



**cofem**,s.a.  
1973

# I-LINK

**<Addressable systems management software>**

**User Manual**

<b>INTRODUCTION .....</b>	<b>5</b>
<b>Installation .....</b>	<b>6</b>
<b>Start software the first time .....</b>	<b>7</b>
<b>Users .....</b>	<b>7</b>
<b>Program structure .....</b>	<b>9</b>
<b>EDITION .....</b>	<b>11</b>
<b>OPERATION AND CONFIGURATION .....</b>	<b>13</b>
<b>Start a configuration .....</b>	<b>13</b>
<b>Import a configuration file .....</b>	<b>14</b>
<b>Export a configuration file .....</b>	<b>15</b>
<b>Workspace .....</b>	<b>15</b>
<b>Control panel configuration .....</b>	<b>16</b>
<b>Points configuration .....</b>	<b>19</b>
<b>Relays configuration .....</b>	<b>22</b>
<b>List configuration .....</b>	<b>24</b>
<b>Zones configuration .....</b>	<b>26</b>
<b>GRAPHIC REPRESENTATION .....</b>	<b>29</b>
<b>Maps configuration .....</b>	<b>29</b>
<b>Cameras configuration .....</b>	<b>34</b>
<b>ADDITIONAL FUNCTIONS .....</b>	<b>36</b>
<b>Print configuration .....</b>	<b>36</b>
<b>Exchange loops .....</b>	<b>37</b>
<b>Loop Calculator .....</b>	<b>38</b>
<b>Monitor detectors .....</b>	<b>39</b>
<b>COMMUNICATIONS .....</b>	<b>40</b>
<b>GENERAL DOWNLOAD / UPLOAD .....</b>	<b>43</b>

---

<b>General download</b> .....	43
<b>General upload</b> .....	44
<b>History download</b> .....	45
<b>Delete general configuration (in the control panel)</b> .....	48
<b>MULTIPLE CAMERAS</b> .....	49
<b>MANAGEMENT ONLINE OF THE CONTROL PANEL</b> .....	50
<b>Software extension</b> .....	50
<b>Structure of Online mode</b> .....	50
<b>Operation of Online mode</b> .....	53
<b>FIRMWARE</b> .....	57
<b>UPDATE I-LINK</b> .....	58





## Installation

The minimum hardware and software requirements to install I-link are:

### Windows® Client: 7, 8, 10.

- Processor 1.8GHz or faster
- 2GB of RAM; 4GB of RAM recommended (2.5GB minimum if running on a virtual machine)
- 1GB of available hard disk space 5400RPM hard disk drive
- DirectX 9-capable video card (1024x768 or higher resolution)

To install the software, first is necessary to install the .NET Framework 4.52 package at the following path:

<https://i-remote.com/ilink/help/dn452.exe>

Run the file **Setup.exe** provided by Cofem. After the installation wizard starts, accept the license agreement and click on the **Next** Button (see Figure 1) to start the process.

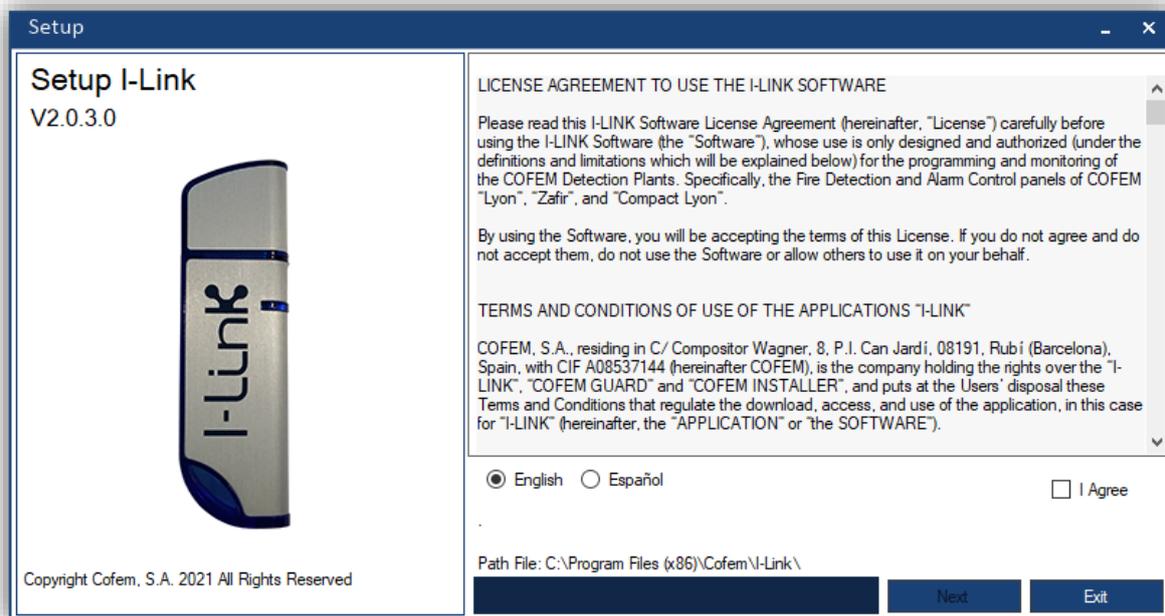


Figure 1. I-link's installation wizard window.

## Start software the first time

The first time, introduce the follow username and password.

User: **master**  
Password: **9000**

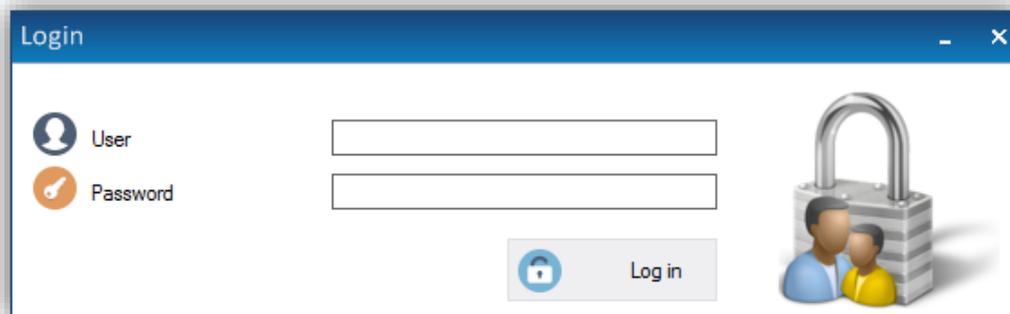


Figure 2. User's authentication window.

Press the **Log in** button , the main menu of the software will opens automatically

**IMPORTANT:** FOR SECURITY REASONS IT IS RECOMMENDED TO CHANGE THE DEFAULT USERNAME AND PASSWORD AFTER THE FIRST SUCCESSFUL AUTHENTICATION.

## Users

I-link provides several options to manage the configuration of users, such as creation and modification of users, also to grant their permissions.

Switch user using the **User Login** button  (placed at the top right part of the main menu).

Users are divided in three types according to their permissions as follows:

- **Administrator:** The user has full control over the software. This means that any user with administrator permissions can configure all elements of the control panel (points, relays, cameras, etc), interact with it in online mode, manage the users who have acces, update the firmware of the control panel or update the I-link.
- **Supervisor:** this type of user can update the software and interact with the control panel in online mode (sending commands, take action on events, ...) but can not modify any aspect of the configuration.
- **Technician:** the technician user type can update the I-link software and monitor the functionality of the control panel in online mode.

The **Setting Users** menu  allows to add a new user, modify an existing one or delete an account. To perform any of the three actions mentioned, the user must have **Administrator** permissions.

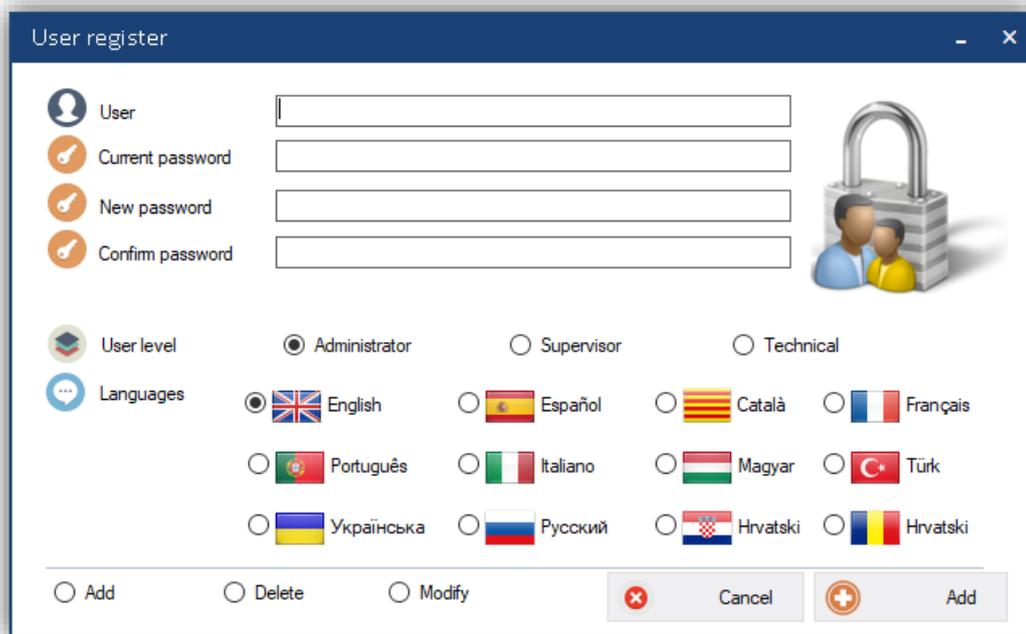


Figure 3. Configuration menu for users.

Select the **Add** option  to add a new user, then set the username, the new password, confirm the password, select the access level, the language and finally press the **Add** button  to save it.

To modify the user's password or the language, select **Modify** option , set the username, password and edit the necessary fields, finally click on **Modify**  to save the changes. In this case, just an **Administrator** user can modify the account of a **Supervisor** or **Technician** user. Like to modify the account of an **Administrator** can just be done from the same account or from the account **master** (which is given by default in the I-link).

Finally, to delete an account choose the **Delete** option , set the username and current password of the user to be deleted and finally press the **Delete** button .

## Program structure

The main menu of the program is always visible and it allows the user access the most important functionalities, which are briefly described below:



Figure 4. Top structure of the main menu of I-link

1. **CONFIGURATIONS**: It is the structure where the main adjustments are made, such as creating a new configuration file, open an existing one, import it from several programs provided by Cofem, exporting it, closing it. It is also possible editing the control panel's configuration, points, relays, zones, maps, cameras and open the loop calculator.
2. **EDITION**: This option allows you to set the maximum number of control panels to be connected, the connection type (TCP/IP, USB or both), the option to view multiple cameras in the same tab, the display style, get the online mode validation code (on request), activate the acoustics warnings or install the driver to USB connection.
3. **COMMUNICATIONS**: In this window, the communication with the control panel is configured by setting the necessary parameters according to the connection type (USB or TCP/IP).
4. **DOWNLOAD / UPLOAD**: It allows downloading all configurations (control panel, points, relays and zones) from the control panel to the software. It is also possible to upload the entire configuration generated in the software into control panel or delete the configuration contained control panel. Furthermore, in this section it is possible download the history log of the control panel in the software.
5. **MULTIPLE CAMERAS**: It enables viewing up to 12 cameras simultaneously.
6. **ONLINE**: Prior the activation of this mode, please go the section **Online Mode Activation** in Management Online of the Control Panel. This mode offers important benefits of information for the controller's installation, allowing the visualization and perform actions on all events produced in the control panel more easily than from itself.
7. **FIRMWARE**: An administrator user can easily update the firmware of the control panel through this section of the software.
8. **UPDATE**: Updates the software to the last available version automatically.

In addition, the program contains the typical menu to access these functionalities.

It is possible to observe on Figure 5, the configuration of the I-link, which is always shown at the bottom of the main window of the program. It shows the connection status, the name of the configuration file, the number of control panels, points, relays, and zones. It also contains the screen resolution, the performance of the CPU and RAM, the date, time and the language used (pressing the language button it is possible change it). To hide or show this information bar, press the **Information** button .

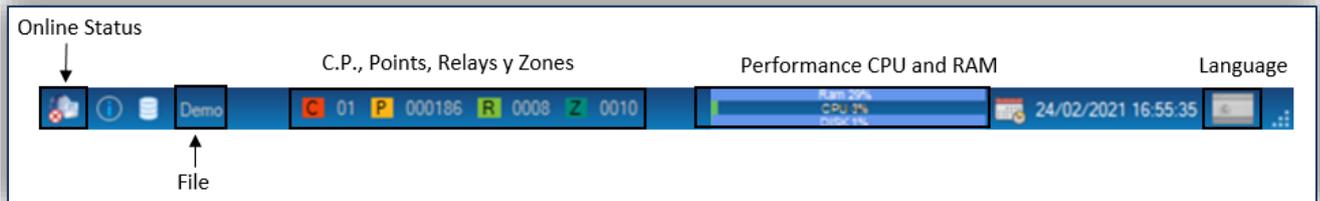


Figure 5. General information shown at the bottom of the I-link main

Another one by double clicking on the image can replace the image at top bottom. The new image should not be higher than 300 pixels width and 92 height.

## EDITION

The fact that there is a multitude of configurations in the installations and all of them different, causes that each user needs to cover some specific requirements of the software. For this reason, the I-link allows the user to configure several aspects of the software, thus adapting to any configuration.



To that end, before opening any configuration, enter the **Edition** tab of the main menu.

When entry, a window like one the shown in the Figure 6 will appear.

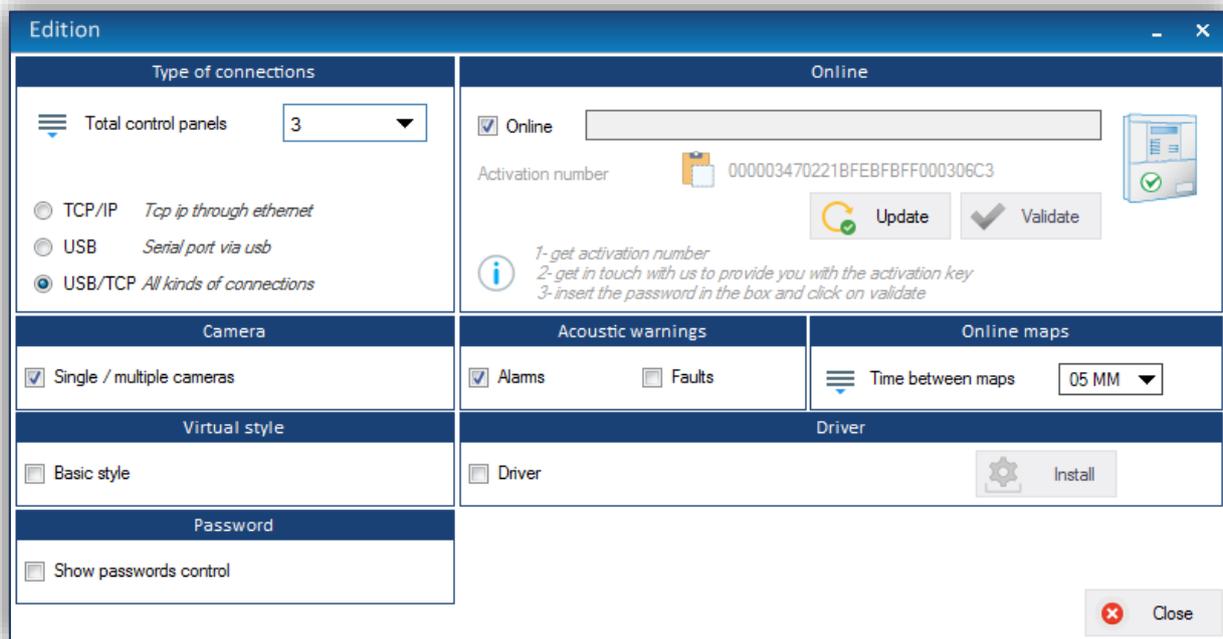


Figure 6. Menu to configure functional and visual aspects of the I-link

It is possible edit the following software options:

- The maximum number of control panels to connect and the type of connection.
  1. TCP/IP. Through Ethernet (using a RS485 converter).
  2. USB. Serial port via USB.
  3. USB/TCP. Supports all previous connections.
- Activate Online mode. In the chapter **Management Online of the Control Panel**, specifically in **Extension the software**, the steps to follow to activate the Online mode are detailed.
- Enable the option to view multiple cameras simultaneously. To enable this option, the user must check the box. However, if the user just want a camera must uncheck the box.

- Enable acoustic warnings on the Online mode, when occurs alarms and/or faults in the control panel.
- To configure the time between maps on the Online mode, when I-link does not have events.
- The basic style of the software, deletes the colorful structures, thus increasing the performance of the software. To enable the basic style check the box.
- Install the driver that allows configuring the serial communication port of the computer, so that the I-link may communicate with the control panel. In other words, if the user do not install the driver, the I-link may not communicate with the control panel trough serial port (USB). Once installed, if the O.S. is Windows 7, it can see in the Device Manager of the PC the data like the Figure 7.

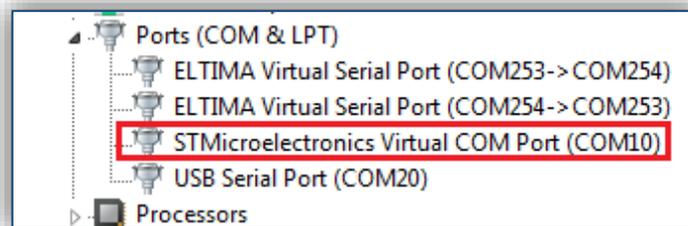


Figure 7. Information of the serial port in Windows 7

- Activate the option “Show Password Control” to modify the level access 2 and 3 in the control panel configuration section.

## OPERATION AND CONFIGURATION

### Start a configuration

First, create a new configuration to work with the software pressing the **Configurations** button



in the main menu and the **Add** button



If has saved configurations, they are opened simply by pressing the **Open** button

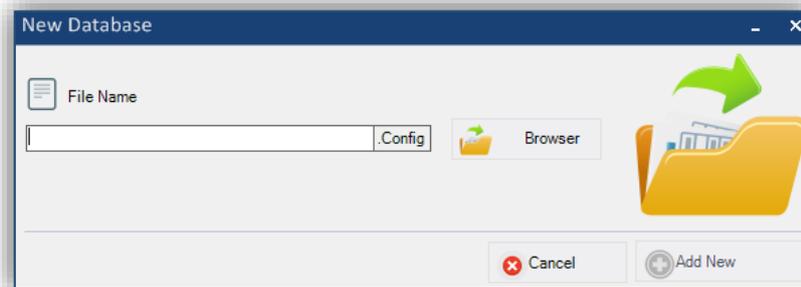


Figure 8. Create a new configuration file.

The program offers two options: to work with this file or create a backup file, to make modifications to the copied file. Thus, the user can recovery the data in case of error.

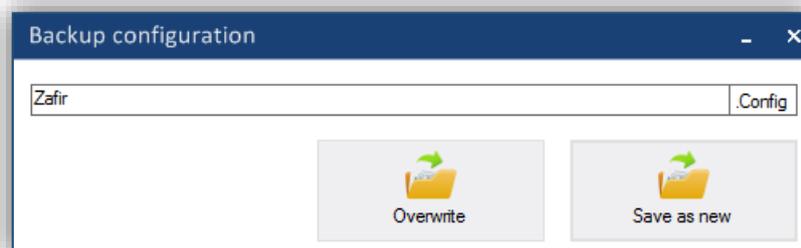


Figure 9. Create a new configuration file.

All configurations are saved automatically when the software is closed. To close any configuration, press the **Close** button



## Import a configuration file

The versatility of the software, allows to work from the I-link with configurations created on other applications of Cofem like *EASY CoNET*, *EASY Lyon* or the mobile platform *Cofem Installers*. For this, it is necessary import the data in the following way:

To import a configuration, you must not have any configuration open (except when import an .acv file into the current). To enter the menu, click the **Import** button .

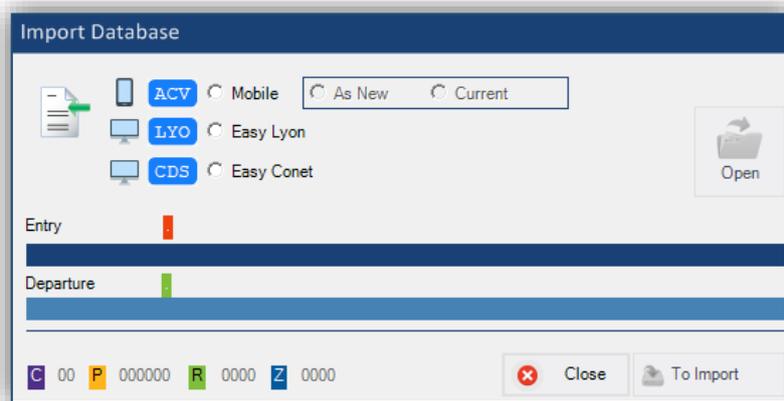
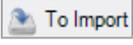


Figure 10. Menu to import configurations from other Cofem platforms

In this menu, select the platform of the file to be imported and then open the folder where the configuration file is located. Once the path is selected, the names of the files will automatically appear in the input and output tabs. To start the import process, press the **Import** button . When finished, the new generated .config file is automatically stored in the same path where the imported file is stored.

At the bottom shows the elements of the configuration: the number of control panels, points, relays and zones. When importing a configuration file with .acv extension (Cofem Installers), I-link allows doing it in two different ways:

Import a file **As new**, in this way the program generates an empty configuration as a base on which it will be imported. On the other hand, when you selecting as **Current**, it allows importing an .acv configuration overwriting it over an existing one. The software will insert all configurations of the imported file into current file and in the case, there are repeated configurations, the software will update them, as they are stored in the imported file.

When importing an .acv configuration file, I-link configures by default the control panel one as a *Zafir* if it has two or fewer configured loops and as a *Lyon* if it has more than two. To change the type simply follow the steps detailed in the Chapter of **Control Panels Configuration**.

## Export a configuration file

The same way that the software can import compatible configurations, it is also capable of generating compatibles configurations with the Cofem Installers platform. For this, it is necessary to export the configuration from the software in the following way:

First, the configuration must be opened in the I-link. Once open, to export a configuration, press the **Export** button and a window like the one in Figure 11 will automatically be opened.

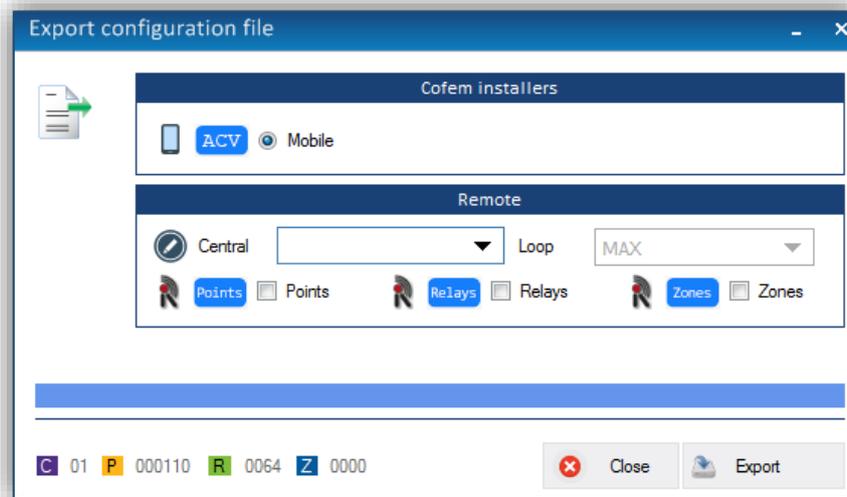


Figure 11. Menu to export a configuration.

The new generated .acv configuration file is stored in the path:

***C:\Users\Usuario1\Documents\Cofem\I-LINK\WORKSPACE\EXPORTED\ACV***

## Workspace

When a configuration file is opened in I-link, on the left side of the main menu, a workspace appears with a drop-down showing all elements that make up this configuration. Furthermore, at the bottom there is a quick search option for points, relays and zones. To use it, select any of the three options and fill the empty fields. This window can enabled or disabled by clicking on the

**Workspace** button  (in the **Configurations** tab). In addition, if you click twice on any element, the configuration of it is opened directly.

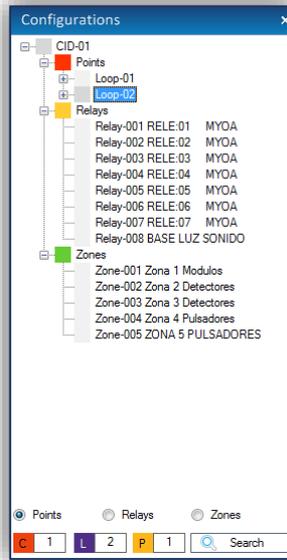


Figure 12. Workspace

## Control panel configuration



To access the configuration of the control panel, click the **Control panel configuration** button (in the **Configurations** tab) and window like the one in figure 13 will automatically open. In this window, can add a new configuration of a control panel, modify the parameters of an existing one or delete it directly. Before editing any parameter, verify that any of the three options is selected in the actions tab. **(1)**

The main settings to edit from the control panel are:

- The type of control panel can be *Compact Lyon*, *Lyon* or *Zafir*. If the panel has a version V8 or higher, select the button PLUS to implement all the system functionalities. **(2)**
- The control panel number, which serves as identifier when configuring points, relays or zones. This number cannot be greater than 32. The loops number, depending of the control panel can be two or more. Furthermore, more loops can be add if the installation required. **(3)**
- The delay times of the general sounder relay, fault relay and of the autoevacuation function. These delays allow a certain time to act before the relays activated. **(4)**
- Change the password of the level two and level three. **(5)**
- The start of day mode, night mode and the days of the week remains in night mode. The relays have a different behavior by day and night, so the day mode can be activate or deactivate for all days of the week independently, so that the selected days will be kept in night mode the 24 hours of the day. **(6)**
- The welcome message appears in the control panel and activate the option of synchronize the date and time of the control panel with that of the computer. **(7)**
- The **Data view** window shows a list of the control panels with their configuration parameters. **(8)**

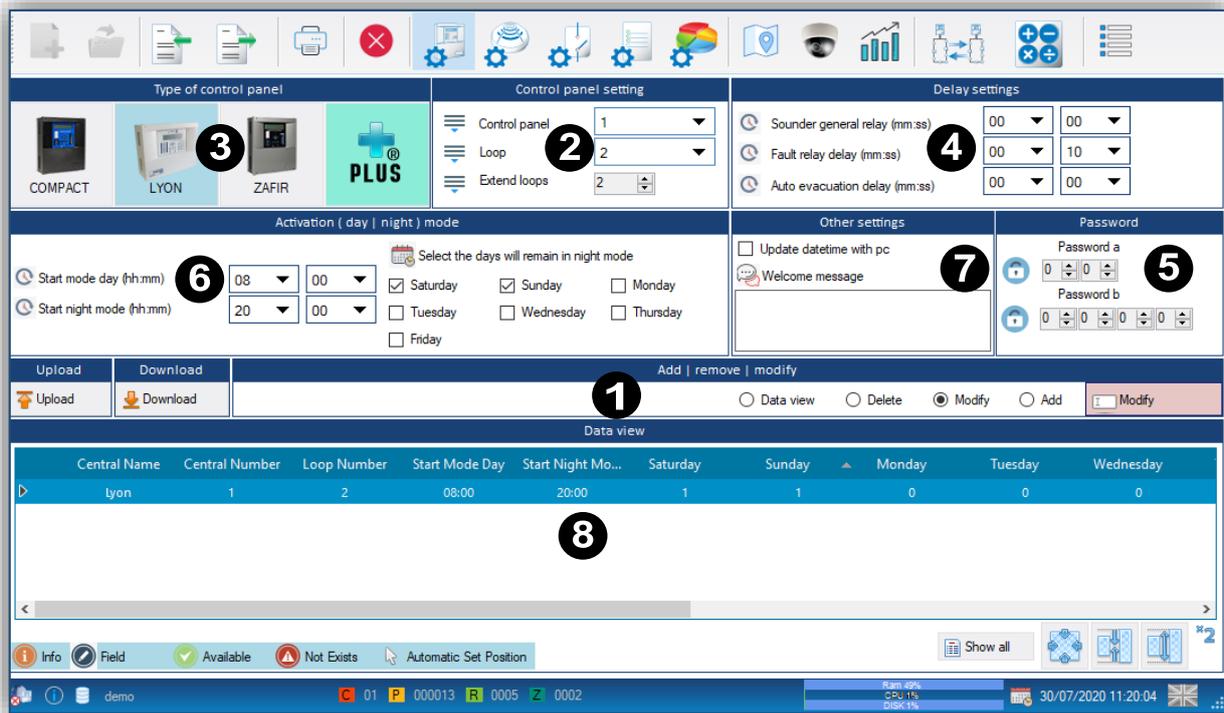
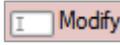
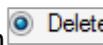


Figure 13. Menu for the configuration of the control panels from the I-link.

Therefore, select the **Add** option  to add a control panel to the configuration of the I-link, fill in all fields previously mentioned, and finally click the **Add** button . When finished, the configurations is automatically stored in **Data View**.

To modify the configuration of a control panel, select the control panel in **Data View** list, then select the **Modify** option , edit the necessary parameters and click the **Modify** button . In the **Data View** the configuration already modified will appear.

To delete a control panel, select **Delete** option , choose the control panel in **Data View** list and click **Delete** button . The follow figure present the confirmation menu to delete any control panel, which shows the information of the associated elements to the control panel.

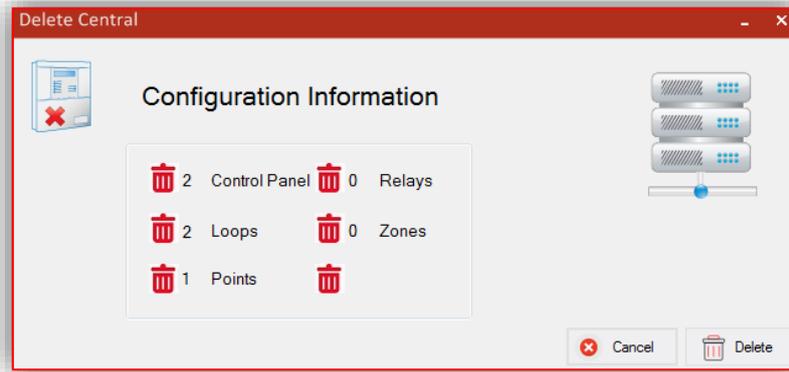
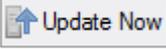


Figure 14. Menu that shows the information of the configuration of the control panel to be deleted.

Before uploading any configuration (of a control panel, point, relay or zone) from the software to the control panel or downloading from control panel to the software, must to establish communication between them either via USB or Ethernet (see **Communications** chapter).

To upload the control panel configuration select the configuration in the **Data View** list, press the **Upload** button  and then window like the one in figure 15 will appear. To start the upload process click the **Update now** button . When the status bar is in 100% the upload process has finished, to close the window click on **Close** button .

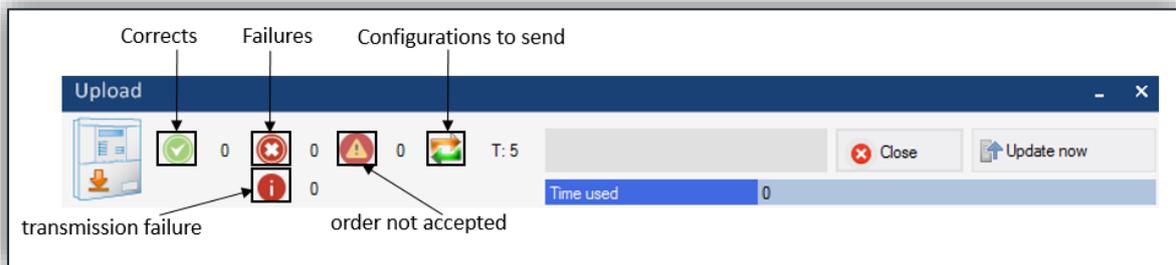


Figure 15. Menu to upload the configuration of a control panel from the program to the control panel.

However, to download the configuration from the control panel click the **Control panel Download** button . In this window select the central number and click the **Download** button . If the download process has been successful, the configuration information of the control panel should appear as shown in Figure 16.

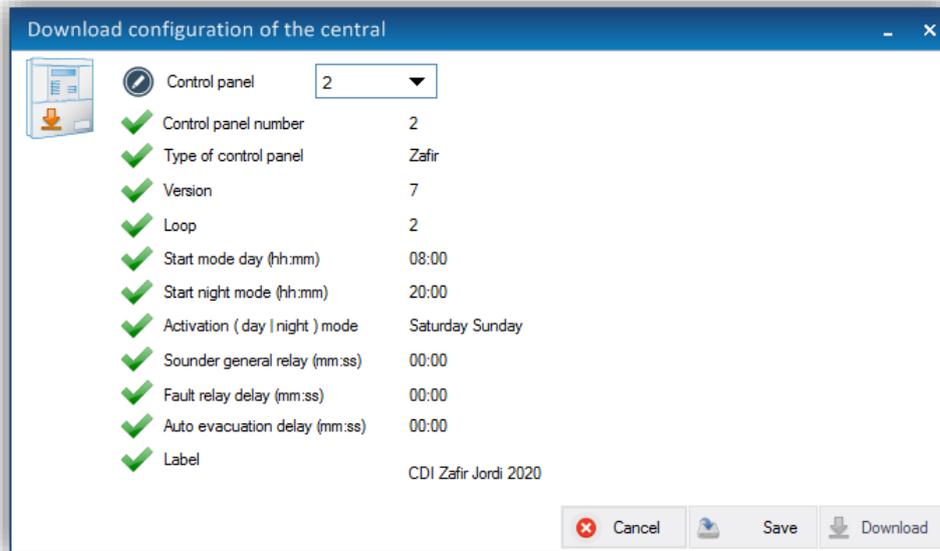


Figure 16. Menu to download the configuration of a control panel from the control panel to the program.

## Points configuration

This window allows the points configurations, to access it click the **Point Configurations** button



(in the **Configurations** tab).

Before configuring a point, ensure that at least one control panel configuration is stored in the software. The main actions to be carried out on the points are: add a new point, modify one existing, and delete one or all points by loop. **(1)**

The basic parameters that are edited to add or modify a point are detailed below: **(2)**

- The control panel number and loop associated to the point. The maximum number of loops depends on the loops configured in the configuration menu of the control panel.
- The point number corresponds to the order of the point within the loop and cannot be greater than 199. In addition, the software provides the option to insert it automatically or manually (check/uncheck the option **Auto Number**). If done automatically, it increases its value by one as the points are added. However, if done manually it is necessary to avoid repeating numbers with already configured points, in which case the software returns an error message.
- The serial number has a maximum of five digits. This number links the physical element that forms it and can be found in the physical label of the point.
- The label is the text associated to the serial number and allows a maximum of 20 characters.

Then select the type of point and if necessary it is possible to add any comments. **(3)**

The **Data viewer**, shows the points list configured with their features. This option allows filter the points by the control panel number, loop number, point number or label. To list points, choose the control panel number, the loop number or the point number and press the **Show all** button . To list all points, choose the "MAX" option as shown in figure 17.

It is also possible export this list in .csv format by selecting the Excel icon . The file is saved by default in the following path: **(4)**

To add bases with sound, or with light and sound, select any of the two options in the Base section (5).

**C:\Users\User1\Documents\Cofem\I-LINK\WORKSPACE/EXPORTED/EXCEL**

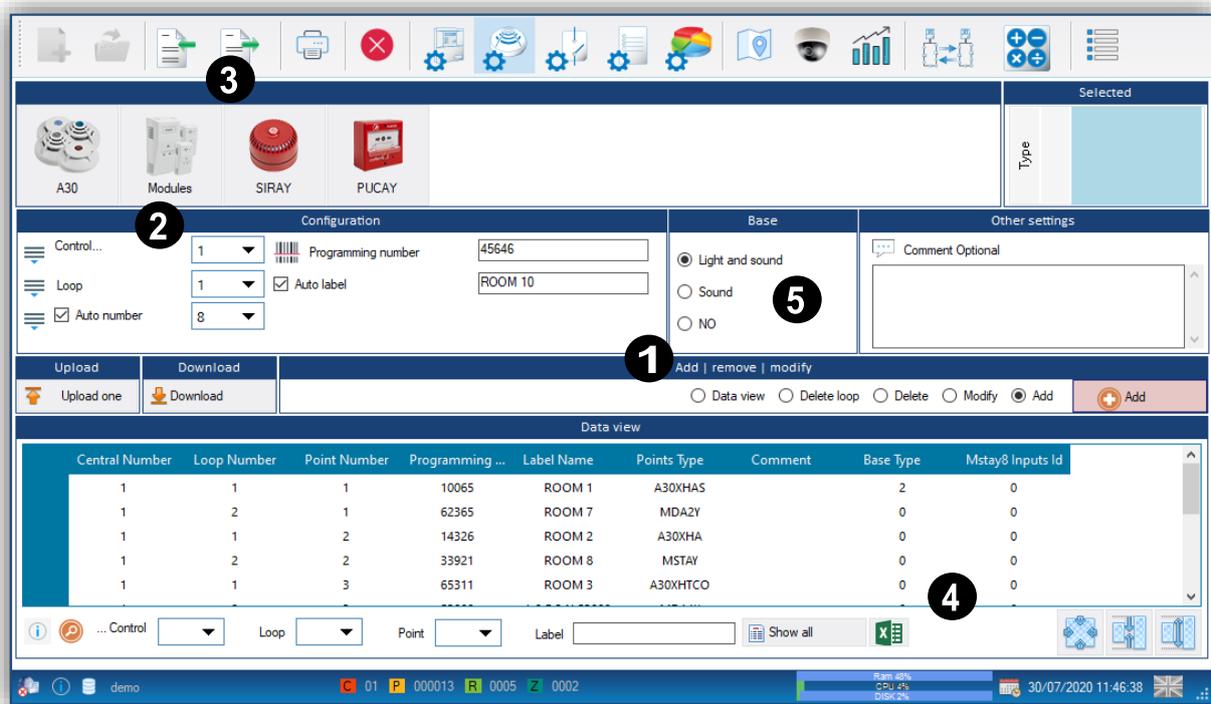
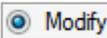
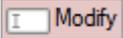
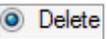
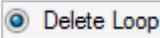
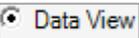
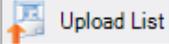


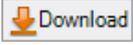
Figure 17. Menu to configure points from I-link.

Select the **Add** option  to add a new point to I-link configuration, then fill all fields, and click the **Add** button . To modify a point configuration, selected it in the list, select the **Modify** option , edit the necessary parameters and click on **Modify** button . For delete a point select the **Delete** option , select it in **Data View** list and click **Delete** button . For delete all points of a loop, select **Delete loop** option , select control panel and loop in **Data View** filter and click **Delete** button .

The **Data View** option  simply displays the information of the point selected in the list.

When uploading points, from the I-link to the central, there are two options: upload a point individually or upload a list with all points shown in the **Data View** list.

To upload a point individually, you must select that point in the list and press the **Upload point** button . However, to upload a list of points, fill the fields of the **Data View** and click on **Upload list of point** button .

For download points from control panel, click **Point Download**  button and a window like the one in Figure 18 will open. Once inside, select the control panel, the loop (in case of downloading the points of all loops, select the “MAX” option) and the point or points (selecting the “MAX” option) and click on **Download**  button. At the bottom of the window, the section called Log contains a register of the points that have been downloaded with their configuration parameters.

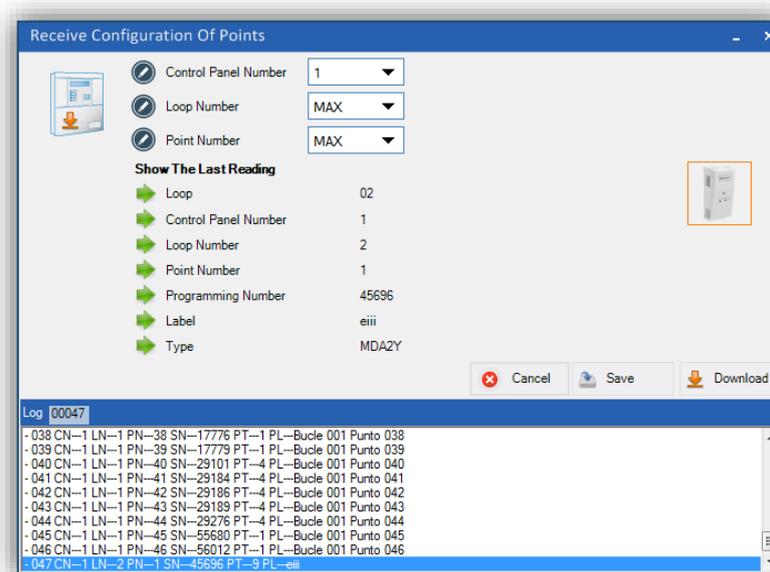


Figure 18. Points download menu from the central to the program.

The example of the previous figure presents the download of all points (of all loops) of the central number 6.

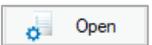
**Note:** Remember to establish communication between the control panel and the program before loading or downloading configurations.

## Relays configuration

For access the configuration menu, click the **Relays configuration** button  (in the **Configurations** tab). Before configuring any relay, ensure that have points stored in the configuration.

This menu presents all information necessary to correctly configure the relays. As in the previous configurations, the actions to be performed are: add, modify or eliminate a relay. **(1)**

The configuration of the relays is done as in the control panel:

- Link the relay to the point, for this select the control panel, action type and loop corresponding to the point. Then, clicking on the field of the point automatically shows the points containing relays. The software returns an error message if the selected loop has no point containing relays. When you select the point, appears an image of the point type to the MDA2Y (module of two relays) under the image you can choose which relays (R1 or R2) is configured. Subsequently, a numerical value is assigned to the relay to identify it in a same control panel (it can be a maximum of 32 in the *CompactLyon*, 64 in *Zafir* and of 199 in *Lyon*) and a label, which can be automatic or manual, of up to 20 characters. **(2)**
- Set the delay times, depending on the point that causes the activation of the relay. This point can be a push button (configured as day or night mode) or a detector (also configured as day mode or night mode). That is, configuring these times allows the relay to be triggered immediately, after a certain time that the alarm is triggered or that does not trigger directly. Depending on the configuration of the point that causes the trigger of the relay if it is a detector configured in day mode or night mode, or if it is a push button in day mode or night mode. The maximum time allowed is 9:59 minutes **(3)**
- Set the type of relay action in PLUS panels( with versión V8 or higher): **(4)**
  1. General Network: The relay is activated with any alarm from the panel's network.
  2. General Activation: The relay is activated with any alarm from the own panel.
  3. By list: The relay is activated when an element of the selected list is on alarm. There are two ways to configure this list. One option is to do it before configuring the relay (see List Configuration) or do it pressing the button Open .

Note: It's important to select the option Add in the section List Configuration .

In versions that not PLUS (with version 7):

1. General Activation: The relay is activated with any alarm from the own panel.
2. By zone: The relay is activated when the elements of the selected zone are in alarm.

Like the Points configuration, to shows the relay in **Data view**, select the control panel number, the loop number, the relay number or the label. If you want list all relays you must choose the "MAX" option in the control panel box.

It is also possible to export the relays list (on the same path as in the section of points configuration) in .csv format by filling in the fields of the control panel, relays, label and pressing the **Excel** icon 

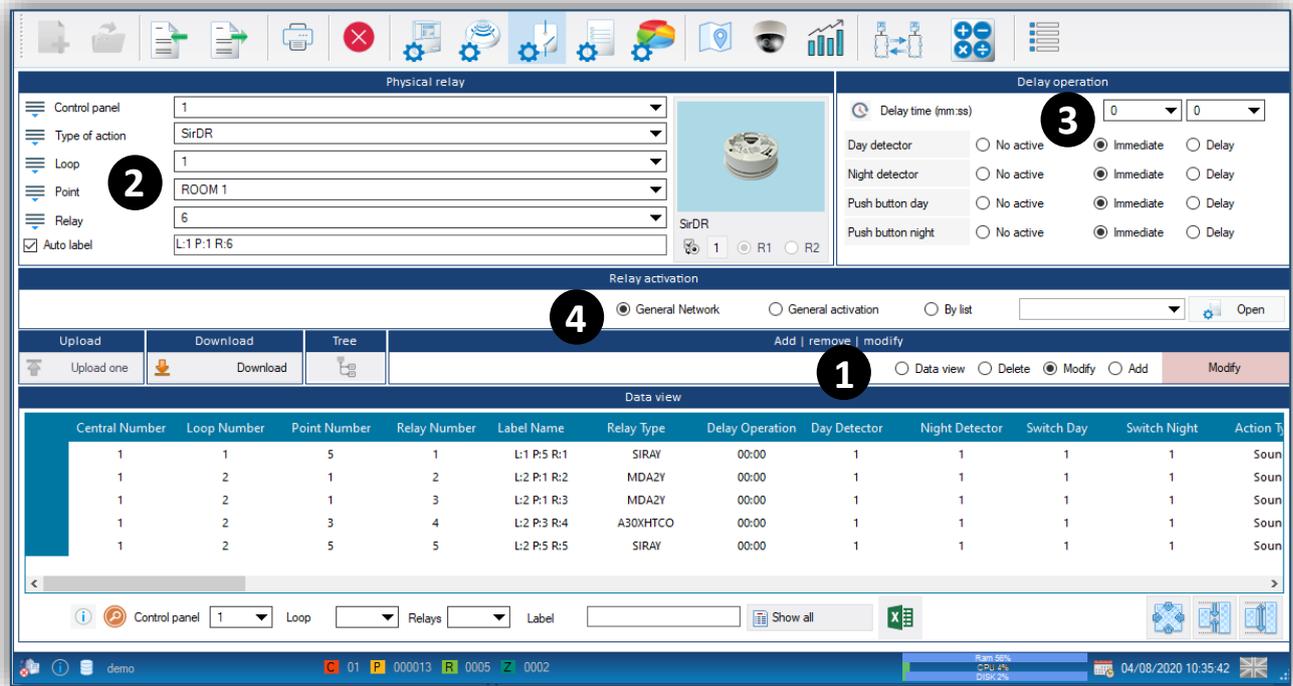
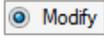


Figure 19. I-link menu to configuring the parameters of the relays.

To add a new relay, click on the **Add** option , then edit its parameters and click the **Add** button  to save the new configuration.

To modify the relay configuration, first click on **Modify** option , then select it in the **Data View** list, edit the necessary parameters and click on **Modify** button  to save the new configuration.

Instead, for delete a relay, select the **Delete** option , select it in the **Data View** list and click on **Delete** button .

Before uploading or downloading any relay, verify if the communication between the I-link and the control panel is right.

To upload a relay from I-link to the control panel, select it in the **Data View** list and click on **Upload relay** button .

To download relays from the control panel to the I-link, press the **Relay Download**  button and a window like the one in figure 20 will open. In this window, select the control panel number and the relay number or in the case of downloading all relays choose the “MAX” option and click on **Download**  button. In the relay configuration section there is the information of the last relay and in the list of relays shows the different zones associated with the activation of the relays.

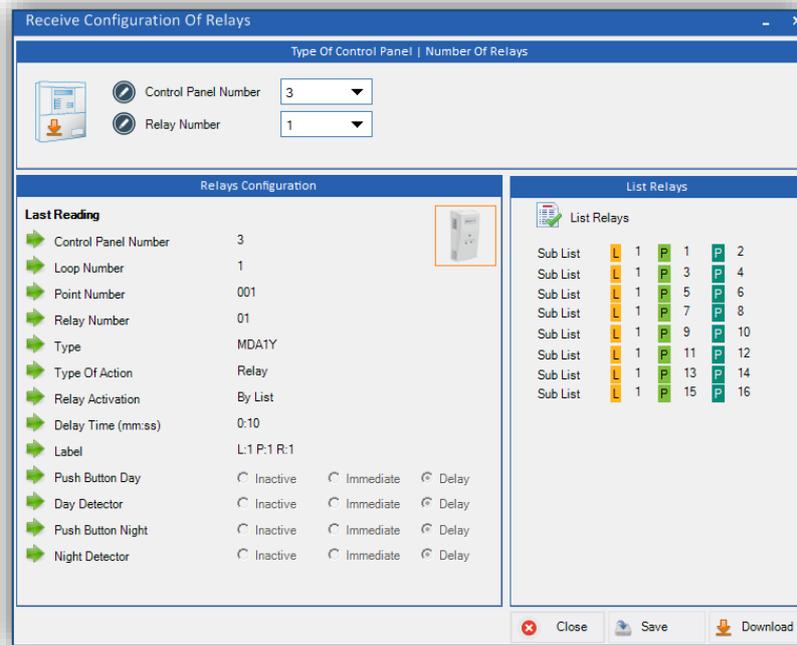


Figure 20. Relay download menu from the control panel to I-link.

## List configuration

The relay activation lists are configured from the List configuration menu (located in the Settings tab). An specific relay can be activated with this specific list of elements.

To add a new activation list, modify it or delete an existing one, are the main actions of this menu.

Activation lists can be added in two ways.

- If there are zones created and the elements to add to the lists coincide with the zones, we can import them with the **Import Zone button** .

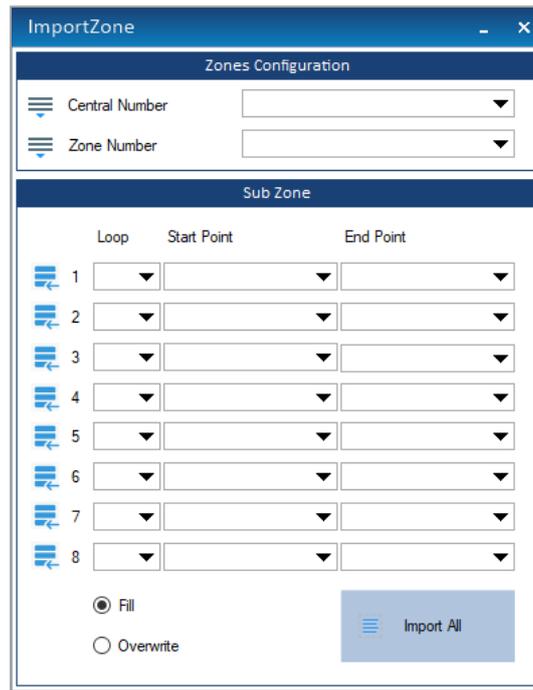
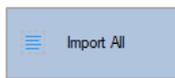


Figure 21. Import zones in a list

In the import zones window, select the number of the panel where the zone is located, and the zone number to import. It will automatically show the fields with the elements that configure the area.

The buttons  allows to directly add a sub-zone to the activation list.

Select the number of a zone to import all the sub-zones. Then, press the button Import All



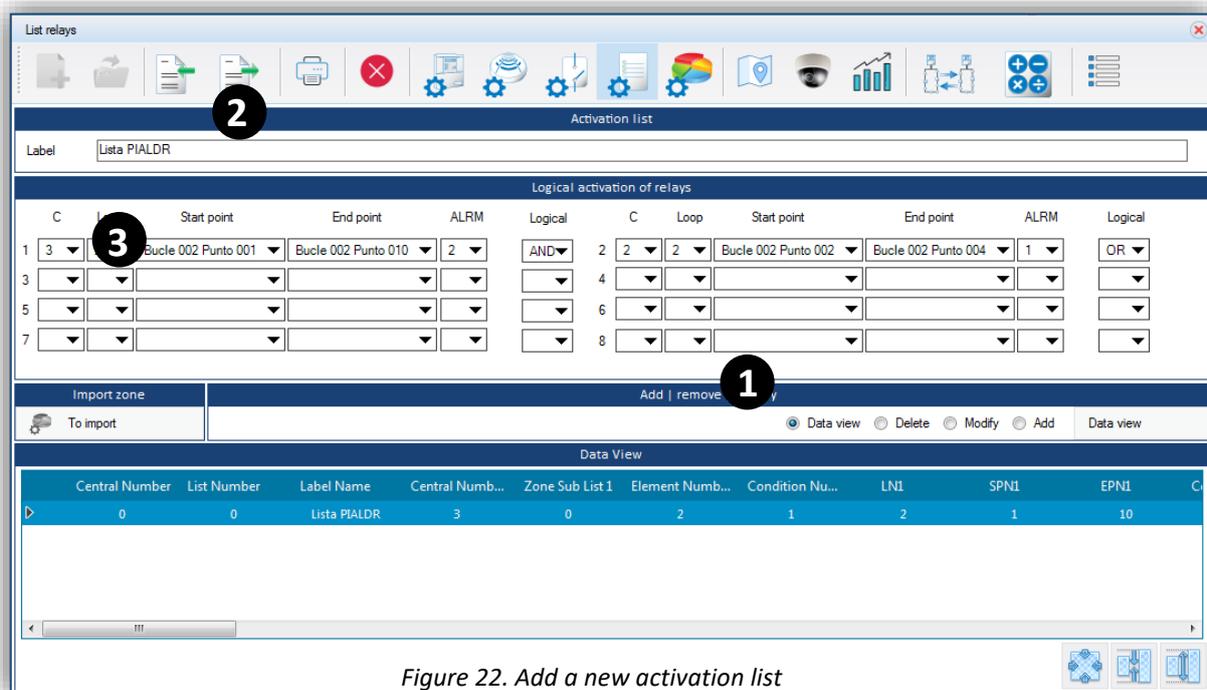
. If the Fill  Fill option has been previously selected, it's possible to add a new sub-zone. Otherwise select Overwrite  Overwrite to replace the previous sub-zone for the new desired.

- To create an activation list without previously creating zones, select the Add button (1). 

Edit a label that identifies the Activation List (2) and in the Relay Logic Activation section, complete the different parameters starting with sublist 1 (3):

- C → Control panel where the elements belong
- Loop → Number of loop where the elements belong
- Starting point → First item in the list.
- End point → Last point in the list.
- ALRM → Number of elements that must be in alarm for the relay to activate. The maximum number is 3.
- Logical → Allows to configure the logical functions "AND", "OR", "END" between the sublists.

- AND: the relay associated with the list will be activated when elements of the current sublist and the following sublist are activated. If only the elements of a sublist are activated, the relay will not change to activate status.
- OR: the relay associated with the list will be activated when the elements of one of the sublists are activated. In this case, it's not necessary that elements from the two sub-lists are active to change de relay status to active.
- END: Indicates the finish of the list. This logical must be set on the last sublist. It works like the OR logical.



## Zones configuration

To enter in the zones configuration menu, click on **Zones configuration** button  (in the **Configurations** tab).

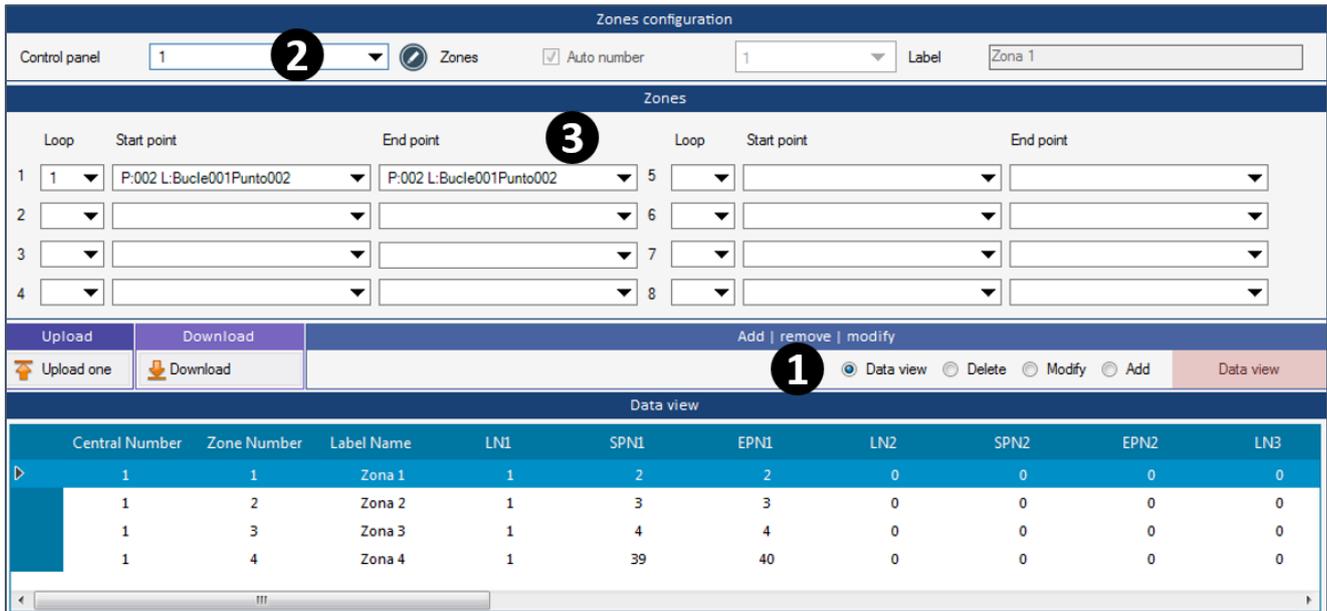
The main options to do in this menu are: add a new zone, modify an existing one or delete it. **(1)**

When accessed for the first time, the option by default is the **Data view** . This option just allows visualize the saved zones configuration. Nevertheless, to show the zones in the Data View list, you must first select the control panel number in the **Zones Configuration** section.

The parameters to edit to configure a zone are the following:

- The control panel number corresponding to the zone, the zone number (up to 99 maximum per control panel) that will serve to identify the zone in the list and a label of maximum 20 characters. **(2)**
- Select the points list that set the zone. To do so, choose, in each case, the loop that contains the starting point and the end. In this option, you can add up to 8 combinations in the same zone. **(3)**

**Note:** You cannot include the same point in two different alarm zones.



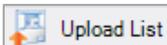
Loop	Start point	End point	Loop	Start point	End point
1	P:002 L:Bucle001Punto002	P:002 L:Bucle001Punto002	5		
2			6		
3			7		
4			8		

Central Number	Zone Number	Label Name	LN1	SPN1	EPN1	LN2	SPN2	EPN2	LN3
1	1	Zona 1	1	2	2	0	0	0	0
1	2	Zona 2	1	3	3	0	0	0	0
1	3	Zona 3	1	4	4	0	0	0	0
1	4	Zona 4	1	39	40	0	0	0	0

Figure 23. Menu to configure the parameters of zones in I-link

Select the **Add** option  to configure a new zone, then edit its parameters and finally click on **Add** button  to save the new configuration. Instead, to configure one that already exists, select the corresponding control panel in the **Zones Configuration** section to display all the zones in the **Data View** list, then select the zone to modify and the **Modify**  option and after editing the necessary parameters click on **Modify** button  to save the configuration. For delete a zone, select the **Delete** option , then select it in the **Data View** list and click on **Delete** button .

The procedure to uploading or downloading the zones is the same as the points or relay, i.e. to upload just a zone to the control panel, select it in the **Data View** list and click on the **Upload zone** button . To upload a set of zones that appears in the **Data View** list click on **Upload list of zones** button .

To download the zones configured in the control panel press the **Zones download** button.

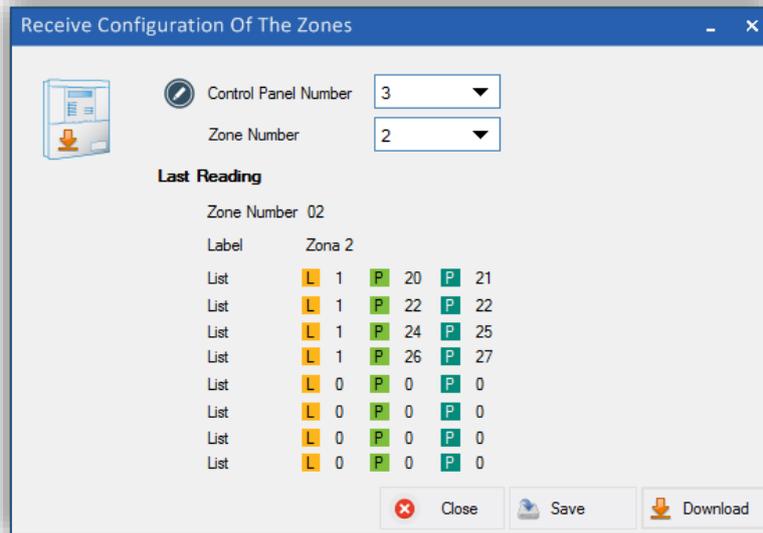


Figure 24. Menu to download the configuration of zones from the control panel to the I-link.





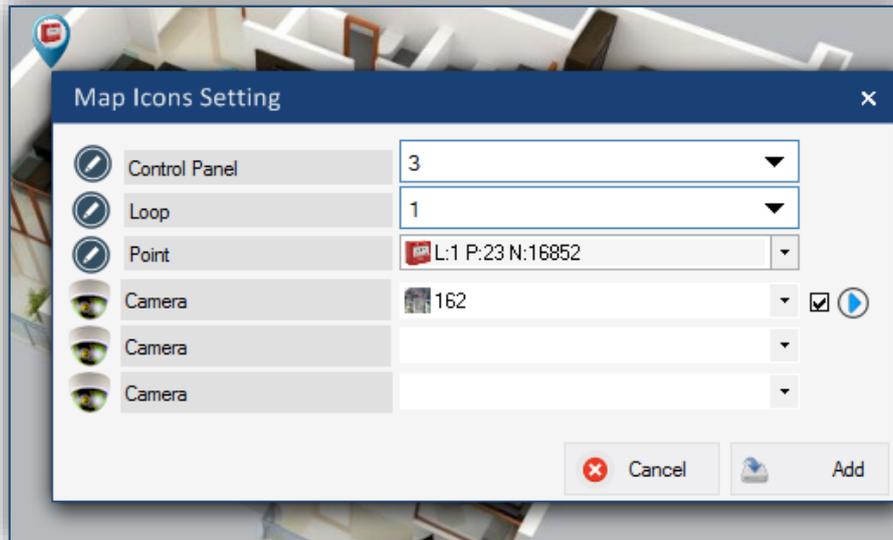


Figure 26. Menu to setting the parameters of the points on the map.

If the color of the point's label is red (as shown in Figure 27), this point is already on the map (or other map), so the software avoids repeating points.

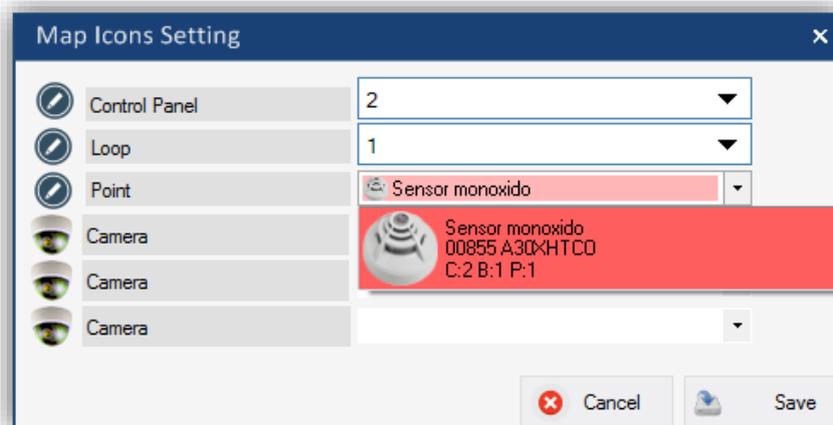


Figure 27. Duplication of points on the map.

Before associating a camera with a point on the map, it must be configured. The chapter **Camera Configuration** explains how to configure a camera.

The software allows associating a maximum of three cameras per point. In case of associating three cameras, only the first can have configured the *autoplay* function. This function is enabled by checking the box next to play icon and works like this: when an event occurs (alarm, fault, ...) in the associated point on the map, the video of the camera will appear automatically in the "Camera" section of the **Online** mode. In addition, it is possible to associate the same camera to different points.

On the map, it is possible to check the point configuration, placing the cursor over its icon. The information of the point that appears is the following:

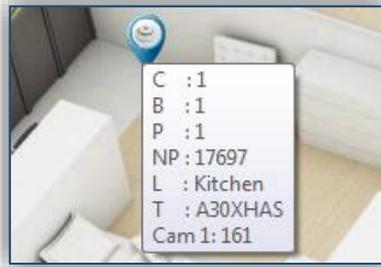


Figure 28. Point information.

- Control panel
- Loop
- Point
- Programming Number
- Label
- Type
- Cameras

After adding a point, the program offers the possibility to see the associated cameras live. To do this, right-click on the point icon and select the **View of the camera** option, as shown in Figure 29.

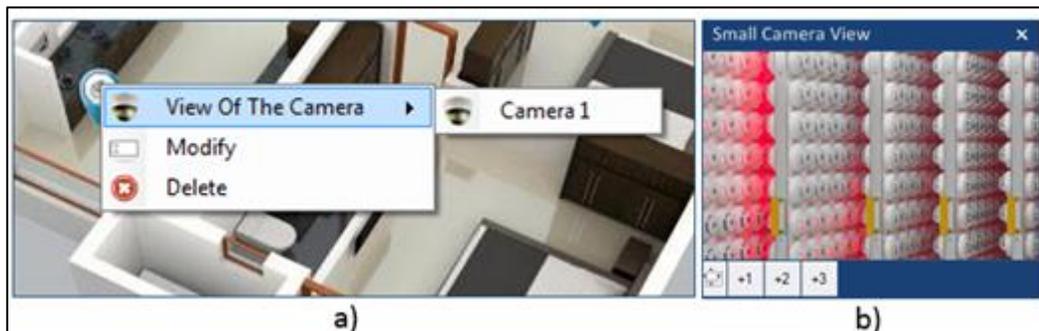


Figure. 29a. Settings menu of points on the map after inserting.

29b. Small camera view from map menu.

In the camera view, it is possible to adjust the size of the window with the +1, +2 and +3 buttons. Where +1 is the smallest size and +3 is the largest.

In the **Properties** window, there are the label and position of the selected point on the map with respect to the horizontal and vertical axis.

Finally, by selecting the map in the list and by pressing the right mouse on it, it is possible to change the name of the map, replace the map image with another one, export the map as an image or delete it.

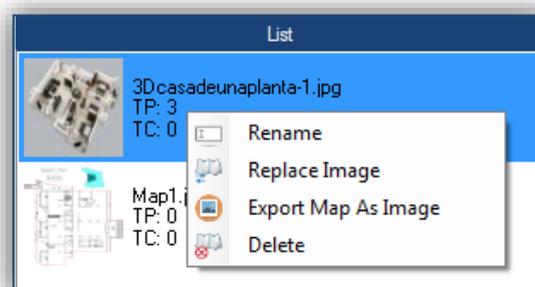


Figure 30. Main settings of the maps.

To rename the map, select that option and edit the name of the new map in the window in the window of the Figure 33.

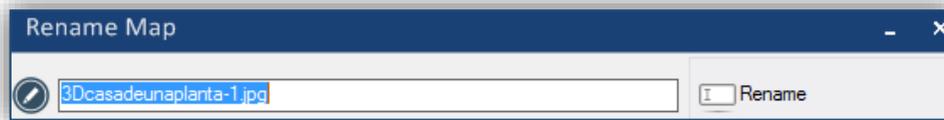


Figure 31. Menu to rename the map.

If select the **Replace Image** option, the window of Figure 34 is opened showing, on the one hand, the image of the old map and, on the other hand, the new map. To select the new map click on the **New map** button . In this case, the software keeps the structure of configured points, changing one image for another simply, without having to re-insert the points.



Figure 32. Pop-up menu to change the map image.

On the other hand, when exporting the map, the program exports it with the points configured in the image. This image is saved in the following default path:

**C:\Users\User1\Documents\Cofem\I-LINK\MAP-SNAPSHOT**

## Cameras configuration

I-link allows working with IP cameras. These cameras work using the IP protocol and are capable of send of sending video and audio signals through any computer connected to the Internet.

To access the Cameras configuration menu, click on **Cameras configuration** button  (in the **Configurations** tab). When entering, the software shows a structure like the one in Figure 33 but empty), which consists of the following sections:

- The camera viewer allows viewing the video of the configured camera. The software incorporates additional functions (located at the bottom of the viewer) such as: pause, stop or resume video recording, rotate the image 180°, make a screenshot, consult the configuration parameters of the camera or the status of the communication. In addition, if the camera allows it, it is possible to change the focus position manually, using the arrows at the ends of the screen. **(1)**
- The list of cameras configured with their configuration parameters (label, IP address and port). **(2)**
- The actions to make, either add a new camera, modify an existing one or eliminate it. **(3)**
- Every IP camera has a user and password associated to access its configuration, therefore, to make any configuration these parameters must be inserted, in addition to its IP address and port. The software allows associating a label to identify the camera in case there are several configured. **(4)**
- Enable or disable the option to make a capture of the image and the option of playing the camera when selecting it in the list. To enable either of these two options, check their corresponding boxes. **(5)**

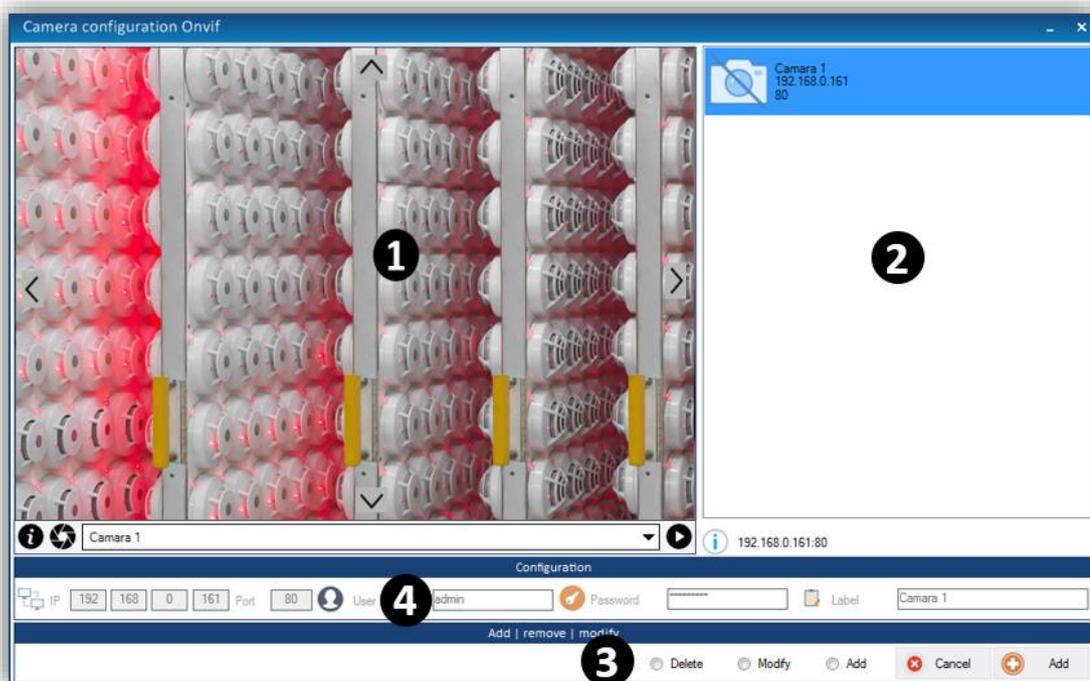


Figure 33. Menu to configure cameras from the I-link.





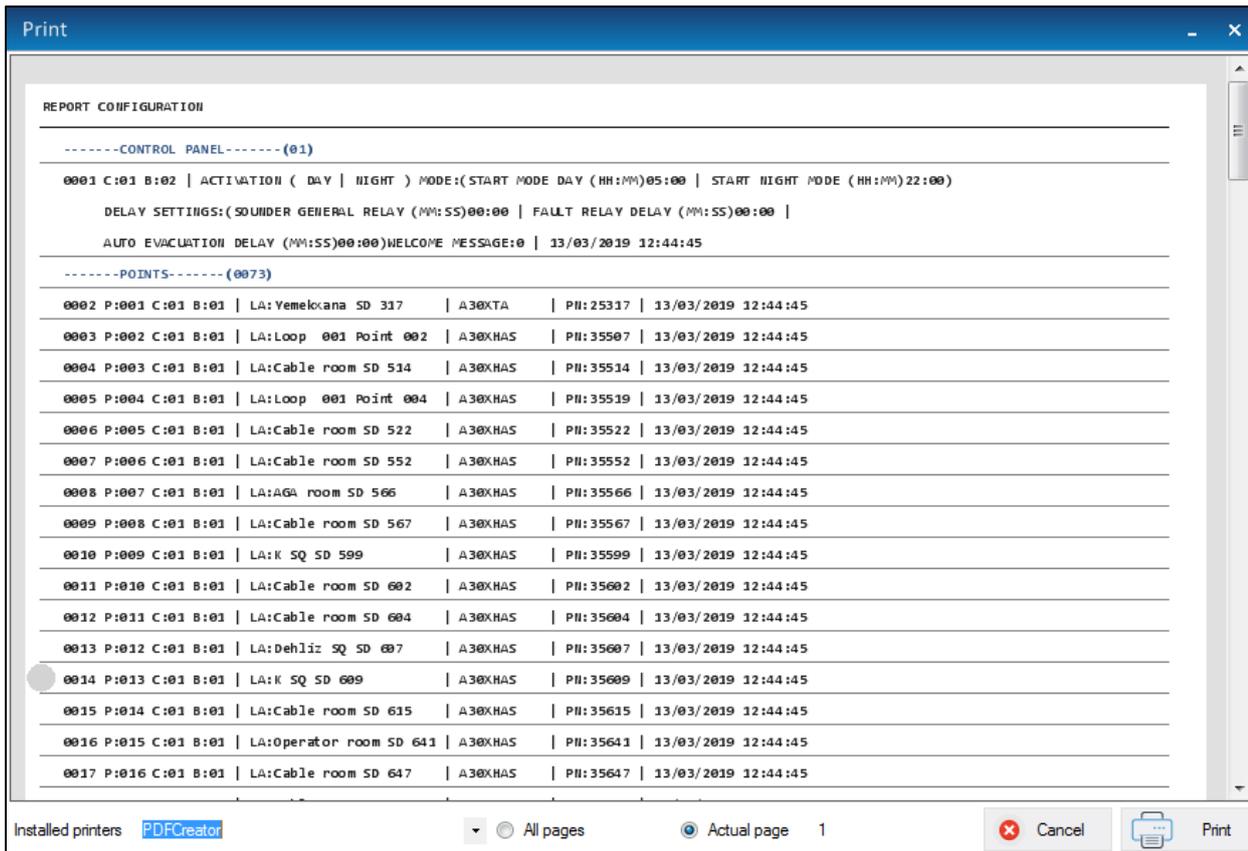


Figure 35. Preview of the configuration report.

## Exchange loops

This function allows to exchange all configured points, relays and zones from a loop to another. In

The Figure 36 shows the menu to interchange loops (via **Exchange loops** button) in a simple way.

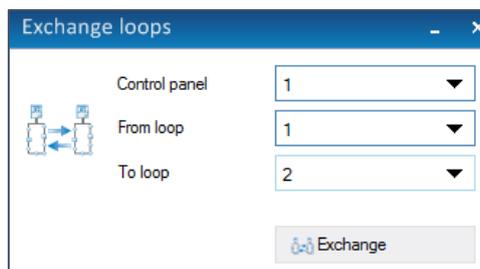


Figure 36. Menu to interchange configurations of different loops.

## Loop Calculator

I-link has a tool to calculate the loop elements capacity according to different parameters, such as amount of points, the cable distance, the control panel type, .... The **Calculator**  button redirects the software to a document where filling the fields, this generate automatically the load loop percentage. It is recommended that this percentage does not exceed 95%.

The load loop calculator is used before make the installation, to know the amount of required loops, type of control panel or cable section.

LOOP ELEMENTS CAPACITY CALCULATION  
CÁLCULO DE CAPACIDAD DE ELEMENTOS DEL BUCLE

---

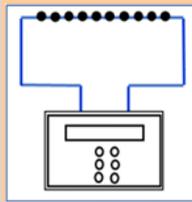
GENERAL DATA/ DATOS GENERALES

Control Panel Model/Modelo Central =

---

Wire lenght /Longitud del cable =  m  
 Cable section/Sección del cable =  mm<sup>2</sup>  
 Elements Arrangement in wire /  
 Disposición Elementos en cable =





LOOP ELEMENTS DATA/ DATOS ELEMENTOS BUCLE

Nº Elements/ Nº Equipos	Model / Modelo	Sound dB/ Sonido dB	Power Light/ Potencia Luz
2	PUCAY		
0	KMAY		
0	KMAY32		
0	MSTAY		
0	MSTAY8		
0	MDA1Y		
0	MDA2Y		
0	MDA2YLT		
0	MYOA		
50	A30XHA/A30XHAS/ A30XTA/A30XHTCO		
0	KABY		
0	SIRAY	Standard	
0	SIRAYL	Standard	
2	(SIRAY + BSLC)	Standard	Standard
0	A30XBSL		Standard
0	A30XBSD	Standard	

RESULTS/ RESULTADOS

LOOP LOAD/ CARGA DEL BUCLE =   
 Nº Elements / Nº Elementos =   
 Nº Relays/ Nº Reles =

Figure 37. Document that calculates the load loop according to several parameters.

## Monitor detectors

The monitoring menu, accessible via the **Monitoring button** , located in the principal menu, is a useful tool for the installation maintenance because allows obtaining the values of temperature and smoke in real time (represented in a graph) and the values of dirt and sensitivity set. It also allows the generation of a monitoring status report of all the detectors connected to the control panel (loop by loop).

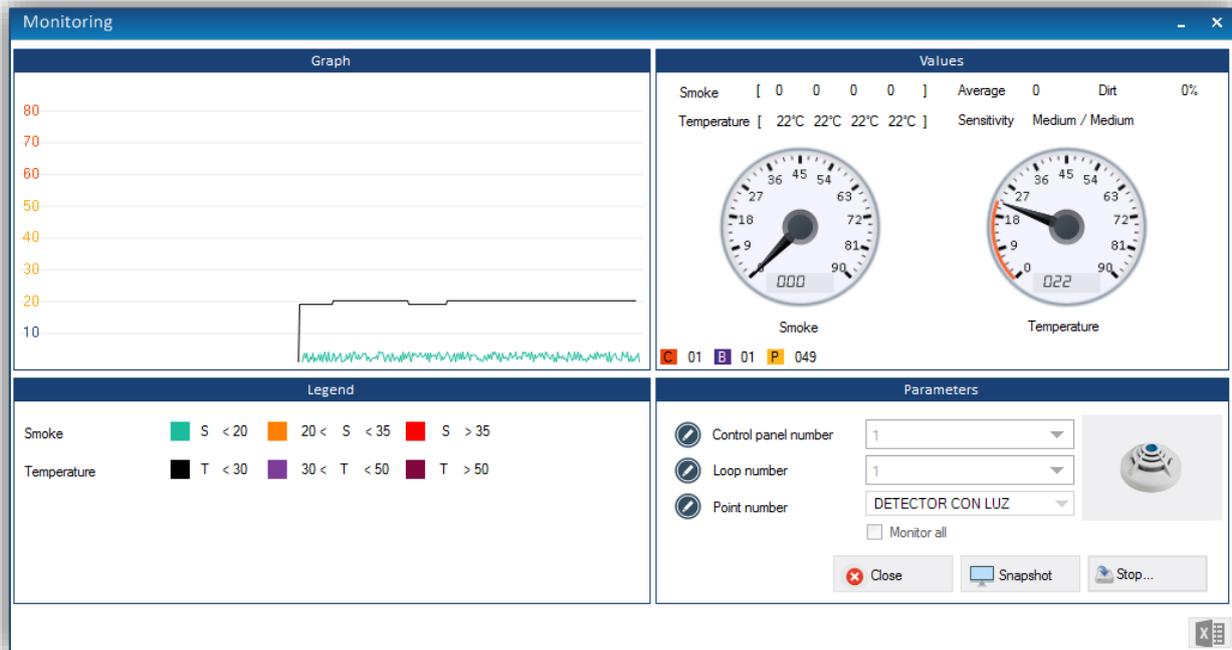


Figure 38. Monitoring menu to get a report of detectors status.

For monitor a detector, select the control panel number, loop, point and click on the **Monitor**  button. Automatically, the graph and markers will begin to show the values of smoke and/or temperature, depending on their type. On the other, to obtain a report of detectors status at the same loop, select the control panel, loop number and check the box **Monitor all** and click on **Monitor**  button. At the end of monitoring process, click on the **Excel**  button, to generate the .csv document that is stored at the following path:

**C:\Users\Documents\Cofem\I-LINK\WORKSPACE\EXPORTED\Excel**

## COMMUNICATIONS

First, select in the **Edit** menu the type of connection and the number of control panel that will connect to the I-link.

In the case of communicating with the control panel via USB, it is necessary to install the driver (see **Edition** chapter) and configure the parameters that are detailed below. It should be noted the importance of correctly configuring the parameters (both USB and Ethernet), otherwise, the I-link will not allow access many of its functions.

To enter the communications menu, click on the **Communications** button  of the main menu.

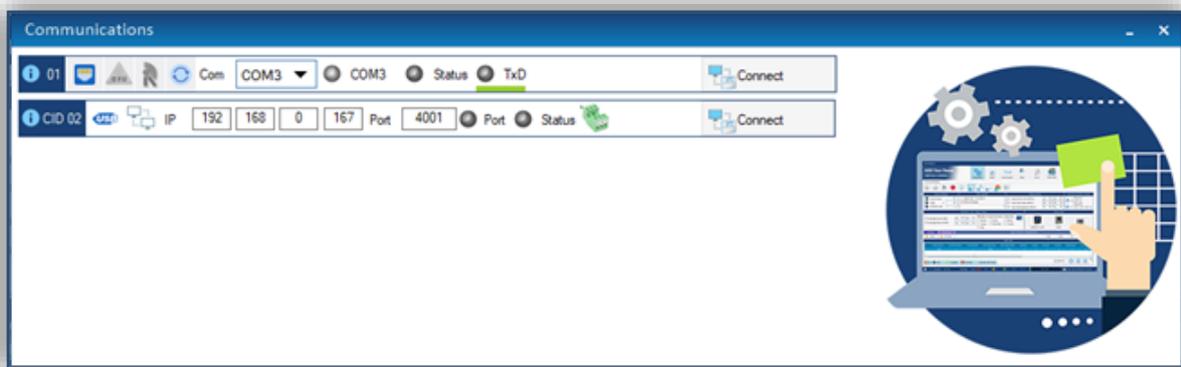


Figure 39. Menu of communications via USB or Ethernet-RS485.

There are two possible ways to communicate:

- **USB:** This communication is done through the USB protocol. For this reason, the cable has to comply with the USB 1.1 regulation, with connector type A to connect the PC and type B for the end that connect with control panel.

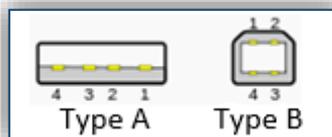


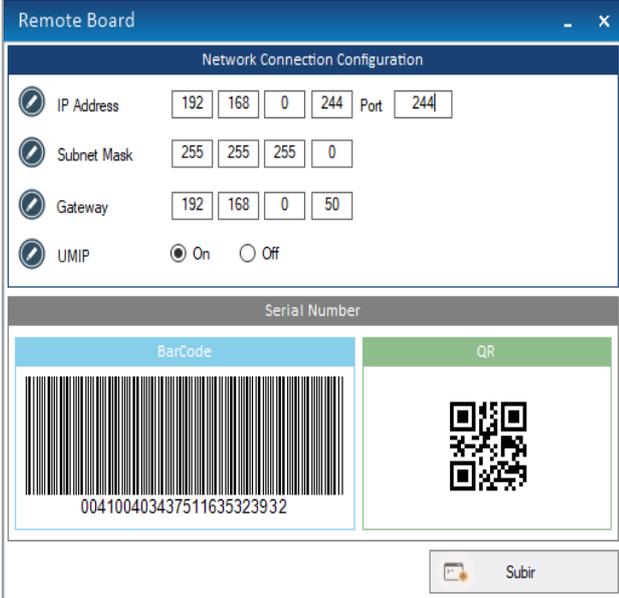
Figure 40. Connectors of the USB cable

For connect the I-link to control panel by USB, press **USB**  button and introduce the port used by PC to communicate with the control panel (in the corresponding control panel number). Click on the **Update** button , to get the port number. In case the port does not appear, reinstall the communication driver. After entering the parameters click on the **Connect** button to establish the connection.



- **Remote system parameters:** It's possible to enter the communication parameters of the Remote system directly from I-link, pressing the button . In this window it's possible to enter the IP, Port, Mask, Gateway and the option to automatic update the IP (UMIP).

Also shows the serial number and the QR code, which can be scanned to get directly the information.



The screenshot shows a software window titled "Remote Board" with a "Network Connection Configuration" section. It includes fields for IP Address (192.168.0.244), Subnet Mask (255.255.255.0), Gateway (192.168.0.50), and a Port field (244). There is a radio button for "UMIP" set to "On". Below this is a "Serial Number" section containing a barcode with the number 004100403437511635323932 and a QR code. A "Subir" button is located at the bottom right.

Figura 43. Communication parameters of the Remote system.

## GENERAL DOWNLOAD / UPLOAD

The software allows sending and receiving all configurations of control panels, points, relays and zones stored in the control panel, in addition to receiving all events registered in the history and even delete the items saved in the configuration of the control panel. To access this functions, click on the **Download/Upload**  tab of main menu.

### General download

This function send the configuration from control panel to I-link simultaneously.

When clicking the **Download general** button , a window like the one shown in Figure 44 will open automatically. Here, select the control panel number and check the boxes of items to download.

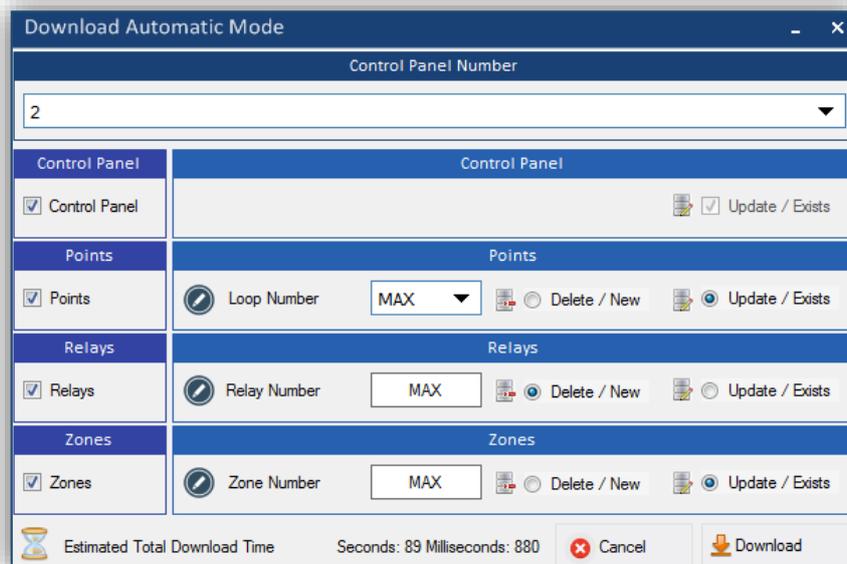


Figure 44. Menu to receive the general configuration stored in the control panel.

In the points section, it is possible to choose between downloading all the points of a loop or of all the loops (by selecting the "MAX" option). In the case of relays and zones, simply check their boxes and all configurations will be downloaded.

There are two possibilities to save the data. The **Delete/New** option  consists of deleting the configuration stored in the I-link and adding the downloaded one as new. The other option **Update/exists**  updating the stored configuration, i.e. update the item if it is saved in the configuration of the I-link and add the item it does not have, like new.

Finally, click on the **Download** button  to start the general downloaded process.

## General upload

This function loads the generated configurations by the software to the control panels. When uploading the configuration, the control panel delete the saved configurations automatically and add the new configurations from I-link. In the case of not selecting any element (control panel, points, relays or zones) the control panel keep the configuration.

For example, to upload the configuration of the points and relays and keep the configuration of the control panel and zones, simply have to check in the upload general menu the box corresponding to the points and relays, as shown in the Figure 45.



To access this function, click on the **Upload general** button

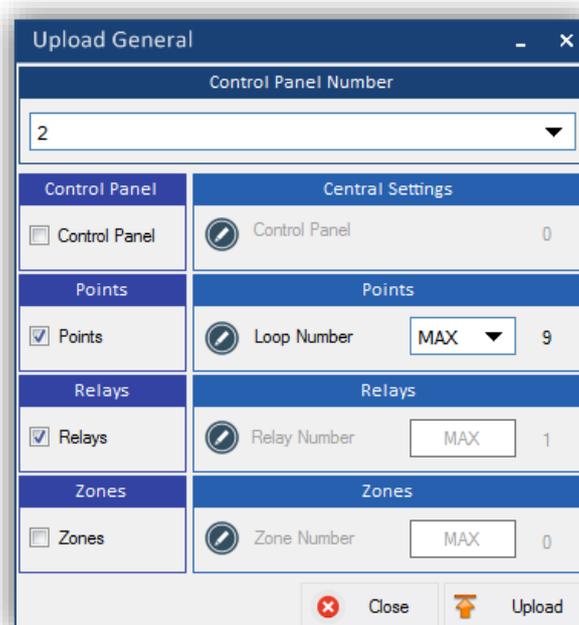


Figure 45. Menu to send the general configuration of the I-link to the central.

The procedure is similar to that of download general. That is, first select the control panel number and then choose the items to upload. In the points, it is possible choose between uploading the points of a loop or all points of all loops. To start the general upload process, click on the **Upload** button .

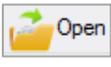
## History download

The control panel stores a register of all events occurred in chronological order, from the most recent to the oldest. From the I-link it is possible to receive all these events, downloading the history of the control panel. Like from the control panel, the software allows to filter the events by type, either alarms, faults, etc.

The software offers other complementary functions, to facilitate the management of events such as saving the history in different formats, printing it, etc.



To enter the history menu, click on the **Download history** button

In this menu, the software offers two options to work with the history. One is to open a file that is saved previously, clicking on the **Open** button  and other is to download the history of the control panel.

To do the latter, select the control panel number, then insert the number initial and final of the list and finally click on the **Download** button . If do not fill the boxes of the initial number and final, the software download all events that store in the control panel. At the end of the download, the software allows to filter the events according to their type.

If the **Select the last one** function (located at the bottom of the window) is checked, select at all times the last event it is receiving, showing the most current events.

In the example of the Figure 46, the download of all events from 1 to 20 of control panel number 2 is shown.

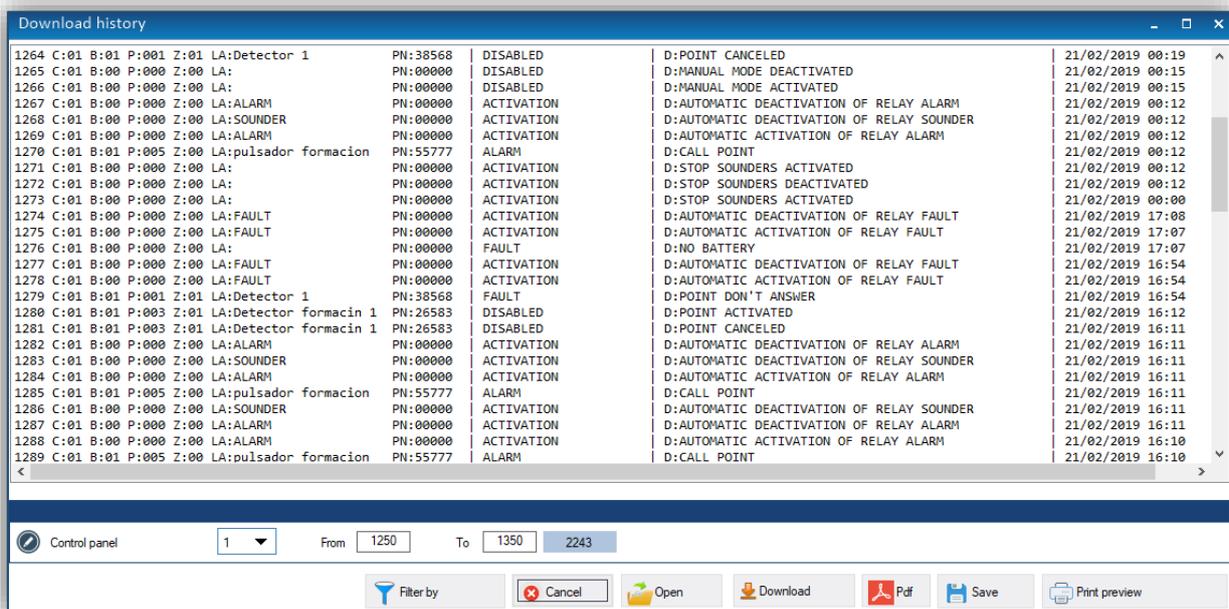
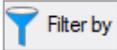


Figure 46. Menu that shows the history of the control panel.

When finish the download process, the program allows filtering the received events by type and/or the date. To access the filter menu, click on the **Filter by** button .

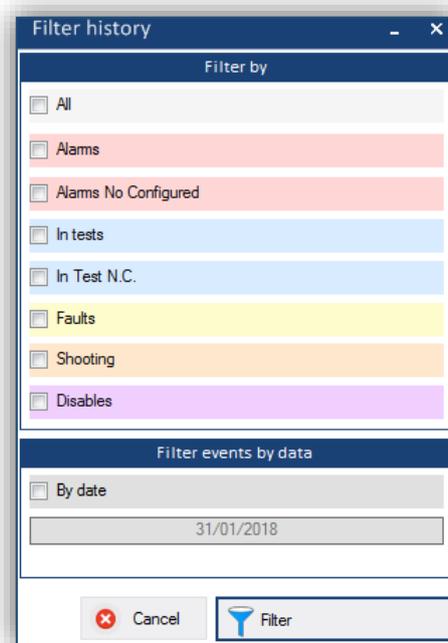
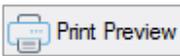


Figure 47. Menu to filter the events of history.

It is possible to save the register of downloaded events in different formats: format .pdf, clicking on the **PDF** button , or format .pro, clicking on the **Save** button .

To print the history, click on the **Print preview** button . The Figure 48 shows the preview of the history before being printed.

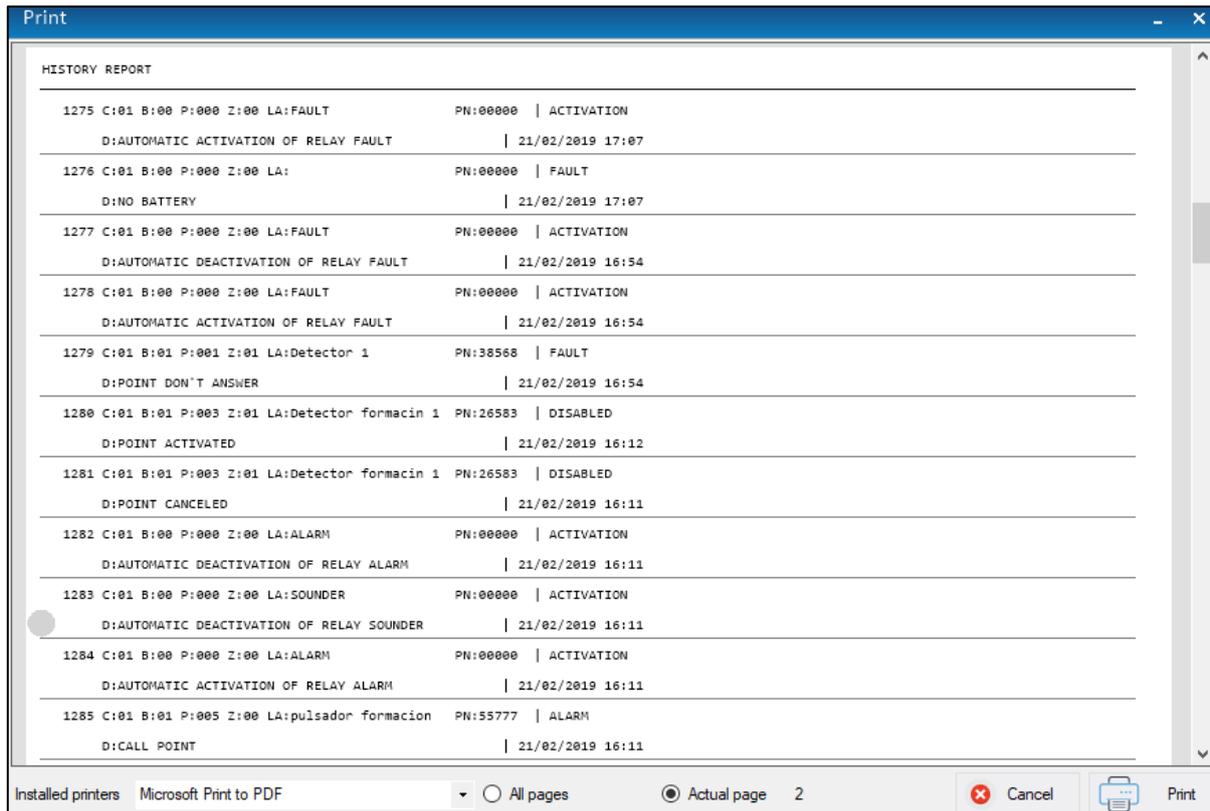


Figure 48. Preview of the history report.

Before to print, select the printer and the option of print all pages or just a current page (at the bottom of menu). Finally, click on the **Print** button  to print the final report.

- C → Control panel
- L → Loop
- P → Point
- Z → Zone
- LA → Label
- NP → Programming number
- D → Description

## Delete general configuration (in the control panel)

The software is able to delete the configurations stored in the control panels in a simple and intuitive way. The fact of deleting the general configurations of the control panels from the I-link, offers advantages in terms of resources and time.

Click on the **General delete** button , to access the menu of the delete general configuration.

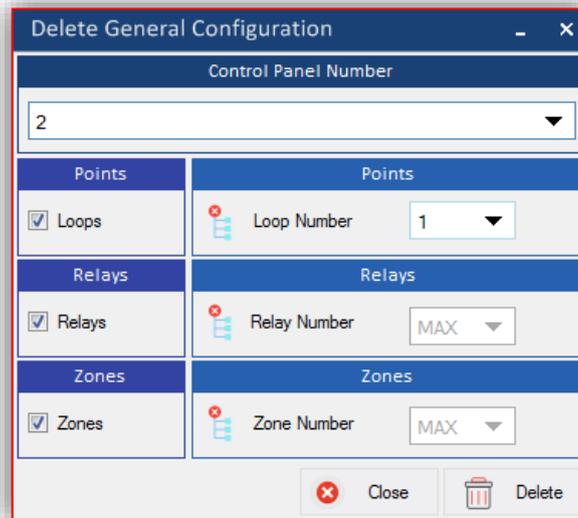
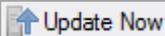


Figure 49. Menu to delete the general configuration stored in the control panel.

When entering to the menu, select the control panel number and check the boxes of the items to be delete. In the points, it is possible select it of a loop or of all loops. Then, click on **Delete** button



Figure 50. Confirmation menu to delete the general configuration.

Finally, click on the **Update now** button  to start the delete process.

## MULTIPLE CAMERAS

I-link offers the possibility of observing all the cameras configured simultaneously (maximum 12 cameras), thus facilitating the control of the cameras.

To access the menu of multiple cameras, press the **Multicamera**  button. Entering, can observe a window divided into 12 sections, which correspond to each of the cameras configured.

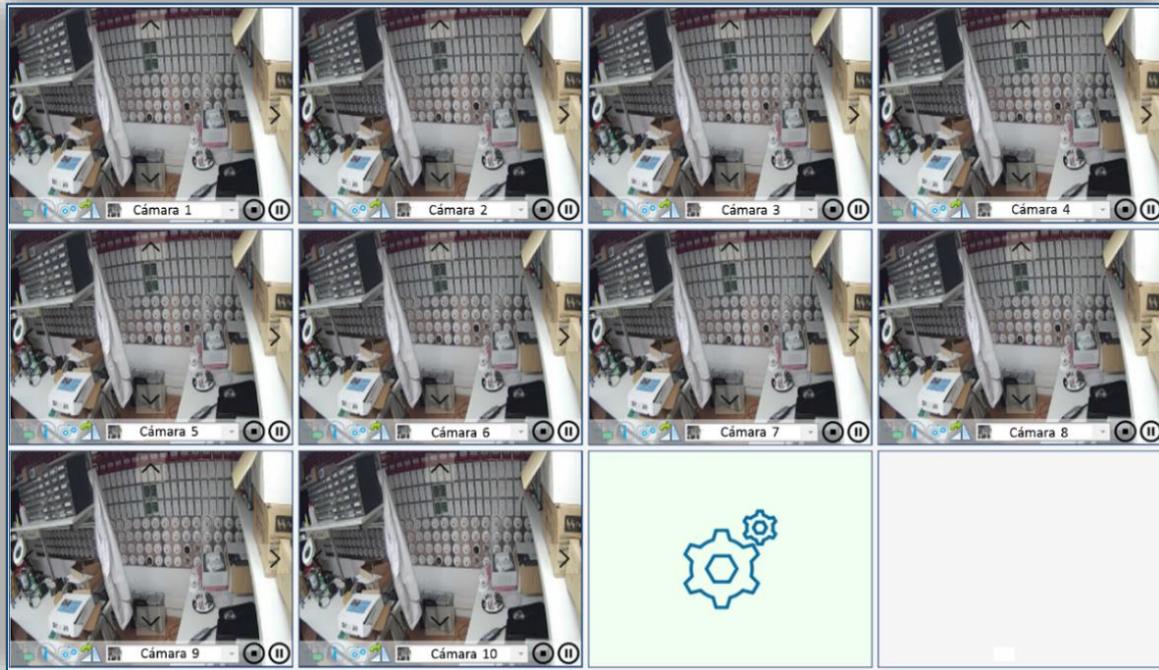


Figure 51. Multicamera menu that shows all configured cameras in I-link.

To view the cameras trough this window have to configure in the **Configuration of cameras** menu previously.

The example in the Figure 51 shows cameras 1 through 10 are configured and activated. However, camera number 11 is configured but not activated on this window. The box of the number 12 is empty because in the configuration of cameras there are only 11 configured.

To activated them, click-right on the box and appears a menu at the bottom part. In this menu select the camera in the empty pull-down where the label of the camera will appear once the camera has been selected.



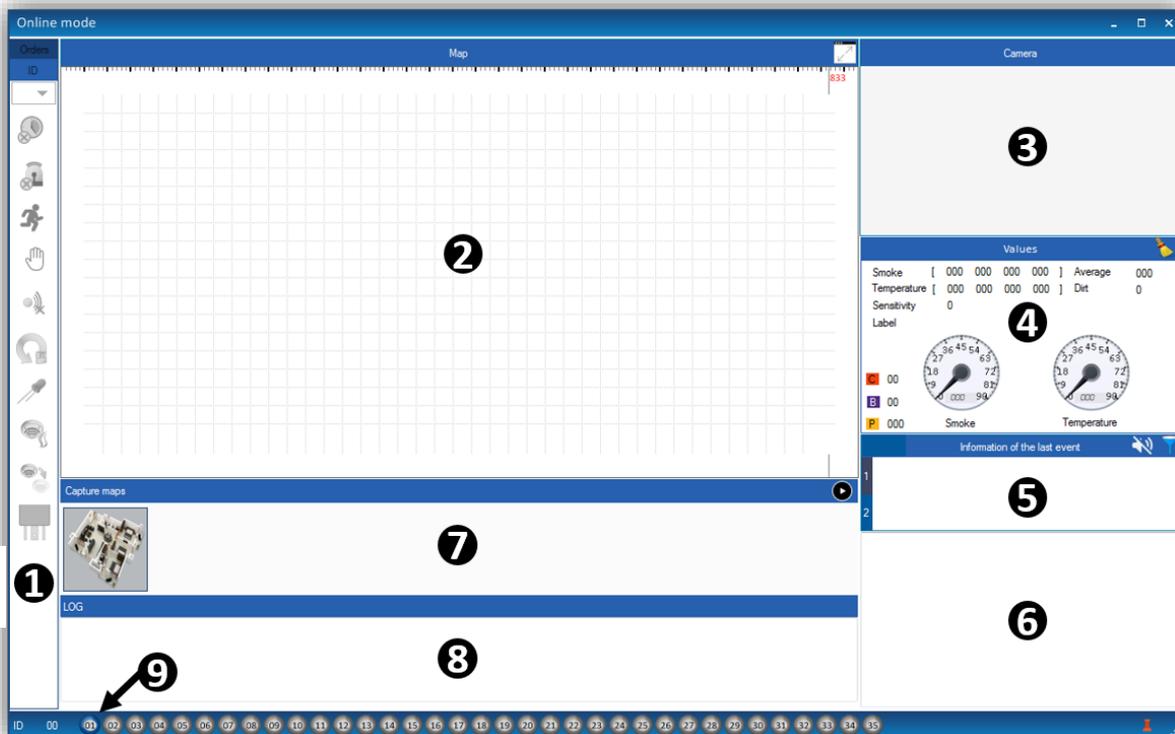


Figure 52. Structure of Online mode from which the events received from the control panel can be managed.

The structure is distributed of the following way:

- **Orders:** This section shows all buttons corresponding with the different orders that can be performed from the front panel of the control panel and others that are performed from the access level 1, which are the following: **(1)**

-  → **No delay:** Disables the delays of the configured relays.
-  → **Silence sounders:** Deactivates all relays that are configured as sounders.
-  → **Evacuation:** Activate all relays configured as sounders and operations.
-  → **Manual mode:** Set the control panel in manual mode and disables the automatic activation of relays.
-  → **Stop buzzer:** Stop the buzzer when it is ringing in the control panel.
-  → **General reset:** Executes a full reset of the control panel.
-  → **System test:** Turn on all LEDs and darken the screen.
-  → **Test mode:** Set the central in test mode or normal mode, by zones or general.

-  → **Enable/Disable:** Allows disable or enable points or zones of the control panel.
-  → **Logical relays:** Activates or deactivates the logical relays and the configured as sounders or operations, separately.

- **Map:** In this window appears the maps with its distributed elements. So helping to locate the point physically. To see the elements over the maps, previously you have to add the points on the maps (see the **Map configuration** chapter). **(2)**
- **Camera:** When an event occurs at a point associated with a camera, it appears in this window. Allowing the user to see what happen at all times. In addition, this window offers several additional functions like make a capture, see the camera information, rotate, play, pause, stop the image and (if the camera allows it) change the focus using the cursors located at the ends of the image. **(3)**
- **Monitor:** This section shows the monitoring values of selected point on the map. **(4)**
- **Information of the last event:** In this section, the first and last events produced in the control panel connected to the I-link are shown. **(5)**
- **Events list:** Here, all events produced in the control panel with their information appear organized in a list, except for the events related to the activation/deactivation of general relays and logic relays. The list is organized by chronological order, i.e. the first event is the oldest event while the last is the most current. It is possible reset the events, clicking-right on them. It is also possible to filter the events according to their control panel and their type. **(6)**
- **Capture of maps:** All maps associated with points with events are displayed. In this case, the user can choose the map he wants to open in the **Maps** window, because in that window just the map associated with the last event produced appear. **(7)**
- **Event log (LOG):** Here, the date and hour of the events produced in the control panels and the actions that perform form the Online mode are recorded, either reset an alarm, activate a relay, enable a point, etc. **(8)**
- **Activate of control panels:** It contains the buttons to activate the control panels in Online mode. The buttons can be three colors depending on their status: the gray means that the control panel is not connected to the I-link, while the blue means that the control panel is connected but it is not activated in the Online mode and finally the green means that the control panel is activated in Online mode. **(9)**

## Operation of Online mode

To start working with Online mode, you must to activate the control panel (or control panels), clicking on the **Activation** button  corresponding to its ID (control panel number) located in the **Activate of control panels** (at the bottom of the Online window). The green button indicate that the activation process in Online mode has been successful.

**Note:** To activate the control panel, the **Activation** button corresponding to its ID must be blue. If the button is gray, connect the control panel with I-link (see the **Communications** chapter).

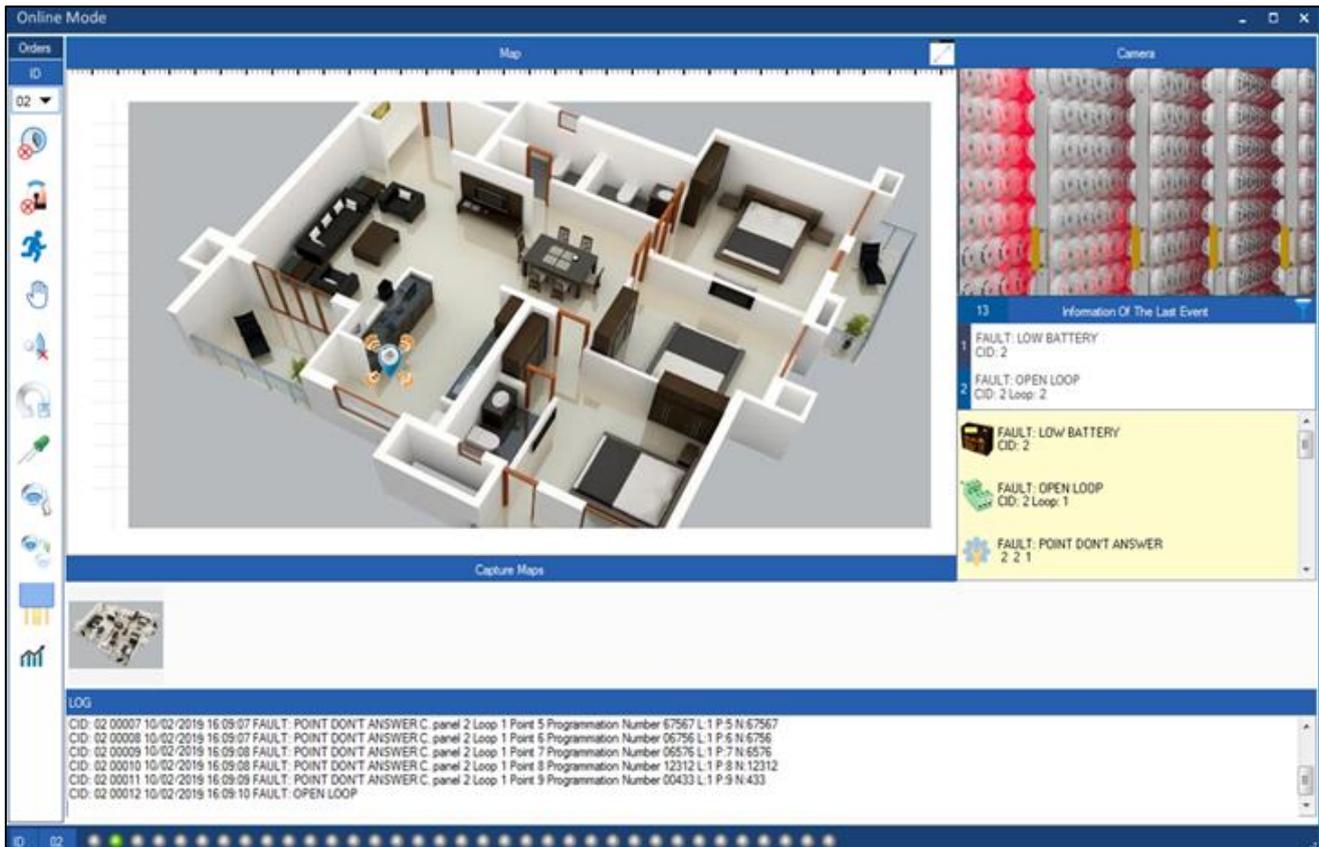


Figure 53. General structure of the online mode with the events of a control panel connected to the I-link.

To filter the events, depending on its control panel or its type, click on the **Filter**  button and a window like the one in Figure 51 opens.

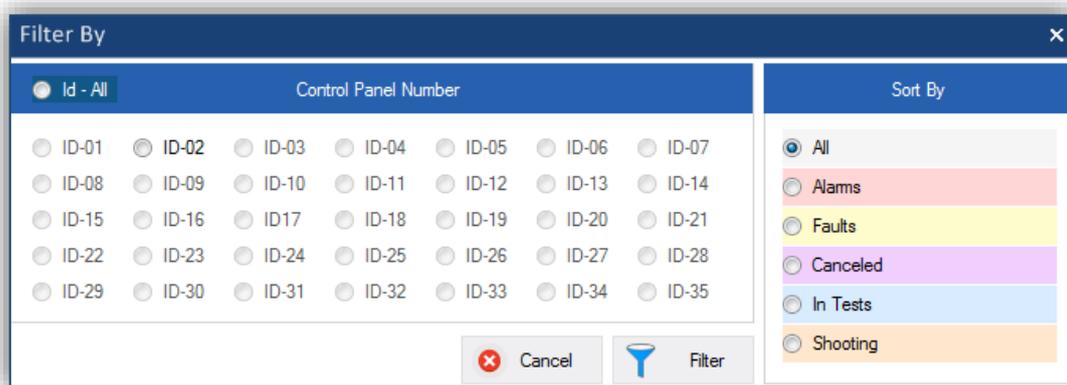


Figure 54. Menu to filter the events according to their control panel and their type.

If the acoustics warnings are activated on the **Edition** menu, it is possible mute the sound when occurs an event trough the button .

To reset an event, select it from the list of events and right-click on it until a window as the one shown in the following figure appears. When selecting the **Rearm-Reset** option the event automatically disappears from the list and the control panel.



Figure 55. Reset an event from the I-link.

On the map, it is possible to move the image and adjust the zoom to obtain a greater accuracy of the physical situation of the point. In addition, if click on the point, it is possible to see the monitoring values.

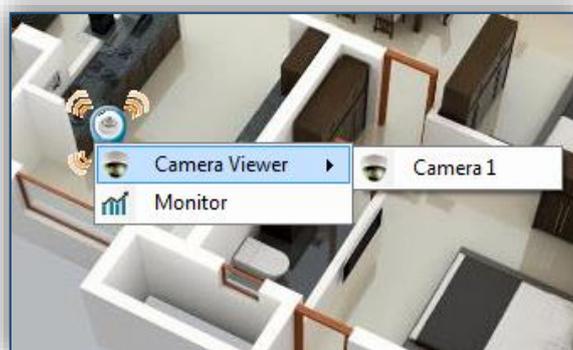


Figure 56. View or monitor a point.

When activating the control panel in the Online mode, the **Orders** section is enabled automatically. In the case of activating several control panels, it is possible to send the orders to all or separately. To do it individually, choose its ID (at the top), instead, to send the orders to all control panels, select the option “MAX”.

The first seven orders are activated directly by pressing their button. However, for the rest of orders you have to follow some steps to activate them. Next, presents a brief explanation how activate them:

- The Figure 57 shows the menu to activate the Test mode of a control panel. To access the

menu click on the **Test Mode** button .

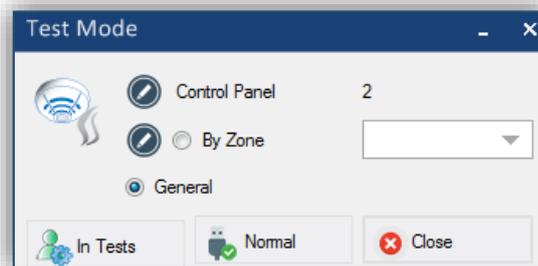


Figure 57. Activation menu of Test Mode in a control panel.

This menu offers two possibilities: activate the Test mode in general o by zone. In both cases, to activate the Test mode, check its box (for the zones select also the zone number)

and click on the **In Tests** button . To deactivate it click on the **Normal** button



- The menu shown in Figure 58 allows enable/disable zones or points individually. To enter,

click on the **Enable/Disable** button .

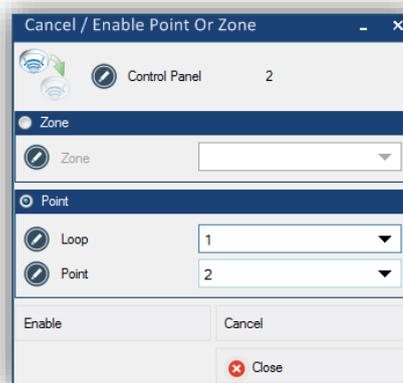


Figure 58. Menu to enable or cancel points or zones of a control panel.

By default, the configured points and zones in the control panel be enabled .To cancel them, in the menu, select the zone or point to be canceled and click on the **Cancel** button. To enable again, press the **Enable** button.

- The figure 59 shows the activate/deactivate menu of logical relays configured in the control panel. To enter, click on the **Activate relays** button .

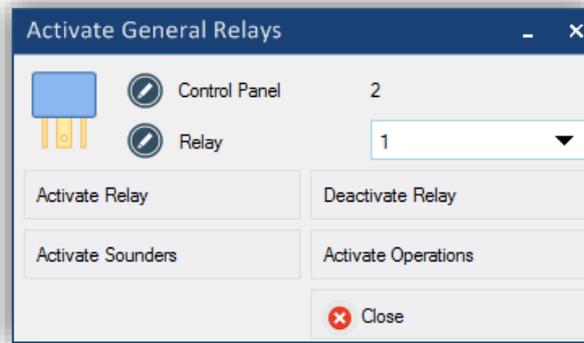


Figure 59. Menu to activate/deactivate logical relays in the control panel.

In the menu, it is possible to activate or deactivate any relay that is configured in the control panel. This menu also allows activating all relays configured as sounders (clicking on the **Activate sounders** button) or activating them configured as operations (clicking on the **Activate operations** button).

When finish working with the Online mode, before closing the window, deactivate the control panel, pressing the button corresponding to its ID, in the Central Selector. When the button is blue, the Online mode can be closed.

## FIRMWARE

One of the keys of the I-link is that it allows to update the firmware version of the central remotely. However, only users with administrator permissions can do so.

To update the firmware it is necessary that the control panel is connected with PC through a USB cable and in **DFU Mode**. There are two ways to update the firmware:

- **Manually:** To enter mode DFU in the control panel manually, turn on the control panel pressing and holding the **STOP BUZZER**  and **RESET** keys at the same time. By starting the control panel, it shows on the display that it is in **DFU Mode**.

Finally, in the I-link click on the **Firmware**  button of the main menu.

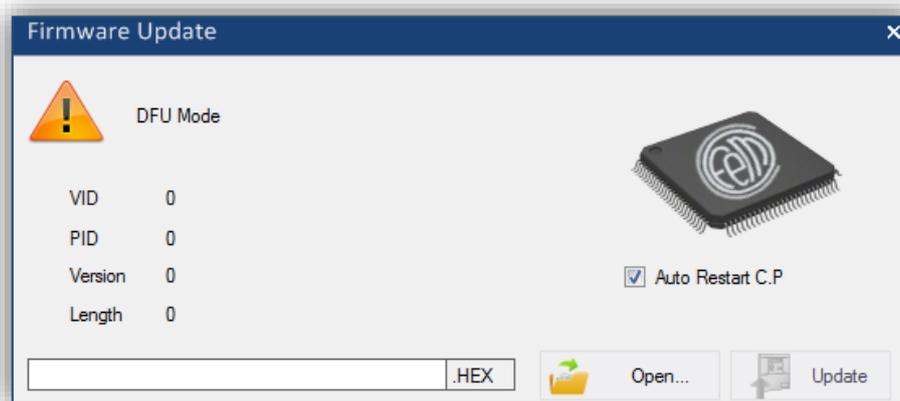
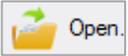


Figure 60. Menu for updating the firmware of the control panel.

- **Automatically:** From the USB communications menu, press the **DFU** button  which will be enabled when the control panel is connected. When pressing the **DFU** button, the control panel gets into DFU mode automatically and the menu for updating the firmware on the I-link opens.

In the update menu, select the path of the file to be loaded in the control panel (sent from Cofem),

clicking the **Open** button . If the **Auto Restart C.P.** box is checked, the control panel will restart at the end of the update process. When loading the file, on the left side of the menu appears its information: like firmware version or the size.

Lastly, click on the **Update** button  to start the update process.







FABRICANTE DE PRODUCTOS CONTRA INCENDIOS - FIRE PROTECTION  
 MANUFACTURER - FABRICANTS DE PRODUITS CONTRE INCENDIES  
 P.I Can Jardí, Carrer Compositor Wagner, 8-10, 08191 RUBÍ (Barcelona) SPAIN

<b>Comercial</b> <i>Commercial</i>	+34 935 862 690	comercial@cofem.com cofem@cofem.com
<b>Ventas</b> <i>Sales</i>	+34 935 862 690	ventas1@cofem.com ventas2@cofem.com
<b>Atención Técnico Comercial</b> <i>Technical &amp; Commercial Service</i>	+34 902 448 811	sat1@cofem.com sat2@cofem.com
<b>S.A.T.</b> <i>T.A.S</i>	+34 935 862 692	tecnic@cofem.com
<b>Compras</b> <i>Purchase</i>	+34 935 862 693	compras@cofem.com
<b>Export</b> <i>Export</i>	+34 935 862 694	export@cofem.com
<b>Fax pedidos</b> <i>Orders Fax</i>	+34 902 338 811	
<b>Fax general</b> <i>Fax</i>	+34 936 999 261	