



GLOBAL
FIRE EQUIPMENT

OPERATION MANUAL

ORION PLUS
FIRE ALARM CONTROL PANEL

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Some functions are only available at Authorized User level of Access. To enter this mode, a valid user Code has to be entered using the panel's front display keypad. The factory default code is: ▲ ▲ ▲ ▲ ▲ To enter, press ENTER then press 5 consecutive ▲, then press ENTER again. If code entry was successful, the words "USER ACCESS LEVEL" will appear on the top line of the LCD display.

SECTION 1 - OPERATION

1.1 DESCRIPTION OF THE FIRE CONTROL PANEL FASCIA

NOTE: Functions indicated as available to the General User do not require an access code to be entered.



STATUS

FIRE - If the LED is RED it indicates that there is a fire situation.

FAULT - If the LED is AMBER it indicates a fault situation. Additional information will be shown on the LCD display and, if applicable, on the LEDs in the FAULTS section of the main panel (i.e. 7, 8, 9, 10).

PRE-ALARM - If the LED is AMBER it indicates that a detector is in PRE-ALARM.

TEST - If the LED is AMBER it indicates that the panel is in a test mode.

DISABLED - If the LED is AMBER it indicates that at least one disablement exists.

SYSTEM ON - If the LED is GREEN it means that the panel is in ACTIVE mode. If the LED is flashing GREEN then the panel is in INSTALLATION mode.

FAULTS

ALARM FAULT - If the LED is AMBER it indicates that there is a problem with a loop sounder or conventional sounder circuit. This could be an open or short circuit.

SUPPLY FAULT - If the LED is AMBER it indicates that there is a Primary Supply (Electrical mains) Fault, a Battery Fault or that there is an Earth Fault.

SYSTEM FAULT - If the LED is AMBER it indicates that there is 5 Volt fault or a processor/program failure.

KEYPAD

ESC | ENTER | ▲ | ▼ | ► |

Press these buttons to toggle between menus, enter User and programming codes and other on-screen information.

CONTROLS

BUZZER SILENCE - Pressing this button will silence the internal buzzer during a FIRE or FAULT condition. If the LED is lit, it indicates that a new FAULT or FIRE condition has occurred.

SYSTEM RESET - Pressing this button restores the panel to its normal operating condition after an alarm. Alarms must be silenced before a SYSTEM RESET can be performed. A SYSTEM RESET does not clear any settings or disablements; it only clears FIRE and FAULT conditions (and then only if the source of the FIRE or FAULT has been cleared).

LAMP TEST - Whilst this button is depressed all of the panel's LEDs will be illuminated and all of the LCD display pixels will be set to black. Use this button to confirm the LEDs and LCD display are functional.

SOUNDERS ACTIVATE/SILENCE - Pressing this button will activate all sounders and panel buzzers (main panel and Repeaters). Pressing the button again will silence the sounders. If the LED is RED it means that the SOUND ALARMS function has been activated by either pressing SOUNDERS ACTIVATE/SILENCE switch or during an alarm or Evacuate function is active.

DISABLEMENTS

AUXILIARY RELAYS - Pressing this switch disables or enables all the relay outputs. If the LED is lit it means that the relay outputs are disabled.

DELAYS ACTIVE - Delays can be configured for the sounders and I/O modules using the programming functions. Pressing this button enables or disables these delays. If the LED is AMBER it means that the delays are active.

SOUNDERS DISABLE Pressing this button will enable/disable all sounders in the system. The LED will be lit when sounders are disabled.

SELECTED ZONES - Using the programming functions individual zones can be set for SELECTIVE DISABLEMENT. When this button is activated those zones will be disabled (isolated). Note that this button will only operate if at least one detector has been set for SELECTIVE DISABLEMENT. If the LED is AMBER it means that the selected zones are isolated.

QUEUE REVIEW

FIRE - If there is more than one FIRE pressing this button will display the next FIRE report on the LCD display for 20 seconds. Subsequent presses will step through all the FIRE reports. If the LED is flashing RED it means that there are FIRE reports to be reviewed. If the LED is steady RED then all FIRE reports have been reviewed.

FAULT - If there is more than one FAULT, or if there is at least one FAULT and a FIRE, pressing this button will display the next FAULT report on the LCD display for 20 seconds. Subsequent presses will step through all the FAULT reports. If the LED is flashing AMBER it means that are FAULT reports to be reviewed. If the LED is steady AMBER then all FAULT reports have been reviewed.

TEST - If there are zones in test mode then pressing this button will show those zones on the LCD display. If more zones are in test mode than can be shown on the LCD display at one time then subsequent presses of the button will step through all the zones in test mode. If the LED is AMBER it means that one or more zones are in test mode.

DISABLED - If there are disablements then pressing this button will show the disablements on the LCD display. If there are more disablements than can be shown on the LCD display at one time then subsequent presses of this button will step through all the disablements. If the LED is AMBER it means that there is at least one disablement.

NOTE: The functions of some switches will only be operational after entering the authorized user or programming access codes.

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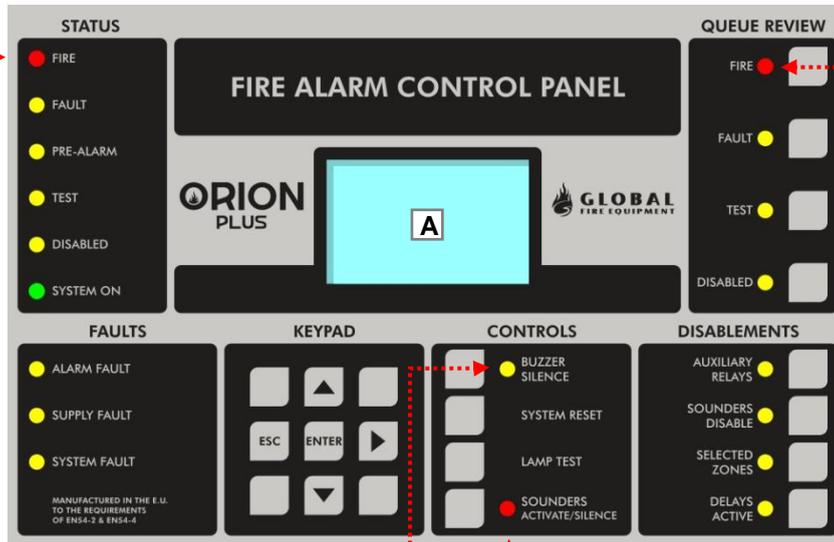
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1.2 ALARM (Authorized User Access)

If the fire alarm control panel signals an ALARM the following events will take place:
The sounders and other outputs will operate in accordance with their programming.

The STATUS FIRE LED will illuminate RED. The fire control panel buzzer will sound continuously.

A
The number of the Zone (or Zones) will be shown on the fire control panel LCD display.



If more than one alarm has occurred the QUEUE REVIEW FIRE LED will flash RED indicating that further fire reports can be displayed on the LCD display by pressing the QUEUE REVIEW FIRE button.

The BUZZER SILENCE LED will be illuminated.

The SOUNDRS ACTIVATE/SILENCE LED will be illuminated.

EVACUATE IN ACCORDANCE WITH THE SITE PROCEDURE

ONLY WHEN AUTHORIZED should you silence the alarms.



A
To do this press the BUZZER SILENCE button. Pressing this button will:
- Silence the internal buzzer
- Turn off BUZZER SILENCE LED

B
To stop Sounders, press SOUNDRS ACTIVATE/SILENCE button. The LED will also turn off after pressing.

C
The STATUS - FIRE LED will remain lit RED.

DO NOT PRESS SYSTEM RESET UNTIL THE ALARM CONDITION HAS BEEN DEALT WITH!

1.3 RESET THE SYSTEM (Authorized User Access)

This procedure should be used if:

- There has been an alarm and the alarm condition no longer exists.
- There has been a fault and the fault condition no longer exists.

A

After entering either the User or programming Access Code, press the SYSTEM RESET button. The system takes about 20 seconds to reset. The company name, date and time will appear on the LCD display when the reset is complete.

Any alarm and/or fault LEDs indicated by the panel before pressing SYSTEM RESET will no longer be illuminated after reset.

A SYSTEM RESET can only be performed once all alarms have been silenced.



1.4 SOUND AND SILENCE THE ALARMS – (EVACUATION) - (Authorized User Access)

This section shows you how to turn on and turn off all the sounders in an installation. It is identical to a fire drill procedure.

On the fire control panel:

A

Press the SOUNDERS ACTIVATE/SILENCE button

- All sounders turn on
- The SOUNDERS ACTIVATE/SILENCE LED illuminates RED
- To stop sounders, press SOUNDERS ACTIVATE/SILENCE button again
- The SOUNDERS ACTIVATE/SILENCE LED extinguishes



1.5 READ THE FIRE, FAULT, TEST AND DISABLED QUEUES

(Access level 1 - General User)

Fire, fault, test, and disabled messages are shown on the LCD display.

The LCD has a limited display area. If more messages exist than can be shown on the LCD display the FIRE, FAULT, TEST or DISABLED LEDs illuminate on the QUEUE REVIEW area of the fascia. The following procedure describes how to display the additional messages.



A

FIRE - If the QUEUE REVIEW - FIRE LED is flashing RED...

Press the QUEUE REVIEW - FIRE button to display the first queued message. Press the button again to review the next queued message. Do this until all messages have been reviewed. The LED stops flashing RED, but remains lit, once all messages have been displayed.

After 20 seconds the first fire event will be re-displayed.

B

FAULT - If the QUEUE REVIEW - FAULT LED is flashing AMBER...

Press the QUEUE REVIEW - FAULT button to display the first queued message. Press the button again to review the next queued message. Do this until all messages have been reviewed. The LED illuminates steady AMBER when all messages have been displayed.

After 20 seconds the first fault will be re-displayed unless a fire has occurred in which case the first fire will be re-displayed instead.

C

TEST - If the QUEUE REVIEW - TEST LED is illuminated AMBER...

Press the QUEUE REVIEW - TEST button to display the Zones in test mode. Sometimes not all the Zones in test mode can be displayed at once, in this case press the button again to see the next set of Zones in test mode.

After 15 seconds the display will return to its quiescent state (usually the company name and current time).

D

DISABLED - If the QUEUE REVIEW - DISABLED LED is illuminated AMBER...

Press the QUEUE REVIEW - DISABLED button to display the disablements on the LCD. Sometimes not all the disablements can be displayed at once, in this case press the button again to see the next set of disablements.

After 15 seconds the display will return to its quiescent state (usually the company name and current time).

1.6 DELAYS ACTIVE (Authorized User Access)



During installation, via the programming functions, delays can be set for the sounders.

These delays are only active when the DELAYS ACTIVE LED is illuminated. At all other times the sounders will operate immediately when / if a fire is detected.

After entering User Access code, to enable or disable these delays press the DELAYS ACTIVES button.

Note that it is also possible, via the programming functions, to set DELAYS ACTIVE to automatically turn off at night.

For details on the programmable features and delays refer to the 'Installation & Commissioning Manual'.

During an alarm condition, if the delays are active (DELAYS ACTIVE LED is lit), pressing the DELAYS ACTIVE button will cancel the delays and every sounder programmed to be activated during a specific fire alarm condition will activate immediately.

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1.7 LAMP TEST (General User Access)

This tests that all LEDs on the fascia are functioning, that the buzzer sounds properly and that the LCD display is fully functional.

A

Press and hold the LAMP TEST button.

- All LEDs shown in this diagram should be illuminated
- All pixels on the LCD display should turn black
- All external Zone LEDs should be illuminated

Release the LAMP TEST button to end the test. The LEDs and LCD display will return to their normal condition.



1.8 PERFORM A FIRE DRILL (Access Level 2 or Authorized User Access)

This tests that all LEDs on the fascia are functioning, that the buzzer sounds properly and that the LCD display is fully functional.

A

To start the fire drill press the **SOUNDERS ACTIVATE/SILENCE** button.

The following will occur:

- All sounders turn on
- The SOUNDERS ACTIVATE/SILENCE LED illuminates RED.

To end the fire drill press the **SOUNDERS ACTIVATE/SILENCE** button.

The following will occur:

- The sounders stop sounding
- The SOUNDERS ACTIVATE/SILENCE LED extinguishes.



EVACUATE IN ACCORDANCE WITH THE SITE PROCEDURE

1.9 TEST MODE - (*One-Man Walk-Through Test*) - (Authorized User Access)



Entry and Exit of Caretaker Test Mode

A

Press the QUEUE REVIEW - TEST button first.

B

Then the CONTROLS - LAMP TEST button momentarily.

C

(The FAULTS - PROC FAULT LED will light momentarily, this is OK).

Test mode can be activated at anytime except when:

- There is a FIRE
- SOUND ALARMS have been activated
- Something is already in TEST MODE (Test Sounders or Test Zones)
- You are in Programming Mode
- You are Installation Mode

When Test Mode is entered 'INITIALIZING' may be displayed for up to 20 seconds depending on the system size.

D

Test Mode is exited by pressing SYSTEM RESET.

Indication of Test Mode

- The TEST LED will be lit
- The buzzer will sound for 0.5 seconds every 5 seconds (same as FAULT indication).
- ALARM SILENCE will not stop this.
- The message " ZONES TEST MODE " will be displayed on the LCD
- The Zones in test mode will be displayed on the LCD - " ALL ZONES "

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Logging

- Individual zones tests are not logged (they would fill the log very quickly)
- Entry to Caretaker Test Mode is logged

Zones Under Test

- All detectors and call points in all Zones will be put into test mode

Indication When a Device is Tested

When a detector is activated (using smoke spray for example):

- The LED on the detector is activated whilst the detector is above the fire alarm threshold
- The Main Panel Conventional Sounders will operate for 1 second, if selected to do so.
(See Function 7.3)

The event is reported on the Main Panel and Repeater LCD displays for 15 seconds

Testing More Than One Device

- Detectors and call points can only be tested one at a time. The LED must be extinguished on the current device before moving on to test the next device. (*Don't use too much smoke spray*)

Disablements

- All disablements for sounders, loop and detectors are ignored during Caretaker Test Mode. However the LED on disabled detectors will not be lit when the detector is tested (all other aspects of the test will be as normal).

Other

- Whilst in Caretaker Test Mode the SOUND ALARMS button will remain functional
- Caretaker Test Mode can be initiated from a Main Panel or Repeater.

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1.10 DISABLEMENTS (Authorized User Access)



1.10.1 SELECTED ZONES

Using the programming functions (see the 'Installation & Commissioning Manual') individual zones can be set for SELECTIVE DISABLEMENT. When the SELECTED ZONES button is activated those detectors will be disabled. (This may be required, for example, in a building with smoke detectors inside a room reserved for cigarette smokers. During the day it would be wise to disable these detectors in order to prevent the obvious false alarms it would otherwise generate).

SELECTED ZONES

When activated:

- A** The SELECTED ZONES LED will be illuminated
- B** The STATUS - DISABLED LED will be illuminated
- C** The QUEUE REVIEW - DISABLED LED will be illuminated
- D** The disabled zones can be reviewed using the DISABLED QUEUE REVIEW button



The SELECTED ZONES button will only operate if there is at least one detector set to SELECTIVE DISABLEMENT.

Re-pressing the SELECTED ZONES button again will re-enable the zones.

1.10.2 SOUNDERS DISABLE

A By pressing this button, all sounders on the system will be disabled.

B Its associated LED will light up.

C The DISABLED LED will also be lit.

By pressing SOUNDERS DISABLE button once more, the LED will turn off and all sounders will re-enable.



1.10.3 AUXILIARY RELAYS

The AUXILIARY RELAYS DISABLEMENT button enables and disables all relay outputs. This means that those outputs will remain unchanged if a fire or fault occurs. The outputs that are controlled by this button include the normally energized FAULT relay, the FIRE relay and, of course, the auxiliary relays.

SELECTED DETECTORS

A To disable the relays press the AUXILIARY RELAYS button.

B The AUXILIARY RELAYS LED illuminates AMBER.

C The STATUS - DISABLED LED illuminates AMBER.

D The QUEUE REVIEW-DISABLED LED illuminates AMBER.

Re-press the AUXILIARY RELAYS button to re-enable the relays.



1.10.4 ENABLE/DISABLE ZONES

In order to Enable/Disable a zone follow the procedure described below:

- 1 - Enter either a valid User or Programming Code.
- 2 - Select Function 3.1 (Zones Disable/Assign), using the ▲▼ arrow keys. Press ENTER when menu 3 is reached.
- 3 - Using the ▲▼ arrow keys once more, select function 3.1 and press ENTER.
- 4 - Select the zone to be disabled using the ▲▼ arrow keys and press ENTER.
- 5 - The present status of the zone is shown. To change it, press ENTER and change the status using the ▲▼ arrow keys from enabled to disabled and vice versa. When selection is complete press OK/Enter. To exit press the ESC key. Each consecutive press of the ESC key will revert back one step.

If any zones are disabled during this time, the DISABLED LED in the STATUS area of the panel's fascia will be lit. The DISABLED LED in the QUEUE REVIEW area will also be lit. If the latter LED flashes, this gives the indication that more than one disablement has taken place in the system. To scroll through these multiple disablements, press the DISABLED button in the QUEUE REVIEW area.

1.11 IF THE PANEL DISPLAYS A FAULT

A

If the system detects a fault, the STATUS - FAULT LED will light up AMBER.

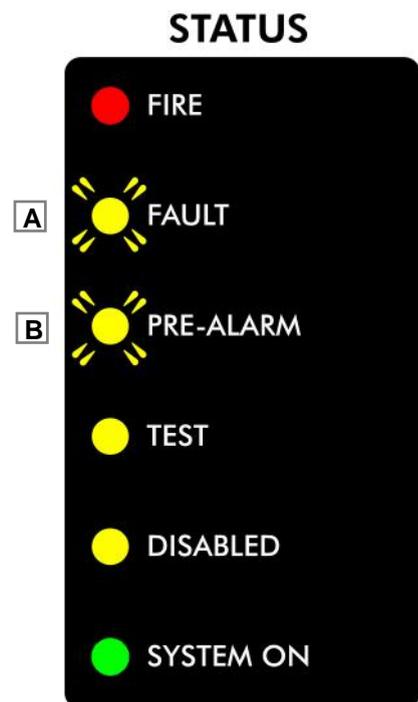
CALL THE MAINTENANCE ENGINEER

1.12 IF THE PANEL DISPLAYS A PRE-ALARM

B

If any detector detects a pre-alarm condition, the STATUS - PRE-ALARM LED will light up AMBER.

FOLLOW SITE SPECIFIC INSTRUCTIONS



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