

EP203 AUTOMATIC EXTINGUISHER PANEL

User Manual and Log Book

Approved Document No. DFU0002031 Rev 1



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IMPORTANT SAFETY NOTES

The EP203 Automatic Extinguisher Panel (hereafter called the EP203 panel) is safe to operate provided it has been installed in compliance with the manufacturer's instructions and used in accordance with this manual.

Lethal voltages are present inside the panel. DO NOT operate the EP203 panel with its enclosure open. There is no need to open the enclosure except to carry out commissioning, engineering or maintenance work. This work must only be carried out by competent service personnel who are fully conversant with the contents of the separate installation manual for this product and have the necessary skills for maintaining this equipment.

If the enclosure is damaged in any way, expert advice should be sought regarding its repair.

Regular servicing of the EP203 panel and extinguishing system is highly recommended, preferably on a continuous maintenance contract and by a competent organisation. A full itemised report of the installation should be obtained at least annually.

BASIC OVERVIEW AND KEY FEATURES

The EP203 panel acts as both a conventional fire alarm panel and an automatic extinguisher control panel.

The EP203 panel's features include the following:

- Time-stamped event log
- Abort option for cancelling the extinguishant release sequence
- Front-panel mounted LCD Status Display Unit displays system status and facilitates system programming
- Front-panel mounted extinguisher release button and two keyswitches; one to enter access mode and one to toggle between automatic/manual modes of operation
- Three-zone conventional detector circuits, line monitored for open and short circuit faults. Any zone combination can be programmed to activate an alarm and initiate the extinguishant release sequence
- Three conventional alarm sounder circuits (two x 1st stage, one x 2nd stage), line monitored for open and short circuit faults
- Monitored inputs for:
Manual Release, Flow Switch, Low Pressure, Mode, Hold and Abort
- Auxiliary outputs for:
Fire, Local Fire, Extract, 1st Stage, 2nd Stage, Fault
- Extinguishing output supports up to 2 x solenoids, or multiple 'Metrons™'
- Adjustable extinguishant release time delay, duration and flooding time
- Alarm counter to record the number of times the panel has been in an alarm state
- Optional Relay Output Card providing additional relay outputs for:
Reset, Mode, Discharged, Hold and Abort
- Connections for up to eight Remote Status Units (RSU) which provide remote indication of system status on a Status Display Unit with mode select and manual extinguisher release
- Connections for up to eight Economy Status Units (ESU) to provide remote indication of system status with mode select.
- Pushbutton and keyswitch entry to two access levels (displayed on the Status Display Unit). Access Level 1 (AL1) is for general users, Access Level 2 (AL2) is for authorised users.

CONTROLS & INDICATORS

The front of the EP203 panel has various LED indicators, pushbuttons, keyswitches and an LCD Status Display Unit, as shown in Figure 1 below:

Note: P/B=Pushbutton, K/S=Keyswitch

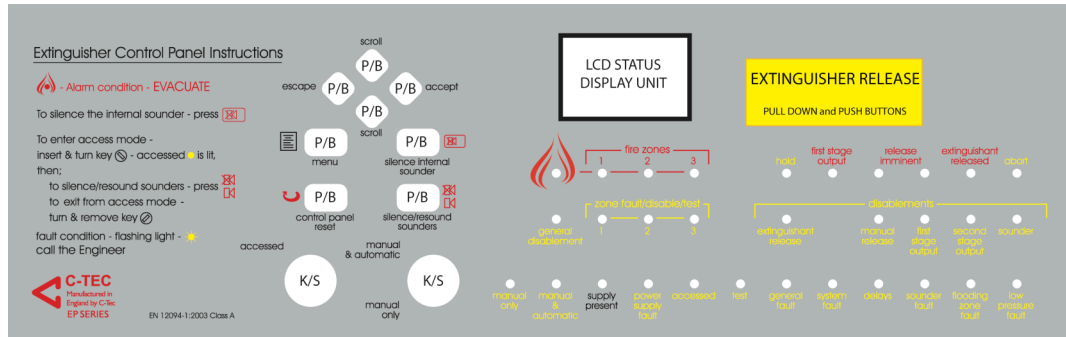



Figure 1 : Front Panel Controls and Indicators

LCD Status Display Unit

This unit provides system status information, counts down the time for extinguishant release and displays Access Levels 1 & 2 menu controls.

LED Indicators





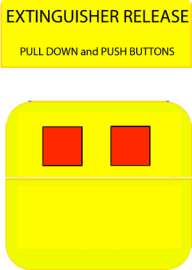
The LED indicators on the front of the panel give a comprehensive overview of the system’s current status. Any fire and fault conditions are clearly displayed, disablements highlighted and the status of all inputs and outputs displayed. The table below summarises the various indicators and what they mean in their various states.

INDICATOR	STATUS	DESCRIPTION
(General Fire) 	Flashing Red	The panel has detected a fire alarm condition on a fire zone
	Steady Red	The fire alarm has been silenced
Fire Zones 1 – 2 – 3	Flashing Red	A fire alarm condition has been detected on the zone(s) flashing
	Steady Red	The fire alarm has been silenced on the zones lit steady
Hold	Flashing Yellow	A hold input has been received at the panel
First Stage Output	Steady Red	First stage extinguishant output has been activated.
Release Imminent (x2)	Steady Red	Countdown timer to extinguishant release has started
Extinguishant Released	Steady Red	A flow switch input (from a flow switch on the extinguishant cylinder) is received at the panel
Abort	Steady Yellow	An abort input has been received at the panel
General Disablement	Steady Yellow	Part of the system has been manually disabled and/or one or more of the fire zones has a delay applied to them

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INDICATOR	STATUS	DESCRIPTION
Zone Fault/Disable/Test 1 – 2 – 3	Flashing Yellow	Faulty wiring, or detector removed from base, detected on the zones flashing.
	Steady Yellow	The zones lit steady have been disabled
	Flashing Yellow	The zones flashing are in test mode
Extinguishant Release Disablement	Steady Yellow	Extinguishant release output has been disabled
Manual Release Disablement	Steady Yellow	Manual release facility has been disabled
First Stage Output Disablement	Steady Yellow	First stage contact has been disabled
Second Stage Output Disablement	Steady Yellow	Second stage contact has been disabled
Sounder Disablement	Steady Yellow	Indicates all panel sounders are disabled
Manual Only	Steady Yellow	Indicates the status of the extinguishant system is "Manual Only" mode
Manual & Automatic	Steady Yellow	Indicates the status of the extinguishant system is "Manual & Automatic" mode
Supply Present	Steady Green	The panel is supplied with power
Power Supply Fault	Flashing Yellow	The panel has detected a fault with its power supply, or back-up batteries
Accessed	Steady Yellow	The panel-mounted keyswitch has been turned to the "accessed" position and the panel is in Access Level 2 (authorised user level).
Test	Flashing Yellow	The panel is in test mode
General Fault	Flashing Yellow	Indicates a fault has been detected on the system
System Fault	Flashing Yellow	The panel has detected a microprocessor fault.
Delays	Steady Yellow	Delays have been programmed into the panel
	Flashing Yellow	A delay is currently running
Sounder Fault	Flashing Yellow	Faulty wiring (short or open circuit) has been detected on the panel's sounder circuits
	Steady Yellow	The alarm sounders have been disabled
Flooding Zone Fault	Flashing Yellow	Indicates a short or open circuit on extinguishant output.
Low Pressure Fault	Flashing Yellow	Indicates there is low pressure in the extinguishant system, or there is a short/open circuit fault on the low pressure switch input

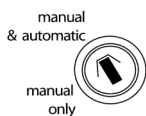
Pushbutton Controls

PUSHBUTTON	DESCRIPTION
Scroll (up) ▲ / Scroll (down) ▼	Dependent on the status of the panel, these pushbuttons: <ul style="list-style-type: none"> scroll vertically through any fire, pre-alarm or fault conditions that appear on the panel's Status Display Unit scroll vertically through the panel's user menus manipulate date, time, disablement settings, etc.
Escape ◀ / Accept ▶	Dependent on the status of the panel, these pushbuttons: <ul style="list-style-type: none"> scroll horizontally through the panel's user menus escape or accept options available in the panel's user menus.
Menu 	Provides access to the Access Level 1 and 2 menus.
Silence Internal Sounder 	Silences the panel's internal sounder at anytime.
Control Panel Reset 	Resets the panel after the sounders have been silenced (Access Level 2 only).
Silence / Resound Sounders 	Silences or resounds the system's sounders (Access Level 2 only). Note: This pushbutton will not silence 2nd stage alarm if the extinguishant is about to be released.
Extinguisher Release (pushbuttons in yellow housing) 	CAUTION: THESE PUSHBUTTONS MANUALLY RELEASE THE EXTINGUISHANT. Pull down the flap and press both buttons to release the extinguishant.

Keyswitch Controls



Insert and turn the panel-mounted keyswitch to the "accessed" position to enter Access Level 2 (Authorised User level). Turn and remove the keyswitch to exit Access Level 2.



Insert and turn the panel-mounted keyswitch to toggle the mode of the extinguishant system between "Manual Only" and "Manual & Automatic".

NOTE: WHEN THE PANEL IS IN MANUAL MODE, EXTINGUISHANT CANNOT BE RELEASED BY AUTOMATIC FIRE DETECTION.

MODE SELECT KEYSWITCHES ARE ALSO MOUNTED ON REMOTE STATUS UNITS (RSU) AND ECONOMY STATUS UNITS (ESU) AND OTHER DEVICES. ANY ONE KEYSWITCH IN THE MANUAL POSITION TAKES CONTROL OF THE SYSTEM MODE.

ACCESSING THE MENU CONTROLS

Overview

Two levels of menu controls are available on the EP203 panel; Access Level 1 for General Users and Access Level 2 for Authorised Users. All menus are displayed at the Status Display Unit, as detailed below:

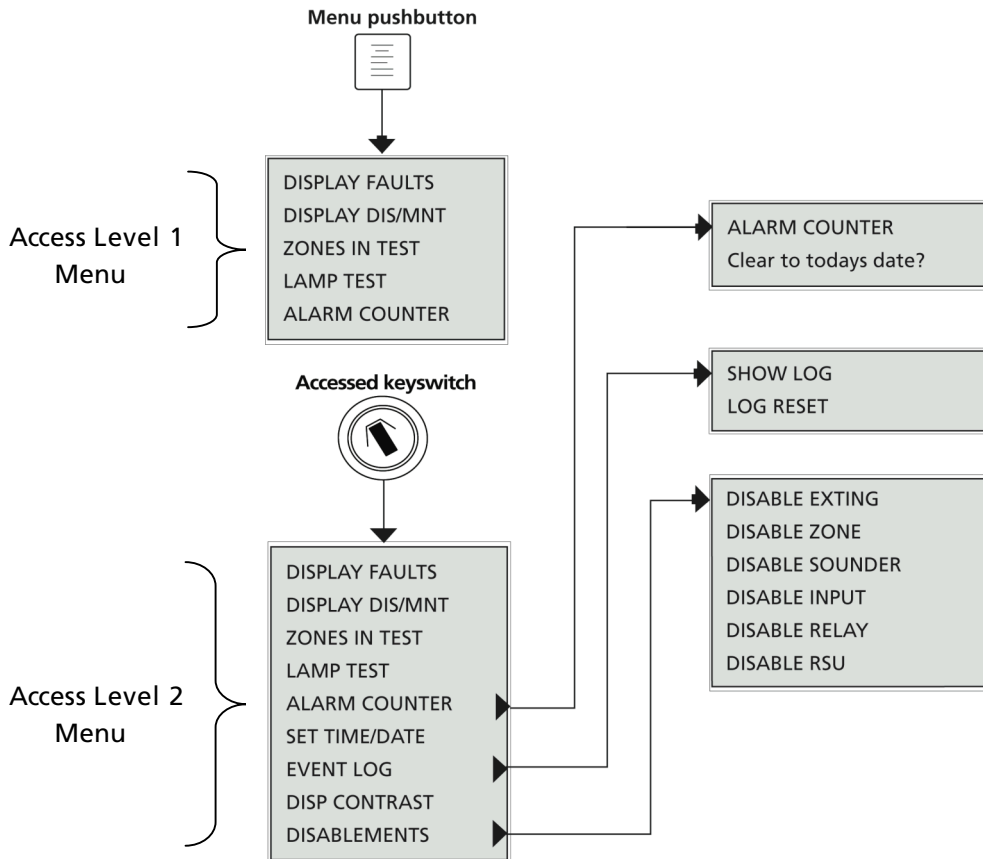


Figure 2 : Overview of Access Levels 1 & 2 Menus

Selecting the Menus and Sub Menus

1. To enter Access Level 1 menu press the Menu pushbutton, or to enter Access Level 2 menu turn the panel-mounted keyswitch to the "accessed" position.
2. Press the Scroll (up) ▲ and Scroll (down) ▼ buttons to highlight a menu.
3. Press the Accept ► button to select a menu.
4. Press the Accept ► button to select a sub menu (if available).
5. If applicable, press the Scroll (up) ▲ and Scroll (down) ▼ buttons to scroll the display through all active conditions (faults, disablements, tests,).
6. Press the Escape ◀ button to return to the previous menu.
7. To exit Access Level 1 press the Escape ◀ button. **Note:** The panel will automatically exit Access Level 1 after approx. 15 secs. of inactivity.
To exit Access Level 2 turn the panel-mounted keyswitch to the NOT "accessed" position.

General User Controls (Access Level 1)

The functions that can be performed in Access Level 1 are:

- Manually activate the extinguisher release
- Mute the internal sounder.

In addition, by pressing the Menu pushbutton, the Status Display Unit displays the following menu:

Note: All Access Level 1 menus are available to an Access Level 2 user.

MENU	DESCRIPTION
Display Faults	Displays all faults on the system
Display Dis/Mnt	Displays all disablements on the system
Zones In Test	Displays all detection zones that are in test mode on system
Lamp Test	Illuminates all front panel LED indicators
Alarm Counter	Displays the number of times a fire alarm condition has occurred on the panel

Display Faults

1. In Access Level 1, select the Display Faults menu. The panel displays all active faults on the system. (e.g. Zone 1 O/C Fault, Zone 2 S/C Fault, etc.)
2. Scroll the display through all active faults using the Scroll (up) and Scroll (down) buttons.
3. Press the Escape button to return to the Access Level 1 menu.

Display Dis/Mnt

The Display Disablements menu displays all active disablements on the system. An Access Level 2 user sets disablements.

1. In Access Level 1, select the Display Dis/mnt menu. The panel displays all active disablements on the system (e.g. Zone 1 disabled, etc.)
2. Scroll the display through all active disablements using the Scroll (up) and Scroll (down) buttons.
3. Press the Escape button to return to the Access Level 1 menu.

Zones in Test

This menu displays all detection zones that are currently in test mode on the system. A system engineer can only put zones into test mode.

1. In Access Level 1, select the Zones in Test menu. The panel displays all zones currently in test on the system (e.g. Zone 1 is on Test, etc.)
2. Scroll the display through all active zones in test using the Scroll (up) and Scroll (down) buttons.
3. Press the Escape button to return to the Access Level 1 menu.

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Lamp Test

All LED indicators can be tested at anytime by selecting using this menu.

1. In Access Level 1, select the Lamp Test menu. All the panel's LEDs will illuminate steady for approx. 2 secs. The panel's internal sounder will also sound. If any LEDs fail to illuminate report the fault to the designated site engineer and make a note in the Log Book.
2. On completion, the display returns to the Access Level 1 menu.

Alarm Counter

1. In Access Level 1, select the Alarm Counter menu. The total number of times the panel has been in a fire alarm condition is displayed.
2. Press the Escape button to return to the Access Level 1 menu.

Authorised User Controls (Access Level 2)

The functions that can be performed in Access Level 2, by turning the panel-mounted keyswitch to the "accessed" position, are:

- Manually activate the extinguisher release
- Mute the internal sounder
- Silence the alarm sounders
- Resound the alarm sounders
- Reset an alarm condition.

In addition, the Status Display Unit displays the following menu:

MENU	SUB MENU	DESCRIPTION
Display Faults	-	See Access Level 1
Display Dis/Mnt	-	See Access Level 1
Zones In Test	-	See Access Level 1
Lamp Test	-	See Access Level 1
Alarm Counter	-	Displays the number of times a fire alarm condition has occurred on the panel. Also, resets the counter.
Set Time/Date	-	Adjusts the panel's date & time settings
Event Log	Show Log	Displays the panel's event log
	Log Reset	Resets the panel's event log
Disp Contrast	-	Adjusts the contrast of the Status Display Unit
Disables	Disable Exting	Disables/enables the extinguishant system
	Disable Zone	Disables/enables detection zones
	Disable Sounder	Disables/enables fire sounders
	Disable Input	Disables/enables monitored inputs
	Disable Relay	Disables/enables auxiliary relay outputs
	Disable RSU	Disables/enables Remote Status Units

Alarm Counter

1. In Access Level 2, select the Alarm Counter menu. The total number of times the panel has been in a fire alarm condition (since last reset) is displayed.
2. Press the Escape button to return to the Access Level 2 menu or, to clear the alarm counter, press the Accept button. The panel requests confirmation to clear to today's date.
3. Press the Accept button to reset the counter. The panel will start counting any new fire conditions from the current date. A confirmation message confirms the change has been made and the display returns to the Access Level 2 menu.

Set Time/Date

1. In Access Level 2, select the Set Time/Date menu. The panel's current time setting is displayed.
2. Use the Scroll (up) and Scroll (down) buttons to adjust the hour (the panel has a 24 hour clock).
3. When the correct hour is displayed, press the Accept button to move to the minutes field.
4. Use the Scroll (up) and Scroll (down) buttons to adjust the minutes.
5. When the correct time is displayed, press the Accept button to alter the date.
6. Use the Scroll (up), Scroll (down) and Accept buttons to set the day/month/year, as appropriate.
7. When correct, press the Escape button to return to the Access Level 2 menu.

Event Log

1. In Access Level 2, select the Event Log menu, select Show Log sub menu. The panel's last event log is displayed.
2. Use the Scroll (up) and Scroll (down) buttons to view the previously saved events. When the log is full, the newest record replaces the oldest record. Events are listed in chronological order.
3. Press the Escape button to return to the previous menu.
4. To reset the panel's event log, in Access Level 2, select the Event Log menu, then select Log Reset sub menu. The panel requests confirmation to erase the event log.
5. Press the Accept button to confirm and the event log is cleared from the panel's memory.
6. Press the Escape button to return to the previous menu.

Disp Contrast

1. In Access Level 2, select the Disp Contrast menu. The panel's current display contrast is displayed.
2. Use the Scroll (up) and Scroll (down) buttons to adjust the contrast of the Status Display Unit.
3. Press the Accept button to confirm the new setting and return to the Access Level 2 menu.

Disabling

The Disabling menu allows the temporary disabling, or enabling of the extinguishant system, detection zones, sounders, monitored inputs, relays and RSUs. Typically used when there are input/output faults and for system testing.

Any active disabling are displayed at the EP203 panel by the General Disabling and relevant disabling yellow LEDs lit steady.

Note: It is recommended all disabling are immediately enabled when no longer required as they can have a major effect on how the system works.

Disable Exting

This sub menu allows the disabling/enabling of the extinguishant system.

1. From the Disabling menu, select the Disable Exting sub menu.
2. Press the Accept button to disable/enable the extinguishant system.
3. Press the Escape button to return to the Disabling menu.

Note: 'Exting System Disabled' will also be displayed at any Remote Status Units (RSUs) on the system.

Disable Zone

This sub menu allows the disabling/enabling of one or more of the panel's three detection zones. Disabled zones do not report fire or fault conditions.

1. From the Disabling menu, select the Disable Zone sub menu.
2. Select the detection zone(s) to be disabled/enabled using the Scroll (up) and Scroll (down) buttons.
3. Press the Accept button to disable/enable a selected zone.
4. Press the Escape button to return to the Disabling menu.

Disable Sounder

This sub menu allows the disabling/enabling of the fire sounders from sounding in a fire condition.

1. From the Disabling menu, select Disable Sounder.
2. Press the Accept button to disable/enable the sounder circuit.
3. Press the Escape button to return to the Disabling menu.

Disable Input

This sub menu allows the disabling/enabling of one or more of the panel's six monitored inputs: Manual Release, Flow Switch, Low Pressure, Mode Switch, Hold and Abort.

1. From the Disabling menu, select Disable Input.
2. Select the input(s) to be disabled/enabled using the Scroll (up) and Scroll (down) buttons.
3. Press the Accept button to disable/enable the selected input.
4. Press the Escape button to return to the Disabling menu.

Disable Relay

This sub menu allows the disabling/enabling of one or more of the panel's six auxiliary relay outputs: Fire, Local Fire, Extract, 1st Stage, 2nd Stage and Fault.

Note: If a Relay Output Card is fitted, this sub menu also allows the disabling/enabling of one or more of the card's five relay outputs: Reset, Mode, Discharged, Hold and Abort.

1. From the Disablements menu, select Disable Relay.
2. Select the relay output(s) to be disabled/enabled using the Scroll (up) and Scroll (down) buttons.
3. Press the Accept button to disable/enable the selected relay output.
4. Press the Escape button to return to the Disablements menu.

Disable RSU

This sub menu allows the disabling/enabling of one or more of the panel's Remote Status Units.

1. From the Disablements menu, select Disable RSU.
2. Select the RSU(s) to be disabled/enabled using the Scroll (up) and Scroll (down) buttons.
3. Press the Accept button. The panel requests confirmation.
4. Scroll (down) to confirm the change.
5. Press the Accept button to disable/enable the selected RSU. The Disablements menu is displayed.

Note: 'RSU Disabled' will be displayed at the RSU that has been disabled.

FIRE ALARM/EXTINGUISHER PANEL LOG BOOK

It is recommended that this log book be maintained by a responsible person, who should ensure that every entry is properly recorded. In the UK, this is necessary to satisfy the recommendations of BS5839-1: 2002, compliance with which may be a requirement of legislation. If your premises are certificated under the Fire Precautions Act 1971, failure to keep a suitable log book may be a breach of the requirements of the certificate, which is a criminal offence. In order to satisfy the requirements of BS5839-1: 2002, the following must be recorded:

- Name of the responsible person
- Brief details of the maintenance arrangements
- Dates and times of all tests, including fire drills
- Dates and times of all fires to which the system responds
- Dates and times of all false alarms
- Causes, circumstances surrounding, and category of false alarms (if known)
- The identity of any manual call point or fire detector that triggers any of the above fire alarm/extinguisher signals (if known)
- Dates, times and type of all faults and defects
- Dates and times of all maintenance (e.g. service visit or non-routine attention).

USER: _____

SITE ADDRESS: _____

RESPONSIBLE PERSON(S) ON SITE: _____

THE SYSTEM WAS DESIGNED BY: _____

THE SYSTEM WAS INSTALLED BY: _____

THE SYSTEM WAS COMMISSIONED BY: _____

THE SYSTEM WAS ACCEPTED BY: _____

VERIFICATION WAS UNDERTAKEN BY: _____

FOR SERVICE (DETAILS OF WHO YOU SHOULD CONTACT IF MAINTENANCE IS REQUIRED)

THE SYSTEM IS MAINTAINED UNDER CONTRACT BY:

Company: _____

Address: _____

Contact No: _____ Expiry Date: _____

NORMAL HOURS (MON-FRI) TEL: _____

OUTSIDE NORMAL HOURS TEL: _____

MANNED CENTRE TEL: _____

MANNED CENTRE CODE: _____

NORMAL MAXIMUM ATTENDANCE TIME FOR A MAINTENANCE TECHNICIAN IS: _____

EXPENDABLE COMPONENT REPLACEMENT PERIODS (LIST): _____

INSTALLATION CERTIFICATE

BS5839-1:2002 recommends that certificates be issued for all aspects of the fire alarm/extinguisher system including design, installation, commissioning, acceptance, verification (optional) and maintenance. Therefore, before this user manual is handed over, the following installation certificate and the commissioning certificate (overleaf) should be completed as appropriate by the relevant installation/commissioning engineer(s). Please ensure that the system set-up data chart and the relevant parts of the system Log Book are also completed as appropriate. For countries outside the UK, different certification requirements may apply.

Certificate of INSTALLATION

for the fire alarm/extinguisher system at:

Address: _____

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the installation of the fire alarm/extinguisher system, particulars of which are set out below, CERTIFY that the said installation for which I/we have been responsible complies to the best of my/our knowledge and belief with the specification described below and with the recommendations of Section 4 of BS5839-1:2002, except for the variations, if any, stated in this certificate.

Name (in block letters): _____

Position (in block letters): _____

Signature: _____

Date: _____

For and on behalf of: _____

Address & postcode: _____

The extent of the liability of the signatory is limited to the system described below.

Extent of installation work covered by this certificate:

Specification against which the system was installed:

Variations from the specification and/or Section 4 of BS5839-1:2002 (see BS5839-1:2002, Clause 7):

Wiring has been tested in accordance with the recommendations of Clause 38 of BS5839-1: 2002. Test results have been recorded and provided to: _____

Unless supplied by others, the "as fitted" drawings have been supplied to the person responsible for commissioning the system (see 36.2m) of BS5839-1: 2002: _____

COMMISSIONING CERTIFICATE

BS5839-1:2002 recommends that certificates be issued for all aspects of the fire alarm/extinguisher system including design, installation, commissioning, acceptance, verification (optional) and maintenance. Therefore, before this user manual is handed over, the following commissioning certificate and the installation certificate (overleaf) should be completed as appropriate by the relevant installation/commissioning engineer(s). Please ensure that the system set-up data chart and the relevant parts of the Log Book are also completed as appropriate. For countries outside the UK, different certification requirements may apply.

**Certificate
of COMMISSIONING**

for the fire alarm/extinguisher system at:

Address: _____

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the commissioning of the fire alarm/extinguisher system, particulars of which are set out below, CERTIFY that the said work for which I/we have been responsible complies to the best of my/our knowledge and belief with the specification described below and with the recommendations of Clause 39 of BS5839-1: 2002, except for the variations, if any, stated in this certificate.

Name (in block letters): _____
Position (in block letters): _____
Signature: _____
Date: _____
For and on behalf of: _____
Address & postcode: _____

The extent of the liability of the signatory is limited to the system described below.

Extent of system covered by this certificate:

Variations from the recommendations of Clause 39 of BS5839-1:2002 (see BS5839-1:2002, Clause 7):

- All equipment operates correctly.
- Installation work is, as far as can reasonably ascertained, of an acceptable standard.
- The entire system has been inspected and tested in accordance with the recommendations of 39.2c of BS5839-1:2002.
- The system performs as required by the specification prepared by: _____ a copy of which I/we have been given.
- Taking into account the guidance contained in Section 3 of BS 5839-1:2002, I/we have not identified any obvious potential for an unacceptable rate of false alarms.
- The documentation described in Clause 40 of BS5839-1:2002 has been provided to the user.

The following work should be completed before/after (delete as applicable) the system becomes operational:

The following potential cause(s) of false alarms should be considered at time of next service visit:

Before the system becomes operational, it should be soak tested in accordance with the recommendations of 35.2.6 of BS5839-1:2002 for a period of: _____ (enter a period of either one week, such period as required by the specification, or such period as recommended by the signatory of this certificate, whichever is the greatest, or delete if not applicable).