



**FIRECLASS**



## **FC501, FC503 & FC506 Addressable Fire Control Panels**

**PC Programming Manual**

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## Introduction

You can program the system from the control panel (user interface) or from a computer, using the FireClass FC500 (FC501\_FC503\_FC506) Console. This section describes how to program the system from a computer. If you intend to program the system from the control panel, refer to the *Programming from the panel* chapter in the corresponding *Installation manual*. To manage and program the FC501, FC503 and FC506 control panels using a computer, you must install the FireClass FC500 (FC501\_FC503\_FC506) Console on the computer. To program the fire control panel, use the Software FireClass FC500 (FC501\_FC503\_FC506) Console release 01.00.01 or higher.

## Installation

Complete the following steps to install the FireClass FC500 (FC501\_FC503\_FC506) Console application:

1. Run the installer program FC500 (FC501\_FC503\_FC506) Console-vX.X.X.Y-Setup.exe (vX.X.X.Y indicates the program version).
2. Follow the required steps.

**Note:** Download the latest version of FireClass FC500 (FC501\_FC503\_FC506) Console from the FireClass website.

**Note:** When the FireClass FC500 (FC501\_FC503\_FC506) Console starts for the first time, it will prompt you to select a country. To confirm, select and press the check button.

**Note:** To install the FireClass FC500 (FC501\_FC503\_FC506) Console software on the computer, the PC configurations below are required.

### Minimum required configuration:

1GHz microprocessor or better  
256MB of free RAM or better  
Windows XP or higher operating systems  
250MB of free hard-disk space after installation  
Administrator premises on the machine

### Suggested configuration:

1.5GHz microprocessor or better  
512MB of free RAM or better  
Windows 7 or higher operating systems  
250MB of free hard-disk space after installation  
Administrator premises on the machine

### Suggested configuration for Real-Time monitoring and graphic maps:

2.0GHz Dual Core microprocessor or better  
1GB of free RAM or better  
Windows 7 or higher operating systems  
2GB of free hard-disk space after installation  
1280 x 1024 screen resolution or higher  
Administrator premises on the machine

## Select language

Select the FireClass FC500 (FC501\_FC503\_FC506) Console language from the list of languages provided. To select the application language, follow these steps:

1. Run the FireClass FC500 (FC501\_FC503\_FC506) Console application.
2. Select **Tools** from the Main window.
3. Select **Language** from the drop-down menu.
4. Select a language from the Language list.

## Software window appearance

To modify the appearance of the FireClass FireClass FC500 (FC501\_FC503\_FC506) Console window, select **Tools** from the Main window and select **Skin**.

## Control panel connections

When using the Supervisory, Management, Downloading and Log Management functions, you must connect the control panel to your computer in local communication (RS232/USB) or remote by LAN.

### Connecting the control panel locally

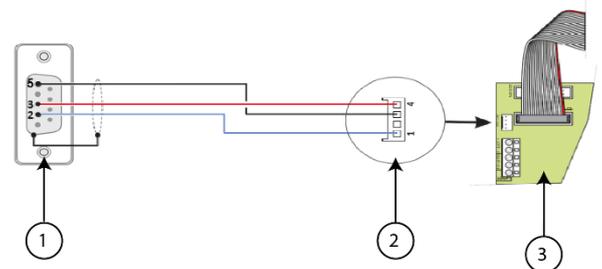
Connect the control panel's PCLink connector (see Figure 2, item 11, *Installation manual*) to one of the computer's serial ports using the PCLink cable (accessory item, see [Figure 1](#)). Alternatively, use the control panel's USB socket (see Figure 3, item 5, *Installation manual*) and a USB cable (Type A-A) or the USB cable USB5M (508.032.037) (Length 5m).

### Connecting the control panel remotely

Install the FC500IP board, as described in the paragraph **Installing the FC500IP board** on page 27 of the *Installation manual*.

If you do not connect the control panel to your computer, the warning **Response from Panel Timed!** will display. If the serial port for the local communication is invalid, the warning **cannot open serial port** will display.

**Figure 1: Schematic diagram of the PCLink cable**



1	RS-232 Female connector, solder side
2	4 way MTA connector
3	Fire panel board

## Main window

From the FireClass FC500 (FC501\_FC503\_FC506) Console main screen, click **File** and then **New**, to display the window shown in [Figure 2](#) where you select the firmware release of the control panel to program. Click the green tick to accept the selection. The following selections describe the File, Tools and Help menus.

**Table 1: Icons on the Main window**

Icon	Description
	Click this icon, in the Master control panel, and the window in <a href="#">Figure 3.2</a> appears. In this window, a client panel can be inserted. <b>Notes:</b> <ul style="list-style-type: none"> <li>The FC501 panel neither has any client panel, nor can it be added as a client panel of the FC503 or FC506 panel.</li> <li>FC503 can have FC506 as a client panel and vice versa.</li> </ul>
	Click this icon to remove the selected Client control panel.
	Opens the window <b>Panel details</b> where you check or insert various programming. See <a href="#">Figure 5</a> .
	Checks <b>Panel details</b> . Enter the name and address of the control panel or customer. See <a href="#">Figure 5</a> .
	Downloads the programming via serial link or USB or TCP/IP to the connected control panel after entering correct installer password.
	Uploads the programming of the connected control panel after entering correct installer password.
	Selects the loop for inserting devices.
	Start operations in real time. This feature allows you to view the status of the FC501, FC503 and FC506 control panel in real time on a computer using the FC500IP module connected to the network, or by using the serial port or USB port.

## File menu

The File menu allows you to manage customer account data. The following are the various selections within the File menu.

### New

Click **New** to create a new installation and assign the factory default values to all programming parameters.

### Open

Click **Open** to retrieve a previously saved customer installation file. Locate the required installation file and double click to open it.

**Note:** You can have more than one installation file open at the same time. Pay attention to the tabs on the left side to ensure you are editing the correct file.

### Save

Click **Save** to save the changes in the current installation, if you modified the installation data.

### Save as

Click **Save as** if you created a new installation or want to save an existing installation under a new name.

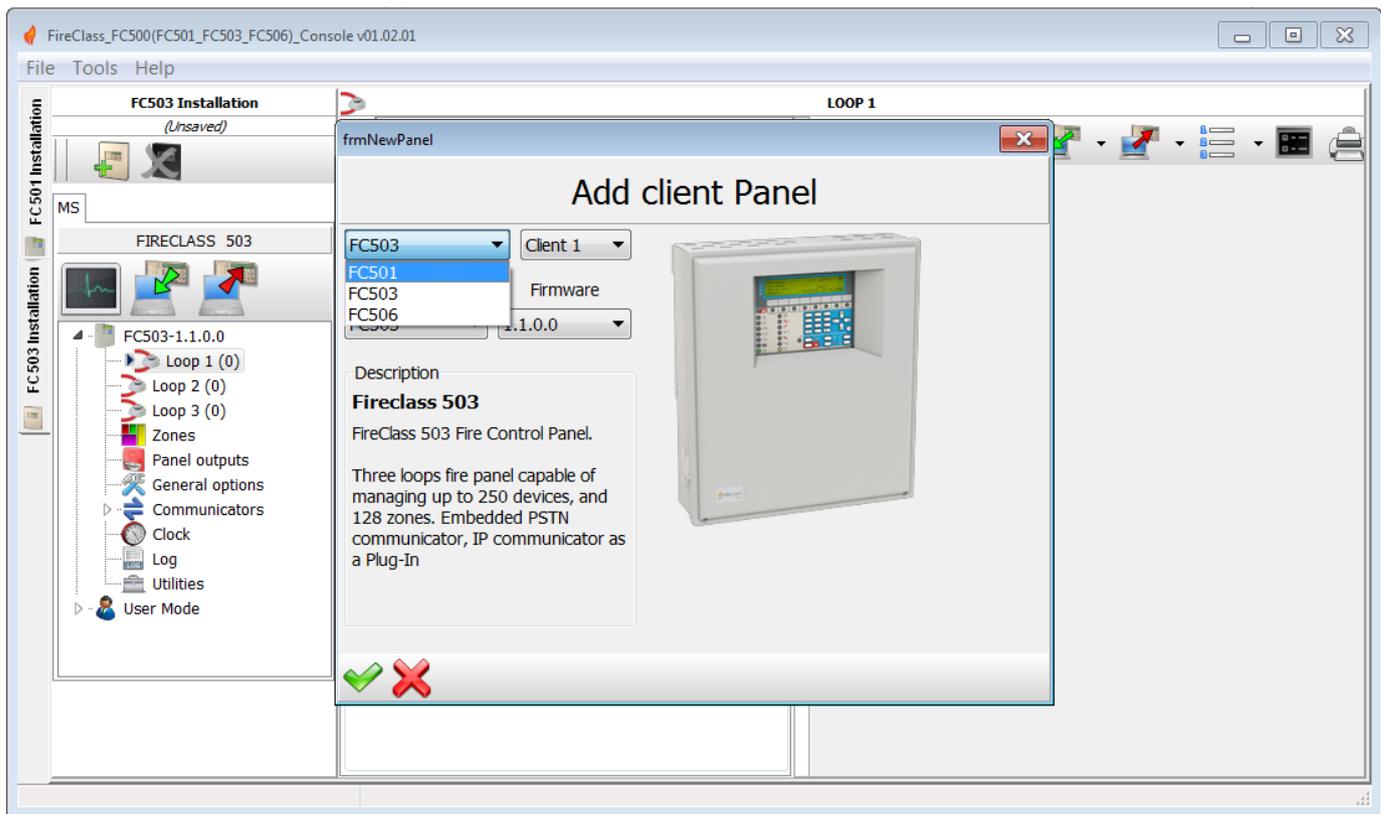
### Close

Click **Close** to close the current installation. You will be prompted to save any changes made.

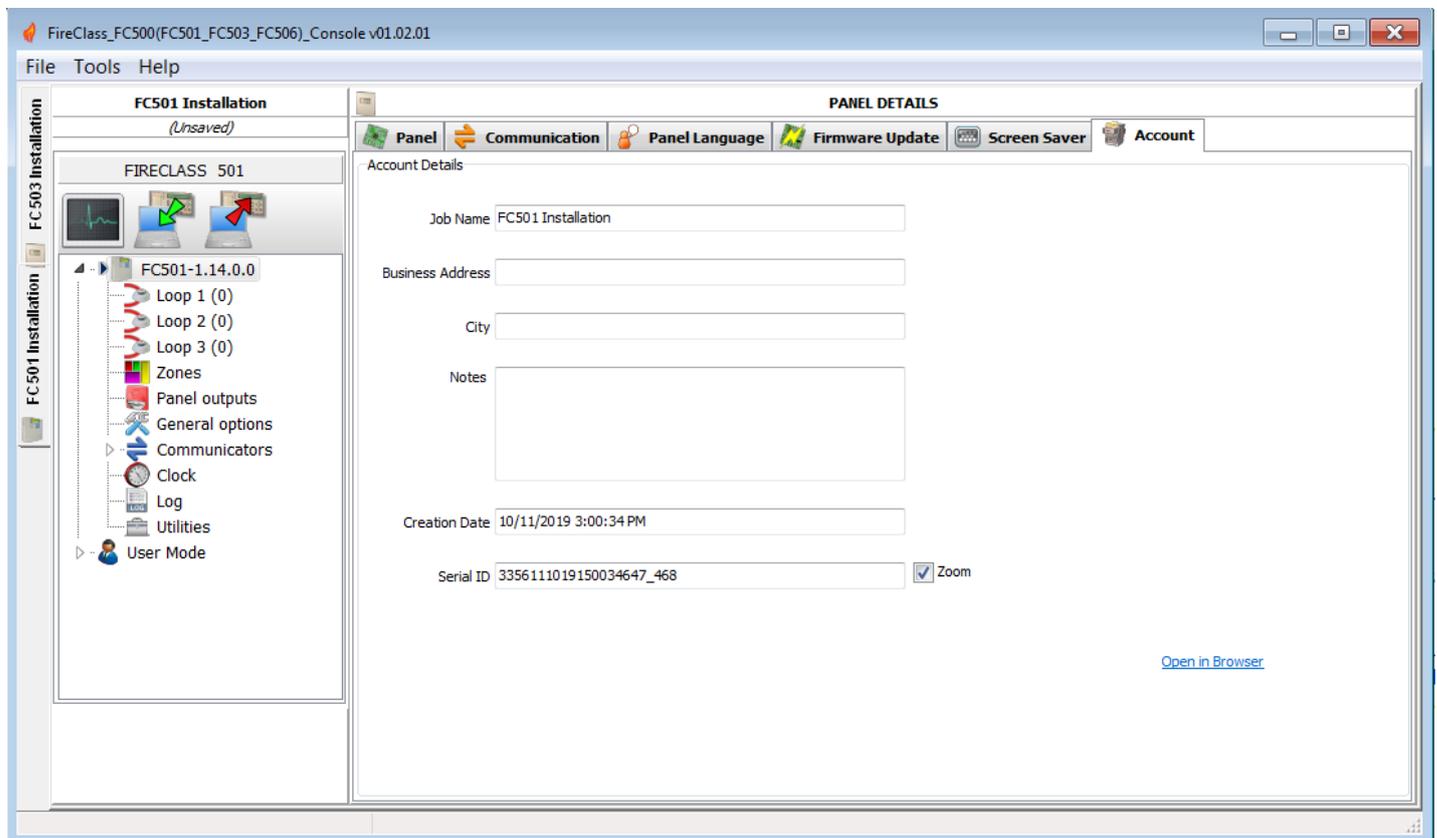
### Exit

Click **Exit** to close the FireClass FC500 (FC501\_FC503\_FC506) Console. You will be prompted to save any changes made.

**Figure 2: File menu to New display**

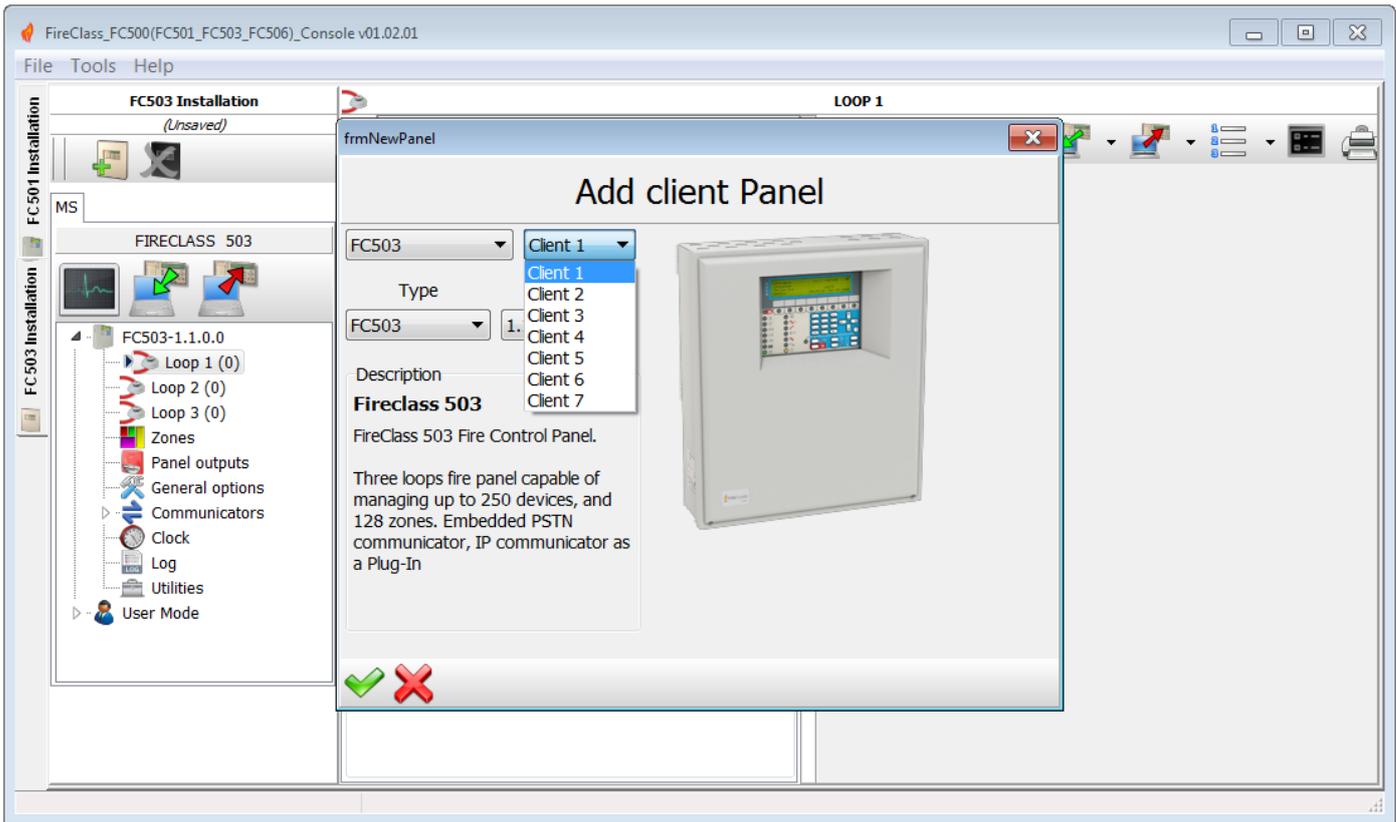


**Figure 3.1: Panel display in FC501**



**Note:** The FC501 panel neither has any client panel, nor can it be added as a client panel of the FC503 or FC506 panel.

**Figure 3.2: Add client panel display**



**Note:** For the FC503 panel, you can add FC506 as a client panel and the other way around.

## Tools menu

### Language

See [Select language](#) paragraph.

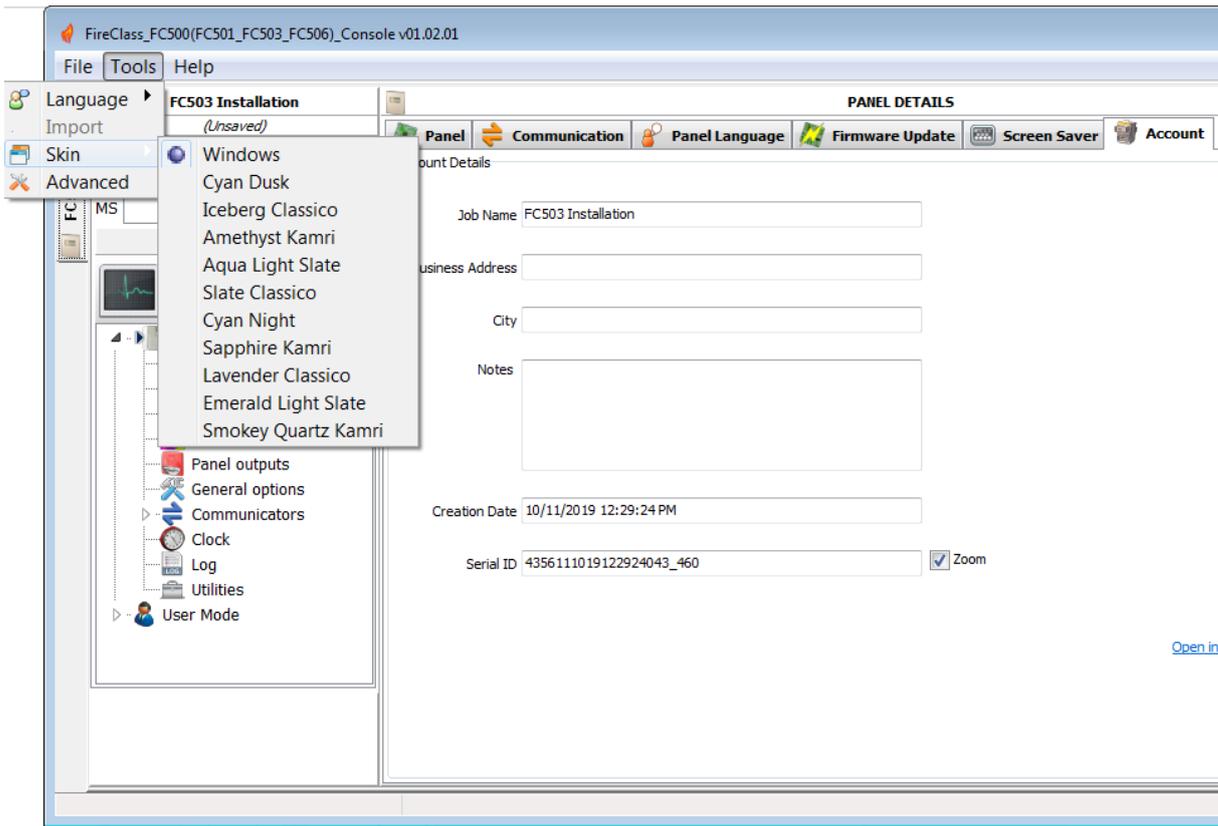
### Skin

To change the appearance of the FireClass FC500 (FC501\_FC503\_FC506) Console, click **Tools** and then **Skin** to choose available appearances from a list.

### Advanced

In Advanced, you can set up the Tooltips duration. Load the driver to use the USB. You can also associate the .FCI files generated by the programming/management of the fire system with the FireClass FC500 (FC501\_FC503\_FC506) Console.

**Figure 4: Modifying the appearance of the FireClass FC500 (FC501\_FC503\_FC506) Console**



**Table 2: Icons on the Panel details menu**

Icon	Description
	Checks the firmware version of Main board, Auxiliary controller, Repeater, FC500FMI module and Plug-in board.
	Restores the control panel to the factory default.
	Opens the Installation manual.
	Opens the define panel version window.

### Help menu

Click on the **Help** option and a technical support file opens. This application allows you to learn how to use the FireClass FC500 (FC501\_FC503\_FC506) Console.

### Panel details

Click on the **Panel details** icon (see [Table 1](#)) and the following menu tabs display (see [Figure 5](#)):

- Panel
- Communication
- Panel Language
- Firmware Update
- Screen Saver
- Account

### Panel details menu

In this window, you can enter the name of the panel and customer.



## Communication menu

In the communication menu, you can choose the connection mode between the panel and your computer; the options include TCP/IP, RS232 or USB.

Click on the **refresh** icon to update the type of connection. Click the **TEST** button to verify the functionality of the connection status. The FireClass FC500 (FC501\_FC503\_FC506) Console will show a pop-up that asks you to enter an installer password every time you want to read or write to or from the panel. The password you enter should match with the panel installer password for successful communication. In the TCP/IP mode, you must enter the FC500IP parameters and Encryption key. Use the IP module to program the parameters corresponding to the IP module described below.

**Figure 7: Entering the installer password**



## IP address

Enter the IP address assigned to the IP module you want to program or, if dynamic IP address (DHCP) is selected, contact the network administrator to request the IP address details assigned to the IP module.

## Dynamic DNS service

Control and monitor the panel remotely using ethernet, a dynamic DNS service. You can use graphic maps without a static IP address assigned by an internet provider to the supervisor site. Add the necessary fields to the configuration software in the FireClass software. This allows you to connect to the control panel remotely using a fixed literal domain name; for example, `mysupervisedsite.dns.org`. You can avail of this site instead of a numeric IP address. The default setting is 192.168.0.101.

## IP module port

Enter the details of the port assigned to the IP module you want to program. Contact the network administrator for this.

## IP module code

Enter the access code assigned to the IP module you wish to program. The default setting is 5555.

## Encryption key

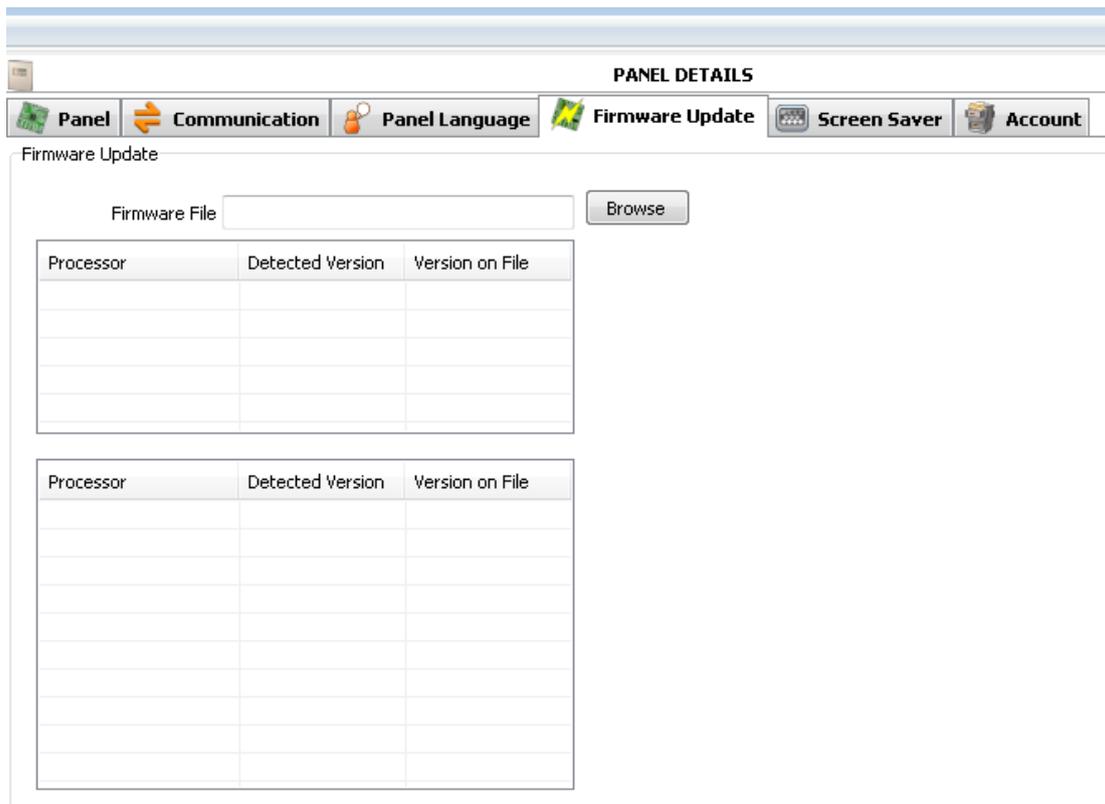
Enter the encryption key assigned to the IP module you want to program. The default setting is 32 zeros.

## Panel language menu

The panel language menu allows you to change the system language on the user interface or repeater to any of the languages currently loaded. Follow the steps below:

1. In the Loaded Language section, select **Change System Language**.
2. Select the language and the device, user interface or repeater.
3. Override the language in the control panel memory.
4. When the new language download finishes, the panel uses the language and updates any necessary peripherals.

**Figure 8: Firmware update window**



### **Firmware update menu**

Click on **Firmware Update**; see [Figure 8](#). From a source file, you can carry out a firmware update of all the system interface including the Main board, User interface, Loop controller and Repeater.

**Note:** If the FC500 has a firmware version 3 or less, and the language is Italian while English appears on the panel, the installer must realign the language strings after the firmware update, using the language change process; see paragraph **8-Key System** on page 47 of the *Installation manual*.

### **Screen saver menu**

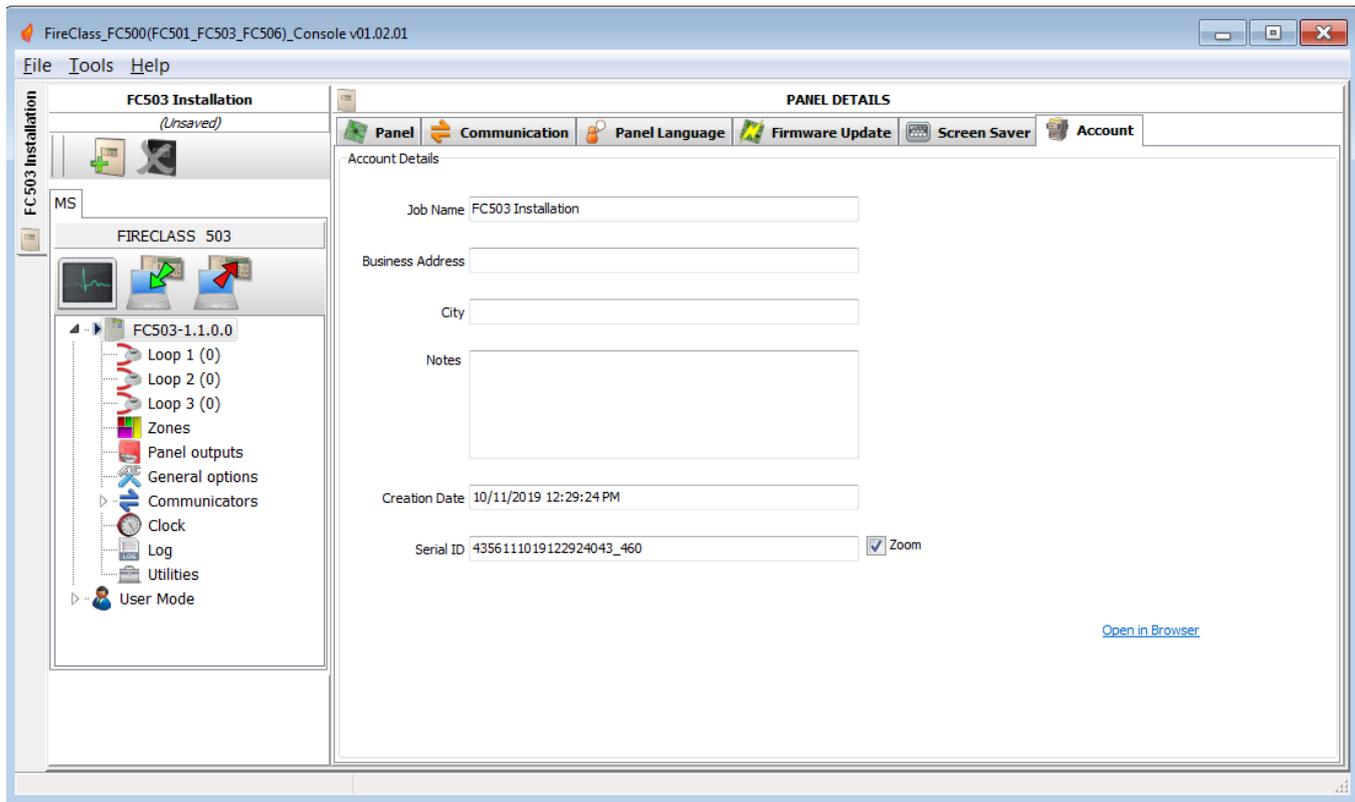
In the Screen Saver menu, you can insert four lines of text, such as installer address and telephone, which will load on the user interface display when the panel is in standby status. The four rows can include steady, scroll or blink.

### **Account menu**

In the Account menu, enter the account data. For better account identification, enter the address, click on the

address field and the software attempts to find the address on Google maps if you have an internet connection.

**Figure 9: Account window**



**Notes:**

- It is not mandatory to fill out the Notes field.
- Do not add any personal data to the Notes field.

**Programming screens**

The programming screens of the system are the following:

- Loop devices
- Zones
- Panel outputs
- General options
- Communicators
- Clock
- Log
- Utilities
- User mode

See more information on these screens in the following sections.

**Loop devices programming**

On the left side of the window, click the **panel name** to expand the tree view. Then click on the **required loop**, 1, 2 or 3. The devices programming window will display. See [Figure 10](#).

**Note:** On the right of Loop 1, Loop 2 or Loop 3, the current number of devices is shown in brackets.

**Table 3: Icons in the tool bar**

Icon	Description
	Add device: Select new devices.
	Removes device: Remove the install devices.
	Copies device on the clipboard: This allows you to copy device data to the clipboard for use in another account.
	Pastes clipboard content: This allows you to add device data previously copied to the clipboard.
	Read loop: This allows you to upload the current loop data from the panel.
	Send elements: This allows you to download the current loop data to the panel.
	Device's details: This opens a new window where you can see the device status.
	Selection: This allows you to select all devices or invert the current selection.

	Print to file: This allows you to print the list of devices of the selected loop to a .csv file. You can edit the .csv file using Microsoft Excel.
--	--

**Note:** If different devices have common programming parameters, you can use the multiple selection of the devices and assign the same parameters.

### Select devices

1. Click on **Panel 1**.
2. Select Loop 1, Loop 2, Loop 3, Loop 4, Loop 5 or Loop 6.
3. Click on **new device**. The window in [Figure 10](#) will display.
4. Select the programming device, check the address (auto addressing) and click on the link.
5. Click **Enable** to add the device to the loop. For other devices, repeat the same procedure. The icon in the Features field represents the detector type.

### Remove devices

1. Select the device in the list.
2. Click the **Remove device** icon.
3. Click **YES** to remove or **NO** to cancel. See [Figure 10](#).

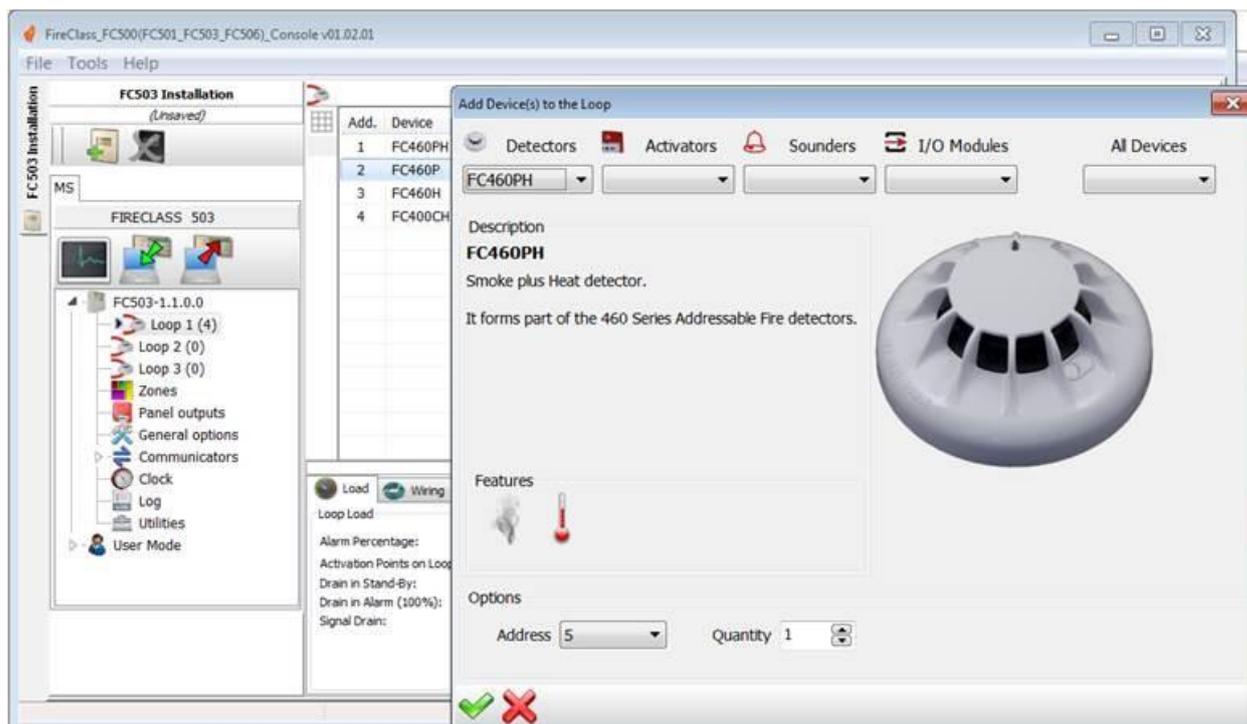
### Loop loading

Find the Loop load section at the bottom of the programmed devices list. See [Figure 11](#). This section displays the number of Activation points on the loop, the Drain in standby, the Drain in alarm and the Signal drain. You can also adjust the Alarm percentage.

**Note:** You may enter remote LEDs in the calculation.

The percentage shown in the **Loop drain in alarm (100%)** is the programmed value in [Battery calculation](#); an option of the Utilities screen for the battery calculation after you enter the cable length. You can choose the type of cable if you have a database.

**Figure 10: Loop devices programming window**



### Loop wiring calculation

The loop wiring is located beside the Loop load tab. This gives you the maximum permitted resistance of the loop based on the cable length and the Alarm percentage. If cable data is available from the [Utilities](#) section, then a suitable cable may also appear.

### Detectors parameters programming

Click on a **device** in the Device list. The relevant device programming window appears on the right; every device

has the dedicated programming window. To view the detectors, see [Figure 10](#).

**Note:** You can program the Remote LED on the control panel user interface, in the detectors programming page.

### First section (General)

- **Enabled:** A tick indicates that the detector is enabled.
- **Label:** This indicates the editable device-label. The system uses the label as the device identifier.
- **Address:** In this field, you can modify the detector address.

### Options

**LED blinking:** A tick indicates that the LED detectors will flash.

- **Assigned zones:** Each Fire detector, Input module and Manual callpoint can be associated with one of the available software zones; 32 for the FC501, 128 for FC503 and 256 for the FC506 control panel. If a device goes into Alarm status, the zones assigned to it will also go into Alarm status.

### Base

In this section, it is possible to select the detector base by clicking on the available bases. When you select the sounder base type, a new programming tab Base is available, which opens the sounder base programming screen. On this screen, you can select the trigger zones, the trigger points and the trigger events conditions and you can configure the following parameters.

**Table 4: Base parameters for detectors**

Parameter	Result
Enabled	When selected, the base is enabled. Otherwise, the base is disabled.
Label	20 characters base label
Silenceable	Rings until you select the <b>Silence/Resound</b> sounders button. Otherwise, ringing continues until you select the <b>Reset</b> button.
Set as SC1	When selected, the base behaves as the sounder circuit 1 (SC1).
Monostable	When selected, the base rings until the Monostable outputs time elapses.

### Remote LED

In this section, you can activate the programmable Remote LED of the detectors. The detectors have an output used to drive the remote LED. This output is only activated for the detector alarm to which it belongs. Now, you can program the output to activate for other events, exactly as activation occurs for other panel outputs, as well as for the detector alarm to which it belongs.

Figure 11: Detectors parameters programming window

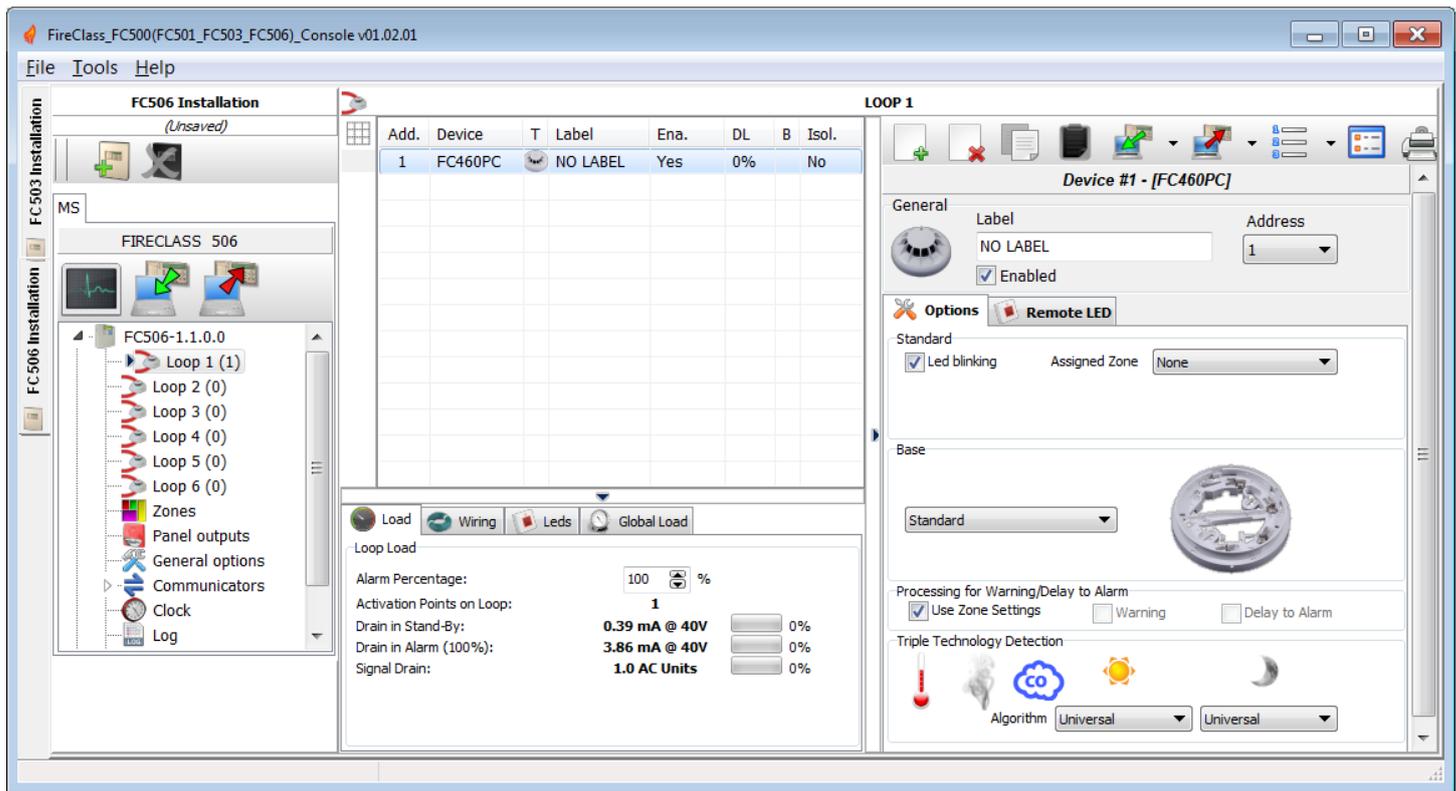


Table 5: Detector classification temperature

Detector Class	Typical application Temperature °C	Max. Application Temperature °C	Min.Static Response Temperature °C	Max.Static Response Temperature °C
A1	25	50	54	65
A2	25	50	54	70
B	40	65	69	85
C	55	80	84	100
D	70	95	99	115
E	85	110	114	130
F	100	125	129	145
G	115	140	144	160

### Classifying detector temperature

Detectors will conform to one or more of the following classes: A1, A2, B, C, D, E, F or G. Optionally, manufacturers may give additional information concerning the response type exhibited by the detector, by adding the suffix S or R to the above classes. Detectors, with a suffix S to their class, do not respond below the minimum static response temperature, even at high rates of rise of air temperature. Detectors, with a suffix R to their class, incorporate a rate of rise characteristic, which meets the response time requirements for high rates of rise of air temperature, even when the air temperature starts substantially below the typical application temperature (EN54-5:2000).

### Processing for Warning/Delay to alarm section

This section determines the actions the control panel performs when the device threshold exceeds.

- **Use zone settings:** The detector uses the parameters of the assigned zone; if this option is disabled, you can manually select the Warning or Delay to alarm time.
- **Delay to alarm:** The control panel will activate the Alarm delay.
- **Warning:** The control panel will activate a Warning signal.

Depending on the detector in question, smoke, heat, smoke and heat, heat and carbon monoxide (CO), smoke

heat or carbon monoxide, it will have three sections outlined in [Table 7](#).

**Table 6: Icons for modes**

Icon	Description
	Day mode
	Night mode

**Table 7: Detector sections**

Section	Description
Operating mode heat detector section	Use Day mode. Night mode is for temperature detector, see <a href="#">Table 5</a> . Choose the class of the selected detector.
Operating mode smoke detector section	Use Day mode. Night mode is for smoke and heat detectors: <ul style="list-style-type: none"> <li>• <b>Drift compensation:</b> Drift compensation affects optical smoke sensors only. It will supply a precise analysis about dust accumulation, and therefore, the alarm threshold will modify accordingly (false alarms).</li> <li>• <b>Default:</b> For smoke detectors and smoke and heat detectors only.</li> <li>• <b>Enhanced:</b> For smoke and heat detectors only.</li> <li>• <b>Sensitivity:</b> You can set sensitivity at Low, Medium and High.</li> </ul>
Operating mode carbon monoxide section	Use Day mode. Night mode is for carbon monoxide and heat detectors: <ul style="list-style-type: none"> <li>• <b>Default</b></li> <li>• <b>Enhanced</b></li> <li>• <b>Disabled</b></li> <li>• <b>Sensitivity:</b> You can set this to Low, Normal or High. You can set the FC460PC detector, (smoke, heat and carbon monoxide) to High Immunity or Universal in the triple technology detection.</li> </ul>

**Note:** Click to open or close the relevant section of parameters programming.

**Note:** If a detector linked to an output or an input-output module is disabled (remove a tick in the proper section) a window will ask for confirmation. Click on **Detail** to see further data.

**Note:** For FC410LPA/S series sirens and FC430LPA/S base, in the [Sounder options](#) section, you can set the tone, volume and frequency of the beacon flash.

**Note:** For the FC410LPSY/AV series sirens, you must also choose the subtype.

### Input module parameters programming

Click on an input module entered, and the relevant programming window appears as per the following description.

### First section

See the [Detectors](#) section.

### Assigned zone

See the [Detectors](#) section

### Second section

Select the operating mode style B or C. There are two operating mode styles, B and C.

- **B style:** A two wire connection mode: the short-circuit condition as an Alarm condition.
- **C style:** A two wire connection mode: the short-circuit condition as a Fault condition.

**Note:** As you select different styles, the electrical operating diagram changes.

## Processing for Warning/Delay to alarm section

See the same section in the [Detectors parameters programming](#).

**Note:** For every digital input of loop devices, the Restorable warning parameter (when you select the **Warning** option for the input) can be programmed. This can also apply to the Multiple Input-Output modules, but not for the detectors. When this option is programmed for a certain input, the control panel will enter the Warning status when the appropriate conditions are detected by the input; the control panel exits this status when the loop device returns to standby status.

**Note:** When the loop device is activated and the Warning event is generated, the device LED will switch ON. When the event is restored, the LED will switch OFF.

For the FFC410DDM module only, you can set the gas detection thresholds by selecting **Conventional** for conventional detectors and **Gas source** or **Gas sink** for signalling detectors. In addition:

- **LED blinking:** Click on this to enable or disable the signalling LED module.
- **External power:** Click on this to enable or disable an external 24Vdc PSU.

For the MIM module, you can enable Fast mode in style B or Style C/NO connection. When you enable Fast mode, the control panel will detect the module activation in 2 seconds.

**Note:** A short circuit fault will be detected quickly while its restoration will be slow, as with other faults. The default status is disabled.

### Output module parameters programming

Click on an **Output module** entered and the relevant programming window appears as per the following description.

#### First section

See the [Detectors](#) section

#### Second section

For trigger zones, each Output module can be triggered by up to 4 of the available software zones of the FC501, FC503 and FC506 panels. The available zones are: 32 for FC501, 128 for FC503 and 256 for FC506. An Output module will be activated when any of the selected zones are triggered, reaching the status condition configured in the fourth section (zone row).

## Base

In this section, you can select the base for the Output module. Click on available bases for FC430SAM and FC430SAB only. Once you select the sounder base, you can choose a new programming tab labelled base that allows access to the sounder base programming page; here, you can select the trigger zones, the trigger points, the trigger conditions, and you can configure the following parameters.

**Table 8: Base parameters in output module**

Parameter	Result
Enabled	When selected, the base is enabled. Otherwise, the base is disabled.
Label	20 characters base label
Silenceable	Rings until you select the <b>Silence/Resound</b> sounders button. Otherwise, ringing continues until you select the <b>Reset</b> button.
Set as SC1	When selected, the base behaves as the SC1.
Monostable	When selected, the base rings until the Monostable outputs time elapses.

## Beacon

This activates the blinking or ON status

### Third section

For trigger points, each output module can be assigned three activation points; in this case, the Output module activates when at least one of the input points to which it belongs is in an Alarm status. You must indicate:

- The loop which the device connects to
- The device address

### Fourth section

For Options, you can select the conditions that will activate the output module. Options include:

- Zone warning, Zone fault, Zone delay to alarm, Zone alarm, Zone double knock, Zone test.
- Point warning, Point fault, Point delay to alarm, Point alarm.
- Panel warning, Panel fault, Panel delay to alarm, panel alarm
- Network warning, Network fault, Network delay to alarm, Network alarm

You can also program the output module as Silenceable, Set as SC1, Active on disablement, Monostable, Timed warning. See [Outputs programming](#).

- **Linked delay:** See the same option in the section [Outputs programming](#).

For the following types of devices, FC410LPAV (all versions), FC430LPASB, FC430SAB (with FC430SB), in addition those devices certified to EN54-23, FC410LPS-R/W, FC410LPBS, FC430LPBSB, you can separate the sounder and beacon programming into two different programming tabs. These programming tabs have the same programming options, except for Set as SC1 that will only be present for the sounder output.

**Note:** It is not possible to separately enable or disable the two output channels.

**Note:** The separate sounder and beacon programming of the devices above is also possible using the Control panel user interface in the Devices programming pages.

#### Pulse on

If the Pulse on option is disabled, the sounder rings steadily. If not, the sounds rings 2 seconds on, 2 seconds off, as indicated by the options below. In all cases, the sounder tone is based on the selection in the Options page.

**Note:** The sounder rings continuously for the Fault, Double Knock and Test events.

**Note:** Disable **As general options** to make the Pulse on options of the selected sounder different to the settings in the General outputs settings screen.

#### Detector alarm

If enabled, the sounder will ring when the programmed Alarm event is triggered by a detector. The default status is disabled.

**Note:** The sounder will ring continuously when the programmed Alarm event is triggered by a callpoint or Evac button, independently by the Detector alarm option set.

#### Delay to alarm

If enabled, the sounder rings when the programmed **Delay to alarm** event occurs. The default status is disabled.

#### Warning

If enabled, the sounder rings when the programmed **Warning** event occurs. The default status is enabled.

#### Sounder options

In the loop sounders programming page, there are three controls to set the Tone, Volume and the Beacon

frequency for Alarm, Delay to alarm and Warning event types so that each event type causes a different sound or LED blinking. If different types of trigger events are active at the same time for a sounder, this rings with the highest priority tone.

**Note:** Disable **As general options** to make the Sounder options of the selected sounder different to the settings in the General outputs settings screen.

#### Default volumes

Maximum for Alarm and Delay to alarm, minimum for Warning.

#### Default beacon frequencies

0.5Hz.

#### Multiple input-output module-parameters programming (FC410MIO/FC410QIO)

Click on the **Multiple input/output module** entered, FC410MIO, three inputs and four outputs module, or FC410QIO, four inputs and four outputs module, see the customised manuals, and the relevant programming window will appear.

The options descriptions are the same as the Input and Output modules paragraphs. In the field Label, a description of Input/Output module will be inserted. For trigger points, see the same section in [Output module parameters programming](#).

#### Options section

- **Opps interface:** ActUnit/KeySafe allows you to manage the procedure for the automatic opening of the factory, office, shop, warehouse doors in case of fire. This avoids the breakage of these structures. The module outputs can control these actions.
- **LED blinking:** Click on this to enable or disable signalling LED. The FC410TSM door control module, one input or one output, closes a fire door in the case of an alarm or a fault. The FC410TSM monitors the external power supply and loop voltage test, if the relevant option is enabled.

**Note:** In an eventual connection on the right side, a two wires connection, the module enables the yellow isolator LED blinking. This signals an incorrect installation.

#### Manual callpoint parameters programming

Click on the **Manual callpoint**, FC420CP and FC421CP, the relevant programming will appear as per the following description. The General section is the same as the [Detectors](#) section.

## Options section

- **Assigned zones:** Each manual callpoint can be associated with one of the available software zones (32 for FC501, 128 for FC503 and 256 for FC506).
- **LED blinking:** If you enable this option, the manual callpoint LED blinks on every loop scanning.

## Zones programming

The Zones option from the panel tree menu allows you to access the software zone parameters; see Figures [12.1](#), [12.2](#) and [12.3](#). The software zones parameters are applied automatically to all devices associated with the zone concerned.

### First section (General)

- **Enabled:** A tick indicates that the detector is enabled.
- **Label:** This indicates the editable device-label (up to 20 characters). The system uses the label as the zone identifier.

## Options section

You can program a number of parameters in this section.

### Walk test

- **Active:** If enabled, the zones in Alarm status activate the programmed outputs with Walk test event, while the control panel does not generate an alarm. Select this option if the event is generated by any device (modules, callpoints, and detectors), callpoints (callpoints only) and detectors (modules and detectors, but no callpoints).

### Delay to alarm

- **Delay to alarm:** If you enable this option, the control panel activates the Alarm delay.
- **Double knock:** If you enable this option and the zone is in Delay to alarm status; when you activate any other devices or other addresses associated to this zone, the zone will generate an Alarm status immediately.

**Note:** If the Use zone settings option is unchecked for a device, you can decide for that device if it must process Warning and Delay to alarm statuses. Once you decide

that the device processes the Delay to alarm status, the activation causes the Delay to alarm of the panel (with panel Delay to alarm time); as the device belongs to a zone, that zone will also go into Delay to alarm status. If another point belonging to the zones goes into Delay to alarm status, the Double knock option becomes active if enabled in the Zone programming page.

- **Delay to alarm duration:** An input device programmed with Delay to alarm time will generate an Alarm status when the Delay to alarm time elapses. See [Detectors parameters programming](#). To change the Delay to alarm time, select Delay to alarm and you can set the time from 0 seconds to 300 seconds in 1 second steps.
- **Drift compensation:** See the same option in [Table 7](#).
- **Detector warning:** If you enable this option, the control panel activates a Warning signal. To activate the Warning option for a module, tick the corresponding box on the module programming screen.
- **Smoke delay:** For each zone, you can program the delayed activation of the smoke detectors. The Smoke delay (60 seconds or 30 minutes) parameter, when set, applies to all smoke detectors assigned to the selected zone, the alarm verification algorithm as described in EN54-2.

**Note:** Under the list of Zones (Zone programming page, see Figures [12.1](#), [12.2](#) and [12.3](#)) two windows display which devices and what outputs are enabled. If you click the right mouse button on a device in the list, a new menu displays. Selecting **device details** opens a new window, where it is possible to see what points and output is assigned to the device.

## Communicators section

### PSTN

You can associate each zone with one or more voice messages linked to an Alarm, Delay to alarm, Start-up, Breakdown or Walk test event. You can send these voice messages to a maximum of 32 telephone numbers.

### IP

See PSTN above.

**Note:** The communicators section activates after the PSTN and IP communicator are enabled (double click for this) in the General options page.

Figure 12.1: Zones programming window for the FC501 panel

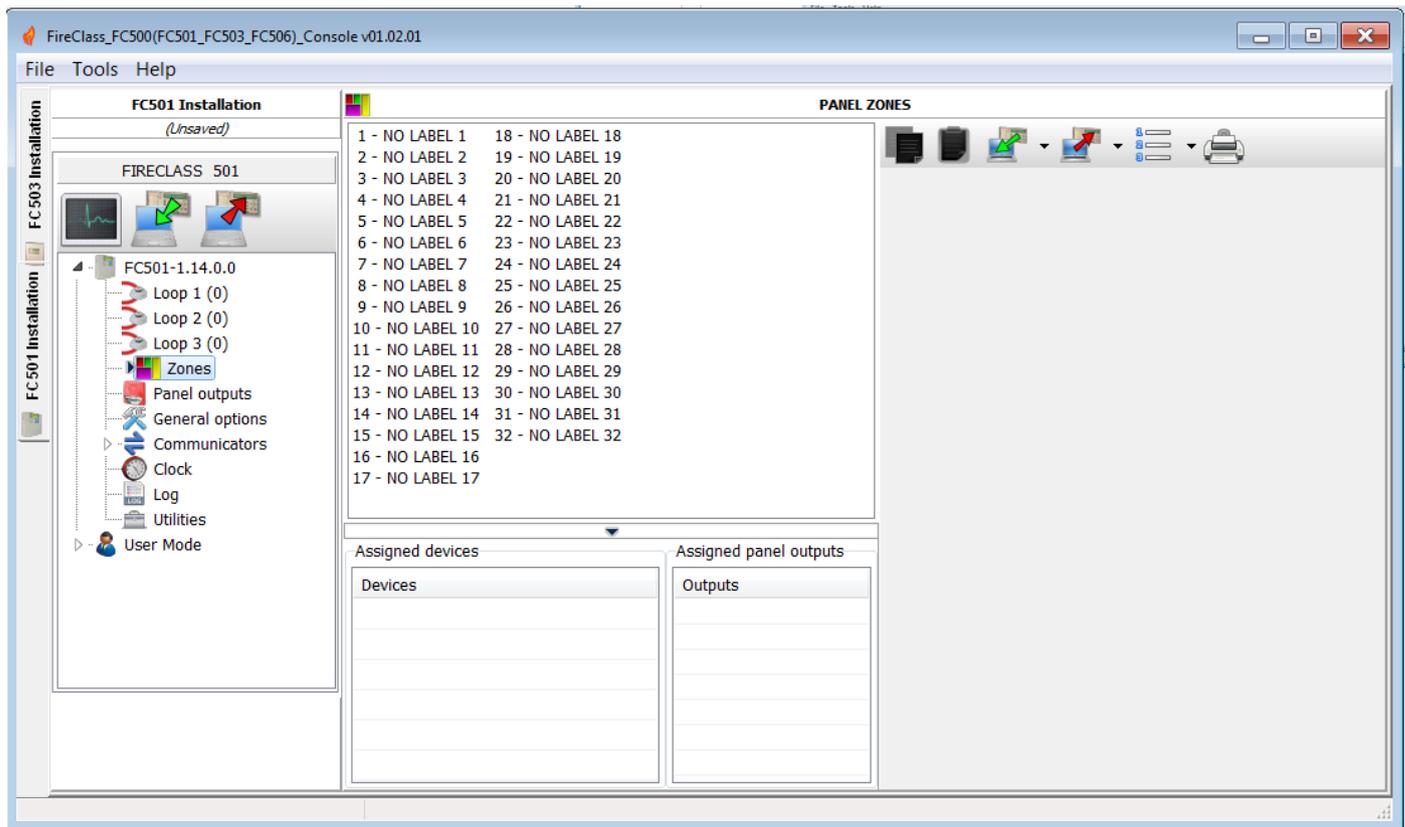


Figure 12.2: Zones programming window for the FC503 panel

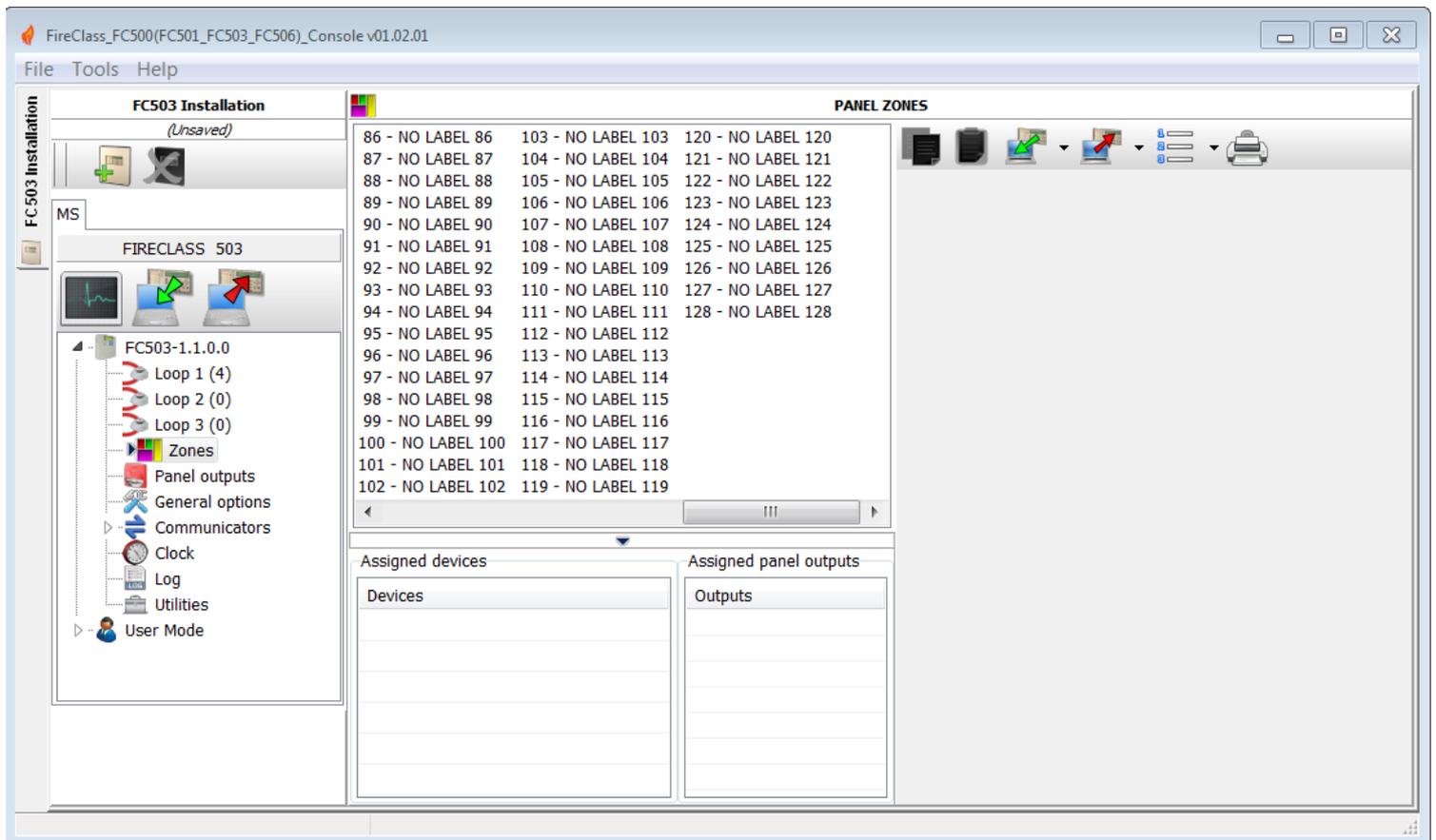
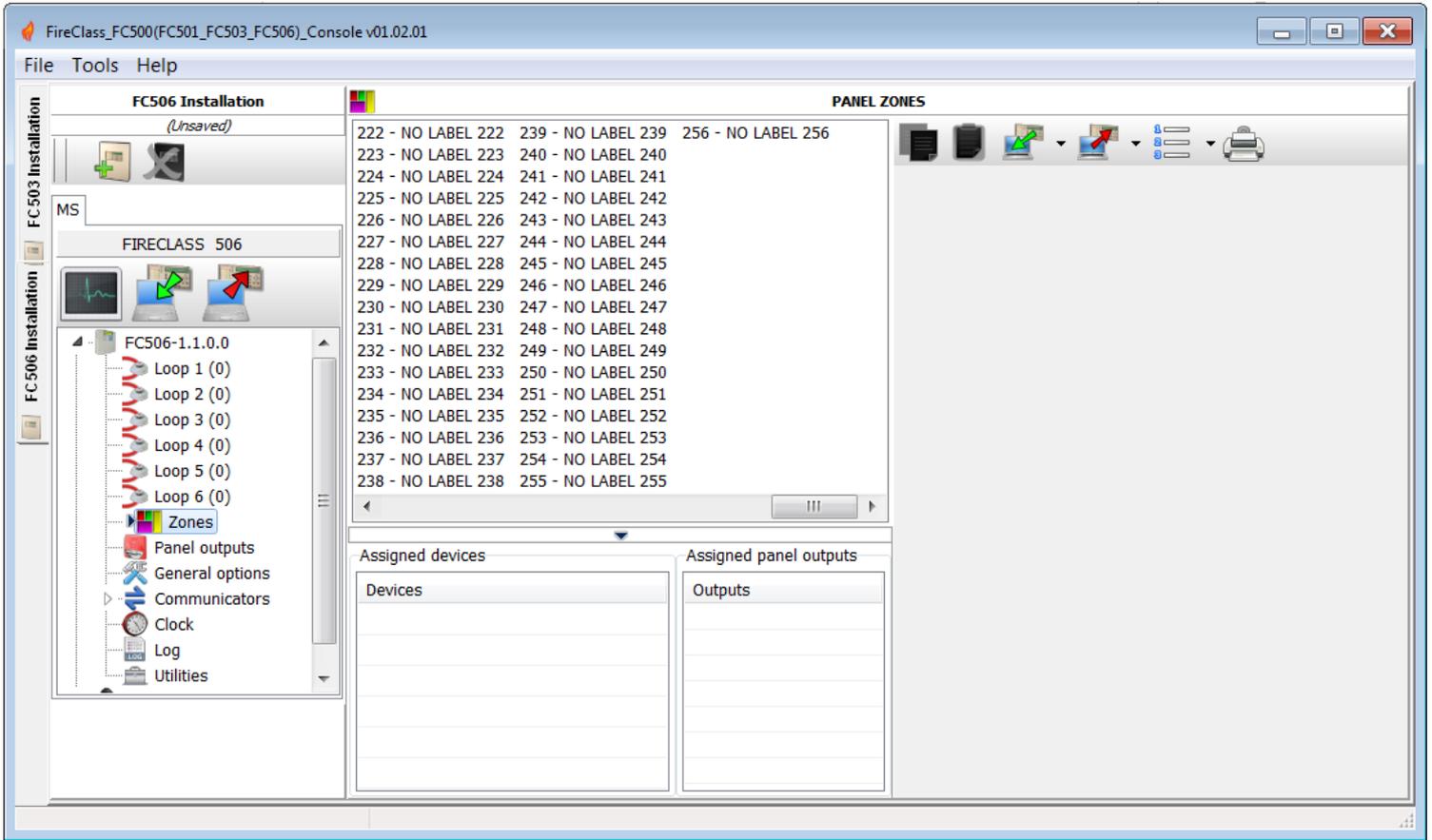


Figure 12.3: Zones programming window for the FC506 panel



## Outputs programming

The Panel outputs option allows you to access the output parameters. The relevant programming appears as per the description in [Figure 13](#).

### SC1, SC2 outputs

These are supervised, silenceable, bypassable (disabled) Alarm outputs. For an Active output, pull up to 27.6V on the positive terminal; pull down to 0V on the negative terminal. When you click on an output, the relevant programming window appears.

### General section

- **Enabled:** A tick indicates an enabled output.
- **Label:** This is for the editable Output-label. The system uses the label as the Output identifier.

### Zones

In the Zones section, it is possible to trigger each output by up to four of the available software zones (32 for the FC501, 128 for FC503 and 256 for the FC506 fire panel).

### Trigger points

In the Trigger points section, it is possible to trigger each output by three input points. For each point, you need to indicate the device address; in the case of FC506, you need to indicate both the loop number and device address.

### Options

In the Options section, you can select the conditions that will activate the outputs. For example, if the Zone warning option is enabled, the control panel activates the output when one of its associated points goes into Warning status.

- Warning zone, Fault zone, Delay to alarm zone, Alarm zone, Double knock (see Zones programming), Walk test zone
- Point warning, Point fault, Point delay to alarm, Point alarm
- Panel warning, Panel fault, Panel Delay to Alarm, Panel alarm, Network RS485 fault
- Set as SC1. If this option is enabled, the output behaves as SC1.

**Note:** When Set as SC1 has been enabled, the Sounders Fault/Dis LED blinks if any set as SC1 output fails. It remains ON if any Set as SC1 output is disabled.

- **Silenceable:** The output, if activated, can be silenceable by checking this option. In the case of a silenceable output, once silenced, the output will automatically reactivate in the case of a new fire event.
- **Active on disablement:** Click this option to activate the programmable SC outputs when any part of the system is disabled.

**Note:** This feature appears for all programmable control panel outputs and for loop modules that provide dry contacts. Both programmable control panel outputs and loop modules devices are affected by the modification. Panel outputs include OC1, OC2 and Fire. Loop modules include FC410RIM, FC410SIO, FC410MIO, FC410MIO, FC410QMO, FC410QRM, and FC410QIO

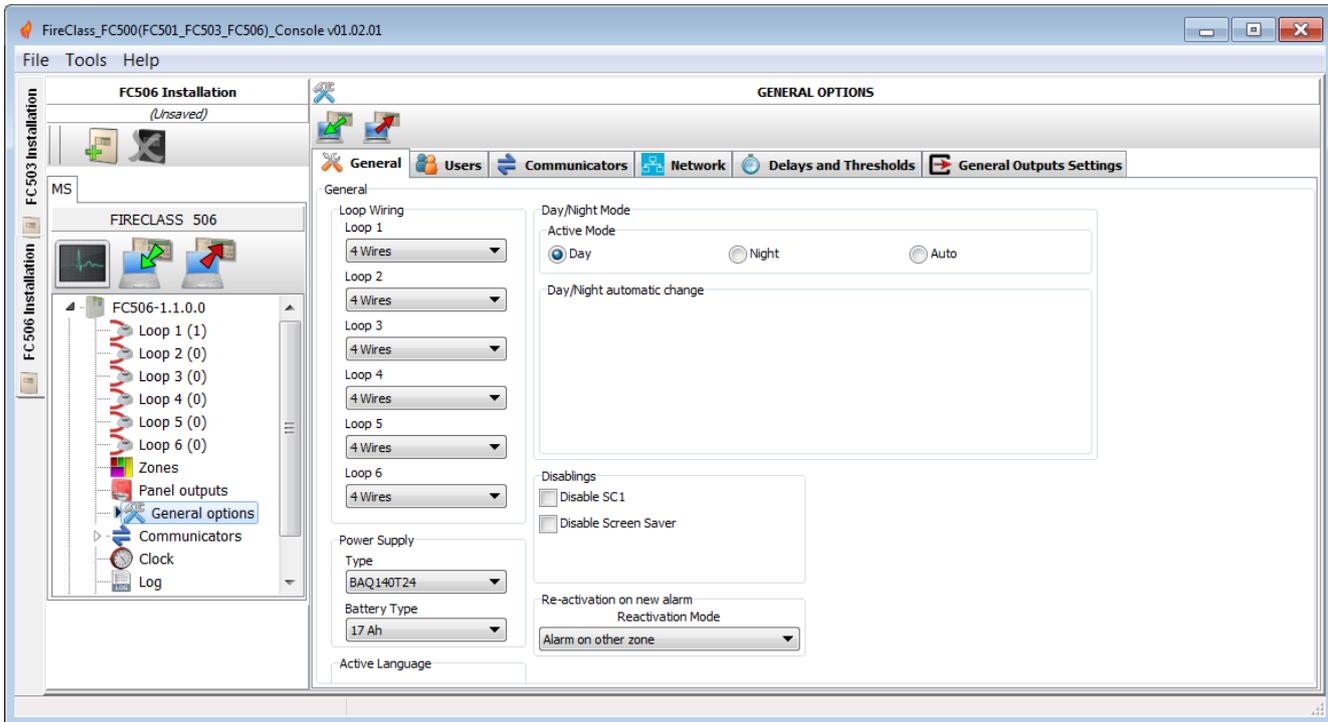
- **Monostable:** This allows the relevant output to automatically deactivate when the MONOST.OUTPUT TIME elapses.

- **As General Options:** This option overrides the Pulse On local selection, forcing the selection of Pulse On in General Options settings.
- **Timed warning:** This becomes available if a warning trigger event is selected for the output. If enabled, the sounder activates when the programmed warning trigger events happen, for the time specified in the Timed Warning duration option. The default status is disabled.
- **Linked Delay:** One of the five available timers (set using the General Options screen on Delays Thresholds) can be associated with an output activated by a zone, point or control panel alarm. The programmed events activate the output, after the delay occurs (indicated by the timer).

### OC1, OC2 Outputs

These are programmed, non-supervised, non-silenceable, bypassable or disabled outputs. These are normally open terminals (open collector) that are close to the ground when the corresponding zones go into Alarm status. These terminals remain close to the ground, even after the generating event ends.

**Figure 13: General options window**



### General options programming

The panel parameters can be programmed through the General Options screen (see [Figure 13](#)).

In the **General** section:

- **Loop wiring:** Select a 2 wire or a 4 wire connection for the Panel loop configuration.

When you select the 2 wire connection, you can connect devices on the both the left and right sides of the loops (two spurs). In the case of the FC501 and FC503 panel, this provides the capability to connect up to six spurs to the panel, mimicking a six zone conventional panel. In the case of the FC506 panel, this provides the capability to connect up to 12 spurs to the panel, mimicking a 12 zone conventional panel.

**Note:** In the description of events, the devices are described as belonging to a loop. In the case of open loops, you cannot distinguish between the left and right side. However, the loop concept is not meaningful by definition, and localization occurs via zones, the same way as conventional panels.

**Note:** For the FC503 panel, if devices are addressed by the service tool, there is an option to set the devices in six zones that correspond to the 6 spurs. Assign the correct zone to each device using the PC console or a control panel LCD.

**Note:** If you do not address the devices, the mapping procedure will occur to locate each device and assign the proper zone to it.

- **Day or Night mode:** Select the operation mode, Day mode or Night mode, or select **Automatic** to set the time (hour and minutes) of transition from one mode to another.
- **Disable screen saver:** This allows the user to enable or disable the screen saver on the main page of the control panel LCD. You can program the screen saver from the control panel user interface or via the FireClass FC500 (FC501\_FC503\_FC506) console. If you have an enabled screen saver, it appears on the LCD. If the screen saver is disabled, it does not appear. This feature is unavailable for repeaters.
- **Power supply:** Select the system power supply, **BAQ140T24**.
- **Disabling:** Disable SC1. This allows you to disable the SC1 output (enabled by default). This is a programmable output. Activation occurs every time the control panel goes into Alarm status.
- **Reactivation of new alarm:** You can select the following options:
  - **No Reactivation:** Outputs here are not reactivated once silenced
  - **Alarm on other zone:** Outputs here reactivate once a new zone goes into Alarm status.

## Users

In the Users section, you can change the installer and the user codes. Each code must have five digits and they can include digits 0-9.

- The installer code allows you to manage the three access levels: Level 1 (View), Level 2 (User) and Level 3 (Installer).  
The default installer code is **00000**:  
One click only means the password is present.  
A second click means the password is enabled.
- The user code allows you to manage two access levels of the control panel: Level 1 (View), Level 2 (User).

The default user code is **11111**:

Once click only means the password is present.

A second click means the password is enabled.

- **Lock installers password:** If you select this option, it is not possible to perform the procedure to reset the installer password after removing Jumper J5.

## Communicators

In the Communicators section, you can enable the PSTN functionality and the FC500IP module.

### PSTN

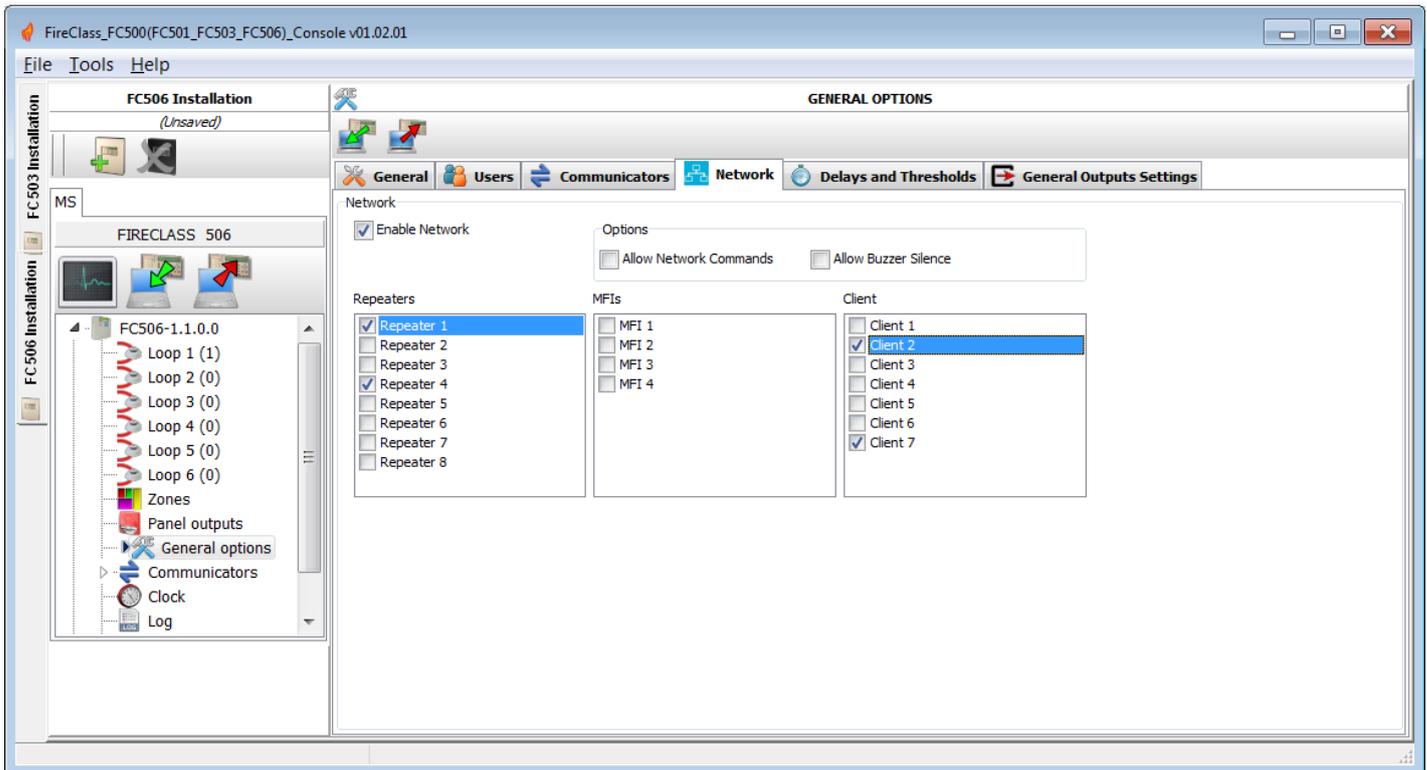
In the PSTN section:

- One click only means the PSTN is present, but not enabled.
- A double click means the PSTN is enabled.

When you enable PSTN, you can also select whether to enable both events, alarms and faults (and one of two).

## Network

Figure 14: Network tab



In the Network section, a tick means you can perform the following actions:

- Enable network
- Allow buzzer silence silences a device that is activated in every part of the network.
- Allow Network Commands enables the Control panels to do the commands (Reset, Silence, Investigate) programmed in other network control panels.
- Enable repeaters and FC500 MFI modules in the Network repeaters section and Network MFI section.
  - One click only means the repeater, FC500MFI and Client panels are present, but not enabled.
  - A double click means the repeater, FC500MFI and Client panels are enabled.

For the FC500MFI module, see the chapter *Programming from the panel* section in the *Installation manual*.

**Note:** You can insert the repeater address from the panel. See the chapter *Programming from the panel* in the *Installation manual*.

## Delays and Thresholds

In this section, you can program:

- The Alarm Delays; you can select five timers. When selecting the output in the Panel outputs screen, the timer is set in the Linked delay option.

- The Panel Delays.
- Investigation Time; When you press the **Investigate** Key, a Delay is added automatically to the Delay to alarm remaining delay.

**Note:** The sum of Investigation time and Delay to alarm time must not exceed 10 minutes.

## Fault delay

This field controls how long it takes the panel to signal a Mains failure. The amber signalling LED (or power supply fault) and the relevant event will appear on the display. For the Delay to alarm duration, an input device programmed with Delay to alarm time generates and Alarm status when the Delay to alarm time elapses.

Delay to alarm signals include:

- An audible signal emitted by the control panel.
- Blinking on the Delay to alarm LED; this LED is on the repeater FC500 only.
- The display message.
- The activation of outputs with programmed delay to alarms.

## Silence duration

When the control panel is in Night mode, the Silence delay is the maximum silence time of the outputs. To disable the Silence duration time, click the checkbox **Disabled** located to the right of Time value entry.

## Reset

Program the Reset time; the minimum time is 2 seconds and the maximum time is 15 seconds.

## Monostable outputs time

When the monostable option is set for the outputs, the Monostable outputs time defines, for the entire system, the period of time for which the outputs remain active once triggered. Values range from 1 to 30 minutes; the default value is three minutes.

## Warning sound duration

This is the numeric value defining the activation time of outputs that have the Timed warning option set. The value is valid for the entire system; every new trigger event of the programmed outputs restarts it.

**Range:** From 3 to 60 seconds

**Default value:** 5 seconds

**Resolution:** 1 second

## Thresholds

The Thresholds section is reserved for the DDM gas detector.

- **Set:** This function allows you to choose between four levels of threshold.

## General outputs settings

In this section, the behaviour of the Sounder circuit 2 (SC2) and the loop sounders can be configured at a system level. These configurations apply to the SC2 loop sounder when As general options is enabled.

## Pulse on

If the **Pulse on** option is disabled, the sounder rings steadily. If not, the sounder pulses (2 seconds on, 2 seconds off) as indicated by the following options. In all cases, the sounder tone is based on the selection in the Panel settings for symphony sounders and Panel settings for AV base sounders sections.

**Note:** The sounds always rings continuously for the Fault, Double knock and Test events.

## Detector alarm

If enabled, the sounder pulses when the programmed Alarm event is triggered by a detector. The default status is disabled.

**Note:** The sounder rings continuously when the Alarm event is triggered by a call point or the EVAC button, independent of the Detector alarm option set.

## Delay to alarm

If enabled, the sounder pulses when the programmed Delay to alarm event occurs. The default status is disabled.

## Warning

If enabled, the sounder pulses when the programmed Warning event occurs. The default status is enabled.

## Panel setting for symphony sounders and panel setting for AV base sounder

For each of the trigger events, Alarm, Delay to alarm and Warning, you can select the Sounder tone, volume, the beacon flash rate default tones; these default zones include 7Hz Fast sweep (Dutch slow whoop if you select Dutch language) for Alarm and Delay to alarm, 2 tone for Warning. Default volumes include maximum for Alarm and Delay to alarm, minimum for Warning. Default beacon frequencies is 0.5Hz.

## Communicators programming

The Communicators screen is for programming the parameters of the PSTN interface, of the FC500IP module and of Panel events, as described below.

## PSTN interface

The PSTN interface section activates, after the PSTN telecom interface is enabled on the General options screen; see [Figure 13](#).

## Options

In the Options section:

- **Call attempts:** Set the maximum number of attempts that the PSTN interface makes for each telephone number. Set from one to nine, three is the default number of attempts you can make.
- **Iterations:** Set the number of times the PSTN interface repeats the voice message; set from one to nine, the default setting is three.
- **Tone check:** If enabled, the PSTN interface controls whether it obtains a Dialling tone and if it can obtain the tone to move to the next step. If not, it considers the phone call failed; hang up and try again.
- **Call all telemonitoring:** If the Call all telemonitoring numbers option is enabled, the PSTN interface calls all numbers programmed for

the previous event, up to the time all telephone calls succeed, or at most, for the numbers of call attempts programmed. If the Call all telemonitoring numbers options is disabled, the PSTN interface will interrupt the call as soon as it succeeds.

- **Call all voice messages:** If the Call all voice messages numbers option is enabled (default setting), the PSTN interface calls all programmed numbers for the previous event, until all phone calls succeed according to the numbers of call attempts programmed. If the Call all voice messages is disabled, the PSTN interface will interrupt the calls as soon as one is successful.

### Play message after

The section Play message after sets the condition for the voice message playback.

- **Dialling:** Message playback occurs as soon as the telephone number is dialled.
- **Voice:** Message playback occurs when the PSTN interface detects a voice answer.
- **Delay:** Message playback occurs when the programmed delay elapses after the telephone number is dialled. You can set the delay from 0 to 99 seconds, with 1 second steps. The default setting is 0 seconds.

### Periodic report

The section Periodic report sets the parameters corresponding to the Period test as described below.

- **Date and time first test:** Set the date and time for the first Periodic test.
- **Period:** Set the interval between two periodic tests. You can set the interval from 1 up to 25 hours, in steps of 1 hour. The default setting is 24 hours.

**Note:** The Periodic test event is not recorded in the Events log.

### Address book

The section Address book programs the telephone numbers that you can use to send:

- **Voice messages:** Diallyer function and telemonitoring data occur when the events are recognised by the panel.

In the case of Telemonitoring, select:

- The type of protocol (SIA, ADEMCO Contact ID) and customer code.

Phone numbers are only for alarms, faults and numbers of general use.

### Voice messages

In the section Voice messages, parameters relating to voice messages are programmed, as described below.

**(1-7) Messages:** You cannot edit messages 1 to 7.

**(8-32) Messages:** You can assign a maximum 20 characters description to messages 8-32.

**Table 9: Icons in the Voice messages section**

Icon	Description
	Listen to a present message.
	Stop the message playback.
	Delete the selected message.
	You can record a voice message via the computer microphone for a maximum of 6 seconds; record the header message for a maximum of 12 seconds.
	Imports an audio file (mp3, wav) for use in a voice message (maximum length is 6 seconds).

**Note:** A USB memory stick is the only way to download audio files from the panel.

### IP Interface

The IP interface section activates after the FC500IP module is enabled in the General options screen. See [Figure 13](#). The IP module programming has three sections: Options, Address book and Advanced.

#### Options

- **DHCP:** Select this option if you want to use a dynamic address for the IP module you are programming.
- **IP static:** Select this option if you want to assign a static IP address to the IP module you are programming and set the following parameters:
  - **IP address:** Enter the IP address assigned to the IP module. The network administrator provides this information. The default setting is 192.168.0.101.
  - **Subnet mask:** This must be the same as the subnet mask for the local network. There is only one valid subnet mask for each local network. All nodes on the same subnet use the same subnet mask. The network administrator provides this information. The default setting is 255.255.0.0.

#### Ethernet speed

Use this section to set the parameters corresponding to the Ethernet interface of the IP module. The default selection is Auto setting.

- **Auto:** If you enable the option, the IP module takes the speed and duplex values from the network. If this option is disabled, the speed and duplex values must be set as described below.

- **Speed:** If this Auto option is disabled, set the speed value as appropriate, 10 Mbps or 100 Mbps.
- **Duplex:** If this auto option is disabled, set the Data exchange, duplex mode as appropriate, either half or full.

## Read-only options

You cannot modify the values in this section. They display information relating to the connected IP module.

- **MAC address:** Displays the MAC address of the IP module; the MAC address is a unique identification number assigned to every IP device in the world.
- **Firmware version:** Displays the version of the program running on the IP module.
- **Boot version:** Displays the boot version.
- **Current IP address:** Displays the IP address assigned to the IP module.

## General options

Use this section to select the general options for the IP module.

- **Encryption key:** If this has been programmed, the IP module uses this key to encode and decode the packets exchanged with the computer. The encryption key may include between 1 to 32 hexadecimal characters (numbers 1 to 9 and letters A to F). To disable encryption, enter 0. If the encryption key does not correspond to that of the IP module, communication between the computer and the IP module is not permitted. The default setting is 0 (encryption key not enabled).
- **Board port:** You should use this port to communicate with the IP module. The default setting is 3064.
- **Pass through port:** You should use this port to communicate with the control unit. The default setting is 3062.
- **Board code:** You should apply this code when the FireClass FC500 (FC501\_FC503\_FC506) Console is used to program the IP module, either remotely or locally. The code should consist of four hexadecimal figures. The default setting is 5555.
- **Idle connection timeout:** Enter the maximum time period during which no data is transmitted, before the connection terminates. The default setting is 20 seconds.

## Address book

**Account code:** The central station uses this account number to distinguish between transmitters. There is one

account number programmable for the FC500IP. The default value is 0000FFFFFF.

**Note:** Account codes 0000FFFFFF, FFFFFFFF and 0000000000 are not valid accounts.

- **Supervision:** To enable Supervision mode, tick this option.

## Main

- **IP Address:** This is a static IP address for the receiver. Program the IP address of the central station receiver. If an IP receiver is not connected, program the 0.0.0.0 address. The default value is 000.000.000.000.
- **Local port and remote port:** These values show the ports that communicate with the receiver. The same receiver supplies these values. The default values are 3060 (local port) and 3061 (remote port).

## Backup

- **Receiver IP:** This is the static IP address for the second receiver. Program the IP address of the second receiver. The default value is 000.000.000.000.

**Note:** The receiver is used for backup only; this is not checked.

- **Local port and remote port:** These values represent the ports used for communication with the backup receiver. Default values are 3065 (local port) and 3066 (remote port).

## Third

- **Receiver IP:** This is the IP address assigned to the domotics system receiver. The receiver itself supplies the IP address. The default value is 40000.
- **Local port and remote port:** These values represent the ports used when communicating with the domotics system receiver. The receiver supplies the values. The default value is 40001. The receiver is used for the domestic system only;

## Advanced

### LED Trouble mask/ Output Trouble mask

You can use this section to enable or disable signals from the OC output and the indicator light, for certain events recognised by the IP module: Network absent. A tick indicates that the corresponding event is detected. By default, the LAN undetected event indication is enabled.

### Output polarity

Use this section to set the operating mode of the OC output on the IP module.

- **Open on trouble:** At default, the outlet suspends when a breakdown occurs.

- **Close on trouble:** The output connects to the earthing system when a breakdown occurs. For the IP module, refer to the procedure *restore to the factory defaults* in the FireClass FC500 (FC501\_FC503\_FC506) Console. In the same section of the FireClass FC500 (FC501\_FC503\_FC506) Console SW, Advanced, you can upgrade the firmware and reset the FC500IP board. For an explanation of the further parameters and programming, see the *Installation manual*.

## Events

In this section, for each event recognised by the panel, it is possible to program the following: the telephone numbers to call, the voice message and the events code to send. You can send the Alarm, Delay to alarm, Warning, Fault and Walk test events to 32 telephone numbers. The telephone numbers are set in the Address book section. It is also possible to set the type of phone call to voice, telemonitoring or IP communicator.

### Options for using the voice messages

- Record them directly on a computer or import present messages on the computer using the buttons functionality in the Messages section.
- Import the voice messages on a computer from an external source, for example, a USB stick; upload them using the buttons functionality in the Messages section.

**Note:** To load the voice messages in the panel, it is necessary to use the USB connector on the motherboard and to start the programming procedure of the panel. See the paragraph **7 Key – USB** on page 51 of the *Installation manual*.

## Clock

The Date/ Time option from the Clock menu is for the clock settings on the control panel. Enter the required time and date. If required, schedule the automatic application of summer time. There is a button to change the daylight saving to default values.

## Log

This option displays the Log stores events.

**Table 10: Icons in the Log bar**

Icon	Description
	Upload from Board: Uploads the Log of the connected control panel.

	Export Log to file: Exports the Log in a (*.fcl) or (*.xml) or (*.xmc) file.
	Import Log from file: Import the Log from a (*.fcl) or (*.xml) or (*.xmc) file.
	Apply filter: Selects the Log filter if necessary: <ul style="list-style-type: none"> <li>• Enabled/Disabled/Restore/Alarm/Delay to Alarm/Warning/Fault/Generic/Walk test</li> </ul> If required, set other filters for the Event log: <ul style="list-style-type: none"> <li>• Filter by panel/ Filter by loop/ Filter by device / Filter by zone.</li> </ul>
	Print a text file: Prints the control panel Event log, or part of it.

The following data is stored in the Log:

- The Event's number
- The Date
- The Time
- The Class (Fault, Alarm, Warning, Generic and Walk test)
- The Event's description
- The Control panel number
- The Loop
- The Device type
- The Status
- The Threshold
- The Zone

There is also an icon to delete the Event log.

## Utilities

The following functions are located on the Utilities screen.

**Table 11: Icons in the Utilities screen**

Icon	Description
	Checking Battery calculations. See paragraph <a href="#">Battery calculation</a>
	Exports the battery calculation into a CSV file that Excel or a similar application can open.
	Using a USB stick to load the firmware, voice messages, panel programming, and then download the customer data.
	Loading the label of the first eight zones that should be printed and inserted in the transparent window of the user interface. See <i>Description of parts</i> mentioned in Figure 3 of the <i>Installation manual</i> .
	Printing a PDF file that contains descriptions of the first eight zones. You cannot resize the front label as it is predetermined. See <a href="#">Figure 15</a> .
	Importing the type of wiring from a database for use in various loop connections. These types of wires are used in the Loop wire calculation

**Note:** By selecting **Override**, it is possible to adjust the panel ID for export and import. If the option Any panel [XXXX] is implemented, you can utilise this configuration in any panel (for example, to load the same voice messages in several panels).

**Note:** In the printer driver, set the Page resizing option to None.

**Note:** You can move the database from one system to another. The console searches for the wire database on start up. If you cannot access a moved database, close the software and restart.

## Battery calculation

The Battery calculation window allows you to see the following (see [Figure 16](#)):

- The FC501 and FC503 loads: Loop 1, Loop 2, Loop 3 device loads.
- The FC506 loads: Loop 1, Loop 2, Loop 3, Loop 4, Loop 5, Loop 6 device loads in the condition of Normal load and Alarm loads (percentage of devices in Alarm status), when the Mains fails. Below this window, in the option Others load, you can insert Loads on auxiliary terminals if required. Automatically, the Total load, the Battery needed and the Battery recharge time appears. Set the Standby hours, Alarm minutes values and the calculation will occur.

## Battery calculation parameters

- Stand-by hours (from 1 to 144h)
- Alarm minutes (from 1 to 240m)

## Battery type

This is the battery (Ah) arising from calculation.

## Battery calculation constraints

- Lock standby hours
- Lock battery type

## Lock standby hours

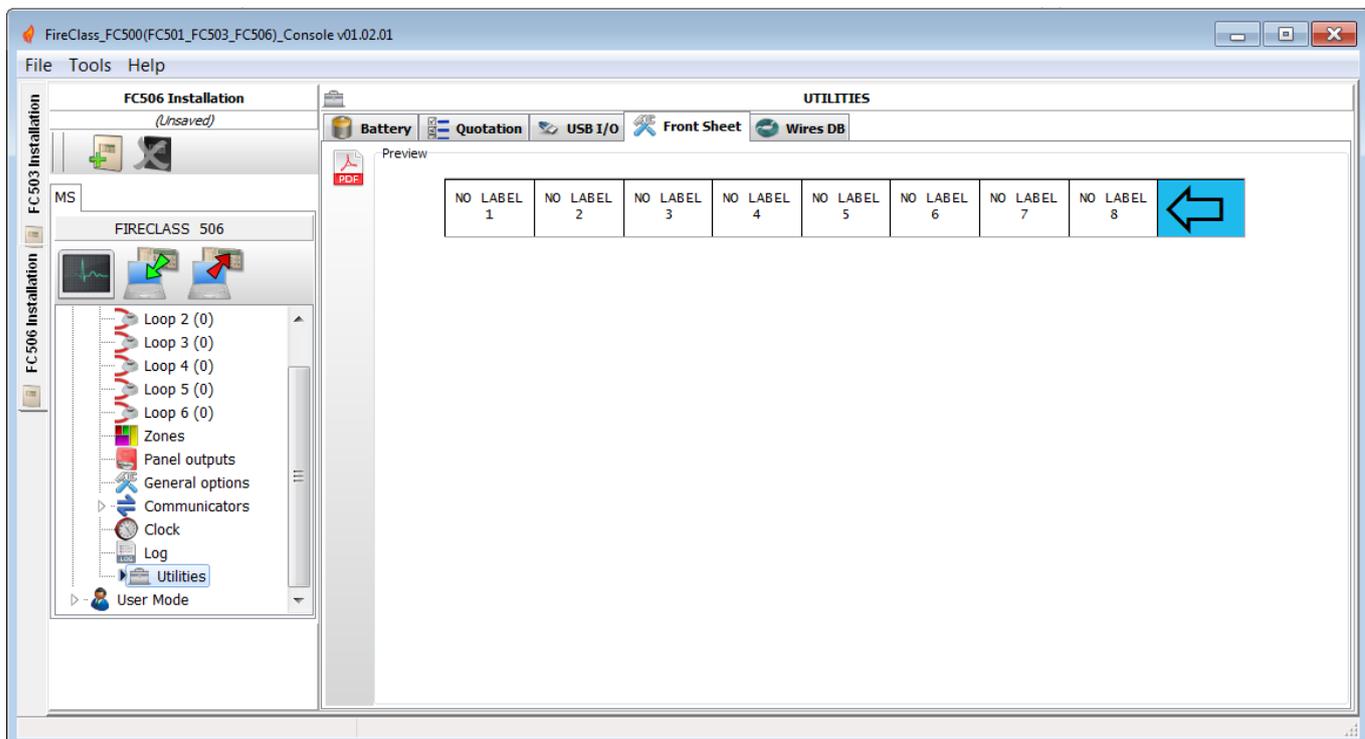
Battery type value (Ah) will be calculated, fixed Standby hours, Alarm minutes.

## Lock battery type

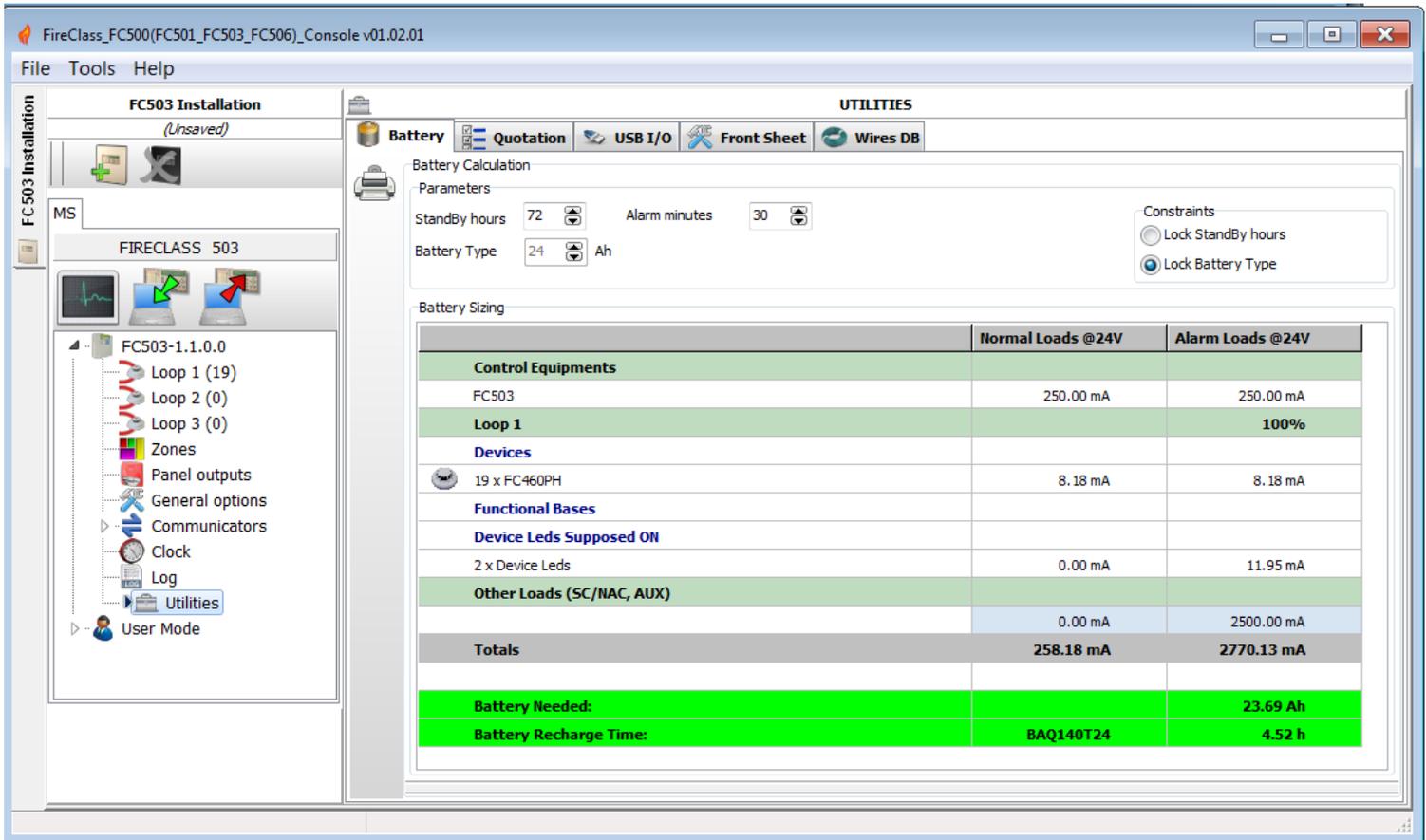
Standby hours value will be calculated, fixed Battery type (Ah), Alarm minutes.

**Note:** The software calculation is a rough calculation and cannot substitute the installer or qualified person's calculation.

**Figure 15: Page to print the zones label**



**Figure 16: Utilities window**



## User mode

If the Installer mode option is enabled, it is possible to program or change the installation using the Installer password. If the option User mode is enabled, this feature allows you to perform the real time monitoring of the panel zones and the loop devices associated with them. The loop device or zone displays in a way that immediately informs you about its state with a coloured background or an overlapped icon. By selecting the loop device, the user can also receive real time information about the last measured value that can be expressed in °C, ppm, % or V, depending on the device type.

While the FireClass FC500 (FC501\_FC503\_FC506) Console is running, the user can choose whether to work in Normal mode of communication (communication with the panel occurs only when required), or in Real time mode. Real time mode communication is activated by a button that starts a session of continuous communication with the panel.

While the FireClass FC500 (FC501\_FC503\_FC506) Console is in real time mode, it constantly receives data from the panel and provides the user with feedback on status changes. The Real time communication also

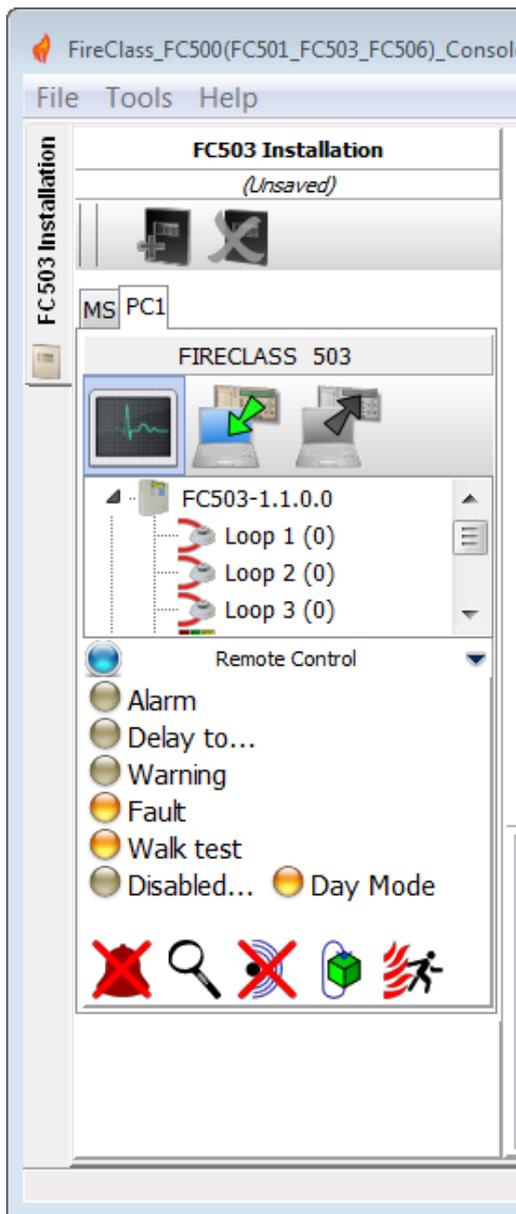
provides the user with two additional controls: Events in real time and Remote control.

The Event log in real time is similar to that found in the Event log screen, but the log is updated constantly, and always shows the last 16 events generated by the control panel. Use the remote control panel to send commands to the fire panel as if are using a graphical interface. This feature allows you to remotely press the functional buttons present on the panel user interface; these include: Silence, Reset, Investigation, Lamp test, Silence buzzer, Evacuate. Sending a remote command to the panel through this interface requires you to insert the panel's User or Installer password for security reasons.

When the fire panel receives commands, the control keypad requests a password. The remote control panel also shows the detailed status of the connected fire panel and provides a ready visualisation of status changes.

A second click on a button ends the communication in real time mode and return to normal mode.

**Figure 17: Remote control display**



## Graphic maps

The User mode provides the use of graphic maps. The activation procedure follows.

1. Create a tree structure to contain the graphics map. Define the first map or background and then import the graphics map.

**Note:** The system of graphic maps allows you to use the vector graphics file (WMF) as well as the more traditional bitmap formats (BMP, JPG, GIF and PNG).

This map appears in the condition of absence of events.

2. Follow the same step for other levels of maps and insert the plan (the picture of the building, the floor where the system is installed and the installation plan) in each tree structure node. You can delete any map or structure.

3. Insert the devices on the maps; after you select the map, click on the name of the installation in the same window, under the tree. A list of all devices on the loop shows. At this point, drag the selected device in the relevant position on the map in question.
4. The final map consists of a series of separate screens linked together that are easily accessible. You can also use the tree diagram to access the final map.

**Note:** The graphic map, in real time, appears in a dedicated window. You can analyse more than one device at a time, but each new image requires additional system resources. To analyse more than four devices simultaneously is inadvisable.

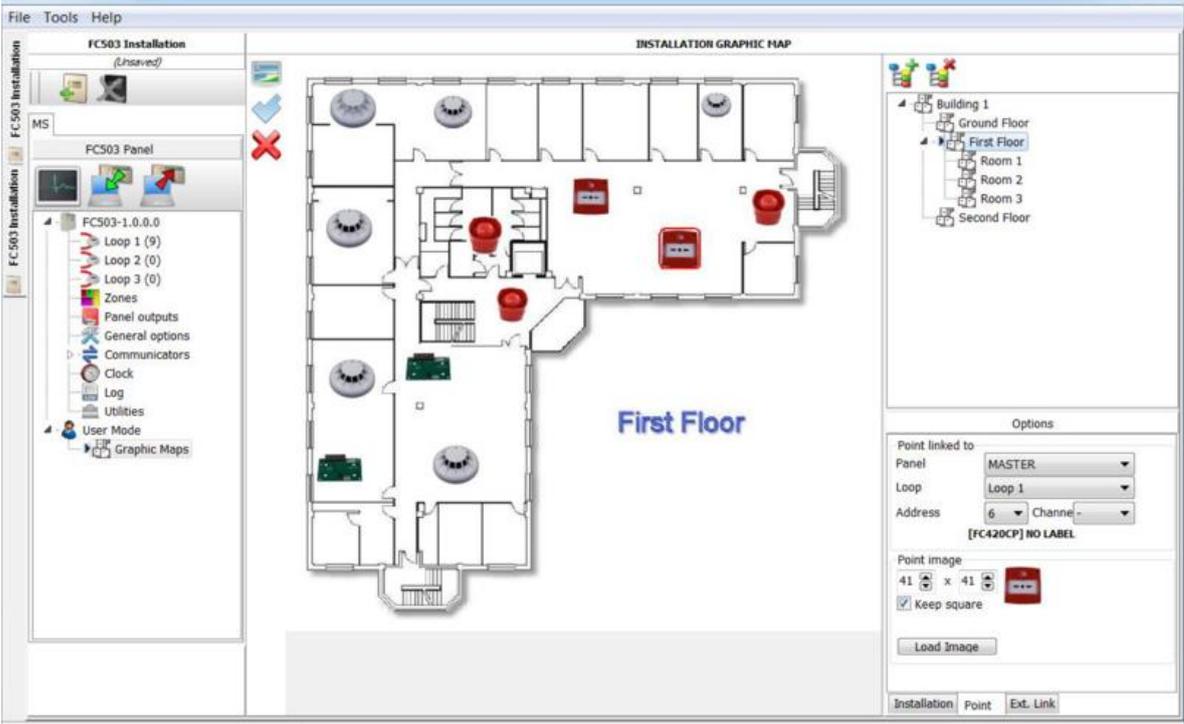
In Real time mode, the Graphic map normally appears in standby status (first map/background).

5. When the fire panel detects and reports a change in status of the detector or module, the FireClass FC500 (FC501\_FC503\_FC506) Console replaces the icon detector with the event icon (for example, Fire alarm).
6. The FireClass FC500 (FC501\_FC503\_FC506) Console activates the Graphic map where the detector or module changed status. Through the connection between the activated map and the first map or background of a higher level, the associated area blinks.
7. Realise the drawing of possible areas that will blink when the contained devices are activated. To close the area, double click the **Dx button**.
8. Delete any devices or areas, after they are selected. For more information about the function and the use of graphic maps, follow the Help, accessible by both the main menu and graphic maps.

## Disable

The disable screen (click the right button on the selected device) is available only when the FireClass FC500 (FC501\_FC503\_FC506) Console communicates in Real time. Devices and zones can be disabled or enabled. Before sending a Disable or Enable command, the FireClass FC500 (FC501\_FC503\_FC506) Console provides the prompt to enter the user password.

Figure 18: Example of the Graphic maps





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