



The operation and functions described in this manual are available from Software Version 5000-053-12 onwards.

Specifications:



Item	Specification Details		
Part Number:	Touch-10	Touch-10/FT	
Enclosure	Steel IP30 RAL9005	Steel IP30 RAL9005	
Dimensions H x W x D mm	205 x 290 x 85	205 x 290 x 85	
Weight	3Kg	3Kg	
Temperature	-5°C to 40°C	-5°C to 40°C	
Humidity (RH)	95 % Max	95 % Max	
Cable Entries (20mm knockouts)	5x top / 5x top rear	5x top / 5x top rear	
Power Supply	24V (18-30V) DC, 330mA @ 24V	24V (18-30V) DC, 365mA @ 24V	
Display	10" Colour TFT	10" Colour TFT	
Indicators	Fire, Fault, Disabled, Test, Power On, System Fault	Fire, Fault, Disabled, Test, Power On, System Fault	
Touch Keypad	Full screen – Resistive	Full screen – Resistive	
Backlight	Automatic brightness control	Automatic brightness control	
Number of Fire Zones	2000 when networked	2000 when networked	
Network (fitted)	STD (ST4)	FT (ST7)	
Programmable Inputs	1 x Hard wired input – default PSE fault input		
USB Interfaces	USB type A (future use) USB type B for PC connection		
TCP/IP Interface	On-board provision for 10BaseT connection (future use)		
Event Log	5000 Event & Diagnostic + 500 Fire		
As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice			


1	INTRODUCTION.....	5
1.1	STANDARDS.....	5
1.2	CAUTIONS AND WARNINGS.....	5
1.3	DESCRIPTION.....	5
1.4	EN54 FUNCTIONS.....	6
1.1.1	EN54 Optional Features with Requirements.....	6
1.5	INSTALLATION APPROVALS.....	7
1.5.1	Fire System Installations.....	7
1.5.2	Wiring Regulations.....	7
2	CONTROL AND INDICATIONS.....	8
2.1	LED STATUS INDICATORS.....	8
2.2	GRAPHIC DISPLAY & TOUCH KEYPAD.....	9
2.2.1	Control Buttons.....	10
2.2.2	Number and Letter Buttons.....	10
2.3	BUZZER.....	10
3	OPERATION.....	11
3.1	ACCESS LEVELS.....	11
3.1.1	Password Entry.....	11
3.2	FIRE ALARM CONDITIONS.....	12
3.2.1	Zone details.....	13
3.2.1.1	View Points.....	13
3.2.1.2	View Maps.....	13
3.3	FAULT CONDITIONS.....	14
3.4	DISABLEMENT CONDITIONS.....	14
3.5	SUPERVISORY CONDITIONS.....	15
3.6	ALARM / WARNING CONDITIONS.....	15
3.7	TEST CONDITION.....	15
3.8	MULTIPLE CONDITIONS.....	15
3.9	GRAPHICAL MAPS.....	16
3.10	USER MENU FUNCTIONS.....	17
3.10.1	Zones Menu.....	18
3.10.1.1	Test.....	18
3.10.1.2	Disable Inputs.....	18
3.10.1.3	View Points.....	19
3.10.1.4	View Map.....	19
3.10.2	View Menu.....	20
3.10.2.1	Zone Filter.....	20
3.10.2.2	Log.....	21
3.10.2.3	Software.....	21
3.10.2.4	Network.....	21
3.10.3	Disable Menu.....	22
3.10.3.1	Inputs.....	22
3.10.3.2	Outputs.....	22
3.10.3.3	User Id.....	23
3.10.4	Enable Menu.....	23
3.10.4.1	Inputs.....	23
3.10.4.2	Outputs.....	24
3.10.4.3	Part Disabled.....	24
3.10.5	Test Menu.....	25
3.10.5.1	Zones.....	25
3.10.5.2	Buzzer.....	25
3.10.5.3	LEDs.....	25
3.10.6	Delay.....	26
3.10.7	Access Level.....	26
3.10.8	Home Screen.....	26
4	INSTALLATION.....	27
4.1	IDENTIFICATION OF PARTS.....	27
4.2	INSTALLING THE ENCLOSURE.....	27
4.2.1	Opening the Enclosure Cover.....	27

4.2.2	Removing the Main Chassis Assembly.....	27
4.2.3	Mounting the Enclosure	28
4.2.4	Remounting the Main Chassis Assembly	28
4.2.5	Recommended Cable Routing Arrangement.....	28
4.2.6	Surface Mount Back Box (Option)	29
4.3	WIRING INSTALLATION.....	30
4.3.1	DC Power Installation.....	30
4.3.2	Network Interface	31
4.3.3	USB Interfaces	32
4.3.3.1	USB A.....	32
4.3.3.2	USB B.....	32
4.4	SD MEMORY CARD.....	32
4.5	MAIN PCB	33
5	PROGRAMMING	34
5.1	SOFTWARE UPDATE	34
5.1.1	SOM Module	34
5.1.2	Panel	34
5.1.3	Peripherals	34
5.2	CONFIGURATION.....	34
5.2.1	PC CONFIG Tool	34
5.2.2	Display Menu	35
5.2.2.1	Passwords.....	35
5.2.2.1.1	Forgotten Level 3 Password	36
5.2.2.2	Zone text	37
5.2.2.3	PC configuration.....	37
5.2.2.4	Settings	37
5.2.2.4.1	Erase Configuration.....	37
5.2.2.4.2	Node Configuration.....	38
5.2.2.4.3	Terminal Zone	38
5.2.2.4.4	Logging Mode.....	38
5.2.2.4.5	Fault Buzzer	38
5.2.2.4.6	Configuration Data.....	38
5.2.2.4.7	RAM Test.....	38
5.2.2.4.8	Wallpaper	38
5.2.2.4.9	Transparency.....	39
5.2.2.4.10	Slideshow Interval	39
5.2.2.4.11	Brightness	39

1 Introduction

1.1 Standards

Advanced Electronics Ltd declares that the products identified below conform to the essential requirements specified in the Low Voltage Directive 2006/95/EC & Electromagnetic Compatibility Directive 2004/108/EC:

	15
EN54-13:2005 Type 1 Component – Remote control and indicating equipment	
Touch-10, Touch-10/FT	

Low Voltage Directive 2006/95/EC

BS EN60950-1: 2006 Safety of information technology equipment

Electromagnetic Compatibility Directive 2004/108/EC

BS EN55022: 2010 Emissions, Class B

BS EN50130-4: 2011 Immunity, Product Family Standard

1.2 Cautions and Warnings



BEFORE INSTALLATION – Refer To the Ratings shown on the label inside the product and to the ‘Specifications Chart’ in this document.
Please read this manual carefully. If you are unclear on any point **DO NOT** proceed – Contact the manufacturer or supplier for clarification and guidance.



Only Trained service personnel should undertake the Installation, Programming and Maintenance of this equipment.



This product has been designed to comply with the requirements of the Low Voltage Safety and the EMC Directives. Failure to follow the installation instructions may compromise its adherence to these standards.



This equipment is constructed with static sensitive components. Observe anti-static precautions at all times when handling printed circuit boards. Wear an anti-static earth strap connected to panel enclosure earth point. Before installing or removing any printed circuit boards remove all sources of power.



Where you see the “PC Only” symbol, these features can either only be set-up using the PC Configuration Tool or there are additional options that are only available via the PC Configuration Tool.

1.3 Description


This manual covers the installation, programming, commissioning and use the *Touch Control Touch-10 Remote Control* and Indicating panels. This manual provides generic programming and installation information.


Install the panel in accordance with the instructions in Section 4.

Program the operation in accordance with the instructions detailed in Section 5.

Use the panel in accordance with the instructions detailed in Section 3. The operation of the Touch Control remote terminals and the available controls and indications are equivalent to the controls and indications on the MX-5000 control panels (refer to document 680-166).


1.4 EN54 Functions


	<p>The Touch Control Panels in conjunction with the Mx-5000 Control Panels are compliant with the requirements of EN54-2 (1997) and EN54-13 (2005).</p> <p>In addition to the basic requirements, the following optional functions are provided and these comply with the requirements of EN54.</p>
---	---


	C.I.E Optional Functions	EN54-2 Clause	
	Indication	Outputs to Fire Alarm Devices	7.8
	Outputs	Outputs to Fire Routing Equipment	7.9
	Controls	Investigation Delays to Outputs	7.11
		Co-incident Detection	7.12
		Alarm Counter	7.13
		Fault Signals from Points	8.3
		Output to Fault Routing Equipment	8.9
		Disablement of Points	9.5
		Test Condition	10
		Standardised I/O	11
			Type B & Type C


1.1.1 EN54 Optional Features with Requirements


In addition to the mandatory requirements of EN54 Part 2, the Touch Control Remote CIE supports the indication and control of the following optional features with requirements: -

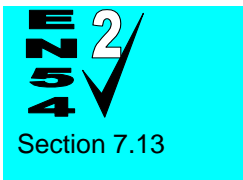
 <p>Section 7.8</p>	<p>Outputs to Fire Alarm Devices.</p> <p>The Touch Control CIE has provision for the indication of conditions relating to fire alarm device outputs. It is possible to Silence and Re-sound the alarms at Level 2.</p>
---	--

 <p>Section 7.9</p>	<p>Outputs to Fire Routing Equipment.</p> <p>The Touch Control CIE has provision for the indication of conditions relating to the transmission of the fire alarm condition to a remote receiving station such as the fire brigade office.</p>
--	---

 <p>Section 7.10</p>	<p>Outputs to Fire Protection Equipment.</p> <p>The Touch Control CIE has provision for the indication of conditions relating to the transmission of the fire alarm condition to fire protection equipment.</p>
---	---

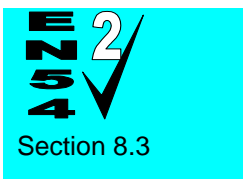
 <p>Section 7.11</p>	<p>Delays to Outputs.</p> <p>The Touch Control CIE has provision for the indication of conditions relating to Output and Investigation Delays.</p>
---	--

 <p>Section 7.12</p>	<p>Coincidence Detection.</p> <p>The Touch Control CIE has provision for the indication of Coincidence Detection. Types B and C are supported in the Mx-5000 Series control panels.</p>
---	---



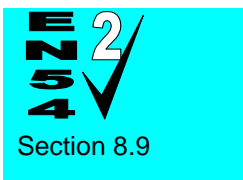
Alarm Counter.

The Touch Control CIE has provision to record the number of times that the fire alarm condition is entered.



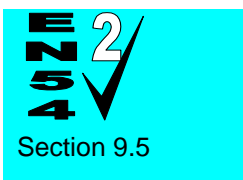
Fault Signals from Points.

The Touch Control CIE has provision for the indication of conditions relating to fault signals from points. These are indicated on a per zone basis.



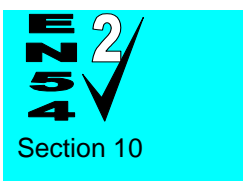
Outputs to Fault Routing Equipment.

The Touch Control CIE has provision for the indication of the conditions relating to the transmission of the fault condition to a remote receiving station such as the service centre office.



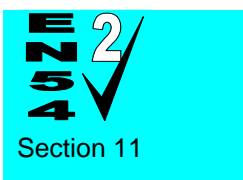
Disablement of Points.

The Touch Control CIE has provision for enabling and disabling signals from points over the *Ad-Net* Network.



Test Condition.

The Touch Control CIE has provision for enabling the testing of the installation on a per zone basis over the *Ad-Net* Network.



Standardised Input / Output interface.

The Touch Control CIE provides the Standardised I/O interface for the indication and control of the mandatory conditions over the *Ad-Net* Network.

1.5 Installation Approvals

1.5.1 Fire System Installations

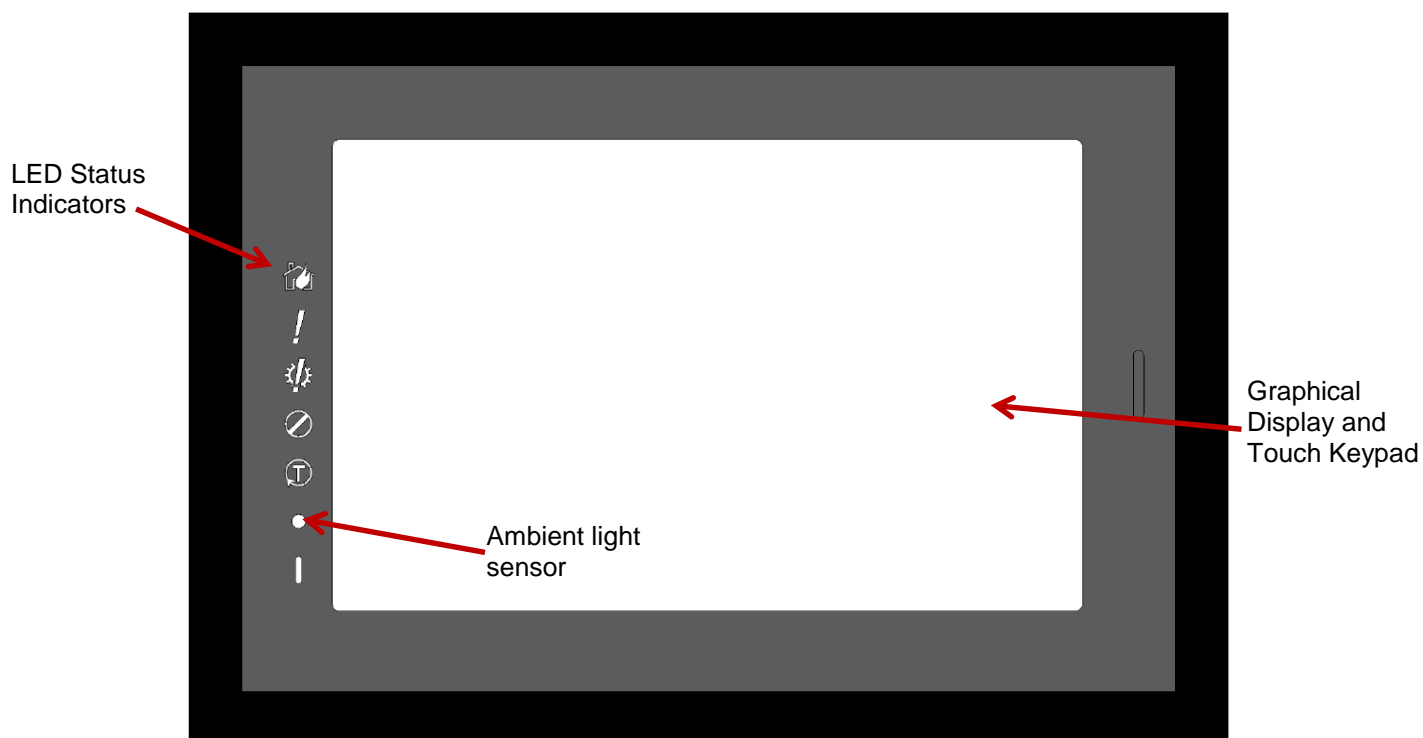
The panel must be installed and configured for operation in accordance with these instructions and the applicable code of practice or national standard regulations for fire systems installation (for example BS5839-1: 2002) appropriate to the country and location of the installation.

1.5.2 Wiring Regulations

The panel and system must be installed in accordance with these instructions and the applicable wiring codes and regulations (for example BS7671) appropriate to the country and location of the installation.







2 Control and Indications

The following information identifies the buttons and indications available on the Touch Control panel:



2.1 LED Status Indicators

The LED Status Indications show the basic operational state of the panel and whether the panel is in a fire alarm, fault, disabled or test condition.

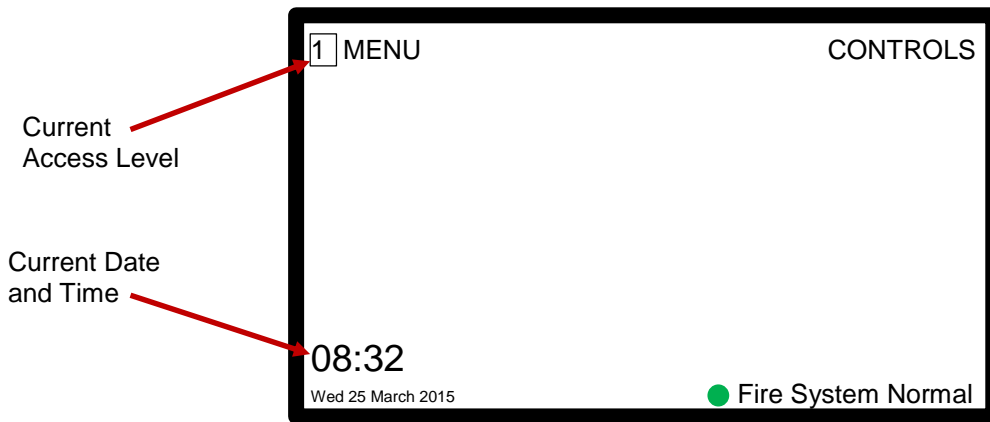
Function	Symbol	Colour	Description
FIRE		Red	Indicates that the system has detected a fire alarm condition.
Fault		Yellow	Indicates that the system has detected a fault condition
System Fault		Yellow	Indicates the presence of a system fault.
Disable		Yellow	Indicates that part of the system has been disabled (i.e. isolated).
Test		Yellow	Indicates that part of the system is in a test condition
Power		Green	Indicates the presence of power

2.2 Graphic Display & Touch Keypad

The background image, colour and optional logo are configurable.

In the following images and in the remainder of this document, the background image and logo are not shown for clarity.

Normal Display:

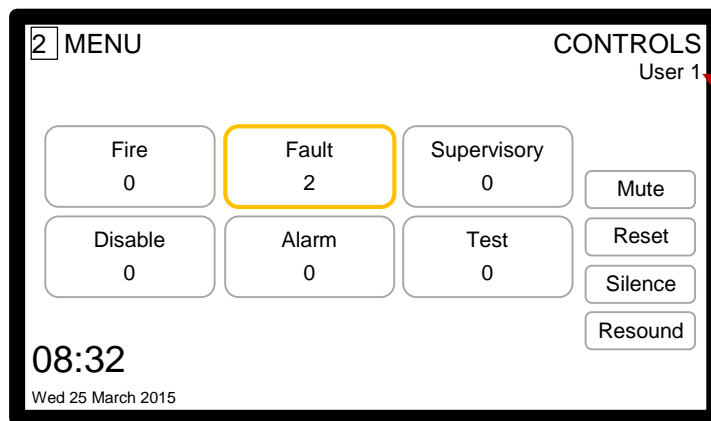


Current Access Level

Current Date and Time

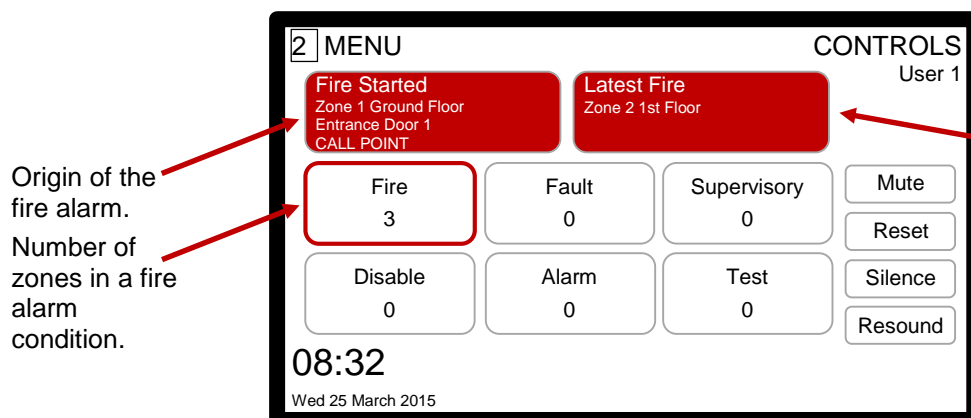
Status Display:

The following status summary display is shown when there are any non-normal conditions.



Shows which user is signed on at Level 2

Fire Alarm Display:



Origin of the fire alarm.
Number of zones in a fire alarm condition.

The latest zone in a fire alarm condition.
Only shown if there is more than one zone in fire.

Buttons on the touch display are shown by an outline symbol.

In addition, the MENU and CONTROLS words are also buttons. The position of buttons is context sensitive. Buttons may / may not be shown depending on the specific display content.

A light intensity sensor is provided to automatically control the brightness of the display backlight (future function).

2.2.1 Control Buttons

Control buttons are provided to mute the buzzer, silence or resound the sounders, reset the system or initiate an evacuation.

To activate the controls touch the word CONTROLS and a drop down box appears with the appropriate buttons.

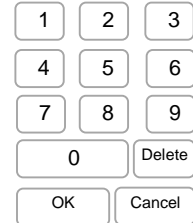
If the panel is at Level 1, pressing a button (except Mute) will require the entry of a password. Some control buttons automatically appear depending on the state of the system.



2.2.2 Number and Letter Buttons

A pop-up window will appear when number or letter buttons may be entered.

When only numbers are required (e.g. password entry) a number keypad as shown opposite.



Letters, numbers and special characters are presented using a "QWERTY" style keyboard.

Press 'shift' for capital letters.

Press '123' for numbers and other characters

Press '1/2' or '2/2' for number / other keypads.

Press 'abc' to return to normal letters.

Delete acts as a backspace and deletes the last character in the line.

Press Enter / OK to confirm entry.

Spacebar

2.3 Buzzer

The buzzer produces two different sounds to differentiate between fire alarm conditions and fault conditions.

Condition	Operation
Fire Alarm	The buzzer operates with a continuous tone.
Fault	The buzzer operates intermittently.

3 Operation

3.1 Access Levels

The panel operation is protected from inadvertent and erroneous misuse by means of four access levels. These levels are as follows:

Level 1	Untrained user
Level 2	Authorised User
Level 3	Service and Maintenance Engineer
Level 4	Service and Maintenance Engineer – Special Tools required

- A Level 1 Untrained User can view the current operational condition of the system and may MUTE the internal buzzer.
NOTE: Depending on the configuration settings, a Level 1 user may also be permitted to EVACUATE and/or SILENCE and/or RESET the system by pressing the appropriate button and entering a password.
- A Level 2 Authorised User can view the operational condition of the system and may MUTE the internal buzzer. In addition, the EVACUATE, SILENCE and RESET buttons are enabled and access to the Level 2 Menu functions is available.
NOTE: There are up to 10 User ID codes available, each with its own password, which can be configured with varying permissions to specific menu function options.

A Level 3 User has access to program and configure the operation of the panel. This is described in detail in section 5.

3.1.1 Password Entry

To change operating levels; activate controls at Level 1 and perform other functions requires the entry of a password.

A pop-up window will appear as opposite.

Enter the password using the number buttons and then press 'OK' to confirm

An '*' is shown as each number is entered.

Press 'Delete' to backspace and erase the last number entered.

Press 'Cancel' to abandon password entry.

If no buttons are pressed for 15 seconds, the password entry will automatically be cancelled.

Password	1	2	3
**	4	5	6
	7	8	9
	0	Delete	
	OK	Cancel	

3.2 Fire Alarm Conditions

If a fire alarm condition occurs, the Fire LED will flash and the display shows the status display with the fire alarm status highlighted. The internal buzzer will sound for each new zone in a fire alarm condition.

Touch 'MUTE' to silence the buzzer – the Fire LED will turn on steady.

Touch 'SILENCE' to turn off the sounders.

Touch 'RESOUND' to turn on the sounders if they have been previously silenced. The sounders will automatically resound if the fire spreads to another zone.

Touch 'RESET' to reset the system.

Note: If the display is at Level 1, touching a control button will prompt for a Level 2 password before the action is performed.

Origin of the fire alarm.

Number of zones in a fire alarm condition.

The latest zone in a fire alarm condition. Only shown if there is more than one zone in fire.

The origin of the fire alarm is always shown at the top left. The number of zones in a fire alarm condition is shown below in the fire alarm summary button.

If there is more than one zone in a fire alarm condition, the last zone to enter the fire alarm condition is shown at the top right (this is not shown if there is only one zone in a fire alarm condition).

To obtain more information on the individual zones and devices in a fire alarm condition touch the fire alarm summary button.

Note: The display will automatically revert to this display from any other display 15 seconds after the last button press.

A list of the zones in a fire alarm condition is shown. Up to 12 zones (in three rows of four) can be seen in zone numeric order.

If there are more than 12 zones in a fire alarm condition then a page select is shown at the bottom of the display. The number of pages shown depends on the number of zones in a fire alarm condition.

PREVIOUS 1 2 3 NEXT

Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.

3.2.1 Zone details

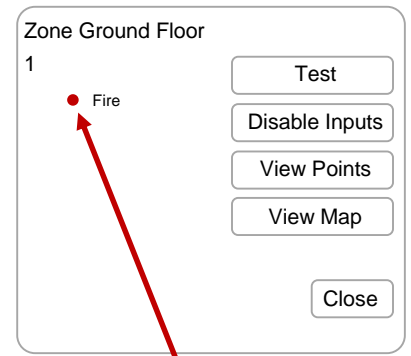
To view more information for a specific zone, touch the zone summary button.



A pop-up menu is shown.

To view the individual fire input points (e.g. detectors, call points, etc.) that are in a fire alarm condition touch "View Points".

If available and configured, touch "View Map" to view a graphical map / mimic diagram of the location. (Note: This button option is not shown when maps are not configured).



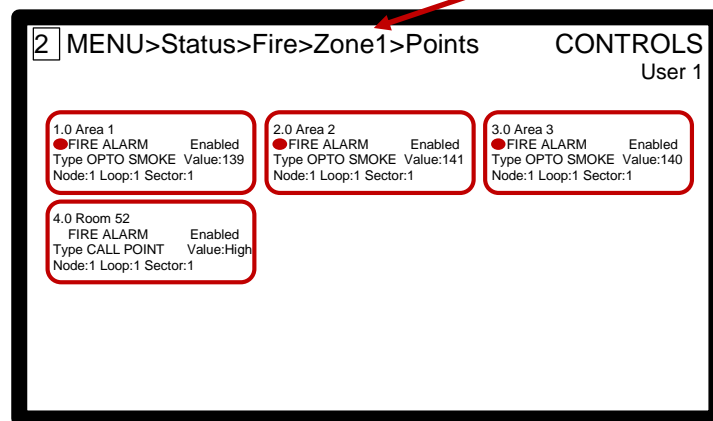
The pop-up also shows the full status of this zone for other conditions – e.g. fault, disablement, etc. if these are present.

3.2.1.1 View Points

The display shows a list of the individual points that are in a fire alarm condition.

Up to 9 points can be shown on the display in numerical order. If there are more than 9 points in this zone in the fire alarm condition the display shows these in pages – a page select bar is shown at the bottom of the display. To view the other points select the page as required.

In this example, the display shows four points in alarm in Zone 1.



Note: The header shows the hierarchical display level.
Touch on a word to revert to that previous menu level.

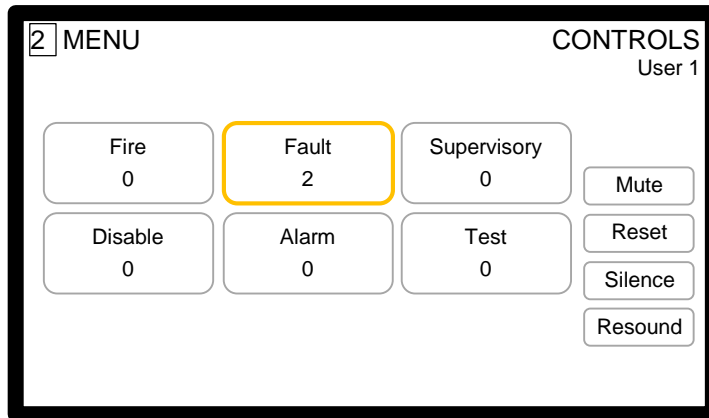
3.2.1.2 View Maps

If configured, the location of the fire alarm can be viewed on a series of building maps.

For more information see section 3.9

3.3 Fault Conditions

! If a fault condition occurs the Fault LED will flash and the following status summary display will be shown.



The display shows the number of zones in a fault condition.

The internal buzzer will sound for each newly recognised fault condition and the Fault LED will flash.

Touch the 'MUTE' button to acknowledge the fault and mute the buzzer. The Fault LED will turn on steady.



To obtain more information on the individual zones and devices in a fire alarm condition touch the fire alarm summary button.

Point details and maps (if available) can be shown.

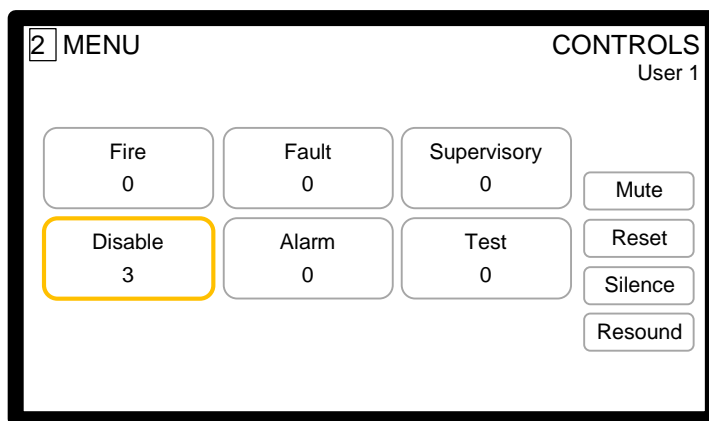
Fault conditions are normally non-latching and the fault condition will automatically clear when the fault is removed / corrected. If the same fault is acknowledged 5 times (MUTE) then the fault is latched.

⚙️ System fault always latches.

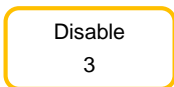
Latched fault conditions can be cleared by touching the RESET button.

3.4 Disablement Conditions

⊗ The disablement LED will illuminate when any disablement condition is present and the following status summary display will be shown.



The display shows the number of zones in a disabled or part disabled condition.



To obtain more information on the individual zones and devices in a disabled or part disabled condition touch the disable summary button.

Point details and maps (if available) can be selected and shown.

3.5 Supervisory Conditions

Supervisory conditions are indicated for conditions that may interfere with or hamper the operation of the system for fire protection measures, etc. but are not faults in the installation. For example, frozen water supplies, closed water valves, etc.

The status display indicates the number of zones in a supervisory condition and the internal buzzer will sound for each new zone.

Touch the 'MUTE' button to acknowledge supervisory and to mute the buzzer.

Supervisory
4

To obtain more information on the individual zones and devices in a supervisory condition touch the supervisory summary button.

3.6 Alarm / Warning Conditions

Alarm and warnings conditions are indicated for other conditions such as test fire alarms, pre-alarms, plant or machinery alarms, etc.

The status display indicates the number of zones in an alarm condition and the internal buzzer will sound for each new zone.

Touch the 'MUTE' button to acknowledge the alarm and mute the buzzer.

Alarm
3

To obtain more information on the individual zones and devices in an alarm condition touch the alarm summary button.

3.7 Test Condition

The test condition is used to check inputs (e.g. detection zones) and outputs (e.g. sounders).

T The Test LED will illuminate when a test condition is configured. The number of zones in a test condition will be indicated on the 'test' summary button.

Test
2

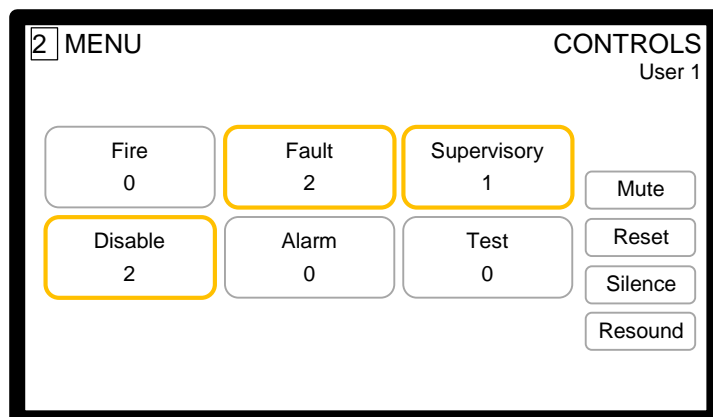
To obtain more information on the individual zones and outputs in an alarm condition touch the test summary button.

See section 3.10.5 for more information.

3.8 Multiple Conditions

The normal status display always shows a status summary for all fire alarm, fault and supervisory, etc. conditions. Each summary border is highlighted if the number of conditions is greater than zero.

In this example, the system has two zones in a fault condition, one zone in a supervisory condition and two zones in a disabled condition.



3.9 Graphical Maps

The Touch-10 panel can be configured to show graphical information on the location of fires, faults, disablements, etc.

The images can be in the form of isometric views or 2D plans.

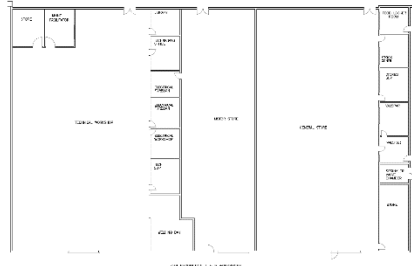
Depending on the complexity and size of the building, multiple images can be linked to allow more details to be seen. The images will be highlighted to show the condition of areas that are not in the normal state. Touching the relevant area can zoom-in and open up a new image to view this area in more detail.

For example, the main image may be an outside view of a multi-storey building. If a fire occurs on Floor 5 the floor will be highlighted red on the image. Touching the floor (red highlight) can (if configured) open up a new image showing the plan of this floor with the actual zone / area highlighted to show the position of the fire alarm on the floor.

As the nature and design of each building is unique, the following can only be an example of what is possible to show.



Example isometric view



Example floor plan



Example site plan

Fire Started
Zone 1 Ground Floor
Entrance Door 1
CALL POINT

If a fire alarm condition is present, touch either of the fire status buttons and the display will show the 'Home' map. The relevant zones / areas in a fire alarm condition will be highlighted.

Fault
2

For other conditions touch the zone summary buttons and then touch a zone button to select a zone.

Zone Ground Floor
1

- Fire
- Fault

Test

Disable Inputs

View Points

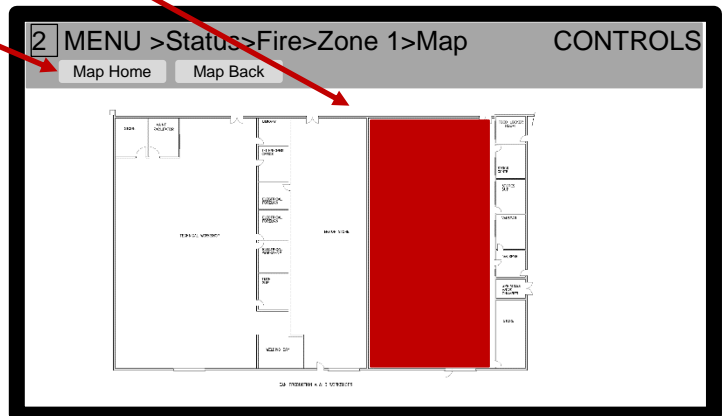
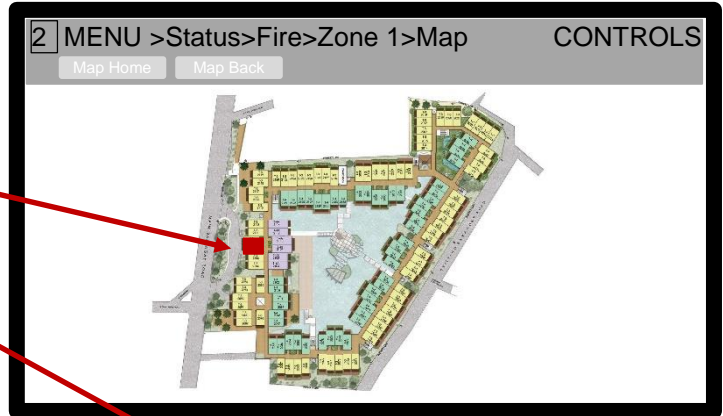
View Map

Close

From the pop-up menu touch the 'View Map' button and the display will show the 'Home' map.

As an example, the location of the fire alarm is shown highlighted in red.

Touch this area and a more detailed floor map is shown.



Note: The 'Map Home' and 'Map Back' buttons are enabled when more detailed images have been selected.

Map Home > Go to the home image

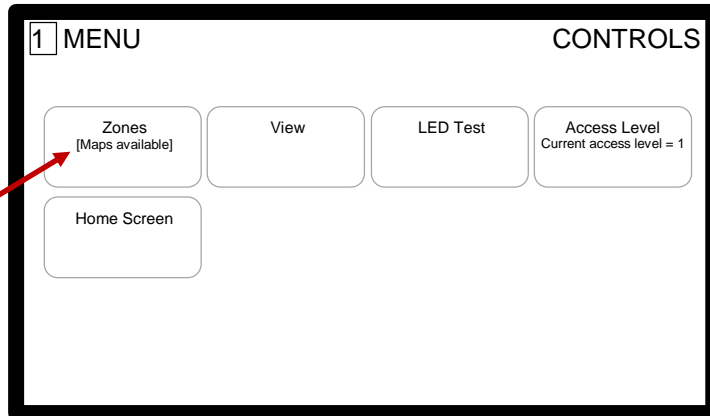
Map Back > Go back to the previous image

The Touch-10 allows for multiple levels of detailed images.

3.10 User Menu Functions

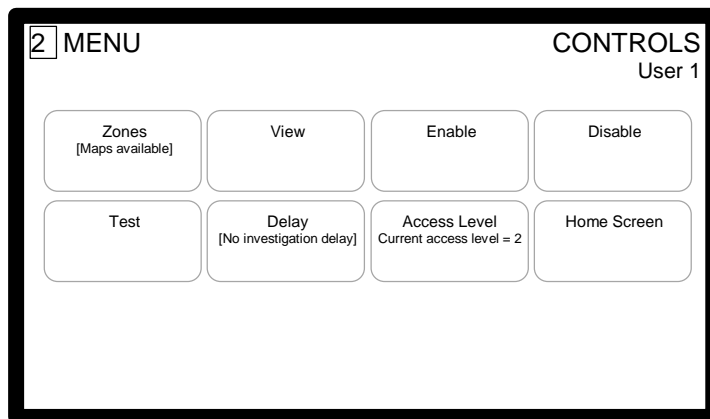
Touch the word MENU to show the user menu functions. The available functions are shown in the following displays.

LEVEL 1



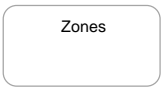
If maps are configured and available this will be indicated.

LEVEL 2

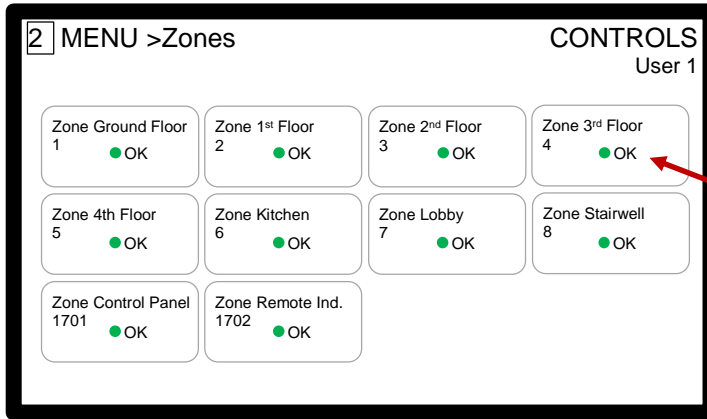


To change the access level, touch the 'Access Level' button. See section 3.10.7 for full information.

3.10.1 Zones Menu



Touch the 'Zones' button and the display will show all the available zones and their current status.

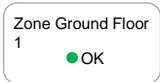


The display will show the current status of the zone and whether it is in a fire, fault, disable or other condition. OK means the zone is in a normal condition.

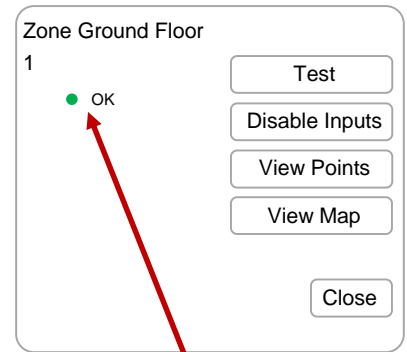
If there are more than 12 zones then a page select is shown at the bottom of the display. The number of pages shown depends on the number of zones.



Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.



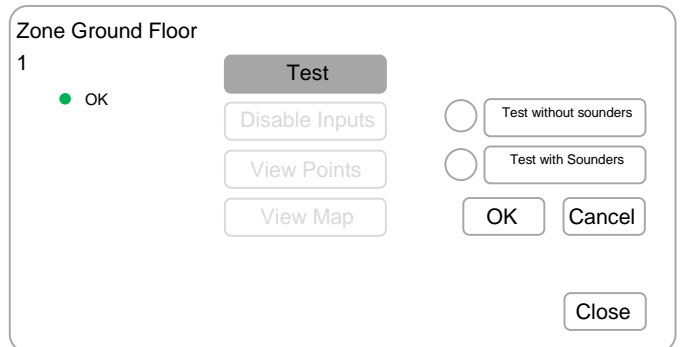
For more information on each zone, touch the required zone button and a pop-up menu will be shown.



The pop-up shows the full status of this zone for all conditions – e.g. fire, fault, disablement, test, etc. if these are present.

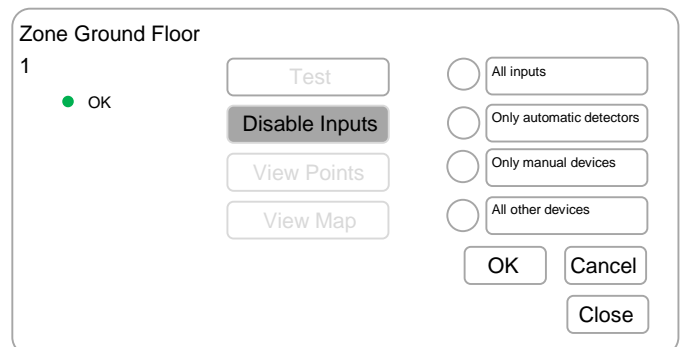
3.10.1.1 Test

The zone can be placed into a test condition. Touch the TEST button and a new pop-up will be shown. See section 3.10.5.1 for more information.



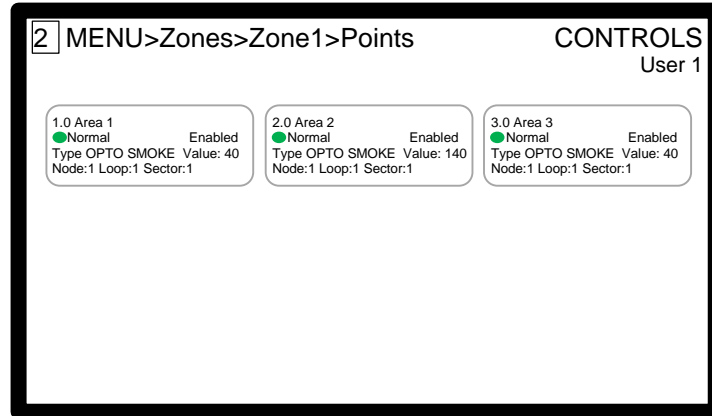
3.10.1.2 Disable Inputs

The zone inputs (detectors, call points, etc.) can be placed into a disabled condition. Touch the DISABLE INPUTS button and a new pop-up will be shown. See section 3.10.3.1 for more information. See below to disable individual points.

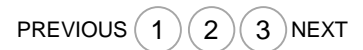


3.10.1.3 View Points

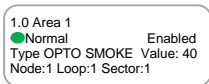
Touch the VIEW POINTS button and the points in the zone are shown as follows:



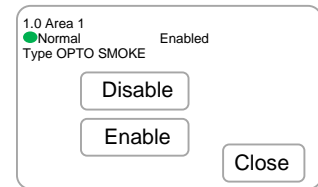
If there are more than 9 inputs then a page select is shown at the bottom of the display. The number of pages shown depends on the number of inputs in the zone.



Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.



Touch the required point and a pop-up menu appears. The point can be disabled or enabled from this menu.

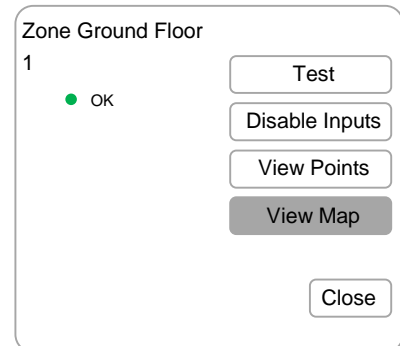


3.10.1.4 View Map

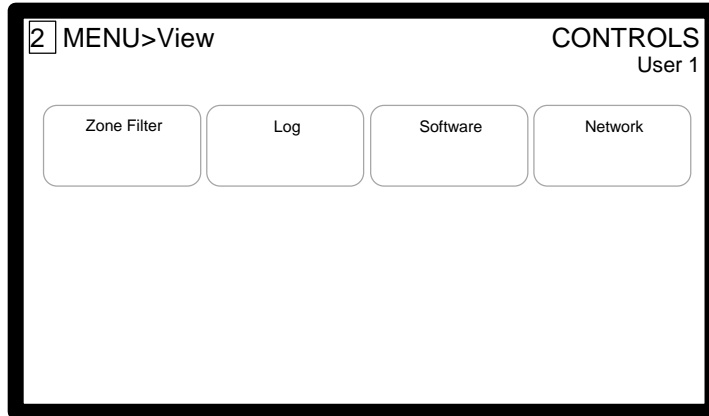
If configured, the location of this zone can be viewed on a series of building maps.

Touch the VIEW MAP button.

For more information see section 3.9



3.10.2 View Menu



3.10.2.1 Zone Filter

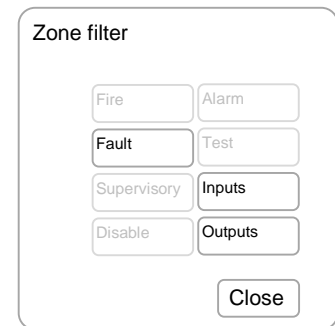
The zone filter allows selection of which zones to view based on specific operating conditions. Options that can be selected are highlighted.

Inputs and outputs are always available. In the example opposite, the fault option is also highlighted to show there are faults on the system that can be interrogated.

Select the required option by touching the respective button.

Each option will then show all of the applicable zones with that condition only.

Note: Inputs and outputs will show all zones.



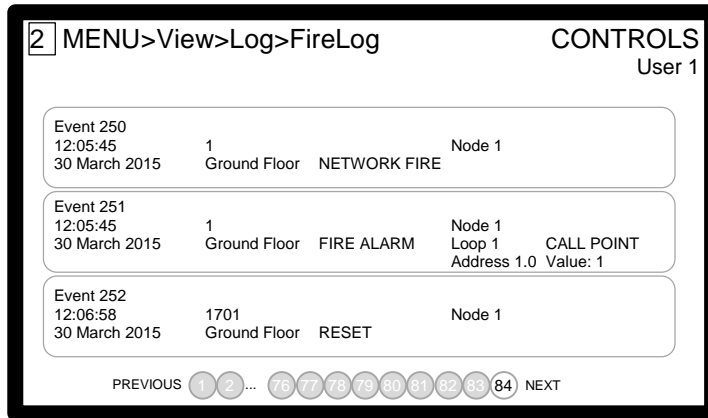
3.10.2.2 Log



Touch the 'Log' button and a pop-up selection window will appear. The log function can show the overall log of every event (5000 events) or the log of fire alarm related events (500 events).

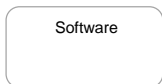


Touch the button for the required log and the display will show the last three events.

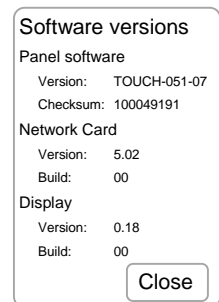


To view other earlier events touch the individual page numbers or touch PREVIOUS. To view other later events touch the individual page numbers or touch NEXT. Each page contains three events. The selected page is highlighted.

3.10.2.3 Software

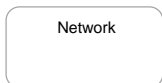


To view the software revisions in the panel touch the 'Software' button. The display shows a pop-up window with the relevant information as follows.



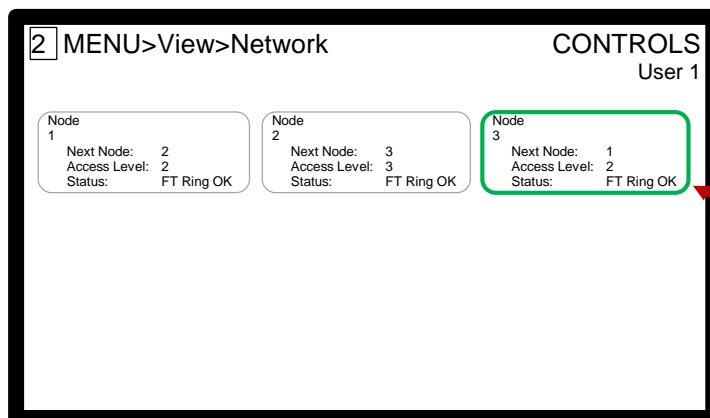
Touch 'Close' to return to the view menu display.

3.10.2.4 Network



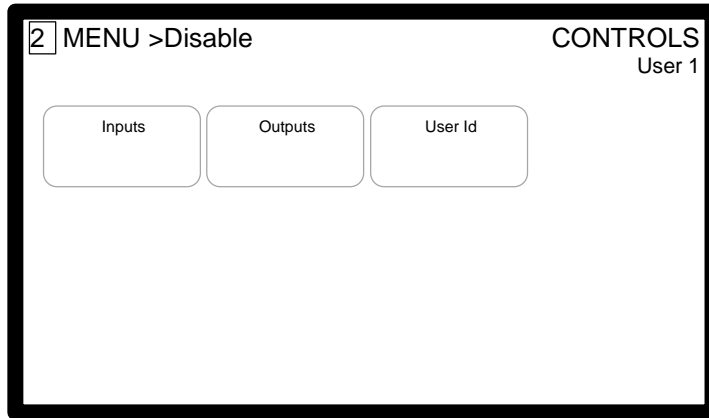
Touch the 'Network' button and the display shows a list of the panels on the network.

The display shows up to 9 panels. If there are more panels then the display shows these on different pages. The display shows the current access level and network status for each panel (node).



Green border shows this panel.

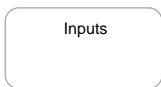
3.10.3 Disable Menu



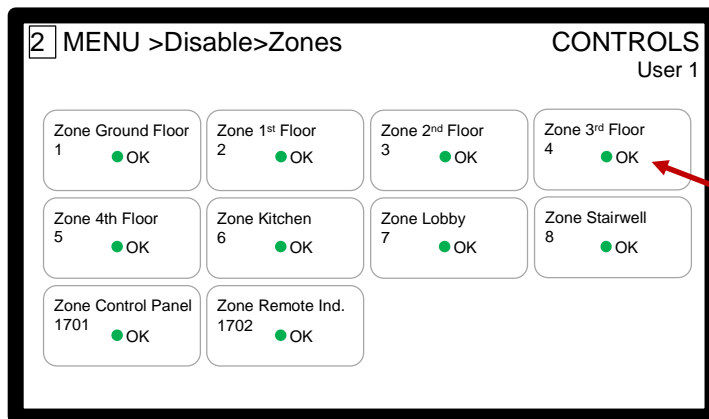
Touch to appropriate button to select the required disablement.

Note: A password may be required to be re-entered (User with permissions) to perform the disable functions.

3.10.3.1 Inputs



Touch the 'Inputs' button and the display will show all the available zones and their current status.

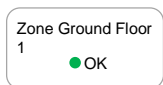


The display will show the current status of the zone and whether it is in a fire, fault, disable or other condition. OK means the zone is in a normal condition.

If there are more than 12 zones then a page select is shown at the bottom of the display. The number of pages shown depends on the number of zones.



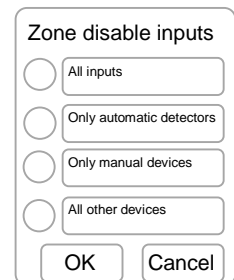
Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.



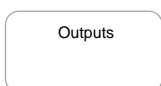
Touch the required zone button and a pop-up menu will be shown. Select the required disable function by touching the appropriate circle. When selected, the button will be shown as follows.

Touch 'OK' to confirm the disablement.

Note: Individual inputs can be disabled via the 'Zones' menu option.



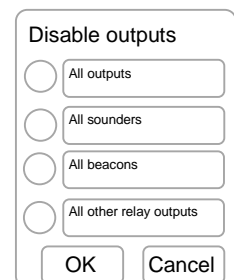
3.10.3.2 Outputs



Touch the 'Outputs' button and a pop-up menu will be shown. Select the required disable function by touching the appropriate circle. When selected, the button will be shown as follows.

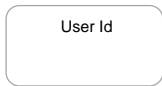
Touch 'OK' to confirm the disablement.

Note: Additional disablement options for fire routing, pager, etc. may appear in the list depending on the configuration of the system.



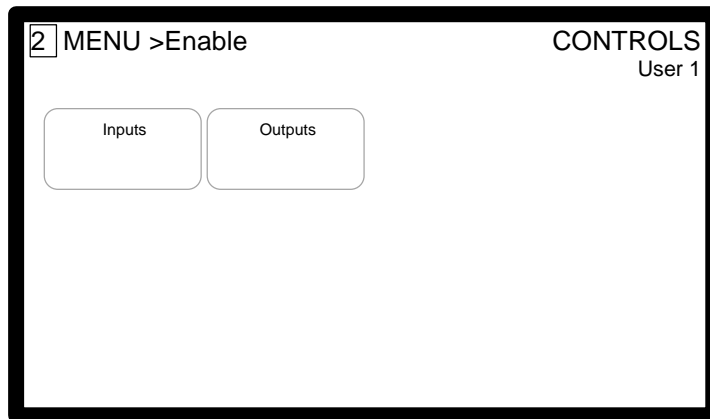
3.10.3.3 User Id

Each user may have separate permissions for the various functions available at Level 2. The current User Id is shown at the top right of the display.



Touch the 'User Id' button to return the panel to User 1 settings (minimum permissions).
The current User Id will be updated at the top right of the display.

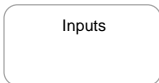
3.10.4 Enable Menu



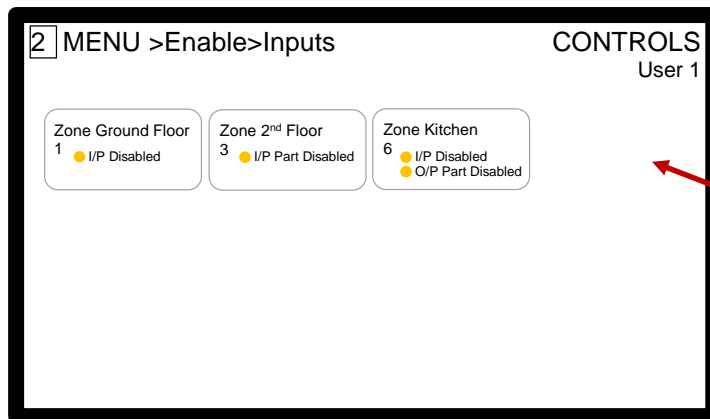
Touch to appropriate button to select the required enablement.

Note: A password may be required to be re-entered (User with permissions) to perform the enable functions.

3.10.4.1 Inputs



Touch the 'Inputs' button and the display will show the zones that have inputs that are in a disabled or part disabled condition along with other status conditions.



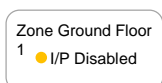
The display will show the current status of the zone and whether it is in a fire, fault, disable or other condition.

OK means the zone is in a normal condition.

If there are more than 12 zones then a page select is shown at the bottom of the display. The number of pages shown depends on the number of zones.

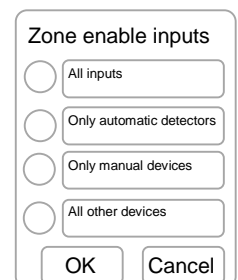


Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.

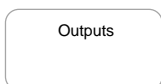


Touch the required zone button and a pop-up menu will be shown.
Select the required enable function by touching the appropriate circle.
When selected, the button will be shown as follows. ●

Touch 'OK' to confirm the disablement.



3.10.4.2 Outputs



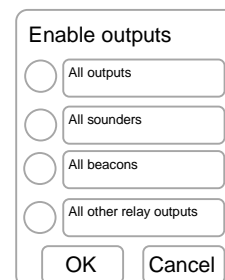
Touch the 'Outputs' button and the display will show a pop-up window with options.

Select the required enable function by touching the appropriate circle. When selected, the button will be shown as follows.

Touch 'OK' to confirm the enablement.

The enablement will be actioned across all panels in a network depending on the sector configuration programming.

Note: Additional enablement options for fire routing, pager, etc. may appear in the list depending on the configuration of the system.

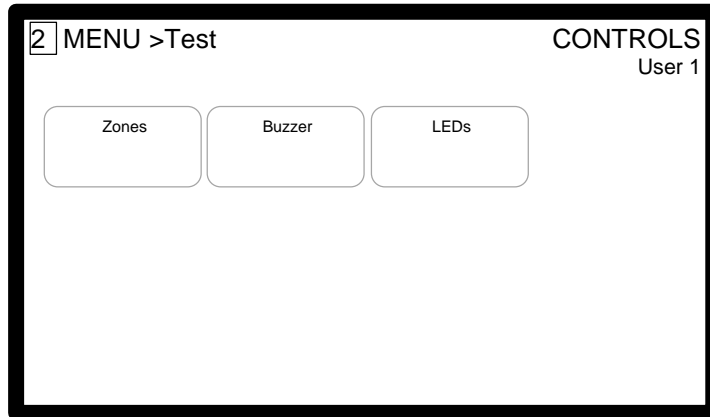


3.10.4.3 Part Disabled

Note: If zone is 'Part disabled' then individual inputs and outputs can be enabled via the 'Zones' menu option. See Section 3.10.1.3 View Points

3.10.5 Test Menu

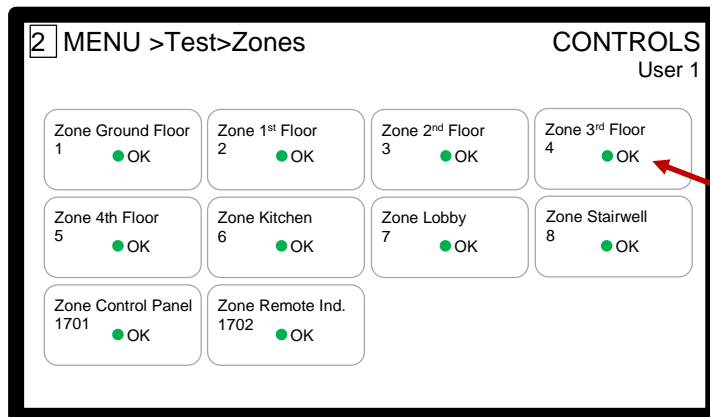
The test facility enables testing of both internal circuits (buzzer and LED) and connected fire detection devices (detectors and call points).



Touch to appropriate button to select the required test.

3.10.5.1 Zones

Touch the 'Zones' button to show all the available zones.



The display will show the current status of the zone and whether it is in a fire, fault, disable or other condition.
OK means the zone is in a normal condition.

If there are more than 12 zones then a page select is shown at the bottom of the display. The number of pages shown depends on the number of zones.

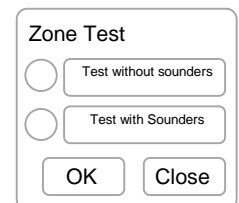


Touch the PAGE numbers, 'PREVIOUS' or 'NEXT' to view the list of zones on another page.



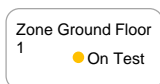
To initiate a test on a particular zone, touch the required zone button and a pop-up window will be shown.

Note: A password entry may be required depending on the user permissions.



Select the required sounder performance by touching the appropriate circle. When selected, the button will be shown as follows.

Touch 'OK' to place the zone in a test mode.



The Zone button will now show that the zone is 'On Test'.



When a device is tested and placed into an active alarm condition the button indicates the alarm condition.

Touch the zone button again to remove the zone from a test condition.

Note: If the zone remains in the alarm condition, it is not possible to exit from the test condition.

3.10.5.2 Buzzer

Touch the 'Buzzer' button and the internal buzzer will sound intermittently for 5 seconds.

3.10.5.3 LEDs

Touch the 'LEDs' button and the five status LED indicators will be illuminated for 5 seconds.

3.10.6 Delay

Investigation delays (if configured) can be turned on or off.

In addition, and depending on configuration, the delays can be permanent, timed, once only or extend.



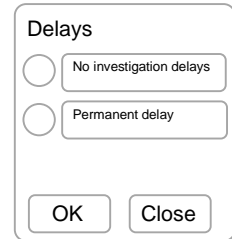
The delay button shows the current operating condition.

Touch the delay button to change the mode of operation. A pop-up window will be shown that contains buttons for the configured options.

Select the required mode by touching the appropriate circle. When selected, the button will be shown as follows.

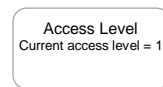
Touch 'OK' to complete the change of mode.

Note: It may be required to enter a password to complete the change.



Select 'No investigation delays' to turn off delays.

3.10.7 Access Level

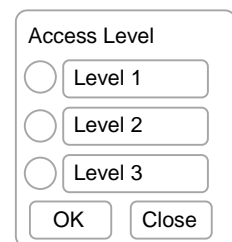


Touch the menu button and a pop-up window will be shown to select the required access level.

Select the required access level by touching the appropriate circle.

When selected, the button will be shown as follows.

Touch 'OK' and then enter the password to confirm the change in operating level.



Note: Level 3 is for service and maintenance engineer purposes. See section 5 for more information.

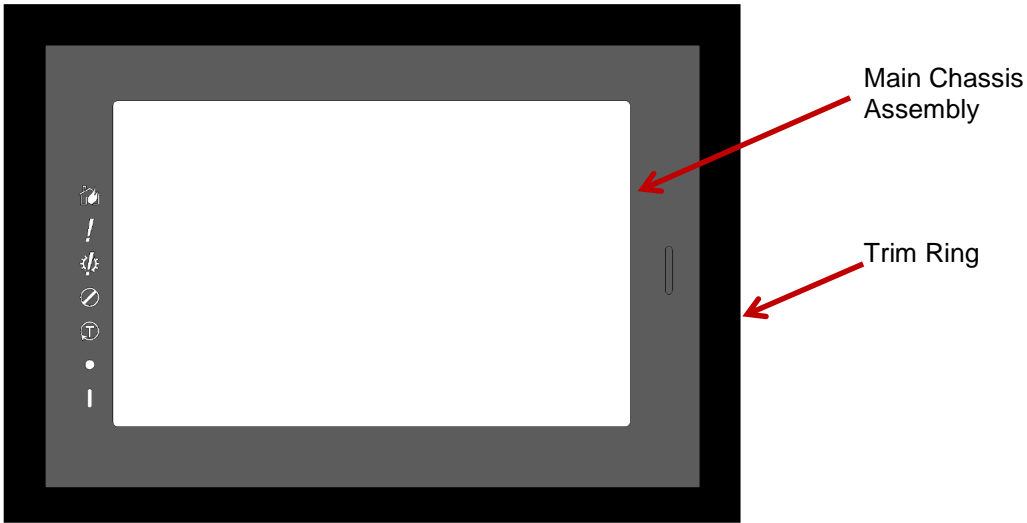
3.10.8 Home Screen

Touch the 'Home Screen' button to return to the normal or status summary displays.

Note: The display will automatically return to the normal / status screen if no button is touch for 60 seconds (15 seconds if there is a fire alarm condition).

4 Installation

4.1 Identification of Parts



The Touch Control Terminal comprises of three basic parts; a main chassis assembly, a back-box and a trim ring.

The main chassis assembly slides into the back box and is secured in place with the trim ring.

4.2 Installing the Enclosure

4.2.1 Opening the Enclosure Cover



TRIM RING
Fixing screws M2 (x2)

ENCLOSURE OPENING

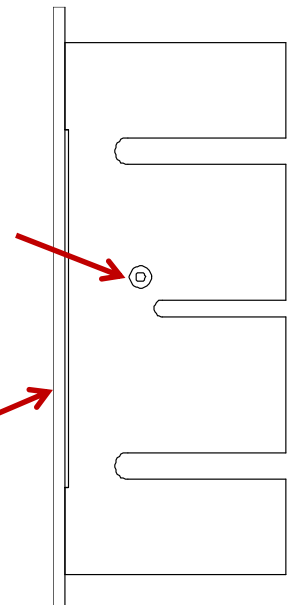
Unscrew the trim ring fixings screws so that the bottom of the trim ring can be pulled forward and slide up and remove. The trim ring is hooked onto the upper flange and secured with the screws locating behind the lower flange. There is no need to fully remove the screws!

The touch display module can be pulled forward by 35mm to gain access to USB sockets underneath.

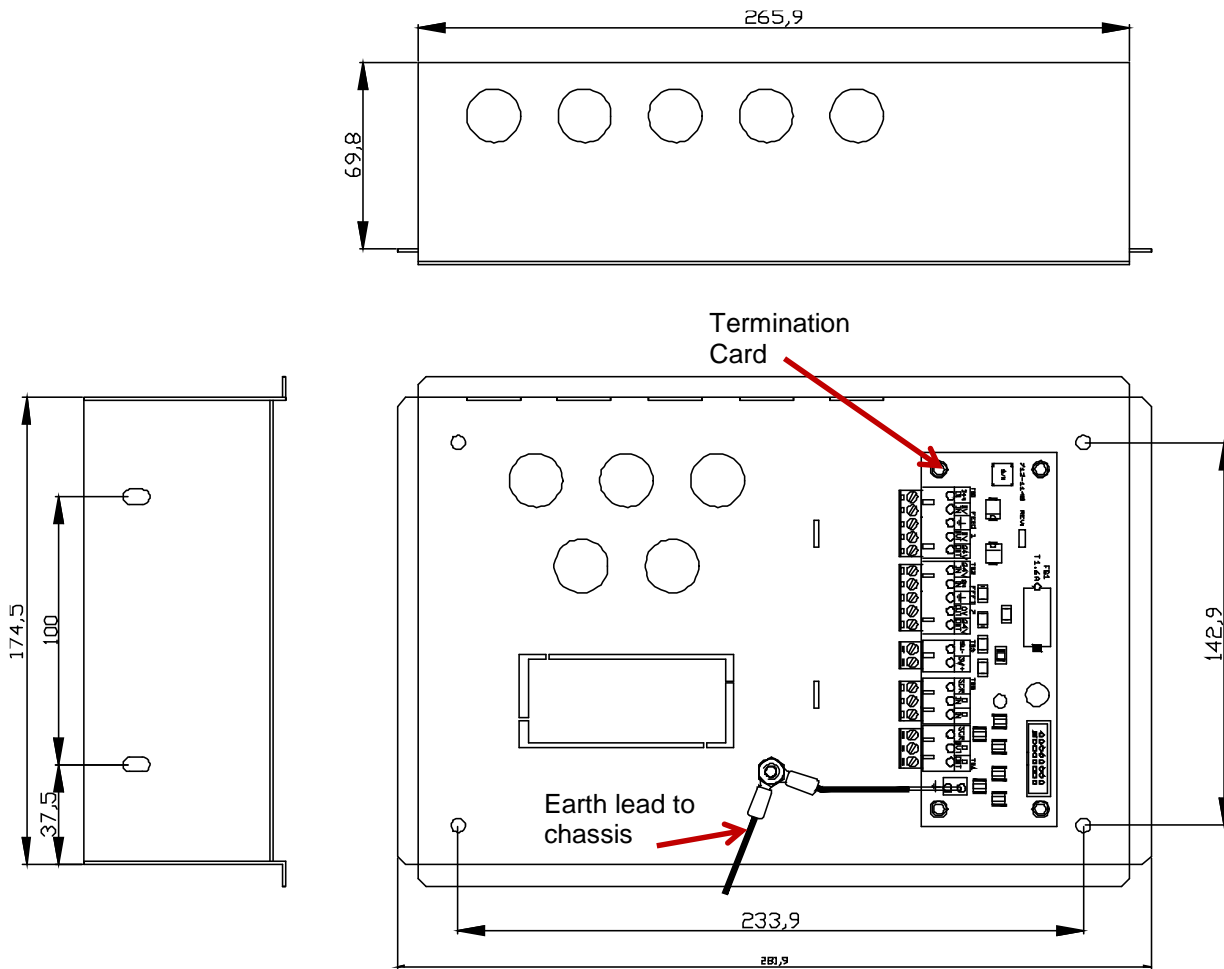
4.2.2 Removing the Main Chassis Assembly

To fully remove the chassis lift up the pin levers either side to disengage the internal catches and remove the chassis. Disconnect the earth lead from the tab on the back box and the ribbon cable from the termination card.

! Glass – Handle with care



4.2.3 Mounting the Enclosure



ENCLOSURE MOUNTING

! This unit is designed to be flush mounted into stud walling. Cut out the aperture in the wall to 3mm larger than the size of the back box.

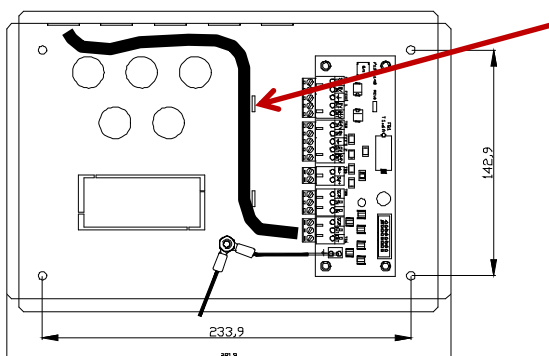
ENCLOSURE FIXING POINTS

4x fixing holes in rear of enclosure or
 4x fixing slots in side walls
 Side wall slots allow some adjustment for uneven walls.

4.2.4 Remounting the Main Chassis Assembly

Reconnect the ribbon cable to the termination Card and reconnect the earth lead to the tab in the back box. Insert the chassis assembly into the back box and push inwards until the retaining catches engage. To complete the assembly, push the chassis fully home, locate the trim ring over the top flange and then locate the trim ring over the bottom flange. Screw in the trim ring retaining screws.

4.2.5 Recommended Cable Routing Arrangement

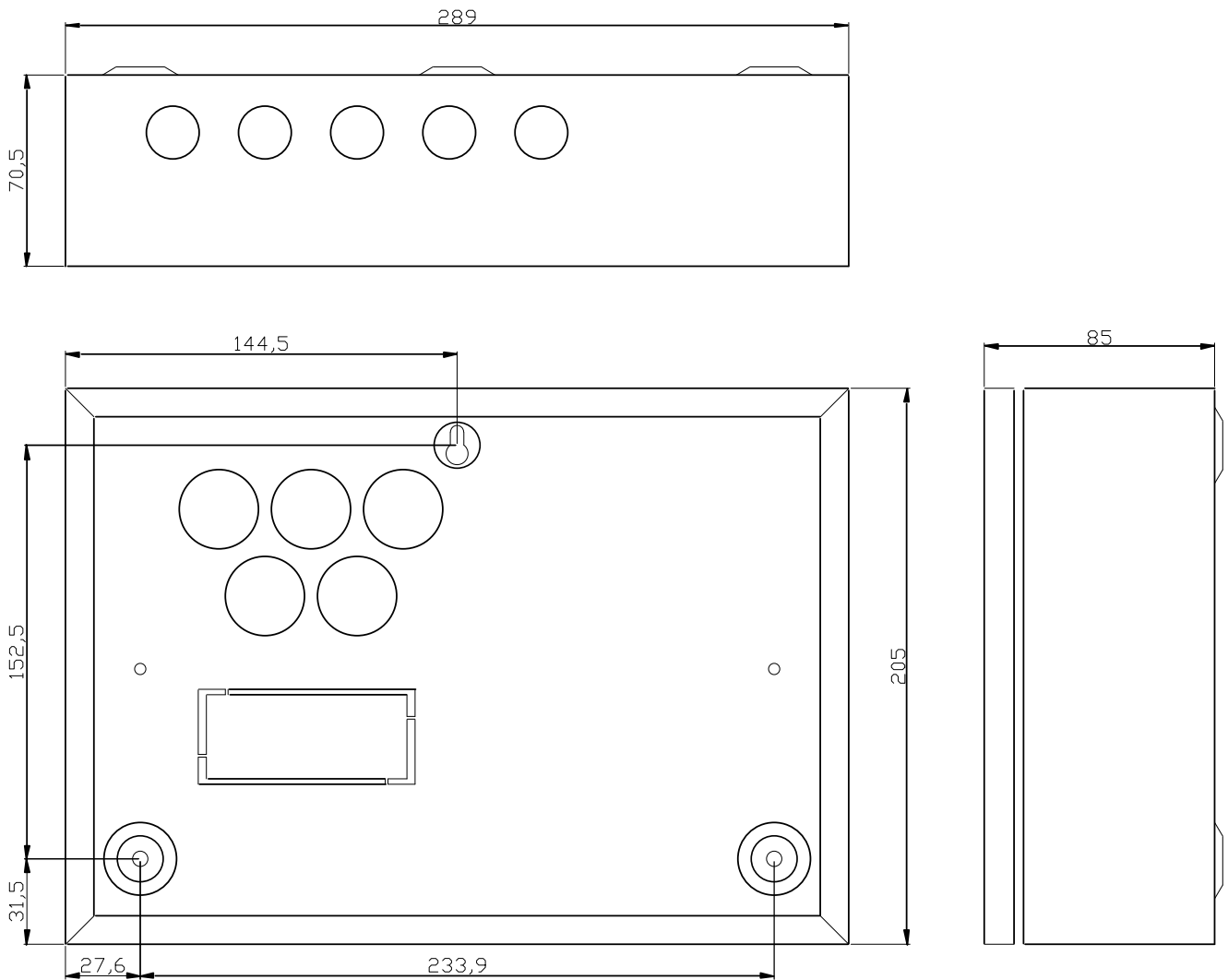


CABLE ROUTING

Route cables from the knockouts as shown and tie to anchor points with the supplied cable ties.

4.2.6 Surface Mount Back Box (Option)

The Touch-10 may also be surface mounted using the TOUCH-10-SBB enclosure (order separately). The enclosure dimensions are shown in the diagram below.



Remove the required knockouts and fix the enclosure to the wall using the three fixing points.

Mount the Touch-10 back-box into this sleeve and locate over the two central studs – affix with the supplied nuts and washers. Mount the chassis and trim ring as described earlier.

The top five knockouts are 20mm diameter. Fit the cable glands to this surface mount back-box before inserting the Touch-10 enclosure.

The rear five knockouts are 30mm diameter clearance. Fit the cable glands to the Touch-10 enclosure.

4.3 Wiring Installation

All electrical wiring installation work should be carried out in accordance with the code of practice or applicable national standards appropriate to the country of installation.

To maintain electrical integrity of the SELV wiring on the DC Power and communications lines all SELV wiring should be segregated from the LV mains wiring and be wired using cable with insulation suitable for the application.

To minimise the effects of EMC interference all data wiring circuits should be wired with a twisted pair of conductors with a cross sectional area suitable for the loading conditions.

In areas where cabling may come into contact with high frequency interference, such as portable radio transceivers etc. the data wiring cable should be of a twisted pair construction within an overall screen. Care should be taken to correctly terminate this screen, refer to the appropriate sections of this manual for further information for each circuit type.

NB: Minimum / Maximum cable size for all external connections is limited to 0.5mm² / 2.5mm² (22-14AWG).

4.3.1 DC Power Installation

The main electronics requires a 24V DC supply – this must be a Safety Extra Low Voltage (SELV) supply provided by an EN54-4 certified PSE.

It is not possible to use an Mx-5000 series 24VDC AUX output to power this equipment.



The enclosure must be connected to Earth for EMC Immunity protection.

Connect the earth wire to either terminal marked 'E'.

Connect to the supply earth through the power cable.

Either one (default) or two feeds can be used.

EN54-4 Clause 6.4 requires that two separate feeds when the PSE is housed in a separate cabinet from control and indicating equipment. The feeds should be run in separate cables and via diverse route for integrity.

Each feed can be monitored and a fault is registered on the loss of any one feed. Monitoring of the second feed can be turned on / off (programming).

A common separate PSE fault input can also be connected to the panel to indicate other PSE failures such as charger failure, battery missing, etc.

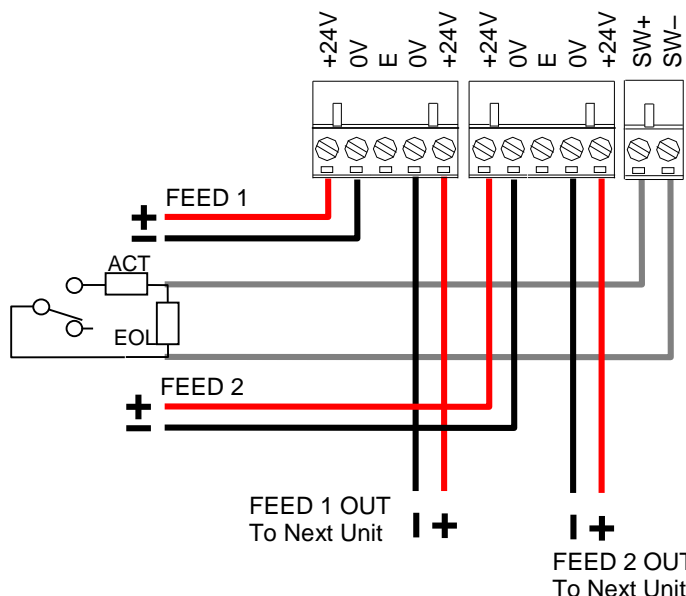
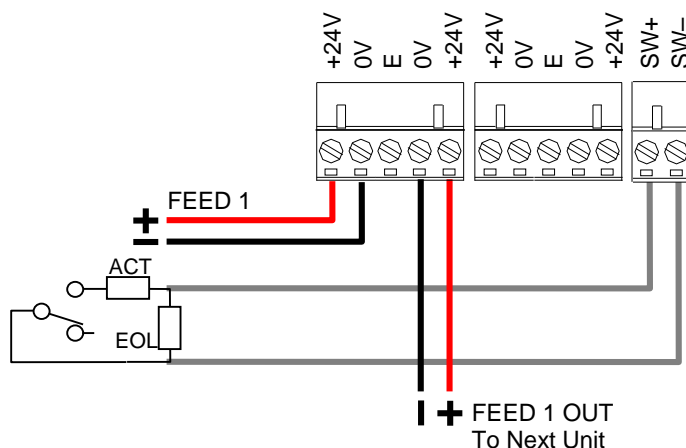
Use a fail-safe relay that de-energises on fault condition and loss of power.

Diagram shows the normal (active) no fault condition.

EOL = 3300Ω

ACT = 680Ω

If not used, short the SW+ and SW– terminals with the 3300Ω EOL provided.



4.3.2 Network Interface

The network permits the connection of other panels, remote terminals and other devices to complete a distributed system.

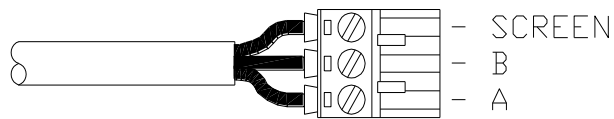
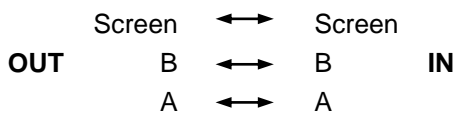
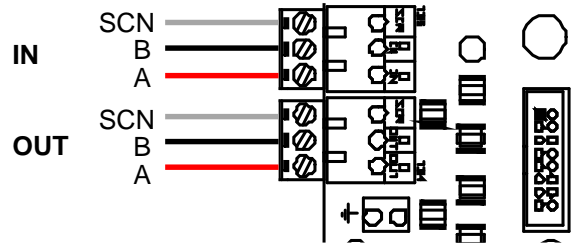
The Touch Control Terminal is available as either a (STD) standard network interface peripheral or as an (FT) fault tolerant network interface peripheral. All network nodes must be installed with the same type of interface.

Cable must be twisted pair 18AWG or 20AWG.

Screened type cable is recommended (e.g. Belden 8760, 8762). Connect the screen to the designated terminal block positions only.

Do not connect cable screen to earth.

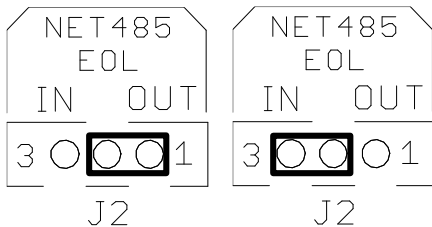
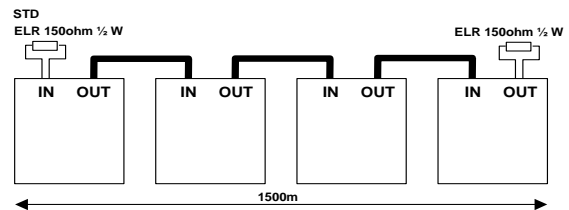
Each card has independent connectors for the outgoing and incoming network cable. Using a twisted-pair cable, connect from the "OUT" socket on the first panel to the "IN" socket on the next panel as follows.



STD (Up to 32 nodes)

The "IN" terminals on the first node and the "OUT" terminals on the last node are not used.

Maximum cable length (overall length) is 1500m using recommended cables.



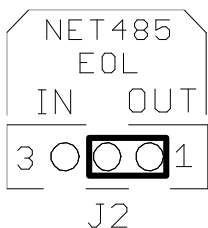
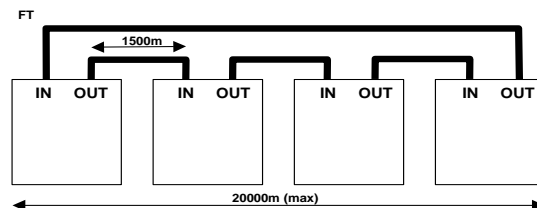
If the Touch-10 is the last unit on the network the OUT terminals require an ELR (150Ω) resistor between A and B on the terminal blocks of the unused socket. This can be achieved on the main PCB as shown left. Move the jumper link from the OUT position (EOL not in circuit) to the IN position (EOL connected). A separate EOL resistor is not required.

FT (Up to 200 nodes)

Other Network devices must be fitted with a FT type adaptor card.

Install a cable from the last node "OUT" terminals back to the first node "IN" terminals to form a ring.

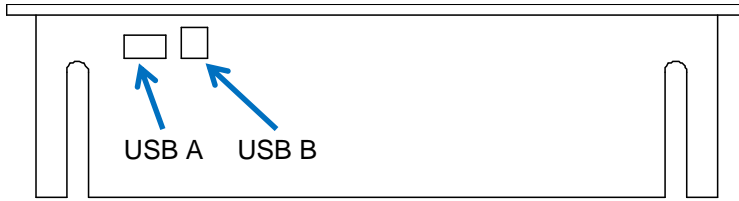
Maximum cable length between nodes is 1500m using recommended cables. Maximum cable length (overall length) is 20000m using recommended cables.



The EOL Resistor is not used in FT mode. Leave the jumper link in the OUT position.

4.3.3 USB Interfaces

The Touch Control terminal is provided with two types of US interface; USB A and USB B. These are located on the lower wall of the chassis assembly. To access the USB connectors remove the trim ring and pull out the chassis assembly until it reaches its stop point (35mm).



4.3.3.1 USB A

The USB A interface is currently unused.

4.3.3.2 USB B

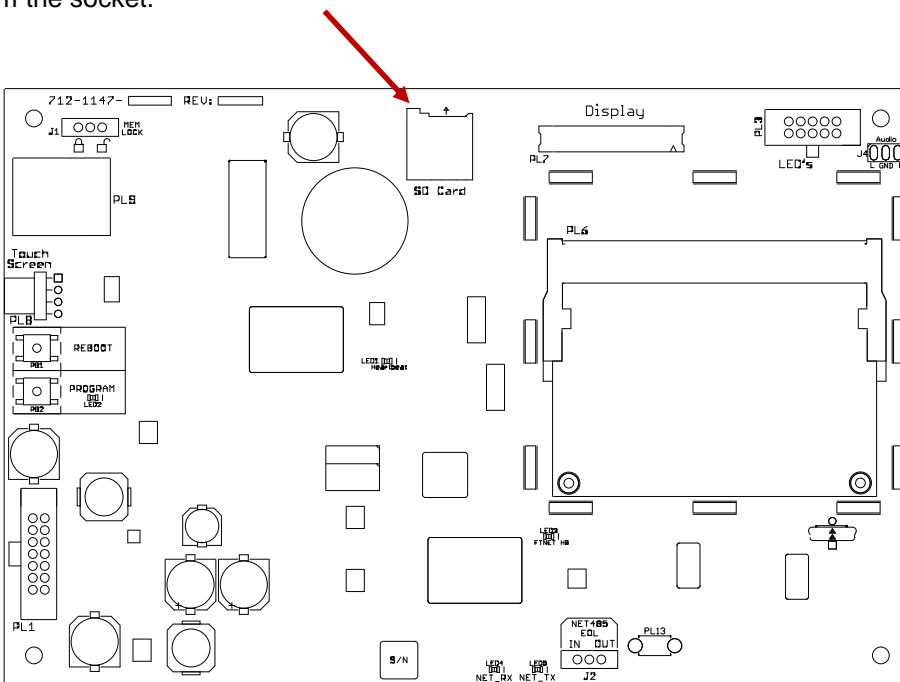
The USB B interface is used for connection to a PC for flash program update, configuration file updates, etc.

4.4 SD Memory Card

The SD Memory card is used for the customer logo, maps, etc.

To insert the memory card, locate the card in the slot at the top and push in until it clicks into place.

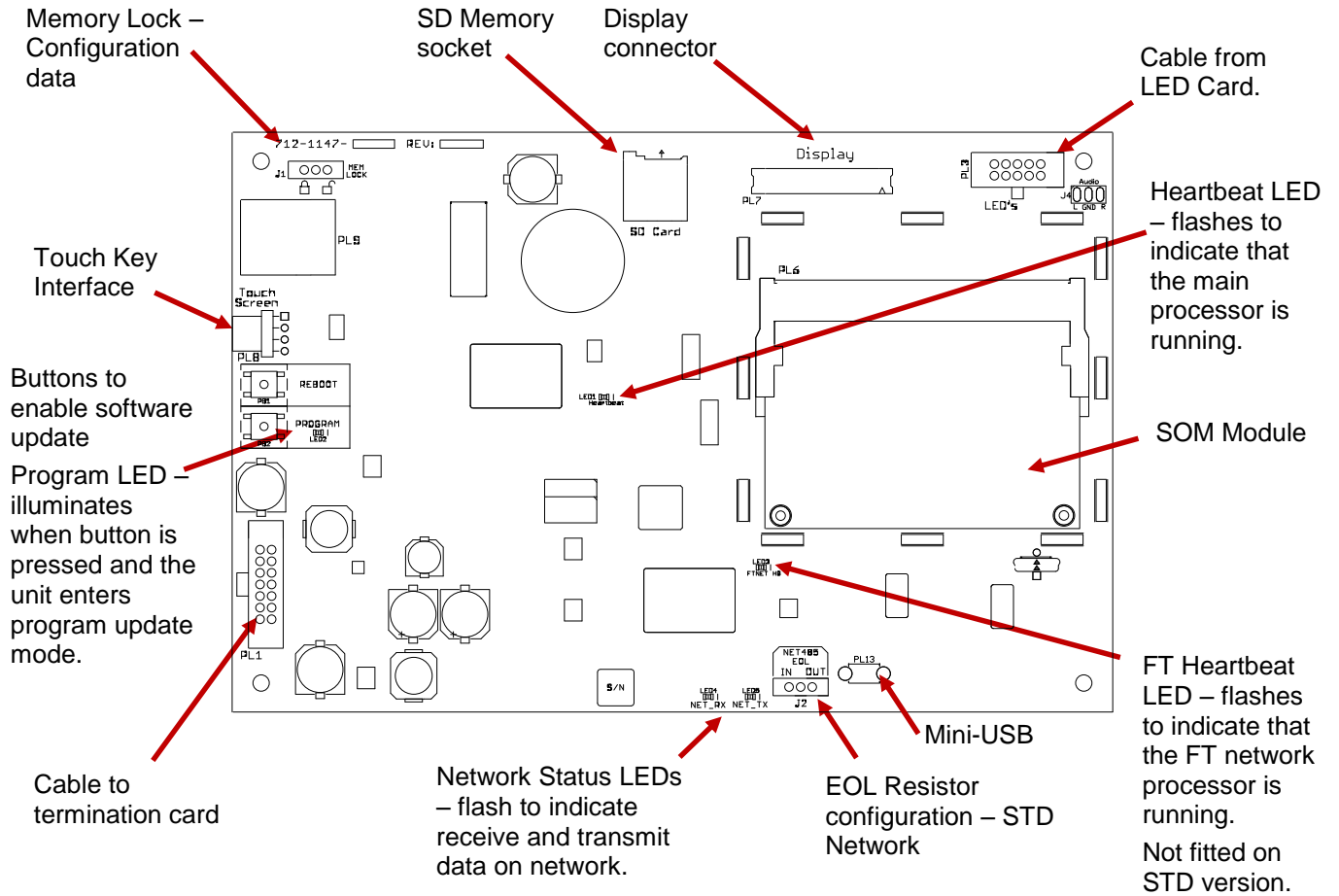
To remove the memory card, push in until it clicks. The memory card will spring out and can then be withdrawn from the socket.



4.5 Main PCB

The main elements of the PCB are shown in the diagram below.

The PCB is equipped with diagnostic LED indicators that show the operational condition of the panel.



The SOM Module provides the basic operating system for the display and touch key interface.

5 Programming

5.1 Software Update

5.1.1 SOM Module

The SOM is reprogrammed using the mini-USB on the base card.

5.1.2 Panel

The procedure is similar to the MX-5000 series panels using the MX-Flasher program.

Connect the PC to the USB-B connector.

Press the PROGRAM (PB2) button – the associated LED will illuminate

Press the REBOOT (PB1) button.

Use the MX-Flasher program to reprogram the main panel operating software.

On completion, press the PROGRAM button (LED turns off) and then press the REBOOT button.

5.1.3 Peripherals

The network software can be updated

Connect the PC to the USB-B connector.

Enter Level-3 mode using the display touch controls.

Use the MX-Flasher program to reprogram the main network operating software.

On completion, return the unit to Level-2 via the display touch controls.

5.2 Configuration

5.2.1 PC CONFIG Tool

Connect the PC to the USB-B connector.

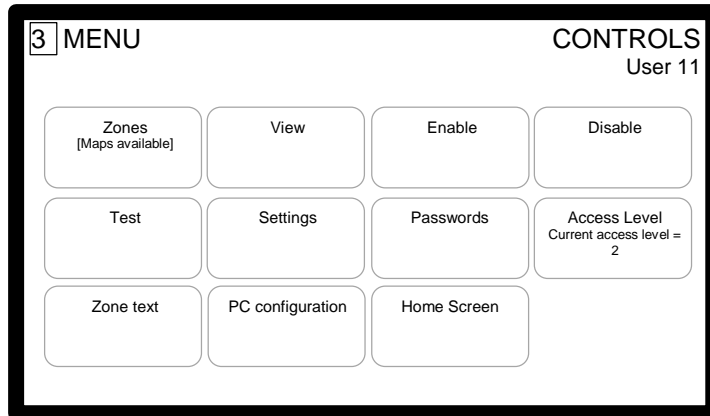
Enter Level-3 mode using via the display touch controls and select PC configuration option – see section 5.2.2.3.

Use the MX-CONFIG Tool to upload a configuration file.

On completion, return the unit to Level-2 via the display touch controls.

5.2.2 Display Menu

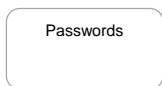
To change the access level, touch the 'Access Level' button. See section 3.10.7 for full information. When the panel is in Level 3, touch the word MENU to view the Level 3 menu options. LEVEL 3



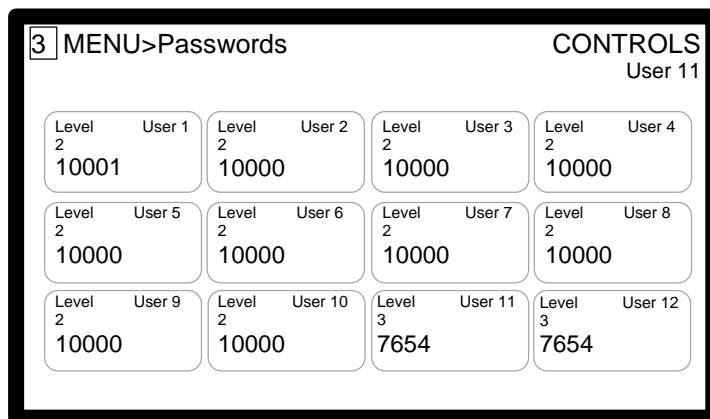
The menu options, Zones, View, Enable, Disable and Test, have the same functionality as those in the Level 2 menu but limited to this panel zone only.

The menu options, Access Level and Home Screen, have the same functionality as those in the Level 2 menu.

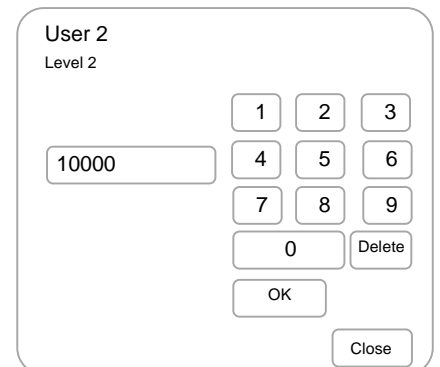
5.2.2.1 Passwords



To change the passwords assigned to each user touch the 'Passwords' button. Up to 10 Level 2 User passwords and 2 Level 3 Service passwords can be configured. Use of the PC CONFIG Tool will ensure that the passwords on all panels are the same.



To change a User password, touch the appropriate User button. A pop-up window with number keypad will be shown. Enter the required password for this user.



5.2.2.1.1 Forgotten Level 3 Password

Should the Level-3 password be forgotten, contact Customer Support to obtain a temporary permit number to regain access to the panel programming functions.

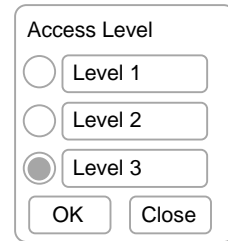
Customer Support will require a decryption key displayed by the panel. To obtain this number, follow the procedure outlined below.

PART 1

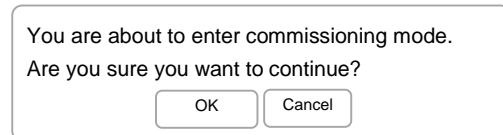
Touch the MENU button

Touch the "Access Level" button

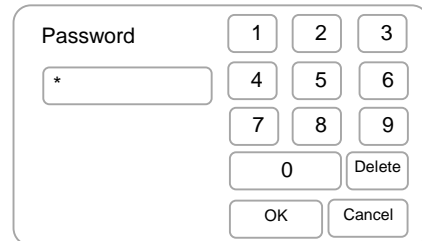
Select Level 3 in the pop-up dialog box and touch the OK button.



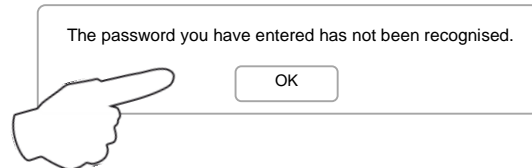
Touch the OK button.



Enter '0' and then touch the OK button.

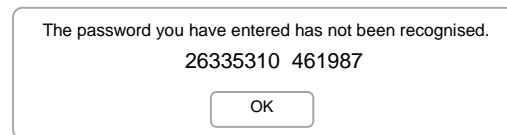


Touch the pop-up dialog box with a long press (not the OK button).



Contact Advanced Technical support and quote the two numbers.

Technical support will issue a password based on the two keys given. Touch the OK button



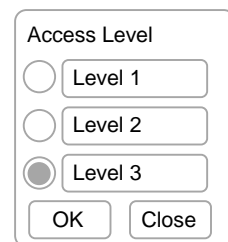
To Enter Level 3 with the temporary password follow the steps below.

PART 2

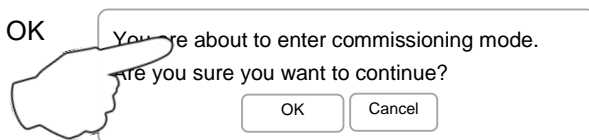
Touch the MENU button

Touch the "Access Level" button

Select Level 3 in the pop-up dialog box and touch the OK button.

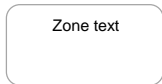


Touch the pop-up dialog box with a long press (not the OK button).

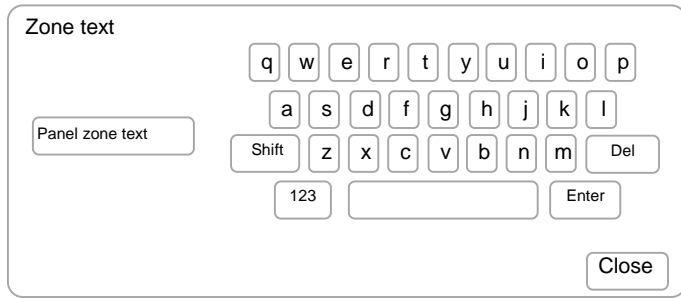


The display will then show the normal password entry display. Enter the temporary password provided and touch OK.

5.2.2.2 Zone text

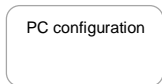


To change the zone text assigned to this panel touch the 'Zone text' button.
The display will show a pop-up screen containing the letter and number keypad.

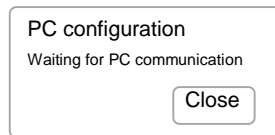


The current text assigned to this zone is shown.
Refer to section 2.2.2 for information on the use of the keypad.

5.2.2.3 PC configuration

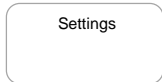


To upload a configuration file from the PC CONFIG tool touch the 'PC configuration' button.
The display will show confirmation.
Upload the file of the PC Tool

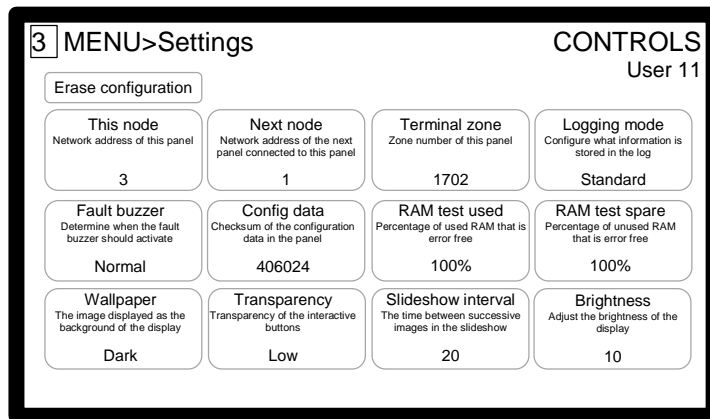


Press 'Close' when the process is completed.

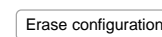
5.2.2.4 Settings



To view and edit the settings touch the 'Settings' button.
The display will show the following:



5.2.2.4.1 Erase Configuration



The panel can be returned to factory default settings by pressing the 'Erase configuration' button.

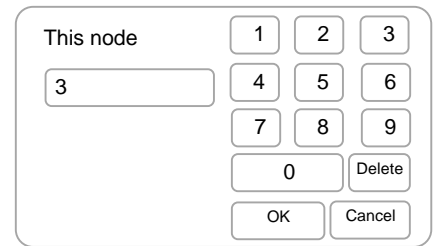
A pop-up display will prompt to continue or cancel the erase.

5.2.2.4.2 Node Configuration

This node Network address of this panel 3	Next node Network address of the next panel connected to this panel 1
---	--

Refer to document 680-502 for more information on networking.
Assign a node address to this panel using the 'This node' option.

Assign the address of the next node (normally this address +1 or node 1).
A pop-up display presents a number keypad and shows the current node address assigned to this node.
Enter the required node address.



5.2.2.4.3 Terminal Zone

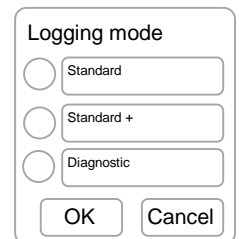
Terminal zone Zone number of this panel 1702
--

Assign the zone to this panel in the range 1 – 2000. The zone number must be unique.
A pop-up display presents a number keypad and shows the current zone number assigned to this node. Enter the required zone number.

5.2.2.4.4 Logging Mode

Logging mode Configure what information is stored in the log Standard
--

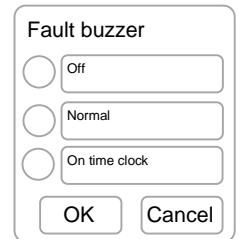
The amount and type of information to be logged can be selected.
This is the same as all Mx-5000 series panels.
Select the require mode from the pop-up list.



5.2.2.4.5 Fault Buzzer

Fault buzzer Determine when the fault buzzer should activate Normal
--

The response of the internal buzzer to fault conditions can be configured to off (the buzzer will not sound on any fault condition), normal (the buzzer will sound for each newly recognized fault condition) or timed (the buzzer will sound for each newly recognized fault condition during specified periods).
The time clock must be configured using the PC CONFIG Tool.




5.2.2.4.6 Configuration Data

Config data Checksum of the configuration data in the panel 406024

This is for information only and shows the CRC Checksum of the configuration data. This value will change with the configuration.

5.2.2.4.7 RAM Test

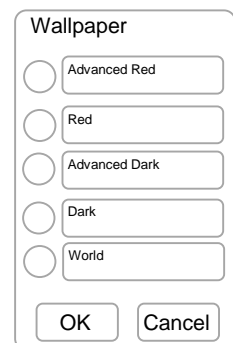
RAM test used Percentage of used RAM that is error free 100%	RAM test spare Percentage of unused RAM that is error free 100%
---	--

This is for information only and shows the performance of the system and whether any errors have been detected in the memory of the panel.
A system fault will also be indicated if there are errors. 

5.2.2.4.8 Wallpaper

Wallpaper The image displayed as the background of the display Dark
--

The background image on the display can be changed.
Select the required image from the pop-up list.

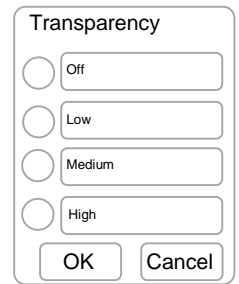


5.2.2.4.9 Transparency



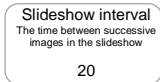
This option determines the transparency of the buttons and how much of the background image will show through the button.

Select the required option from the pop-up list.



5.2.2.4.10 Slideshow Interval

If the SD Memory card is provided with a suite of background images, these can be linked in a slideshow sequence. The time interval that each image shown can be selected.



A pop-up display presents a number keypad and shows the current time interval setting. Enter the required time in seconds.

Minimum = 1 second

Maximum = 99 seconds

5.2.2.4.11 Brightness

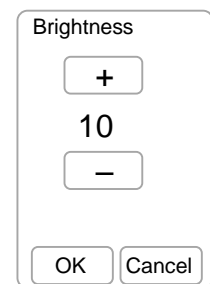
The brightness of the display and its backlight can be adjusted to suit the location.



The current brightness level (range 1-10) is shown.

Touch the + symbol to increase the brightness.

Touch the – symbol to decrease the brightness



This page is intentionally left blank

This page is intentionally left blank

This page is intentionally left blank

USER NOTES

Doc Number: 680-217

Revision: 01



Advanced Electronics Ltd
Moorland Way, Cramlington, Northumberland, NE23 1WE UK

Tel: +44 (0)1670 707 111

Fax: +44 (0)1670 707 222

Email: sales@advancedco.com Web: www.advancedco.com