



GLOBAL
FIRE EQUIPMENT

JUNO-NET

EN-54

Fire Alarm Control Panel

OPERATION
&
MAINTENANCE
MANUAL

CONTENTS

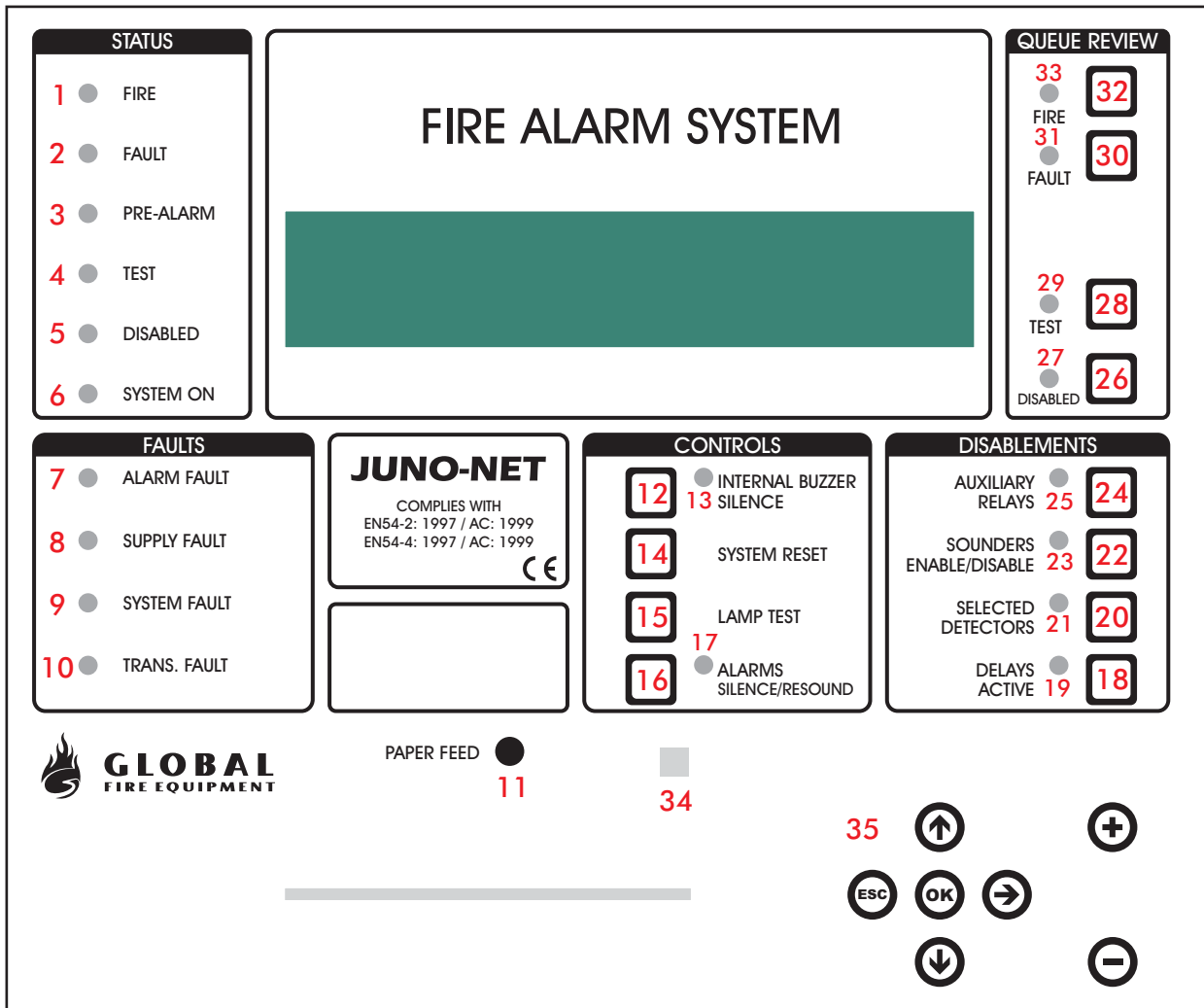
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1.1 DESCRIPTION OF THE FIRE CONTROL PANEL FASCIA



NOTE: The operation of front panel switches will only be possible upon entering a valid User or Programming Access Code. See Page 7.

- 1 **FIRE:** If the LED is RED it indicates that there is a fire situation.
- 2 **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).
- 3 **PRE-ALARM:** If the LED is AMBER it indicates that a detector is in PRE-ALARM.
- 4 **TEST:** If the LED is AMBER it indicates that the panel is in a test mode.
- 5 **DISABLED:** If the LED is AMBER it indicates that at least one disablement exists.
- 6 **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.
- 7 **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 or a blown alarm fuse.
- 8 **SUPPLY FAULT:** If the LED is AMBER it indicates that there is a Primary Fault, a Battery Fault or that there is an Earth Fault. Further details will be shown on the LCD display as to the type of supply fault.
- 9 **SYSTEM FAULT:** If the LED is AMBER it indicates that there is 5 Volt fault or a processor/program failure.
- 10 **TRANSMISSION FAULT:** If the LED is AMBER it indicates that there is an open or short circuit in the fire brigade transmission circuit.

1.1 DESCRIPTION OF THE FIRE CONTROL PANEL FASCIA (continued...)

- 11 PAPER FEED:** Pressing this switch will advance paper through the printer.
- 12 INTERNAL BUZZER SILENCE:** Pressing this button will silence the internal buzzer during a FIRE or FAULT condition.
- 13 INTERNAL BUZZER SILENCE:** If the LED is lit it indicates that a new FIRE or FAULT condition is present on the system.
- 14 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).
- 15 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.
- 16 ALARMS SILENCE/RESOUND:** Pressing this button will activate all sounders. Pressing the button again will silence the sounders.
- 17 ALARMS SILENCE/RESOUND:** If the LED is lit it means that the SOUND ALARMS function has been activated or there is a new fire Alarm condition present on the system.
- 18 DELAYS ACTIVE:** Delays can be configured for the sounders, I/O modules and fire brigade transmission using the programming functions. Pressing this button enables or disables these delays.
- 19 DELAYS ACTIVE:** If the LED is lit it means that the delays are active. (When they have been programmed)
- 20 SELECTED DETECTORS:** Using the programming functions individual detectors can be set for SELECTIVE DISABLEMENT. When this button is activated those detectors will be disabled (isolated). Note that this button will only operate if at least one detector has been set for SELECTIVE DISABLEMENT.
- 21 SELECTED DETECTORS:** If the LED is AMBER it means that the selected detectors are isolated.
- 22 SOUNDERS ENABLE/DISABLE:** Press to Enable or disable all sounders on the system. Both Conventional or Addressable.
- 23 SOUNDERS ENABLE/DISABLE:** When LED is lit, all sounders are disabled. Enabled if LED is off.
- 24 AUXILIARY RELAYS:** Pressing this switch disables or enables all the relay and I/O module outputs.
- 25 AUXILIARY RELAYS:** If the LED is lit it means that the auxiliary relay and I/O module outputs are disabled.
- 26 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.
- 27 DISABLED:** If the LED is AMBER it means that there is at least one disablement.
- 28 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.
- 29 TEST:** If the LED is AMBER it means that one or more ZONES are in test mode.
- 30 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.
- 31 FAULT:** 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.
- 32 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.
- 33 FIRE:** 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.
- 34 INFRA-RED SENSOR:** When using the Remote Infra-Red Keypad it is important that the remote is pointed towards this sensor.
- 35 KEYPAD:** Used to enter authorized User and Programming codes, to select functions and options, and scroll through devices, loops and zones.

1.2 ALARM - (Authorized User Level Access)

If the fire alarm control panel signals an ALARM the following events will take place:

The sounders, I/O modules and other outputs will operate in accordance with their programming.

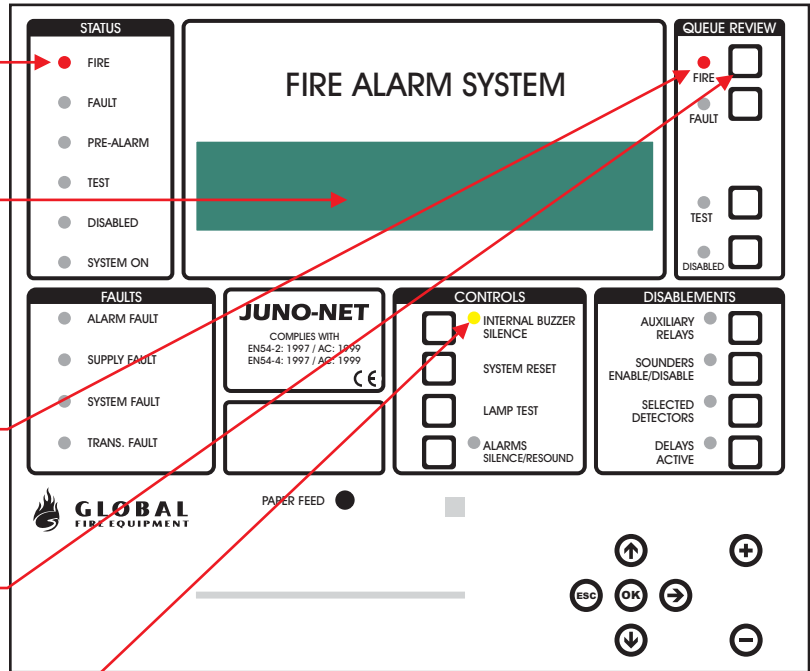
At the fire control panel, the STATUS - FIRE LED will illuminate RED.

The fire control panel buzzer will sound.

The location of the alarm (or alarms) 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.

If fitted, the external RED Zone LEDs will be illuminated for the Zones in FIRE.



LED will be lit at each new Alarm event

EVACUATE IN ACCORDANCE WITH THE SITE PROCEDURE

ONLY WHEN AUTHORISED should you silence the alarms.

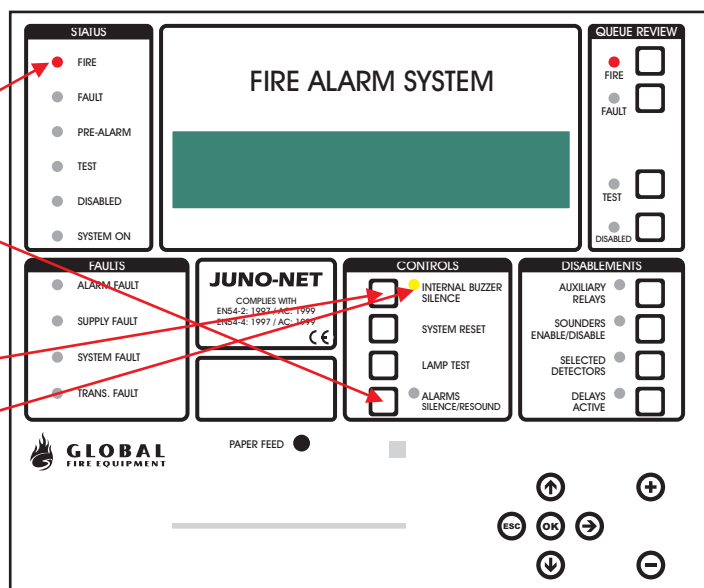
To do this press the ALARMS SILENCE / RESOUND button.

Pressing this button will:

- Stop the sounders sounding
- Stop sounders queued for delayed activation

The STATUS - FIRE LED will remain lit RED.

Press the INTERNAL BUZZER SILENCE button to silence the Internal Buzzer. It will also turn off the INTERNAL BUZZER SILENCE LED.



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

1.3 RESET THE SYSTEM - (Authorized User Level Access)

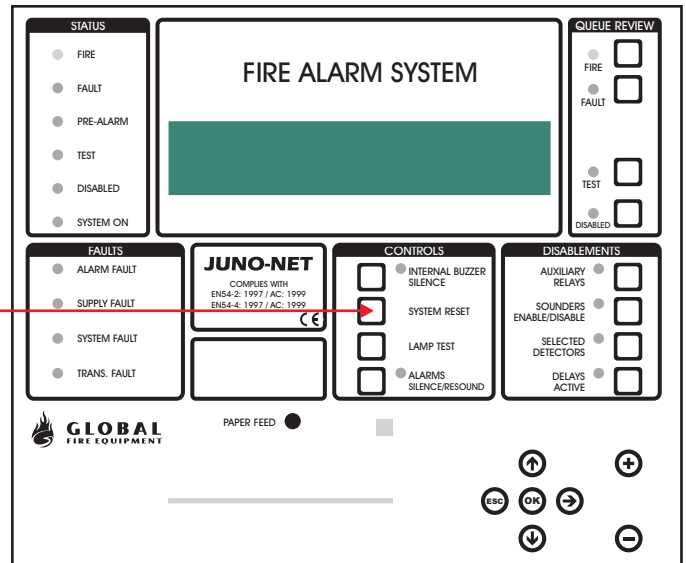
This procedure should be used if:

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

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 - (Authorized User Level 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.

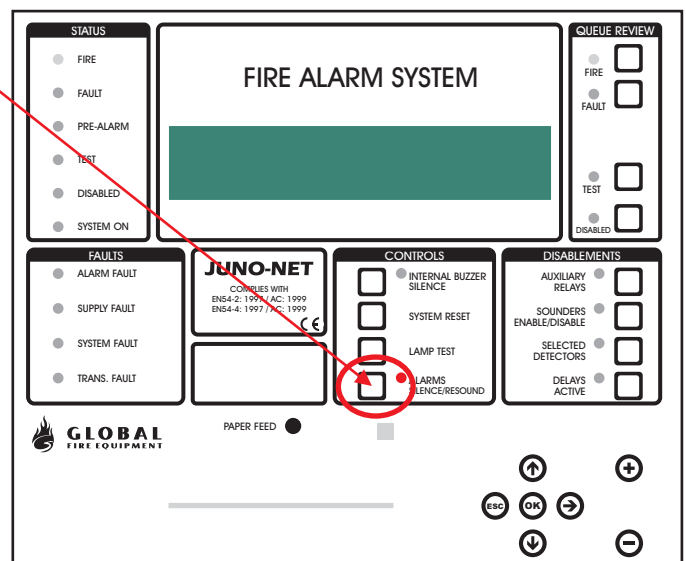
On the fire control panel:

Press the ALARMS SILENCE/RESOUND button.

- All sounders turn on
- The ALARMS SILENCE/RESOUND LED illuminates RED

Press the ALARMS SILENCE/RESOUND button.

- The sounders turn off
- The ALARMS SILENCE/RESOUND LED extinguishes

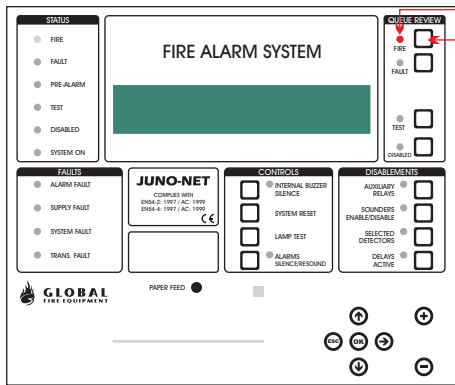


General User Level
Access Code entry not required

1.5 READ THE FIRE, FAULT, TEST AND DISABLED QUEUES

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.

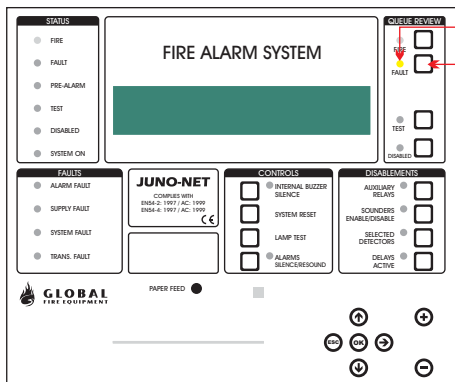


FIRE

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.

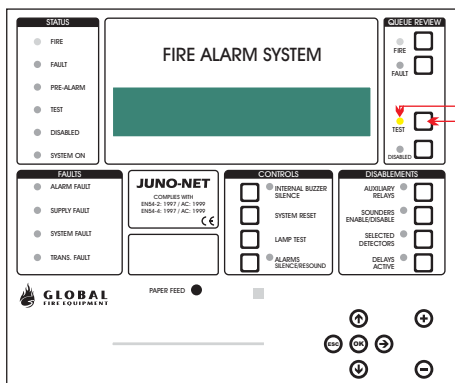


FAULT

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.

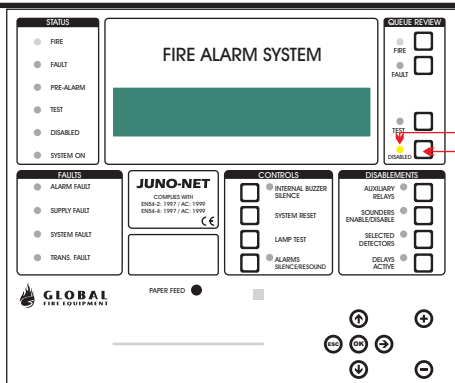


TEST

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).



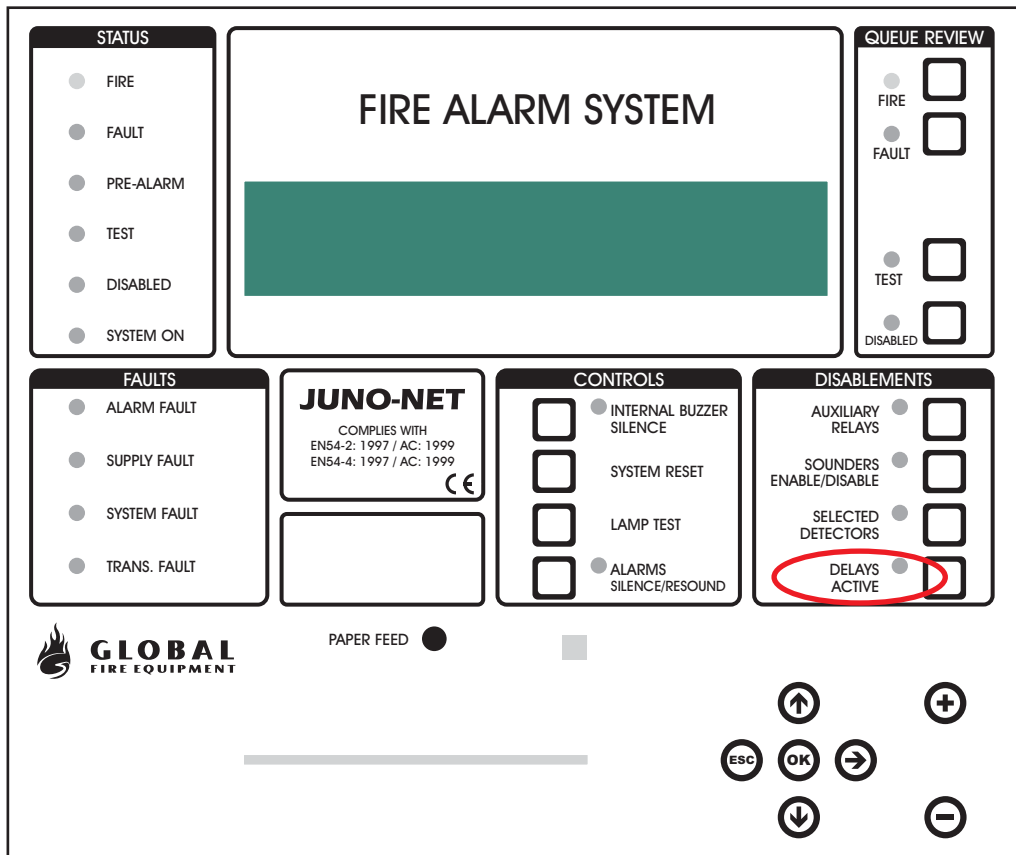
DISABLED

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 ACTIVE DELAYS - (Authorized User Level Access)



During installation, via the programming functions, delays can be set for the sounders, I/O modules and fire brigade transmission.

These delays are only active when the ACTIVE DELAYS LED is illuminated. At all other times the sounders, I/O modules and fire brigade transmission will operate immediately a fire is detected.

To enable or disable these delays press the ACTIVE DELAYS button.

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

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

NOTE: 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:

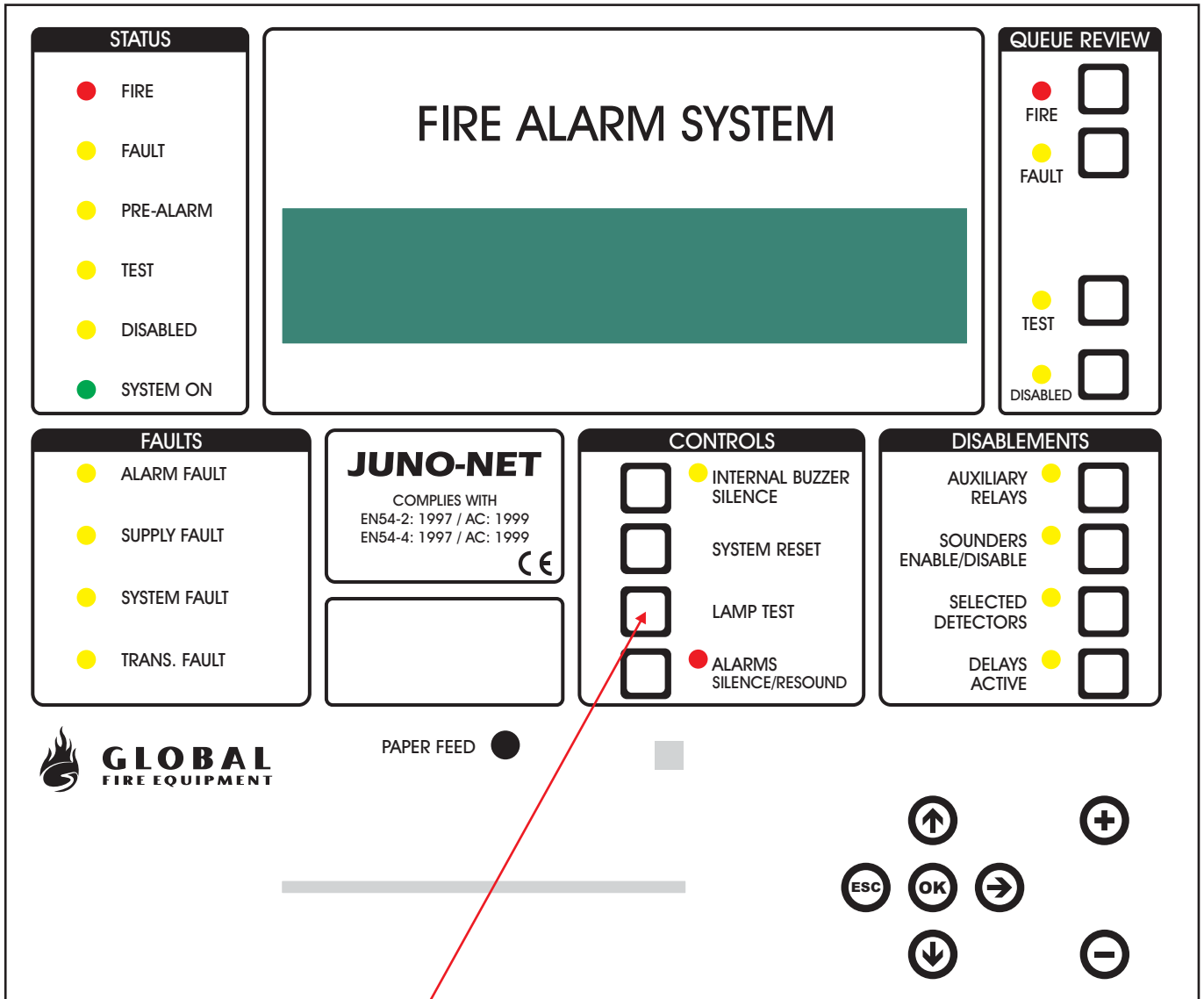
▲▲▲▲▲

To enter, press OK then press 5 consecutive ▲▲▲▲▲, then press OK again. If code entry was successful, the words "USER ACCESS LEVEL" will appear on the top line of the LCD display.

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

1.7 LAMP TEST - (General User Access Level)

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



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, if fitted, 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 - (Authorized User Level Access)

To start the fire drill press the ALARMS SILENCE/RESOUND button.

The following will occur:

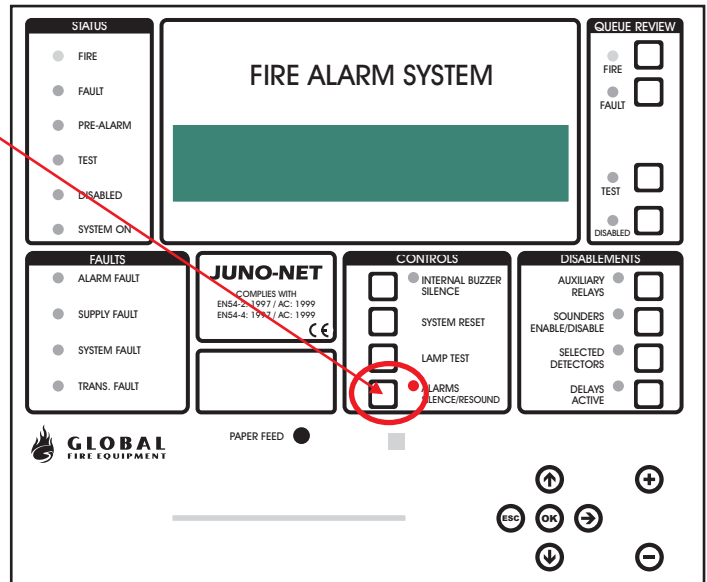
- All sounders turn on
- The ALARMS SILENCE/RESOUND LED illuminates RED

EVACUATE IN ACCORDANCE WITH THE SITE PROCEDURE

To end the fire drill, press ALARMS SILENCE/RESOUND button once more

The following will occur:

- The sounders stop sounding
- The ALARMS SILENCE/RESOUND LED extinguishes



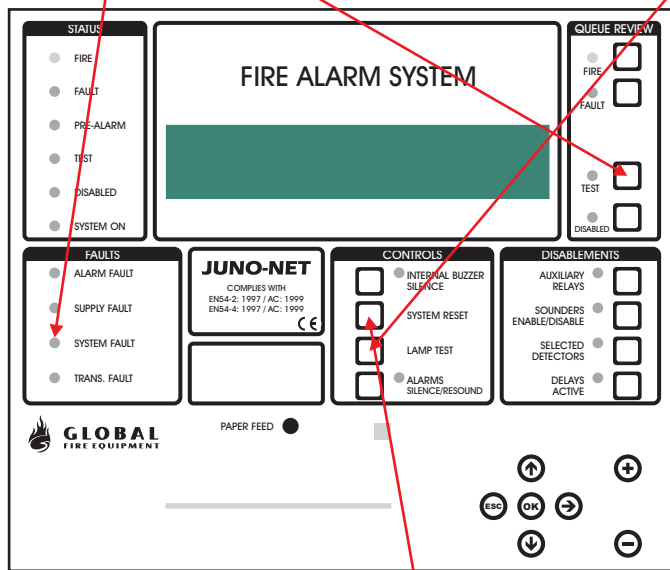
1.9 CARETAKER TEST MODE (One-Man Walk-Through Test) - (Authorized User Level Access)

Entry and Exit of Caretaker Test Mode

To begin, enter valid User Access Code and press OK. Press ESC once. The LCD display will show on the top line "USER ACCESS CODE LEVEL" followed by "COMPANY NAME" (if programmed) and the Date and time on the 3rd line. Only then is it possible to enter this mode. If the user is in the menu area, press the ESC key as many times as required in order for the LCD display to show the described above format.

Press the QUEUE REVIEW - TEST button first, then the CONTROLS - LAMP TEST button momentarily.

(The FAULTS - SYSTEM 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)
- The system is in ALERT MODE (pulsing sounders requested by PC graphics package)
- You are in Programming Mode
- You are Installation Mode

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

Caretaker Test Mode is exited by pressing SYSTEM RESET button.

Indication of Caretaker 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 " DETECTOR TEST MODE " will be displayed on the LCD
- The Zones in test mode will be displayed on the LCD - " ALL ZONES "

1.9 CARETAKER TEST MODE (continued...)

Logging

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

Devices Under Test

- All detectors and callpoints in all Zones will be put into test mode
- Detectors and callpoints not assigned to Zones will also 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
- The Loop Sounders connected to the same sub-panel as the detector under test will sound for 1 second
- The event is reported on the Main Panel and Repeater LCD displays for 15 seconds

Testing More Than One Device

• Detectors and callpoints 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.)

Disabling

• All disabling for sounders, loops 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).

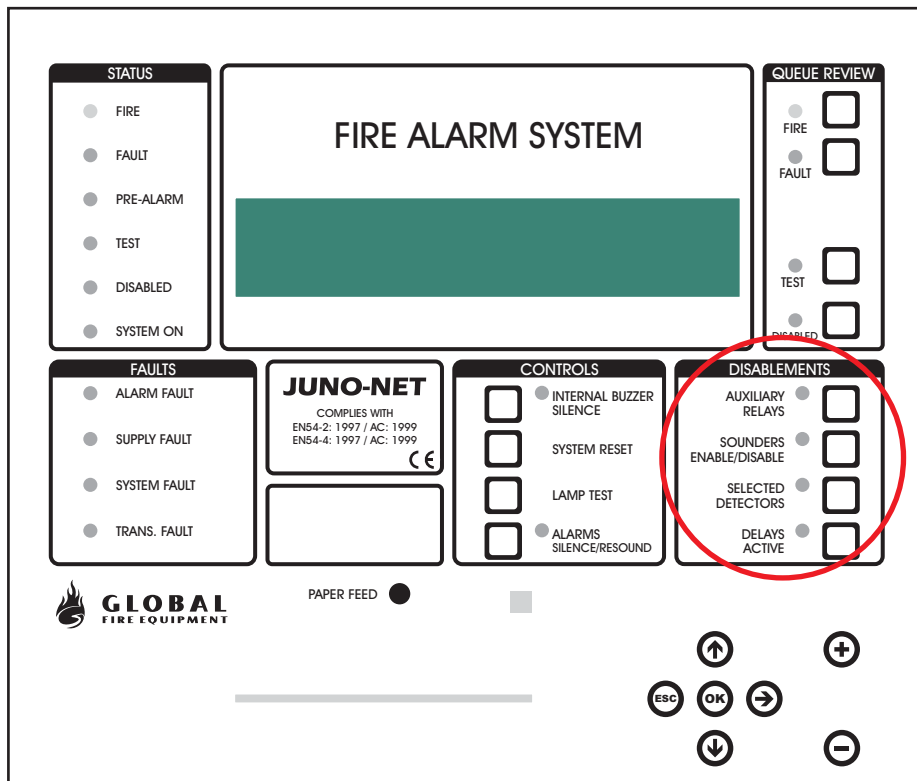
Sensor sensitivity

• This will not be changed on entry to test mode (so at night the sensitivity may be high and during the day low - depending on the system settings).

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

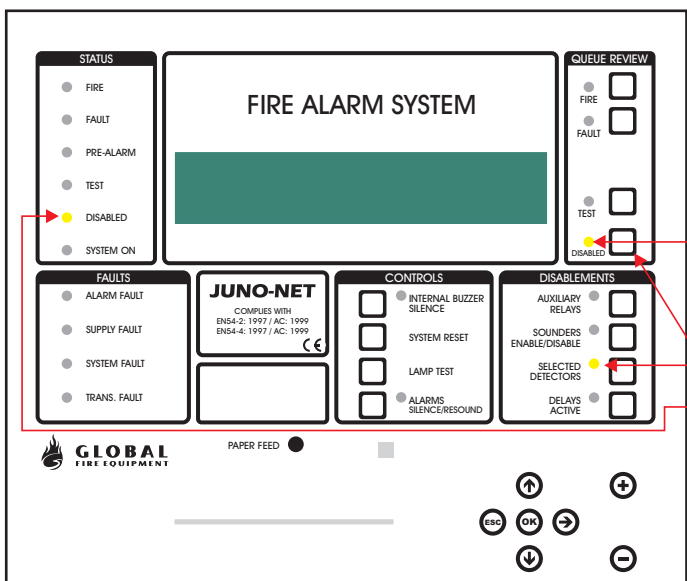
1.10 DISABLEMENTS - (Authorized User Level Access)



1.10.1 SELECTED DETECTORS

Using the programming functions (see the 'Installation & Commissioning Manual') individual detectors can be set for SELECTIVE DISABLEMENT. When the SELECTED DETECTORS 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 DETECTORS



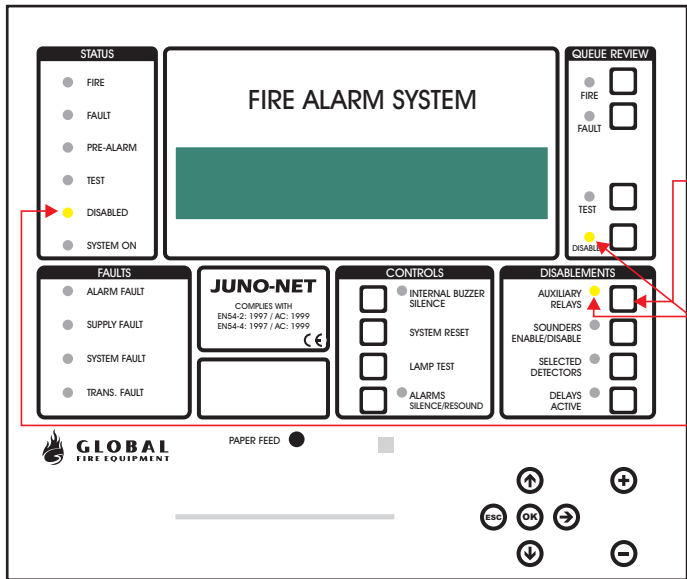
When activated:

- The SELECTED DETECTORS LED will be illuminated
- The STATUS - DISABLED LED will be illuminated
- The QUEUE REVIEW - DISABLED LED will be illuminated
- The disabled detectors can be reviewed using the DISABLED QUEUE REVIEW button
- The SELECTED DETECTORS button will only operate if there is at least one detector set to SELECTIVE DISABLEMENT.
- Re-pressing the SELECTED DETECTORS button again will re-enable the detectors.

1.10 DISABLEMENTS (continued...)

1.10.2 AUXILIARY RELAYS

The AUXILIARY RELAYS DISABLEMENT button enables and disables all relay and I/O module 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 energised FAULT relay, the FAULT I/O group, the EVAC relay as well as the I/O modules fitted to the analogue loops and, of course, the auxiliary relays.



To disable the relay and I/O module outputs press the AUXILIARY RELAYS button.

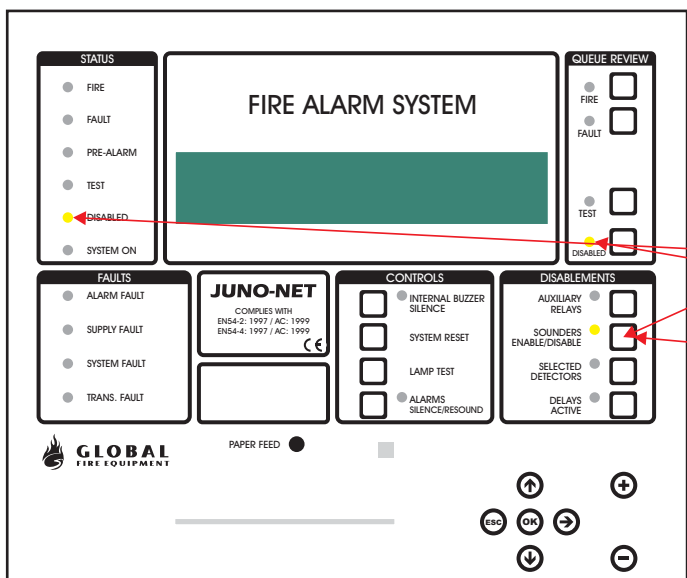
The AUXILIARY RELAYS LED illuminates AMBER.

The STATUS - DISABLED LED illuminates AMBER.

The QUEUE REVIEW-DISABLED LED illuminates AMBER.

Re-press the AUXILIARY RELAYS button to re-enable the relays and I/O modules.

1.10.3 SOUNDERS ENABLE/DISABLE



To disable all sounders in the system press the SOUNDERS ENABLE/DISABLE button.

The SOUNDERS ENABLE/DISABLE LED illuminates AMBER.

The STATUS - DISABLED LED illuminates AMBER.

The QUEUE REVIEW-DISABLED LED illuminates AMBER.

Re-press the SOUNDERS ENABLE/DISABLE button to re-enable all sounders.

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 or the arrow keys on the either the Infrared remote control or a PS2 keyboard. Press OK/Enter when menu 3 is reached.
- 3 - Using the **↑↓** arrow keys once more, select function 3.1 and press OK/Enter.
- 4 - Select the zone to be disabled using the **↑↓** arrow keys and press OK/Enter.
- 5 - The present status of the zone is shown. To change it, press OK/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

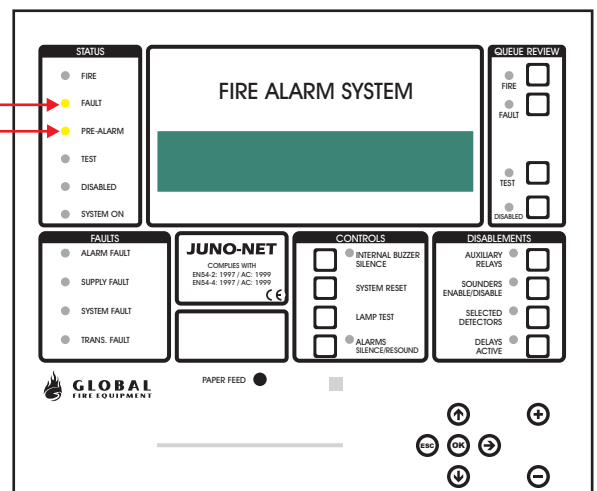
If the system detects a fault, the STATUS - FAULT LED will light up AMBER.

CALL THE MAINTENANCE ENGINEER

1.12 IF THE PANEL DISPLAYS A PRE-ALARM

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

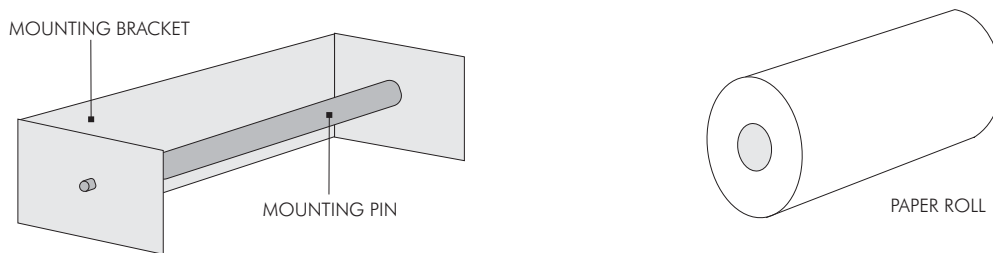
CALL THE MAINTENANCE ENGINEER



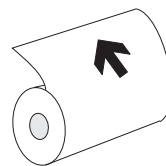
2.1 PRINTER PAPER REPLACEMENT

This procedure describes how to replace the paper when it runs out. Use of any paper not supplied by the manufacturer of this fire alarm control panel may result in shortened printer life and/or fading prints. Do not leave the paper in bright sunlight for long periods. Do not expose the paper to high temperatures.

The printer is located on the rear of the main board attached to the fascia. Unscrew the fascia screws and swing the fascia open. Then remove power from the panel, this is necessary to prevent accidental short circuiting or printer operation in the case of a fire or fault.

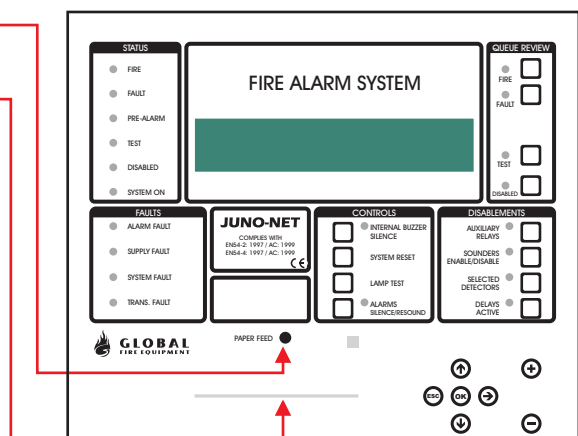


- Gently pull the sides of the mounting bracket and remove the mounting pin.
- Remove the pin from the centre of the empty paper roll and discard the empty roll.
- Place the pin inside the new roll of paper.
- Gently pull the sides of the mounting bracket again and re- insert the mounting pin with the new roll.
- The loose end of the paper goes at the top, pointing towards the main circuit board.
- Thread the paper into the printer.
- Close the fascia and replace the screws.
- Apply power to the panel.
- Press the PAPER FEED button and check that the paper feeds smoothly from the printer.
- The paper comes out through the opening in the fascia to the front of the panel.



WARNING

THE PRINTER CAN BE DAMAGED IF IT IS OPERATED WHILE PAPER CANNOT FEED FREELY. AT FIRST INSTALLATION, REMOVE THE ELASTIC BAND FROM THE PAPER.



2.2 SIM CARD REPLACEMENT

This procedure is required when a software upgrade is supplied on a SIM CARD. The original SIM CARD also holds all the system configuration (settings) so this data must first be uploaded to a PC in order that it can be downloaded into the new SIM CARD once it has been fitted.

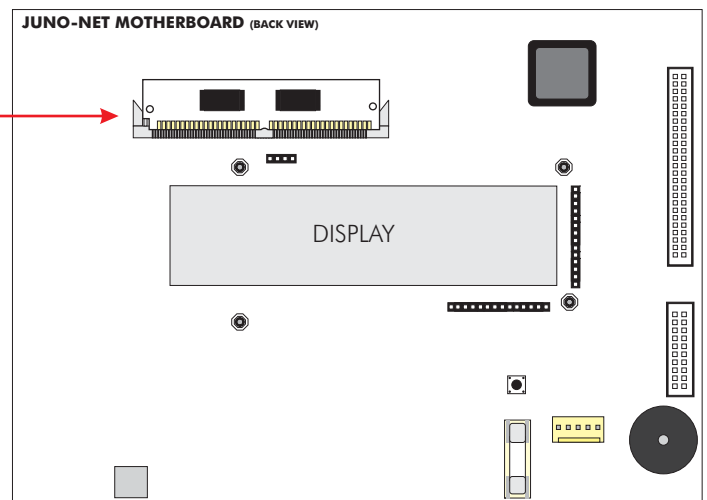
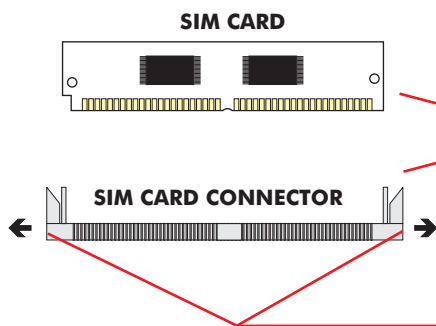
In some cases the replacement SIM CARD will have been pre-programmed with the site configuration. In this case it is not necessary to upload the configuration from the original SIM CARD.

The procedure assumes that the fascia panel is swung open and that power has been removed from the panel.

WARNING
ENSURE THAT THE POWER IS TURNED OFF



ELECTRO-STATIC SENSITIVE DEVICES (ESD)
TAKE SUITABLE ESD PRECAUTIONS WHEN
REMOVING OR INSTALLING PRINTED
CIRCUIT BOARDS.



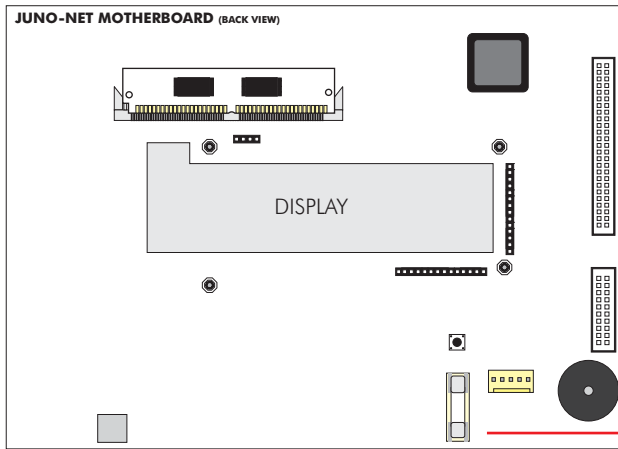
- The SIM CARD is mounted on the back of the main board.
- Release the retaining clips by pulling in the direction of the arrows (←→).
- With the retaining clips held in the released position, push the SIM CARD forward and down until it is almost horizontal with the main panel board.
- Lift the SIM CARD off the connector.
- To install the replacement SIM CARD, locate it on the connector almost horizontally with the main panel board, push it up and back gently until the retaining clips snap into position.
- Download the panel configuration from the PC.

Uploading and downloading requires a special adapter board, lead and PC software.

Instructions on how to perform the upload and download will be supplied with the PC software.

2.3 MAIN BOARD CONTROL FUSES

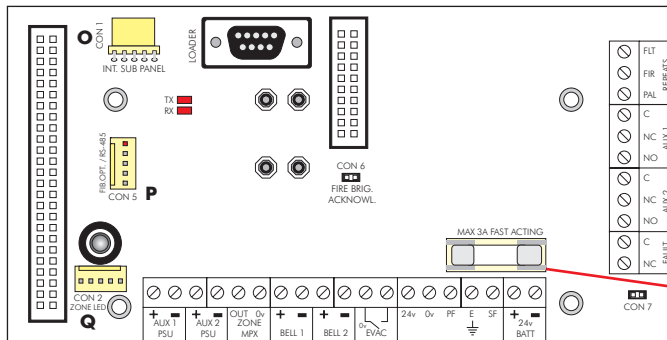
The location, function and rating of the fuse on the main control board is given below.



WARNING
ALWAYS REMOVE POWER FROM THE
PANEL BEFORE REPLACING FUSES.

2.4 CONNECTION BOARD FUSES

The location, function and rating of the fuse on the connection board is given below.

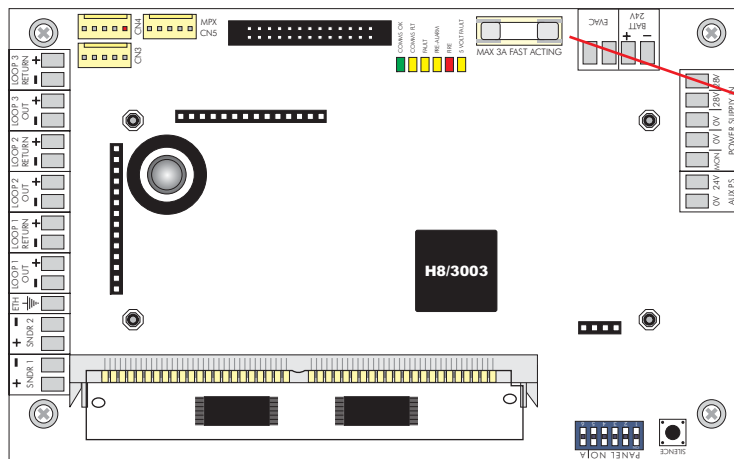


WARNING
ALWAYS REMOVE POWER FROM THE
PANEL BEFORE REPLACING FUSES.

J-NET-CON:
JUNO-NET-CONNECTOR BOARD

2.5 SUB-PANEL FUSE

The location, function and rating of the fuse on the connection board are given below.



WARNING
ALWAYS REMOVE POWER FROM THE
PANEL BEFORE REPLACING FUSES.

J-NET-SP:
JUNO-NET
SUB-PANEL BOARD

2.6 BATTERY VOLTAGE AND CHARGER CHECKS

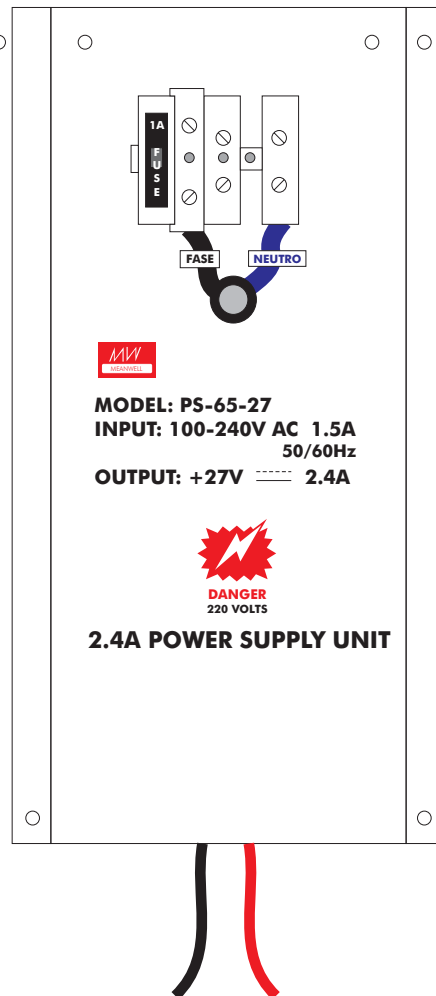
On the main panel and sub-panels (if fitted) measure the battery voltage. This should be 28.5V +/- 0.2V. Switch off the primary supply and check that the battery voltage does not drop significantly. Carry out a test on a detector or manual callpoint with the primary supply disconnected to ensure that the batteries are healthy.

NOTE: BATTERIES MUST BE REPLACED PERIODICALLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. ALWAYS USE SEALED LEAD ACID BATTERIES.

2.7 REPLACING THE ELECTRICAL MAINS FUSE

On the main panel and sub-panels (if fitted) locate the power supply unit. On the aluminum covering you will find a 3 way fused terminal block. Lift the protruding grasp handle. Inside you will find the fuse housing. For convenience, there is also place to store a spare fuse.

| PSU | FUSE |
|--------|---------------|
| 2.4Amp | = 4Amp Fuse |
| 5.6Amp | = 6.3Amp Fuse |



2.8 USE OF PROGRAMMING FUNCTIONS FOR MAINTENANCE

The following programming functions can be used to check that the panel is operating correctly.

Note that to use these functions the installer needs to have granted 'User Access' to the following functions. By default, access is denied.

Entry to Programming Mode is covered in the section 2.8.

1-1 Display Historic Log

The panel logs all events in an internal event log. It can store a rolling 2000 entries. When it is full the latest entry is added and the oldest entry discarded.

Help is automatically displayed on entry to the function because it is not possible to display a log entry and help at the same time.

To select a specific entry, input the number and then press ENTER.

1-2 Print Historic Log Entries

Select which entries you wish to print and press ENTER.

If the printer is already in use it is necessary to wait until the printer is free before starting a new print job.

If you wish to stop a printout enter the function again and you will be given the option of canceling the printout.

This function cannot be accessed remotely (from a Repeater or the PC Graphics Interface).

Nothing will be printed if the printer is disabled by (function 8-4-3).

Note that once the log is full the log entry number (0001 - 2000) will change for each logged event but log entry 0001 will be the oldest entry and 2000 will be the most recent.

1-3 Clear Historic Log

Clears the Historic Log.

1-4 Print Loop/Device Set-up

Prints all the device information for the specified Analogue Loop. The information printed includes the device address, type, zone, text label and whether it is currently disabled.

If the printer is already in use it is necessary to wait until the printer is free before starting a new print job.

If you wish to stop a printout enter the function again and you will be given the option of canceling the printout.

This function cannot be accessed remotely (from the PC Graphics software or a Repeater).

Nothing will be printed if the printer is disabled by (function 8-4-3).

1-5 Read/Clear Autostart Count

Every time the Main Panel has a Master Reset or it's power is cycled the Autostart count is incremented. SYSTEM RESETs from the front panel button do not increment the Autostart count.

7-1 Device Count, Type & Value

Use this function to check that all Sub-panels are present and that all devices are present.

Use +/- to select the Analogue Loop number and 0-9 and ▲ ▼ to select the device address on that loop.

This function is also useful to confirm the address of the various different types of devices connected to the Analogue Loops.

Note that in Installation Mode all information is live i.e. the count of devices will change as the panel learns and device types will be updated if they change. In Active Mode only the device value is live.

7-2 Test Sounders

Use this function to test the audibility of the sounders in a more comfortable manner than pressing SOUND ALARMS.

Main Panel

The Main Panel Conventional Sounders will sound for 1 second then be silenced for 9 seconds.

Standard Sub-panels

Conventional Sounders and Loop Sounders are operated for 1 second then silenced for 9 seconds.

Integrated Sub-panels

Conventional Sounders and Loop Sounders are operated for 1 second then silenced for 9 seconds.

Conventional Sounder operation for a Repeater Integrated Sub-panel will be synchronized to the Loop Sounder operation.

7-3 Sounders on Test Activation

This function allows you to choose an audible confirmation that a device has detected a fire. The audible confirmation consists of a 1 second period of sounder operation. The settings selected by this function are used by '7-4 Test Zones' and '6-4-1 Activate ASET Mode (SAM)'.

ALL SOUNDERS ON DETECTOR TEST activates the Main Panel Conventional Sounders and all Conventional Sounders and Loop Sounders on the Sub-panel under test.

SUB_PANEL SOUNDERS ON DETECTOR TEST only operates the Conventional Sounders and Loop Sounders on the Sub-panel under test. I.e. The Sub-panel that the detector under test is physically connected to.

Note - using this function AFTER '7-4 Test Zones' and '6-4-1 Activate ASET Mode (SAM)' will NOT change the settings for the zones already in test mode and the loops already in ASET mode.

7-4 Test Zones

Select the Zones you wish to put into test mode.

Exit programming mode, but DO NOT press SYSTEM RESET as this clears all test modes.

In test mode when a detector is activated the LED on the detector will be illuminated and the event will be reported on the Main Panel (and Repeaters) for 15 seconds. If selected then the sounders will also operate for 1 second. The LED on the detector is not latched and will clear when the alarm level falls below the alarm threshold for the device.

Pressing TEST QUEUE REVIEW will report the zones that are in Test Mode.

7-5 Sub-Panel LED Test

This function is used to confirm that all the Standard Sub-panel LEDs are functional.

Each of the LEDs on all sub-panels will operate in sequence.

The test is only performed whilst LED TEST MODE is shown within this programming function. There is no need to press ENTER just use UP/DOWN to toggle between LED NORMAL MODE and LED TEST MODE.

This test has no effect on Integrated Sub-panels.

Upon exit of this programming function normal functionality is automatically restored.

7-6 Light LED on device

This function is used to confirm the physical location of a specific detector.

For each Sub-panel only one detector LED can be lit at any one time.

Select the device and SWITCHED ON and press ENTER. The device will typically take a few seconds to respond.

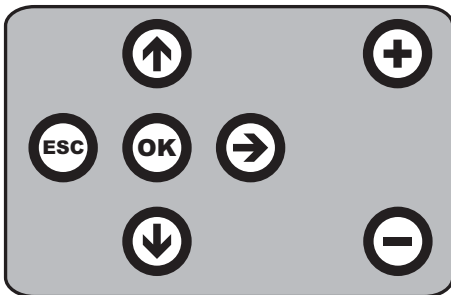
Selecting NORMAL for that device, or selecting SWITCHED ON for another device on the same Sub-panel, will clear the LED on the first device.

2.9 GETTING INTO PROGRAMMING MODE

Programming mode is accessed via the front panel 7 key keypad or the miniature infra-red keypad (IR Keypad) or by connecting a PC (PS2) keyboard to the Main Panel. It is also possible to upload and download settings to a PC but to do this you must first enter the panel programming mode.

If using the front panel's keypad, the **↑ ↓ →** keys will have the same function as the equivalent keys on the IT Remote Control Keypad (or PS/2 keyboard). The OK key is equivalent to ENTER and the ESC key will perform the same functions as the ESC key on the remote IR keypad

FRONT PANEL KEYPAD



OK Used to confirm entry of any data or selection. Same function as the ENTER key on IR remote control.

↑ Used to increase selection or number. Equivalent function as UP arrow key on IR remote control.

↓ Used to decrease selection or number. Equivalent function as UP arrow key on IR remote control.

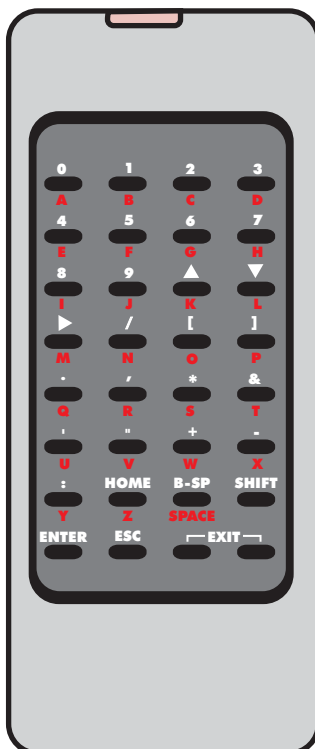
ESC Escape key. Used to exit a particular function. Equivalent function as ESC arrow key on IR remote control.

+ Used to increase loop number. Equivalent function as + arrow key on IR remote control.

- Used to decrease loop number. Equivalent function as - arrow key on IR remote control.

Note: It is not possible to introduce text for labels using the front panel keypad.

INFRA-RED KEYPAD



HOME: Return to first loop, zone, device etc.

B-SP: Backspace

SHIFT: Toggle this keypad to switch from alpha-numeric to numeric

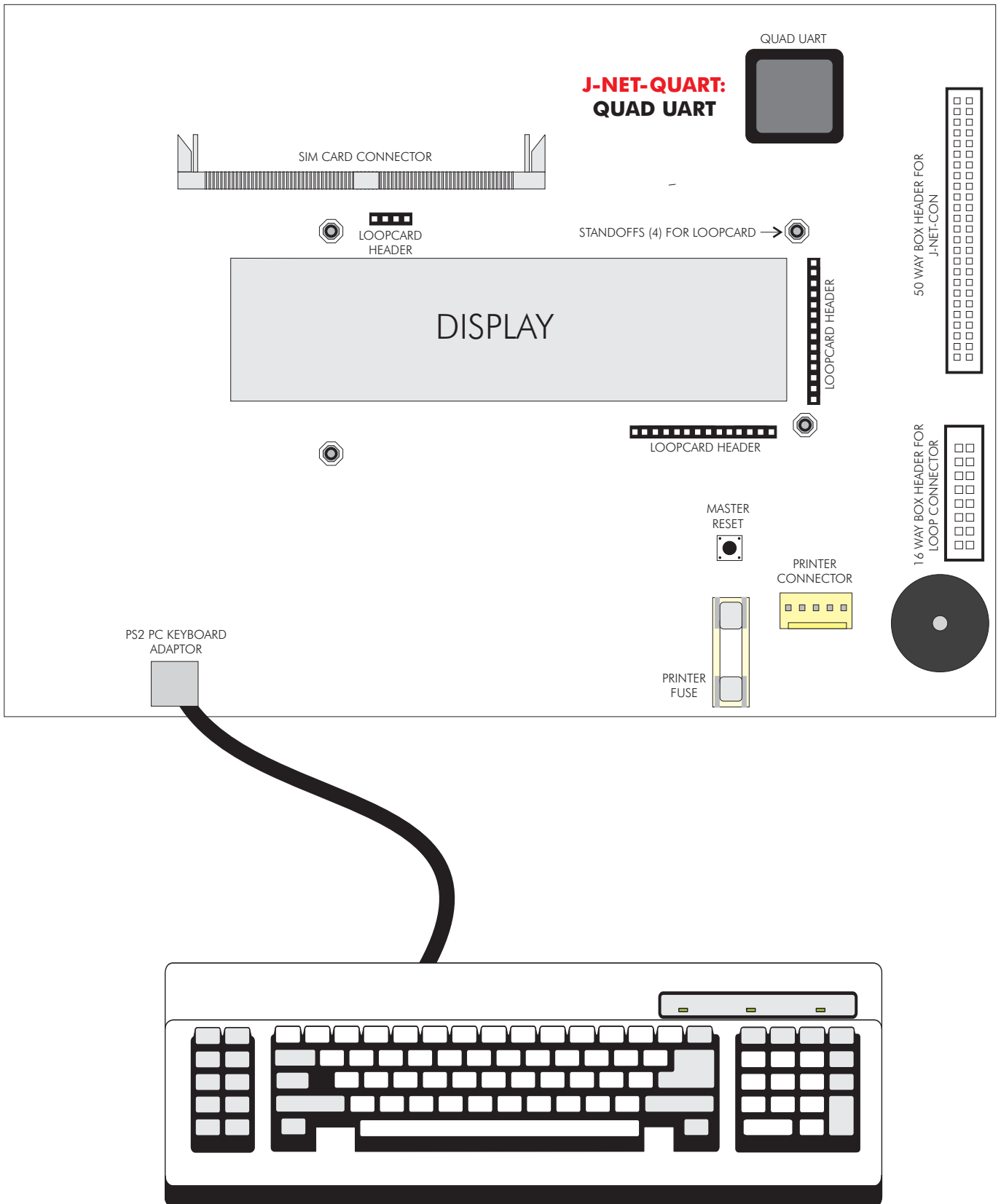
ENTER: Accept current selection

ESC.: Reject. (ESCape from current selection)

EXIT: Press both keys simultaneously to stop programming

Connecting A PS2 PC Keyboard To The Main Panel

JUNO-NET MOTHERBOARD (BACK VIEW)



The IR Keypad is typically the most convenient method to program the system. The sensor for the IR Keypad is just below the SOUND ALARMS button on the Main Panel and on a Repeater. Each time a key is pressed on the IR Keypad the Main Panel will beep.

If no beeps are audible then check the batteries in the IR Keypad.

The IR Keypad uses 2 x AAA batteries.

The IR Keypad Keys

To access the characters in RED, first press the SHIFT KEY. To return to the characters in BLACK press the SHIFT KEY again.

Each time a key press is received by the panel the panel emits a beep. The beeps when SHIFT is on are of a higher pitch than when SHIFT is off.

0-9 are used to input numbers

▲ and ▼ are used to select items

B-SP and ► are often used to change fields (move the cursor)

+/- are often used to select the loop

ENTER is used to select items and to store changes

ESC is used to abort changes and exit

HOME is often used to go back to the start of a function

Pressing both EXIT keys exits programming mode.

Help

Where possible help is displayed automatically. However additional help is sometimes available if you press the help key ':' the colon.

The first press will display help for 7 seconds, a second press will ensure the help is displayed for 20 seconds. Pressing any key whilst help is displayed will clear the help but this key press will be ignored.

Logging In



To enter programming mode you need to log in.

The Main Panel must be powered up and must have initialised itself i.e. NOT be showing the 'INITIALISING' message.

Press ENTER on the Panel Keypad, IR Keypad (or keyboard). You must now input your unique customer access code (supplied with the panel). You have unlimited attempts but if code entry is not started within 10 seconds then the panel will revert back to its default screen. While entering the code you are allowed up to 5 seconds between key presses.

Function Selection

The programming functions are arranged using a menu system.

To select a function or sub-menu use either   and ENTER or 0-9 and ENTER.
HOME takes you to "1-Review".
ESC takes you up a menu level.

Any number presses (0-9) will append a digit to what you see unless :

- 1) You are at the very top (1 - Review) then the first press selects the first digit.
- 2) You are at the bottom then the press replaces the last digit.

The top level menus are:

- 1 Review Historic Log
- 2 Text Descriptions & Names
- 3 Zones - Disable & Assign
- 4 Sounders - Disable & Assign
- 5 Input/Output - Disable & Assign
- 6 Device Set-up
- 7 Monitor Device Counts & Test
- 8 General

Most functions operate in a consistent manner using the standard keys. The item that is being changed is usually highlighted with a flashing cursor.

2.10 LOGBOOK

In accordance with EN54 part 14, it is the user's responsibility to maintain a logbook and to record all events resulting from or affecting the system. The logbook should be kept in a place accessible to authorised persons (preferably near the control panel).

One or more identifiable individuals should be appointed to oversee or carry out all entries in the logbook. The names of these persons (and any changes of responsible person) should be recorded.

All events should be properly recorded (events include real and false fire alarms, faults, pre-alarm warnings, tests, temporary disconnections and service visits). A brief note of any work carried out or outstanding should be made.

Sample pages of the logbook are provided here and can be photocopied to produce a logbook that conforms to EN54-14. The sample below is for the reference data (e.g. the name of the responsible person), whilst the sample on the next page is for entry of event data.

REFERENCE DATA

Name and address:

Responsible person: _____ Date: _____

_____ Date: _____

_____ Date: _____

_____ Date: _____

The system was installed by: _____

and is maintained under contract by: _____

_____ until: _____

Telephone number: _____

should be contacted if service is required.

2.10 EVENT DATA SHEET

| DATE | TIME | EVENT | ACTION REQUIRED | DATE COMPLETED | INITIALS |
|------|------|-------|-----------------|----------------|----------|
| | | | | | |