



Algorithmic System
AGE42 Installation Customizer
User Manual

VERSION 1.5
JAN/07

TABLE OF CONTENTS.

1 INTRODUCTION..... 5

2 INSTALLATION AND START-UP OF THE PROGRAM..... 7

3 MENUS. 9

3.1 FILE. 9

 3.1.1 New/Open..... 9

 3.1.2 Save..... 10

 3.1.3 Verify..... 10

 3.1.4 Locate not shown elements..... 11

 3.1.5 Language..... 11

 3.1.6 History..... 12

 3.1.7 Receive panel file..... 12

 3.1.8 Receive repeater file..... 12

 3.1.9 Update old files..... 12

 3.1.10 Exit..... 13

3.2 VIEW..... 14

 3.2.1 Toolbar..... 14

 3.2.1.1 Hide..... 14

 3.2.1.2 Left..... 14

 3.2.1.3 Right..... 14

 3.2.1.4 Up..... 15

 3.2.1.5 Down..... 15

 3.2.2 Structure..... 15

 3.2.3 Risks..... 16

 3.2.3.1 Simulate risk..... 17

 3.2.3.2 Delete risk..... 18

 3.2.3.3 Edit risk..... 18

 3.2.3.4 Edit causes..... 19

 3.2.4 Plans..... 20

3.3 REPORTS..... 21

 3.3.1 Installation..... 21

 3.3.1.1 Equipment..... 21

 3.3.1.2 Sequences..... 21

 3.3.2 Panel..... 21

 3.3.2.1 Points, by equipment..... 21

 3.3.2.2 Points, by zones..... 21

 3.3.2.3 Sectors with zones..... 21

 3.3.2.4 Sequences with maneuvers..... 22

 3.3.2.5 Conditions..... 22

 3.3.2.6 Equipment Layout..... 22

3.4 PROGRAMMING..... 23

 3.4.1 Calibration..... 23

 3.4.1.1 Ionic..... 23

 3.4.1.2 Optical..... 23

 3.4.1.3 Heat..... 23

 3.4.2 Times..... 23

 3.4.2.1 Detector verification..... 23

 3.4.2.2 Master reset..... 23

 3.4.2.3 Maneuver confirmation..... 23

 3.4.3 Digital inputs..... 24

3.5 IMAGES..... 25

 3.5.1 Edit..... 25

3.6 CONFIGURATION..... 28

 3.6.1 Appearance..... 28

 3.6.2 Printer..... 29

3.6.3	Communications	29
3.6.4	Plans	30
3.7	HELP	31
3.7.1	Content	31
3.7.2	About the customizer	31
4	CREATING A PERSONALISATION OF AN INSTALLATION.	33
4.1	CREATING AN INSTALLATION STRUCTURE	34
4.2	PERSONALISATION OF THE PANEL	37
4.2.1	Add channels	37
4.2.2	Import channels	37
4.2.3	Add equipment on the channel	38
4.3	DEFINITION OF ZONES ON THE PANEL	41
4.3.1	Add zones	41
4.3.2	Editing zones	41
4.3.3	Delete zones without points	42
4.3.4	Allocation of points to the zones	42
4.4	DEFINITION OF SECTORS	44
4.4.1	Add sectors	44
4.4.2	Edit sectors	44
4.4.3	Assignment of zones to the sectors	45
4.5	EDIT POINTS	46
4.6	DEFINITION OF SEQUENCES	48
4.6.1	Add Sequences	48
4.6.2	Edit sequences	49
4.6.3	Add maneuvers	49
4.6.4	Edit maneuvers	50
4.7	DEFINITION OF TRIGGERING CONDITIONS	53
4.7.1	Add Conditions	53
4.7.2	Edit Conditions	54
4.7.3	Add subcondition	55
4.7.4	Edit subcondition	55
4.8	PROPERTIES OF THE PANEL	57
4.8.1	Logotype	57
4.8.2	Programming	58
4.8.3	Delays	60
4.8.4	Users	61
4.8.5	Configuration	62
4.8.5.1	Times	63
4.8.5.2	Power supply	64
4.8.5.3	Communications	65
4.8.5.4	Other parameters	66
4.9	RISKS	67
5	PLANS FOR DISPLAY IN CONTROL POST.	69
5.1	ADD A PLAN	69
5.1.1	Add active element	71
5.1.2	Add active element (command)	72
5.1.3	Delete active elements	73
5.1.4	Edit active elements	73
5.1.5	Align	73
5.1.6	Size	74
5.1.7	Configuration	74
5.1.8	Refresh	74
5.2	EDIT PLANS	75

6	DOWNLOADING PERSONALISATIONS.....	77
6.1	COMMUNICATIONS PORTS.....	77
6.2	DELETION OF THE EXISTING PERSONALISATION.....	78
6.2.1	Deletion by CPU selector.....	78
6.2.2	Deletion by Menu options.....	79
6.3	DELETION OF EVENTS HISTORY.....	79
6.4	CONFIGURATION OF THE COMMUNICATIONS PORT IN THE COMPUTER.....	79
6.5	DOWNLOADING TO A STAND-ALONE PANEL.....	80
6.6	DOWNLOADING TO AN INSTALLATION IN ARCNET NETWORK.....	82
6.6.1	Panels and Repeaters.....	82
6.6.2	Panels and Control Post.....	84
	APPENDIX 1. QUICK KEYBOARD REFERENCE.....	87
	APPENDIX 2. CONNECTION WITH THE PANEL.....	89

1 INTRODUCTION.

The AGE42 program has been designed by Aguilera Electrónica to simplify the creation and maintenance of the personalisation files utilized for the Algorithmic Panels:

- AE/SA-PC
- AE/SA-C2
- AE/SA-C8
- AE/SA-C23H.
- AE/SA-C83H.
- AE/SA-TCR.

The AGE42 program allows:

- Creating new personalisations.
- Editing existing personalisations.
- Importing channel structures created by means of the Start-up Program.
- Acquisition of the personalisation of the connected panels.
- Downloading the personalisation to the connected panels.
- Verifying the integrity of the personalisation data.
- Listing of the personalisation data, by display and printout, by means of various types of report.

👁 This manual is updated and revised for use with the program AGE42 V1.1n. The personalisation files prepared with earlier versions are incompatible with this version, and the user should first use the converter incorporated in the customizer to adapt them. Consult section 3.1.8 on Upgrading Earlier Files for fuller information.

👁 Check that the software versions of the CPU of the Algorithmic Panel and the Line Control Cards it is equipped with are compatible with the software version of the Customizer.

2 INSTALLATION AND START-UP OF THE PROGRAM.

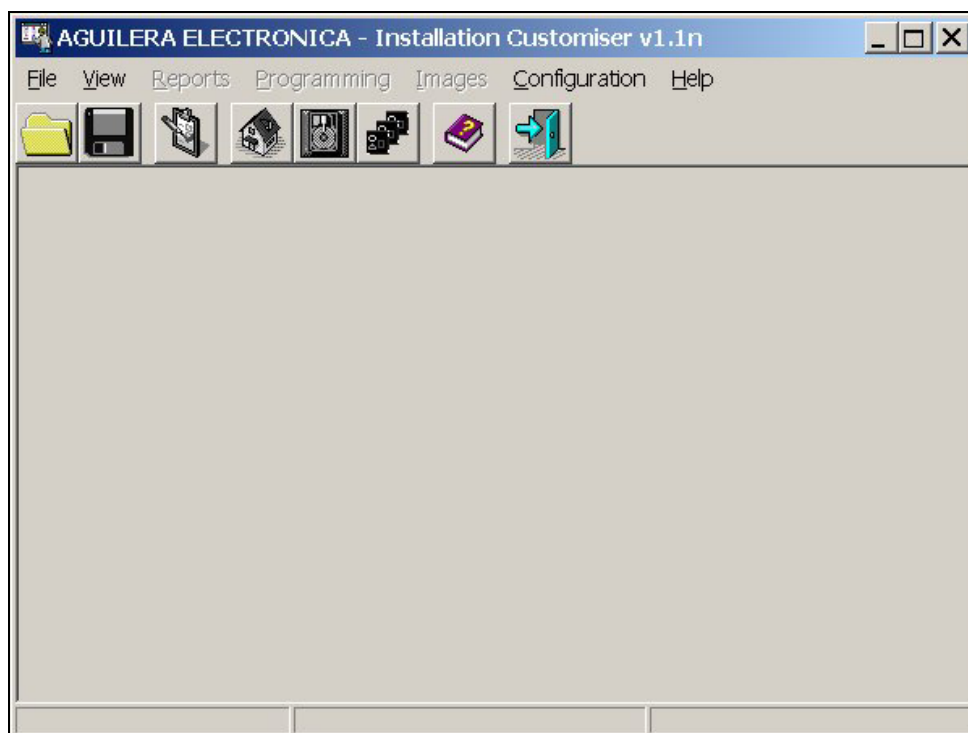
The program is installed by running the file SETUP.EXE. By default it will locate it in the directory C:\Program Files\Aguilera Electronica\AGE42 , or in the unit where the Windows operating system is found, however another location can be specified for it. Starting from this version, it is allowed to have several software versions simultaneously in one PC.

Once the options of the installation program have been accepted, a shortcut is created in:

Start ->Files>Aguilera Electronica->Sistema Algoritmico->Instalacion Customizer->

but one can be created on the desktop for quicker and easier access.

On starting the program, the following screen is shown:



Three different zones can be distinguished:

- Menu bar.
- Tools bar.
- Main window, where the other windows will be opened, which can be:
 - Structure. It shows the structure of the installation with the elements that constitute it.
 - Detection Panel. A window for each element (panel or repeater) that forms the installation.
 - Risks. Information on the risks associated with the points that constitute the installation.
 - Drawings. Graphic information of Drawings used in the Control Position.

Initially we only have the following options available on the menu bar:

- **File:**
 - **New/Open.** It allows a new installation structure to be created, or an existing one to be open.
 - **Receive file from Panel.** Receive the personalisation programmed in a Panel.
 - **Receive file from Repeater.** Receive the personalisation programmed in a Repeater.
 - **Exit.** We exit the program.
- **View:**
 - **Tool bar.** It allows the position of the toolbar to be changed on screen.
 - Hide.
 - Left.
 - Right.
 - Up.
 - Down.
- **Configuration:**
 - **Appearance.** It allows the appearance to be changed of the presentation of the different windows and texts on screen.
 - **Printer** It allows the printer to be configured for use in the PC.
 - **Communications.** It allows the RS-232 port of the PC to be configured, utilized to download the personalisations to the Panels and Repeaters.
 - **Drawings.** It allows the position and size of the active elements to be configured.
- **Help.**

The development of these sections will be explained later.

In the toolbar we only have the options available that appear in colours, corresponding to:

- Create or open personalisation.
- Help.
- Exit.

When we create an installation, or open an existing one, all the options of the menus and the toolbar will be activated.

3 MENUS.

The main menu provides access to the different functions of the program.

Access to the different functions of the menu is carried out with:

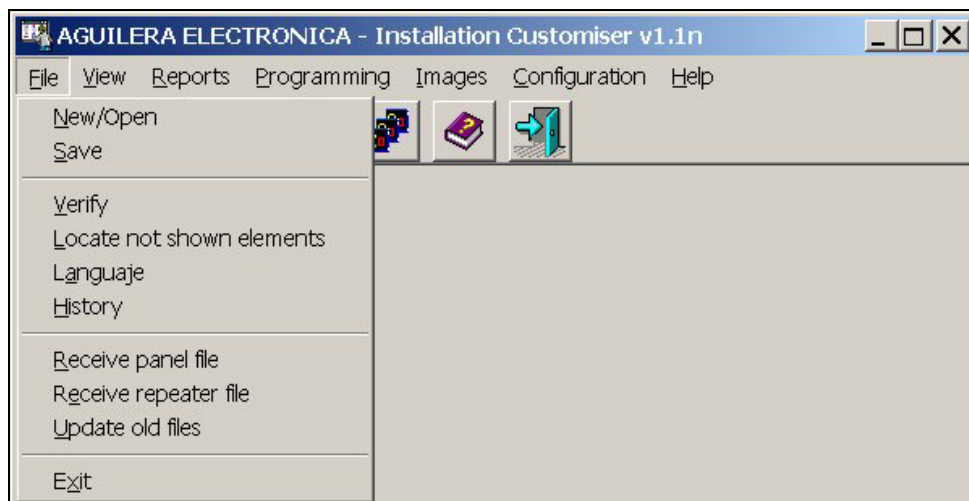
- the mouse,
- by pressing the key that appears underlined in the menu options, when this it is active
- by moving the cursor with the left, right, up and down arrows, and accepting with the key "Enter".

To activate the menu, press the "Alt" key.

The menu options are organized in the following way:

3.1 FILE.

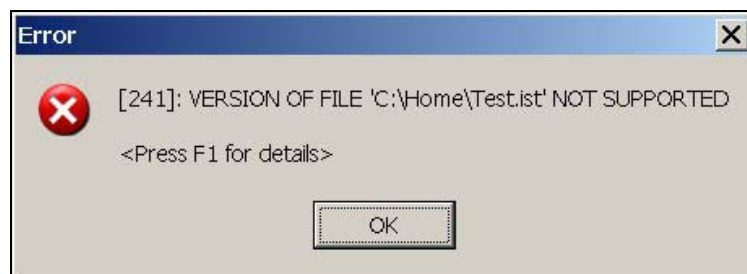
Options to create, recover, modify, verify and send personalisation files.



3.1.1 New/Open.

It allows a new personalisation session to begin. For this, we must select the personalisation file we want to open.

If we try to open a file of an existing personalisation, but created with an earlier version of the program that is incompatible, the following error message will appear as a warning.

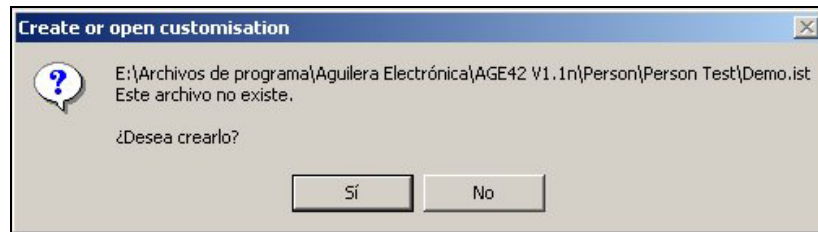


In this case, it will be necessary to run the option "Update earlier files" before continuing with the personalisation.

If a nonexistent file is specified, the program will create a new installation with that name in the location indicated.

If we execute this operation when there is already a session open, the program will close it first.

The file is stored with the extension "ist". If the specified file does not exist, it is created.

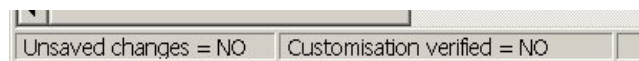


Once selected, a structure window opens up, in which you work to create the personalisation of the installation.



3.1.2 Save.

It allows saving to disk the modifications made in the personalisation, without closing the current session. Once the data have been stored, it will indicate in the status line that there are no changes pending saving.



It is convenient to carry out this operation periodically during the session, the purpose being to prevent accidental loss of data (electric power cuts, etc).

3.1.3 Verify.

It permits the integrity of all the personalisation data to be verified. If the process is successful, the status line will indicate that the data are verified.



Otherwise, the first error detected will be reported and the data will remain without verifying.

For the analogical panels to accept the personalisation, it is necessary that this has been verified successfully.

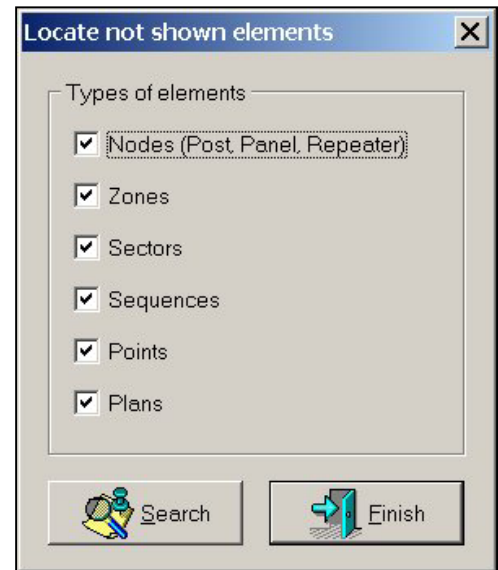
3.1.4 Locate not shown elements.

It allows elements of the installation to be located, of one or more types, which have not yet been positioned in any drawing.

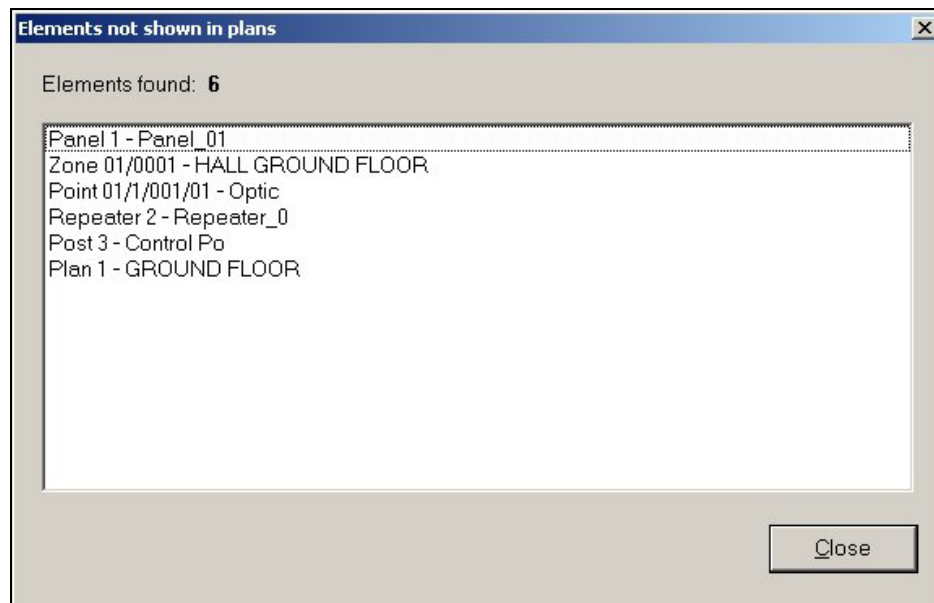
It allows a selection to be carried out in the search, according to the types of element that we can have available in an installation:

- Nodes.
- Zones.
- Sectors.
- Sequences.
- Points.
- Plans.

The search will only be carried out for those types of element that have the checkbox selected.



The results of the search are shown in a window:



It is convenient to run it in the last stages of creating a personalisation, or when carrying out modifications thereto.

3.1.5 Language.

It allows the language to be selected that we wish to use in the analogical panels and the repeaters of the installation. For this it will show a selection dialogue with a list of available languages, in which the language presently in use will appear marked with an asterisk (*).



3.1.6 History.

It allows a rich text file (RTF) to be edited that is associated with the installation, in which we will be able to append the annotations we wish. This file will be called the same as the installation, with RTF extension, and the customizer will create it automatically if necessary.

3.1.7 Receive panel file.

It allows connection with a remote Panel and to obtain its personalisation, which will be stored in the file we specify beforehand.

The communications port used to connect with the panel or repeater is defined in the configuration.

👁 The information is obtained from the Panel, but not that of the installation structure.

3.1.8 Receive repeater file.

It allows connection with a remote repeater and to obtain its personalisation, which will be stored in the file we specify beforehand.

The communications port used to connect with the panel or repeater is defined in the configuration.

👁 The information is obtained from the Repeater, but not that of the installation structure.

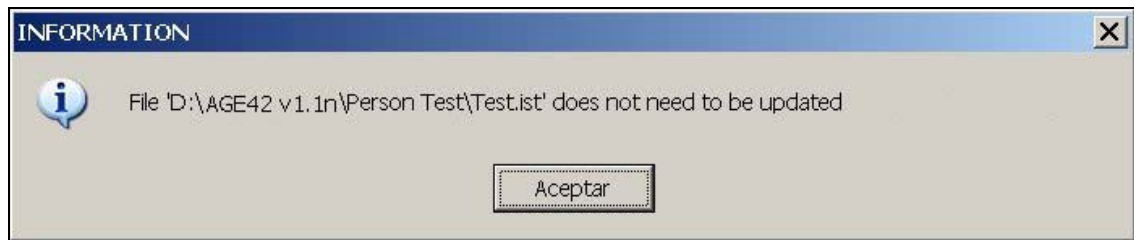
3.1.9 Update old files.

It allows obsolete files to be selected (produced with earlier versions of the customizer) and to adapt them to the latest version of personalisation available, and so be able to work with them.

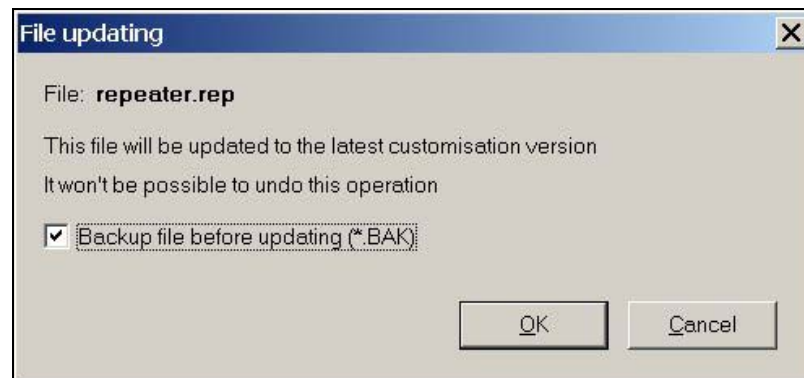
In the first place, it is necessary to select the file to update in the selection dialogue we are shown.

Once the file has been selected, the customizer determines its version and proceeds accordingly:

- If the file is not able to (or need not) be updated, a message will be shown informing us of this.



- Otherwise a second window will allow us to confirm we really want to make the conversion, and also to indicate if we want to keep a backup copy of the file or not.



Lastly, the customizer will update the file and report the final result of the process.

3.1.10 Exit.

This closes the customizer. If there is a session open, this will be closed automatically. For this, the changes pending will be saved, if any, and the user confirms this when asked.

3.2 VIEW.











The options of the Toolbar submenu allow us to define if it is to be visible or not, and if affirmative, in what position of the workspace we want to have it located.

The remaining options of this menu open the corresponding tree window. If the window requested is already open, the program transfers it to the foreground, making it visible over the other windows.

3.2.1 Toolbar

It contains a series of buttons with icons that provide quick access to the most frequently used functions.

Button	What it does
	It creates a new personalisation or opens an existing one.
	It saves the changes made in the personalisation.
	It verifies the integrity of the personalisation data.
	It shows the structure tree.
	It shows the risk tree.
	It shows the plans tree.
	It opens the help contents table.
	It closes the customizer.

3.2.1.1 Hide.

It hides the toolbar, leaving more space on screen for the main window.

3.2.1.2 Left.

It shows the tools window on the left side of the screen.

3.2.1.3 Right.

It shows the tools window on the right side of the screen.

3.2.1.4 Up.

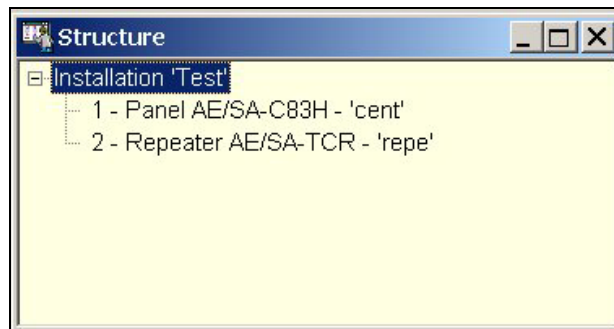
It shows the tools window on the top side of the screen.

3.2.1.5 Down.

It shows the tools window on the bottom side of the screen.

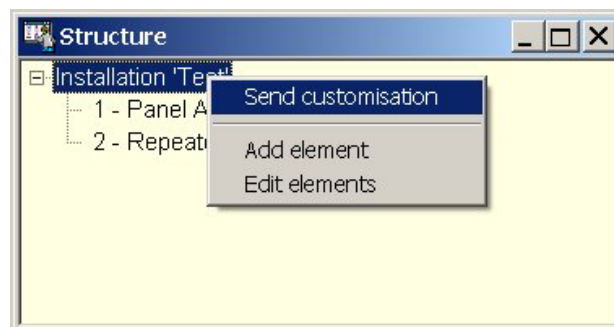
3.2.2 Structure.

It shows the structure window of the facility.



By selecting the root of the structure with the right button of the Mouse, we extract the menu to allow us:

- To send the personalisation.
- To add an element to the structure of the installation.
- To edit elements.
- To change the type of installation.

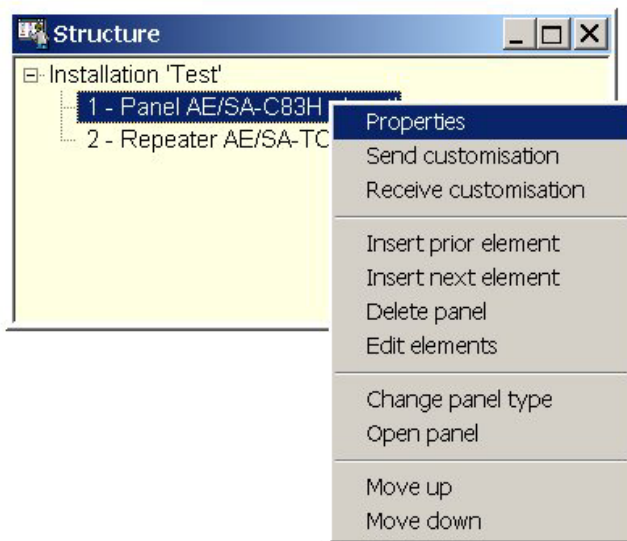


In the elements of the installation, the following fields can be edited:

- Descriptive name of the element.
- Synoptic in alarm state.
- Synoptic in fault state.
- IP address. Only for facilities with ETHERNET.

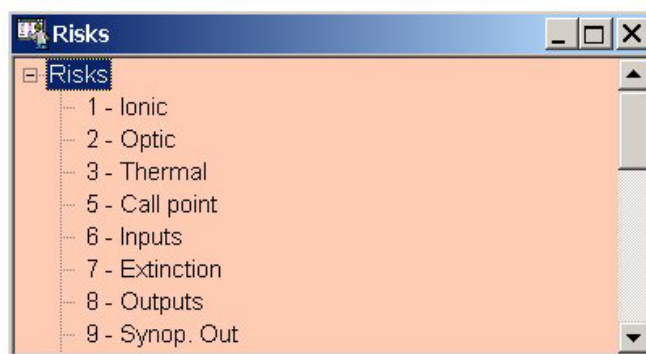
Number	Type	Name	File	Synoptic 1	Synoptic 2
1	AE/SA-C83H	cent	cent.cen		
2	AE/SA-TCR	repe	repe.rep		

By selecting any of the elements that constitute the installation with the right button, a menu is shown with the options available for each type of element.



3.2.3 Risks.

It shows the risks window of the facility.



The inherent risks are shown, as well as those most usually simulated, defined by default, and those that we have defined by ourselves.

With the right button of the Mouse, the menu is shown of options available to carry out on the risks:

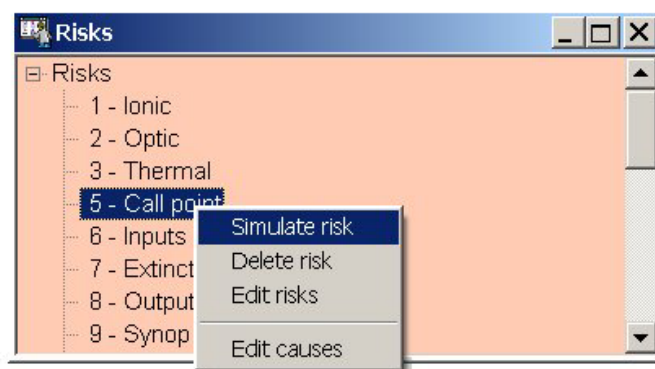
3.2.3.1 Simulate risk.

It allows a risk to be created from another, termed generator or inherent. The new risk inherits the causes of the inherent risk, its operation being therefore the same, but indicated with another name, if the causes are not changed or modified.

The risks that can be simulated are:

- Pushbutton.
- Inputs.
- Outputs.
- Master.

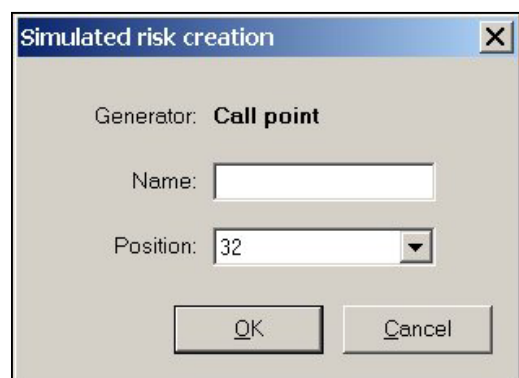
On trying to simulate any other risk, an error message will be shown.



To create a simulated risk, the cursor is located on the risk to simulate, and "Simulate risk" is selected, opening a new window to indicate the name of the risk and the position number we want it to occupy, between the numbers 21 to 40.

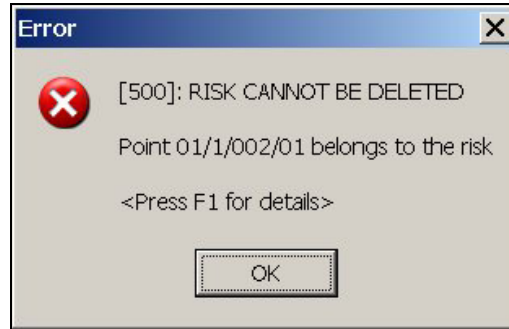
The numbers 21 to 31 are occupied by default by simulated risks, but they can be erased if not used.

In a simulated risk it is not possible to associate points belonging to different inherent risks.

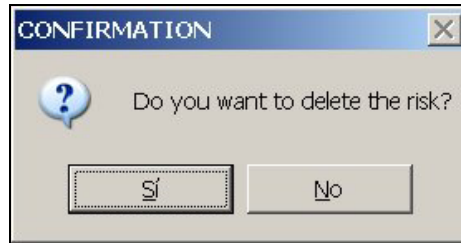


3.2.3.2 Delete risk.

It is only allowed to delete simulated risks that have no associated point. If it is attempted to delete a risk with associated points, the following error message is shown.



Confirmation is requested before deleting the risk.



3.2.3.3 Edit risk.

On selecting the option of editing risks, a window opens with the risk edition matrix.

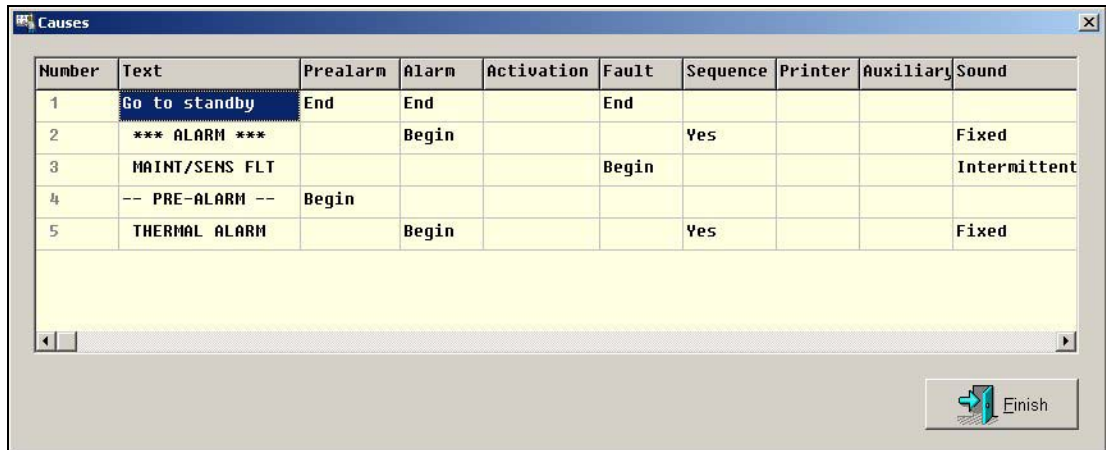


Number	Name	Generator	Causes
11	Master		7
12	Suction		18
13	Power Sup.		9
21	Bells	Outputs	6
22	Sirens	Outputs	6
23	Fire door	Outputs	6
24	Flow sw.	Inputs	3
25	Floodgates	Inputs	3

It allows the name of the risks to be modified, showing the generator risk in the event of being a simulated risk and the number of causes associated with each risk, it being possible to access the edition window.

3.2.3.4 Edit causes.

To edit the causes of a risk, we should select a risk and access the option "edit risk". A window opens that shows the causes associated with this risk.



Number	Text	Prealarm	Alarm	Activation	Fault	Sequence	Printer	Auxiliary	Sound
1	Go to standby	End	End		End				
2	*** ALARM ***		Begin			Yes			Fixed
3	MAINT/SENS FLT				Begin				Intermittent
4	-- PRE-ALARM --	Begin							
5	THERMAL ALARM		Begin			Yes			Fixed

👁 The modification of the causes can produce malfunctioning of the Panel and impede compliance with the EN 54-2 standard.

Here the actions to take in the panel are decided when a cause is received from a point associated with this risk, the status which the point should adopt, and therefore the zone with which it is associated.

Each point should be in one of the following states:

- Pre-alarm.
- Alarm.
- Activation. Similar to Alarm, but it does not put the Panel in alarm state. Only to be used for the exits.
- Fault.
- Standby If in none of the above.

The fields and states that we can edit are the following (to change the state press "Enter"):

- | | | |
|---------------|-------------------------|---|
| - Text. | | Text describing the cause with 16 characters. |
| - Pre-alarm. | Start/End/Null | Change of the point to prealarm state. |
| - Alarm. | Start/End/Null | Change of the point to alarm state. |
| - Activation. | Start/End/Null | Change of the point to activation state. |
| - Fault. | Start/End/Null | Change of the point to fault state. |
| - Sequence. | YES/Null | Activation of the operation sequence associated with the zone of the point. |
| - Printer. | YES/Null | Send the cause to the printer. |
| - Auxiliary. | Yes/Null | Reserved, not used. |
| - Sound. | Fixed/Intermittent/Null | Operating mode of the sounder. |

The "Null" state does not cause any change.

It should be assured that a correct transition takes place between the states, assuring that the point can reach the standby condition.

3.2.4 Plans.

It shows the structure window of the facility. It is only used in the Control Position personalisations.



With the right button of the mouse the menu is shown that will allow native risks drawings to be added and edited.



3.3 REPORTS.

Each option of this menu produces a report and sends it to a display window, from which we will be able to inspect it and, if we wish, print it.

To be possible to produce, most of the reports require the personalisation data to have been successfully verified beforehand.

According to their extent, the reports can be of two types:

3.3.1 Installation.

The information reported includes elements from the whole installation.



3.3.1.1 Equipment.

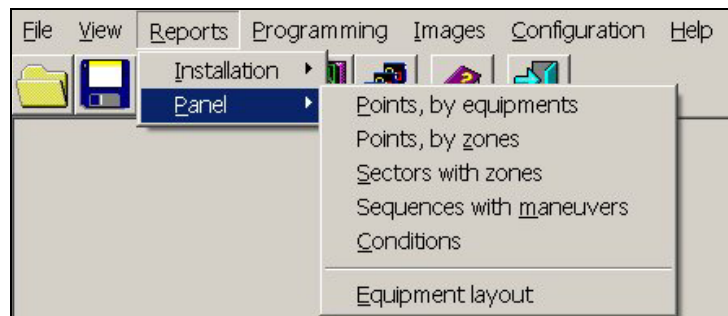
It shows a report on the screen of the items that constitute the installation, of all the Detection Panels.

3.3.1.2 Sequences.

It shows a report on the screen of the operation sequences defined in the installation, with the operations that each sequence performs, for all the Detection Panels of the installation.

3.3.2 Panel.

The information reported includes elements of an analogic panel of the installation. If there is more than one panel in the installation, we will have to select one of them in a window when issuing a report of this type.



3.3.2.1 Points, by equipment.

It shows a report on the screen of the points organized by the items of equipment that constitute the installation, within the Panel selected.

3.3.2.2 Points, by zones.

It shows a report on the screen of the points organized by the zones that constitute the installation, within the Detection Panel selected.

3.3.2.3 Sectors with zones.

It shows a report on the screen of the sectors that constitute the installation with detail of the zones that are connected with each sector, within the Panel selected.

3.3.2.4 Sequences with maneuvers.

It shows a report on the screen of the operation sequences defined in the installation, with the maneuvers that each sequence performs, for the Panel selected.

3.3.2.5 Conditions.

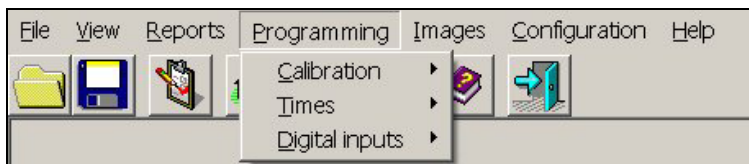
It shows a report on the screen of the tripping conditions of maneuver sequences defined in the installation, with detail of the sub-conditions defined for the Panel selected.

3.3.2.6 Equipment Layout.

It shows a report on the screen of the distribution of equipment in the installation, organized by channels and equipment type, for the Panel selected.

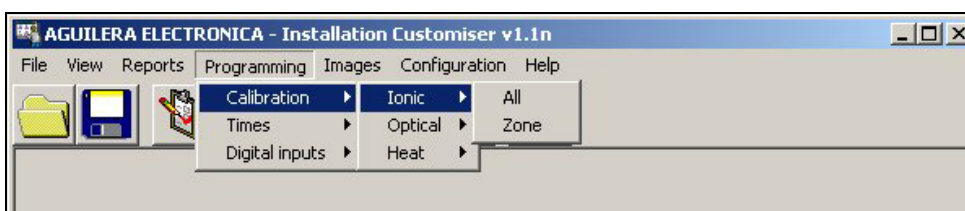
3.4 PROGRAMMING.

The options of this menu allow operations to be carried out on groups of points in the installation.



3.4.1 Calibration.

It allows the levels of the analogical detectors of the installation to be programmed, according to type:



3.4.1.1 Ionic.

Ionic detectors (all or only those of a zone).

3.4.1.2 Optical.

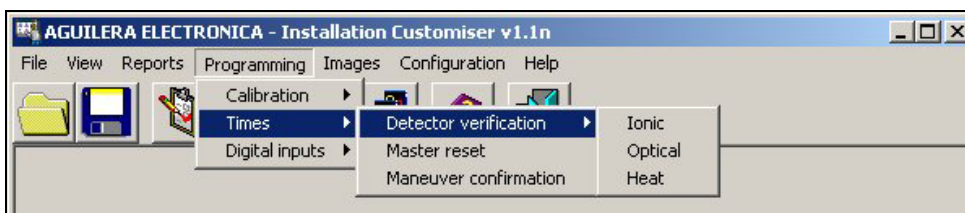
Optical detectors (all or only those of a zone).

3.4.1.3 Heat.

Heat detectors (all or only those of a zone).

3.4.2 Times.

It allows the following parameters to be configured:



3.4.2.1 Detector verification.

Verification time of the ionic, optical or heat detectors.

3.4.2.2 Master reset.

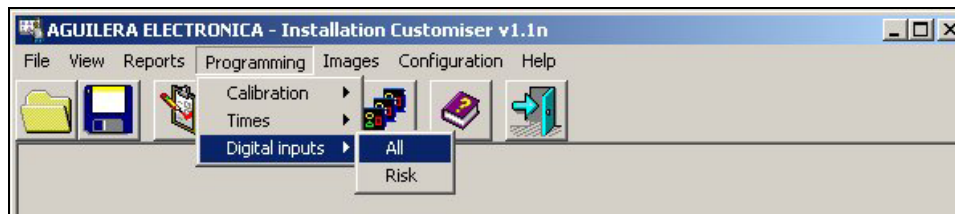
Master resetting time.

3.4.2.3 Maneuver confirmation.

Confirmation time of operation in check maneuvers.

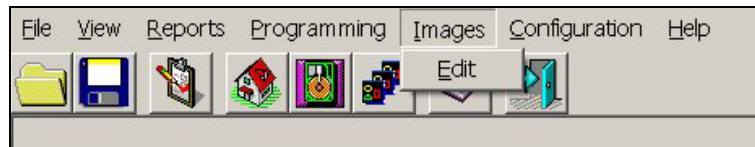
3.4.3 Digital inputs.

It allows the type of contact to be defined for the input points of the whole installation, or of a risk.



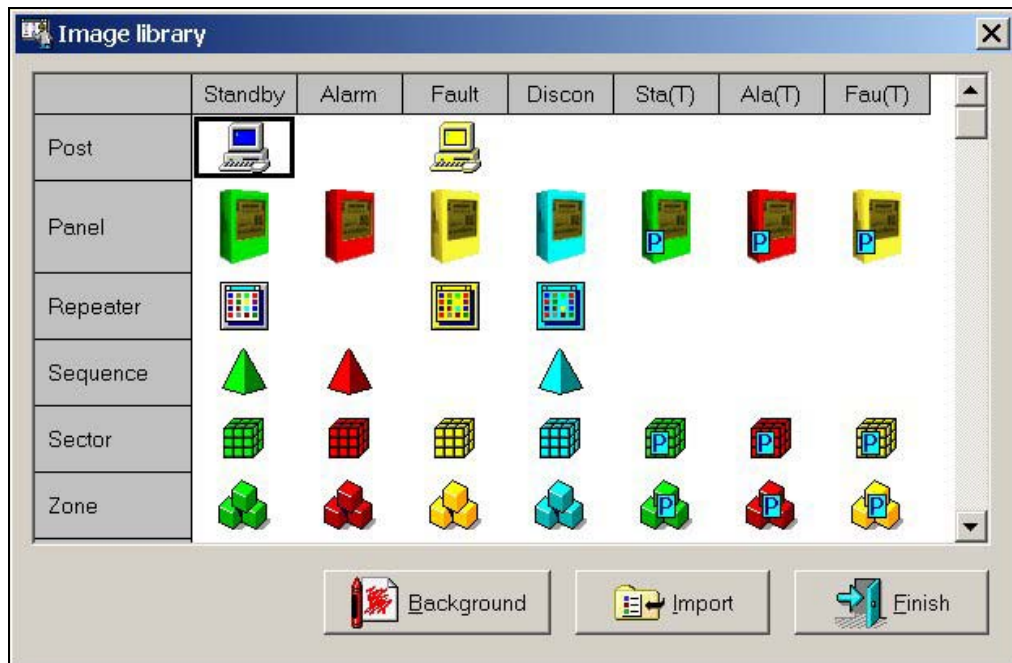
3.5 IMAGES.

This option will only be available if we have previously defined a drawing in the Drawings Window, for facilities that have a Control Position.



3.5.1 Edit.

The image editor allows the images used to represent the active elements in the drawings to be seen and modified.



It is a modal dialogue, in which the images are presented arranged in rows and columns. Each **row** represents one type of element. There are 47:

- Row 1: Control position.
- Row 2: Panel.
- Row 3: Repeater.
- Row 4: Sequence.
- Row 5: Sector.
- Row 6: Zone.
- Row 7: Drawing.
- 40 remaining rows: Risk points 1.. 40.

Each **column** represents the state of an element. There are 7 possible states:

- Column 1: Standby.
- Column 2: Alarm.
- Column 3: Fault.
- Column 4: Disconnected.

- Column 5: Standby, under test.
- Column 6: Alarm, under test.
- Column 7: Fault, under test.

The intersection between a row and a column defines a **cell**, which contains the image used to represent an element in a defined state.

If an animated icon is used with several images to represent the element in this state, the cell will contain the first photograph thereof.

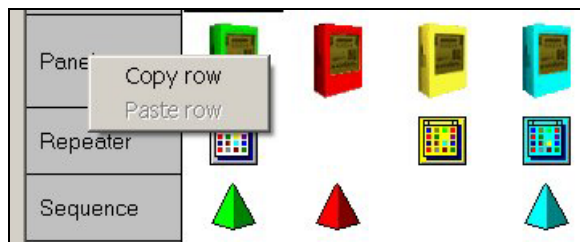
One of the cells will appear with a frame inside, and it is said that it is **selected**. To select a cell, the cursor movement keys can be used or you can click it with the left button of the mouse.

Some cells, even although they are selectable, do not represent valid combinations of element and state: for example, a repeater in alarm or a sequence in fault. Although they are managed and processed like the rest of the cells, the image contained in them will be ignored since it will never have to be used in any drawing.

The most usual way of interacting with the images is by means of the context menus, which are dropped down on pressing the right button of the mouse on a cell.

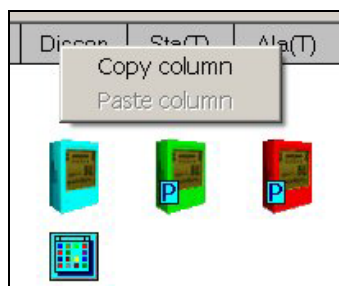
There are 3 types of contextual menu, depending on the cell type that deploys them:

- Context menu for the cells of column 0.



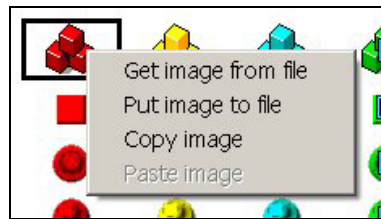
- o **Copy row.** It copies all the images from the row to the editor's clipboard. It does not produce changes in the data.
- o **Paste row.** It recovers all the previously "copied" images on the row, if any.

- Context menu for the cells of row 0.



- o **Copy column.** It copies all the images from the column to the editor's clipboard. It does not produce changes in the data.
- o **Paste column.** It recovers all the previously "copied" images on the column, if any.

- Context menu for the remaining cells:



- **Edit.** A dialogue is opened that allows the image (or series of animated images) to be defined that will be used to represent the element/state pair associated with the cell.
- **Copy.** It copies the image from the cell to the editor's clipboard. It does not produce changes in the data.
- **Paste.** It recovers the image on the cell "copied" previously, if any.

Under the area of images (cells), the editor also has the following control buttons:

- **Background colour** button. It opens a dialogue in which we will be able to select a new background colour for the images zone. The new background colour selected is applied immediately to the background of the cells and remains until we select another, even between different sessions with the customizer. This allows us to appreciate the effect of the current images on different colour hues, since the drawings can vary substantially from one installation to another. The effect of this change is purely visual, the personalisation data are not altered. This background colour will also be used in the image definition dialogue.
- **Import** button. It allows an image file (*.lip) to be selected and loads a copy of all its images on the cells. This allows us to easily acquire the images of an already existing installation in ours.
- **Finish** button. It closes the image editor.

3.6 CONFIGURATION.

The customizer allows us to configure some of its parameters through different dialogues.

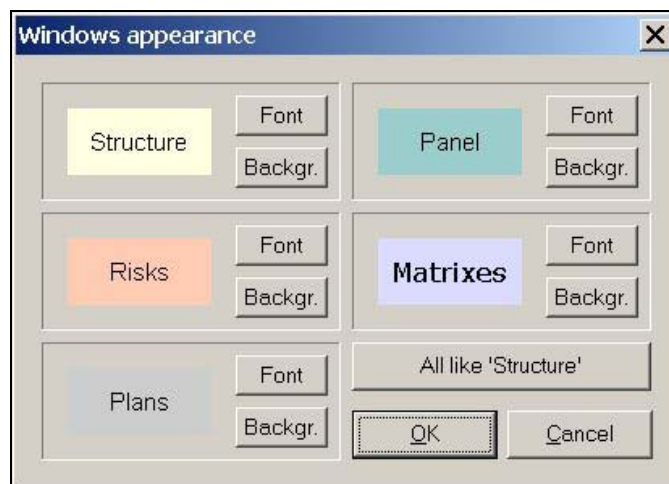


These parameters are not part of the personalisation, i.e.:

- They are independent of the installation that is being personalized.
- Their value is kept between different sessions, until the user modifies them again.

3.6.1 Appearance.

It allows the appearance of the windows to be modified, allowing selection of the background colour and the text source to use.



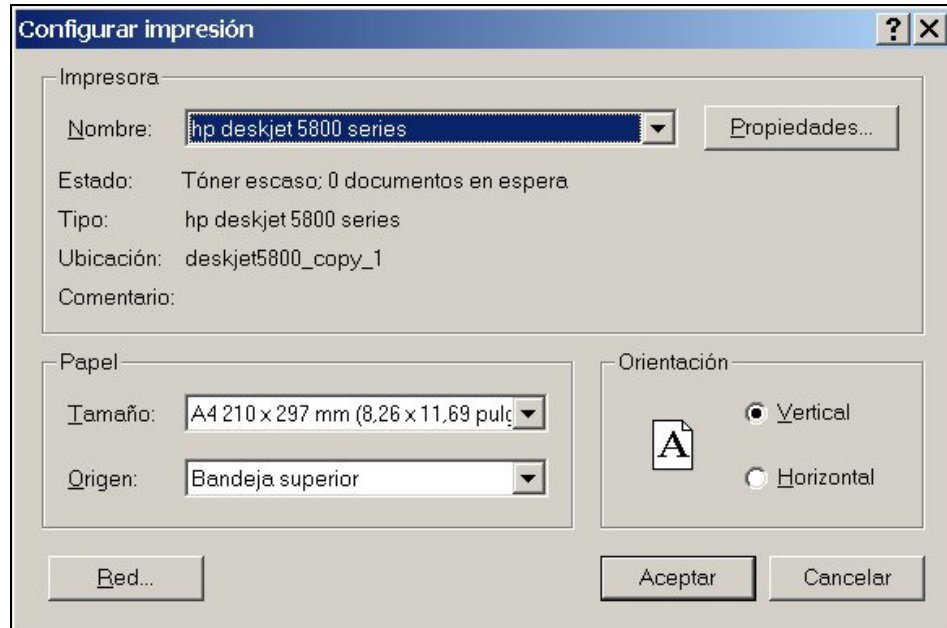
The button **All like "Structure"** facilitates the possibility to give the same appearance to all these windows at the same time. On pressing it, all the windows will acquire the properties we have specified for the structure tree.

The changes carried out in this dialogue will **not** be applied immediately to the windows that are already open, but to those that are opened later. To refresh the appearance of all the windows open, close the session and open it again.

3.6.2 Printer.

A standard Windows dialogue will allow us to select and configure the printer that we want to use to issue the listings. The appearance and functionality of this dialogue will depend on the printers that have been installed in the equipment.

**** IMPORTANT:** Although we are not going to print listings, it is essential to configure a default printer to be able to see the reports on screen.



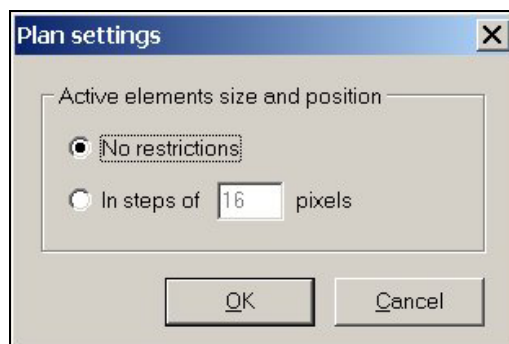
3.6.3 Communications.

This window will allow us to select the communications port that the customizer has to use to communicate with the panel or the remote repeater in the operations of downloading and personalisation acquisition.



3.6.4 Plans.

This dialogue allows definition of whether the active elements of the drawings can be displaced to any position or resized to any size, or if on the contrary, these two operations have to be restricted to discrete positions and sizes, multiples of a certain user-specified value.

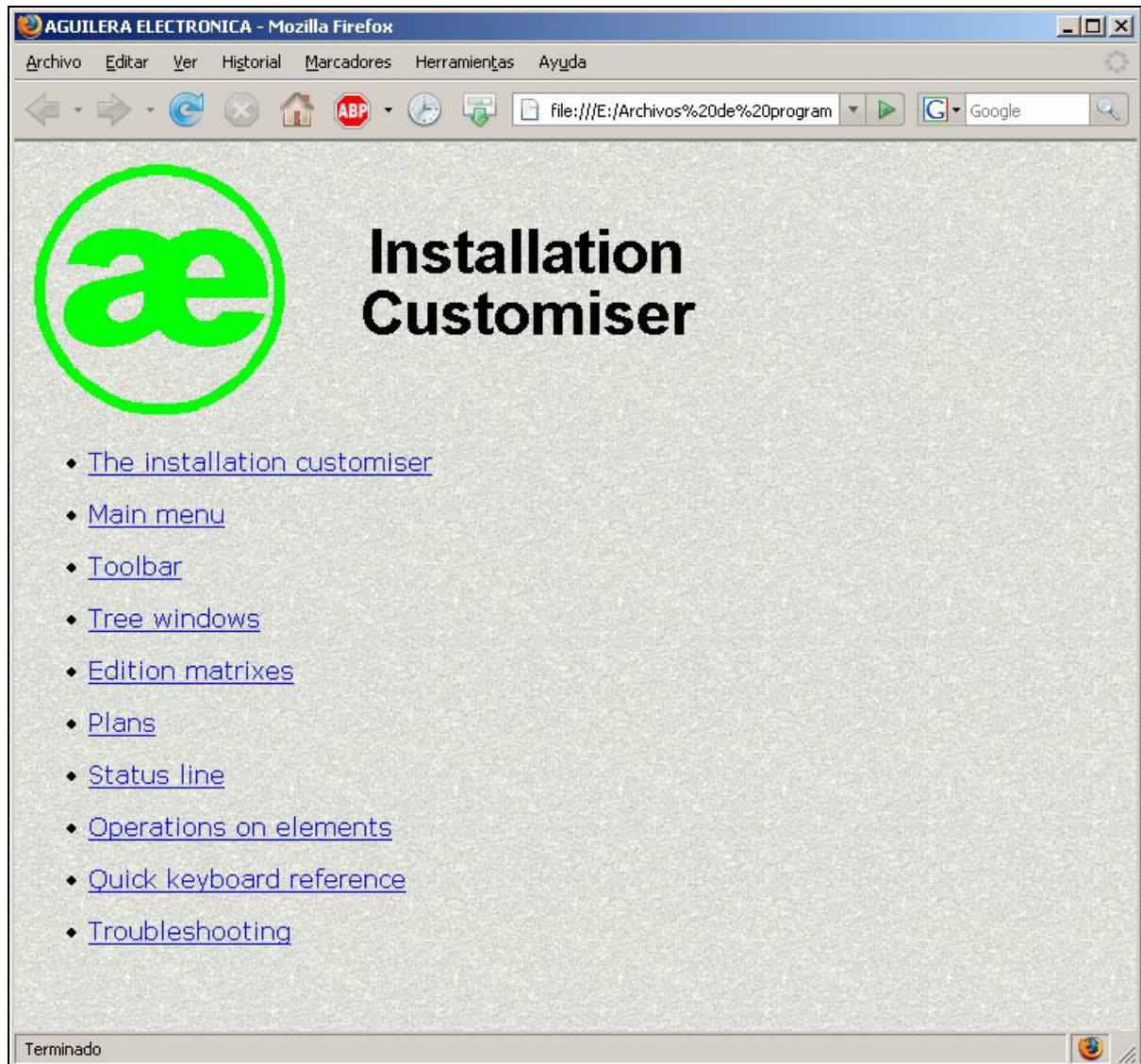


3.7 HELP.

3.7.1 Content.

Open the help section in the main contents page.

Open the help section of the Facilities Customizer, using the Internet Explorer or another browser we have installed, on the main contents page.



3.7.2 About the customizer.

It shows an informative dialogue with details of the application and Aguilera Electrónica: Name of the program, version, Web address, etc.

4 CREATING A PERSONALISATION OF AN INSTALLATION.

To create a personalisation of an installation it is necessary to be clear about some concepts that are new in this Detection Panel which adapt to the EN 54-2 standard and vary regarding the operation of other Panels used up to now.

The installation is divided into:

- Equipment Each of the devices that can be connected on each of the channels of the Algorithmic Panel, and occupy an address in the channel, within the range 1 to 125.
- Channels. Detection circuits to which the equipment can be connected. The panels can have from 2 to 8 channels, according to the model.

Points. Each of the different signals that can be emitted or received by an item of equipment in the Panel. There are units with 1, 2 or 32 points.

- Zones. Geographical subdivision of the premises protected in which one or more call points are installed and through which a common zone indication is provided.
- Sectors. Geographical subdivision of zones inside the building to be protected.
- Risk. Group of points with the same operating characteristics, although they belong to different types of equipment.

It must be remembered that the indication of the incidents is carried out by zones, independently of the points that are associated with said zone.

To be able to carry out the personalisation it is necessary to have the following information:

- Number of Panels and repeaters.
- Number of Channels per Panel.
- Number of items per channel.
- Sectors into which the installation is divided. Descriptive text of each sector.
- Zones into which the installation is divided. Descriptive text of each zone.
- Association of points with the zones.
- Operations to carry out and manual and/or automatic operation.
- Sequences of operations and outputs on which they act.

In some cases it will be necessary to modify the associations of zones and sectors, in order to be able to execute the operation sequences in terms in the desired operating mode.

4.1 CREATING AN INSTALLATION STRUCTURE.

To start creating a personalisation of the installation, it is first necessary to define its structure, even although it only comprises one Panel.

This is important to be clear about this, since if we receive the personalisation of a Panel or repeater, we will only have the file of the Panel, not the structure, and it will be necessary to create it to be able to use it.

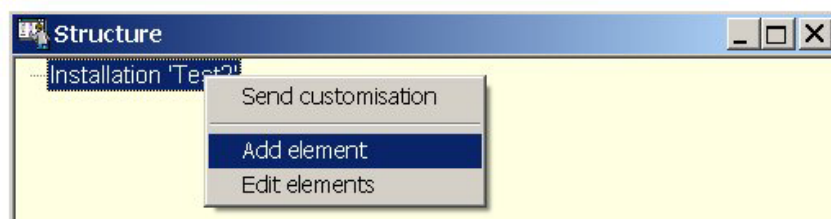
We open the customizer program of AGE42 facilities, and we select the File option on the menu bar. A drop-down menu opens, where we will select New/Open.



A file is created with the name we indicate, which will be saved with the extension "ist".

Once defined, the window of the installation structure opens.

From now on we will work in this window. By pressing the right button of the mouse, a drop-down menu appears, with the available options. We select Add element.



A window is shown with the types of element that can be added to the structure of the installation. This window also appears by pressing the key "Insert".



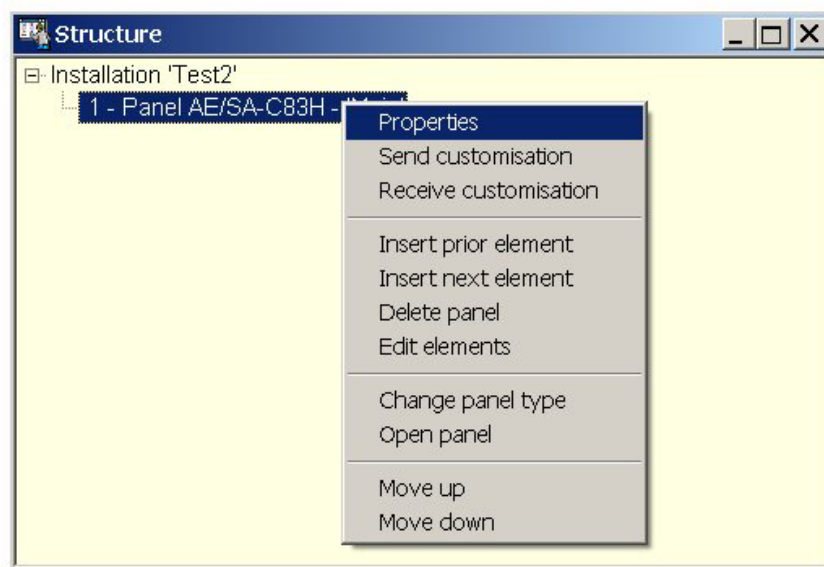
Once the type of element to add has been selected, it must be given a name to identify the file.



The element that we have added appears in the structure window, although in the descriptive text only the first 10 characters appear.



This process has to be repeated as many times as there are elements we want to add to the installation structure. Using the right button of the mouse a drop-down menu is shown, with the actions we can carry out on the selected element.

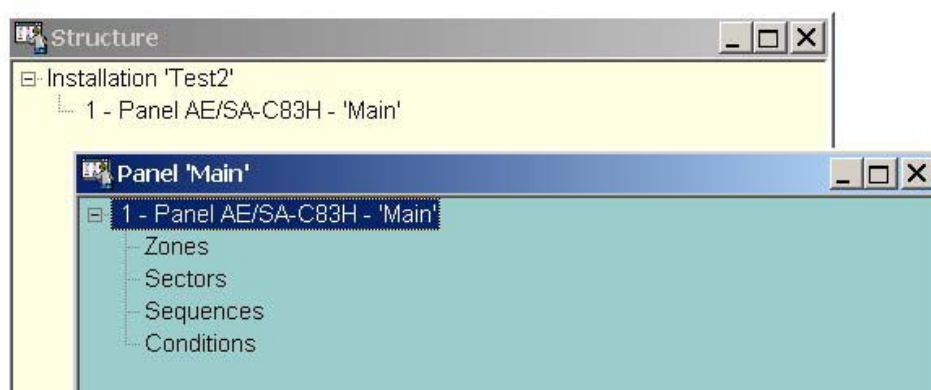


The Properties section allows a number of Panel configuration parameters to be changed. With the option "Change panel type" we can modify the type of Panel selected, but with the following restrictions:

- AE/SA-C2 to AE/SA-C8.
- AE/SA-C23H to AE/SA-C83H.

The reverse process can be only carried out if the number of loops defined in the panels so allows.

To begin to program the personalisation of a Panel, we select the option "Open panel", and a new window corresponding to the Panel selected opens.



From now on we work in this new window.

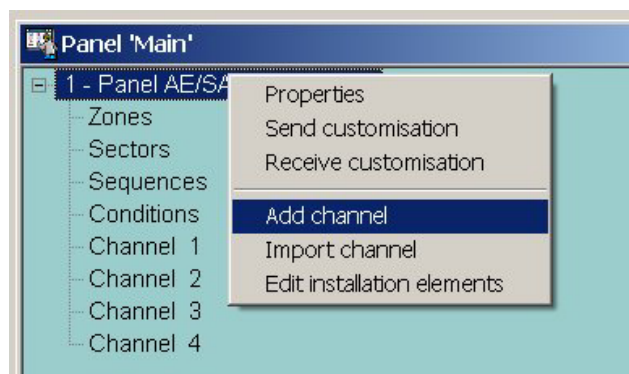
4.2 PERSONALISATION OF THE PANEL.

To personalize the Panel, it is first necessary to indicate the channels that comprise the installation and the equipment connected on each channel.

By locating the pointer over the Panel, we extract the drop-down menu with the right button of the mouse, with the options available.

4.2.1 Add channels.

In the drop-down menu, we select the Add channel option. The newly created channels will progressively appear in the structure tree of the Panel.



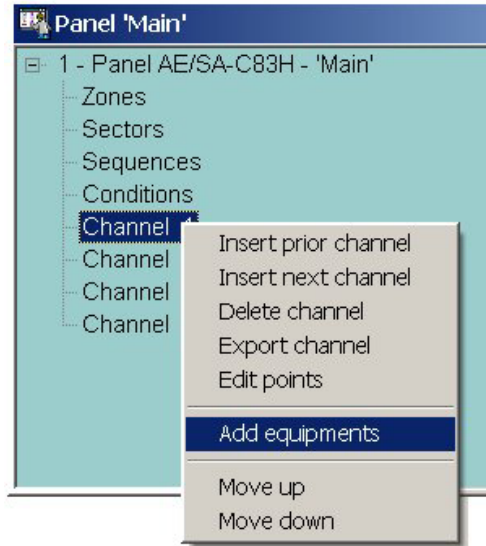
This operation will be repeated as many times as there are channels we want to create.

4.2.2 Import channels.

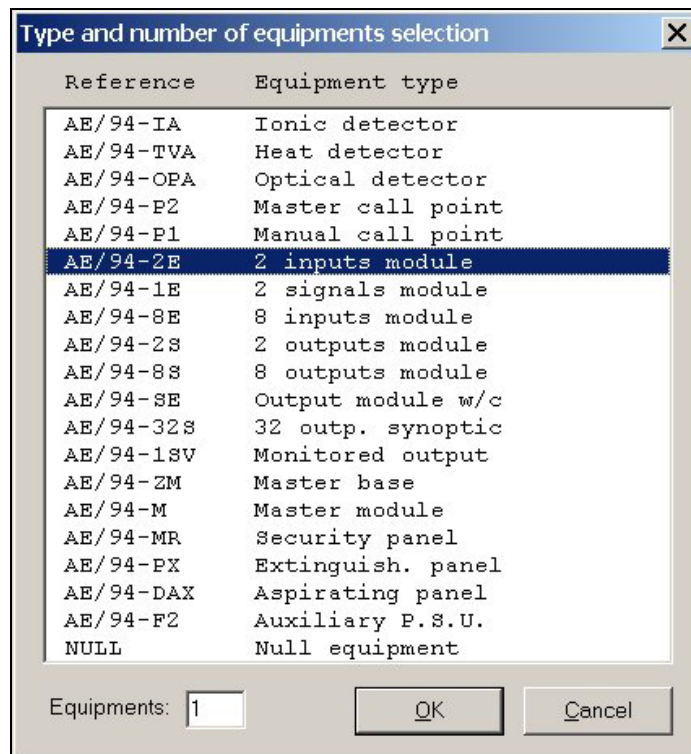
In the drop-down menu, we select the Import channel option, and add a Channel to the Panel that had been exported previously with the AGE41 Start-up program.

4.2.3 Add equipment on the channel.

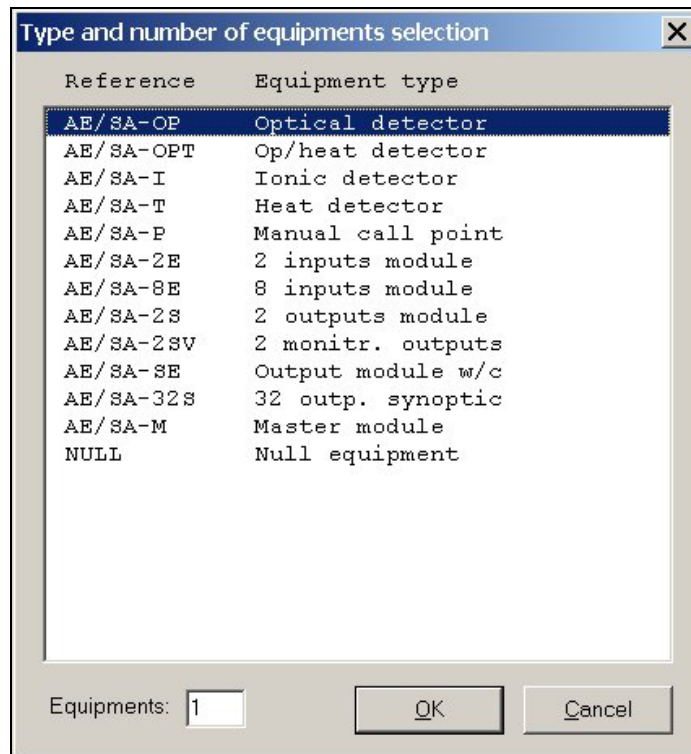
To add equipment to a channel, we select it with the mouse pointer and, with the right button, we deploy the drop-down menu, where we select the option "Add equipment".



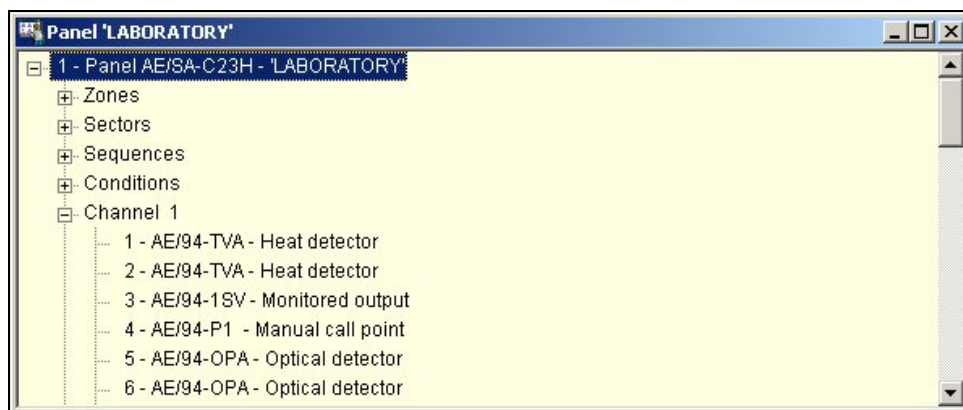
A new window opens where we select the type and number of units of equipment to insert.



The units will be added to the loop in the order in which they are selected, it being permitted to add units of different types in a single operation.

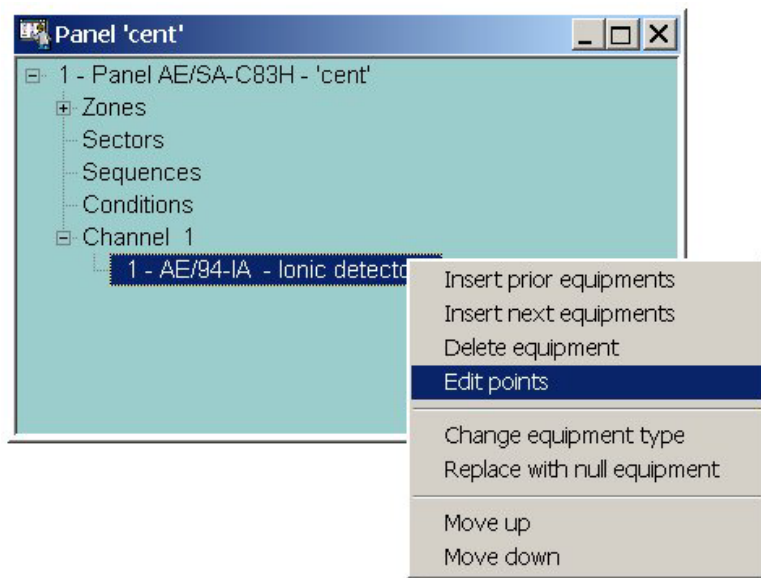


The types of equipment available will depend on the type of Panel, and on the type of wiring: 2-wire or 3-wire.



By locating the pointer of the mouse over the units, we extract the drop-down menu with the right button, with the options available.

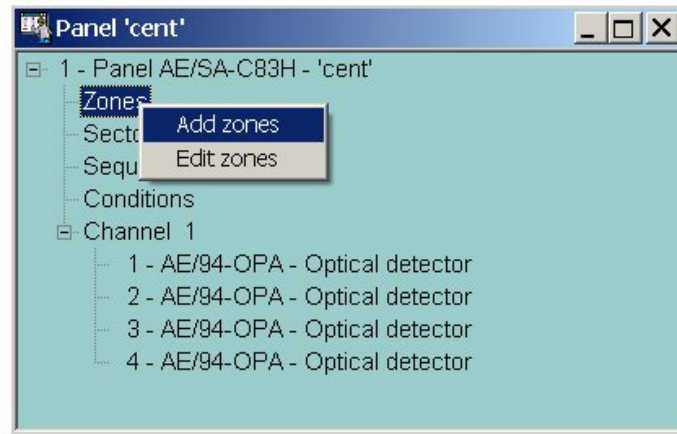
We can add units before or after the position of the cursor, delete units, edit them, change the type of unit or replace them with nulls.



The editing of the points will be seen later, since it is first necessary to define the zones and the sectors.

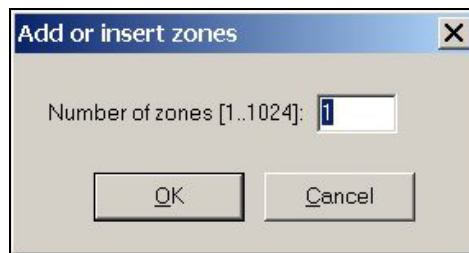
4.3 DEFINITION OF ZONES ON THE PANEL.

To add zones, we locate the cursor in "Zones", and with the right button we deploy the menu, and use the options Add zones, Edit zones and Assign points.



4.3.1 Add zones.

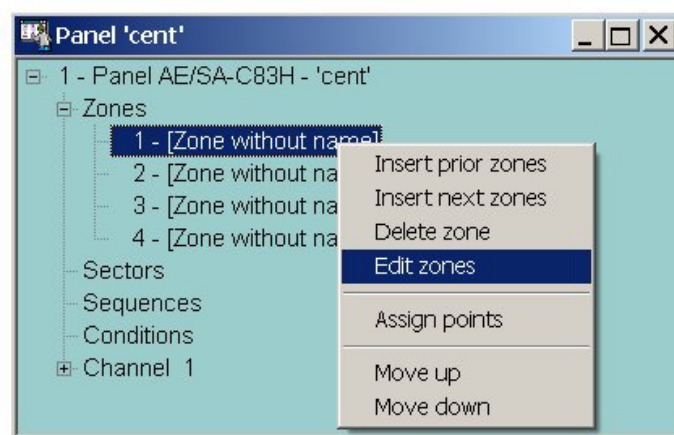
By selecting the option Add zones, we are shown a window where we indicate the number of zones to add.

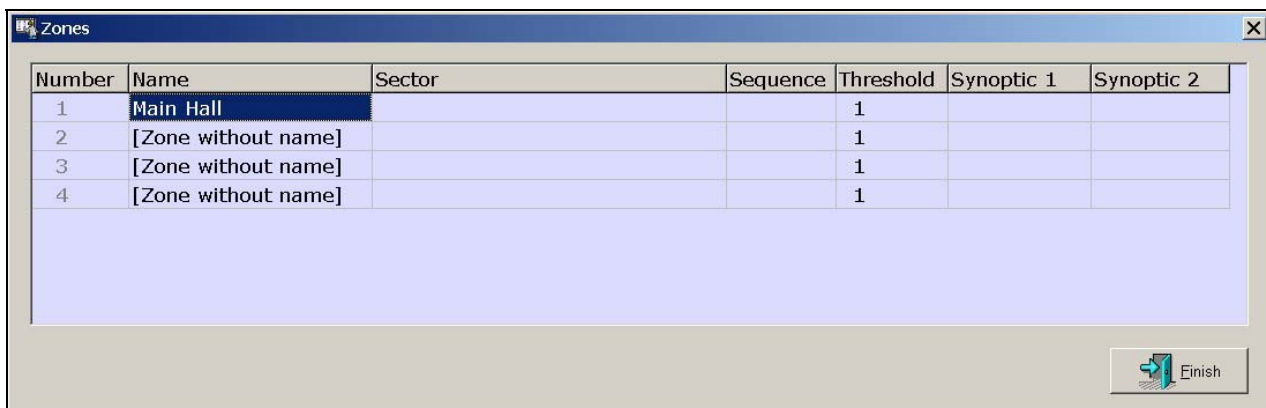


The definition of zones is common for the whole Panel.

4.3.2 Editing zones.

We can reach the zone editing menu through the menu shown in the zones field, like as already seen, or with the right button of the mouse by locating the cursor on one of the zones.





Number	Name	Sector	Sequence	Threshold	Synoptic 1	Synoptic 2
1	Main Hall			1		
2	[Zone without name]			1		
3	[Zone without name]			1		
4	[Zone without name]			1		

On selecting it, a new window opens with an editing matrix, where we can modify the following fields:

- Name. Text describing the zone with 32 characters. The uppercase and lowercase are admitted.
- Sector. Sector with which the zone is associated. It should be defined previously.
- Sequence. Sequence of operations it performs. It should be defined previously.
- Threshold. Number of points associated with the zone that should be in alarm simultaneously in order to proceed to the performance of the sequence of operations associated with the zone.
- Synoptic 1. Synoptic output associated with the zone.
- Synoptic 2. Synoptic output associated with the zone.
- Sounder. Activates the sounders of all the detectors in the zone at the same time.

The operating mode of the synoptic panels is defined in "Properties of the panel".

4.3.3 Delete zones without points.

It deletes all the zones that have no associated point of the installation, displacing the subsequent zones upwards, if any.

The displaced zones take the following number in correlative order.

4.3.4 Allocation of points to the zones.

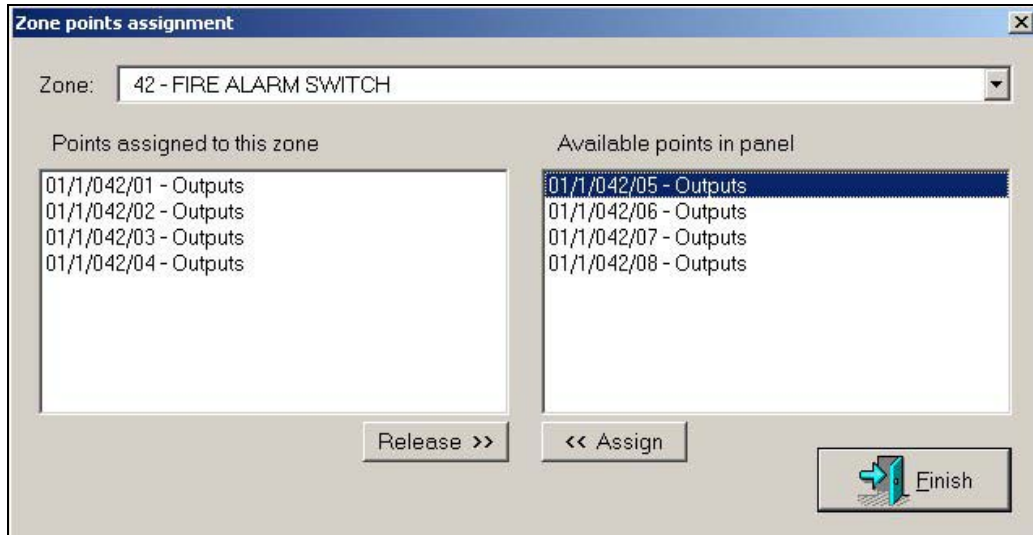
By selecting the option Assign points, a window opens that allows us to assign and release points of the installation to the selected zone.

It is only necessary to select the available points of the Panel, in the window on the right, and send them to the window on the left, by clicking the button "Send", where the points are shown that are already associated with this zone.

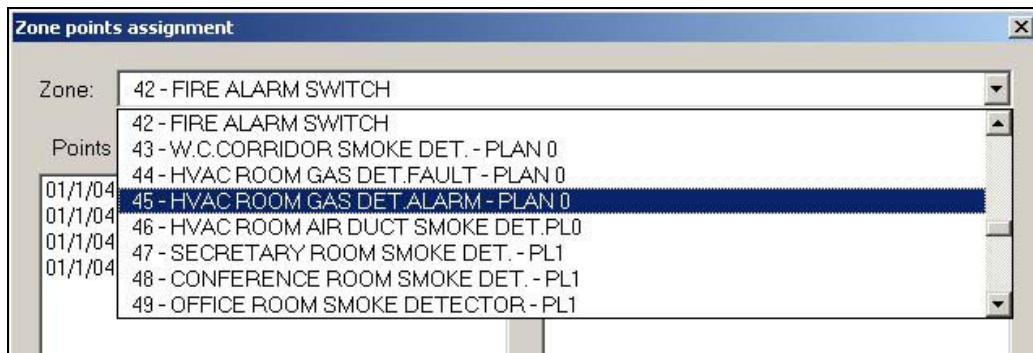
If we want to release some associated point, we select the point in the window on the left and send it to the window on the right, by clicking the button "Release".

The selection of points allows the keys "Control" and "Alt", so:

- By maintaining "Control" pressed, we can select different non-consecutive points in the listing, by locating the cursor on the desired point and clicking on the left button of the mouse.
- By pressing "Alt" we select a range of consecutive points on the listing, indicating the start and end of the block with the cursor of the mouse and the left button.

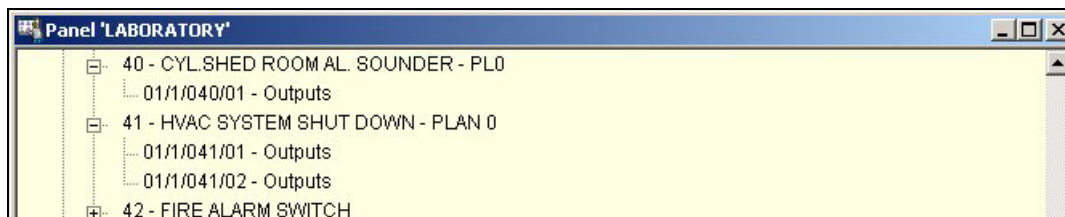


With the Zone drop-down menu, we can change the zone selected to that where we want to assign points.



By clicking "Finish" we exit the option of point allocation to the selected zone.

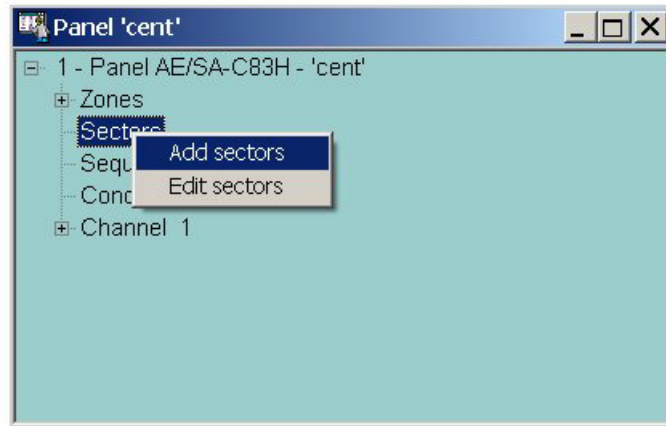
The zones are indicated in the Panel tree that have associated points, and the field can be deployed, showing the associated points.



All the zones of the Panel have to have some point associated, and all the points of the installation have to be assigned to some zone.

4.4 DEFINITION OF SECTORS.

To add sectors, we locate the cursor on "Sectors", and with the right button we deploy the menu, and use the options Add sectors, Edit sectors and Assign zones.



4.4.1 Add sectors.

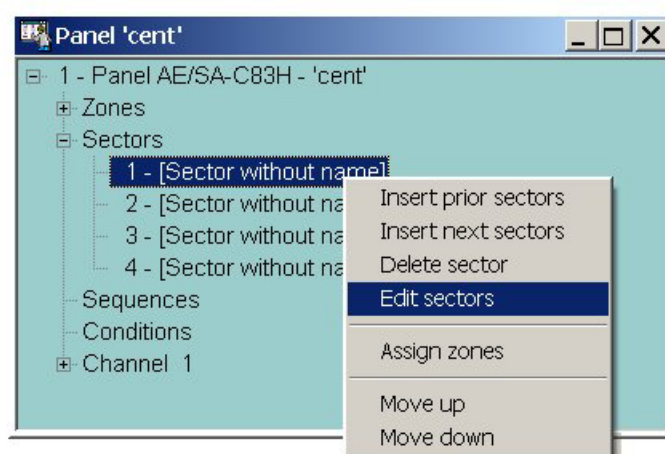
By selecting the option Add sectors, we are shown a window where we indicate the number of sectors to add.



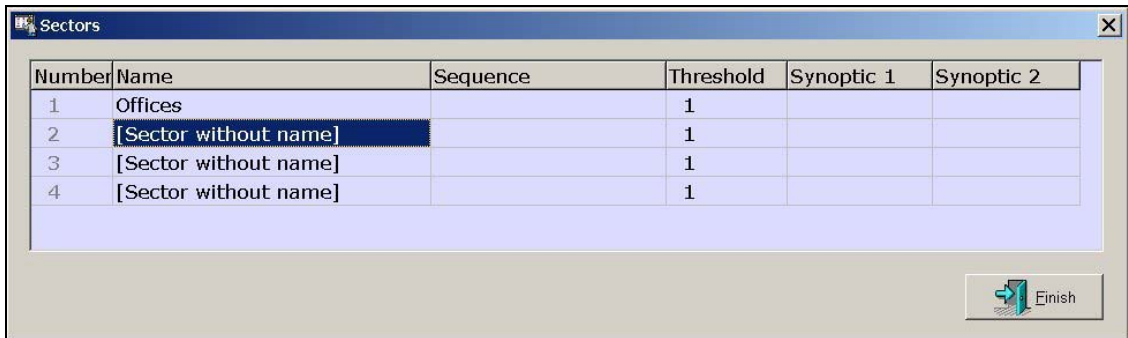
The definition of sectors is common for the whole Panel.

4.4.2 Edit sectors.

We can reach the sector editing menu through the menu shown in the sectors field, as already seen, or with the right button of the mouse by locating the cursor on one of the sectors.



On selecting it, a new window opens with an editing matrix, where we can modify the following fields:



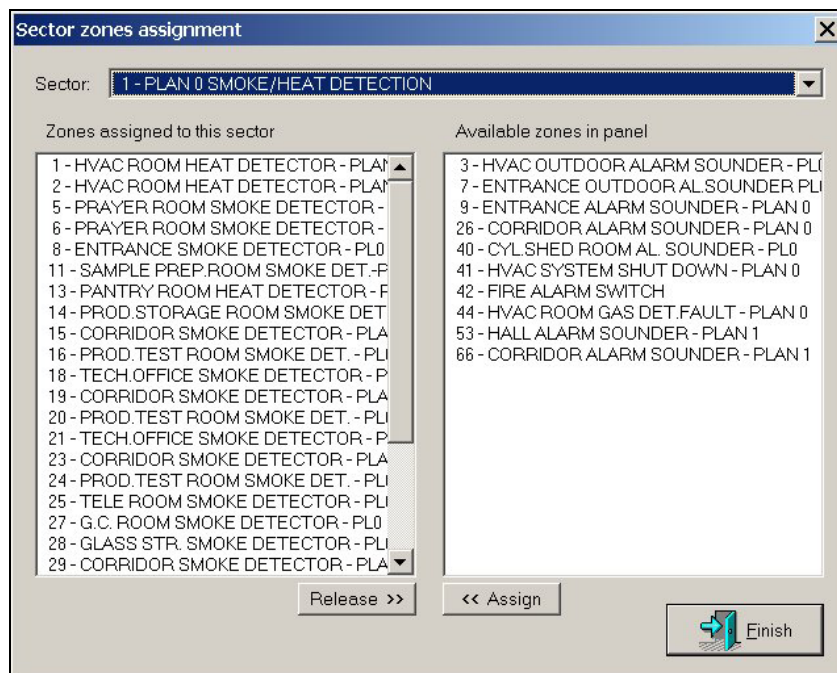
- Name. Text describing the sector with 32 characters. The uppercase and lowercase are admitted.
- Sequence. Sequence of operations it performs.
- Threshold. Number of zones associated with the sector that should be in alarm simultaneously in order to proceed to the performance of the sequence of operations associated with the Zone.
- Synoptic 1. Synoptic output associated with the sector.
- Synoptic 2. Synoptic output associated with the sector.

The operating mode of the synoptic panels is defined in "Properties of the panel".

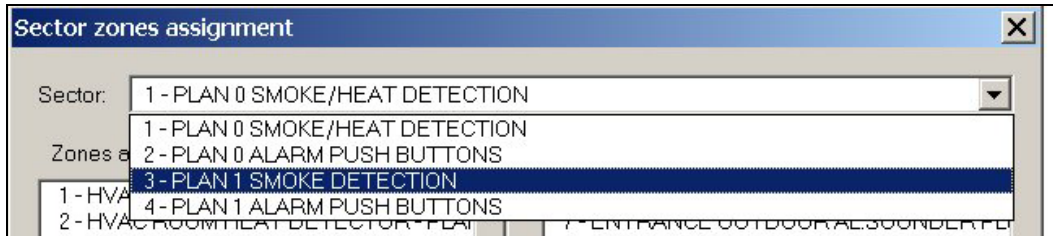
4.4.3 Assignment of zones to the sectors.

By selecting the option Assign zones, a window opens that allows us to assign and release zones of the installation to the selected sector.

The operation is the same as that of assignment of points to the zones.



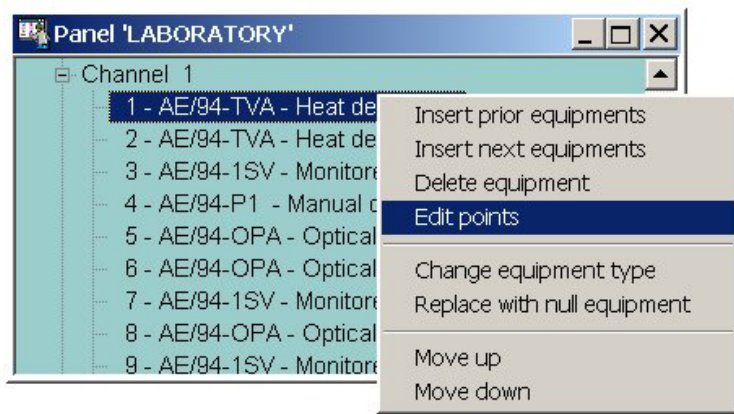
With the Sector drop-down menu, we can change the sector selected to that where we want to assign the zones.



By clicking "Finish" we exit the option of zone allocation.

4.5 EDIT POINTS.

We can access edition from the drop-down menu of the Channel, or from the latter the definition of the equipment in the channel, through the menu options.



On selecting it, a new window opens with an editing matrix, where we can see the following fields, and modify some of them, depending on the risk associated with the point:

Equipm	Reference	Type	Point	Location	Risk	Mode	Zone
1	AE/94-TVA	Heat detector	1	01/1/001/01	3 - Termico	Complete	1 - HVAC ROOM HEAT DETECTO
2	AE/94-TVA	Heat detector	1	01/1/002/01	3 - Termico	Complete	2 - HVAC ROOM HEAT DETECTO
3	AE/94-1SV	Monitored output	1	01/1/003/01	8 - Salidas	Complete	3 - HVAC OUTDOOR ALARM SOL
4	AE/94-P1	Manual call point	1	01/1/004/01	5 - Pulsador	Complete	4 - HVAC ROOM AL. PUSH BUTT
5	AE/94-OPA	Optical detector	1	01/1/005/01	2 - Optico	Complete	5 - PRAYER ROOM SMOKE DETE
6	AE/94-OPA	Optical detector	1	01/1/006/01	2 - Optico	Complete	6 - PRAYER ROOM SMOKE DETE
7	AE/94-1SV	Monitored output	1	01/1/007/01	8 - Salidas	Complete	7 - ENTRANCE OUTDOOR AL.SO

Informative fields:

- Equipment. Identification number of the equipment in the channel. It is the number that it should be coded with.
- Reference. The commercial reference of the item.
- Type. Description of the type of equipment.
- Point. Point number in the equipment. For the synoptic module global reference is made to all the points.
- Location. Indication of the number of Panel, Channel, Equipment and point.

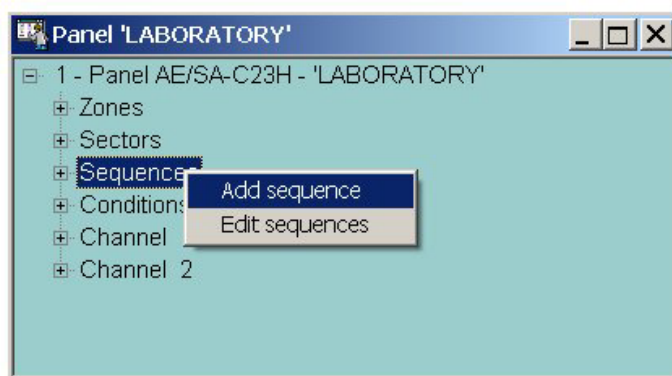
Configurable fields (according to the risk they belong to):

- Risk. Type of risk with which the point is associated. According to the type, it can be replaced by a simulated risk.
- Mode. It indicates the programmed operating mode. It can be:
 - Day.
 - Night.
 - Complete.
 - Not personalized.
- Zone. Zone of the installation with which this point is associated. All the points of the installation should be associated with a zone.
- Sequence. It indicates the sequence of operations that should be executed when the point passes to alarm state. This field is optional, and it is not available for points of output risks exits and synoptic.
- Synoptic 1.
- Synoptic 2.
- Maintenance Level. Maintenance level for analogical and algorithmic detectors.
- Pre-alarm Level. Pre-alarm level for analogical and algorithmic detectors.
- Alarm Level. Alarm level for analogical and algorithmic detectors.
- Time. This field indicates different functions according to the type of equipment:
 - Analogical detectors. Confirmation time of alarm state.
 - Master. Resetting time of the detection loop.
 - Operation module with confirmation. Confirmation time of operation performance.
- Contact. It indicates the standby state of the points connected to digital input modules.

It must be kept in mind that a synoptic output alone can be associated with a point, zone or sector.

4.6 DEFINITION OF SEQUENCES.

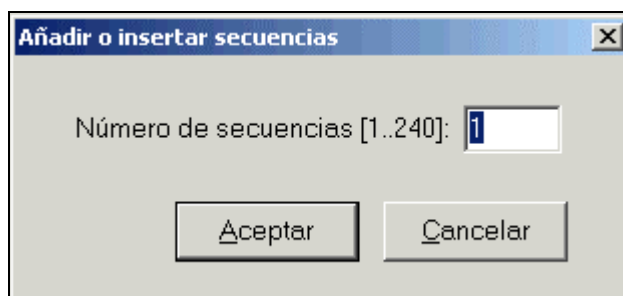
To define sequences, we position the cursor on "Sequences", and with the right button we extract the menu, and use the options Add sequences and Edit sequences.



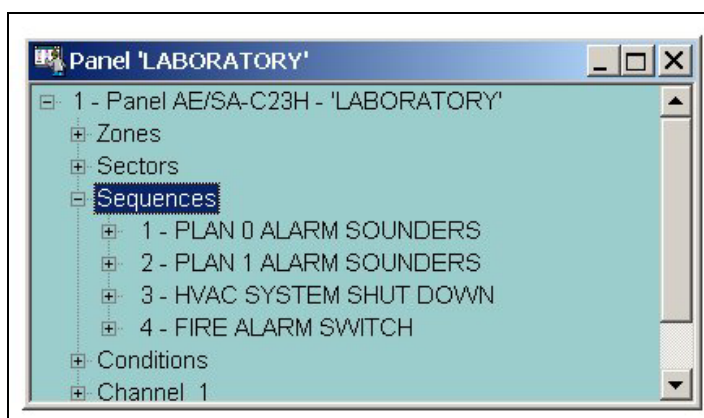
4.6.1 Add Sequences.

We can add a sequence in two different ways:

- By pressing "Insert" with the cursor positioned on "Sequences".
- By selecting the option Add sequence of the drop-down menu, and indicating the number of sequences we want to add.



The sequences created are shown on the structure tree of the Panel.



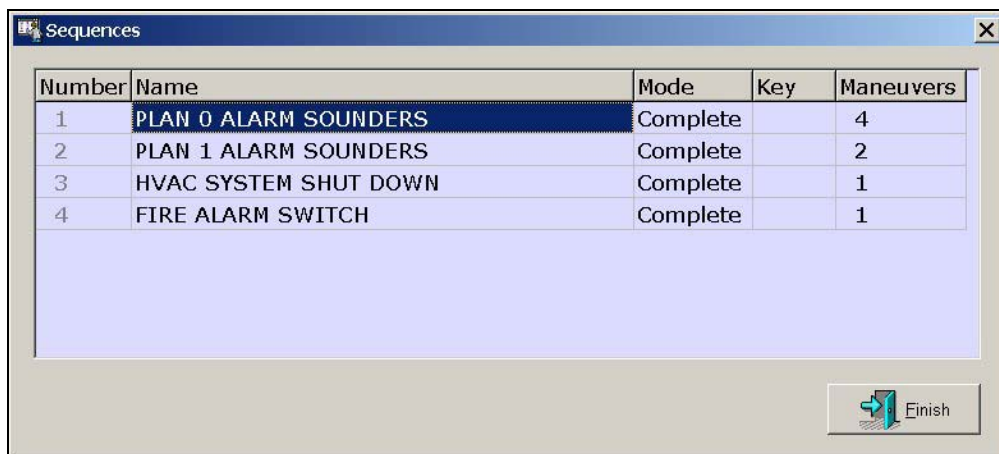
4.6.2 Edit sequences.

The sequences can only be edited from the option "Edit sequence" of the drop-down menu.

On selecting it, a new window opens with an editing matrix, where we can modify the following fields:

- Name. Text describing the sequence with 32 characters. The uppercase and lowercase are admitted.
- Type. It defines the type of treatment that the Panel gives to the performance of the sequences of maneuvers:
 - Alarm. When activated, it causes the activation of the Alarm state in the panel, activating the indicators and outputs of corresponding relays.
 - Operation. When activated, it has no effect on the alarm state of the Panel.
- Mode. Operating mode, which can be: DAY/NIGHT/COMPLETE.
- Key. Key on the front of the Panel that is programmed to activate or restore the sequence in manual mode.

The maneuvers field indicates the number of maneuvers associated with the sequence that will be performed.



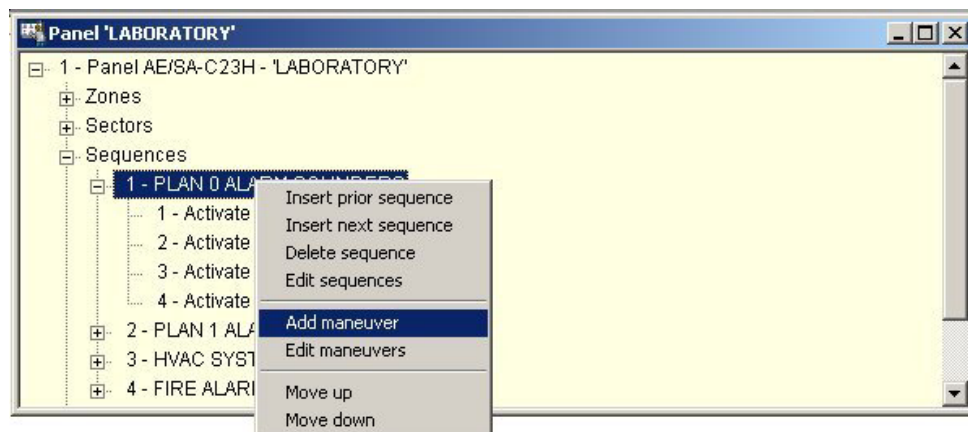
Number	Name	Mode	Key	Maneuvers
1	PLAN 0 ALARM SOUNDERS	Complete		4
2	PLAN 1 ALARM SOUNDERS	Complete		2
3	HVAC SYSTEM SHUT DOWN	Complete		1
4	FIRE ALARM SWITCH	Complete		1

4.6.3 Add maneuvers.

We can add maneuvers to a sequence in two different ways:

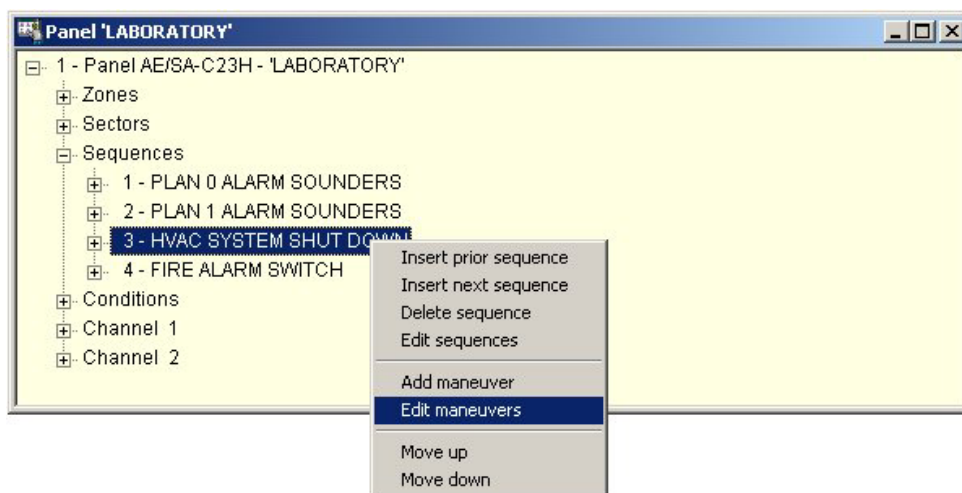
- By pressing "Insert" with the cursor positioned on the sequence to which we wish to add the maneuver.
- By opening the drop-down menu and selecting the option Add operation or Add set of operations.

The maneuvers added are shown on the structure tree of the Panel.



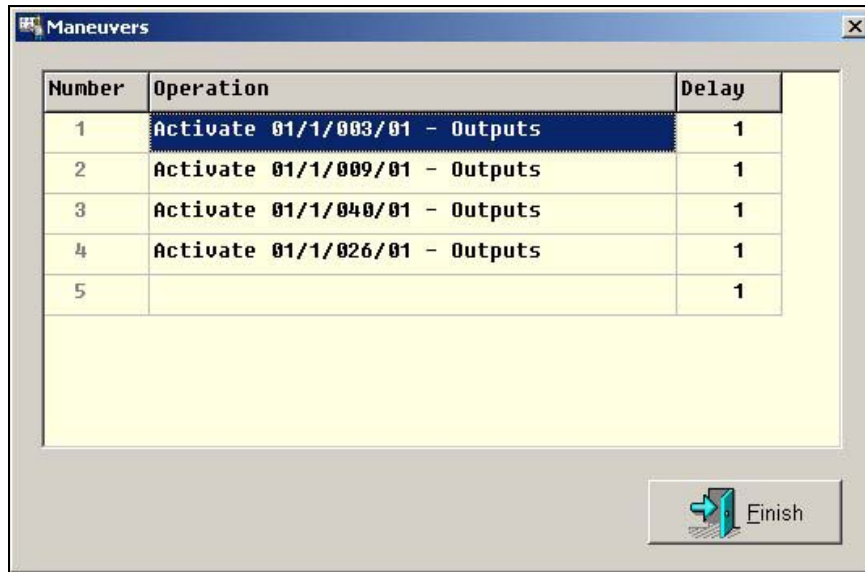
4.6.4 Edit maneuvers.

From the hierarchical structure of the sequence, or by selecting one of the maneuver in the sequence, we can access the edition of the operations.



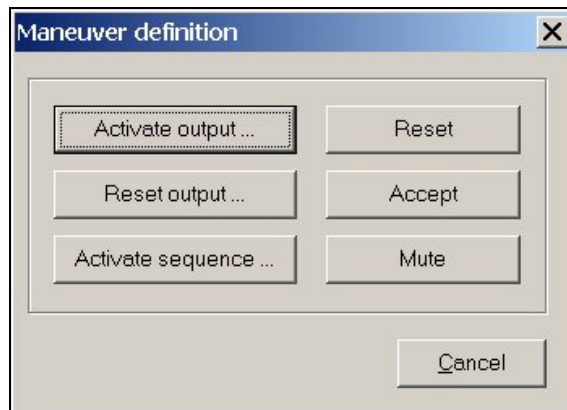
On selecting it, a new window opens with an editing matrix, where we can modify the following fields:

- Operation. Definition of the maneuver to carry out.
- Delay. Time prior to performance of the maneuver in seconds.



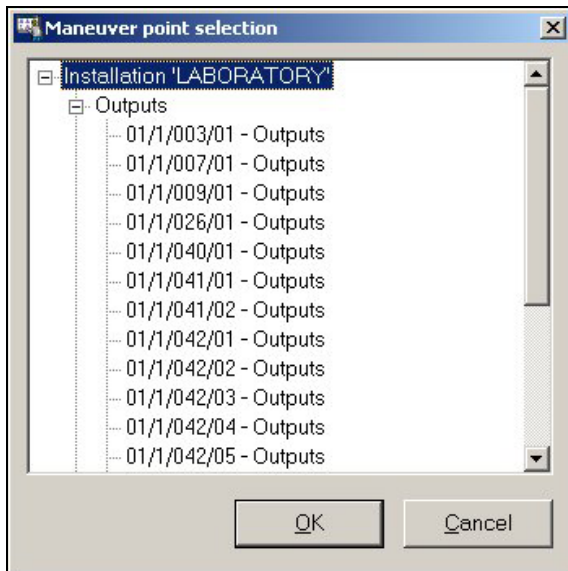
On selecting the Operation field a new window opens where we define the operation to be carried out.

The available options are:



- Activate output. It opens a window for selection of all the output points of the installation. It allows outputs of other Panels of the installation to be activated.
- Reset output. It allows an output to be reset that had been activated previously.
- Trip sequence. It allows the performance of another sequence to begin, being nested.
- Reset sequence. It allows a sequence to be reset that had been activated previously.
- Reset. It performs a local resetting of the Panel, similar to pressing the key on the Panel.
- Accept. It performs a local restoration of outputs on the panel, similar to pressing the key on the panel.
- Mute. It shuts off the panel sounder.

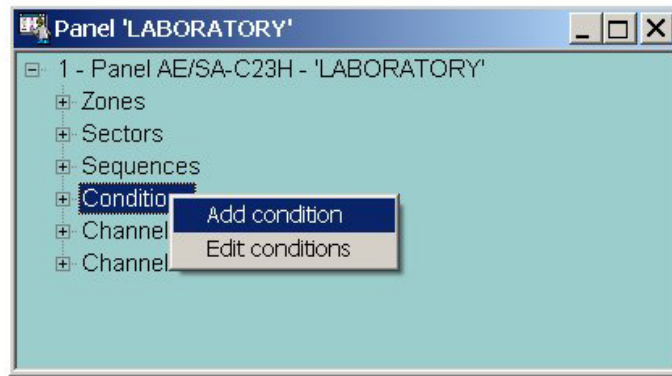
When we select an output to perform an activation or a restoration, a selection window is shown with the output points organized by risks.



It is mandatory to program the Restore and Reset actions as the last action of a sequence, since it also causes the finalizing of all the operation sequences.

4.7 DEFINITION OF TRIGGERING CONDITIONS.

To define sequence triggering conditions, we position the cursor on "Conditions", and with the right button we deploy the menu, and use the options Add condition and Edit conditions.

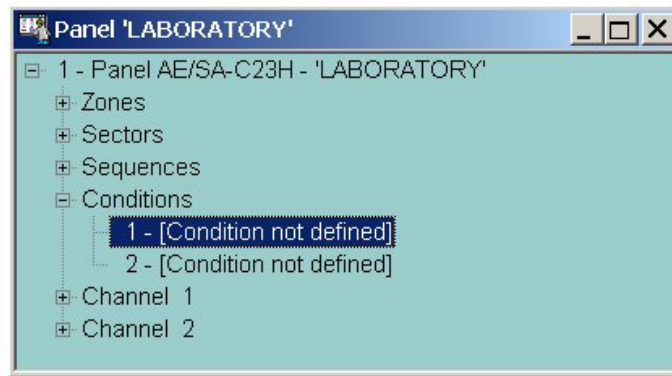


4.7.1 Add Conditions.

We can add a sequence triggering condition in two different ways:

- By pressing "Insert" with the cursor positioned on "Conditions".
- By selecting the option Add condition on the drop-down menu.

The conditions created are shown on the structure tree of the Panel.

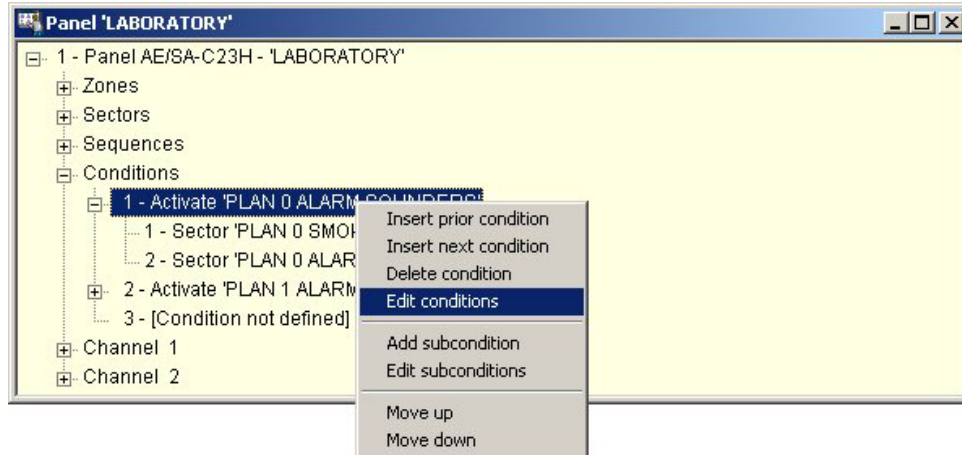


In one personalisation we can program up to 250 triggering conditions.

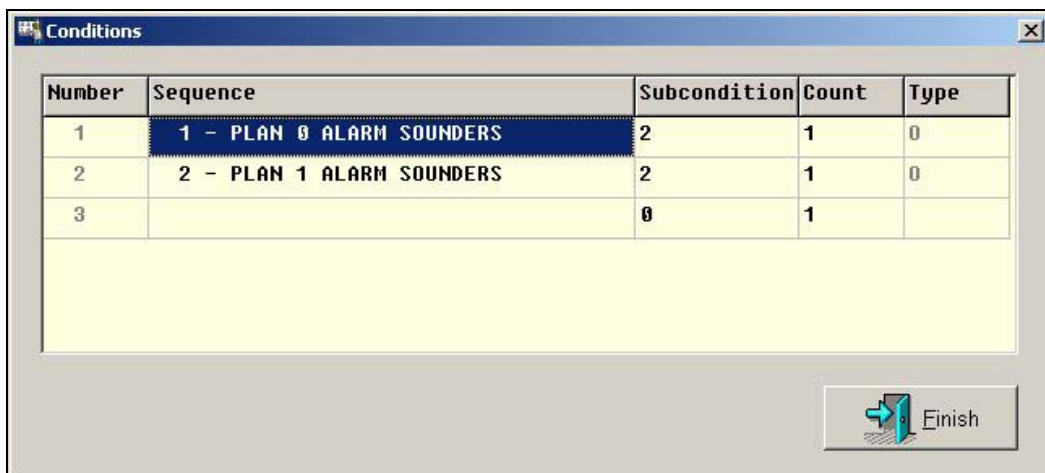
Unlike other elements of the personalisation, the triggering conditions do not have a working mode, nor can they be disconnected, for which reason they are always operative.

4.7.2 Edit Conditions.

The sequence triggering conditions can only be edited from the option "Edit conditions" of the drop-down menu.



On selecting it, a new window opens with an editing matrix, where we can modify the following fields:



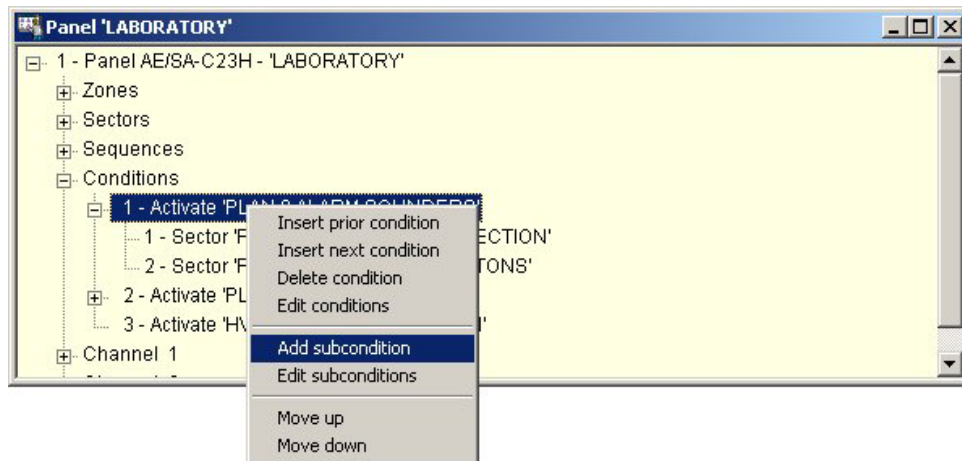
- Sequence. It indicates the sequence that will be run when the condition is fulfilled.
- Subcondition. This is the passing to alarm state of a certain element of the installation. The elements of the personalisation that can define events are:
 - Sectors.
 - Zones.
 - Points.
- Count. It indicates the number of events that must be completed so that the triggering condition is executed. To be able to define the subcondition, the events must be defined previously.
- Type. There are 3 different types, in terms of the number of events that have to be completed.
 - Type "Y" or "AND", for which the triggering condition is satisfied when all the events that form the same are completed. The triggering account should be configured with the number of events that form the condition.

- Type "O" or "OR", for which the triggering condition is satisfied when any one of the events of the same is completed. The triggering account should be configured with '1'.
- Type "multiple OR", it is actually an extension of the single 'OR' type. It executes the sequence when the first 'N' subconditions are completed that form it. The desired number 'N' is the value to configure as triggering account.

Each sequence triggering conditions must contain at least one subcondition and a maximum of 32.

4.7.3 Add subcondition.

To create the events of a triggering condition, we open the drop-down menu and select the option Add subconditions.



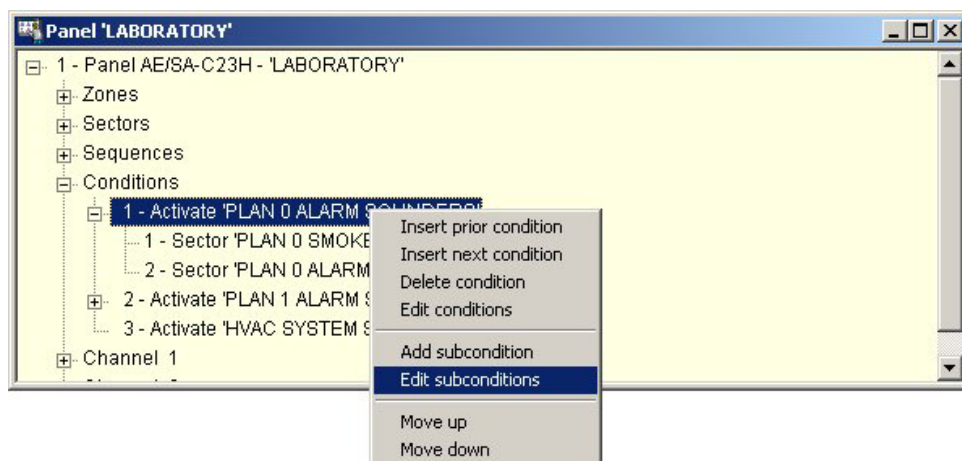
We can add a triggering subcondition in two different ways:

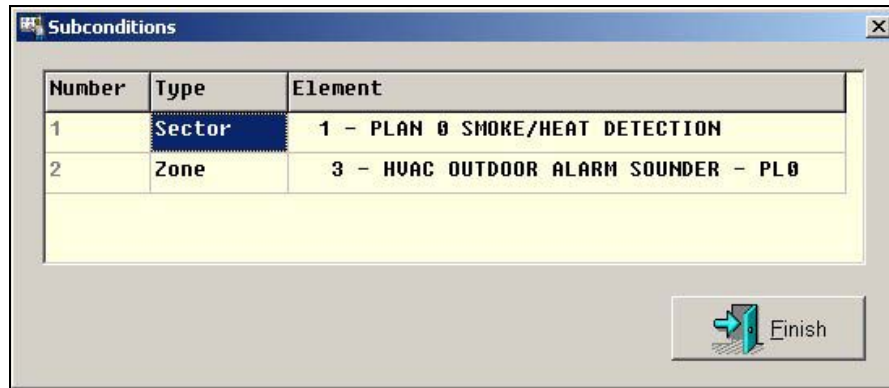
- By pressing "Insert" with the cursor positioned on "Add subconditions".
- By selecting the option Add subcondition on the drop-down menu.

The subconditions created are shown on the structure tree of the Panel.

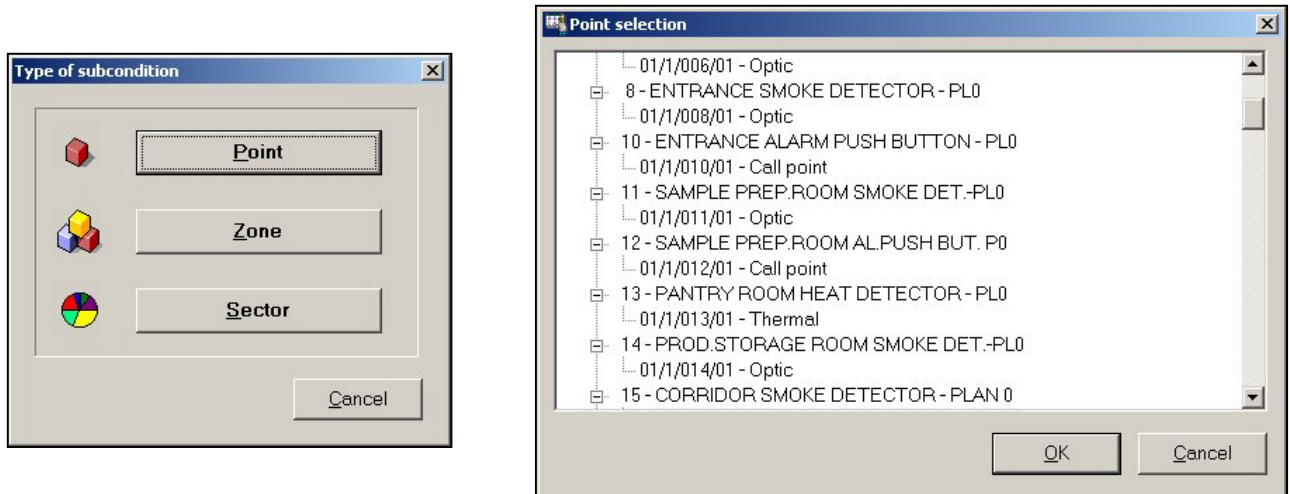
4.7.4 Edit subcondition.

The triggering subconditions can only be edited from the option "Edit subconditions" of the drop-down menu.





A window is shown, where we can select the type of associated element, and the available sectors, zones or points.



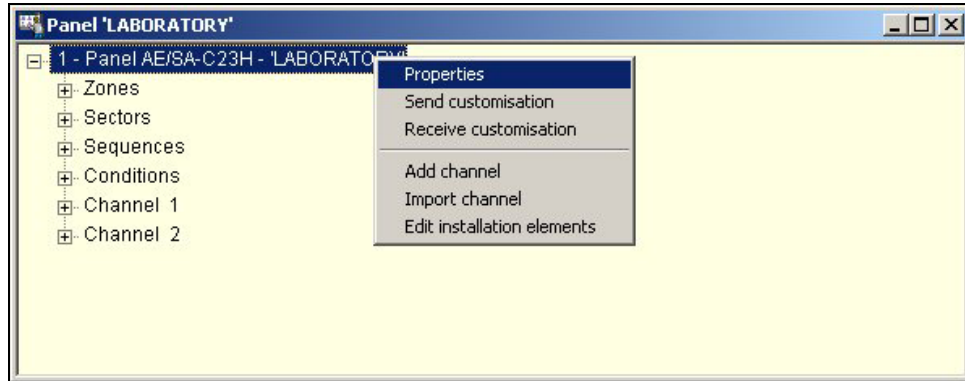
The events created are shown on the structure tree of the Panel.

It is necessary to take into account that:

- A triggering condition must contain at least one subcondition and a maximum of 32.
- The elements of the personalisation under test and/or disconnected do not activate events.
- The triggering condition can contain subconditions of different types; i.e., it could be formed by three events for example: one point event and two zone events.
- The points, zones and sectors can not be used in more than one subcondition.

4.8 PROPERTIES OF THE PANEL.

Positioning the cursor on the Panel, we use the right button to drop down the configuration menu of the Panel, where we can access its properties. Access is also possible from the window of the installation structure.



When selected, a new window opens up with the available configuration options, placed on different tabs.

4.8.1 Logotype.

It allows the logo to be configured that will show the Panel on the display when the installation is in the standby state.



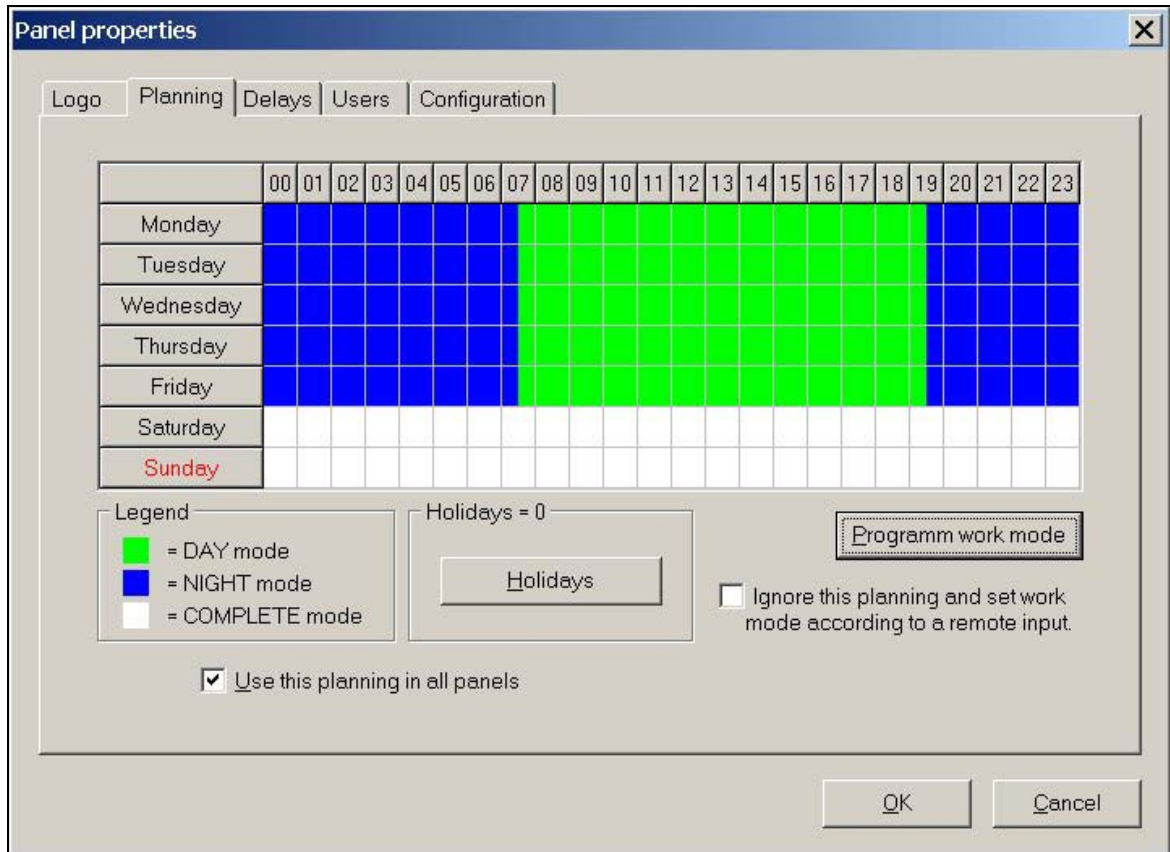
It is possible to include any image in BMP format with a size of 144 * 56 pixels in 2 colours.

The logo defined in a Panel can be used in all the Panels of the installation.

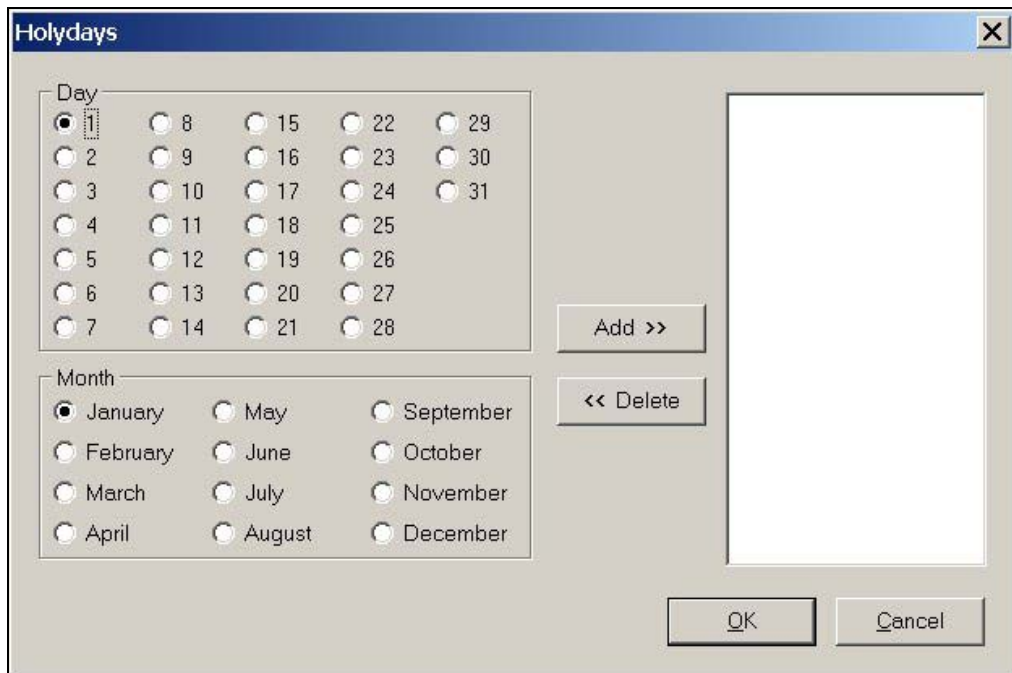
A personalized text of 25 characters can be inserted on the bottom line of the display, to indicate the name of the site, etc. To modify it, press on "Edit text".

4.8.2 Programming.

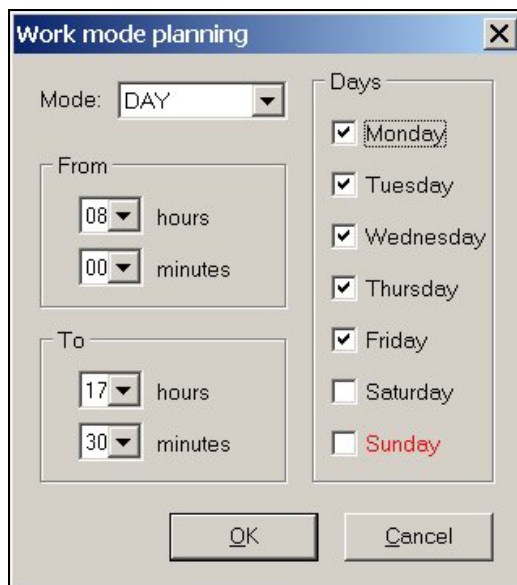
It allows the changes in operating mode to be configured Day, Night and Complete, so that they take place automatically.



Holidays can also be configured; they will take the same programming as has been applied for Sundays. The maximum number of holidays that can be programmed is 16.



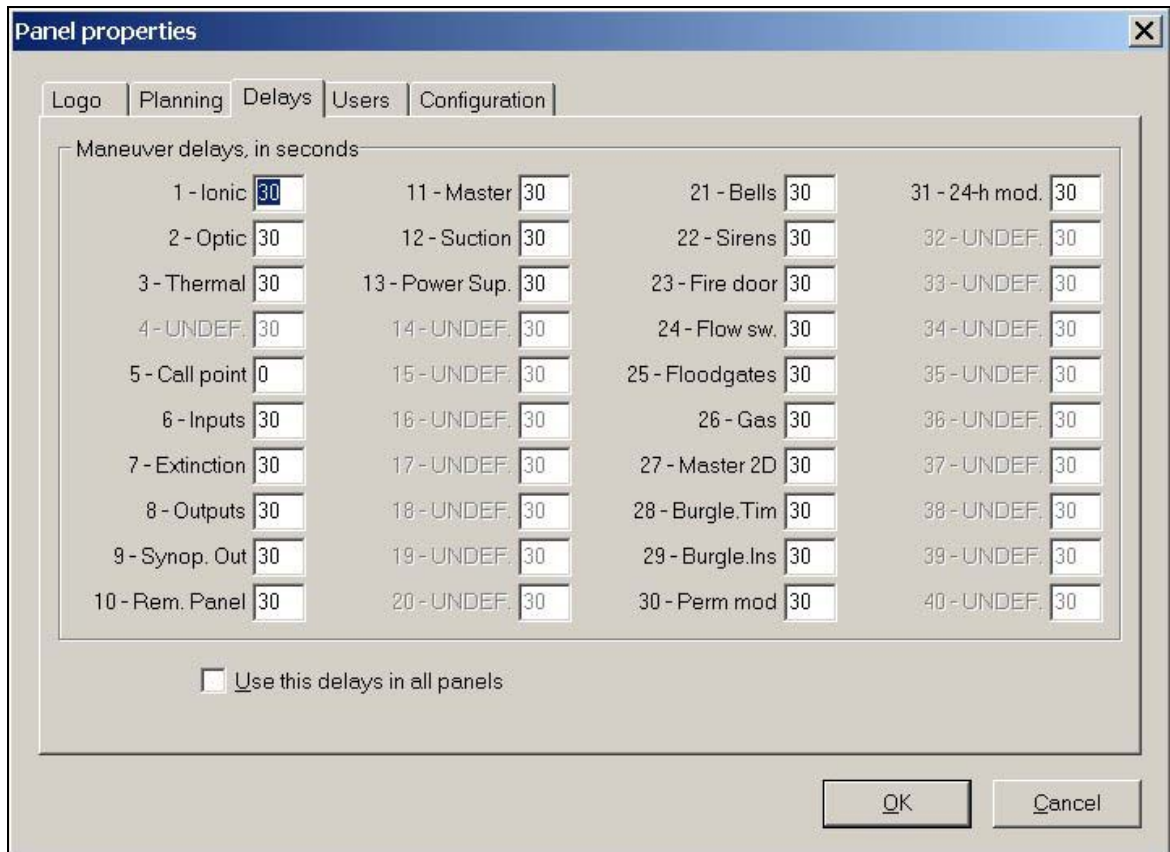
The programming is carried out by indicating operating cycles, specifying the mode, cycle start and end time, and the days of the week to which it has to apply.



The programming carried out on one Panel can be used in all the Panels of the installation.

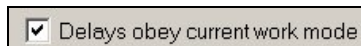
4.8.3 Delays.

It allows the delay time to be defined prior to the performance of operations. This time is taken into account when the Immediate Output Activation function is disabled, and it is an interval of time prior to performing the first action of the programmed operation sequences.



It is mandatory for the risk pushbutton to have time 0, to comply with the EN 54-2 standard.

On the Panel we can associate the DAY and NIGHT operating modes with the Immediate Output Activation function, so it is connected and disconnected automatically when changing the operating mode.

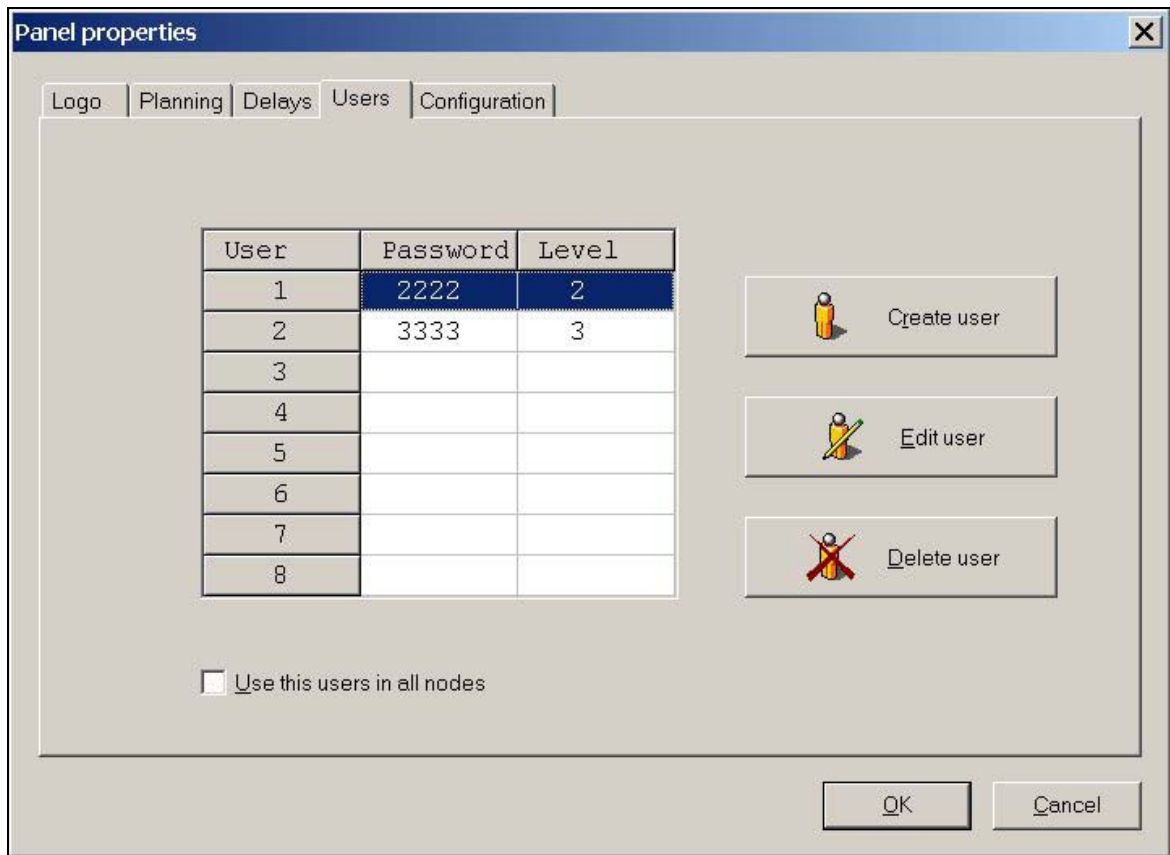


This parameter is configured on the Configuration tab, Other parameters.

The programming carried out on one Panel can be used in all the Panels of the installation.

4.8.4 Users.

It allows users to be defined in the installation, with their password and access level.



A maximum of 8 different users can be defined, it being possible to create, edit or delete users.

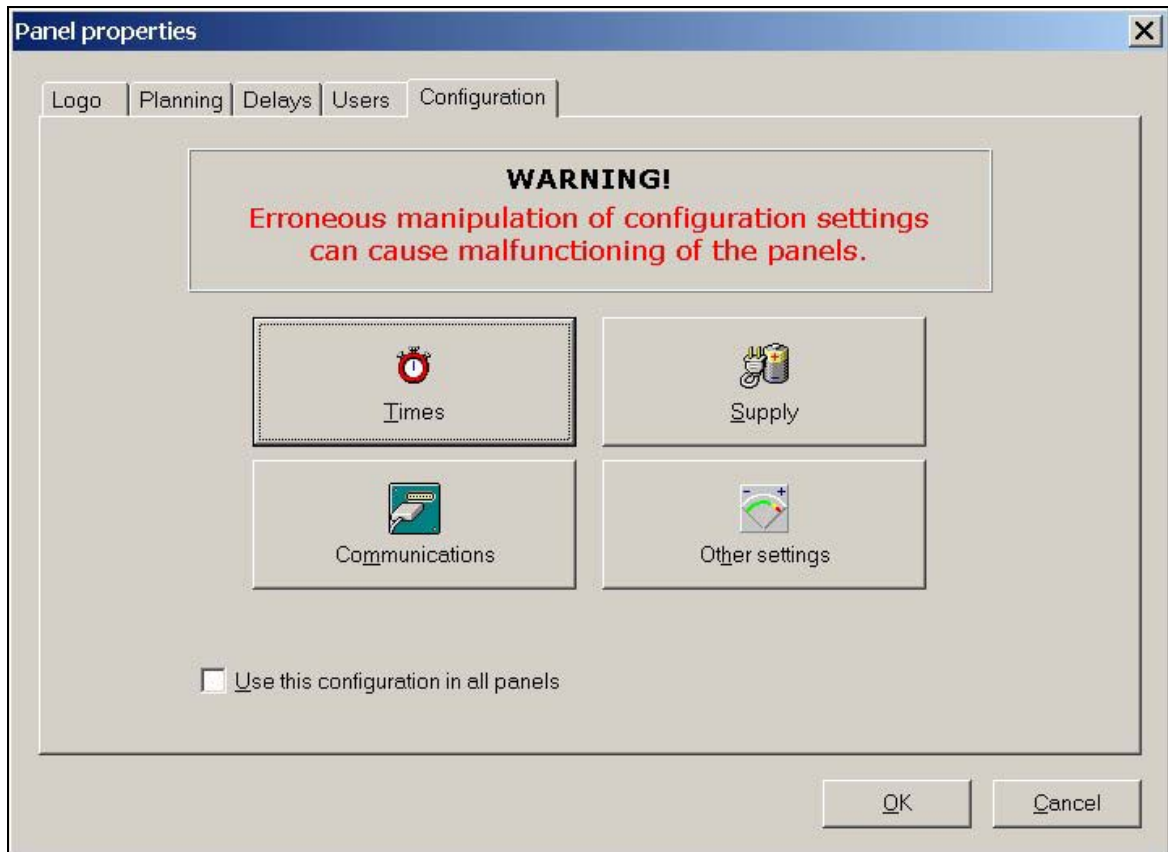


Only the access levels 2 and 3 can be established, in accordance with the EN 54-2 standard.

The programming carried out on one Panel can be used in all the Panels of the installation.

4.8.5 Configuration.

It allows some Panel operating parameters to be modified and it should be carried out taking certain precautions, since an error in the handling can cause malfunctioning of the Panel.



👁 These parameters should not be changed if you are not very sure of what is being done, and of the repercussions they can have in the operation of the Panel, so that it continues to comply with the EN 54-2 standard.

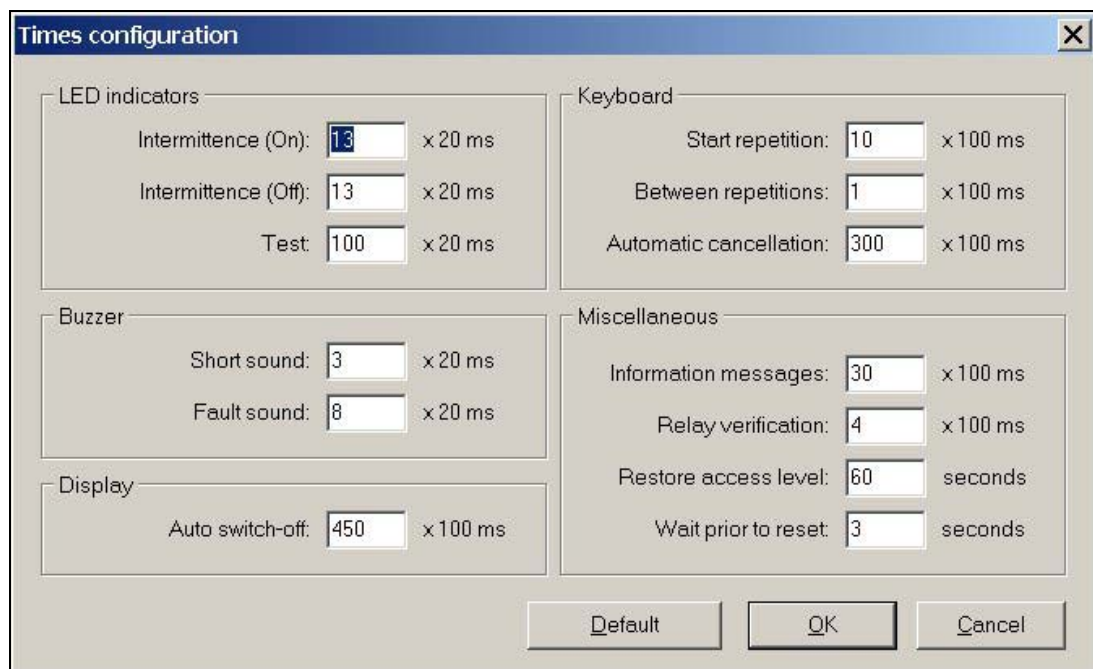
Four available options appear, in terms of the parameters we can modify:

- Times.
- Power supply.
- Communications.
- Other parameters.

The programming carried out on one Panel can be used in all the Panels of the installation.

4.8.5.1 Times.

- Light-emitting indicators.
 - Flashing period, ON and OFF times.
 - Duration of the LED test.
- Keyboard.
 - Detection of key pressed for repetition.
 - Automatic cancellation for timeout.
- Sounder.
 - Duration of short burst.
 - Duration of fault burst.
- Display.
 - Automatic extinguishing of the display lighting.
- Miscellaneous.
 - Show time of informative messages.
 - Verification of actuation on relays.
 - Restore access level, from pressing the last key.
 - Hold time for information on incidents after resetting.

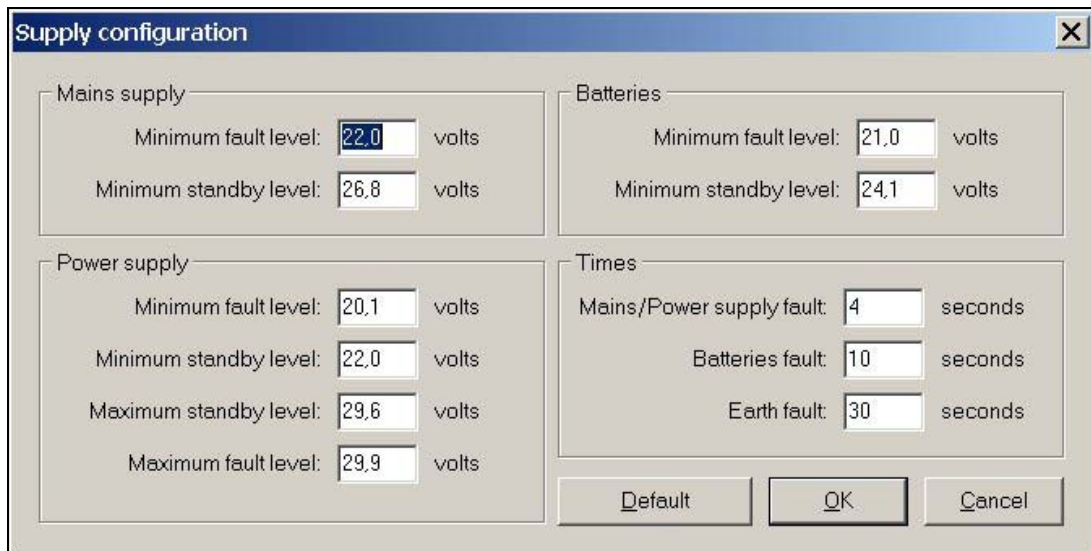


It allows recovery of the default parameter values.

4.8.5.2 Power supply.

It allows adjustment of the voltage levels and time of the following parameters:

- Mains voltage:
 - Minimum voltage, for warning of a mains fault.
 - Minimum voltage, for warning of fault over.
- Power supply unit:
 - Minimum voltage, for passing to fault for absence of voltage.
 - Minimum voltage, for fault over for absence of voltage.
 - Minimum voltage, for fault over for excessive voltage.
 - Maximum voltage, for fault for excessive voltage.
- Batteries:
 - Minimum voltage for fault.
 - Minimum voltage for fault over.
- Times:
 - Confirmation of fault in Mains and Power Supply Unit.
 - Confirmation of battery voltages.
 - Confirmation of fault in earth system.



It allows recovery of the default parameter values.

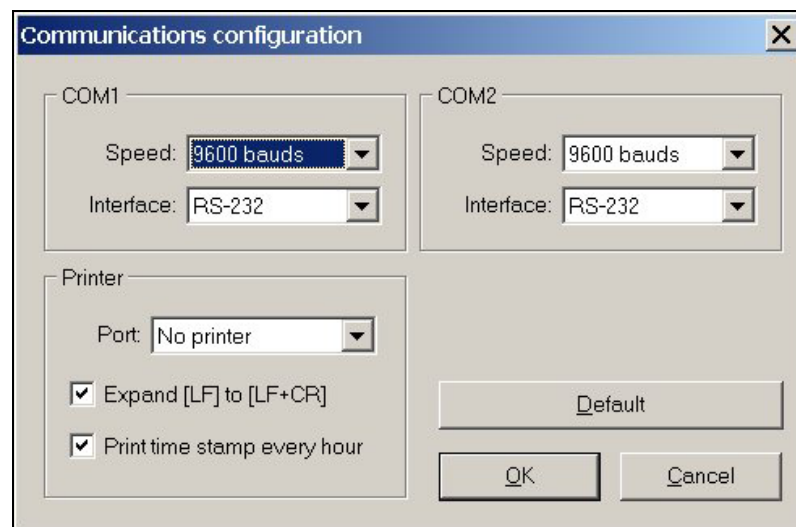
4.8.5.3 Communications.

It allows the communications ports of the Panel to be configured, indicating the bit rate and type of Port: RS-232 or RS-485.

If the Panel has a printer, it must be configured in one of the ports. By default it is assigned to COM2.

The customizer checks that one of the 2 ports is always configured as RS-232 at 9600 bauds, to assure that communication can established for downloading the personalisations.

It is recommended to configure the printer for this speed, to be able to make common use of the port.

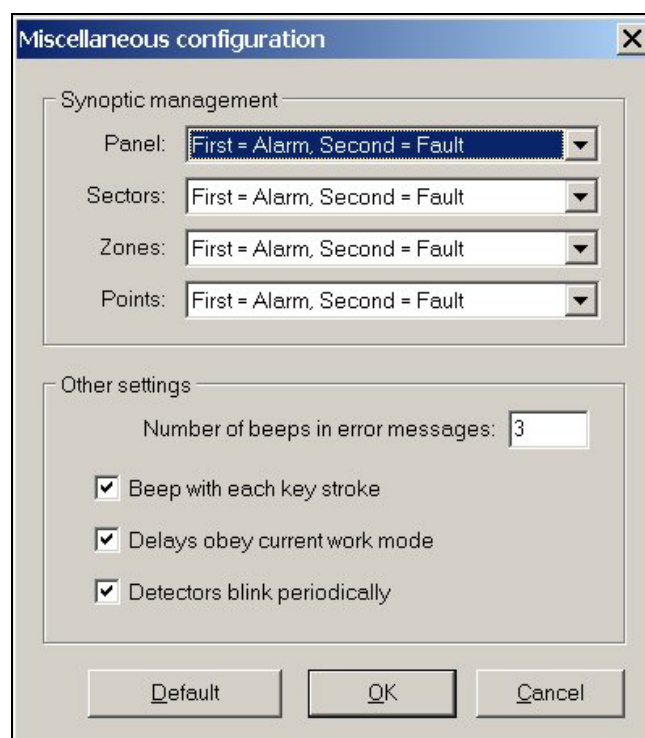


It allows recovery of the default parameter values.

4.8.5.4 Other parameters.

It allows several operating parameters of the Panel to be configured:

- Managing synoptic, assigned to:
 - Panel.
 - Sectors.
 - Zones.
 - Points.
- Number of sounds in error messages.
- Emit sounds with key strokes.
- Flashing in detectors, as operational pilot, globally for the whole installation.



It allows recovery of the default parameter values.

4.9 RISKS.

When we open the risks window, the default defined risks are shown for the personalisation of facilities.

In section 3.2.3 it is explained how to create and modify new risks, to adapt the messages produced by Panel to the installation.

We can create simulated risks, or modify those created by default, so that it is easier to identify the different types of detectors, sensors, operating units, etc., with which the installation is equipped.

5 PLANS FOR DISPLAY IN CONTROL POST.

A plan is the graphical representation of a physical zone of the installation (for example, a floor of a hotel) or of a logical grouping of some of its elements (for example, the sequences defined in a power station).

The customizer allows the drawings defined for the installation to be viewed and edited in windows that contain the following components:

- Background image. This is a stationary image that is obtained from the image file (BMP or JPG) associated with the drawing at the time of its creation. A given image file can be reused in all the drawings we want.
- Active elements. This is a collection of images that are positioned on the background image, and that can be of the following types:
 - Control positions.
 - Panels.
 - Repeaters.
 - Points.
 - Zones.
 - Sectors.
 - Sequences.
 - Plans.

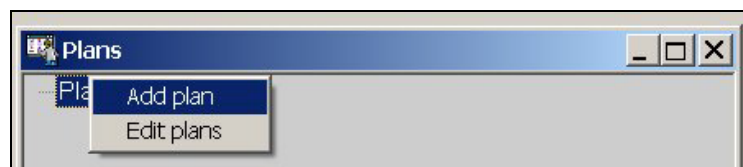
The active elements represent elements of the installation. The images used to draw them are defined in the image editor.

There is another special type of active element, the command, which represents an operation on an element of the installation: reset a panel, trip a sequence, disconnect a sector, etc. The zones that the commands occupy in the drawing will be transparent, invisible, in the software of the control position; however in the customizer they will be seen as semi-transparent grids, to be able to access them visually.

To work with the drawings, it is necessary to open the plans window.

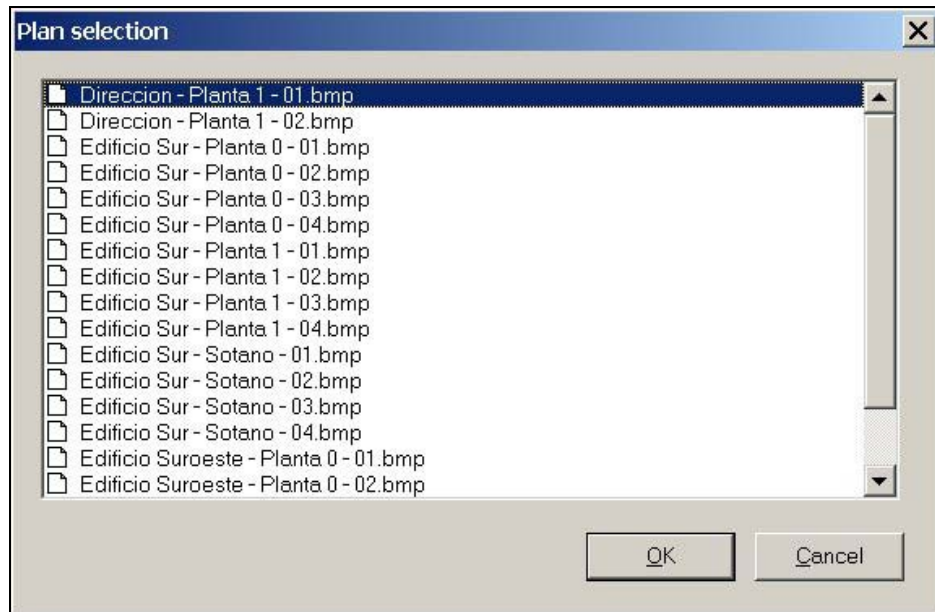


With the right button of the mouse the menu is shown that will allow plans to be added and edited.



5.1 ADD A PLAN.

With this option we can progressively add the drawings of the installation. A window is shown with all the graphic files available in BMP and JPG format that are in the same working directory where we are storing the personalisation.

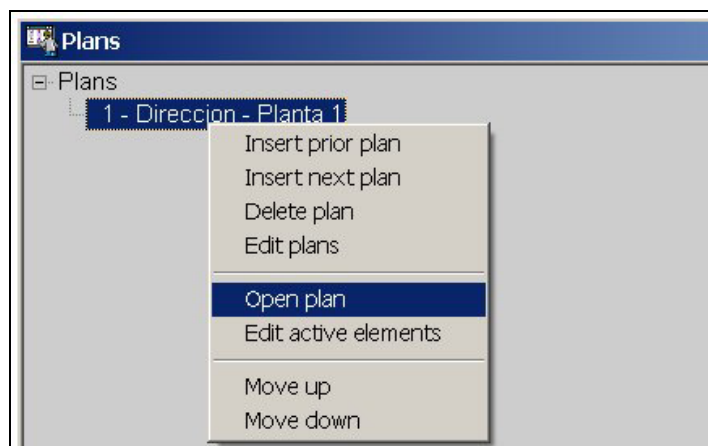


To add a plan, we select it from the list, and accept.

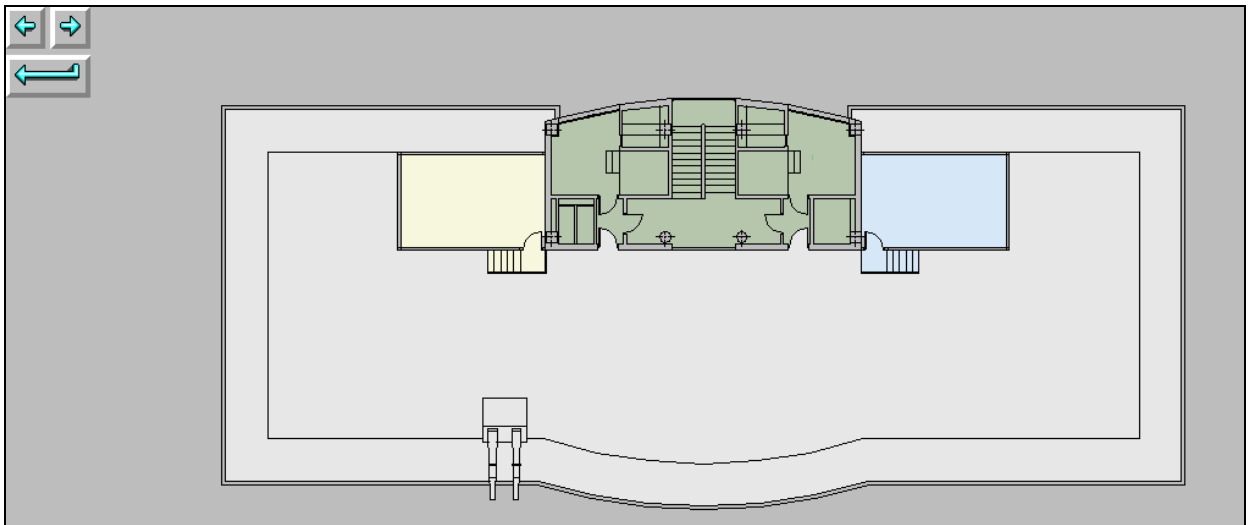
The plan files should have been created previously, with a suitable size and resolution for the display zone available in the program of the control position, which will vary as a function of the monitor employed and of the screen resolution defined in the computer.

It is recommended to work at the same resolution as the Control Post, to preview the final appearance of the drawings in the Control Post.

Once the plan has been added, we use the right button of the mouse to extract a menu with the actions we can take on this plan.

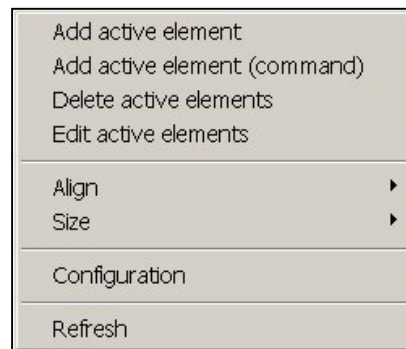


With the option Open plan, we are shown it in a new window, and we can work with it.



By pressing the right button of the mouse, a new menu appears, with the following actions available.

- Add active element.
- Add active element (command).
- Delete active elements.
- Edit active elements.
- Align. (submenu).
- Size. (submenu).
- Configuration.
- Refresh.

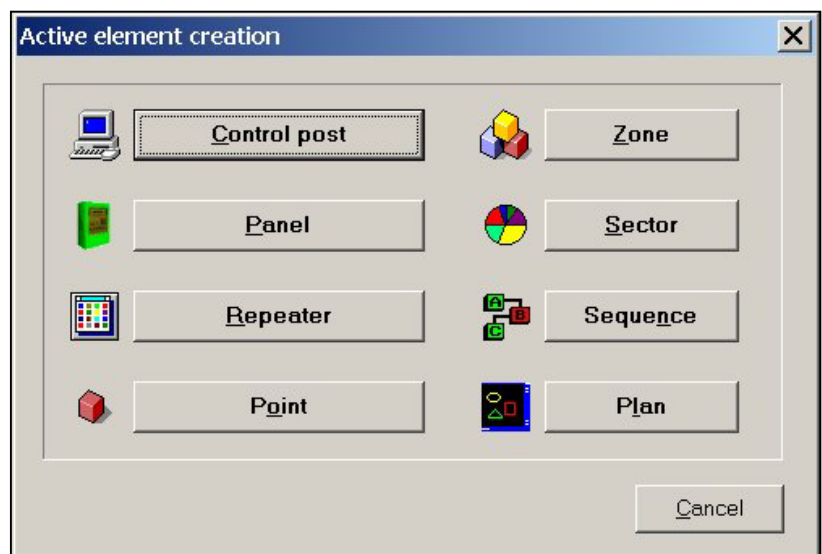


5.1.1 Add active element.

This dialogue shows a series of buttons corresponding to the type of active element that we want to include in the drawing:

- Control position.
- Panel.
- Repeater.
- Point.
- Zone.
- Sector.
- Sequence.
- Plan.

Each of them will deploy a new selection window, appropriate for the corresponding type of element, in which we will be able to select the desired element of the installation.

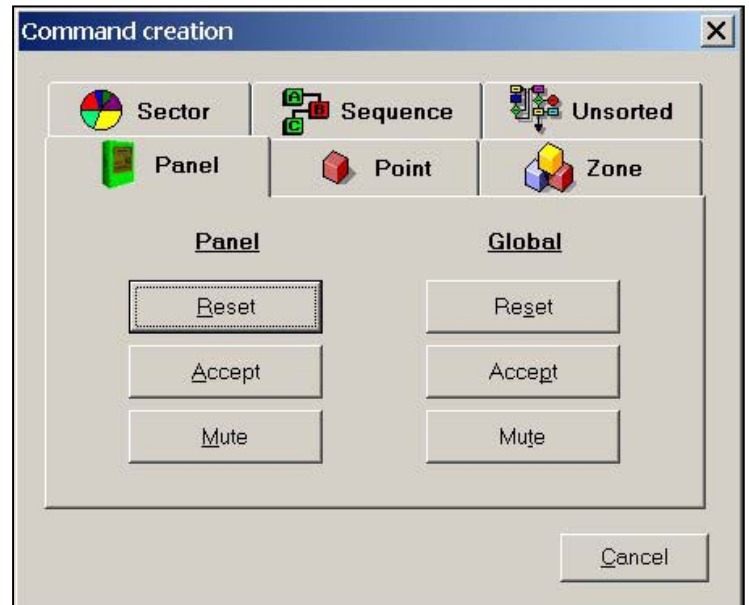


5.1.2 Add active element (command).

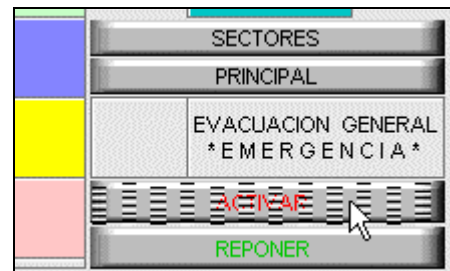
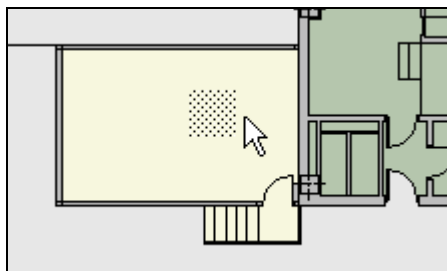
This dialogue shows a series of items with tabs that allow us to select the type of command we want to include in the drawing.

Each item corresponds with the type of element implicated in the command, and each tab of the item will deploy (if necessary) a new selection window, appropriate for the corresponding type of element, in which we will be able to select the element of the installation on which the command is executed:

- Item "Panel".
 - Reset.
 - Accept.
 - Mute.
 - Global Reset.
 - Global Accept.
 - Global Mute.
- Item "Point".
 - Connect.
 - Disconnect.
- Item "Zone".
 - Connect.
 - Disconnect.
- Item "Sector".
 - Connect.
 - Disconnect.
- Item "Sequence".
 - Connect.
 - Disconnect.
 - Trip.
 - Restore.
- Item "Unsorted".
 - Local silence.
 - Go to plans.



The zones that the commands occupy in the drawing will be transparent, invisible, in the software of the control position; however in the personaliser they will be seen as semi-transparent grids, to be able to access them visually.



Usually these commands will be positioned on drawings or legends that identify them to facilitate their localization and execution.

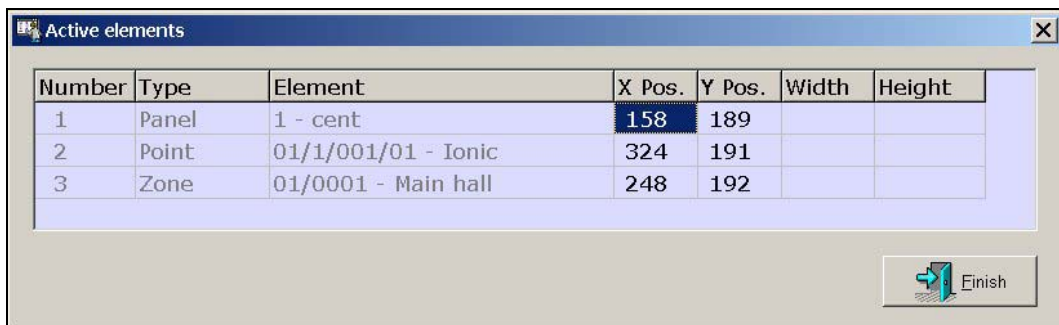
5.1.3 Delete active elements.

To eliminate the selected elements from the drawing, we should press the “**Supr**” key or deploy the local menu with the right button and execute the option "Delete active elements".

If there is more than one active element selected, confirmation will be requested before proceeding to delete the same. If there is only one selected, it will be deleted directly.

5.1.4 Edit active elements.

It allows the coordinates to be modified where the different active elements have been located. In the case of command type active elements, it also allows the size of their graphic representation to be changed.



Number	Type	Element	X Pos.	Y Pos.	Width	Height
1	Panel	1 - cent	158	189		
2	Point	01/1/001/01 - Ionic	324	191		
3	Zone	01/0001 - Main hall	248	192		

5.1.5 Align.

The alignment operations of the local menu also produce the displacement of the active elements on the selected drawing:

- Left. Equalizes the left coordinates of all the selected elements, displacing all those that so require horizontally.
- Centre. Equalizes the central coordinates of all the selected elements, displacing all those that so require horizontally.
- Right. Equalizes the right coordinates of all the selected elements, displacing all those that so require horizontally.
- Top. Equalizes the top coordinates of all the selected elements, displacing all those that so require vertically.
- Middle. Equalizes the central coordinates of all the selected elements, displacing all those that so require vertically.
- Bottom. Equalizes the bottom coordinates of all the selected elements, displacing all those that so require vertically.

To select a single active element, click on it with the mouse.

To select an active element in addition to those that are already selected, click on it with the mouse while maintaining the “**Shift**” key pressed.

A group of active elements can also be selected by framing them in the drawing with the mouse. All those that are inside the defined zone will be selected automatically.

A click with the mouse in any free zone of the drawing will reinitiate (leave empty) the list of selected elements.

Once this operation has been executed, it cannot be undone.

5.1.6 Size.

It is only possible to modify the size of the commands; the remaining active elements use images predefined in the image editor.

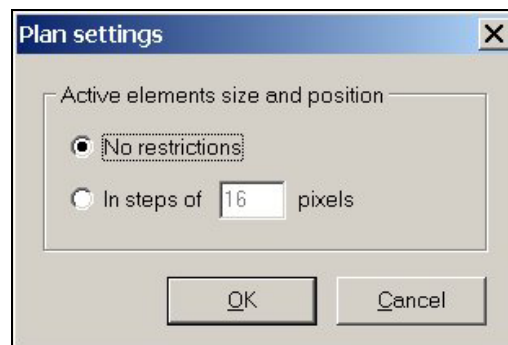
The size operations of the local menu also produce the redimensioning of the commands selected on the drawing:

- More width: It equalizes the width of all the commands selected, increasing that of all those that so require.
- Less width: It equalizes the width of all the commands selected, reducing that of all those that so require.
- More height: It equalizes the height of all the commands selected, increasing that of all those that so require.
- Less height: It equalizes the height of all the commands selected, reducing that of all those that so require.

Once this operation has been executed, it cannot be undone.

5.1.7 Configuration.

This dialogue allows definition of whether the active elements of the plans can be displaced to any position or resized to any size, or if on the contrary, these two operations have to be restricted to discrete positions and sizes, multiples of a certain user-specified value.

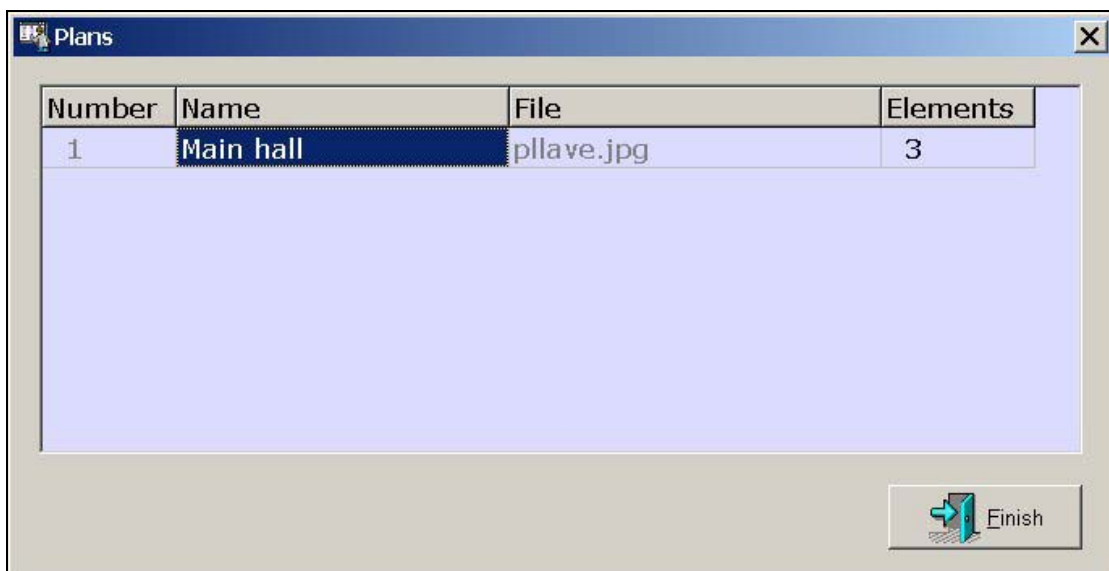


5.1.8 Refresh.

The refresh produces the redrawing of the plan and its elements, to fully reflect the latest changes introduced.

5.2 EDIT PLANS.

This option allows us to edit some characteristics of the plans, like the identification name of the plan, and the active elements defined. It also informs us of the file name associated with the representation of this plan.



6 DOWNLOADING PERSONALISATIONS.

Once the personalisation of an installation has been done and appropriately verified, checking that there are no mistakes, we should download it to the different elements that comprise the installation, Panels and Repeaters.

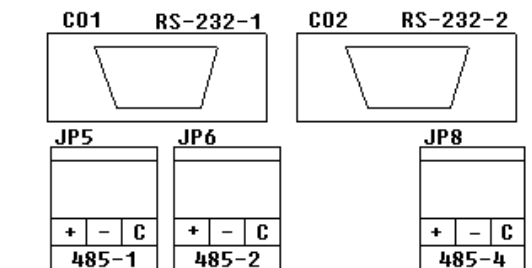
The downloading of the personalisation can be carried out in different ways, depending on the type of installation:

- AGE42 Facilities Customizer Program.
- AGE42PER Personalisation Transmit and Receive Program.
- AGE43 Installation Control Post.
- AGE48 Remote Control Program.

According to the program utilized, we will be able to use in turn the different communications ports that the Panel and the repeaters have.

6.1 COMMUNICATIONS PORTS.

The Panels and repeaters of the AE/SA series include 4 serial ports for communication with other items of equipment, or for integration in other systems, although some of them have a specific utility.

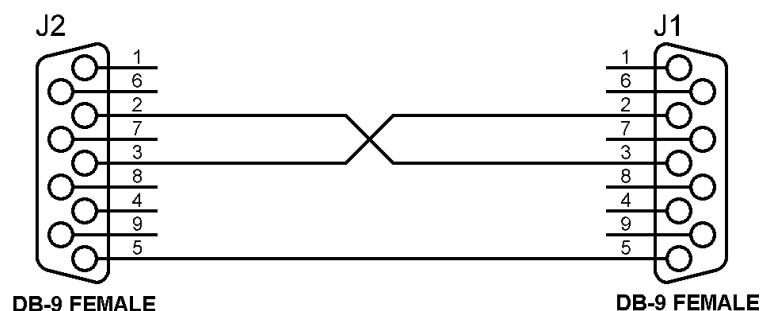


The COM1 and COM2 ports can be configured as RS-232 or RS-485 ports, although obligatorily one of them has to be configured as RS-232 at 9600 bps to allow the personalisation to be downloaded. This same port will usually be used simultaneously to connect a printer, leaving the other port free to carry out system integrations.

The selection of port type is carried out in the personalisation of the installation. When the Panel is not personalized, the configuration of these ports is RS-232 at 9600 bps.

The connections through the RS-232 ports to a PC or printer, is carried out by means of a null-modem cable with DB-9 female connector, with the following pin arrangement:

- Pin 2 RxD.
- Pin 3 TxD.
- Pin 5 Negative common.



The COM3 port is reserved for communication between the CPU and the line control cards, and does not usually have the connection terminals mounted.

The COM4 port is of the RS-485 type and is reserved for the AE2NET network, for the connection of other Panels, Repeaters and Control Positions.

i The COM4 port is not available in all the panels, only in those terminated in RS (AE/SA-C23HRS, AE/SA-C83HRS, etc.).

The connections of the RS-485 ports are marked with the following plug arrangement:

- + Communications positive.
- - Communications negative.
- C Common.

6.2 DELETION OF THE EXISTING PERSONALISATION.

Before proceeding to download a personalisation, it is convenient to start with the deletion of the existing personalisation in the Panel or Repeater.

Although this step is not essential, since the new personalisation will be overwritten on the existing one, it is possible that the assignment of ports existing in the Panel does not allow the correct downloading of the personalisation, giving communications failures through having assigned a different port type, communications rate, or being in the process of dumping data through the printer output.

The deletion of the personalisation can be carried out in two different ways:

- By means of selector 8 of SW1 in the CPU.
- By means of the Delete personalisation option in the start menu.

6.2.1 Deletion by CPU selector.

Selector 8 of SW1 of the CPU is used to compel a complete deletion of the panel or repeater personalisation.

When the fire control panel is switched on with this position (OFF) activated, the panel screen displays a message warning that the personalisation is going to be erased and requesting confirmation from the user.

- If the user confirms the action by pressing the < YES > key, the Panel deletes the personalisation it has stored and begins to operate without personalisation.
- If the user cancels the confirmation by pressing the < NO > key, the panel will begin to operate normally using the current personalisation, should there be one.

i The panel waits for the user's confirmation for an indefinite time. The panel will not begin to operate normally until the user confirms or rejects the deletion of the personalisation.

The actual message of confirmation recommends the user to return the selector to its normal standby position (ON) before continuing. If this is not done, next time the control panel is rebooted, it will carry out the same process again, with the risk that an undesired personalisation deletion is confirmed by mistake.

6.2.2 Deletion by Menu options.

To be able to access this option, it is necessary to have the Level 3 access key that will be requested.

Once in the menus, we click on:

- 5. Programming.
 - 5 . Technical. Level 3 access key.
 - 3. Initialize
 - 2. Erase Customization.

A confirmation message will be shown before proceeding to delete the personalisation.

Once the personalisation has been deleted, a message will be shown on the screen, and the Panel will pass to the standby state, having both the general fault indicator activated and the relay output.

6.3 DELETION OF EVENTS HISTORY.

Whenever a new personalisation is downloaded to Panels or Repeaters, which involves a change in the assignment of equipment, zones, sectors, sequences, etc., it is necessary to erase the events history, since in the listings shown with incidents occurred before downloading the new personalisation, they may not correspond with the real incidents produced in the installation.

To delete the events history, it is necessary to have the Level 3 access key that will be requested.

We access the menus, and click on:

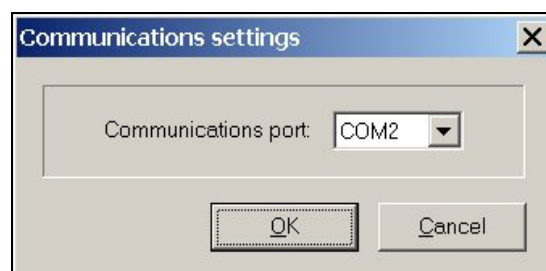
- 5. Programming.
 - 5 . Technical. Level 3 access key.
 - 3. Initialize
 - 1. Erase events history.

6.4 CONFIGURATION OF THE COMMUNICATIONS PORT IN THE COMPUTER.

In the AGE42 Communications Personaliser program, it is necessary to define the communications port of the computer we will use to communicate with the Panel.



We should select one of the RS-232 ports available, and that is not being used by another application.



6.5 DOWNLOADING TO A STAND-ALONE PANEL.

The downloading of the personalisation of a stand-alone Panel that is not integrated in any network, is carried out through the RS-232 serial ports COM1 or COM2, using a null-modem cable, connected to an RS-232 port of the computer.

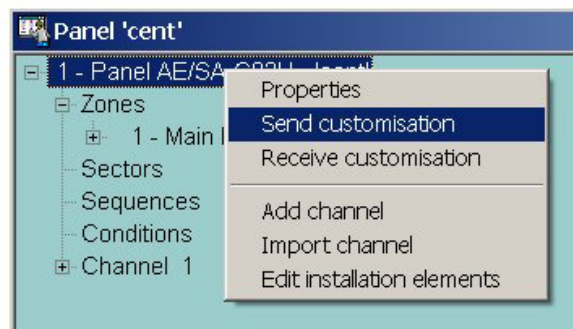
Before downloading the personalisation, it is necessary to verify it, the process being aborted otherwise.



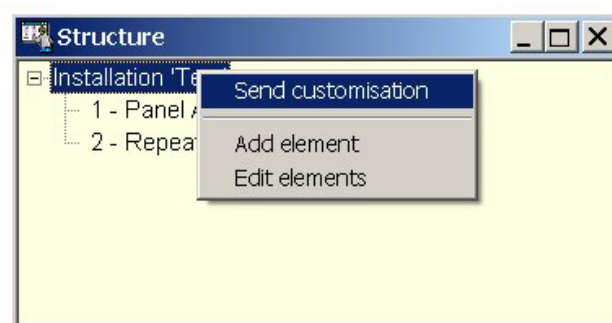
Once verified and sure there are no mistakes that can cause malfunctioning of the installation, downloading can proceed, which can be carried out from different sites:



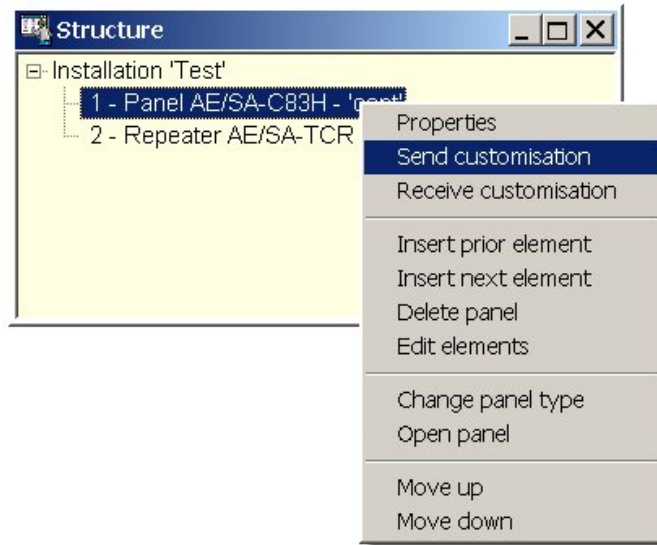
- From the Panel Window, by selecting the root field with the right button.



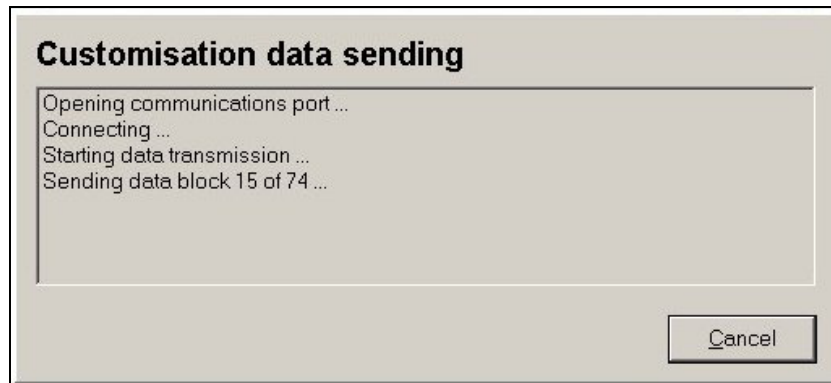
- From the Structure Window, by clicking the root field of the installation with the right button.



- From the Structure Window, by clicking on the Panel with the right button.



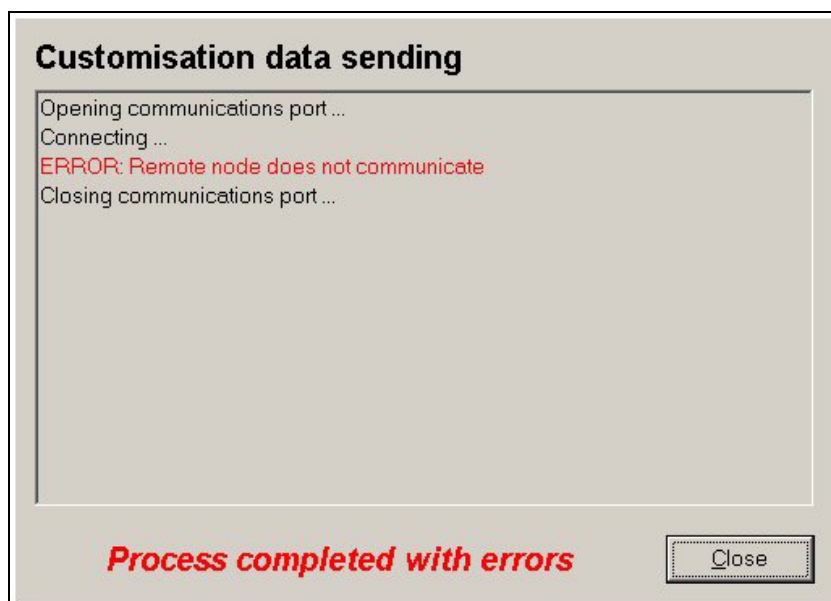
Once the option has been accepted, data transmission begins to the Panel, and the following window appears:



The indicator of data blocks sent will increase progressively until transmission is concluded and a message appears of transmission completed successfully.



If a failure occurs, it will be indicated with a text in red.



Starting from this moment, the Panel is reset, and the installation begins to work with the new personalisation.

6.6 DOWNLOADING TO AN INSTALLATION IN ARCNET NETWORK.

An installation in ARCNET network will be constituted by one of the following combinations:

- 1 or more Panels, and 1 or more Repeaters AE/SA-TCR.
- 1 or more Panels, and 1 or more Control Positions AE/SA-PC.
- 1 or more Panels, 1 or more Repeaters, and one or more Control Positions.

The personalisation can be downloaded individually both to the Panels and to the Repeaters, in the same way as explained for the stand-alone panels.

The ARCNET network allows us the possibility of downloading the personalisation to all the Panels and repeaters of the installation from a unit able to work in gateway mode, which can be:

- AE/SA-TCR Control Panel.
- AE/SA-TCR Repeater.
- AE/SA-IDC Communications Interface.

6.6.1 Panels and Repeaters.

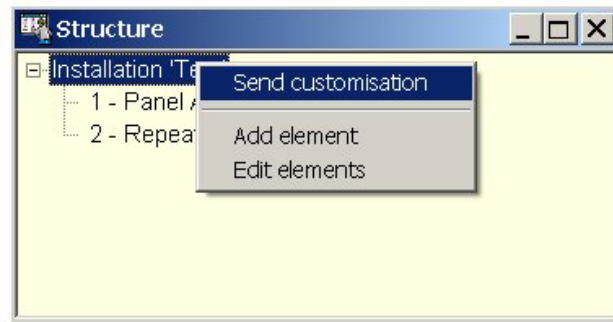
To carry out the downloading of a personalisation in an installation in ARCNET Network formed by 1 or more Panels, and 1 or more repeaters, we will use one of the AE/SA-TCR repeaters as gateway connection.

Before proceeding with the downloading of the personalisation, the following precautions must be taken:

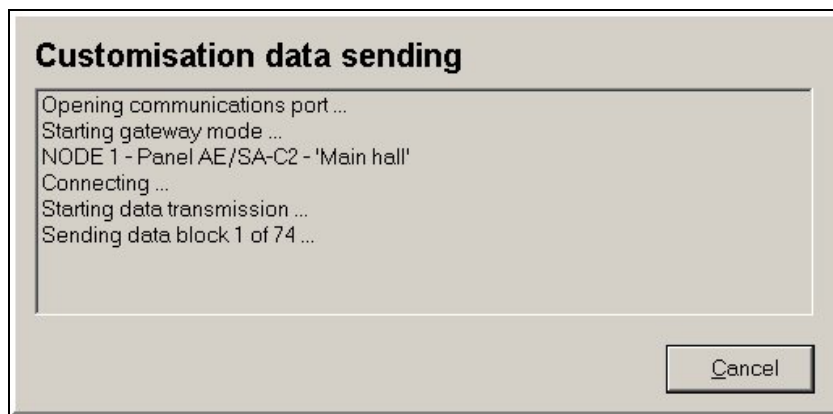
- The Panels and Repeaters must have the dilswitch SW1 coded with the unit number inside the installation, exactly as defined in the personalisation.
- The Panels should not be personalized, or they should not have a preliminary personalisation, configured to work in stand-alone mode, since it will not recognize the ARCNET network. If this is the case, proceed to delete the personalisation.

We connect the PC from the configured RS-232 Series Port, to one of the RS-232 series ports of the repeater, using a null-modem cable.

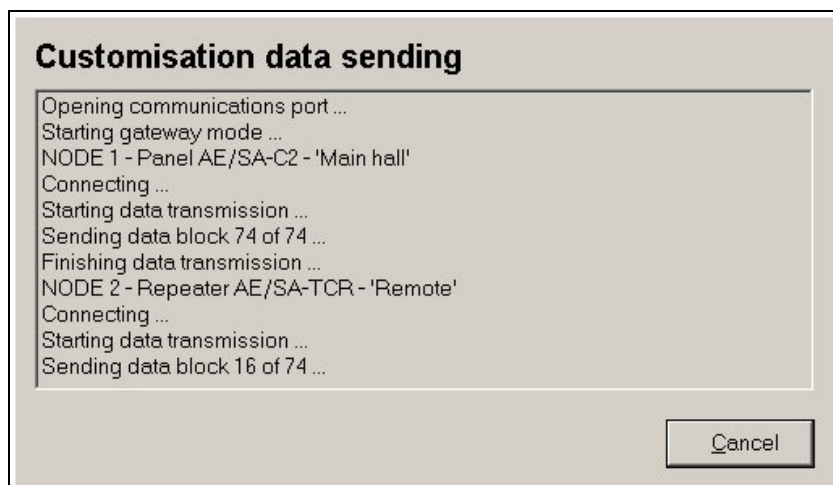
From the window of Installation, we select the root field "ARCNET Installation", and with the right button we extract the options menu and select Send personalisation.



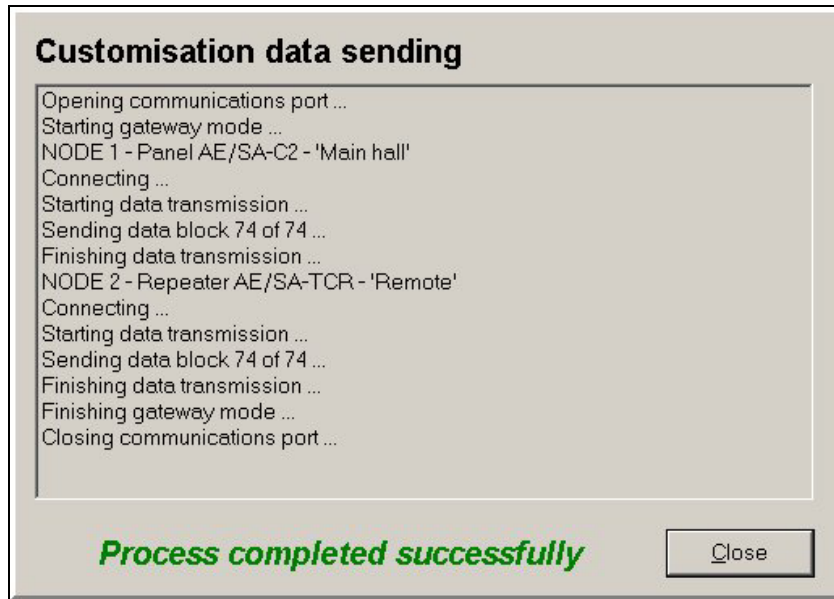
The connection is set up with the repeater in gateway mode, and transmission begins to the different units that constitute the installation.



When downloading the personalisation it finishes, it passes to the following unit of the installation.



Once the downloading of the personalisations to all the units of the installation has been completed, the gateway mode is finalized.

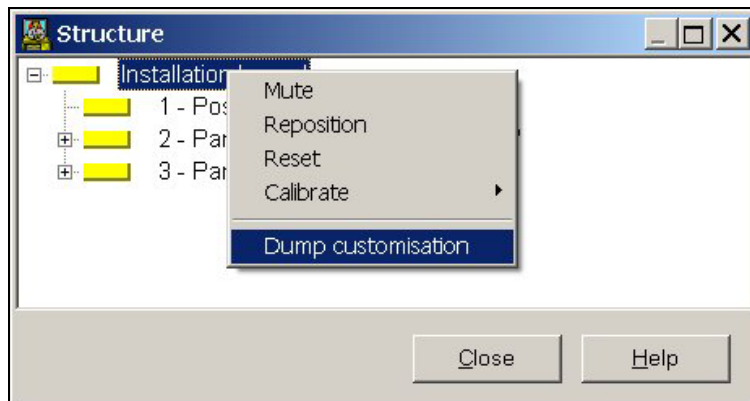


As from this moment, the whole installation begins to work with the new personalisation.

6.6.2 Panels and Control Post.

When there is a Control Post in an installation in ARCNET network, the easiest way of sending the personalisations is from the software of the actual Control Post.

The transmission is carried out from the structure window.

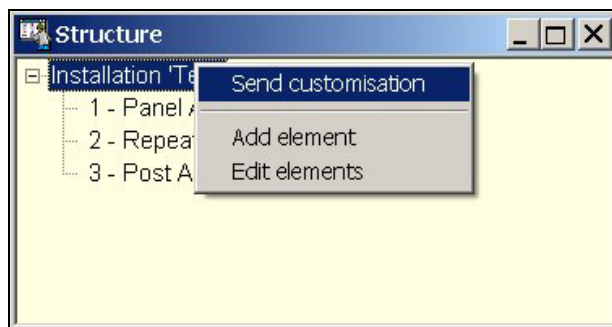


The Control Post is connected to the ARCNET network through the AE/SA-IDC Communications Interface. The connection between the computer of the Control Position and the AE/SA-IDC can be carried out by means of RS-232 or RS-485 connection.

It is also possible to send the personalisation from the AGE42 Facilities Customizer, making use of the connection through the communications interface.

In this case, the personalisation is not sent to the Control Position, since the *.IST, *.CEN and *.REP files must be installed together with the software, and any modification that is carried out in the personalisation implies substitution of the files in the Control Position.

The personalisation is sent from the root element of the structure window.



APPENDIX 1. QUICK KEYBOARD REFERENCE.

Depending on the window in which we are located, quick keyboard functions are available. These functions are:

Tree windows		
Key(s)	Operation performed	Mouse
Cursor up/down	Select node	Click left
Shift+Cursor up/down	Move node up/down	
Space bar	Select root node	
Ctrl+F4	Close the tree window	
Ctrl+F6 ó Ctrl+Tab	Change to another window	
Cursor left	Reduce/ Go up a level	
Cursor right	Expand/ Go down a level	
+ (Numeric keyboard)	Expand a level	Double click left
- (Numeric keyboard)	Reduce a level	Double click left
* (Numeric keyboard)	Expand complete branch	
Insert	Add node, lower level	
Shift+Insert	Insert prior, same level	
Ctrl+Insert	Insert after, same level	
Supr	Delete node	
Shift+Supr	Replace unit with null	
Enter	Open Edit matrix	
Ctrl+Enter or Alt+Enter	Edit properties	
F2	Export	
F3	Import	
F4	Change type of detector	
F5	Assign elements	
Shift+F10	Drop down local menu	Click right

Edit matrixes		
Key(s)	Operation performed	Mouse
Cursors	Select cell	Click left
Enter	Edit cell selected	Double click left
Supr	Delete cell selected	
Ctrl+C	Copy cell content	
Ctrl+V	Paste in the cell	
Ctrl+L	Find and replace text in the column	
Esc	Close edit matrix	

Drawings		
Key(s)	Operation performed	Mouse
Insert	Add active element	Double click left
Shift+Insert	Add active element (command)	Shift+Double click left
Ctrl+Insert	Add active element (command)	Ctrl+Double click left
Supr	Delete elements selected	
Enter	Open edit matrix	
Ctrl+Enter	Configuration of drawings	
Alt+Enter	Configuration of drawings	
F5	Update	
Ctrl+Cursors	Move elements selected	
Shift+Cursors	Change size of elements selected	

Image editor		
Key(s)	Operation performed	Mouse
Cursors	Select cell (image)	Click left
Enter	Obtain image from a file	Double click left
Ctrl+C	Copy image	
Ctrl+V	Paste image	
Esc	Close image editor	

APPENDIX 2. CONNECTION WITH THE PANEL

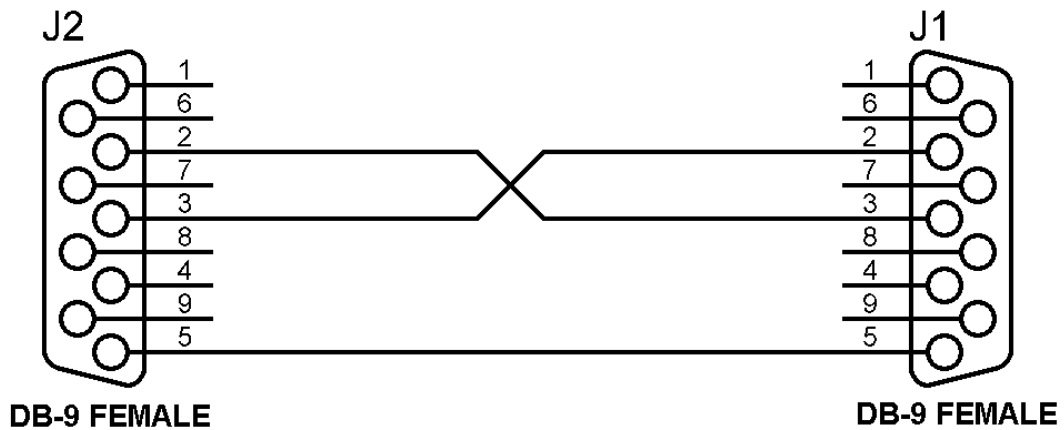
The connection with the SA panel series is made through one of the RS-232 ports of the panel and the COM port of the computer. See sections 3.6.3 for configuring the computer port and 4.8.5.3 for configuring the panel ports.

The COM1 and COM2 ports can be configured as RS-232 or RS-485 ports, although it is mandatory that one of them be configured as RS-232 at 9600 bps to permit personalisation downloading.

The selection of the port type is made in the personalisation of the installation. When the Panel is not personalized the configuration of these ports is RS-232 at 9600bps.

Connections through the RS-232 ports to a PC, are made by means of a null-modem cable with female DB-9 connector, with the following pin-out:

- Pin 2 RxD
- Pin 3 TxD
- Pin 5 Common Negative





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