FC501 Addressable Fire Control Panels User Manual

120.615.011_FC-FC501-P-U Rev. 11.0

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Introduction

Johnson Controls assumes no responsibility for damage to products arising from improper application or misuse.

The FC501-L, FC501-H, and FC501-HK fire control panels comply with the essential requirements of standards EN54-2, EN54-4, and EN 54-21.

The FC501-L, FC501-H, and FC501-HK fire control panels support several addressable devices, such as detectors, modules, manual call points, and so on. For further information about these devices and their accessories, refer to http://www.fireclass.com.

The manufacturer reserves the right to change the technical specifications of these products without prior notice.

Maintenance

To ensure that the system continues to operate correctly, it must be maintained with regular testing by the user and periodic maintenance by the installer in accordance with local laws.

ⓘ **Note:** For the maintenance of other devices such as detectors, modules, and so on, follow the dedicated instructions for the devices.

The following operations must be carried out regularly:

1. Remove dust from the control panel cabinet with a damp cloth. **Do not use solvents of any kind.**
2. Check that the LEDs and buzzer are functioning correctly. To do this, use the LAMP TEST key.
3. Ensure the batteries are sufficiently charged and functioning correctly. If not, replace them immediately.

   ⚠ **CAUTION:** Batteries must be replaced by a trained person only.

4. Ensure all cables and connections are intact.
5. Ensure there are no unrelated objects inside the control panel case.
6. Ensure the control panel is capable of processing a fire alarm, and if sounders are present in the system, they activate in consequence of this alarm. If there is a facility for transmission of fire alarm signals to a central station, ensure that the signal is correctly received.
7. Verify the functionality of the circuit for the detection of earth fault. The procedure is as follows:
   a. Connect one of the SH terminals of the loop to the panel earth.
   b. Verify that the fault is reported correctly by the panel.
   c. Remove the connection previously made.

ⓘ **Note:** Points 1 and 2 can be carried out by users. Points 3, 4, 5, 6, and 7 must be carried out by qualified persons.

Waste Electrical and Electronic Equipment (WEEE) Directive

In the European Union, this label indicates that you must dispose of this product separately from household waste at an appropriate facility for recovery and recycling.

General description

FC501 fire control panel

The FC501 fire control panel follows Johnson Controls' highest standards of quality and performance.

The FC501 is available in the following models:

- FC501-L
- FC501-H
- FC501-HK

ⓘ **Note:** The information in this manual applies to all FC501 control panels and to the FC500 repeater if not stated differently.

The FC501 fire control panel is a modular system. The configuration of the FC501 system depends on the size and requirements of the application. Some of the described devices and functions may not be present on your system.

The FC501 system consists of the following components:

- One FC501 control panel
- Max. four FC500 repeaters
- Max. four FC500MFI multifunction modules
- Max. 128 devices spread over three sub loops or 128 devices on a single loop

FC501-L

FC501-L is an analogue addressable fire control panel with one loop incorporating three sub-loops. The panel can support up to 128 addressable devices and 32 zones. The UI uses text descriptions to identify function buttons and indicators. Powered: 1.8 A @ 27.6 V switching power supply.

FC501-H

FC501-H is an analogue addressable fire control panel with one loop incorporating three sub-loops. The panel can support up to 128 addressable devices and 32 zones. The UI uses text descriptions to identify function buttons and indicators. Powered: 2.7 A @ 27.6 V switching power supply.

FC501-HK

FC501-HK is an analogue addressable fire control panel with one loop incorporating three sub-loops. The panel can support up to 128 addressable devices and 32 zones. The UI uses icons to identify function buttons and indicators. Powered: 2.7 A @ 27.6 V switching power supply.

Accessory items

FC500 repeater

Repeaters are peripherals that provide system status information, emit audible signals, and allow users to control the functions of the FC501 system.

FC500MFI

The FC500MFI is a programmable multifunctional module for connection to a real time event printer. The terminal blocks also make it possible to connect a standard interface to remotely control and manage a set of inputs and outputs to control the panel.

FC500IP

This module connects the control panel to a Local Area Network (LAN).

Connected Services Gateway

The Connected Services Gateway (CSG) is a comprehensive interface card that supports central station communication and enables SafeLINC cloud services. For more information about the configuration and interfacing the CSG, refer to *Connected Services Gateway Setup Guide for FireClass Fire Panels (5791466)*.

User access levels

Access level 1 (L1)

At access level 1 (L1) or viewing level, all users can access the menu listed in Table 1.

Table 1: Access level 1 (L1)

Menu	Options	Description
ANALYZE	1. Loop 2. Device 3. SW zone 4. Outputs 5. Network 6. Communic. 7. Option 8. Log 9. FW. ver. 0. Panel	View loop information View devices information View software zones information View outputs information View network information View communicator information View system options View event log View firmware version View panel information
VIEW LISTS	1. Dis.Zone 2. Dis. Dev 3. Dis.Part 4. Walk Test 5. Faults 6. Warnings 7. Dev. in Test	View disabled zones list View disabled devices list View disabled system parts list View zones in walk test list View faults list View warnings list View devices in test list

Access level 2 (L2)

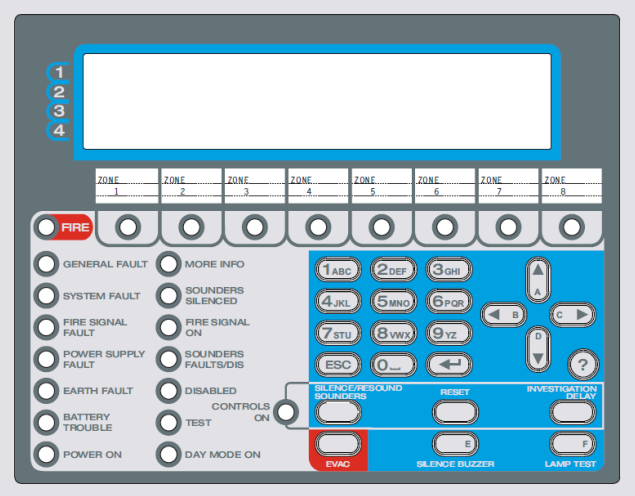
Access level 2 (L2) is for operating the system, and requires an access code. At this level, all the operations at L1 are also available. See Table 2 for information about the L2 operations.

Table 2: Access level 2 (L2)

Menu	Operations	Description
MODIFY	1. Init MSG 2. l2-User Password 3. Day/Night 4. Time and Date 5. Clear LOG 6. Zone Walk Test	Modify the panel label Modify the users passwords Modify the panel operating mode Modify the panel time and date Clear the event log Activate the zones walk test
DISABLE	1. Dis. list 2. Device 3. SW zone 4. Output 5. Network 6. Communic. 7. Password 8. FIRE Relay	View the disabled zones, loop devices, and system parts Disable the loop devices Disable the software zones Disable the panel outputs Disable the network devices Disable the communicator Disable the passwords Disable the fire relay

User interface

Figure 1: UI view of FC501-L and FC501-H



Description of keys

To manage the panel from the UI, use the following controls:

- Alphanumeric keypad: Numbers 0 – 9 and letters A-Z
- Cursors keys: Up, Down, Right, and Left
- Esc key
- Enter key
- Help button to open the help screens on the display. See Figure 2.
- Command keys

Note: You can use the cursor keys Up, Down, Right, and Left, and the command keys LAMP TEST and SILENCE BUZZER to enter the hexadecimal digits A, B, C, D, and F, where required.

The function of the cursors keys, the Esc key, the Enter key, and the command keys, is different on every LCD screen and is fully described in this manual. Also, the amount of time spent pressing the keys has a different function in the different LCD screens. To access more information, use the HELP key.

Panel command keys

Table 3: Control panel and repeater keys

Key		Description	Notes
	SILENCE/RESOUND SOUNDERS	Resets the silenceable outputs and the loop devices to standby status	The silence status remains until you press the SILENCE/RESOUND SOUNDERS key again in day mode, or until the night mode silence time expires in night mode, or until the system detects a new alarm condition.
	RESET	Resets the fire detectors and restores all outputs to standby status	
	INVESTIGATION DELAY	Refreshes the delay-to-alarm time	If you press this during a delay-to-alarm condition, the remaining delay-to-alarm time is increased with the programmed investigation delay.
	EVAC	Activates the evacuation If you press and hold this key for more than one second, the system generates an alarm.	
	SILENCE BUZZER	Silences the local buzzer on the control panel	The buzzer operates every time a new event is activated.

Table 3: Control panel and repeater keys

Key		Description	Notes
	LAMP TEST	Tests the buzzer and the LEDs	If you press this key when the control panel is functioning as intended, all LEDs are on and the buzzer emits a continuous beep.
?	HELP	Explains the information on the LCD display in the different screens	• This is an embedded help feature present on the panel LCD display. • The help key is disabled on repeater panels.

ⓘ **Note:** You can operate the LAMP TEST, SILENCE BUZZER, and EVAC command keys without the access code, access level L1. To operate all the other command keys, use the access level L2 and L3 codes.

Help key

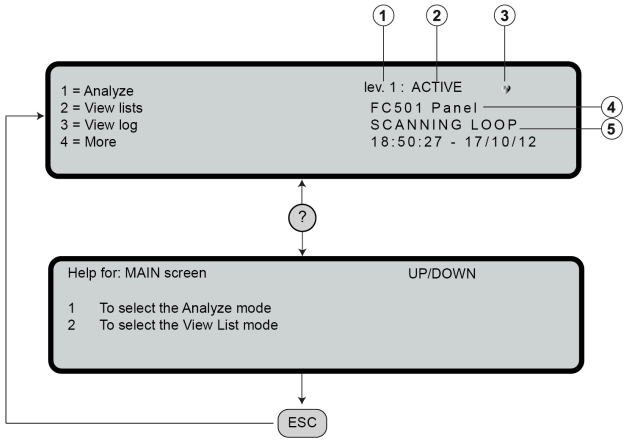
This section describes the functionality of the help key (?).

To explain the information on the LCD display on the different screens, an embedded help feature is present on the panel UI.

To display help related to a LCD screen, press the help key. For example, see Figure 2.

To scroll the help screen, use the Up and Down keys. To exit the help screen, press Esc.

Figure 2: Example of the LCD display after pressing the help key



Callout	Description
1	Access level
2	Control panel status
3	If flashing, the control panel is working normally
4	Control panel name (you can modify this)
5	Working activity

Silencing and reactivating sounders

The control panel operates in day or night mode. If the system is silenced during day mode, the silence status remains until the system is unsilenced unless new alarms or faults occur. If the system is silenced during night mode, the silence status remains until the night mode silence time expires. When you turn on the system, it starts in day mode by default.

Reset

Reset stops alarm, delay-to-alarm, warning, and fault conditions. Access to this command is limited to authorized personnel using an installer or user access code. The system reprocesses any alarm, delay-to-alarm, warning or fault signal that is not cleared by a reset. Command keys cannot be used when a reset is running.

System status signaling

The system status is indicated by the following items:

- Status LEDs
- Display
- Buzzer

Status LEDs

Table 4 describes how the control panel LEDs operate, and the actions that can be taken during the various states signaled on the LEDs.

Table 4: Control panel and repeater LEDs

LED		Description
	FIRE (Red)	ON indicates the alarm status. In the event of an alarm, the control panel activates the unbypassed alarm outputs.
	GENERAL FAULT (Amber)	ON indicates the presence of a fault. The following LEDs and the LCD display indicate the type of fault. Flashing indicates fault events in memory.
	SYSTEM FAULT (Amber)	ON indicates that the control panel is blocked. ➤ **Important:** Maintenance required Slow flashing indicates the control panel restart. Fast flashing indicates that the panel programming data are corrputed. ⓘ **Note:** The SYSTEM FAULT LED latches when the control panel resets itself due to an internal logic fault.
	FIRE SIGNAL FAULT (Amber)	ON indicates that the communicator is disabled. Flashing indicates that the communicator is faulty.
	POWER SUPPLY FAULT (Amber)	ON indicates a mains failure. Flashing indicates a power supply fault. During this condition, the control panel is powered by the batteries.
	EARTH FAULT (Amber)	ON indicates a voltage leakage to Earth. ➤ **Important:** Check wiring insulation.
	BATTERY TROUBLE (Amber)	ON indicates that the batteries are discharged or faulty. If this condition persists, the batteries cannot function as intended in the event of a mains failure. ➤ **Important:** New batteries are required.
	POWER ON (Green)	ON indicates that the panel is supplied with power. The battery disconnect threshold is 19.2 V. Ensure the batteries do not reach the disconnect threshold.
	MORE INFO (Amber)	ON indicates that there is hidden information with lower priority. View List shows the hidden information. OFF indicates no hidden information is available.
	SOUNDERS SILENCED (Amber)	ON indicates that the silenceable outputs and loop device have been forced into standby by the SILENCE/ RESOUND SOUNDERS key. In day mode, the silence status remains until the SILENCE/RESOUND SOUNDERS key is pressed again. In night mode, the silence status remains until the night mode silence time expires or until the system detects a new alarm or a new trouble condition.
	FIRE SIGNAL ON (Red)	ON indicates that the transmission was successful. Flashing indicates that the transmission is in progress. On the control panel screen, the connection type, such as PSTN or LAN network, is displayed.

Table 4: Control panel and repeater LEDs

LED		Description
	SOUNDERS FAULTS/DIS (Amber)	ON indicates that the output is disabled or outputs configured to "act as SC1" are disabled. Flashing indicates that the SC1 is in fault or outputs configured to "act as SC1" are in fault. OFF indicates that all the main sounder outputs (EN54-1, TYPE "C" outputs) function correctly.
	DISABLED (Amber)	ON indicates that the system has an active disablement.
	TEST (Amber)	ON indicates the test conditions on at least one zone.
	DAY MODE (Amber)	ON indicates that the control panel is operating in day mode. OFF indicates that the control panel is operating in night mode.
1-8	SOFTWARE ZONES (Red)	ON indicates that the corresponding software zones are in Alarm status. ⓘ **Note:** This status LED indicates that the zone outside the 1- 8 range does not have a related LED, its alarm status is displayed only by the LCD. Flashing indicates that the corresponding software zones are in delay-to-alarm status.
	CONTROLS ON (Amber)	ON indicates that the control panel is at least at level 2 so the SILENCE/RESOUND SOUNDERS, RESET and INVESTIGATION DELAY keys are enabled.

Notes:

- During standby status, and if the control panel is in day mode, only the green POWER ON LED and the DAY MODE LED are ON.
- The GENERAL FAULT LED and the LED specific to the fault are ON or flashing during a fault condition.

Buzzer

The control panel buzzer provides an audible indication of the panel status. See Table 5 for a description of each buzzer sound.

ⓘ **Note:** When an alarm status is silenced and a new fault signal is detected, the control panel restarts the buzzer with the previous alarm sound.

To test the buzzer, press the LAMP TEST key.

Table 5: Buzzer sounds

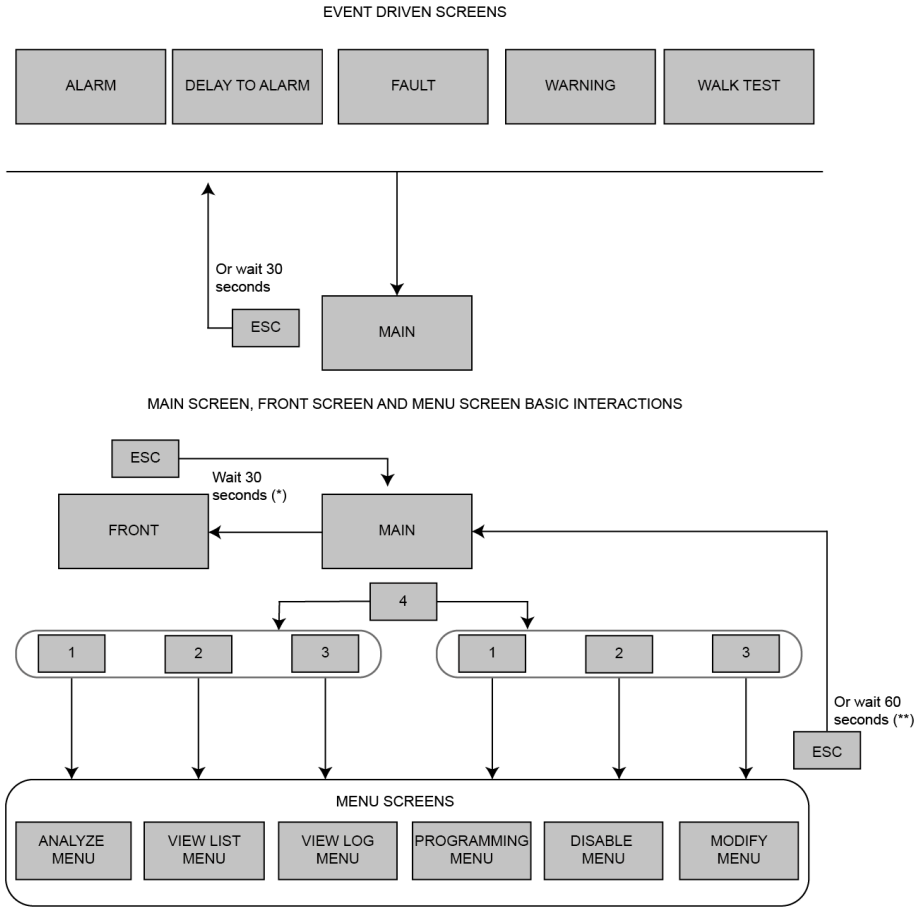
Condition	Frequency (Hz)	Sound	Pause
System Fault (main processor fail)	1300	2.5 s	2.8 s
General Fault (Programming data corrupted)	660	1 s	1 s
Alarm	3300	0.2 s	0.2 s
Fault	660	1 s	1 s
Delay-to-Alarm	880	0.5 s	0.5 s
Warning	440	2 s	2 s
Reset	No sound		
Test	No sound		

Display

The information on the display is organized as screens, as follows:

- Front screen
- Main screen
- Diagnostic screens
- Menu screen
- Events driven screen

Figure 3: Event driven screens and main screen basic interactions



Callout	Description
*	If the panel is in normal activity, wait 30 seconds.
**	There is no timeout for the analyze menu, view log screen, and view list screen.

Front screen

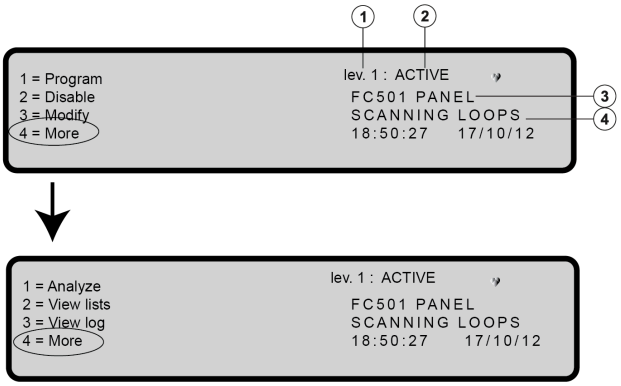
The front screen displays when the panel is in standby status. It can show an advertisement message set by the installer. To exit from the front screen, press Esc. The display shows the main screen or the event driven screens.

Note: If you want to turn off the front screen, ask the installer.

Main screen

The main screen is the first screen displayed by the panel after it turns on. See Figure 4. The event driven screen can replace the main screen. After 30 seconds of inactivity, the front screen displays.

Figure 4: The main screens



Callout	Description
1	Access level
2	Control panel status
3	Control panel name (you can modify this)
4	Panel activity

The access level field shows the current access level of the panel. Ten seconds before leaving the present access level, this field starts to flash.

The control panel status field displays the current panel status. The panel's default state is active.

When the control panel works correctly, the display shows a flashing heart.

The panel activity field displays the current activity of the panel. For more information, see Table 6.

Table 6: Panel activity field values

Panel activity message	Description
RESETTING	Panel is resetting
LOC. PROG	Panel is being programmed by a local access
REM.ACCESS	Panel is remotely accessed (PC through serial port, USB or IP)
SYS. INIT	Panel is initializing
SYS. VER	Panel is verifying its system
CLEAR LOG	Panel is clearing the event log
WAITS	Panel is waiting to be configured
———	No activity
SCANNING LOOPS	Panel is in its normal activity

Note: The date and time field flashs until the date and time is set.

Table 7: Keys function on the main screen

Key	Function
1	Moves to program or analyze mode
2	Moves to disable or view lists mode
3	Shows the view log or moves to modify mode
4	Selects between the function groups related to the keys 1, 2, and 3
Up	Increases the brightness of LCD display
Down	Decreases the brightness of LCD display
Right	Increases the contrast of LCD display
Left	Decreases the contrast of LCD display
Esc	Exits from the main screen to the front screen or the event driven screen. Pressing the key for more than three seconds forces the panel to access level 1.

Menu screen

You can access the program, analyze, disable, and modify features of the panel through the menu screens. For more information, see Analyze, Disable, and Modify sections of this manual.

Event driven screens

When the system detects events, the event driven screens activate. When an event activates, it overrides the screen present on the display at that time. An event driven screen can be overridden by another event driven screen that has a higher priority.

Table 8 contains the event driven screen priority assignment.

Table 8: Event driven screen priority

Event driven screens	Priority
Alarm	1 (highest)
Delay-to-Alarm	2
Fault	3
Warning	4
Walk Test	5

If a lower priority event screen is suppressed by a highest priority event screen, the MORE INFO LED switches on.

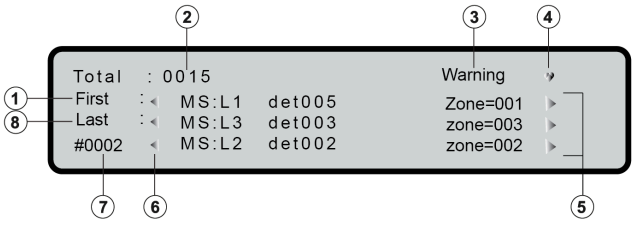
To manually access the suppressed event screens in this condition, use the **View lists** option on the main screen.

Warning status

You can program the control panel to provide warning or delay-to-alarm status before alarm status.

The warning display indicates a warning status, see Figure 5.

Figure 5: Warning status screen



Callout	Description
1	First warning
2	Warnings number
3	Control panel status
4	If flashing, the control panel is working normally
5	The arrow symbols pointing right indicate that there is more information to view by using the Right key.
6	The arrow symbols pointing left indicate that there is more information to view by using the Left key.
7	Number of the displayed warning
8	Last warning

Note: If the events are linked to the devices, the zone label alternates with the point label every three seconds. If you have not assigned the point to a zone, the screen shows the point label only.

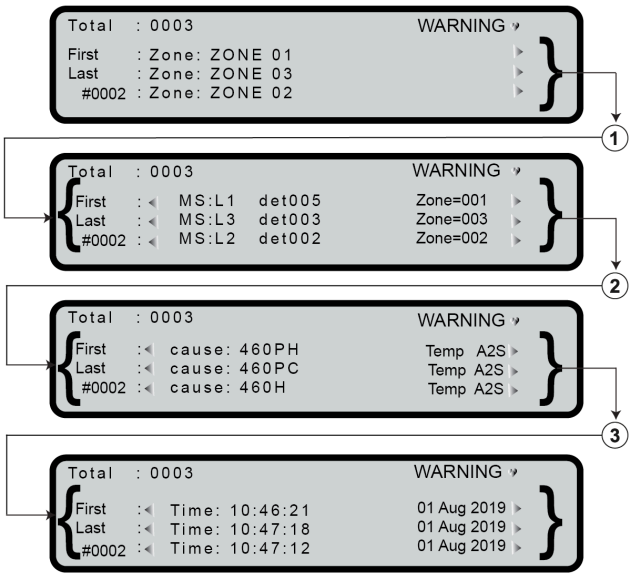
The panel generates a warning when a detector exceeds its warning threshold and there is risk of an alarm.

The following items signal the warning status:

- Warning output points
- Control panel display
- Intermittent audible signal on the panel buzzer
- The repeaters

Figure 6 shows how to scroll the warning status screens.

Figure 6: Scrolling warning status screens



Callout	Descriptions
1	To scroll the second block of data for the warning zones, press the Right key.
2	To scroll the third block of data for the warning causes, press the Right key.
3	To scroll the fourth block of data for the warning times, press the Right key.

Table 9: Keys function on the warning status screens

Key	Function
1	Displays the zones status screen
2	Displays the status screen of the first point in warning status
3	Displays the status screen of the last point in warning status
4	Displays further points in warning status. When point information is present in the fourth row, press the 4 key to display the status screen of the related device.
Up	Shows the next event. The display does not show the next event if it is last.

Table 9: Keys function on the warning status screens

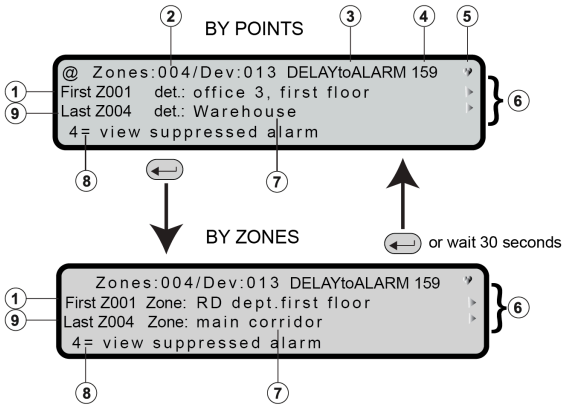
Key	Function
Down	Shows the previous event. The display does not show the previous event if it is the first.
Right	Shows the next block of data
Left	Shows the previous block of data
Esc	Cancels the operation and returns to the main screen
Enter	Stops and restarts the device label or zone label swap ⓘ **Note:** When you stop the device label or zone label swap, the display shows the @ character in the upper-left corner.

Delay-to-alarm status

The delay-to-alarm status indicates that an input point or detector has exceeded its alarm threshold. The control panel does not generate an alarm until the preset delay-to-alarm time ends. If a second input point, such as a detector in the same software zone, detects alarm conditions during the delay-to-alarm state, and the double knock (DK) option has been programmed for that zone, the control panel generates an instant alarm.

The control panel generates an instant alarm if it detects alarm conditions during the night mode, or if you initiate an alarm from a call point. When the control panel is in alarm status, it bypasses the delay-to-alarm.

Figure 7: Delay-to-alarm screens



Callout	Description
1	First zone or device into delay-to-alarm status
2	Number of zones and devices in delay-to-alarm status (flashing)
3	Control panel status
4	Seconds to alarm
5	If flashing, the control panel is operating normally
6	The arrow symbols indicate the presence of further information such as point or zone coordinate, cause, and time
7	Point or zone label
8	To view further zones in delay-to-alarm status, press the 4 key
9	Last zone or device in delay-to-alarm status

You can view the information related to the delay-to-alarm status in point view mode and in zone view mode.

The point related to the first zone in delay-to-alarm status is the first point in the zone that becomes active. For all other zones in delay-to-alarm status, the related point is the last that becomes active. This information is updated in real time.

The first point in the delay-to-alarm field contains the information about the first device that becomes active. Irrespective of what zone it belongs to, the last point in the delay-to-alarm field contains the information about the last activated point.

The following items signal the delay-to-alarm status:

- Control panel display
- LED (1-8) relative zone in delay-to-alarm status flashing
- Intermittent audible signal on the control panel buzzer
- Delay-to-alarm output points

During the delay-to-alarm status, you can silence, investigate, or reset the system, and view the event log.

Table 10: Keys function on the delay-to-alarm status screens

Key	Function
1	Displays the zones status screen
2	Displays the status screen of the first point in delay-to-alarm status

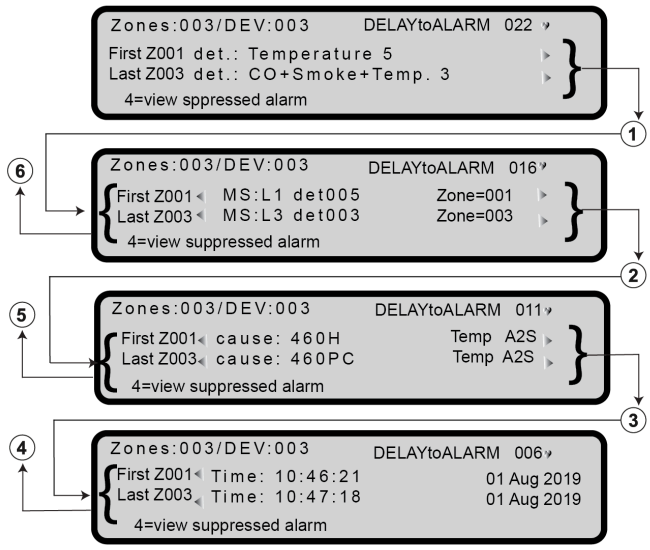
Table 10: Keys function on the delay-to-alarm status screens

Key	Function
3	Displays the status screen of the last point in delay-to-alarm status
4	Displays further points in delay-to-alarm status. When point information is present in the fourth row, press the 4 key to display the status screen of the related device.
Up	Shows the next point in delay-to-alarm status. The display does not show the next event if it is the last.
Down	Shows the previous point in delay-to-alarm status. The display does not show the previous event if it is the first.
Right	Shows the next block of data about the point. See Figure 8.
Left	Shows the previous block of data about the point. See Figure 8.
Esc	Returns to the main screen
Enter	Press for at least one second: Changes between the visualization modes. Press for less than one second: Stops or restarts the zone or point swap.

Note: The keys function is the same for the delay-to-alarm display by zones or by points.

Figure 8 shows how to scroll the delay-to-alarm status screens.

Figure 8: Scrolling delay-to-alarm screens



Callout	Description
1	Press the Right key to scroll to the second block of data: The coordinates of the points.
2	Press the Right key to scroll to the third block of data: The causes of delay-to-alarm status.
3	Press the Right key to scroll to the fourth block of data: The times of delay-to-alarm status.
4	Press the Left key to scroll back to the third block of data.
5	Press the Left key to scroll back to the second block of data.
6	Press the Left key to scroll back to the first block of data.

Alarm status

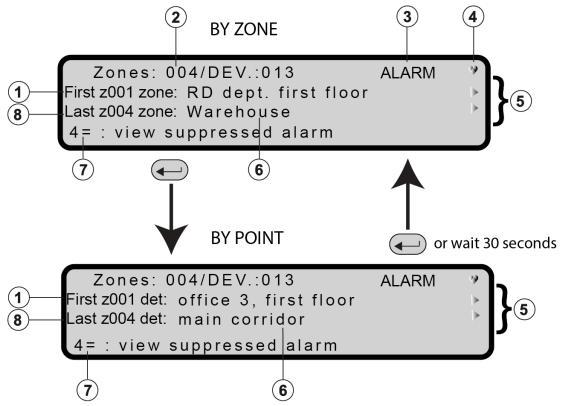
A detector or manual call point can initiate the alarm status.

The following items signal the alarm status:

- Alarm LEDs switch on
- Message on the control panel and repeater displays. See Figure 9.
- Intermittent audible signal on the control panel buzzer
- Output points programmed to signal the alarm status

To terminate an alarm status, press the **Reset** key.

Figure 9: Alarm status screens



Callout	Description
1	First zone or device in alarm
2	Number of zones and devices in alarm (flashing)
3	Control panel status
4	If flashing, the control panel is operating normally
5	The arrow symbols show the presence of further information such as point or zone coordinate, cause, and time.
6	Point or zone label
7	To view further zones in alarm
8	Last zone or device in alarm

You can view the information related to the alarm status in point view mode and in zone view mode. Zone view mode is the default.

For the first zone in alarm status, the display shows the first zone's point gone into alarm status. For the other zones in alarm status, the display shows the latest zone's point gone in alarm status. The display updates this information in real time.

The point view mode shows the first point gone in alarm status and the last point gone in alarm status, not depending on the point's zones.

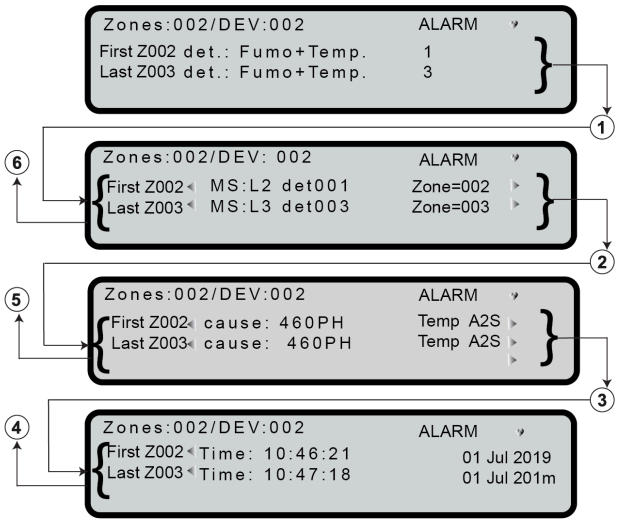
Table 11: Keys function on the alarm status screens

Key	Function
1	Displays the zones status screen
2	Displays the status screen of the first point in alarm status
3	Displays the status screen of the last point in alarm status
4	Displays further points in alarm status. When point information is present in the fourth row, press the 4 key to display the status screen of the related device.
Up	Displays the next point in alarm. The display does not show the next point if it is the last.
Down	Displays the previous point in alarm. The display does not show the previous point if it is the first.
Right	Displays the next auxiliary information about the point in alarm
Left	Displays the previous auxiliary information about the point in alarm
Esc	Returns to the main screen
Enter	Press for at least one second: Changes between the visualization modes. Press for less than one second: Stops or restarts the zone to point swap

Note: The keys function is the same for the alarm display by zones or by points.

Figure 10 shows how to scroll the alarm status screens.

Figure 10: Scrolling of alarm status screens



Callout	Description
1	Press the Right key to scroll to the second block of data
2	Press the Right key to scroll to the third block of data
3	Press the Right key to scroll to the fourth block of data
4	Press the Left key to scroll back to the third block of data
5	Press the Left key to scroll back to the second block of data
6	Press the Left key to scroll back to the first block of data

Fault status

The following items signal the fault status:

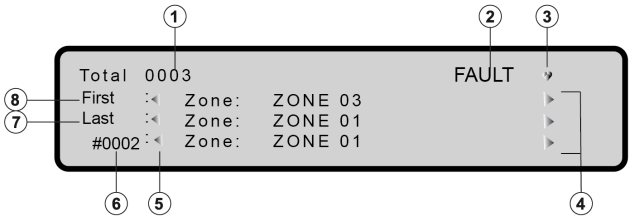
- ON GENERAL FAULT LED
- Message on the control panel display
- Flashing of specific fault LEDs, if present:
  - POWER SUPPLY FAULT
  - BATTERY TROUBLE
  - EARTH FAULT
  - SYSTEM FAULT
  - FIRE SIGNAL FAULT
  - SOUNDERS FAULT/DIS
- Intermittent audible signal on the control panel buzzer
- Output points programmed to signal the fault status

You can use the SILENCE key to temporarily force the fault silenceable outputs to standby status.

If the fault condition is cleared (back to normal), all fault outputs restore automatically to standby.

You can stop the fault status by disabling the item that is generating it. For more information, see Disable. Figure 11 shows the fault status screen.

Figure 11: Fault status screen



Callout	Description
1	Total number of faults
2	Control panel status
3	If flashing, the control panel is operating normally
4	The arrow symbols pointing right indicate that there is other information to view by using the Right cursor key.
5	The arrow symbols pointing left indicate that there is other information to view by using the Left cursor key.
6	Number of the displayed fault

Callout	Description
7	Last fault
8	First fault

Note: If a fault is related to a loop device, the faulty point label is swapped with the point's zone label every three seconds. If you have not assigned the point to a zone, only the point label displays.

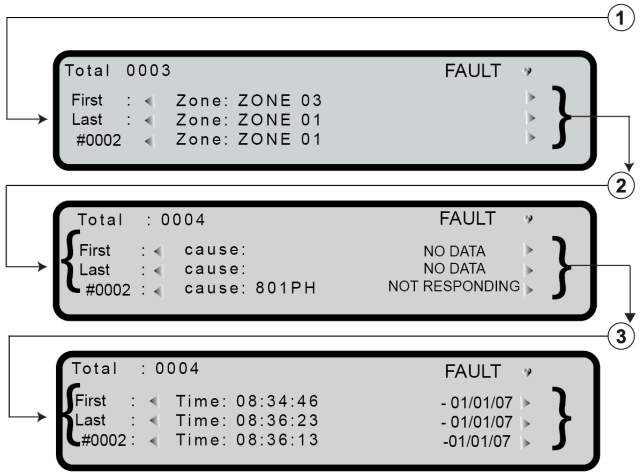
Table 12: Keys function on the fault status screens

Key	Function
1	Displays the zones status screen
2	If the first fault is related to a point, it displays the status screen of the first point in fault status. If the first fault is a loop break fault, it displays the screen to locate the loop break. If the first fault is related to an item that can be disabled, it displays the disabling screen, allowing a fast disablement procedure.
3	If the last fault is related to a point, it displays the status screen of the last point in fault status. If the last fault is a loop break fault, it displays the screen to locate the loop break. If the last fault is related to an item that can be disabled, it displays the disabling screen for a fast disablement procedure.
4	Displays further faults. When a point information is present in the fourth row, press the 4 key to display the status screen of the related device. If the fourth LCD row shows a loop break fault, press the 4 key to display the screen to locate the loop break. If the fourth LCD row shows a fault related to an item that can be disabled, press the 4 key to display the disabling screen, allowing a fast disablement procedure.

Note: For keys 2, 3, and 4, if the access level is less than L2, a password is required before proceeding to disablement.

Figure 12 shows how to scroll the fault status screens.

Figure 12: Scrolling of fault status screens



Callout	Description
1	Press the Right key to scroll to the second block of fault zone data
2	Press the Right key to scroll to the third block of fault zone data
3	Press the Right key to scroll to the fourth block of fault zone data

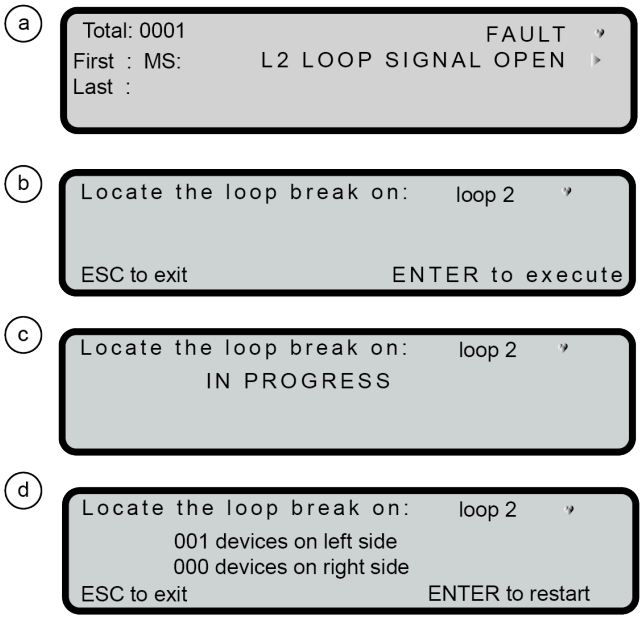
Table 13: Keys function on the fault status screens

Key	Function
Up	Displays the next fault. The display does not show the next fault if it is the last.
Down	Displays the previous fault. The display does not show the previous fault if it is the first.
Right	Displays the next auxiliary information about the fault
Left	Displays the previous auxiliary information about the fault
Esc	Returns to the main screen
Enter	Stops and restarts the device label or zone label swap

Locate loop break

In the case of loop break, the display shows the fault LOOP SIGNAL OPEN. See Figure 13 a.

Figure 13: Locate loop break screens



To locate the point of loop break, complete the following steps:

1. Press the relevant key depending on where the fault appears:
   - If the display shows the fault on the second line, press 2
   - If the display shows the fault on the third line, press 3
   - If the display shows the fault on the fourth line, press 4

   See Figure 13 b.
2. To confirm the loop break localisation request, press Enter. See Figure 13 c.

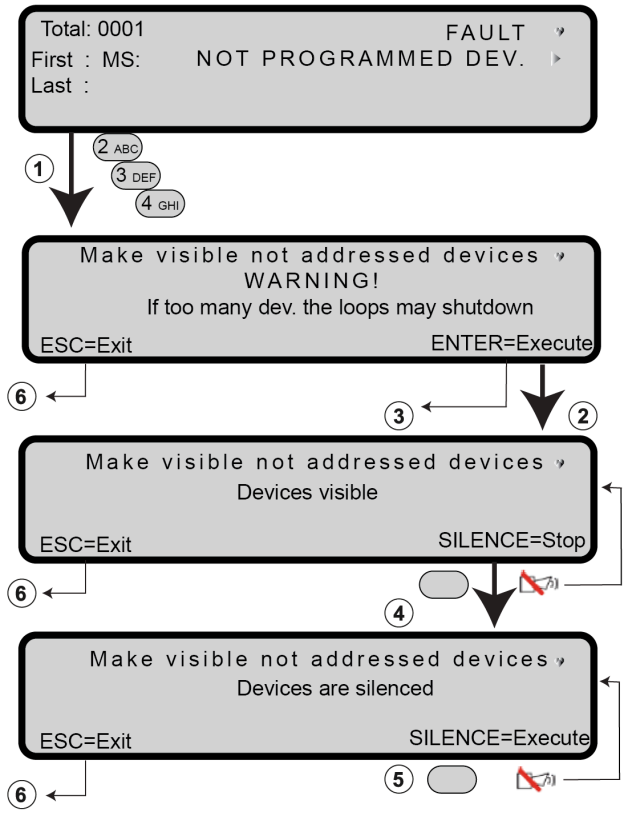
   At the end of the loop break localisation, the display shows the number of devices that the control panel has detected on the left and right sides of the loop. See Figure 13 d.

Note: During the locate loop break procedure, all the detectors turn off. At the end of the procedure, a full loop initialization is executed. The devices not in the configuration are not found.

Locate the not addressed devices

In the case of a NOT POGRAMMED DEV. fault, to locate not-addressed devices, use the procedure shown in Figure 14.

Figure 14: Locate not addressed device screens



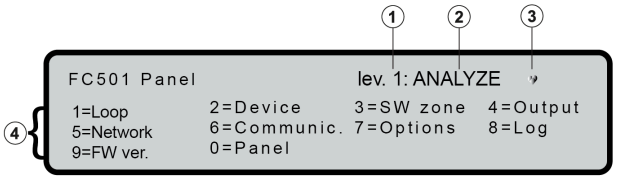
Callout	Description
1	• If the display shows the fault on the second line, press 2 • If the display shows the fault on the third line, press 3 • If the display shows the fault on the fourth line, press 4
2	Press Enter to view not-addressed devices: Module LEDs switch on, sounders starts to sound, and beacons start to flash.
3	If not-addressed devices current is above the loop limit, the loop shuts down.
4	Press the SILENCE/RESOUND SOUNDERS key to switch off the modules LEDs and beacons, and to silence the sounders.

Callout	Description
5	Press the SILENCE/RESOUND SOUNDERS key to switch on the modules LEDs and beacons and to reactivate the sounders, again.
6	Press Esc to return to the main screen.

Analyze

Use the analyze functions to view the information related to the control panel system. You can access the analyze functions though the analyze menu and through the options view log and view lists on the main screen. To access the analyze functions, you do not need a password. Figure 15 shows the analyze menu.

Figure 15: Analyze menu



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Options

Use the analyze menu to view the information listed in Table 14.

Table 14: Keys function on the analyze menu

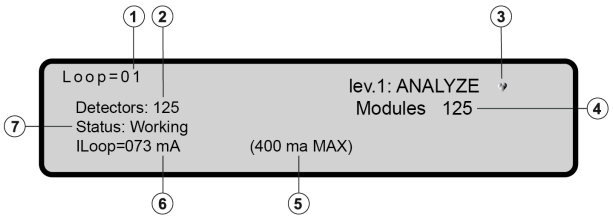
Key	Function
1	Loop: Displays information on the loops
2	Device: Displays information on the loop' devices
3	SW zone: Displays information on the software zones
4	Output: Displays information on the control panel outputs
5	Network: Displays information on the RS485 network's devices
6	Communic.: Displays information on the communicators
7	Options: Displays information on the system options
8	Log: Displays the event log
9	FW ver.: Displays information on the control panel firmware versions
0	Panel: Displays general information on the control panel

To return to the main screen, press Esc.

1 Key - View loop information

Use the 1 key to view the loop information. See Figure 16.

Figure 16: Viewing loop information



Callout	Description
1	Loop number
2	Number of detectors on the loop
3	If flashing, the control panel is operating normally
4	Number of modules on the loop
5	Maximum current that you can draw from the loops
6	Total current drawn by the loops
7	Loop status: Working, Fault, or Disabled

Table 15: Keys function to view loop information

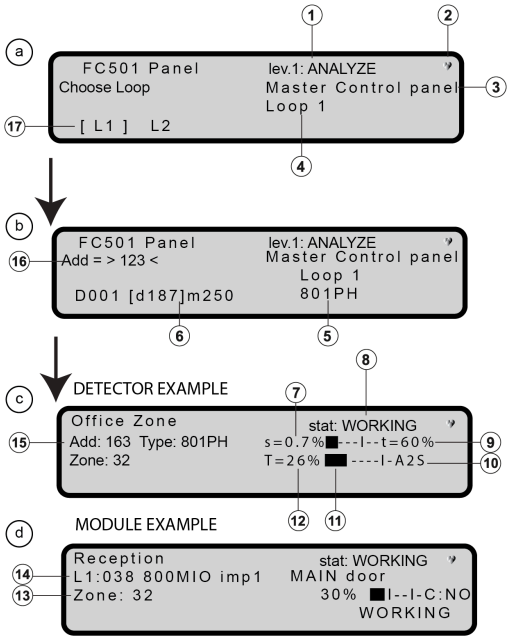
Key	Function
Up	Selects the next loop
Down	Selects the previous loop
Esc	Returns to the previous screen

When you select a loop, the LCD shows the loop information. See Figure 16.

2 Key - View devices information

Use the 2 key to view the loop device information. See Figure 17.

Figure 17: Viewing device information



Callout	Description
1	Access level and menu name
2	If flashing, the control panel is operating normally
3	Control panel label
4	Selected loop
5	Selected device type
6	List of loop's devices: • D001: Detector with address 001 • [d187]: Selected device • m250: Module with address 250 To select the previous device, press the Left key. To select the next device, press the Right key.
7	Detector channels information
8	Device status
9	Threshold
10	Function mode
11	Pattern of the current value and threshold if applicable
12	Measurements of the detector
13	Assigned zone
14	Point coordinate
15	Address and type of device
16	Invalid address
17	Loop list. The square brackets indicates the selected loop. To select the previous loop, press the Left key. To select the next loop, press the Right key.

Table 16: Keys function for loop selection

Key	Function
1	Selects loop 1
2	Selects loop 2
3	Selects loop 3
Right	Selects the next loop
Left	Selects the previous loop
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms and displays the screen for device selection. See Figure 17 b.

Selecting the device

After selecting the loop, the LCD shows the screen to select the device. See Figure 17 b.

To select a device, use the Left and Right keys to scroll the loop's devices, or use the alphanumeric keypad to enter the device address.

– An address between square brackets indicates that the address is valid.

– An address between angular brackets, indicates that the address is invalid. See callout 16 in Figure 17 b. In this case, the LCD shows the device with the address closer to that you entered. See callout 6 in Figure 17 b.

To view the information related to the selected device, press Enter.

Viewing device information

After selecting the device, the LCD shows the the device information. See Figure 17 c and d.

Table 17: Keys function on view device information screens

Key	Function
Up	Scrolls through inputs and outputs of multi inputs-outputs modules
Down	Scrolls through inputs and outputs of multi inputs-outputs modules
Right	Displays the information related to the next device on the loop
Left	Displays the information related to the previous device on the loop
Esc	Cancels the operation and returns to the previous screen

Fields

The device status field displays the current status of the detector or module. See callout 8 in Figure 17. The possible values are as follows:

- WORKING
- ACTIVE
- WARNING
- FAULT
- ZONE DIS.
- WALK TEST
- STAND-BY

The point coordinate area displays the following information. See callout 14 in Figure 17.

- The loop number
- The device address
- The device type
- The input or output number for the modules

The detector channels information area displays the following information. See callout 7 in Figure 17.

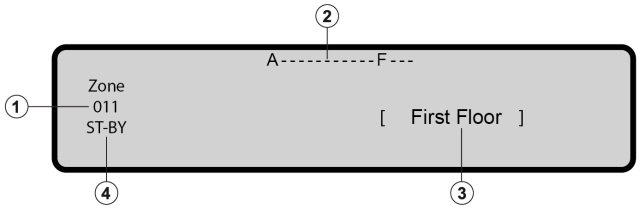
- The channel type:
  - S=Smoke
  - T=temperature
  - C=Carbon monoxide
- The current analogue value in percentage
- A real time graphic representation of the current analogue value with threshold
- The channel function mode or the threshold value
- The channel status

ⓘ **Note:** Device information is only available for devices with a WORKING status.

3 Key - View software zones information

To view software zones information, press the 3 key on the **ANALYZE** menu. The status of the software zones display in compact format, see Figure 18. The status of the software zones display using the abbreviations in Table 18.

Figure 18: Viewing software zones information



Callout	Description
1	Zone number
2	Abbreviated status of all control panel zones. See Table 18.
3	Zone label
4	Zone status. See Table 18.

Table 18: Software zone status abbreviations

Abbreviation	Description
:	UNUSED: The zone is not in use. There are no devices assigned to it.
A	ALARM: The zone is in alarm status
a	PRE AL: The zone is in delay-to-alarm status
W	WARNING: The zone is in warning status
F	FAULT: The zone is in fault status
X	DISABLED: The zone is disabled
t	TEST: The zone is in test mode
T	TEST ON: At least one point in the zone is actively in test mode
_	ST-BY: The zone is in standby status
D	DIRTY: At least one smoke detector in the zone is dirty

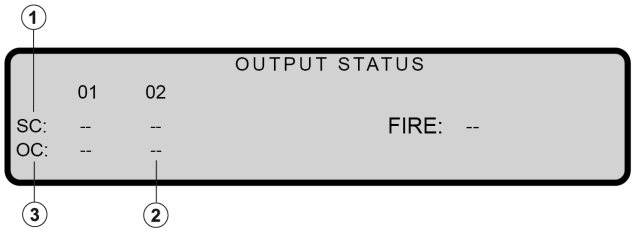
Table 19: Keys function for software zones information display

Key	Function
Right	Selects the next software zone.
Left	Selects the previous software zone.
Esc	Cancels the operation and returns to the previous screen

4 Key - View outputs status

To view the control panel outputs status, press the 4 key on the analyze menu. The status of the control panel outputs displays in compact format, see Figure 19.

Figure 19: Viewing outputs status



Callout	Description
1	SC output
2	Standby status
3	Open collector output

The status of the outputs uses the abbreviations in Table 20.

Table 20: Output status abbreviations

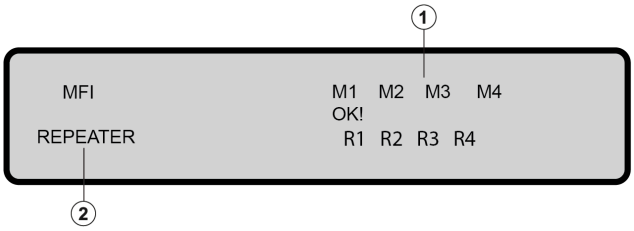
Abbreviation	Description
DIS	Output disabled
ACT	Output active
SC	Output is short circuited
OPE	Output open
_ _	Output in standby
FAU	Transistor fault

To return to the analyze menu, press Esc.

5 Key – View network devices status

To view network devices status, such as the MFI modules and repeaters, press the 5 key on the analyze menu. See Figure 20.

Figure 20: Viewing network devices status



Callout	Description
1	Network devices status. See Table 21.
2	Network devices type

The status of network devices uses the abbreviations in Table 21.

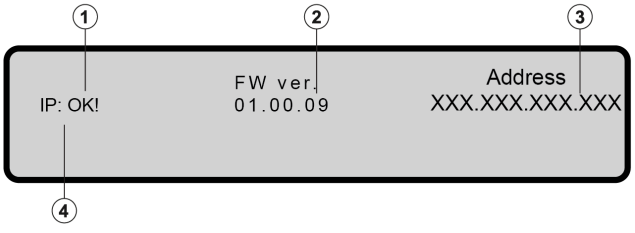
Table 21: Network device status abbreviations

Abbreviation	Description
OK!	Connected and working
KO!	Not connected
FAU	Faulty
DIS	Disabled
No text	Not enrolled
OLD	Obsolete firmware version

6 Key – View communicator status

1. To view the communicator status, press the 6 key on the **ANALYZE** menu. See the following figure.

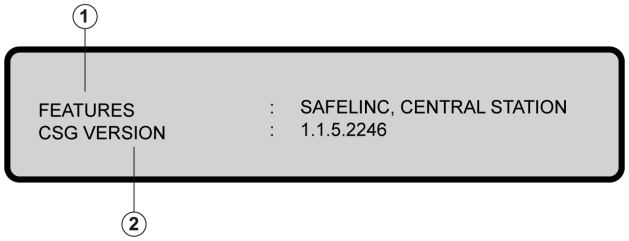
Figure 21: Viewing the communicator status



Callout	Description
1	Communicator status
2	Firmware version
3	IP address of the IP module
4	Type of communication

2. With the CSG selected, press the 6 key on the **ANALYZE** menu. See the following figure.

Figure 22: Viewing the CSG



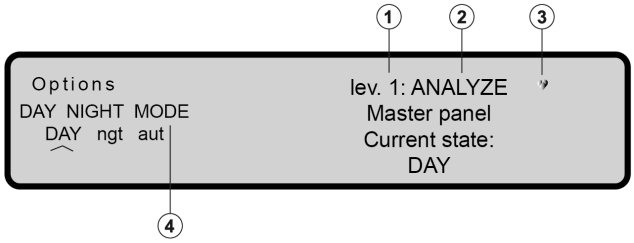
Callout	Description
1	This shows the features selected for the CSG. For example, the SafeLINC central station.
2	CSG build version number

3. To return to the **ANALYZE** menu, press Esc.

7 Key – View system options setup

To view the control panel operating mode, press the 7 key on the analyze menu. See Figure 23.

Figure 23: Viewing control panel operating mode



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Operating mode

The control panel operating mode uses the abbreviations in Table 22.

Table 22: Control panel operating mode abbreviations

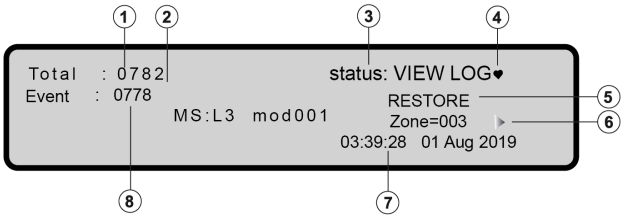
Abbreviation	Description
DAY	Day mode
NGT	Night mode
AUT	Automatic mode

To return to the **ANALYZE** menu, press Esc.

8 Key – View event log

To view the event log, press the 8 key on the **ANALYZE** menu. See Figure 24.

Figure 24: Viewing the event log



Callout	Description
1	Total stored events
2	A flashing asterisk symbol * indicates that you filtered the event view by event type
3	Control panel status
4	If flashing, the control panel is operating normally
5	Event type
6	The arrow symbols pointing right indicate that there are more blocks to view by using the Right cursor key
7	Time and date of the event
8	Current event number

ⓘ **Note:** You can view the event log also by pressing the 3 key on the main screen.

The event log stores the most recent 4,000 events. When the event log is full, the oldest event is deleted, so the newest can be stored.

ⓘ **Note:** Use the CLEAR LOG option in the modify menu to delete the log events.

The control panel stores the following information in the event log:

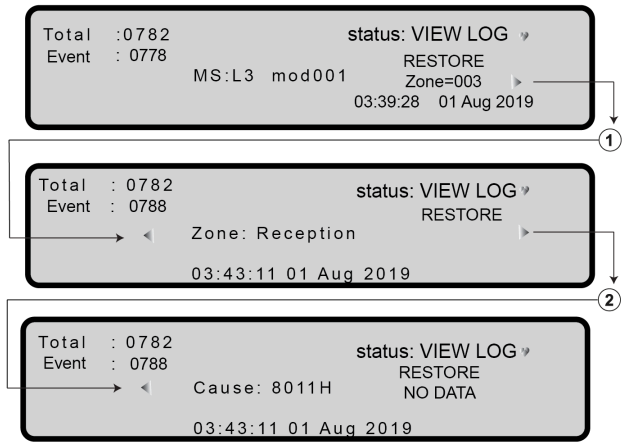
- Event number
- Event type:
  - RESTORE
  - ALARM
  - DELAY-TO-ALARM
  - WARNING
  - FAULT
  - GENERIC
  - WALK TEST

- Event localisation:
  - Control panel or repeater
  - Loop number
  - Device type
  - Device address
  - Zone number
- Event cause
- Event time and date

Table 23: Keys function on the view event log screen

Key	Function
1	Views alarm events only
2	Views delay-to-alarm events only
3	Views warning events only
4	Views walk test events only
5	Views fault events only
6	Views restore events only
7	Views generic events only
Up	Views previous event
Down	Views next event
Right	View next event information block. See Figure 25.
Left	Views previous event information block. See Figure 25.
Esc	Cancels the operation and returns to the previous screen

Figure 25: Scrolling of event log screens



Callout	Description
1	Press the Right key to view the event location. **Note:** If an event is related to a loop device, the event point label is swapped with the point's zone label every three seconds. If you have not assigned the point to a zone, only the point label displays.
2	Press the Right key to view the event cause.

9 Key – View the firmware version

To view the control panel's firmware version, press the 9 key on the **ANALYZE** menu. See Figure 26.

Figure 26: Viewing the firmware versions

To return to the **ANALYZE** menu, press Esc.

0 Key – View panel information

To view the panel information, press the 0 key on the **Analyze** menu. The display shows the following information:

- Control panel ID
- Control panel serial number
- Printed circuit board (PCB) version
- Type of power supply onboard
- Type of batteries onboard
- Presence of the auxiliary controller

To return to the analyze menu, press Esc.

View lists

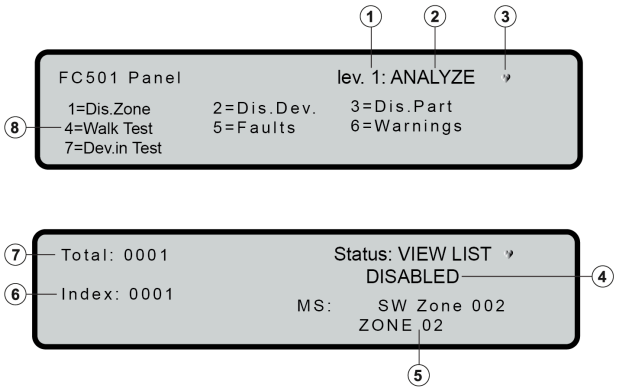
To view the lists in Table 24, select the **View List** option on the main screen.

Table 24: Lists description

Key	Description
1	DIS. Zones: Displays the list of disabled zones
2	Dis. Dev.: Displays the list of disabled devices
3	DIS. Part: Displays the list of disabled parts
4	Walk Test: Displays the list of zones in walk test mode
5	Faults: Displays the list of faults
6	Warnings: Displays the list of warnings
7	Dev. in test: Displays the list of devices in test mode

To view a list, on the main screen, select the **View lists** option and then select the list you want. See Figure 27.

Figure 27: View lists menu and view disabled screen



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	List type
5	Item information
6	Displayed item's number
7	Total number of items in the list
8	Lists list **Note:** A flashing list number indicates that the relative list is not empty.

Table 25: Keys function on the view list screens

Key	Function
1	Shows the enablement screen to enable the displayed item
Up	Shows the next item
Down	Shows the previous item
Esc	Cancels the operation and returns to the previous screen

Modify

To perform the actions described in Table 26, use the modify menu.

Table 26: Modify menu

Key	Description
1	Init MSG: Modifies the control panel label
2	L2-user password: Modifies your own password
3	Day/Night: Modifies the control panel operating mode
4	Time and Date: Modifies the control panel time and date
5	Clear LOG: Clears the event log
6	Walk test: Performs a zone walk test

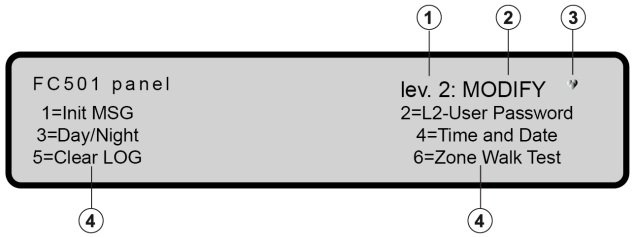
To access the modify menu, complete the following steps:

1. On the main screen, select the **Modify** option by pressing the 3 key.
2. Enter a valid password, then press Enter.

   The default user password is 111111.

   After entering a password, the display shows the modify menu. See Figure 28.

Figure 28: The modify menu

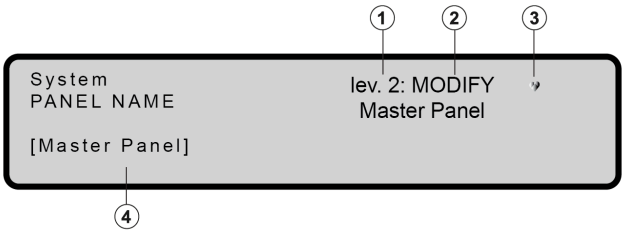


Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Options

1 Key – Modify panel label

To modify the control panel label, press the 1 key on the **Modify** menu. See Figure 29.

Figure 29: Modify panel label screen



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Control panel label

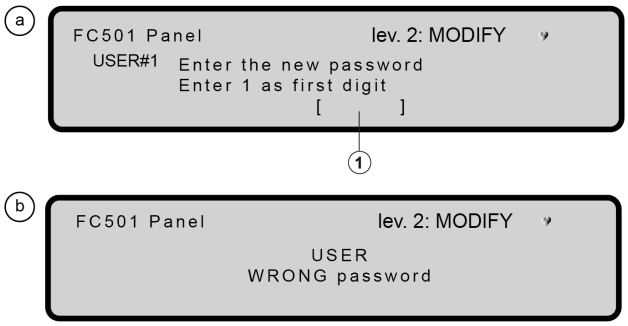
Table 27: Keys function on the modify panel label screen

Key	Description
Alphanumeric keypad	Enters the panel label
Cursor keys	• Up: Changes the selected letter from lower case to upper case • Down: Changes the selected letter from upper case to lower case • Right: Selects the next character to modify • Left: Selects the previous character to modify
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms the label

2 Key - Modify your own password

To modify your own password, press the 2 key on the **Modify** menu. See Figure 30 a.

Figure 30: Modify user password screens



Callout	Description
1	Enters the password in this field

Table 28: Keys function on the modify user password screen

Key	Function
Alphanumeric keypad	Enters the password
Esc	Press for at least one second: Clears all digits Press for less than one second: Exits the modify user password screen without modifying the password
Enter	Confirms the password and starts the password verification process

Note: To avoid using the same password for multiple users, enter the number corresponding to your user position as the first digit of your password, as follows:

- First digit for user 1 is 1
- First digit for user 2 is 2
- First digit for user 3 is 3
- First digit for user 4 is 4
- First digit for user 5 is 5
- First digit for user 6 is 6
- First digit for user 7 is 7
- First digit for user 8 is 8

Note: If you enter an incorrect or empty password, the display shows the screen in Figure 30 b for five seconds.

3 Key - Day and night modes

To change the control panel operating mode from day mode to night mode and reciprocally, press the 3 key on the **Modify** menu. Each time you press the 3 key, the control panel changes its operating mode.

The DAY MODE ON LED indicates the mode that you set up.

Day and night modes

The control panel operates in day mode or night mode. If you silence the control panel during day mode, the silence status remains until you remove the silence status, or until new alarms or faults occur. If you silence the control panel during night mode, the silence status remains until the night mode silence time expires. When you turn on the system, it starts in day mode by default.

Note: The control panel generates an instant alarm if alarm conditions are detected during night mode or if an alarm is triggered from a call point.

4 Key - Modify time and date

To modify the control panel time and date, press the 4 key on the **Modify** menu. See Figure 31 a.

Figure 31: Modify time and date screens

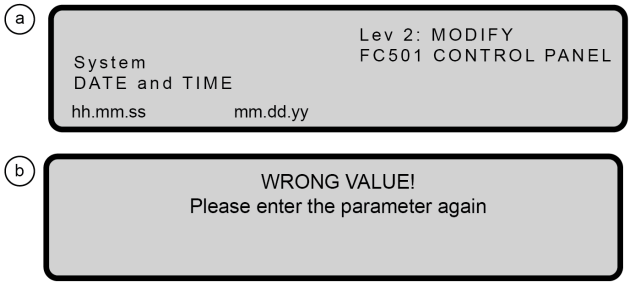


Table 29: Keys function on the modify time and date screen

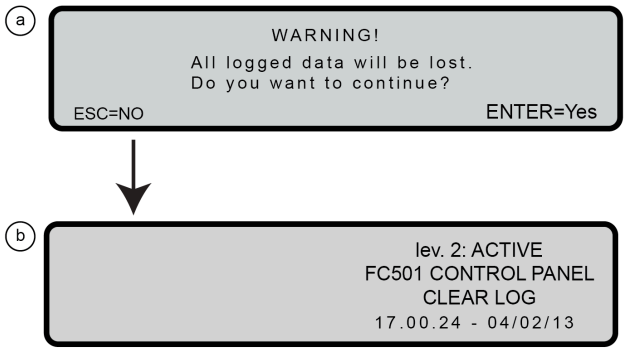
Key	Function
Alphanumeric keypad	Enters the time and date digits
Cursor keys	Right key: Selects the next digit to modify Left key: Selects the previous digit to modify
Esc	Cancels the operation and returns to previous screen
Enter	Confirms the time and date

Note: If you enter incorrect values, an error message displays. See Figure 31 b.

5 Key - Clear event log

To clear the event log, press the 5 key on the **Modify** menu. The display shows a warning message. See Figure 32 a.

Figure 32: Clear event log screens



To cancel the operation, press Esc. The display returns to the previous screen.

To confirm the operation, press Enter. The display shows the CLEAR LOG message. See Figure 32 b.

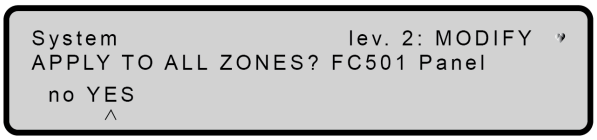
The control panel restarts after it has completed the operation.

Note: The installer can view the full event log after the user has cleared it.

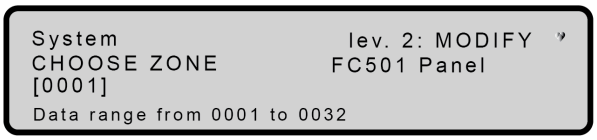
6 Key – Walk test

Use the walk test function to test the software zone's initiating devices. When you activate a device in walk test mode, the control panel memorizes the walk test event in the event log without generating an alarm status. To perform the walk test, complete the following steps:

1. To select the walk test function, press the 6 key on the **Modify** menu.



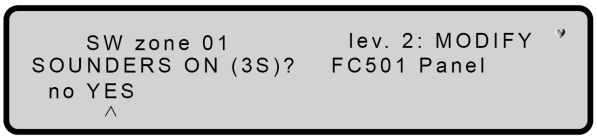
2. Select the software zones that you want to put in walk test mode:
   - To put all software zones in walk test mode, select **YES**.
   - To select which software zones to put in walk test mode, select **no**.
3. Press Enter.



4. **Optional:** If you selected no in step 2, enter the number of software zones that you want to put in walk test mode.

   You must enter four digits. For example, if you select zone number 1, you must enter 0001.
5. Press Enter.

6. Select the software zone's devices that you want to put in walk test mode:
   - To test all the software zones devices, select **all**.
   - To test the software zone's detectors only, select **det**.
   - To test the software zone's manual call points only, select **cp**.
   - To disable the walk test mode, select **OFF**.
7. Press Enter.



8. If you want the zone's sounders activated for three seconds when you activate a zone's device that is in walk test mode, select **YES**.
9. Press Enter.

The control panel resets and then displays the main screen or the event driven screens.

The Test LED lights indicating that there is at least one software zone in walk test mode.

You can put more than one software zone in walk test mode at the same time.

To put another software zone in walk test mode, repeat the procedure.

Disable

To disable the objects listed in Table 30, use the disable menu.

Table 30: Disable options

Key	Description
1	Dis. list: Displays the lists of disabled items
2	Device: Disables loop devices
3	SW zone: Disables software zones
4	Output: Disables the control panel outputs
5	Network: Disables network devices
6	Communic.: Disables the communicator
8	FIRE Relay: disables the FIRE relay

When you disable a control panel item, the disable LED switches on.

A disabled initiating device cannot generate alarms and faults.

The control panel cannot activate disabled notification devices.

If you enable a notification device during an alarm or fault event, the control panel activates that device immediately, if it is programmed to activate for that event.

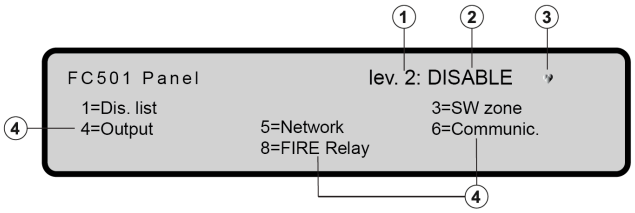
To access the disable menu, complete the following steps:

1. On the main screen, select the **Disable** option by pressing the 2 key.
2. Enter a valid password, then press Enter.

   The default user password is 111111.

   After entering a password, the display shows the disable menu. See Figure 33.

Figure 33: Disable menu



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Options

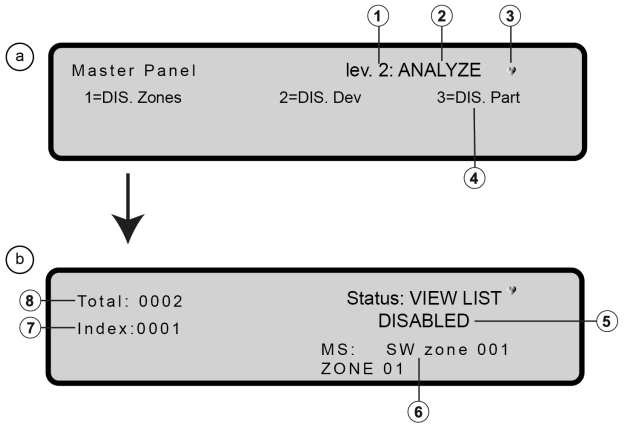
Table 31: Keys function on the disable menu

Key	Function
Alphanumeric keypad	Selects the disable menu options. See Table 30.
Esc	Cancels the operation and returns to the previous screen

1 Key – View disabled items

To view the disabled items, press the 1 key on the **Disable** menu. See Figure 34 a.

Figure 34: Disabled items screens



Callout	Description
1	Access level
2	Menu name
3	If flashing, the panel is operating normally
4	Disabled item lists **Note:** A flashing list number indicates that the relative list is not empty.
5	List type
6	Item information
7	Displayed item's number
8	Number of items in the list

Table 32: Keys function on the disabled items menu

Key	Function
1	Shows the list of disabled zones
2	Shows the list of disabled loop devices
3	Shows the list of other disabled panel items
Esc	Cancels the operation and returns to the previous screen

To see disabled items, select the relevant list in the disabled item menu. See Figure 34 a. For example, Figure 34 b shows the disabled zones.

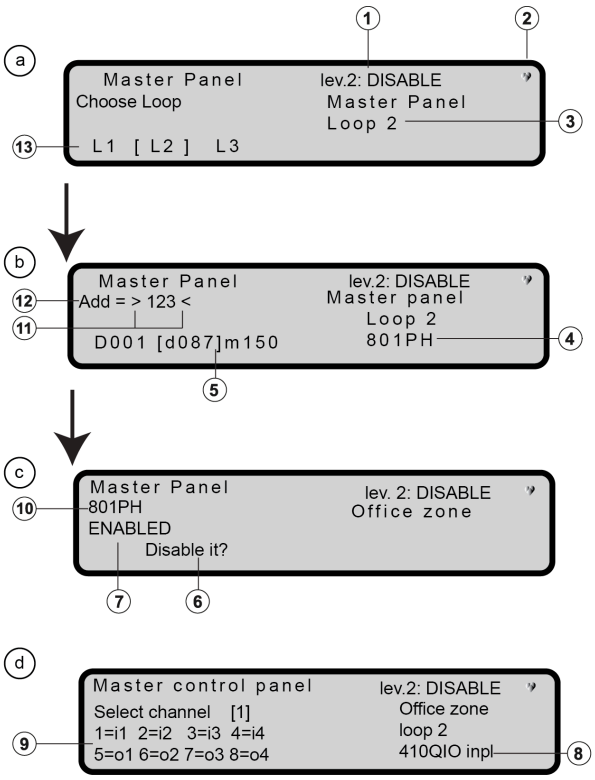
Table 33: Keys function on the view disabled items screen

Key	Function
1	Displays the relevant disable screen
Cursor keys	Up key: Displays the previous disabled item Down key: Displays the next disabled item
Esc	Cancels the operation and returns to the main screen

2 Key – Disable loop devices

To disable and enable loop devices, press the 2 key on the **Disable** menu. See Figure 35.

Figure 35: Disable and enable loop devices screens



Callout	Description
1	Access level and menu name
2	If flashing, the control panel is operating normally
3	Selected loop
4	Selected device type
5	List of loop's devices: • D001: Detector with address 001 • [d087]: Selected device • m150: Module with address 150 To select the previous device, press the Left key. To select the next device, press the Right key.
6	Enable or disable request
7	Current status
8	Module type and channel ID
9	Module inputs and outputs
10	Device to enable or disable
11	Invalid address
12	Entered address
13	Loop list. The square brackets indicates the selected loop. To select the previous loop, press the Left key To select the next loop, press the Right key.

Select the loop

To select the loop of the device you want to disable or enable, use the keys in Table 34.

Table 34: Keys function on the selecting loop screen

Key	Function
1	Selects loop 1
2	Selects loop 2
3	Selects loop 3
Right	Selects the next loop
Left	Selects the previous loop
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms and displays the screen for selecting the device. See Figure 35 b.

Select the device

After selecting the loop, the LCD shows the screen for selecting the device. See Figure 35 b.

To select the device that you want to disable or enable, use the keys in Table 35.

Table 35: Keys function on the selecting device screen

Key	Function	Notes
Alphanumeric keys	Enters the device address	• An address between square brackets indicates that the address is valid. See callout 11 in Figure 35 b • An address between angular brackets indicates that the address is invalid. In this case, the LCD shows the device with the address closer to that you entered. See callout 5 in Figure 35 b.
Left and Right cursor keys	Scrolls the loop's devices	
Esc	Cancels the operation and returns to the previous screen	
Enter	Confirms and displays the screen to disable or enable the device.	If you have selected a multichannel module, the screen for selecting the channel to disable or enable displays.

Select the channel

If you have selected a multichannel module, the screen for selecting the channel to disable or enable displays. See Figure 35 d.

To select the channel that you want to disable or enable, use the keys in Table 36.

Table 36: Keys function on the selecting channel screen

Key	Function
1-8	Selects the required channel
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms and displays the screen to disable or enable the channel

Disable or enable devices

The display shows the current status of the selected device. See Figure 35 c.

To disable or enable the selected device, use the keys in Table 37.

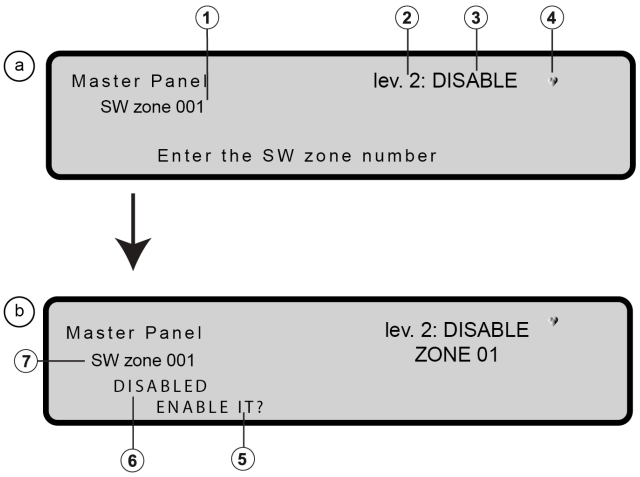
Table 37: Keys function on the disable device screen

Key	Function
Esc	Cancels the operation and returns to the previous screen
Enter	Disables or enables the device. The panel resets and then the display shows the main screen.

3 Key – Disable software zones

To disable and enable software zones, press the 3 key on the **Disable** menu. See Figure 36 a.

Figure 36: Disable and enable software zones screens



Callout	Description
1	Software zone number
2	Access level
3	Menu name
4	If flashing, the control panel is operating normally
5	Enabled or disable request
6	Current status
7	Software zone to disable or enable

Select a software zone

To select a software zone, use the keys in Table 38.

Table 38: Keys function on the selecting software zone screen

Key	Function
Alphanumeric keys	Enters the software zone number
Left and Right cursor keys	Scrolls the software zones

Table 38: Keys function on the selecting software zone screen

Key	Function
Esc	Cancels the operation and returns to the main screen
Enter	Accepts the selection and displays the next screen, if the zone exists. If the zone does not exist, the display shows the following error message: WRONG VALUE PLEASE ENTER NEW PARAMETER. After five seconds, the display shows the screen for software zone selection again.

Disable or enable a software zone

The display shows the current status of a selected software zone. See Figure 36 b.

To disable or enable the selected software zone, use the keys in Table 39.

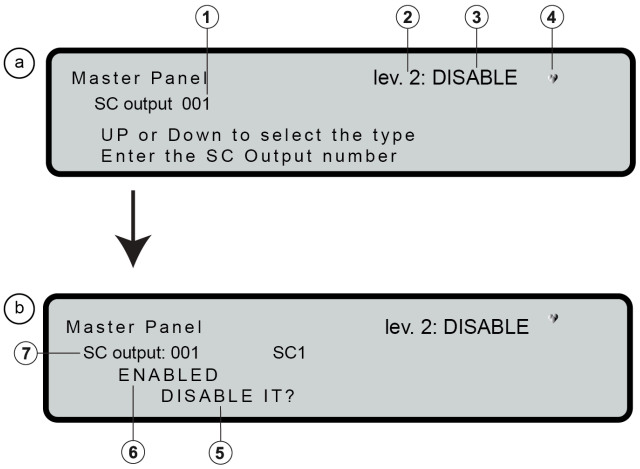
Table 39: Keys functions on the disable software zone screen

Key	Function
Esc	Cancels the operation and returns to previous screen
Enter	Disables or enables the software zone. The panel resets and then the display shows the main screen.

4 Key - Disable outputs

To disable and enable the control panel outputs, press the 4 key on the **Disable** menu. See Figure 37.

Figure 37: Disable and enable outputs screens



Callout	Description
1	Output number
2	Access level
3	Menu name
4	If flashing, the control panel is operating normally
5	Enable or disable request
6	Current status
7	Output to disable or enable

Select the output

To select an output, use the keys in Table 40.

Table 40: Keys function on the selecting output screen

Key	Function
Alphanumeric keys	Enters the output number
Up and Down cursor keys	Scrolls the output types SC and OC
Esc	Cancels the operation and returns to the previous screen
Enter	Displays the status of the selected output

Disable or enable the output

The display shows the current status of the selected output. See Figure 37 b.

To disable or enable the selected output, use the keys in Table 41.

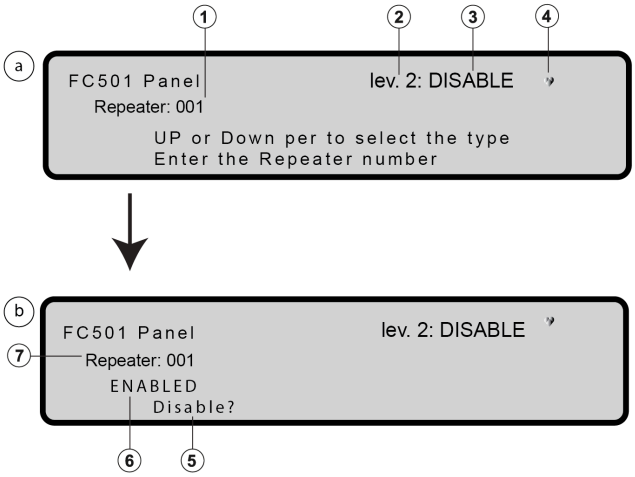
Table 41: Keys function on the disable output screen

Key	Function
Esc	Cancels the operation and returns to the previous screen
Enter	Disables or enables the output. The panel resets and then the display shows the main screen.

5 Key - Disable network devices

To disable and enable network devices, press the 5 key on the **Disable** menu. See Figure 38.

Figure 38: Screens to disable or enable network devices



Callout	Description
1	Repeater number
2	Access level
3	Menu name
4	If flashing, the control panel is operating normally
5	Enable or disable request
6	Current status
7	Device to disable or enable

Select the network device

To select a network device, use the keys in Table 42.

Table 42: Keys function on the selecting network device screen

Key	Function
Alphanumeric keys	Enters the network device number: • Repeater, enter 1 to 4 • MIF, enter 1 to 4 If you enter an invalid number, the display shows the following error message: WRONG VALUE PLEASE ENTER NEW PARAMETER After five seconds, the display shows the screen for network device selection again.
Up and Down cursor keys	Scrolls the following network items: • Repeater • MFI • RS485NET
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms and displays the next screen

Disable or enable the network device

The display shows the current status of the network device.

To disable or enable the selected network device, use the keys in Table 43.

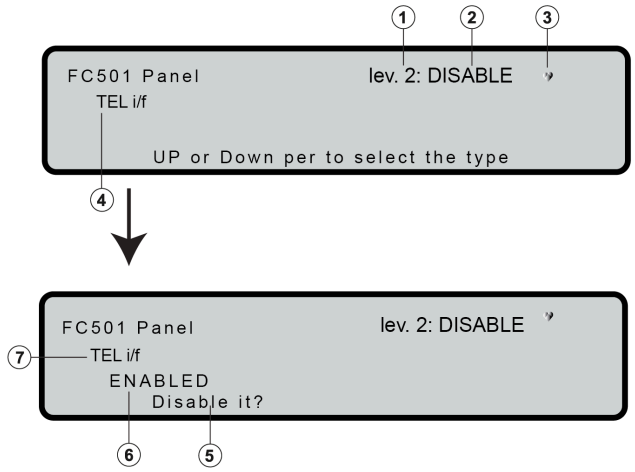
Table 43: Keys functions on the disable network device screen

Key	Function
Esc	Cancels the operation and returns to the previous screen
Enter	Disables or enables the network device. The panel resets and then the display shows the main screen.

6 Key - Disable communicator modules

To disable and enable the communicator modules, press the 6 key on the **Disable** menu. See Figure 39.

Figure 39: Disabling or enabling communicator modules screens



Callout	Description
1	Access level
2	Menu name
3	If flashing, the control panel is operating normally
4	Communicator module
5	Enable or disable request
6	Current status
7	Communicator module to disable or enable

Select the communicator module

To select a communicator module, use the keys in Table 44.

Table 44: Keys function on the selecting communicator module screen

Key	Function
Up and Down cursor keys	Scrolls the following communicator modules: • TEL i/f • Alarm TEL • Fault TEL • IP i/f • Alarm IP • Fault IP
Esc	Cancels the operation and returns to the previous screen
Enter	Confirms and displays the next screen

To disable or enable the selected communicator module, use the keys in Table 45.

Table 45: Keys function on the disable communicator module screen

Key	Function
Esc	Cancels the operation and returns to the previous screen
Enter	Disables or enables the communicator module. The panel resets and then the display shows the main screen.

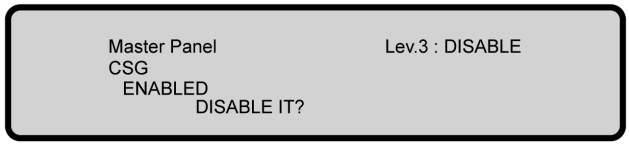
Notes:

- When you disable a communicator module, the DISABLED and FIRE SIGNAL FAULT LEDs switch ON.
- If the display shows the message NO ACTION TO BE DONE when you try to disable or enable the TEL i/f communicator module, it means that the installer has not enabled that module.

Enabling and disabling the CSG

1. To enable or disable the CSG, click **Disable** > **Communicat.**. See the following figure.

Figure 40: Disabling the CSG



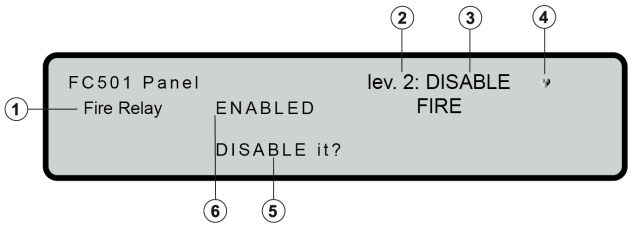
2. To view all the enable and disable actions, click **View List** > **Dis. Parts**, or you can use the **View Log** menu. See the following figure.

Figure 41: View list menu

8 Key - Disable fire relay

To disable and enable the fire relay, press the 8 key on the **Disable** menu. See Figure 42.

Figure 42: Disable or enable the fire relay screen



Callout	Description
1	Item to disable or enable
2	Access level
3	Menu name
4	If flashing, the control panel is operating normally
5	Action to do: • Enable it? • Disable it?
6	Current status: • Enabled • Disabled

To disable or enable the fire relay, use the keys in Table 46.

Table 46: Keys function on the disable fire relay screen

Key	Function
Esc	Cancels the operation and returns to the previous screen
Enter	Disables or enables the fire relay. The panel resets and then the display shows the main screen.

Appendix

Device acronyms

Table 47 shows the acronyms used on the panel LCD to idenitfy the devices on the loops.

Table 47: LCD acronyms

LCD acronym	Loop device name	Loop device description
400CH	FC400CH	Addressable Carbon Monoxide and Heat Detector
410BDM	FC410BDM	Beam Detector Module
410CIM	FC410CIM	Contact Input Module
410DDM	FC410DDM	Universal Fire and Gas Detector Module
410DIM	FC410DIM	Detector Input Module
410MIM	FC410MIM	Mini Input Module
410MIO	FC410MIO	Small Addressable Multi Input/Output Module
410QIO	FC410QIO	Quad Input/Output Module
410QMO	FC410QMO	Quad Monitored Output Module
410QRM	FC410QRM	Quad Relay Module
410RIM	FC410RIM	Relay Interface Module
410SIO	FC410SIO	Single Input/Output Module
410SNM	FC410SNM	Sounder Notification Module
410TSM	FC410TSM	Door Control Module
420CP	FC420CP-I	Addressable Break Glass Callpoint (indoor)
421CP	FC421CP-I	Addressable Break Glass Callpoint (outdoor)
430SAB	FC430SAB	Sounder Addressable Beacon
430SAM	FC430SAM	Sounder Addressable Module

Table 47: LCD acronyms

LCD acronym	Loop device name	Loop device description
440AIB	FC440AIB	Addressable Base Sounder Beacon VID
440AVB	FC440AVB	Addressable Base Sounder Beacon VAD Standard Power
440AVx	FC440AVR	Addressable Wall Sounder Beacon VAD Red
	FC440AVW	Addressable Wall Sounder Beacon VAD White
440SB	FC440SB	Addressable Base Sounder
441AVB	FC441AVB	Addressable Base Sounder Beacon VAD High Power
445AVR	FC445AVR	Addressable Wall Sounder Beacon VAD Weatherproof
44xAIx	FC440AIR	Addressable Wall Sounder Beacon VID Red
	FC440AIW	Addressable Wall Sounder Beacon VID White
	FC445AIR	Addressable Wall Sounder Beacon VID Weatherproof
44xSx	FC440SR	Addressable Wall Sounder Red
	FC440SW	Addressable Wall Sounder White
	FC445SR	Addressable Wall Sounder Weatherproof
460H	FC460H	Addressable Heat Detector
460P	FC460P	Addressable Optical Smoke
460PC	FC460PC	Addressable Optical Smoke, Heat, and CO detector

Table 47: LCD acronyms

LCD acronym	Loop device name	Loop device description
460PH	FC460PH	Addressable Optical Smoke and Heat Detector
LPASB	FC430LPASB	Loop Powered Addressable Sounder-Beacon Base
LPAV	FC410LPAV	Loop Powered Sounder-Beacon IP65
	FC410LPAVR	Loop Powered Sounder-Beacon Red
	FC410LPAVW	Loop Powered Sounder-Beacon White
LPBS	FC410LPBS	Loop Powered Sounder-Beacon IP65 (EN54-23)
	FC410LPBSR	Loop Powered Sounder-Beacon Red (EN54-23)
	FC410LPBSW	Loop Powered Sounder-Beacon White (EN54-23)
LPBSB	FC430LPBSB	Loop Powered Addressable Sounder-Beacon Base (EN54-23)
LPSB	FC430LPSB	Loop Powered Addressable Sounder Base
LPSY	FC410LPSY	Loop Powered Sounder IP65
	FC410LPSYR	Loop Powered Sounder Red
	FC410LPSYW	Loop Powered Sounder White

FC500 repeater

Description of command keys

Note: Only the LAMP TEST, SILENCE BUZZER and EVAC control keys can be activated at L1, without a password. All other control keys can be activated with an access level 2 or 3 password. For more information about control panel and repeater keys, see Table 3.

LCD display description

The information on the LCD display is organized as screens. See Figure 43 b. There are two screen types as follows:

- Main screen
- Event driven screens

The main screen allows access to the panel information. It also shows the status of the panel.

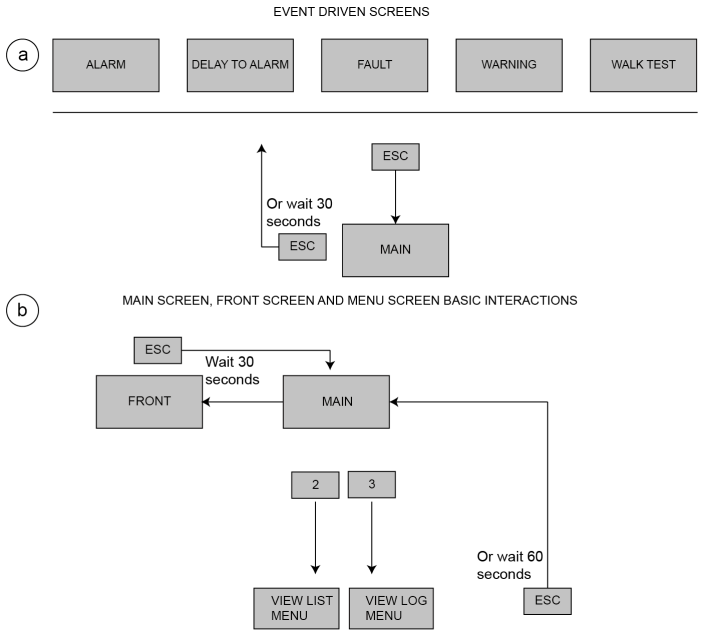
The main screen of the repeater replicates the panel main screen with the following limitations:

- Will never be overwritten by the panel front screen
- Only the view list and view log screens can be displayed
- The Esc long press to return to level 1 is not operative

Description of event driven screens

The event driven screens are activated by events in the system and override the screen present on the display at that time. An event driven screen may be overridden by another event driven screen that has a higher priority. The event driven screen behavior is completely under panel control. See Figure 43 a.

Figure 43: Event driven screens and main screen interactions



The event driven screens replicate the panel event driven screens with the following limitation: It is not possible to change the display mode in the alarm or delay-to-alarm screens.

Description of status LEDS

The Repeater status LEDs are described in Table 4.

CPR information

CE 0051
Tyco Fire & Security GmbH, Victor von Bruns-Strasse 21, 8212 Neuhausen am Rheinfall, Schaffhausen, Switzerland 13 0051-CPR-0406 DoP-2015-4218 (FC501-L) DoP-2015-4219 (FC501-H and FC501-HK)
EN 54-2:1997+A1:2006, **EN54-4**: 1997+A1:2002+A2:2006, **EN 54-21**: 2006 Control and indicating equipment with integrated power supply equipment for fire detection and fire alarm systems for buildings with alarm transmission and fault warning routing equipment **Expected options** Fault signals from points Dependencies on more than one alarm signal: Type A and B Delays to outputs Disablement of addressable point Test condition Output to fire alarm device
EN 54-21 Alarm transmission and fault warning routing equipment for fire alarm systems installed in buildings
EN 54-2 Essential characteristics Performance under fire conditions: Passed Response delay (response time to fire): Passed Operational reliability: Passed Durability of operational reliability, temperature resistance: Passed Durability of operational reliability, vibration resistance: Passed Durability of operational reliability, electrical stability: Passed Durability of operational reliability, humidity resistance: Passed

CE 0051
EN 54-21 Essential characteristics Performance of transmission: Passed Operational reliability: Passed Durability of operational reliability, temperature resistance: Passed Durability of operational reliability, vibration resistance: Passed Durability of operational reliability, electrical stability: Passed Durability of operational reliability, humidity resistance: Passed
EN 54-4 Essential characteristics Performance of power supply: Passed Operational reliability: Passed Durability of operational reliability, temperature resistance: Passed Durability of operational reliability, vibration resistance: Passed Durability of operational reliability, electrical stability: Passed Durability of operational reliability, humidity resistance: Passed

CE 0051
Tyco Fire & Security GmbH, Victor von Bruns-Strasse 21, 8212 Neuhausen am Rheinfall, Schaffhausen, Switzerland 13 0051-CPR-0406 DoP-2015-4211 (FC500IP in FC501-L, FC501-H, and FC501-HK)
EN 54-21 Alarm transmission and fault warning routing equipment for fire alarm systems installed in buildings
EN 54-21 Essential characteristics Performance of transmission: Passed Operational reliability: Passed Durability of operational reliability, temperature resistance: Passed Durability of operational reliability, vibration resistance: Passed Durability of operational reliability, electrical stability: Passed Durability of operational reliability, humidity resistance: Passed

The declarations of performance can be found on the product web page at www.fireclass.com.

CE
0051

Tyco Fire & Security GmbH,
Victor von Bruns-Strasse 21,
8212 Neuhausen am Rheinfall,
Schaffhausen, Switzerland
23
DoP-2023-4308 (CSG-F)

EN 54-21: 2006 Essential characteristics
Alarm transmission and fault warning routing equipment for fire alarm systems installed in buildings