

Mx-1000 Series



Technical Data Sheet



**User Manual
for
Mx-1002, Mx-1004, Mx-1008, Mx-1016 & Mx-1032
Conventional Fire Alarm Control Panels
and
Mx-1108, Mx-1116 & Mx-1132 Repeater Panels**

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Advanced
ELECTRONICS LIMITED

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Mx-1000 Series

Danger

This equipment contains hazardous voltages that can cause death, serious personal injury, or equipment damage.

This equipment contains no user serviceable parts. Refer all maintenance to suitably qualified personnel.

2 User Operation - Fire and Fault Conditions

2.1 *If a fire is detected:*

- On the Fire Alarm Panel:
 - The general Fire LED will flash and the buzzer will sound
 - The relevant zone Fire LED will flash, indicating the location of the fire.
 - If the Delay is OFF [Delay LED off]:
 - The Fire Routing output and LED will operate immediately
 - The Fire Alarm sounders will operate immediately
 - The Fire Protection output will operate immediately
 - If the Delay is ON [Delay LED flashing]:
 - The Fire Routing output and LED will operate after a delay [if the Fire Routing fault/disabled LED is illuminated].
 - The Fire Alarm sounders will operate after a delay [if Sounder fault/disabled LED is illuminated].
 - The Fire Protection output will operate after a delay [if Fire Protection fault/disabled LED is illuminated].
- Locate the source of the fire alarm (an LED will be visible on the detector which has been activated).

2.2 *To Silence the fire alarm sounders:*

- Turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Silence Alarms/Resound button once only.
- The fire alarm sounders will become silent.
- The General Fire LED and the Zone Fire LED will become steady.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

2.3 *To Resound the fire alarm sounders after they have been silenced:*

- Turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Silence Alarms/Resound button once only.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

2.4 *To Reset the panel from a Fire Alarm:*

- After the fire has been extinguished, turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Reset button.
- The General Fire LED and the Zone Fire LED will clear.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

2.5 To operate the fire alarm sounders in Evacuate Mode:

- Turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Evacuate button.
- The Evacuate LED will light and the panel buzzer will operate.
- All fire alarm sounders will operate.
- Press the Silence/Resound Alarm button to silence the fire alarm sounders and clear the Evacuate LED.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

2.6 If a fault is detected:

- The panel buzzer will sound.
- The General Fault LED will flash.
- One or more fault LEDs will flash; identifying which element of the system is faulty.
- When the fault is corrected the fault indication will clear automatically unless the panel is configured to latched fault mode – in which case, operating the Reset button will clear the fault indication.

2.7 To Silence the Buzzer:

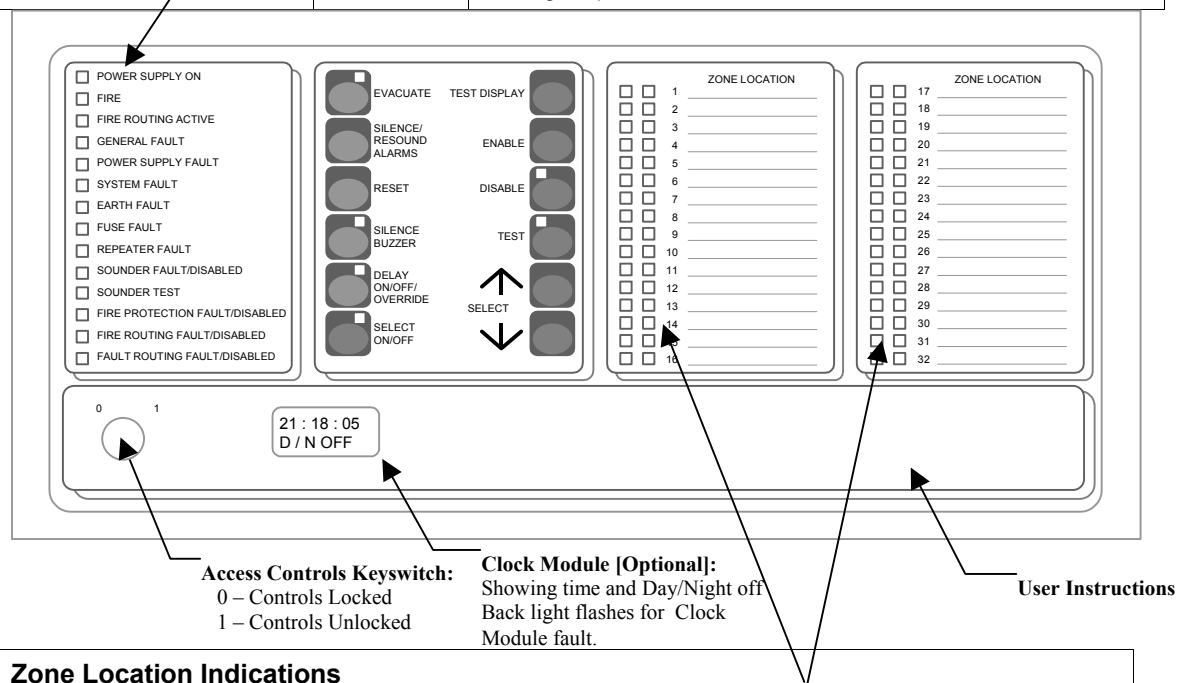
- Press the Silence Buzzer button.
- The Silence Buzzer button LED will light.
- The buzzer will silence.

3 User Indications and Controls

This section gives an overview of the functions available to the end user.

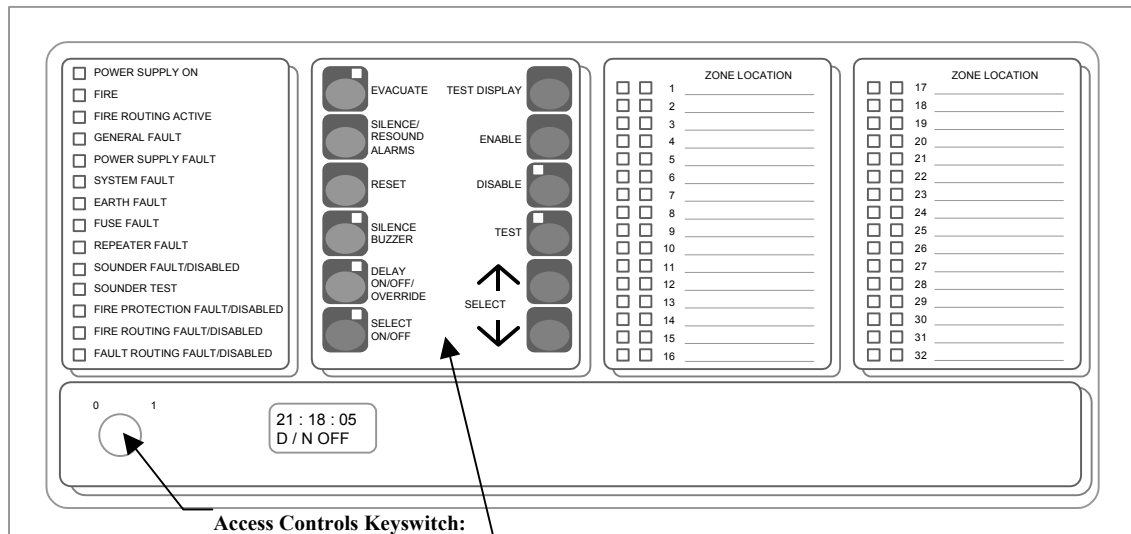
3.1 User Indications [showing optional clock module]

General Indicator Section		
Indicator Description	Colour	Operating Condition
Power Supply On	Green	Steady indication for Mains or Standby power On.
Fire	Red	Flashes on any new fire alarm condition, changing to a steady indication on operation of Silence Alarms.
Fire Routing Active	Red	Steady indication when the Fire Routing Output is active.
General Fault	Yellow	Flashes for any fault condition.
Power Supply Fault	Yellow	Flashes for mains or standby power supply/charge fault
System Fault	Yellow	Steady indication to indicate Microcontroller or Memory Failure. Flashes to indicate Engineer's Configuration Mode active.
Earth Fault	Yellow	Flashes for any positive or negative power supply earth fault.
Fuse Fault	Yellow	Flashes for any auxiliary supply fuse failure
Repeater Fault	Yellow	Flashes for any Repeater fault or repeater communication fault,
Sounder Fault/Disabled	Yellow	Flashes for any sounder fault. Steady for sounders disabled.
Sounder Test	Yellow	Steady indication while sounder walk test is active.
Fire Protection Fault/Disabled	Yellow	Flashes for a fault on the Fire Protection Output. Steady when Fire Protection Output is disabled.
Fire Routing Fault/Disabled	Yellow	Flashes for a fault on the Fire Routing Output. Steady when Fire Routing Output is disabled.
Fault Routing Fault/Disabled	Yellow	Flashes for a fault on the Fault Routing Output. Steady when Fault Routing Output is disabled.



Zone Location Indications		
Indicator Description	Colour	Operating Condition
User Generated Zone Location Text	Red	Flashes when zone is in a fire condition, turning to steady on operation of Silence Alarms.
User Generated Zone Location Text	Yellow	Flashes when zone is in a fault condition. Illuminates steady when zone is disabled or in test.

3.2 User Controls [showing optional clock module]



Access Controls Keyswitch:
0 – Controls Locked
1 – Controls Unlocked

Switch Description	Functionality	Button Availability
Evacuate	Operates all sounders continuously and lights the Evacuated LED adjacent the button until the silence button is operated	When controls are unlocked
Silence/Resound Alarms	Following a fire alarm condition, 1st operation stops sounders. The General Fire LED and the Zonal fire LED will change from flashing to steady. 2nd operation restarts the previously silenced sounders	When controls are unlocked
Reset	Clears the panel display, resets the zones, outputs and operates the reset relay.	When controls are unlocked and [if silence before reset is configured] alarms silence switch has been operated.
Silence Buzzer	1] Press to stop the buzzer sounding in fire or fault conditions. 2] In 2 Stage Delay Mode, with stage 1 delay running, press to start stage 2 delay otherwise all delayed outputs operate when Stage 1 timer times out.	When controls are locked or unlocked When the panel is in the fire condition and the delay is running. Controls are locked or unlocked
Delay On/Off/Override	1] Press once to Enable the delay mode, lighting the adjacent delay on LED. Press again to disable the delay mode and turn off the LED 2] Overrides the delay when delay is running, turning the delay mode and the LED off. All delayed outputs will operate immediately.	1] When controls are unlocked and delay period is set to a value > 0. 2] When the panel is in the fire condition and the delay is running.
Select On/Off	Enables the User select feature [Select ↑ Select ↓] for selection of zones or outputs via for disablement/re-enablement and also Day/Night On/Off selection and setting current time on clock module (when fitted).	When controls are unlocked
Test Display	Press to illuminates all LEDs on the display and operate the buzzer. All indications remain active for approx 5 seconds after button release. Also displays alarm counter on clock module (when fitted).	When controls are locked or unlocked
Enable	Press to clear the disablement or test condition on a zone or output selected via the User Select feature.	When controls are unlocked, the Select switch has been operated and a zone or output has been selected.
Disable	Press to disable a zone or output selected via the User Select feature.	As above.
Test	Press to initiate the One Man Test on sounders or zones as selected via the User Select feature.	As above.
Select ↑ Select ↓	Used to scroll the cursor indication through the zone and output fault LEDs on the display to select a zone or output for disablement, or test. [LED illuminated when Select Mode is active]. Also scrolls through clock module menu (when fitted).	When controls are unlocked and the Select switch has been operated.

4 User Controls – Disablement and Test Conditions.

4.1 To Disable/Enable any Zone or Zones.

- To Access disable/enable mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the zone:
 - Use the Select ↓ button to move the pulsed cursor indication down through the fault LEDs until it pulses the required zone. [The Select ↑ button moves the cursor up].
- To disable the selected zone:
 - Press the Disable button to disable the selected zone.
 - The zone fault/disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved on.
 - The general Disablement LED will light.
- To enable the selected zone:
 - Press the Enable button to enable the selected zone.
 - The zone fault/disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Disablement LED will be cleared if no other disablements are present.
- To quit the disable/enable mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.2 To Disable/Enable all Sounders.

- To Access disable/enable mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the sounders:
 - Use the Select ↑ button to move the pulsed cursor indication up through the fault LEDs until it pulses the Sounder Fault/Disabled and Sounder Test LEDs. [The Select ↓ button moves the cursor down].
- To disable the sounders:
 - Press the Disable button to disable the sounders.
 - The Sounder Fault/Disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved.
 - The general Disablement LED will light.

- To enable the sounders:
 - Press the Enable button to enable the sounders.
 - The Sounder Fault/Disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Disablement LED will be cleared if no other disablements are present.
- To quit the disable/enable mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.3 To Disable/Enable the Fire Routing Output.

- To Access disable/enable mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the Fire Routing Output:
 - Use the Select ↑ button to move the pulsed cursor indication up through the fault LEDs until it pulses the Fire Routing Fault/Disabled LED. [The Select ↓ button moves the cursor down].
- To disable the Fire Routing Output:
 - Press the Disable button to disable the Fire Routing Output.
 - The Fire Routing Fault/Disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved.
 - The general Disablement LED will light.
- To enable the Fire Routing Output:
 - Press the Enable button to enable the Fire Routing Output.
 - The Fire Routing Fault/Disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Disablement LED will be cleared if no other disablements are present.
- To quit the disable/enable mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.4 To Disable/Enable the Fault Routing Output.

- To Access disable/enable mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the Fault Routing Output:

- Use the Select ↑ button to move the pulsed cursor indication up through the fault LEDs until it pulses the Fault Routing Fault/Disabled LED. [The Select ↓ button moves the cursor down].
- To disable the Fault Routing Output:
 - Press the Disable button to disable the Fault Routing Output.
 - The Fault Routing Fault/Disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved.
 - The general Disablement LED will light.
- To enable the Fault Routing Output:
 - Press the Enable button to enable the Fault Routing Output.
 - The Fault Routing Fault/Disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Disablement LED will be cleared if no other disablements are present.
- To quit the disable/enable mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.5 To Disable/Enable Fire Protection Output[s].

- To Access disable/enable mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the Fire Protection Output:
 - Use the Select ↑ button to move the pulsed cursor indication up through the fault LEDs until it pulses the Fire Protection Fault/Disabled LED. [The Select ↓ button moves the cursor down].
- To disable the Fire Protection Output:
 - Press the Disable button to disable the Fire Protection Output.
 - The Fire Protection Fault/Disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved.
 - The general Disablement LED will light.
- To enable the Fire Protection Output:
 - Press the Enable button to enable the Fire Protection Output.
 - The Fire Protection Fault/Disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Disablement LED will be cleared if no other disablements are present.
- To quit the disable/enable mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.6 To Select/Clear One Man Zone Test.

- To access test selection mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the zone to be tested:
 - Use the Select ↓ button to move the pulsed cursor indication down through the fault LEDs until it pulses on the required zone. [The Select ↑ button moves the cursor up].
- To apply the test mode to the selected zone:
 - Press the Test button to activate the test condition on the selected zone.
 - The zone fault/disabled LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved on.
 - The general Test LED will light.
- To clear the test mode on the selected zone:
 - Press the Test button again or press the Enable button to clear the test condition enabling normal operation of the selected zone.
 - The zone fault/disabled LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Test LED will be cleared if no other circuits are in the test condition.
- To quit the zone test selection mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.7 To Select/Clear One Man Sounder Test.

- To access test selection mode:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
 - Press the Select On/Off button to enter the Select Mode:
 - The Select On LED will light.
 - The cursor indication will pulse the yellow Zone 1 fault/disabled/test LED.
- To select the sounders:
 - Use the Select ↑ button to move the pulsed cursor indication up through the fault LEDs until it pulses the Sounder Fault/Disabled and Sounder Test LEDs. [The Select ↓ button moves the cursor down].
- To activate the sounder test:
 - Press the Test button to start the sounder test.
 - The Sounder Test LED will change to the “On-flash” indication while the cursor is on it, changing to steady if the cursor is moved.
 - The general Test LED will light.
 - The sounders will operate for 2 seconds every 15 seconds until the test mode is switched off.

- To terminate the sounder test:
 - Press the Test button again or press the Enable button to clear the test condition enabling normal operation of sounders.
 - The sounders will silence.
 - The Sounder Test LED will change to the “Off-flash” indication while the cursor is on it, changing to off if the cursor is moved on.
 - The general Test LED will be cleared if no other circuits are in the test condition.
- To quit test selection mode:
 - To exit the Select Mode, press the Select On/Off button.
 - The Select On LED will clear.
 - The cursor indication will clear.
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.8 To Enable/Disable Delay Mode

- To access delay mode selection:
 - Turn the Access Controls Keyswitch on the panel door to position “1”.
- To enable the delay:
 - Press the Delay On/Off/Override button once to enable the Delay Mode.
 - The Delay On/Off LED will light.
 - The disable switch LED will light.
 - The fault/disabled LED for each delayed output will light.
- To display the outputs configured to be delayed:
 - With the panel in quiescent condition, turn the Access Controls Keyswitch to position “1”.
 - Press and hold the disablement button.
 - The fault/disabled LED on each output set to the delay mode will illuminate.
 - The indications will clear when the Disablement button is released.
- To disable the delay:
 - With the Delay On, press the Delay On/Off/Override button once to disable the Delay Mode.
 - The Delay On/Off LED will clear.
 - The disable switch LED will clear.
 - The fault/disabled LED for each delayed output will clear.
- To quit delay mode selection:
 - Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.9 To Override the Delay Mode

- When the Delay is running:
 - The Delay On/Off LED will flash.
 - The general Fire and zone fire LEDs will flash.
 - The panel buzzer will operate.
- Press the Delay On/Off/Override button while the Delay On/Off LED is flashing to override the delay allowing all delayed outputs to operate immediately.

4.10 To Extend the Delay [from 1st stage to 2nd Stage]

- When the panel is configured to the two stage delay mode and before 60 seconds has elapsed since the fire alarm triggered:
 - Press the Silence Buzzer button.
 - The Silence Buzzer button LED will light.
 - The buzzer will silence.
 - The 2nd stage delay will start.

4.11 Silencing the Alarms During the Delay:

- Turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Silence Alarms/Resound button.
 - The General Fire LED and the Zone Fire LED become steady.
 - The sounders will not operate after the delay has timed out.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

4.12 Resounding the Alarms after the Delay: [Alarms previously silenced]

- Turn the Access Controls Keyswitch on the panel door to position “1”.
- Press the Silence Alarms/Resound button.
 - The General Fire LED will flash.
 - The sounders operate.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

5 User Operating Instructions for the Optional Clock Module

The normal time display (no LCD backlight) is as follows:

HH:MM:SS D/N ON	or	HH:MM:SS D/N OFF
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5.1 To display the alarm event counter

To display the current alarm, press the Test Display button. The Alarm Count display is as follows:

ALARMS: - NNNN

Note: If the ZERO DIL switch on the timer module is in the ON position, the alarm counter is cleared to zero and the alarm counter is not functional. In this condition, the normal time will still be displayed and the LCD backlight will illuminate when the Test Display is operated but the above message will not be displayed.

The Test Display button does not need to be held pressed. The Alarm Count will be displayed for 5 seconds and then the display will revert to normal.

5.2 To access the User Clock Module Edit Functions

Select the Access Control key switch to position "1".

Press SELECT ON/OFF button.

Use the ↑↓ buttons to scroll the cursor LED indication through the selectable options on the panel display LED indications until the LCD backlight illuminates. The normal time display is:

HH:MM:SS D/N ON	or	HH:MM:SS D/N OFF
--------------------	----	---------------------

- To select Day/Night Mode On/Off:
 - Press the SELECT ON/OFF button to enter Day/night mode On/Off Set Display:

D/N ON Change?	or	D/N OFF Change?
-------------------	----	--------------------

- Pressing ENABLE (+) or DISABLE (-) toggles the setting between D/N ON and D/N OFF.
- To set the current time:
 - Press SELECT ↓ to enter the current Time Set Display:

HH:MM:SS Time Set	HH flashing
----------------------	----------------

- Press ENABLE (+) or DISABLE (-) to adjust the hours (HH) to the desired value (0-23).
 - Press SELECT ↓ to select the minutes:

HH:MM:SS Time Set	MM flashing
----------------------	----------------

- Press ENABLE (+) or DISABLE (-) to adjust the minutes (MM) to the desired value (0-59).
- Press SELECT ↓ to select the seconds:

HH:MM:SS Time Set	SS flashing
----------------------	----------------

- Press ENABLE (+) or DISABLE (-) to reset the seconds (SS) to zero.
- Press SELECT ↓ to exit to the Day/Night Mode On/Off Set Display:

D/N ON Change?	D/N OFF Change?
-------------------	--------------------

Pressing SELECT ↓ repeats the cursor/display changes as above.

Pressing SELECT ↑ repeats the cursor/display changes as above in reverse.

- To exit Clock Module Menu:
 - Press SELECT ON/OFF: Module switches off the LCD backlight and exits configuration mode. The normal time display is:

HH:MM:SS D/N ON	or	HH:MM:SS D/N OFF
--------------------	----	---------------------

- On completion of editing, return the Access Control key switch to position "0".

6 Repeater Panel User Operation - Fire and Fault Conditions

6.1 *If a fire is detected:*

- On the Repeater Panel:
 - The general Fire LED will flash and the buzzer will sound
 - The relevant zone Fire LED will flash, indicating the location of the fire.
 - If the Delay is OFF [Delay LED off]:
 - The Fire Routing output and LED will operate immediately
 - The Fire Alarm sounders will operate immediately
 - The Fire Protection output will operate immediately
 - If the Delay is ON [Delay LED flashing]:
 - The Fire Routing output and LED will operate after a delay [if the Fire Routing fault/disabled LED is illuminated].
 - The Fire Alarm sounders will operate after a delay [if Sounder fault/disabled LED is illuminated].
 - The Fire Protection output will operate after a delay [if Fire Protection fault/disabled LED is illuminated].
- Locate the source of the fire alarm (an LED will be visible on the detector which has been activated).

6.2 *To Silence the fire alarm sounders:*

- Turn the Access Controls Keyswitch on the repeater door to position “1”.
- Press the Silence Alarms/Resound button once only.
- The fire alarm sounders will become silent.
- The General Fire LED and the Zone Fire LED will become steady.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

6.3 *To Resound the fire alarm sounders after they have been silenced:*

- Turn the Access Controls Keyswitch on the repeater door to position “1”.
- Press the Silence Alarms/Resound button once only.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

6.4 *To Reset the panel & repeater(s) from a Fire Alarm:*

- After the fire has been extinguished, turn the Access Controls Keyswitch on the repeater door to position “1”.
- Press the Reset button.
- The General Fire LED and the Zone Fire LED will clear.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

6.5 To operate the fire alarm sounders in Evacuate Mode:

- Turn the Access Controls Keyswitch on the repeater door to position “1”.
- Press the Evacuate button.
- The Evacuate LED will light and the repeater buzzer will operate.
- All fire alarm sounders will operate.
- Press the Silence/Resound Alarm button to silence the fire alarm sounders and clear the Evacuate LED.
- Set the Access Controls Keyswitch back to position “0” to lock the controls.

6.6 If a fault is detected:

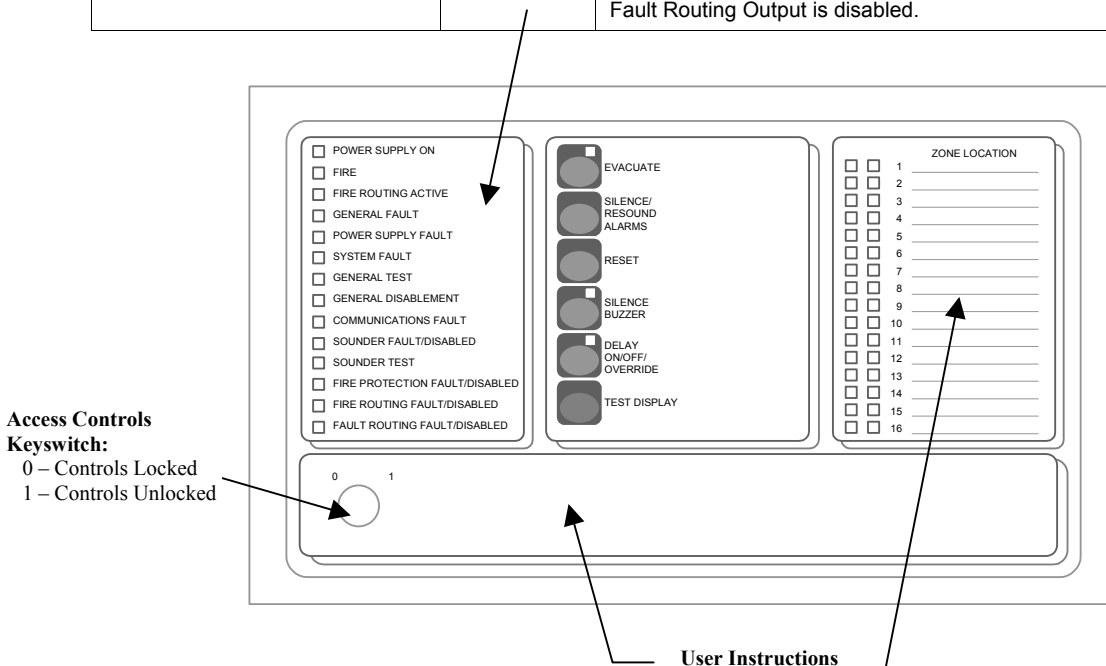
- The repeater buzzer will sound.
- The General Fault LED will flash.
- One or more fault LEDs will flash; identifying which element of the system is faulty.
- When the fault is corrected the fault indication will clear automatically unless the panel is configured to latched fault mode – in which case, operating the Reset button will clear the fault indication.

6.7 To Silence the Buzzer:

- Press the Silence Buzzer button.
- The Silence Buzzer button LED will light.
- The buzzer will silence.

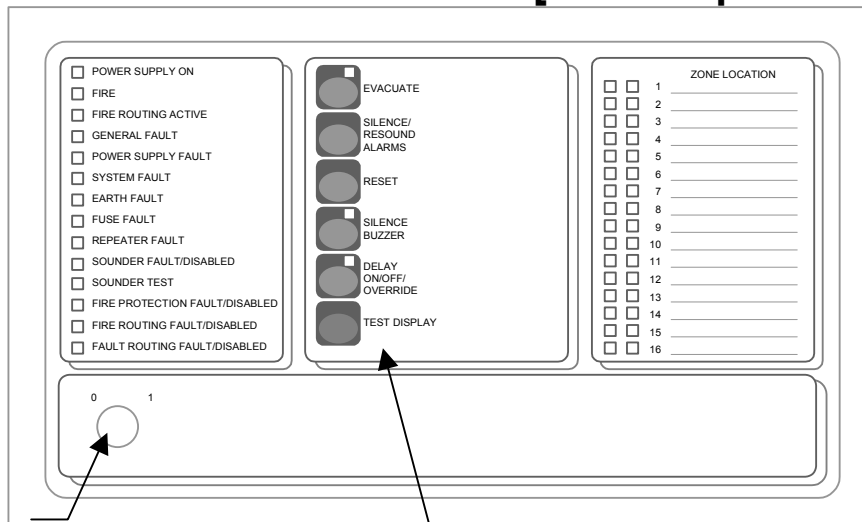
7 Repeater Panel Operation [16 zone version shown]

General Indicator Section		
Indicator Description	Indication Colour	Operating Condition
Power Supply On	Green	Steady indication for Mains or Standby power On.
Fire	Red	Flashes on any new fire alarm condition, changing to a steady indication on operation of Silence Alarms.
Fire Routing Active	Red	Steady indication when the Fire Routing Output is active.
General Fault	Yellow	Flashes for any fault condition.
Power Supply Fault	Yellow	Flashes for mains or standby power supply/charge fault
System Fault	Yellow	Steady indication to indicate Microcontroller Failure.
General Test	Yellow	Steady indication when the zone or sounder test is active.
General Disablement	Yellow	Steady indication whilst a zone or output is disabled.
Communications Fault	Yellow	Flashes for a communications failure between the fire panel and repeater.
Sounder Fault/Disabled	Yellow	Flashes for any sounder fault. Steady for sounders disabled.
Sounder Test	Yellow	Steady indication while sounder walk test is active.
Fire Protection Fault/Disabled	Yellow	Flashes for a fault on the Fire Protection Output. Steady when Fire Protection Output is disabled.
Fire Routing Fault/Disabled	Yellow	Flashes for a fault on the Fire Routing Output. Steady when Fire Routing Output is disabled.
Fault Routing Fault/Disabled	Yellow	Flashes for a fault on the Fault Routing Output. Steady when Fault Routing Output is disabled.



Zone Location Indications		
Indicator Description	Indication Colour	Operating Condition
User Generated Zone Location Text	Red	Flashes when zone is in a fire condition, turning to steady on operation of Silence Alarms.
User Generated Zone Location Text	Yellow	Flashes when zone is in a fault condition. Illuminates steady when zone is disabled or in test.

8 Repeater Panel User Controls [16 zone panel shown]



Access Controls Keyswitch:

- 0 – Controls Locked
- 1 – Controls Unlocked

Switch Description	Functionality	Button Availability
Evacuate	Operates all sounders continuously and lights the Evacuated LED adjacent the button until the silence button is operated	When controls are unlocked
Silence/Resound Alarms	Following a fire alarm condition, 1st operation stops sounders. The General Fire LED and the Zonal fire LED will change from flashing to steady. 2nd operation restarts the previously silenced sounders	When controls are unlocked
Reset	Clears the panel display, resets the zones, outputs and operates the reset relay.	When controls are unlocked and [if silence before reset is configured] alarms silence switch has been operated.
Silence Buzzer	1] Press to stop the buzzer sounding in fire or fault conditions. 2] In 2 Stage Delay Mode, with stage 1 delay running, press to start stage 2 delay otherwise all delayed outputs operate when Stage 1 timer times out.	When controls are locked or unlocked When the panel is in the fire condition and the delay is running. Controls are locked or unlocked
Delay On/Off/Override	1] Press once to Enable the delay mode, lighting the adjacent delay on LED. Press again to disable the delay mode and turn off the LED 2] Overrides the delay when delay is running, turning the delay mode and the LED off. All delayed outputs will operate immediately.	1] When controls are unlocked and delay period is set to a value > 0. 2] When the panel is in the fire condition and the delay is running.
Test Display	Press to illuminates all LEDs on the display and operate the buzzer. All indications remain active for approx 5 seconds after button release.	When controls are locked or unlocked

9 Routine Testing and maintenance

Refer to the Mx-1000 Series Log Book for details.

10 User Responsibilities

Refer to the Mx-1000 Series Log Book for details.

11 Isolate/De-isolate/Test Mode Select Flowchart

