of the Panel Configuration Manual.

'OPAL/ TC800 Advanced devices have additional fields of information that are available to view through the ***Log/Display*** user menu when at user access Level 3.

The serial number of a device, if available, may be displayed - this depends on the correct version of CPU card (PN: 124-360) being fitted. The display is different between sensors and modules: for sensors, the serial number is shown *after* the LED control menu; whereas for modules, the serial number is displayed *before* the LED control menu.

An example of each is given below; sensor first then for a module:'



# 9 Other Changes

## 9.1 Device Data Values

**This is a change to the Operating Manual, Section 8.2 Log/Display Device Data**

The first paragraph of ***Section 8.2 Log/ Display Device Data*** of the Operating Manual now has the following changes to make it clear that when device data is displayed the values given change between CLIP and OPAL/ TC800 Advanced protocol. The information currently given in the manual describes CLIP protocol only.

Change the beginning of the second sentence of the first paragraph as follows:

'For CLIP devices, values are shown as a percentage, scaled.....'

Add the following paragraph after the note at the end of the first paragraph:

'When device data for OPAL/ TC800 Advanced protocol are displayed the values are not percentages, as for CLIP devices, but are a numeric code. Many OPAL/ TC800 Advanced protocol devices return a clean air value of 50. Thermal sensors, however, use a different value of 59 which, for this type sensor, indicates that the sensor temperature is 25°C.

For further information about the meaning of displayed values for sensors or modules contact your Technical Support department.'

## 9.2 Suppression of Select Sector Option over Single-fault-tolerant Network

**This is a change to the Configuration Manual, Section 11.22 Network Settings and Section 14.2 Network Configuration Procedures**

This option is only available at user access Level 3A and is configurable for non-VdS and VdS operational modes.

Supervisor panel commands such as RESET, SILENCE and EVACUATE (not for VdS mode) prompt the user to determine the scope, by sector, of its action over the single-fault-tolerant network. This configuration option enables suppresion of the sector selection menu normally presented when any of these function pushbuttons are pressed. Instead, the panel will always make the selection on the user's behalf: the default selection is ALL SECTORS to which the supervior has access. However, the scope of the action of these pushbuttons can be configured to be **limited** to the LOCAL SECTOR only; this option is not recommended as it presents difficulties when trying to fully reset a system with multiple alarms or faults present.

To configure this option navigate to either of the following configuration menus: ***Network Configuration/ 'peer-to-peer type' network**** or ***Panel Settings/ Network Settings*** and

step through the options until you come to the following screen:

```
Operation of RESET, SILENCE SOUNDERS &
EVACUATE keys across sectored network:
  1:Via Menu
  2:All Sectors visible to Supervisor
  3:Local Sector only (NOT RECOMMENDED)
```

In VdS mode operation the following screen (no EVACUATE action) is displayed instead:

```
Operation of RESET, SILENCE SOUNDERS
keys across sectored network:
  1:Via Menu
  2:All Sectors visible to Supervisor
  3:Local Sector only (NOT RECOMMENDED)
```

In each case, 'Via Menu' is the default selection. The third option 'Local Sector only (NOT RECOMMENDED)' is not recommended, as the menu description suggests, as it is impossible to reset the system from the supervisor when multiple sectors are in alarm. The only recourse is to visit a panel in each sector affected and perform a reset action.

## 9.3 Setting Scope of Fire OUTPUT Disable Pushbutton on Supervisor Panel

**This is a change to the Configuration Manual, Section 11.22 Network Settings and Section 14.2 Network Configuration Procedures**

This option is only available at user access Level 3A.

This configuration option allows the scope of operation of the FIRE O/P DISABLE pushbutton at a supervisor panel to be restricted to the LOCAL zone rather than ALL zones (default action). This function allows the user, therefore, to revert to an earlier (which is inconsistent with other controls which act on all sectors within the supervisor's scope) scope of operation; this condition has existed since the introduction of network sectoring, but has now been resolved in software version 5.05.

To configure this option, navigate to either of the following configuration menus: ***Network Configuration/ 'peer-to-peer type' network**** or ***Panel Settings/ Network Settings*** and step through until you come to the following screen:

* The appropriate network name is displayed when accessing this configuration menu on the panel.

```
Operation of FIRE OUTPUT DISABLE
key across sectored network:
  1:All Sectors visible to Supervisor
  2:Local Sector only
```

The default mode of operation is 'All Sectors visable to Supervisor'. The old option, Local Sector only', provided for compatibility with earlier sectored systems is available for selection, if required.



Panel Software version 5.05