

User's Manual Multitrans II Panel'PC

Centralization of ALARMS by BUS
with "operator HELP"



Version of assembly
in fronting of cupboard

PANEL PC is a manager of TECHNICAL ALARMS " by integral Bus of the functionalities of operator help, of history with storage on Compactflash card.



It is installed in fronting of cupboard or of desk and its touch screen makes it possible to carry out all the operations without additive keyboard.

FUNCTION: Centralizer of Bus, PanelPC allows to manage 64 modules of 12 alarms or I/O modules.

USING :

- In fronting of local cupboard, for a control of alarms and states, with history for a traceability.

- In off-set centralization, with reference of alarms in the BUS, help operator, history, storage. Transfer towards others under possible stations.

PanelPC integrate:

- Display of alarms with acknowledge to the screen
- Operator help or instruction for each channel allowing to indicate to the operator the procedure according to alarm present.
- Visualization of the histories of the period.



- Revisualisation of the one saved period history. (10 000 possible pages)
- Impression of alarms with time stamping.
- Transfer of alarms at distances towards one or more subscribers by Bus (example the guard, engineering department, the control room).
- Possible Outputs remote controls



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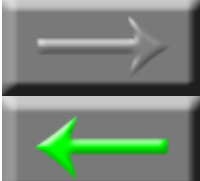
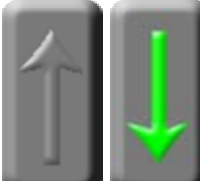




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GENERAL CONTROLS

GENERIC BUTTONS

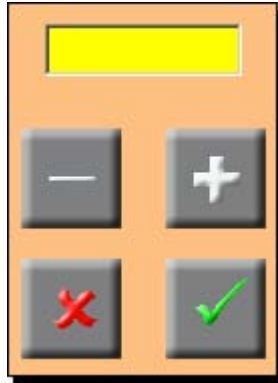
A certain number of buttons returns regularly on the different pages. These buttons, which have the same pictogram, almost always have the same significance.

In order to avoid having to detail the use of these buttons on each page, their description is given below. The possible particular cases will be detailed in each page.

Symbole	Appellation	Usage
	Home	Return to the top menu
	Return	Return to the preceding page, or closing of the dialog box in progress (when this limps does not have the small buttons "notches green" and "Red Cross")
	Decrease	Reduction in the field in the course of edition. The double sign allows décrémenteur more quickly (in general a pitch of 10)
	Increase	Increase in the field in the course of edition. The double sign makes it possible to increment more quickly (in general a pitch of 10)
	Movement keys	These keys make it possible to move page on page when several pages are necessary for the same function. When the keys are grayed, it is that displacement is not possible (for example if one is on the first page of the modules, the key towards the left will be grayed).
	Movement keys	These keys make it possible to move from one control to another in the pages, in order to select them to be able to publish them. When the keys are grayed, it is that displacement is not possible (for example if one is on the first line of a list, the key to the top will be grayed).
	Movement keys	These keys make it possible to move in the lists and the boards. Indeed, because of the reduced size of the controls suitable for Windows, these last are very difficult to use on the touchscreen of Panel CP. It was thus necessary to create more adapted controls. The double triangles make it possible to move more quickly (generally with a pitch of 10 lines)
	Edition	Order amendment. This control generally opens the dialog box of edition. The control refers to the current field, whose content is generally yellow . The use of the dialog box of edition is given below 
	Cancel Validation	Controls used in all the dialog boxes where it is necessary to confirm or to cancel the made amendments. The green stage coach confirms the amendments, whereas the Red Cross cancels them. The two controls close limps it of dialog

DIALOG BOX OF MODIFICATION

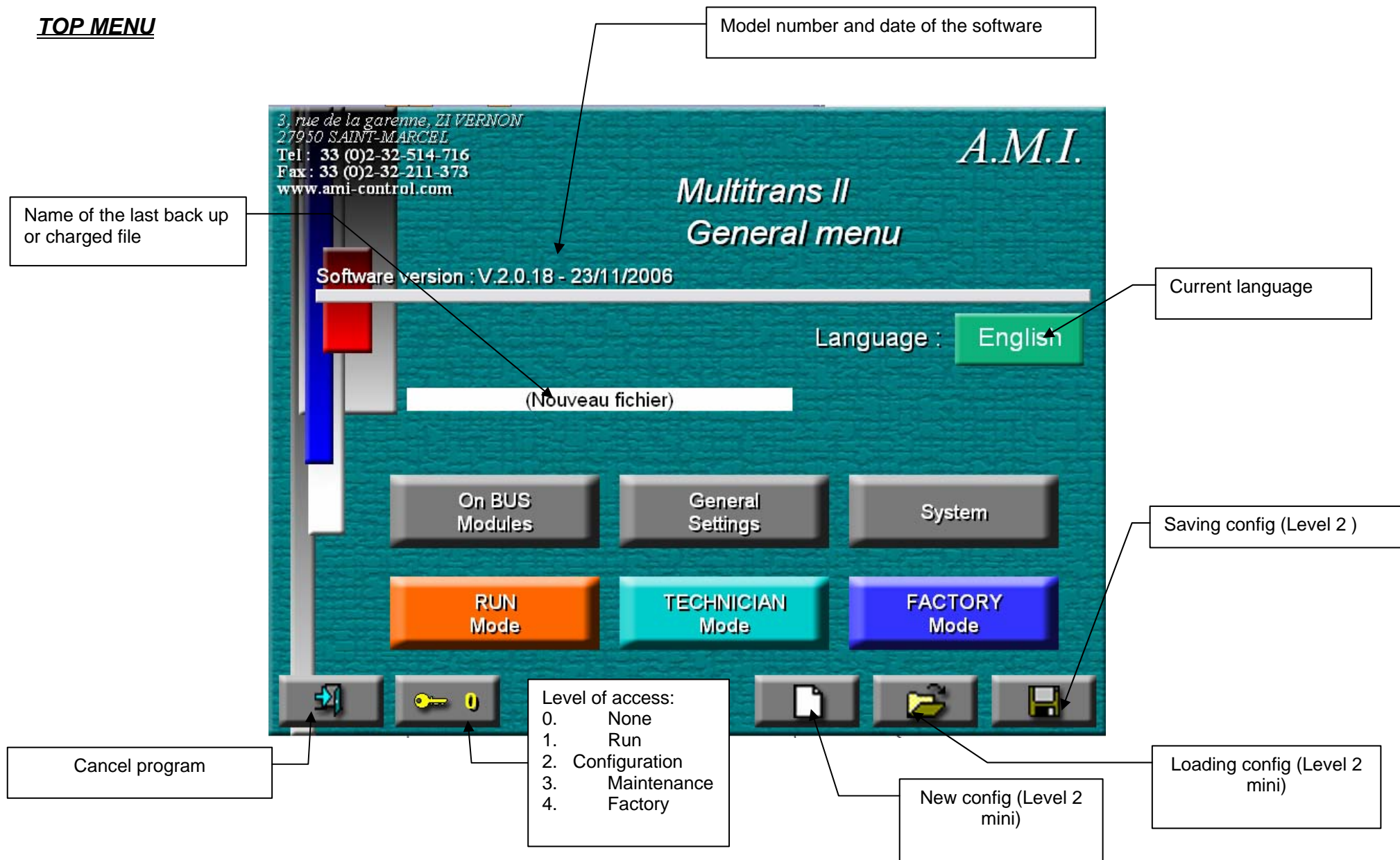
Many modifications are done using a common dialog box, adaptable car according to the values allowed for the field in the course of edition. This dialog box with the following aspect:



The buttons [+] and [-] make it possible to display the various elements of this list, which can be a continuation of number (continuous or discontinuous) or various texts corresponding to the possible options. These securities are displayed in the yellow area.

When the desired value is displayed, it is necessary to validate while clicking on the green stage coach, which closes the dialog box. To cancel the share and to close the dialog box, to click on the RedCross.

TOP MENU



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FILENAME – BACKUPS

The displayed name corresponds to that of the last setup file charged. If the configuration is modified, this configuration is backed up in a temporary file until its voluntary backup. During the closing of the application a request for backup is carried out to recall that it is necessary to record the configuration in a file different from the temporary file, the current filename being taken by defect. However, it is always the temporary file which is reloaded during starting. Thus, in the event of violent closing (planting of the PC, cut sector, etc), it is well the last validated configuration which is reloaded, even if it were not backed up. Nonthe backup of the temporary file is however memorized and a request for backup will be renewed with the closing (normal) following of the application. The backup will thus be requested from each closing of the application until it was carried out. If one wants to cancel this request, it is necessary to reload the file whose name is displayed on the screen and to thus return to the original configuration.

The button “News configuration” makes it possible to return to a virgin configuration, where all the parameters are put at their default value.

The operations on the configuration require level 2 minimum.

Languages

In each support on the button “Language”, one passes to the following language, then one returns to the first. Each time, all the texts of all the pages pass in the selected language.

LEVEL ACCESS

There exist 5 levels of access, numbered from 0 to 4, whose privileges are given below. Each level has the privileges of the lower levels in addition to his clean.

- 0 Visualization of alarms and the histories (prohibition to leave the Run mode)
- 1 Receipt of alarms - remote controls
- 2 Exit Run mode – access to the menus « Bus modules », « Generals parameters », « System ». In this last, access to small “the Passwords”, but only the users of level 2 and inferiors are visible.
- 3 Access to all menus except « Factory ». Complete visibility of passwords
- 4 Access menu « Factory »

One can change level into clicking on the button displaying a yellow key. The level of access running is indicated on the button, on the right of this key.

The change of level is carried out using a dialog box requiring the code user. For more information on this code, to see the section treating of the levels of access (Paragraph “System configuration”).

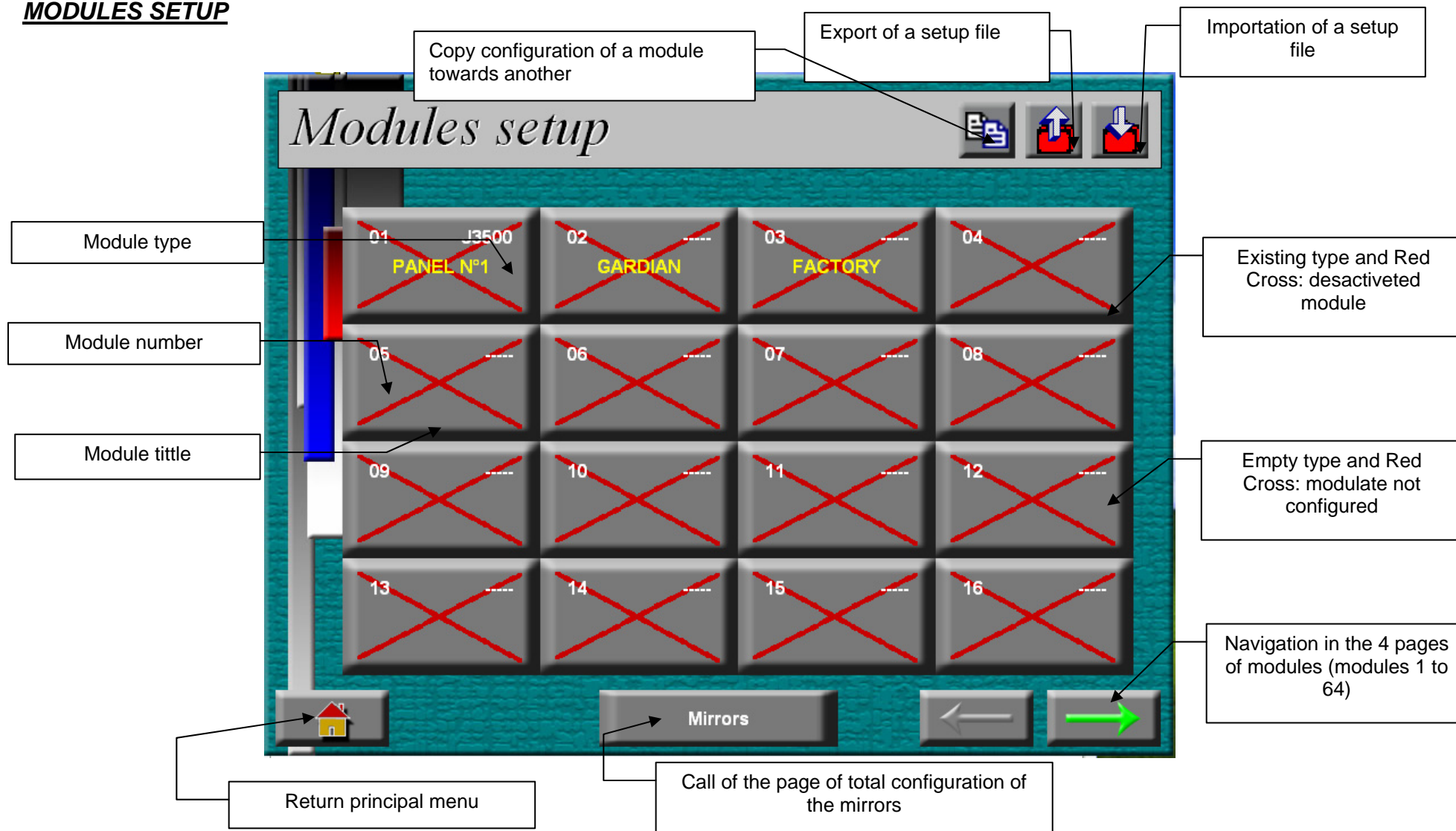
MODEL NUMBER AND DATE

The model number corresponds to securities 1,2 and 4 of those returned in the properties of the executable file when one reaches it by the file explorer. For example, for a version 1.2.3 displayed in the main screen of Multitrans, Windows will return a 1.2.0.3 model number.

The displayed date is the date of compilation of executable and corresponds to the date of amendment in the Windows Explorer.

This information must be communicated to AMI with any report of incident of the software or information request on the operation of the application.

MODULES SETUP



BUTTONS MODULE

While clicking on a button, one reaches the parameter setting of the module concerned. The keys of navigation in bottom on the right of the screen are used to change page. On each button one finds :

- In top on the left, the number of the module
- Top right, the type of declared module
- In the center, the bond of the module

When the module is not configured (not a type) or that it was deactivated, a Red Cross bars the button. This cross means that the module will not be scanned on the bus.

COPY MODULES

When several modules have a similar configuration, it is possible to copy the configuration of the one from another, then to personalize these copies.



For that, it is necessary to click on the button of copy. The dialog box below is displayed. It is enough to select the number of the model module, that of the target module and to validate. Note that it is not possible to copy a module from itself. The copy affects the type of module, its bond and the parameter setting of all its channels.

Note: to change number of module, it is enough to click on the button + and –

The realization of a complete configuration understanding of many modules is a rather long and tiresome task. It can be interesting to use a spreadsheet to carry it out, thus making it possible to use the incremental copies and of the complex formulas to carry out the parameters. One can thus export and import the configuration of all the channels (1 to 24) of all the modules (1 to 64) in the form of text file. Attention, handling of these files should not destroy their structure, or else the importation can produce unforeseeable results. It is advised to use a file exported as a model instead of starting from a virgin file. The file is of separating type the “tabulation”. At the time of the importation, it is necessary to notch the box “tabulation” in the dialog box of data conversion of the spreadsheet. The first line of the file contains the bonds of the fields. Attention, he is strongly advised to respect the securities of validity. Although consistency checks are made with the importation, of the securities except field can bring a planting or an erratic operation of the application.



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The file of importation can not comprise all the channels, but only some. Only the channels defined by the columns PNL and Chnl will then be modified. If the combinations PNL/Chnl are found several times in the file, only the last combination is taken into account (the preceding ones are read but crushed by the following ones).

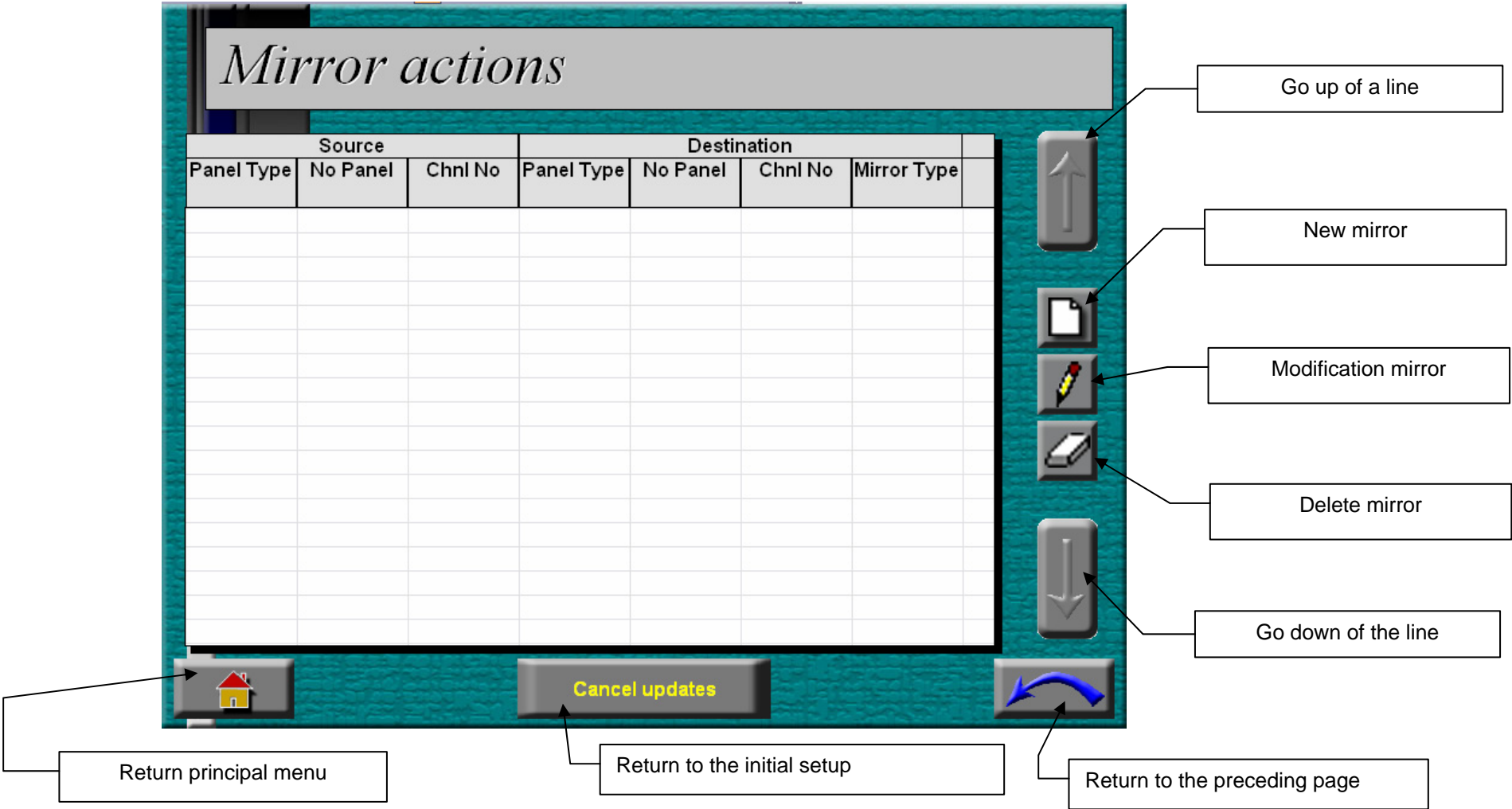
DESCRIPTION OF THE DIFFERENTS TITLES:

Title	Description	Values
Pnl	Number module	1 à 64
Chnl	The type of module is not taken into account for the validity of the number of channel	1 à 24
Screen	Display the channel event on the screen	0 ou 1
Print	Impression of the channel event	0 ou 1
TypePrt	Impression type : 0=Normal, 1=Color, 2=Fat, 3=reverse	0 à 3
Klaxon	Horn on event	0 ou 1
Prio	priority of horn alarms	1 à 5
Histo	Inscription of the channel in the histories	0 ou 1
Bib	Number of library	1 à 64
Help	Number of instruction	1 à 48
React	Reactivation alarms	0 ou 1
Tempo	Tempo of reactivation 1=1mn, 2=5mn, 3=10mn, 4=30mn, 5=1h, 6=12h, 7=24h, 8=36h	1 à 8
TxtScr	Displayed text with the screen on event (alarm and history)	64 caractères
TxtImp	Displayed text on the printer on event	64 caractères



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OVERALL CONFIGURATION OF THE MIRRORS



Although at the time of the configuration of the channels one can parameterize the shares mirrors relating to the channel in progress. This screen makes it possible to have an overall picture of the configured shares mirrors.

The board displays, for all the mirrors present in the configuration, the origin of the share mirror (3 left columns) and its destination (3 right columns). After having selected a share mirror, one can:

- Remove while clicking on the button of suppression (a confirmation is required)
- To modify while clicking on the button of edition. In this case, the dialog box "Mirrors" is called to configure the share. See the paragraph "Mirrors of a channel" for more detail on the configuration of a mirror. Contrary to the configuration of a channel, the part "source" then comprises the possibility of changing the number of module and channel. The fields are upgraded with the opening with the current values of the selected share mirror.

One can create a new share mirror with the "new" button. The dialog box "Mirrors" is called to configure the share. See the paragraph "Mirrors of a channel" for more detail on the configuration of a mirror. Contrary to the configuration of a channel, the part "source" then comprises the possibility of changing the number of module and channel which are virgin at the time of the opening.

The actions of mirrors are classified in the order of their creation. It is not possible to sort them..

CONFIGURATION OF A MODULE

Number of module

Activated / desactivated module

Deleted all channels of the module

Type module

The parameter running is that which has the yellow bottom

Controls of channel :

- Channel number
- Precedent channel
- Following channel
- Copy channel
- Past channel
- Cut channel
- Delete channel

Module #1

Panel title : **PANEL N°1** **ALARM / VISU**

Display on event	Yes
Print on event	Yes
Printing mode	Normal
Sound alarm	Yes
Sound alarm priority	5
Historic plug	Yes
Library number	0
Instruction number	0
Alarm reactivation	No
Reactivation delay	
Screen text	TEMPERATURE HAUTE
Printer text	TEMPERATURE HAUTE

Library

Instructions

Channel number 1

Precedent parameter

Modification of parameter

Following parameter

Call of the page « Mirror channel »

Return principal menu

Return config initial

Change of module

Return to the precedent page

Inactive CLEAR J3500

↑

↓

Cancel updates

← → ↺



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TYPE OF MODULE

To change type of module, it is necessary to click on the top right green button of the screen. Each click makes pass to the type of following module, and reboule with the last. Among the various types the type “No” meaning appears that there is no bearing module this number. It is however possible to configure the channels in preparation for a later amendment. However attention, the change of the type can affect certain parameters, in particular the configuration of the mirrors which can be given to zero at the time of the passage to a type not supporting them. It is advised to parameterize the mirrors only when the type of module is final.

ACTIVATE / INACTIVE

While clicking on the “Active/Inactive” button, one activates or not the module. Its configuration is backed up, but it will not be scanned on the bus. A deenergizing of the module is advised when one removes a module of the bus to avoid causing decelerations of the examination related to an absence of the module. It will be enough to reactivate it at the time of its reintroduction, its parameter setting will not have been modified.

CLEAR MODULE

When the parameter setting of the module is completely different from that desired, it can be desirable to point out all the default values. In this case, it is enough to click on the button CLEAR to erase all the parameters of all the channels of the module.

CHANGE MODULE AND CHANNEL

For a faster configuration, one can change module while remaining on the same channel, or channel while remaining on the same module. The configuration being recorded module by module, a request for confirmation will be made in the first case.

To change module, it is enough to click on the green arrows in bottom of the screen.

To change channel, it is necessary to select the channel on the right by using the vertical green arrows of the screen until the number of channel becomes yellow, then to click on the buttons [+] and [-] located on the right number to increase or decrease this number.



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MANIPULATION OF CHANNEL

One can copy, cut, erase, stick all the parameters of the channel in only one operation with the buttons located on the right of the number of channel.



Copy the channel in the paper weights (special format with Multitrans, it is not a question of the paper weights of Windows)

Past the contents of the channel copied in the current channel

Copy the channel in the paper weights and gives all the parameters to their default value

Gives all the parameters of the channel to their default value

MODIFICATION OF CHANNEL PARAMETERS

To modify individually the parameters of the channel in progress, it is necessary to select the line of the parameter to be modified using the vertical green arrows on the right of the screen. The fields in progress passes in yellow. To modify the value of this field, to click then on the button of amendment. Limps of amendment is displayed, it is enough to click on the buttons [+] and [-] of limps to select the wanted value, and to validate while clicking on the green stage coach. To cancel the amendment in progress (dialog box open), to click on the Red Cross.

Attention, he does not have there an individual "Undo". A modified parameter can be given to its value of origin only while cancelling all the modifications OF THE MODULE.

LIBRARY AND INSTRUCTIONS

The two list boxes "Library" (green bottom) and "Instructions" (blue bottom) make it possible to visualize the correspondence of the number of library or instruction with the associated bond and the text. Each line of the lists contains:

- The Number of library or instruction
- The Title of the library or the instruction
- The text of the library or the instruction



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When one publishes the fields “number of instruction” or “number of library”, the line of the list moves in a synchronous way when one modifies the number in the dialog box of modification, thus making it possible to better see the action of the modifications.

Outwards from the modifications, the lists display the line corresponding to the configuration of the channel. It is not possible to make ravel these lists manually.

CANCEL UPDATES

The button “cancel updates” in bottom of the screen, makes it possible to return to the initial parameter setting of the module before the first modification. These controls cancel the modification of all the channels, like that of the bond, the type and the activation of the module.

MIRRORS

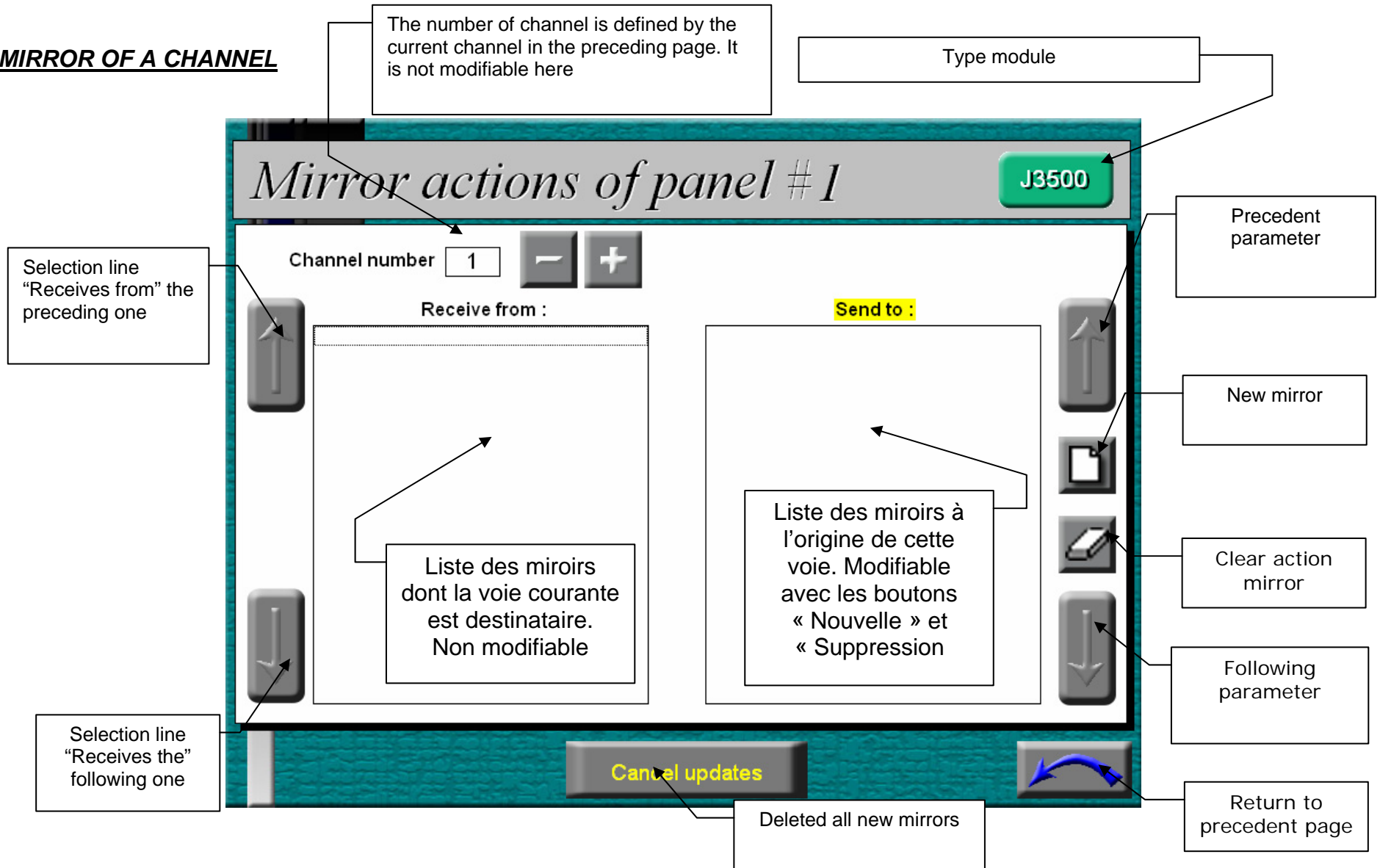


This button calls the window of parameter setting of the mirrors of the channel in progress.



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MIRROR OF A CHANNEL



This page makes it possible to parameterize the action mirrors at the origin of the current channel.

The left part of the page displays the list of the shares mirror whose channel is addressee, but this list is not modifiable and is there only as information. The vertical arrows on lefts of the screen are used to traverse the list if the aforementioned contains more lines than it cannot display some.

In the list of straight line one visualizes the shares already existing mirrors. To select one of them (to remove it for example), it is necessary to use the vertical arrows located on the right screen. After having selected the channel, one can remove it, but for technical reasons it is not possible to modify it. It will thus be necessary to remove the share mirror and to recreate some another (or the reverse).

ADDITION / SUPPRESSION



This button delete the selected action mirror



This button creates a new action mirror opposite by calling the dialog box of configuration.

The parameters “Source” correspond to the module and the current channel. The type of module is pointed out. In the case of J2400, the number of channel does not apply and the button “Reset” is the channel source, some is the current channel at the time of the call of the mirrors.

In the part “Destination”, the type of module is upgraded according to the selected number. The aspect of the field “channel” depends on the context and the possibilities of mirror:

If the channel source is the reset, there is no channel of destination (it is also the reset of the module destination).

MIRROR TYPE

To define the type of mirror, it is enough to click on one of the two buttons located in bottom on the left of the window. By defect, the type is impulse. These buttons are visible only if the association of the channels sources and destination is relevant.



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BEHAVIOUR OF ALARMS

Behaviour settings

	Alarm page	Historical	Printing	Horn
Panel appear/disappear	(2) <input checked="" type="checkbox"/>	(1) <input checked="" type="checkbox"/>	(1) <input type="checkbox"/>	(2) <input checked="" type="checkbox"/>
Alarms	<input checked="" type="checkbox"/>	(1) <input checked="" type="checkbox"/>	(1) <input type="checkbox"/>	(3) <input checked="" type="checkbox"/>
(1) Signals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) Panel Reset	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) PC acknowledgement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Click on a checkbox to modify it


Notes

- (1) All events
- (2) Disparition only
- (3) Apparition only
- (4) On event

Automatic disconnection. See the chapter "System configuration"

Max. inactivity time : 5 mn





Return principal menu

Return to following page

The page “Behavior”, accessible by small “general Settings”, makes it possible to add a layer of personalization to the processing of alarms, by allowing the inhibition of their display independently of the particular tunings of each channel. It also makes it possible to personalize the processing of the events system.

The processing defined in this page is priority on that defined in the parameter setting of the channels. In light:

Parameter preset in the page “Module”	Parameter preset in the page “Behavior”	Processing of the event
YES	YES	YES
YES	NO	NO
NO	YES	NO
NO	NO	NO

The column “Page of alarms” corresponds to the parameter “Appearance screen” of the configuration of the channels

The column “Histories” corresponds to the parameter “Buffer historical” of the configuration of the channels

The column “Impression” corresponds to the parameter “Impression” of the configuration of the channels

The column “Horn” corresponds to the parameter “Audible alarm” of the configuration of the channels

The line “Alarm” relates to the events sent with the type “Alarms” by the modules

The line “Indication” relates to the events sent with the type “Information” with the modules

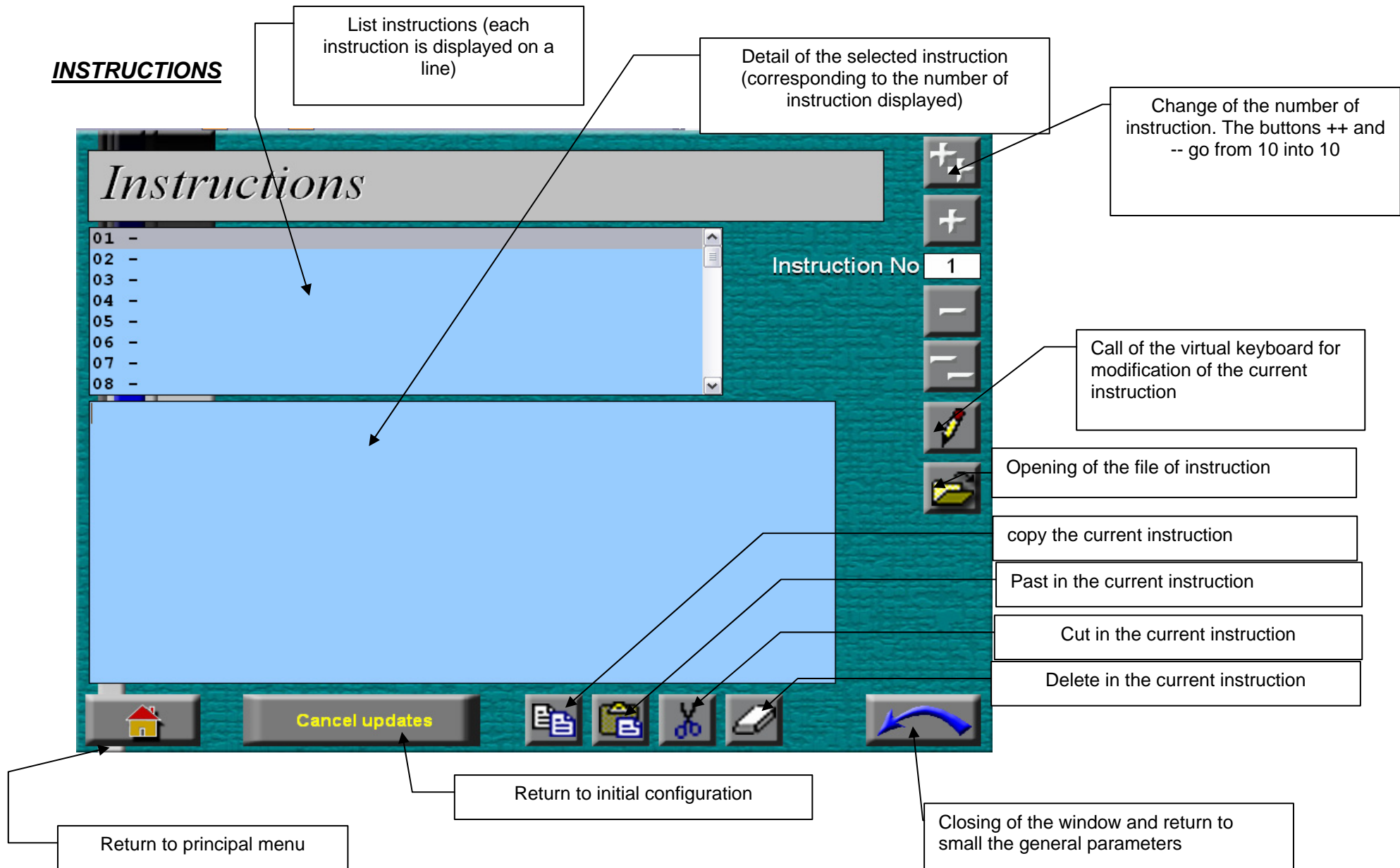
The line “Reset module” relates to the supports on the Reset button of the modules

The line “Acquired PC” relates to the supports on the Acquit button page of alarms of Multitrans

When the processing does not apply, or is not modifiable, the bottom of the box is grayed and puts it is not accessible.

To modify a parameter whose box is white, to click on this box.

INSTRUCTIONS



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With each channel a number with instruction can be associated. In the page of alarms or history, it is possible to select a line and to ask the corresponding instruction. One will be able to thus provide to the operator a list operations to be carried out during the appearance of alarm.

There are 48 instructions available. Each instruction can be multilane partner, but each channel can be associated only with only one instruction. It will be probably necessary to define instructions valid for several channels.

The Consigne page makes it possible to modify the bond and the text of the instructions. It is initially necessary to select a number of instruction using the movement keys (top right of the screen), If one has a mouse, one can also directly select the instruction in the list in top on the left of the screen. The lower restricted parking zone then displays the contents of the instruction, which will be displayed at the time of the call since the page of alarms or history.

EDITIONS OF INSTRUCTIONS

To modify an instruction, it should be selected, then to click on the button of edition. The page of edition opens then.

The left column makes it possible to change character set. It is thus possible to type any text, comprising as well the tiny ones as capital letters, figures that symbols.

- The keys of the line of bottom emulate the special keys of the keyboard:
- HOME Return to the start of text (and not of the line)
- <- et -> Displacement of the cursor of a character on the left and on the right
- END Return at the end of the text (and not of the line)
- <==X delete of the character on the left of the cursor
- DEL delete of the character on the right of the cursor
- CLR Total deleted of the text

The empty key corresponds to space.

It is of course possible to use a keyboard and/or a mouse connected to PanelPC.

It is much easier to use, especially if the text is long because the virtual keyboard does not comprise a key of vertical displacement. The area of edition behaves like a standard text box of Windows, and one can normally use the keyboard and the mouse to publish the text. Copy-to stick is also usable, including starting from an other Windows application like the scratch pad for example.

The maximum length of the text is of 1024 characters (understood space and carriage returns). The carriage returns count for 2 characters. One can copy an instruction in another using the buttons of edition of the bottom of the screen. The buttons To copy and Cross copy the entirety of the text in the paper weights of Multitrans (distinct from that of Windows). The Coller button replaces the entirety of the text of the instruction by that which was copied. The contents of the paper weights are preserved until the program stop. It is specific to each function (the paper weights "Instructions" is distinct from that "Libraries").



Loading of an external text

It is possible to create a library of instructions, for example on desktop PC, then to import them in Multitrans starting from an USB key. Each instruction must correspond to a distinct file, with the pure text format (éditable using the scratch pad).

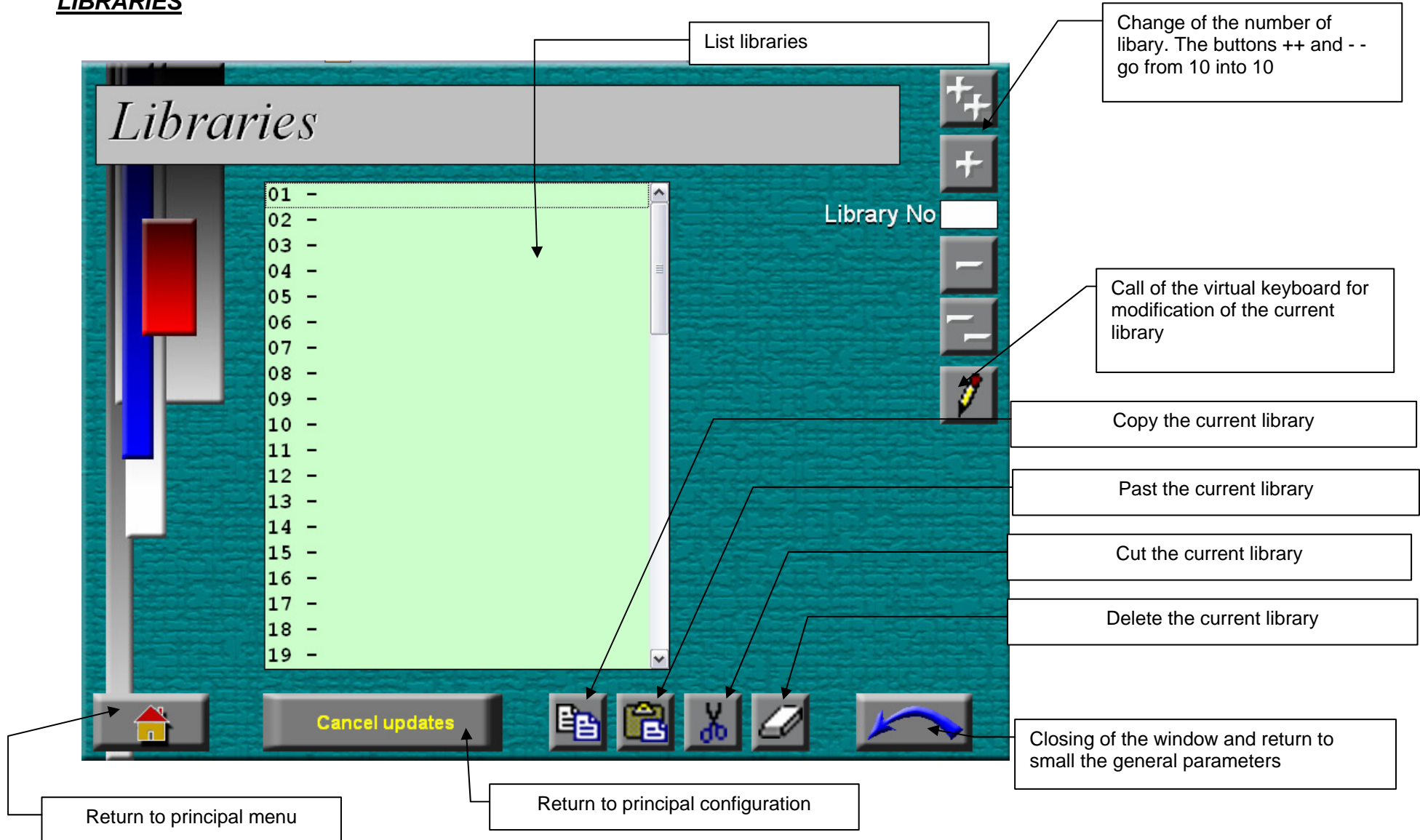
By using the button of loading of instruction, one opens limps it of opening of standard file of Windows. Because of the text size, it is advised to use a stylet or a mouse on PanelPC. To select the prepared text file and to validate. The text is imported in the text box and can possibly be modified before being validated.

The text presented to the operator respects the page layout of the text imported (spaces at the beginning of line, carriage returns, etc) Cependant if the length of line is higher than the width of the display (in particular at the time of the call starting from the page of alarms), the text is returned to the line automatically.



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LIBRARIES



A library is a text inserted in each line of the pages of alarms and history. It is in general about a text common to much of channels, thus making it possible to save the memory when a great number of channels must comprise the same text, and to avoid a tiresome capture at the time of the configuration of the channels.

Edition of the libraries

There exist 64 distinct texts of library. These texts can be called of any channel of any module.

The principle of selection and edition of the libraries is identical to that of the instructions. The button of edition calls the virtual keyboard opposite:

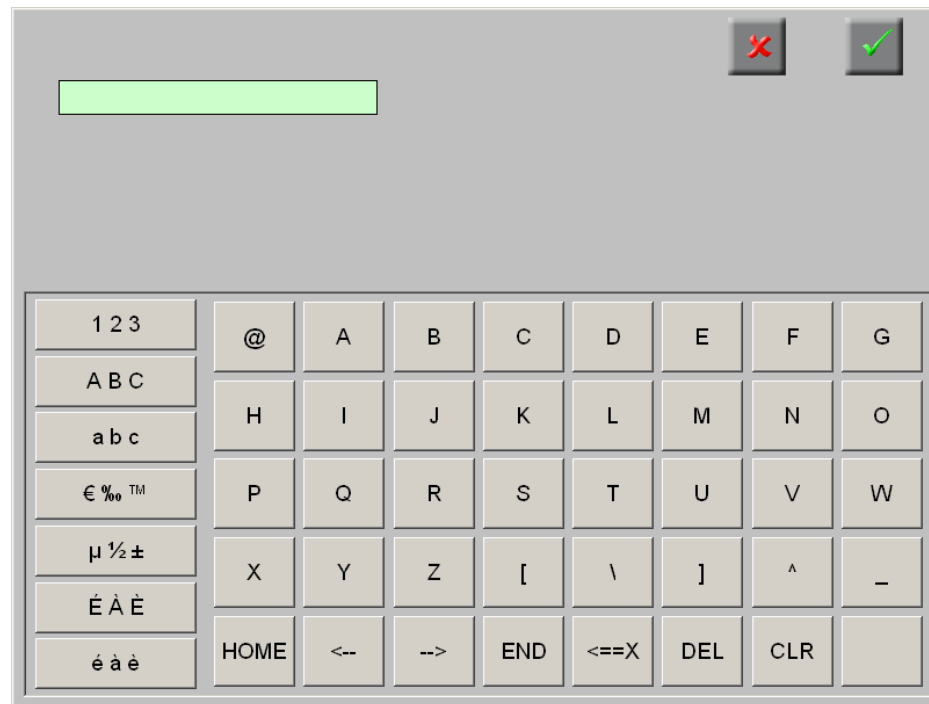
The use of this keyboard is identical to that of the instructions, if it is not that the button carriage return does not exist and that the area of capture is much shorter.

The text of the libraries is limited to 64 characters.

If one has of a keyboard or a mouse, one can copy to stick text in the text box of the keyboard starting from the paper weights of Windows.

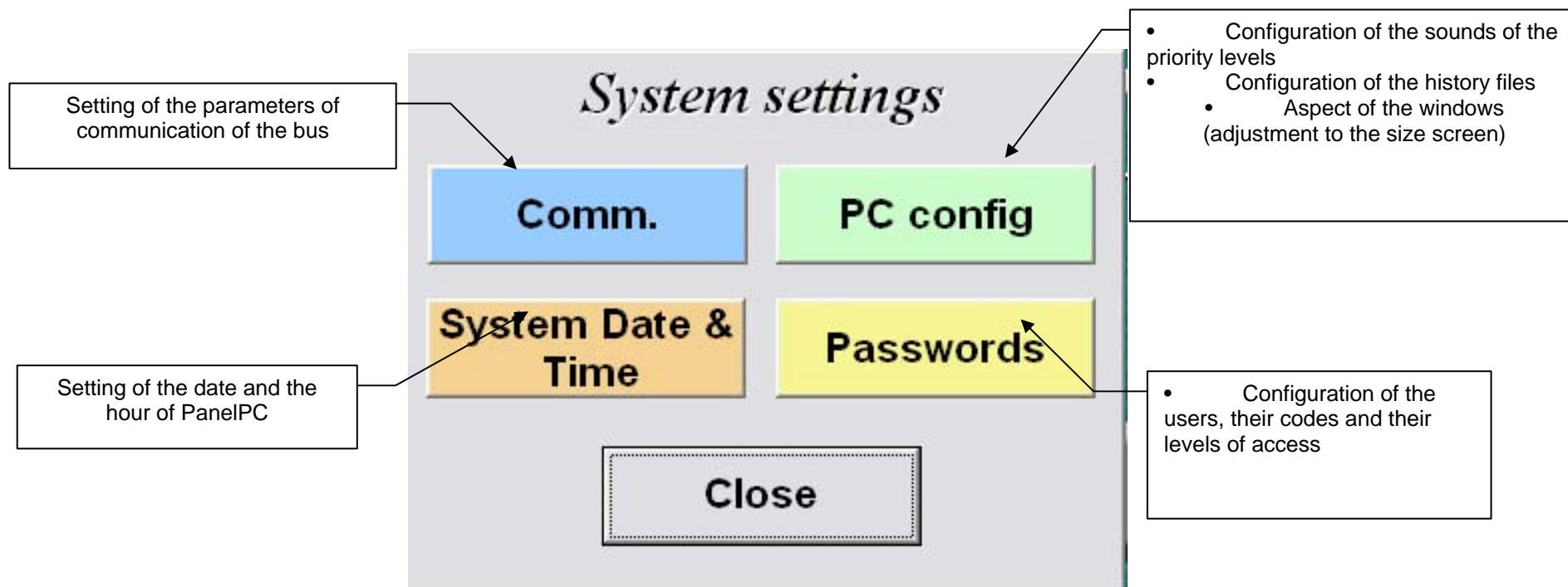
One can copy a library in another using the buttons of edition of the bottom of the screen of configuration of the libraries. The buttons To copy and Cross copy the entirety of the text in the paper weights of Multitrans (distinct from that of Windows). The Coller button replaces the entirety of the text of the library by that which was copied.

The contents of the paper weights are preserved until the program stop. It is specific to each function (the paper weights "Instructions" is distinct from that "Libraries").



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SYSTEM CONFIGURATION



SETTING OF BUS COMMUNICATION

System configuration

BUS

	Current	New	
COM Port	1	1	↑
Speed (bauds)	9600	9600	✎
Parity	None		
Bits number	8		
Stop bits number	1	1	↓
Start with application	No	No	

Return to precedent parameter

Call of box of modifications of the current parameter

Return to following parameter

Return to small System settings

Automatic launching of the communication during the starting of the program

Return principal menu



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The parameters of communication of the bus are accessible by the system menu/Com.

SETTING OF THE PORT OF COMMUNICATION

The accessible tunings for the communication are the number of the wearing of communication, the speed and the number of bits of stop. The securities acceptable for these parameters are:

Port of comm: 1 à 255

Bauds 1200, 2400, 4800, 9600, 19200

Bits of stop 1, 2

The parity and the size of frame are not modifiable.

AUTOMATIC STARTING

Multitrans was conceived automatically to launch the examination of the bus to the launching of the application. That is particularly important at the time of a cut sector, follow-up of a return of the voltage. It is imperative that the monitoring can begin again without manual intervention.

While putting "Yes" in the field "Starting with appli", the examination drunk is launched after an initial synchronization with each starting of Multitrans.

SETTING OF THE SOUNDS OF ALARM

With each channel a priority with alarm can be associated. This priority results in a sound different during release from alarm, which can help to identify the level of gravity by far where the area of origin of the defect.

In the event of multiple alarms, it is its associate with that whose priority is strongest which will resound, that this alarm is a first defect or an avalanche.

Multitrans has in its setup file of a bank 16 sounds.

There exist 5 priority levels, whose sounds are to be chosen among the 16 of the bank. The same sound can of course be associated with several priority levels.

During its launching, Multitrans copies from the hard drive, in its index of installation, the 5 files of sounds corresponding to those selected for the 5 priority levels, plus a file of sound not containing but silence, used to stop the audible alarm in progress. These files are files standard .wav and are named AlarmSoundX.wav, X being worth from 0 to 5. The files are removed during the normal closing of the application and are recreated to each starting.

It is very strongly disadvised removing or modifying the files of sound during the execution of Multitrans, because that could cause an erratic operation of the program at the time of the arrival of an alarm.

To configure a priority level, it is necessary to open the page of configuration using the menus "System/Config PC" and to carry out the following procedure:

- 1 To select the level using the buttons [+] and [-] of the field "Priority"
- 2 To select a sound from 1 to 16 using the buttons [+] and [-] of the field "Number of sound"
- 3 To listen to the sound while clicking on the button Test. A second support stops the sound.
- 4 to validate the choice while clicking on the green stage coach. A click on the Red Cross brings back the configuration of the priority level to its former state.

For a complete configuration, it is necessary to carry out this procedure for each of the 5 priority levels.



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HISTORY FILES

System configuration

Alarm sound

1 - Priority: Low (minus), 5, High (plus)

2 - Sound No: minus, 1, plus

3 - Test: traffic light icon

4 - Validate: red X, green checkmark

Paths & Files

Notes: you have to have at least a mouse or a stylus and rather a keyboard to fill fields below.

Historical files path: C:\Program Files\Multitrans II

Periodicity: ☒ Months ☐ Days

During: ☒ Unlimited

Warning: the place and the periodicity of the historic files are specific to the computer and are not recorded in the configuration file

Resizing: ☒ Not adjust windows size to screen size (default size : 800x600)

Return to the top menu (house icon)

Return to the initial setup (curved arrow icon)

Data validation "Files" (green checkmark button)

Call of limps of choice of index. One can also enter directly the path the field if one has a keyboard. In this case it is possible to give a relative path to the index of the installation.

Interval: Period of validity of a file (1 day or 1 month). Beyond this period, one changes file.

During: Storage time of the files on the hard drive and the card. Then they are unobtrusive. To notch the box to reveal the field of many days/months

In the configuration of the channels, it is possible to make appear the events of the channel in the history, i.e. one will be able to visualize these events after alarms disappeared. In this history appear:

- 1 Arrived of alarms
- 2 Receipt alarms
- 3 Disappearance of alarms
- 4 Disappearance/appearance modules
- 5 Stop / Run of the examination bus
- 6 the starting and the program stop (for the stop, only if "clean" stop)
- 7 changes of operators

These files are stored temporarily in the index of application of Multitrans. With each change of day, the following shares are carried out:

1. Removal of the temporary files having exceeded the date of conservation (see below)
2. Removal of the final files, stored in the index of filing, having exceeded the date of conservation (see below)
3. File copy temporary remainders towards the index of filing

Note: in order to save the number of writings on the support of backup (the flash memories have a number of writings limited to approximately 1 million), an existing file on the support is crushed only if the temporary file of the same name is more recent than him.

It is thus necessary to define the index of file storage of history, like their storage time. For that, one can either enter directly the path of filing the field "Path of the history files" (it is necessary to have a keyboard on PanelPC), or to click on the button on the right field and to select the index using the dialog box. Because of the smallness of the texts, it is preferable to use a stylet or a mouse.

To note that the index of filing does not exist (typical case of a removable disk or an USB key), the removal of the temporary files is carried out but the copy is not it. The absence of the index does not cause an error.

According to the number of daily events, one can choose either an interval day laborer, or for a monthly interval. That amounts changing once file per day or once a month.

In the event of very many events, it is preferable to choose an interval day laborer. Indeed, the number of events in one month would involve a size of history files very large. The display of the history would be very long and the search for an event would be difficult.

On the other hand, if the events are not frequent, of the daily files would be all small. The search for an event would require the frequent change of file, which would involve excessive handling. It is thus preferable to choose monthly files.

It is thus necessary to choose an acceptable compromise according to the life of the installation and the parameter setting of alarms.

At the end of a certain operating time, the history files can bring to a saturation of the hard drive. It is thus advised to limit their lifespan. For that, to click on the button of edition and to regulate the number of days or months (according to the selection carried out above) to a value compatible with the size of the disc and that of the files.



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Caution! The tunings relating to the history files are stored on the machine, and not in the setup file. That makes it possible to establish the configuration of the channels on another machine without “breaking” the configuration of the history, the more so as the latter is related to the hardware setting of the machine (number and name of the discs and indices) which can be very different from one machine to another.

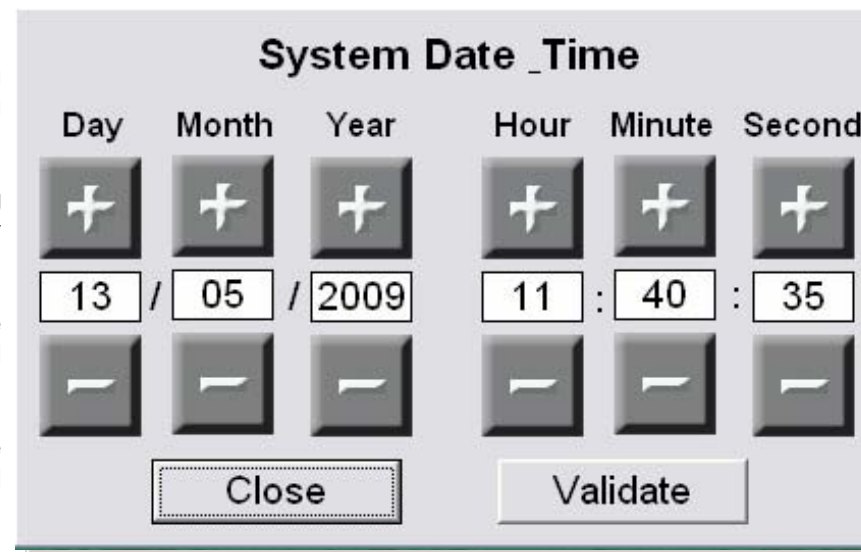
DATE AND HOUR SYSTEM

It is possible to regulate the date and the hour of PanelPC without leaving Multitrans. By calling small Système/Dates and hour system, one opens the dialog box opposite.

The buttons above and below them fields are used to modify the securities ranging between the two. For reasons of validity check, it is not possible to re-enter directly the securities in the fields even if one has a keyboard.

As long as no field was validated, the date is put permanently up to date with the hour system of the machine. As soon as a field was modified, the fields are fixed and one can thus modify them without being embarrassed by the upgraded one.

When the hour is regulated, a support on the button Valider copy the date and the hour displayed in the system timer of the machine. The fields are then freed and again follow the current hour.



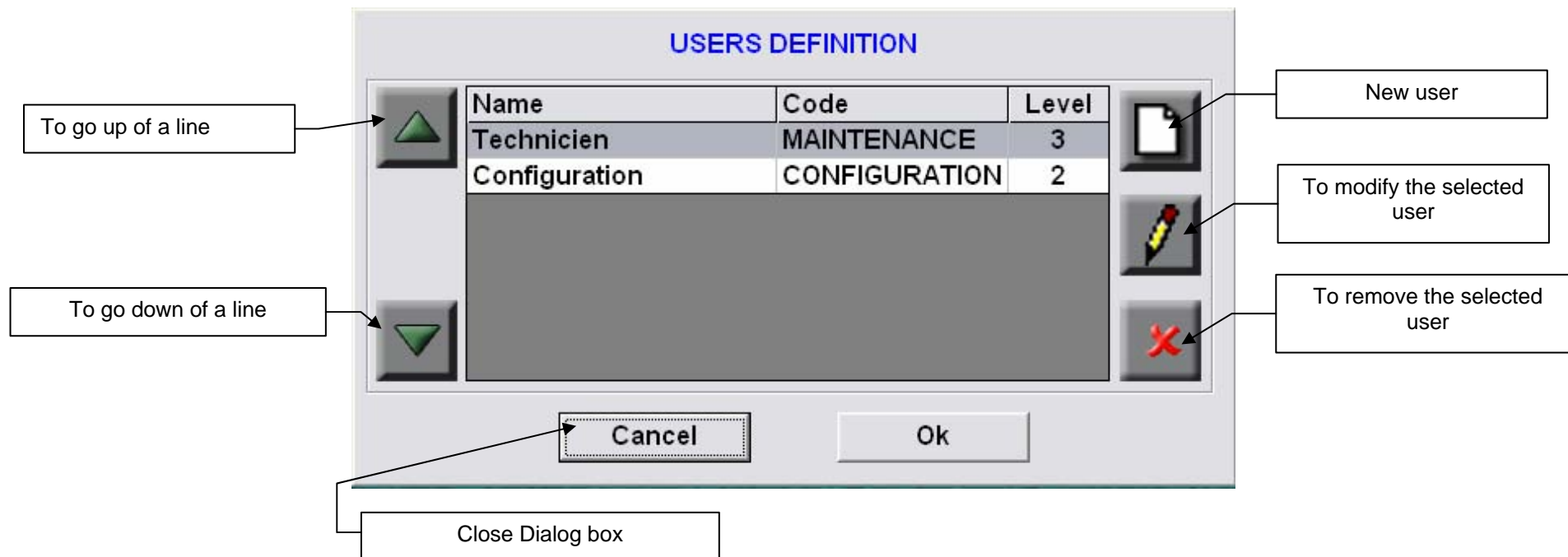
The dialog box is titled "System Date _Time". It contains two main sections: Date and Time. The Date section has three columns: Day, Month, and Year. Each column has a "+" button above a text field and a "-" button below it. The text fields contain "13", "05", and "2009" respectively, separated by slashes. The Time section has three columns: Hour, Minute, and Second. Each column has a "+" button above a text field and a "-" button below it. The text fields contain "11", "40", and "35" respectively, separated by colons. At the bottom, there are two buttons: "Close" and "Validate".

Day	Month	Year	Hour	Minute	Second
+	+	+	+	+	+
13	05	2009	11	40	35
-	-	-	-	-	-
Close			Validate		



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USER MANAGEMENT - LEVELS OF ACCESS



To each operator authorized to use Multitrans is associated a code and a level of access. The name of the operator himself is not visible with the screen except in the historical page at the time of the receipts and the logs on. At the time of the requests for log on, only the code is required. If it corresponds to the one of the recorded codes, the user whose name corresponds is regarded as connected and the current level of access becomes that which is affected for him. The change of user is registered in the history.

- To create a new user, to click on the "New" button.
- To modify a user, to select it with the movement keys, then to click on the button of edition.
- To remove a user, to select it with the movement keys, then to click on the button of suppression (a confirmation is required).

In the first both cases, limps it of log on is called. If it is an amendment, user settings selected are displayed. If it is a creation, the name and the password are empty and the level is regulated on 0.

- o enter a name user. Not to define too long, if not it will be truncated in the historical pages (max. 26 characters)
- To enter a code. To always use capital letters, because the virtual keyboard of log on does not comprise the tiny ones. If one enters a code in small letters or comprising characters accentuated during the parameter setting (using a keyboard for example), the operator will not be able to connect himself in exploitation because it will not lay out any more a keyboard and will not be able to thus type tiny nor D `accents.
- To display the level of access authorized for the operator using the keys [+] and [-].
- Validate.

The level of access is checked in the cases given below. If the level of access is insufficient, the dialog box of log on is displayed and the operator is invited to enter a code corresponding to a sufficient level to carry out the share. If the entered code is not correct, the share is cancelled.

To disconnect itself (to return on level 0), it is necessary to call the dialog box of log-on (for example starting from the main screen), to leave the empty code and to validate. This share will be carried out for example by the operator going down to the change from post.

Action	Niveau minimum
Configuration of the modules	2
Generals parameters	2
System setting	2
Technician menu	3
New configuration	2
Save configuration	2
Loading configuration	2
Abort program – Scrutation bus in service	1
Abort program – Scrutation bus stop	0
Sending of a remote control	2
Access to the window of control of the communication	3
Acknolege and stop horn	1
Exit of the page of alarms towards the screen main	2
Stop/ Run of the examination bus	2

TIME OF INACTIVITY - DISCONNECTION AUTOMATIC

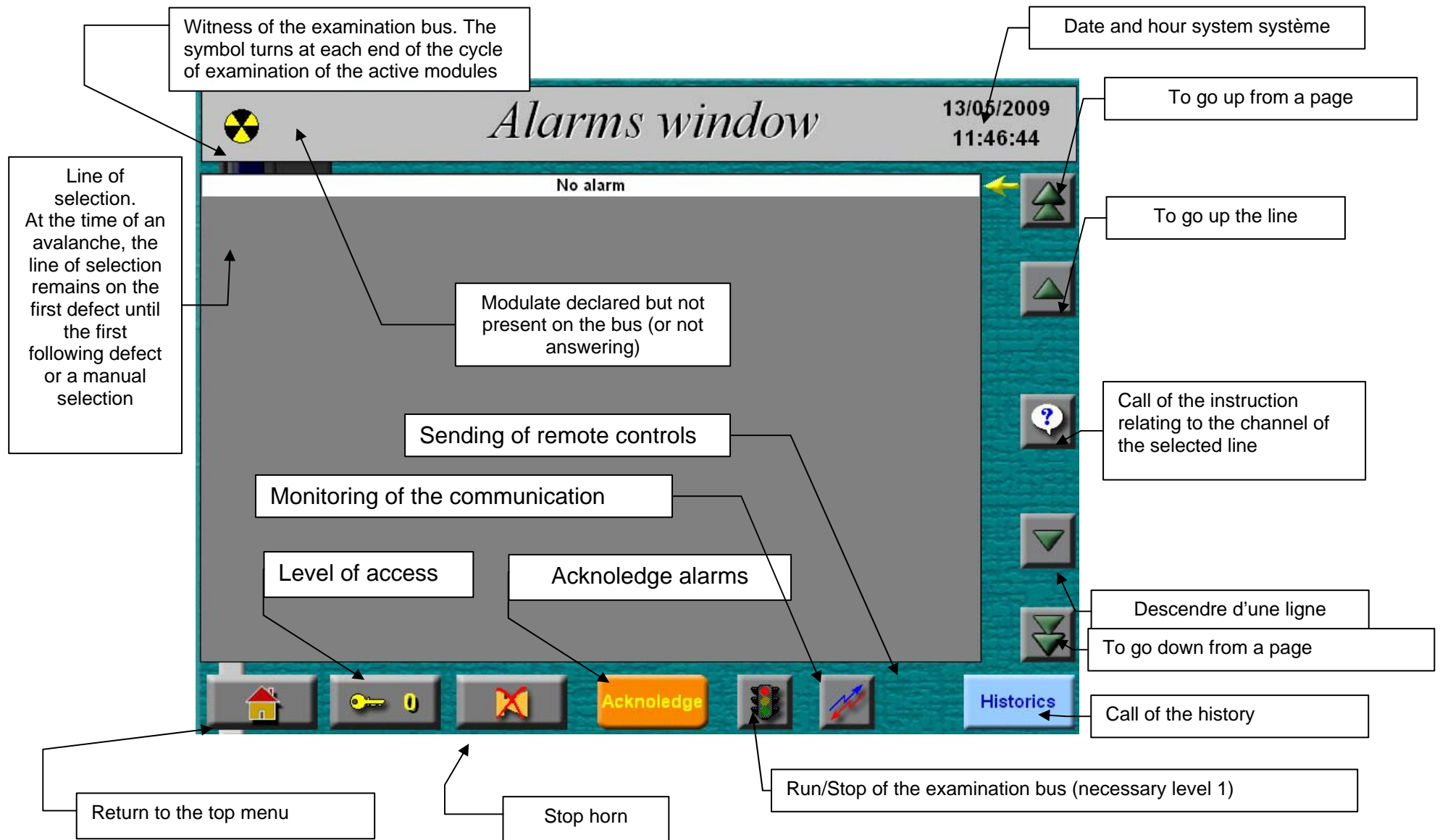
In order to prevent that an operator of higher level leaves the module to an abnormally high level in normal exploitation after an intervention of maintenance for example, a return to level 0 automatically takes place at the end of a given period if no share on the screen (or keyboard/mouse so present) were made.

When the idle period is past, if the level is higher than 1 (Run), the level falls down automatically to zero. If the level is to 1, it remains there. The tuning of the time of inactivity is done using small "the general Parameters - Behavior".



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PAGE OF ALARMS



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The page of alarms is the displayed page in a standard way in exploitation. With each event, it is recalled to the foreground whatever the share in progress. Consequently it is disadvised carrying out operations of configuration asking a validation whereas the examination of the bus is in service. Indeed, although all the precautions were taken to avoid this phenomenon, the display of the page of alarms at the same time as a request for confirmation is likely to involve a blocking of the application. It is in any case rather unpleasant to be stopped brutally during an operation of configuration by an alarm. It is thus advised to stop the communication before such operations, the more so as the recovery is then very fast (he does not have there new synchronization not drunk as long as the application was not closed).

MODULES ABSENT

In top on the left of the screen, a twinkling indicator announces the activity of the communication. It blinks at each end of cycle of examination. In the contrary case, either the examination drunk is stopped (red light on the button of functioning/stop) or no module is declared, or no module does not answer.

The modules declared absent are displayed in the small yellow squares in top on the left of the screen. When a module is declared absent, he is consigned during a certain time (10 mn) before a new attempt at connection is not made. When one is certain that a module again will answer (reconnexion of the cable or handing-over under voltage for example), one can anticipate the resumption of communication as a practitioner a rebootstrapping of the communication. This share is made starting from the page of monitoring of the communication (see below) accessible using the button "Monitoring from the communication" or starting from the page "technician".

DISPLAYS OF ALARMS

The distinction between Alarm and Information of a channel is not made by Multitrans. It comes directly from the module, in which this information was parameterized, either by micro switch, or using the specific software of configuration, according to the model of module.

The page of alarms displays only the channels of which it whose value of configuration setting "Display screen" was regulated on "Yes" in the page of configuration of the channels (even if the channel were physically parameterized in information in the module).

Alarms are displayed in their order of appearance, most recent in top. When an alarm is disappeared and discharged, its line disappears. If no alarm is present, a white line indicates it to avoid leaving the virgin screen.

The color of the lines corresponds to the statute of the channel concerned. These colors are the following ones:

Color	Parameter channel	Type of information	
Red	Alarm	First defect not discharged	
Orange	Alarm	Second defect not discharged	
White	Alarm	discharged Defect	
Magenta	Alarm	Reactivated defect	
Cyan	Info	Signal present	
Green	Info	Signal absent	
Coral	Unspecified	Channel at fault	

FORMAT OF THE LINES OF ALARMS

NNNNNN JJ/MM/AAAA HH:MM:SS Mmm-Vvv LIBRARY TEXT CHANNEL

Field	Length	Description
NNNNNN	6	Number events
JJ/MM/AAAA	10	Date of the event
HH:MM:SS	8	Hour of the event
Mmm-Vvv	7	Number of module and channel. The letters change according to the language to see the histories
BILIOTHEQUE	12	Texte library associated with the channel
TEXTE VOIE	24	Specific text configured for the channel

ACKNOWLEDGE AND STOP HORN

The button "Stop horn" does nothing but stop the program of the sound. He does not discharge alarms. The level necessary for the receipt is 1 ("Run").

The button "Receipt" Stops the sound AND discharges alarms. The receipt is specific to a module. It is sent to the module whose alarm is selected (yellow arrow on the right list). To discharge several modules, it is necessary to select a channel of each one and to click on the button of receipt.

The receipt in Multitrans does not correspond to the support on the Reset button of the modules. In particular, so of the shares mirrors were parameterized for these buttons, the shares are not carried out.

After the receipt, the channels alarms some which disappeared are unobtrusive. Those which remain pass in white. The channels in information are not affected.

INSTRUCTIONS

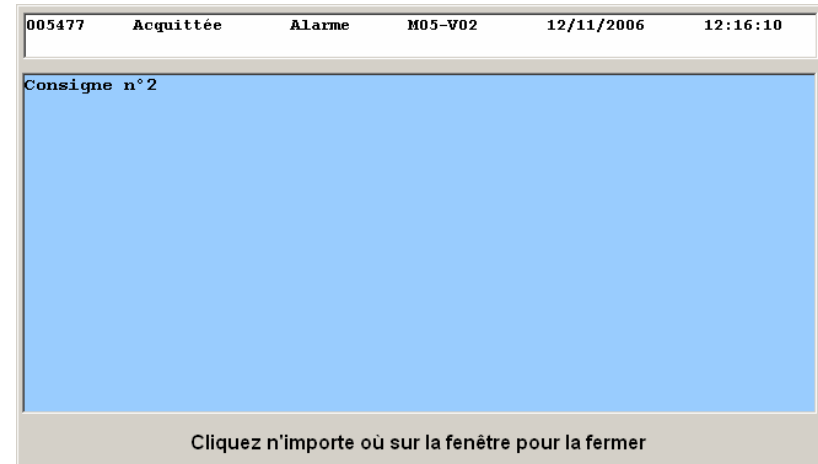
The receipt corresponds to a reset modulates for alarms. Consequently, the receipt on a channel discharges ALL alarms of the module. On the other hand, if indications were parameterized to be displayed, only selected indication is discharged and erased page of alarms. An indication is displayed during any change of state (passage to 1 and passage to 0). If she were not discharged yet during the change of following state, she changes color but remains displayed. If she had been discharged (and thus unobtrusive of the page of alarm), she reappears with the adequate color. Consigne

An aid with the operator is available for each channel, according to the parameter setting carried out (see the chapters "Configuration of a module - Library and instructions" and "Instructions").

To obtain the instruction relative to the one of the displayed lines, to use the buttons of displacement to bring the yellow arrow on the right board to the level of the line concerned, then to click on the button of call of aid.

If an aid is available, it is displayed in the pop-up window above. A reminder of the line of alarm is given in top of the window within the white framework. The text of the instruction is displayed within the blue framework.

To close the window, it is enough to click above.



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RUN/STOP OF THE EXAMINATION BUS

The access to the ordering of functioning and stopping of the bus requires level 2 minimum ("Configuration")

Multitrans store a state of the modules. With the first launching of the examination of the bus, it is thus necessary for him to collect a stable initial state of the installation. This operation is called "synchronization of the bus"

Lors de la synchronisation, Multitrans effectue les opérations suivantes :

- Initialization of the counters of communication errors of the modules
- Upgraded presence modulates
- Upgraded configuration of the channels
- Deleted of the memories of channels of the modules
- Sending of a Reset and a stop horn to the modules
- Deleted of the historical buffers of the modules
- Reading of the state of the channels of the modules
- Execution of the shares mirrors assigned to the channels read

If the examination is stopped then started again without interruption of Multitrans, synchronization bus is not carried out with the revival, since the state of the modules is always in memory. The events which have occurred during the stop are preserved in the buffer of the modules. These buffers will be read with the treated revivals and events. However, the modules not having a time recorder, the events will have as a date and hour those of the moment of their processing and not those where they really occurred.



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MONITORING OF THE COMMUNICATION

The button of monitoring of the communication calls the page of background task which manages the examination of the bus. This page is with the use of technicians and is always in English. The button of call is available only starting from level 3 (Technician)

In the board of straight line the various declared modules are displayed. The first three columns display the value of the counters of errors.

The N1 counter represents the number of non-responses or successive erroneous answers.

The counter N2 represents the errors of first level (non-response or erroneous answer). When this counter reaches value 3, it is given to zero, the N3 counter is incremented and the communication is suspended (towards this module) during 1 minute in order not to disturb the communication towards the other modules. The module is declared absent (display of the yellow square in the heading of the page of alarms).

The N3 counter represents the errors of second level. When the counter N2 reaches 3 for the third time, the communication is suspended during 10 minutes. So during the first following examination of the module this last does not answer yet, the N3 counter is incremented and the next examination is still delayed 10 minutes.

The column "Next Poll" displays the hour of next interrogation of the module. If the module answers normally, this value evolves/moves with each cycle of examination. If not, it indicates the hour to which the next interrogation will take place.

The counters of errors all are given to zero with the first correct answer of the module. One can réinitialiser the whole of the counters of errors of all the modules and to thus immediately start again the communication while clicking on the button "Reinit". The modules on standby are reinterrogated as of the following cycle. **The function "Reinit" allows réinitialiser instantaneously the modules in "Stand By" examination and to visualize the difficulties of reading of the modules (quality drunk). It does not carry out any carryforward.**

The communication can be stopped and re-starting using the functioning/stop key (green red light/) noted Stop/Run. There is no witness of communication, but the color of fire reflects the operating condition and the run of the number of questioned module makes it possible to follow the good walk of communication. Note: If the startup requires a synchronization drunk (the 1st starting), fire does not pass to orange in this page.

N°	N1	N2	N3	Next Poll
01	0000	00	00	14:50:09
02	0000	00	00	14:50:09
03	0006	00	02	14:50:56
04	0000	00	00	14:50:09
05	0000	00	00	14:50:09
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				

Current panel No : 5
Current run time : 14:50:10

Communication

Reinit

Stop/Run

Config bus

Port	1
Speed	9600
Parity	Sans
Frame length	8
Stop bits	1

N1 = Total errors
N2 = 1st level errors
N3 = 2nd level errors

HISTORIES

Alarm historic 13/05/2009 11:50:41

000061	COMM	STOP	SYSTEM	11/05/2009	16:05:36
000062	APPLIC	START	SYSTEM	12/05/2009	08:18:49
*****	*****	*****	*****	*****	*****
000063	LOGIN	LEVEL 0	SYSTEM	12/05/2009	08:28:02
000064	APPLIC	STOP	SYSTEM	12/05/2009	10:08:01
*****	*****	*****	*****	*****	*****
000065	COMM	STOP	SYSTEM	12/05/2009	10:08:01
000066	APPLIC	START	SYSTEM	12/05/2009	10:24:26
*****	*****	*****	*****	*****	*****
000067	LOGIN	LEVEL 0	SYSTEM	12/05/2009	17:27:53
000068	APPLIC	STOP	SYSTEM	12/05/2009	17:27:55
*****	*****	*****	*****	*****	*****
000069	COMM	STOP	SYSTEM	12/05/2009	17:27:55
*****	*****	*****	*****	*****	*****
000071	LOGIN	LEVEL 0	SYSTEM	13/05/2009	11:49:14

Annotations:

- Go up from a page (Top right arrow)
- Go up from a line (Up arrow next to line 000062)
- Appel de la consigne relative à la voie de la ligne active (Question mark icon next to line 000066)
- Go down from a line (Down arrow next to line 000069)
- Go down from a page (Bottom right arrow)
- Sending of remote controls (Bottom right button)
- Following history file (Bottom right button)
- List of files histories (Bottom left button)
- Preceding history file (Bottom left button)
- Line activates (for the call of the instructions) (Arrow pointing to line 000064)

The lines of history are distributed on two lines of text and have the following format :

Légende :

The various combinations are given in the board hereafter :

Display	Param.	Localis.	Library	Specifique	Observations
Normal	Info	Mxx-Vyy	Text library parameterized	Parameterized specific text	Standard cases of events on module
Actived	Info				
Acknowledge	Alarm				
1st Fault	Alarm				
Avalanche	Alarm				
Fault cable	Alarm				
APPAR. DISPAR	Vide	Mxx – Type module	*****	*****	Appearance/Disparition module
APPLI	START	Empty	*****	*****	Start application
APPLI	STOP	Empty	*****	*****	Stop (Clean) application
COMM	START	Empty	Empty	Empty	Start scrutation bus
COMM	STOP	Vide	Empty	Empty	Stop scrutation bus
ACKNOWLEDGE	LEVEL n	Empty	Nom de l'opérateur	Empty	Acknowledge operator on PanelPC
Acquit CL	Info	Mxx-ACK	Empty	Empty	Acknowledge operator on Module
LOGIN	LEVEL n	Empty	Nom de l'opérateur	Empty	Change operators

000000	DISPLAY-----	PARAMETER--	LOCALIS	JJ/MM/AAAA	HH:MM:SS
000000	LIBRARY----- SPECIFIQUE-----				

MANAGEMENT OF THE FILES OF HISTORIES

The events are filed in a provisional way in textual files *.his. The file in progress is read again at the time of the call of the historical page. The change of file can be carried out either the every day, or every month. The interval of the files is to be optimized according to the life of the installation.

If the events are numerous, it is preferable to choose daily files. Indeed, of the monthly files would be very bulky and their second reading by the historical page would be very long, involving a very slowed down display.

If the events are very few, it is preferable to choose monthly files. Indeed, of the daily files would be very small, and the course of the incidents would bring to many changes of files during the change of date of the events.

The history files have one lifespan defined in the parameter setting system (sub-menu "config PC"). After this period, they are removed disc (and support of backup if the aforementioned is present on the machine). With each change of day, the temporary files are recopied on the support of backup if that is present. One can also choose to preserve the files indefinitely, but it should be taken care that these files do not end up saturating the hard drive, and involving the planting of the operation system.

The file copy histories can also be carried out constantly by the technician (see the chapter "Technician")

The list of all the temporary files present on the hard drive of the machine is displayed in bottom of the historical page. The format of their name is AAAA MM for the monthly files, and AAAA MISTERS JJ for the daily files. The files are listed in the chronological order.

One can change daily file by using the keys located on both sides list of bottom of the page.

If one goes up in time, the current line of the list of the events will become the last line of the file of the previous period, which is normally the event having occurred right before that which was selected before.

If one goes down in time, the current line of the list of the events will become the first line of the file of the following period, which is normally the event having occurred just after that which was selected before.

This system makes it possible to ensure a continuity of the display of the events during the change of file.

EXTERNAL EXPLOITATION OF THE FILES

The temporary files are located in the index of installation of the application. The filed files are placed in the index defined in system settings, sub-menu Config PC.

The filename is structured in the following way: HistoAAAAMMJJ.his or HistoAAAAMM.his according to their interval. The letters in italic represent year (AAAA), the month (MM) and day (JJ) of the filed events. The monthly files do not comprise the figures of day.

These files are text files whose each line of event strictly has the format defined for the display screen, if it only it "is not unfolded" on a single line of text. This format is very easy to exploit with a spreadsheet like Excel: It is enough to define the document as text file in fixed width. In the window of data conversion, Excel identifies the various fields very well. It is enough to validate to obtain the list of the events in the form of fact sheet. The use of the automatic filter or the sorting makes it possible to gather the events identical for purposes of various analyzes.

Ne jamais ouvrir le fichier temporaire courant (du jour ou du mois selon le paramétrage) avec Excel. Ce dernier verrouillant le fichier, l'écriture de chaque événement de Multitrans provoquera une erreur dans ce dernier, et l'évènement ne sera pas inscrit.



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CONSIGN

In the same way that on the page of alarms, a page of instruction is available for the events concerning the channels (in the measurements where they were parameterized). To move the line activates (in yellow) with the vertical movement keys on the left of the screen, then to click on the button of aid. The page of instruction described in the chapter "Page of alarms - Instruction" is displayed.

SENDING OF REMOTE CONTROLS

The send button of the remote controls is available only starting from level 1 ("configuration") and so of the Sx00 modules were declared in the configuration. It calls the overall page of the remote controls. To refer to the chapter of the remote controls for more information. In the same way that on the page of alarms, a page of instruction is available for the events concerning the channels (in the measurements where they were parameterized). To move the line activates (in yellow) with the vertical movement keys on the left of the screen, then to click on the button of aid. The page of instruction described in the chapter "Page of alarms - Instruction" is displayed.



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REMOTE CONTROLS

GENERAL SIGHT

When modules of the type S3000 or S3500 are declared on the network, it is possible to send remote controls to these modules.

A remote control consists in making pass to 1 or 0 one of the 12 exits of the module.

The sending of remote controls requires level 1 minimum.



When one clicks on the button present on the page of alarms and the page of histories (only so of the Sx000 modules are configured), the summary page of the remote controls is displayed. On this page each Sx00 module declared in the configuration is represented. The 12 channels of each one are animated to represent the state of the exits of the modules. The high stringcourse of each module represents the bond of the module.

If there is more Sx00 declared than can contain the page of it, the horizontal arrows in bottom on the right of the screen make it possible to pass from one page to the other.

The button in bottom on the left of the screen makes it possible to return in the page of call.



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SIGHT OF THE DETAIL

While clicking on one of the modules, one calls the page of detail of the remote control.



The page represents a module of remote control on the left, and a stringcourse of control on the right. One selects a channel while clicking on the text box of the channel. A yellow framework comes to confirm the selection, and the number of channel is displayed top right.

To send a remote control:

1. To select a channel while clicking on the corresponding text box. The channel is framed of green
2. To click on the button "ON" or "OFF". There is no request for confirmation.

It is normal that the indicator of the channel immediately does not change a color. Indeed, it is not upgraded by the control, but by the second reading of the module. One is thus certain that the remote control was received by the module. It is thus necessary to count the time of transmission of the writing plus that of the reading.

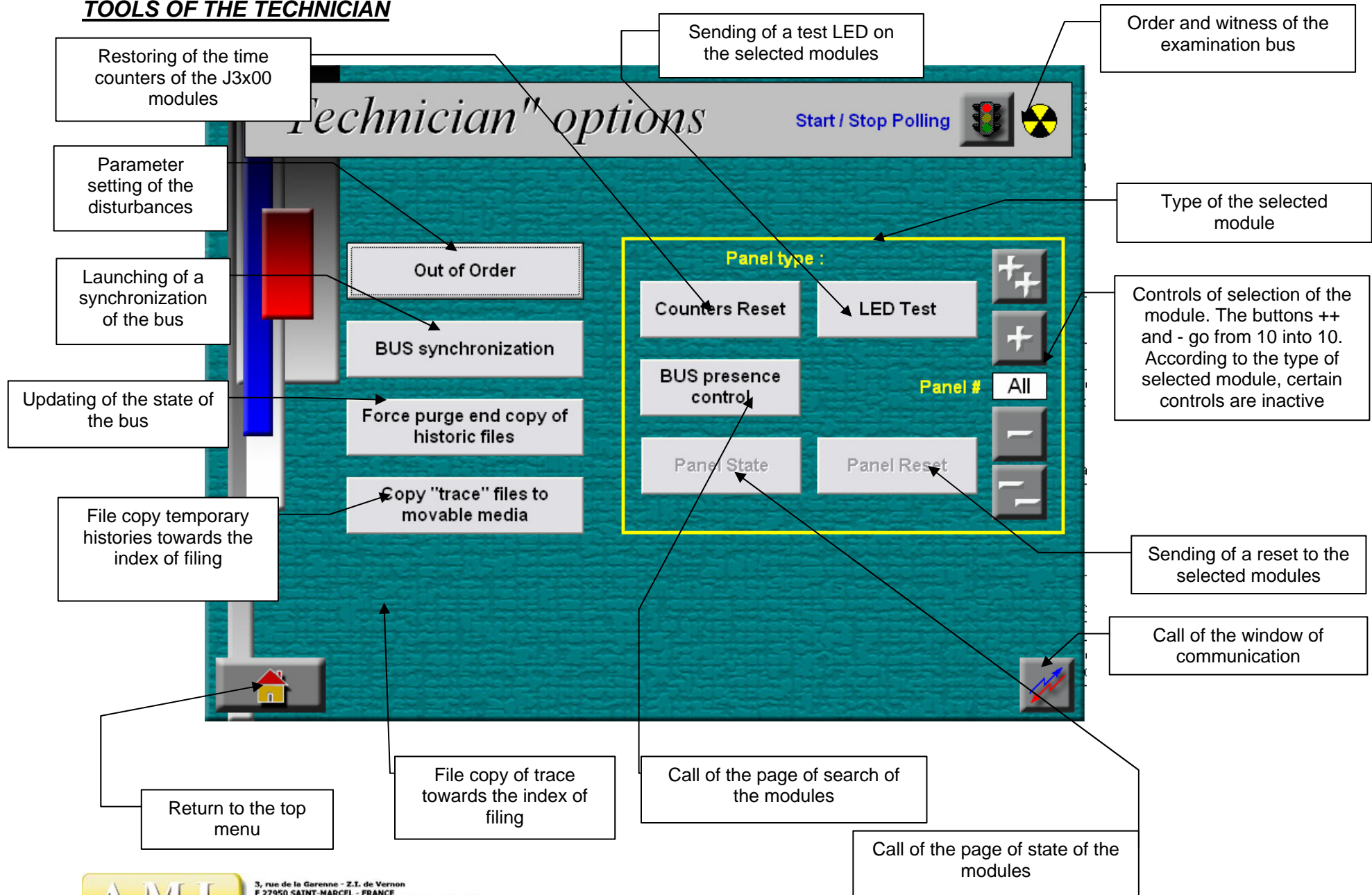
The sending of a firing order on a lit channel, or the reverse), does not cause any fault.

The remote controls come to form part of the cycle of examination while being added to the pile of the controls on standby. Consequently, the remote controls function only if the examination drunk is in service. In the contrary case, a message warns the operator whom the remote control will not be carried out.

DISPLAY OF THE REMOTE CONTROLS

The remote controls are treated in a way identical to indications of the J3x00 modules. Consequently, they by defect are displayed in the page of alarms. That has an important consequence: at the time of any passage of control to a channel of module parameterized with the display, the second reading of the module starts an event and the page of alarm is réaffichée. The operator "is thus ejected" of the page operates by remote control with each passage of control. In the event of multiple passage of remote controls, one needs two clicks on the screen to return in the page concerned. This behavior must be taken into account during the parameter setting of the channels of the modules of remote control, namely if it is quite necessary to display the channels operates by remote control some on the page of alarms, knowing that it is about a voluntary share.

TOOLS OF THE TECHNICIAN



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RESET COUNTERS

This control makes it possible to give to zero the time meter of J3000 and J3500.

If this control is sent to all the modules, it is sent in mode "broadcast". In this mode, the modules are supposed to carry out the control without returning answer. However in their current version, J3000, J3500 and J2400RS do not support this control in this mode. They thus return all answer of error (at the same time!) who comes in more collisionner the frame of following interrogation of PanelPC. The control not being supposed to have answer, the following interrogation leaves indeed immediately after the control.

This control sent to all the modules thus causes a general error of communication and does not have to be employed. Even in stop examination, it is in any case not carried out by the modules. It is thus not possible to synchronize the time meters of all the modules.

The independent drive is compatible with the examination of the bus (it is carried out between two interrogations)

TEST LEDS

This function sends an ordering of test of the indicators to the selected module. If the number of module indicates "All", the control is sent to all the modules at the same time.

This function is compatible with the examination of the bus (it is carried out between two interrogations)

RESET MODULE

This function corresponds to carry out a receipt flickering on the module concerned. This control is available only for the modules J3000 and J3500. It cannot thus be sent to all the modules simultaneously. It corresponds in 2 successive supports on the Reset button of these modules.

Attention, the control causes an error of bus if no alarm is to be discharged on the module. It is thus to prevent if the examination of the bus is moving and that the state of the module is not known.

CONTROL PRESENCE BUS

The button Contrôle présence drunk calls the page below: To only use to check the state of presence, activation/deenergizing, the type and the reading of the modules. It requires the stop of the normal examination. It does not carry out any carryforward. It can be necessary to launch a Bus synchronization then to make sure that no carryforward was forgotten. Cette commande permet de remettre à zéro le compteur de temps des J3000 et J3500.

	Nom du panneau	Déclaré	Activé	Défecté
1	Panneau n° 1 report Gai	S3000	Oui	J3000
2	Panneau n° 2	J3000	Oui	J3000
3	Panneau n° 3 usine	J2400RS	Oui	J2400RS
4	P4 / Report Maintenance	J2400RS	Oui	J2400RS
5	P5/	J3500	Oui	J3500
6		----	Non	----
7		----	Non	----
8		----	Non	----
9		----	Non	----
10		----	Non	----
11		----	Oui	----
12	Panneau 12	----	Non	----
13	Panneau 13	----	Non	----
14	Panneau 14	----	Non	----
15	Panneau 15	----	Non	----
16		----	Non	----
17		----	Non	?????
18		----	Non	?????
19	Panneau 19	----	Non	?????
20		----	Non	?????
21		----	Non	?????
22		----	Non	?????
23		----	Non	?????
24	Panneau 24	----	Non	?????
25		----	Non	?????
26	Panneau S3000 N° 26	----	Non	?????
27		----	Non	?????
28		----	Non	?????
29		----	Non	?????
30		----	Non	?????
31		----	Non	?????
32		----	Non	?????
33		----	Non	?????
34		----	Non	?????

Etat des panneaux

Marche / Arrêt Recherche

Panneau n° 16

Activer Désactiver

Mettre à jour type module

Paramètres Bus

Port COM 1

Vitesse (bauds) 9600

Parité Sans

Nombre de bits 8

Bits de stop 1

Retour page technicien

Board of the modules

To ravel in the list

Launching and stop of search

Activation of the selected module

Deenergizing of the selected module

Change of the type of the selected module

Bus parameters

This window is used to carry out a search for all the existing modules on the network. Each of the 64 addresses is tested and when a module answers, its type is required. As this procedure must often await a timeout, it is rather long. If one is sure that there are no more modules after the number in the course of examination, one can stop search.

The three left columns use the names, types and activations defined in configuration of the modules. At the time of search, the line corresponding to the number of module tested is selected. As of the end of search on this number, the field of straight line of this line is upgraded with the detected real type. If no module were detected, the type is indicated by dashes. At the beginning of search, all the right column is displayed with question marks to announce that these numbers were not tested yet.

So configured modules as decontaminated are found on the network, one can reactivate them starting from this page. It is necessary to select the line of the number concerned using the movement keys, then to click on the Activer button. One can also decontaminate a declared module which does not answer. These amendments are deferred in the configuration current and taken into account to the exit of the page (after request for confirmation).

If a type of detected module does not correspond to the configured module, it is possible to upgrade the configuration according to the detected type. It is necessary to select the line of the number concerned using the movement keys, then to click on the button "To upgrade standard module". This amendment is deferred in the configuration current and taken into account to the exit of the page (after request for confirmation).

The search of the modules is incompatible with the examination of the bus. Consequently, if the aforementioned were in service, it is stopped during all the time that search lasts. It is automatically re-starting to the stop of search.


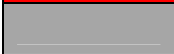

STATE OF THE MODULES

It is possible to visualize the state of each module on the bus (declared in the configuration). The button of call is available only for the modules declared in the configuration, because the format of the interrogations defers according to the type from the module.

After having selected a module declared, the support on the button "State module" opens the page below. The left part represents the fronting of the module (12 or 24 channel according to the type of module). The state of the channels upgraded by an examination specific and distinct to the examination is permanently drunk. The two means of communication are compatible and the state module functions during the examination drunk. However, the specific communication reads the real state of the modules, whereas the examination drunk reads the historical buffer of the modules. The follow-up of the specific communication is made in a textual way below fronting.

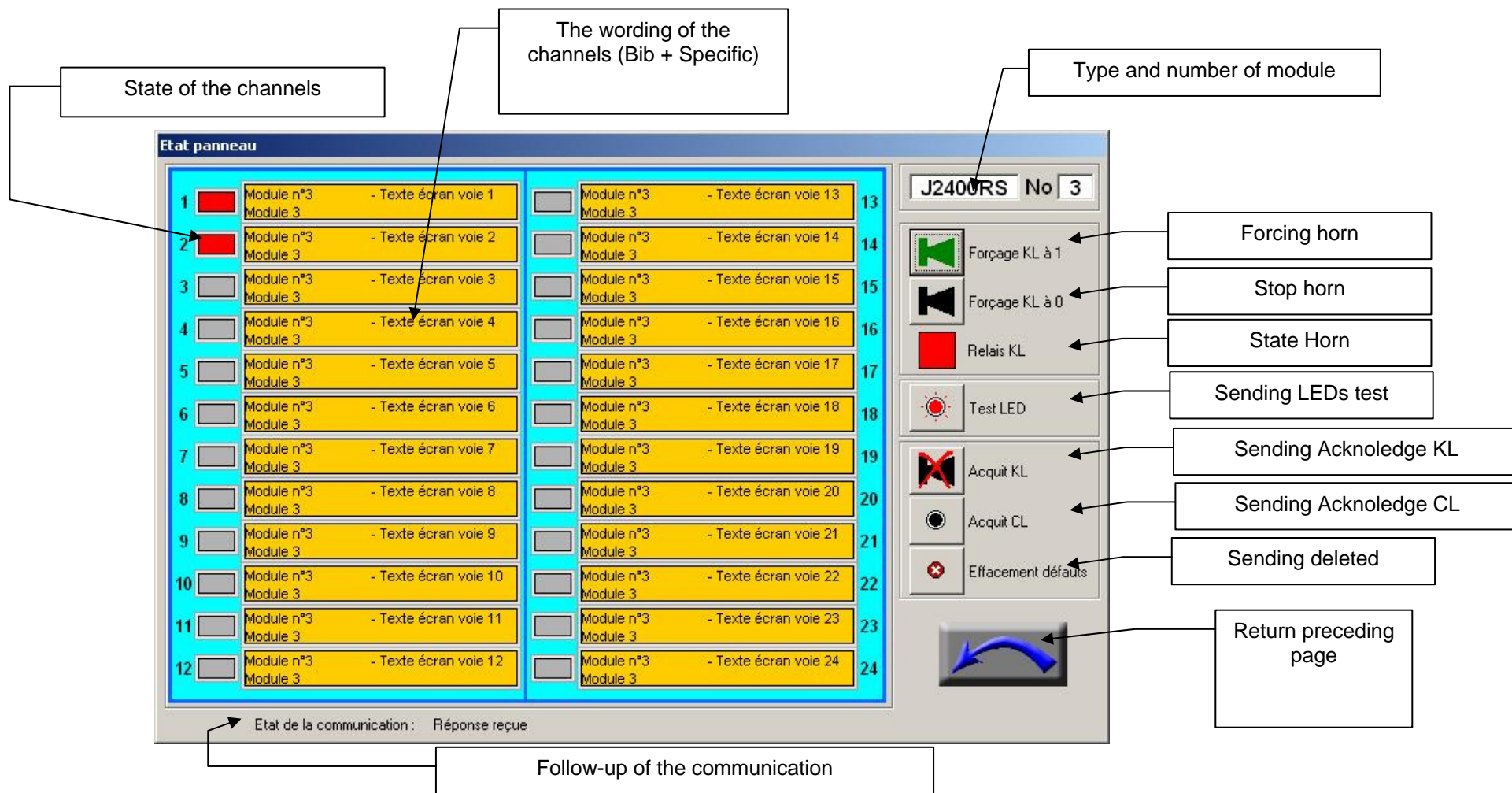
The right part constitutes a control panel/ordering of the module. One can consult the state of the relay horn, and send controls corresponding to physical shares on the module.

The color of the indicators (channels and relay horn) is the following one :

	Red	Activated - contact KL closed
	Gray	inactive Voie - open Contact KL
	Yellow	unknown State (not of communication)



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With the opening of the window, it is normal that all the indicators are yellow: The first reading does not have yet was made and the state of the channels is not known. If the communication with the module does not function, the indicator remain yellow and in the line of state of the communication one can read "Waiting of answer", and sometimes "Defect of communication" (very short because as of the defect detected one retente a reading). If not the indicators are upgraded with the first successful reading.

The three buttons of receipts have as equivalents the physical shares on the Reset button of the modules: Receipt KL = 1st support, Acquired CL = 2nd support, Effacement = 3rd support (according to physical parameter setting of the module). All the controls are compatible with the examination of the bus, but a receipt on a module not having anything to discharge causes an communication error due to the rejection modulates and slows down the examination of the bus during some cycles.





CONSIGNMENTS

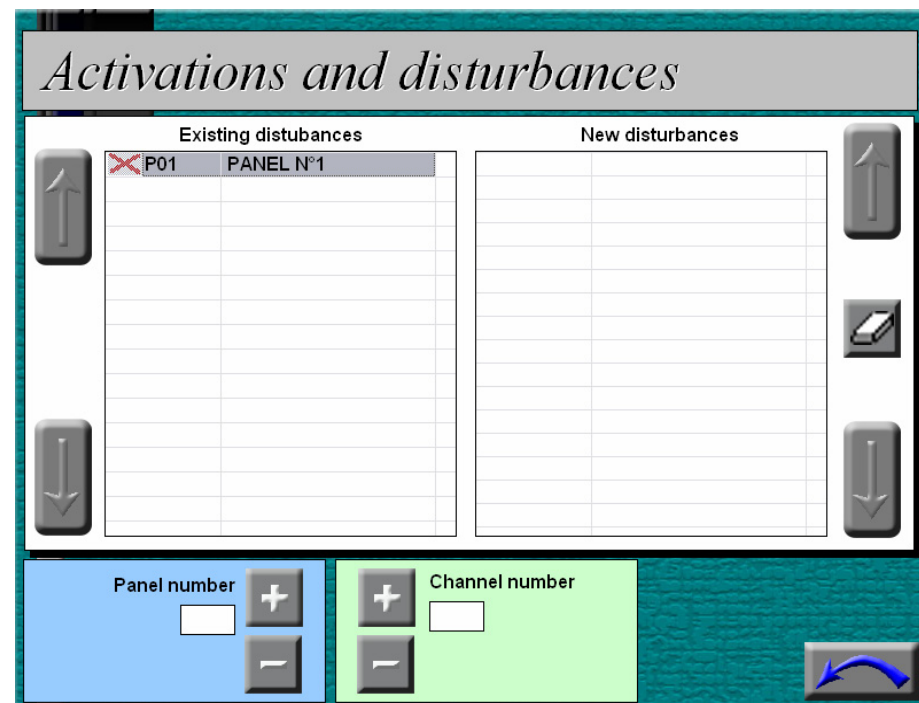
When a channel presents an intermittent defect, inopportune and brought closer alarms can bring an embarrassment for the installation operation. While waiting for the repair of the sensor, one can consign the channel rather than to modify his parameter setting in the configuration. Any event occurring on this channel will then be ignored until the deconsignation of the channel.

The list of left presents the consignments (also called "disturbances") existing in the recorded configuration. The amendments carried out in the page will be displayed in the list of straight line. They will remain provisional to the exit of the page, which will require a confirmation of the amendments. One can move in the lists with the vertical arrows located beside each list.

One can consign either a whole module, or a channel of a module

Symbols of consignment :

-  Module consigned (inactive)
-  Module actived
-  Channel consigned
-  Channel actived




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CONSIGNMENT OF A MODULE

The consignment of a module amounts declaring it inactive in the configuration. Information “modules” of this page is in “dual control” with Active button the “Activated/Inactivated” of the page of configuration modulates. The inactive modules marked in configuration will seem consigned in the page of consignment. The modules consigned in this page will appear inactive in the page of configuration. The module is not scanned any more. This consignment can for example intervene during the provisional withdrawal of a module, a defect of wiring of the bus (wrenching taken, wound of the cable, etc), or a temporary intense interference strongly disturbing the communication of this module.

Caution: The fact that the module is not scanned any more involves that the events remain stored in the buffer, without possible wash-out. With the deconsignation, the buffer of the module will be read and all the treated events, which is normal if it is about a problem of communication. If this behavior is not wished, it is advised to consign all the channels of the module before reactivating it, then of the déconsigner then.

To consign a complete module, it is necessary to select its number within the blue framework of the bottom of the screen, using the Plus buttons and Less.

If the module is not already consigned, a button in the form of Red Cross is visible, announcing that one can consign it (to make the module inactivated = die validation Red Cross). While clicking on the button, the module appears in the list of straight line with the symbol of consignment modulates

If the module appears in the list of the existing disturbances (list of left), the button represents a green stage coach (to make the module active = validation green stage coach). While clicking on the button, the module appears in the list of straight line with the symbol of deconsignation modulates.

If the module appears in the list of the new disturbances (list of straight line), no button appears because the module is already in the course of processing. To remove a processing in progress (list of straight line), it is necessary to select it with the vertical arrows of straight line and to click on the button of suppression.

Consignment of a channel

The consignment of a channel amounts more not taking account of the events relative to this channel. The events are read normally in the buffer of the module, erased of this last, but untreated by Multitrans.

To consign a channel, it is initially necessary to select a number of module within the blue framework, then to select the channel within the green framework

If the channel is not already consigned, a button in the form of Red Cross is visible, announcing that one can consign it (to make the channel inactive = devalidation « Red Cross »). While clicking on the button, the channel appears in the list of straight line with the symbol of consignment sees.

If the channel appears in the list of the existing disturbances (list of left), the button represents a green stage coach (to return the channel activates = validation « green stage coach »). While clicking on the button, the channel appears in the list of straight line with the symbol of deconsignation sees.



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- If the channel appears in the list of the new disturbances (list of straight line), no button appears because the channel is already in the course of processing. To remove a processing in progress (list of straight line), it is necessary to select it with the vertical arrows of straight line and to click on the button of suppression.

SYNCHRONIZATION BUS

Synchronization bus is a procedure which makes it possible to put in conformity the known state of the installation by Multitrans with the real state of the modules. It consists in "flat giving" all the events contained in the modules in order to obtain a stable and well defined situation.

This function is a PURGING of the state of display on the bus. It is to be used after any intervention on the bus (disconnections, reconnections of the bus, removal or addition of module, stop of the examination BUS) to give in configuration the image of the Bus in MULTITRANS and to carry out or remove all the carryforwards concerning the events which have occurred during the severance of communications. It modifies the states of displays on the modules, and can remove certain displayed and not discharged defects. It removes the remote controls present. Think of reactivating them then.

The **Synchronization function BUS** is called automatically:

- With the first launching of the communication, after the starting of the application.
- With the automatic restarting of Panel PC (in the event of return Fuel supply after inopportune cut).

It can be called in a manual way:

- By the ordering of "Synchronization Drunk" of the Technician page (page 51) following a desynchronization, of a reconnexion module or for any other reason such as "Drunk stop examination".

(The possible cases of stop/restarting BUS of examination are:

Automatic launching of the program following a setting or handing-over undervoltage.

Stop examination asked by the operator in the small TECHNICIAN

Use of the function **Controls Bus presence**

The Synchronization function BUS carries out the reset of the panels, the reading of their state and the corresponding sending of the mirrors. The detail is provided in the document "Notes of programmation.doc" contained in the file, like in the user's manual, page 59
Multitrans store a state of the modules. With the first launching of the examination of the bus, it is thus necessary for him to collect a stable initial state of the installation. This operation is called "synchronization of the bus".



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Lors de la synchronisation, Multitrans effectue les opérations suivantes :
During synchronization, Multitrans carries out the following operations:

1. Display of the message of waiting and blocking of the interface screen of Multitrans
2. Upgraded symbol "synchronization in progress" (amber light) in the pages which have which it
3. Test of the presence of each configured module. If the module is present, continuation of the operations
4. Seek type of module and upgraded in-house of its real type
5. Reading of the configuration of the channels
6. Wash-out of entered memory drunk (except J2400)
7. Sending of a Reset and a stop horn
8. Wash-out of the buffer of history (except J2400)
9. Wash-out of the channels and the memory image (J2400) memorized in Panel PC
10. Reading of the channels and processing of the associated events (except J2400), including shares mirrors
11. Upgraded symbol "communication in service" (green light) in the pages which have which it
12. Closing of the message of waiting and reactivation of the interface of Multitrans.

At the end of a synchronization bus:

- All alarms are discharged
- All the channels not yet present physically are unobtrusive
- All the remote controls are given to zero

The channels still present and configured for a display screen have the value "SYNCHRO" in the place of the time meter of the modules in the historical page. Attention, so of the remote controls were activated, the Reset of the synchro drunk gives the channels to zero. However, this event is registered in the historical buffer of the modules. With the following examination, the event of passage to zero will be detected and treated. In particular, if these channels were parameterized with the display screen, they will appear in the list of alarms with the color of inactive indication. It will be enough to discharge them to make them disappear, then if required to return the corresponding remote controls.

SYNCHRONIZATION MIDNIGHT

The Synchronization function at Midnight is called:

- With the change of date
- By the button "synchronization midnight" of the Technician page

This function carries out a reading of the state of the panels and readjusts the state of the internal memory image of MTT2. Carry out then a processing of the particular mirrors, because it does nothing but erase the target channel of a share mirror whose no channel source is active.

FORCE PURGE AND COPY OF HISTORIC FILES

The function Purges and copies forced history files (DoMidnightActions) is called

- with the change of date



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- by the button "Purges and copies forced" of the Technicien page

This function carries out the management of the history files and traces (fences, recopies, wash-outs, etc).

It does not have any share on the modules, the Bus or the carryforwards. It relates to only one management of the memorized files.

The temporary history files are stored in the index of the application until the deadline of conservation (lifespan defined in the page Config PC). With each change of day (thus at midnight), the files are recopied towards the index of filing, if there exists. In all the cases the too old files are purged, that the index of filing is present or not, this in order to prevent that a systematic absence of the archival medium (or a misconfiguration) does not involve the saturation of the disc in the long term. One can constantly start this operation for an unspecified reason. The main one is file recovery on a support not being present in a permanent way: The technician inserts the support in the machine (an USB key for example), starts the forced copy of the histories, then withdraws the support to exploit it on desktop PC.

Attention, at the time of operation, of the old history files existing in the support/index of backup will be removed if they exceeded the date of conservation. It is thus advisable to recopy the history files of the support of backup on another support if one wants to file them for one duration higher than that parameterized in Multitrans. It does not have any share on the modules, the Bus or the carryforwards. It relates to only one management of the memorized files.

COPY « TRACE » FILE INTO MOVABLE MEDIA

The files of trace are not intended to be exploited by the users of Multitrans, but by AMI at the time of incidents or particular problems. Although under a text format, their structure is not documented in this manual.

The files trace can be required by AMI at the time of abnormal operation of Multitrans, or to determine the precise circumstances of an incident which cannot be elucidated using the history files. The technician will have to then copy these files traces on a removable support so forwarding them to AMI.

There exist two manners of recovering the files traces, according to competences of the technician as regards Windows operating system.

1. The technician knows Windows, can launch and use the file explorer. In this case handling is simple. The files trace are under the index of installation of Multitrans (X:\Program files\Multitrans II - X depend on the machine, often different of C: on Panels PC) under index Traces. He is enough to select all files (or at least those which relate to the period of the incident), and to do one to copy to stick towards the peripheral of filing.
2. The technician does not know or not sufficiently the Windows operating system, or does not have of a keyboard or a mouse. In this case, it must check that the path of the history files is located the removable support of course (system menu/Config PC). He clicks then on the button "File copy traces" Technicien page. The files traces existing all are copied from the removable support, under index "Traces" index of filing.

In all the cases it will be advisable to check that the removable support has the place available to receive the files traces, which can be rather bulky.

CALL OF THE WINDOW OF COMMUNICATION

The button in bottom on the right makes it possible to call the window of communication, in order to be able to supervise the examination or réinitialiser the counters of error for example.

The use of the window of communication is defined in the chapter "**PAGE OF ALARMS** - *Monitoring of the communication*".