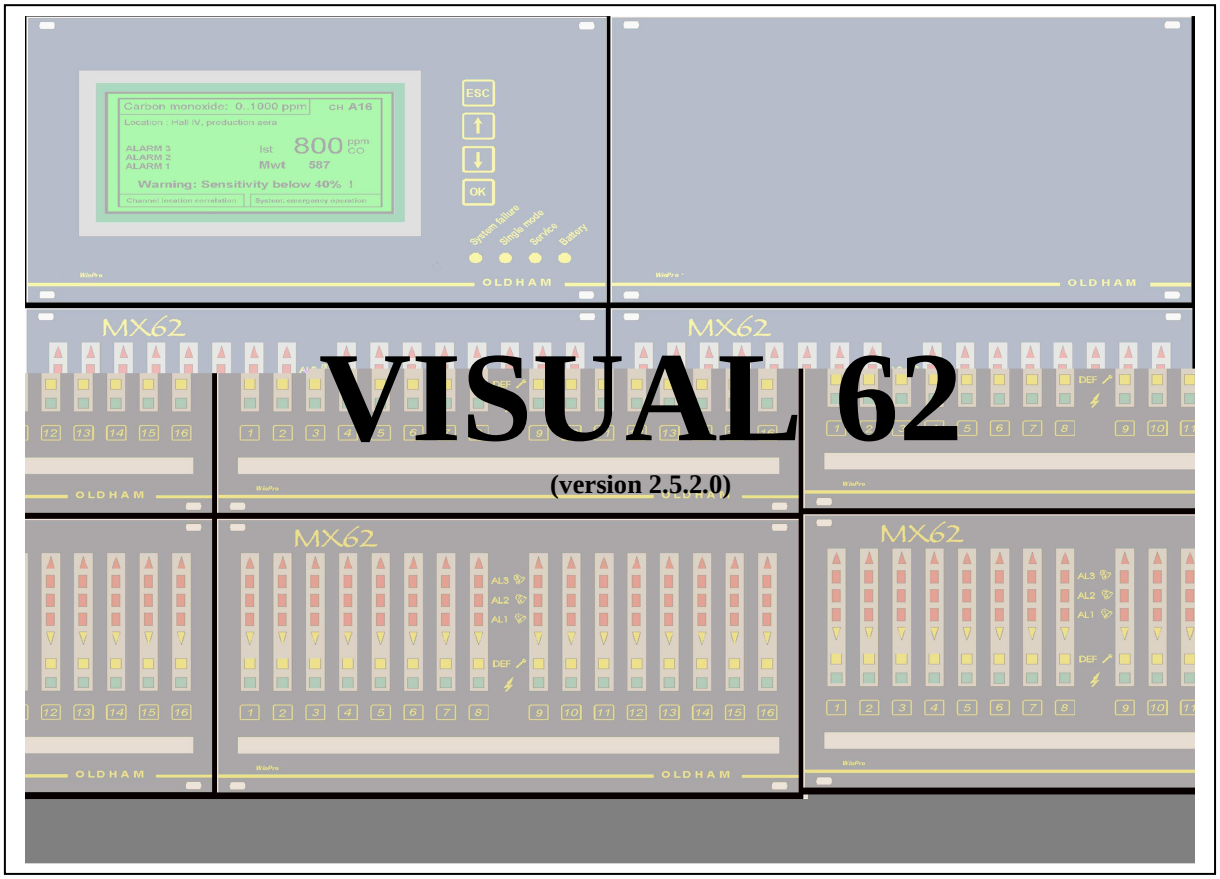
Supervision

(English version)

INDUSTRIAL SCIENTIFIC

OLDHAM

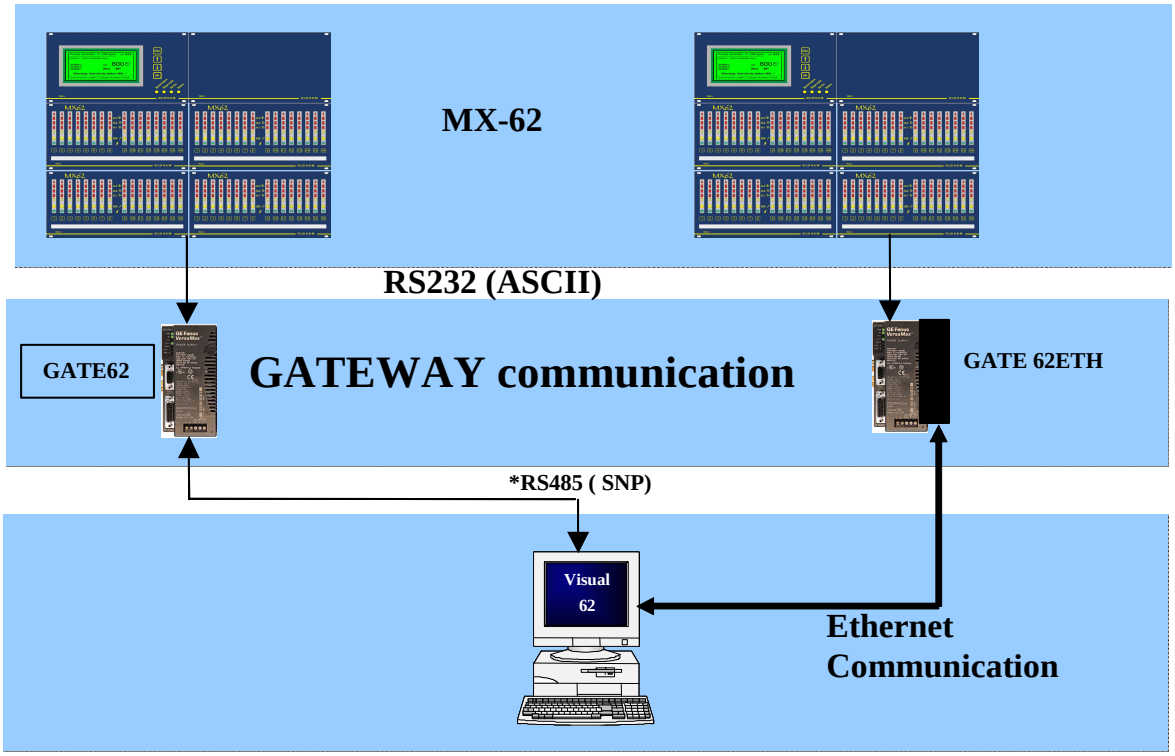


VISUAL 62

(version 2.5.2.0)

CONTENTS

HARDWARE STRUCTURE :



(*): With GATE 62 standard :To envisage adapter RS232 - > RS422/485 if none existing.

SUPERVISION PRINCIPLE

The stations Oldham MX62 are in communication on the PC of supervision via the dedicated bridges (GATE62). The station of supervision carries out the repatriation of information sensors established on site and provided to the user via the synoptic, curves and recording.
Controls of communication are integrated into the level of the supervision and inform the users in the event of loss of power station, loss of bridge or loss of communication in general. This information is stored in the PC and can be printed.

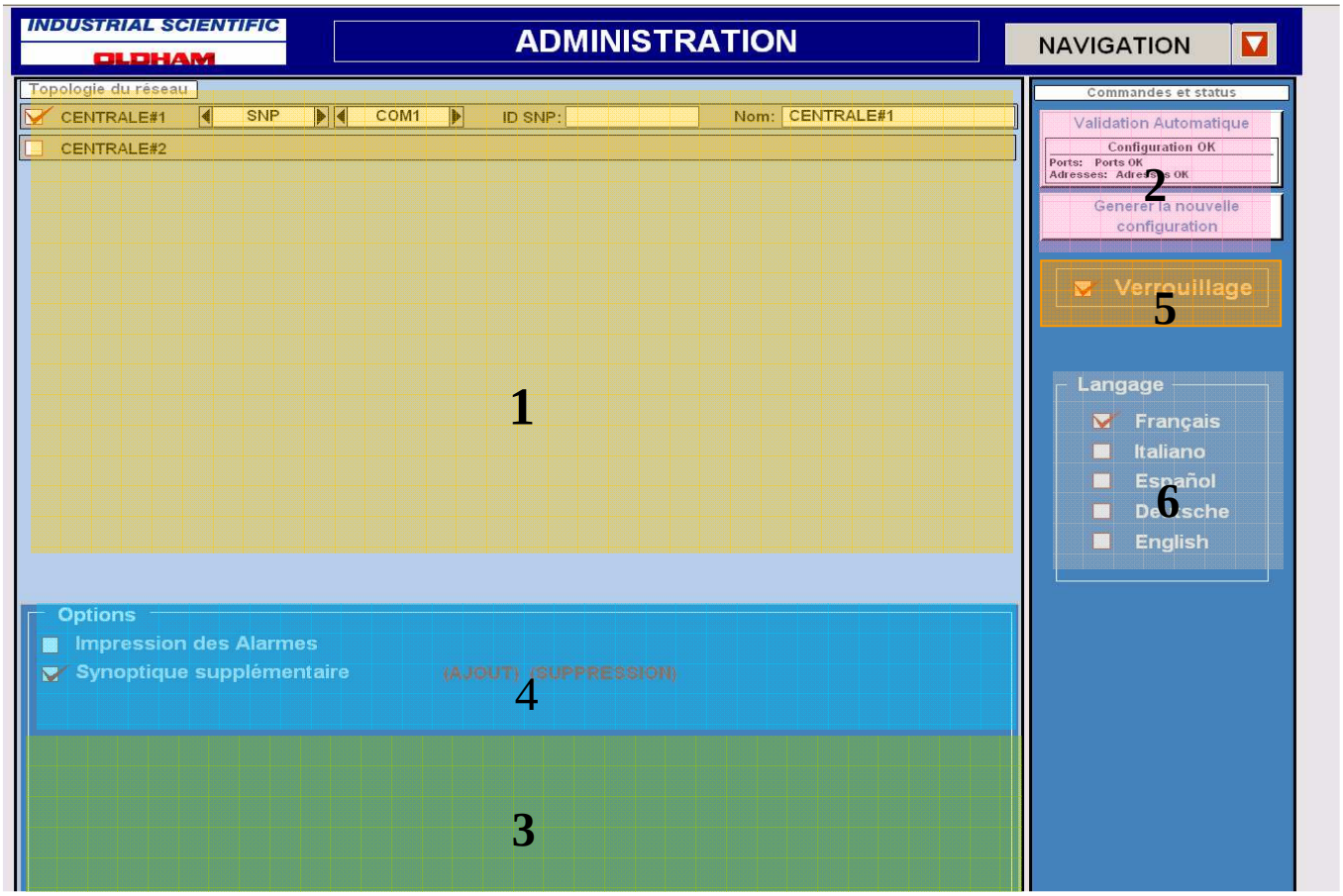
FIRST START:

At the first start of VISUAL62, the "Administration screen " appear to allow the configuration application, next start that will be the " Visualization Screen "

ADMINISTRATION SCREEN

At the first start of visual62, if no MX62 are configured , the Administration Screen appear to configure the project. Then this screen will be available through the "Navigation " banner or through the start menu of Windows

This screen is used to declare the MX62 used on the system



MX62 Declaration :
Up to 16 MX62 can be configured

1 : MX62 declaration part
2 : Validation Banner
3 : Banner alarm power already configured.
4 : Options choice.
5 : Configuration Lock and Unlock access
6 : Selecting the language used in the program

1 : MX62 declaration part

(1) : Check Box to declare a new MX62.

(2) : Choose the network protocol used to communicate with the GATE62.

(3) : Select the PC port of communication with GATE62.

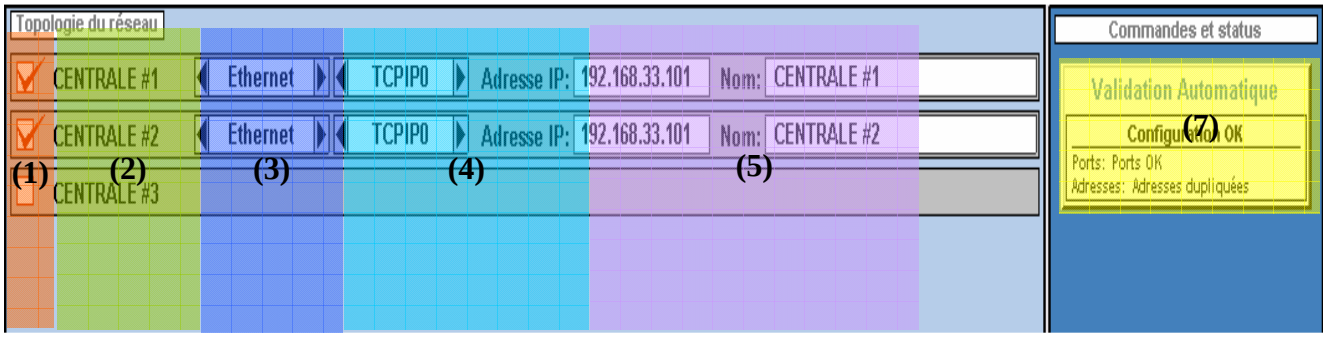
IMPORTANT NOTE: No more than 4 x GATE62 on the same Port.

(4): GATE62 address (IP or ID SNP, depend of the protocol)

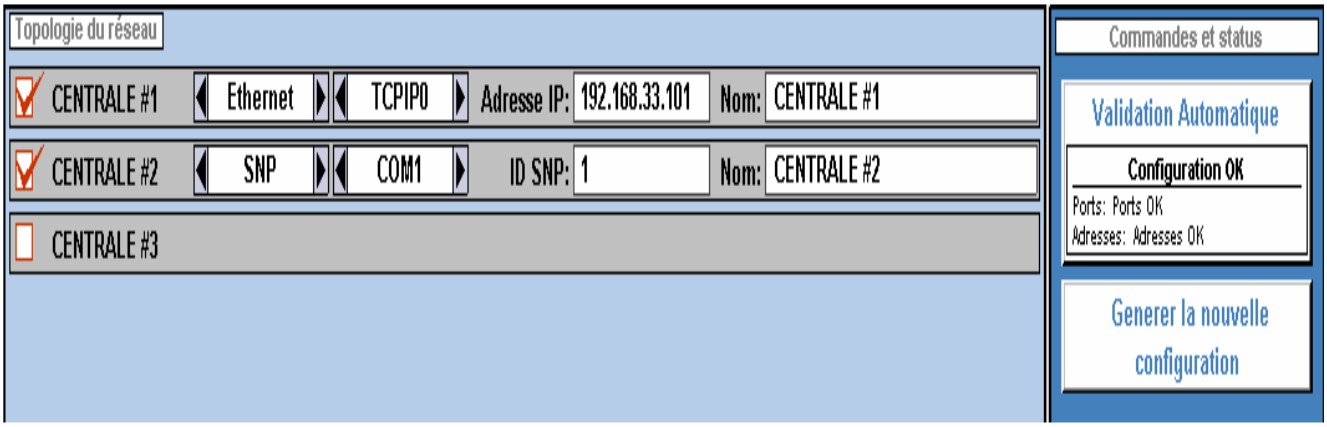
(5) : Enter MX62 name

(6): If all ok, the "validation" button will be available. In other case, the automatic validation

(7) : will give you the error to correct.



BAD CONFIGURATION



CONFIGURATION OK

2 : Validation Banner

The console banner indicates that the configuration entry is valid and authorized by the appearance of the button located below 'Generate the new configuration'.

3 : Banner alarm power already configured

Alarms information of MX62 already existing.

(6)

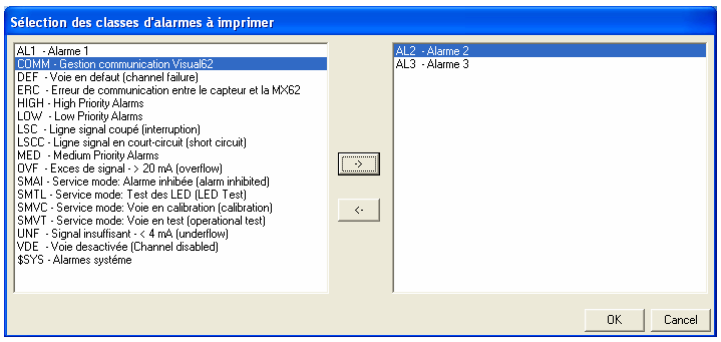
4 : Options Selection

Two options : - Alarm printing options
- Add Synoptic

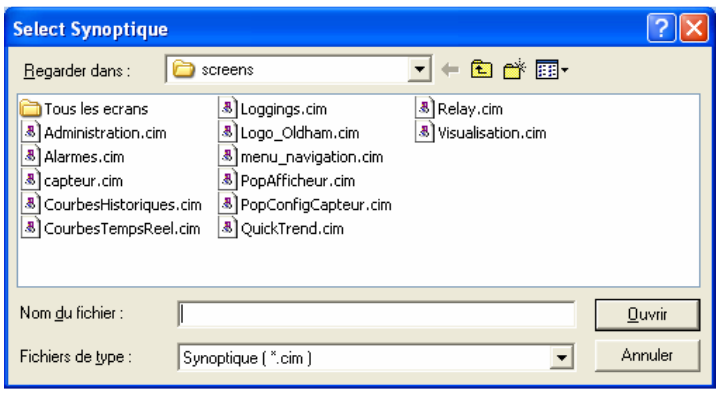
Alarm printing Option

- Validation of real time printing alarm on Matrix printer (parallel port)

Note : The printer could be unselect on the "screen alarm" (if this option is allowed through the "Administration screen".



(SELECT CLASS) : When selected , the window below appear to choose what type of alarm will be printed.
(drag and drop from left to right side to select, ok to accept)



(ADD SYNOPTIC OPTION)
The second option allows you to insert or remove a synopsis in the navigation of the application
This window appears when selecting the Add menu. It allows you to select the synopsis to be added to the navigation menu of the application.

After selecting the Overview, you can customize the name that will appear in the navigation menu.

Note : You can add up to 16 new screens in the navigation.

It is possible to delete a mimic added in the navigation menu by selecting the menu SUPRESSION window showing the following:

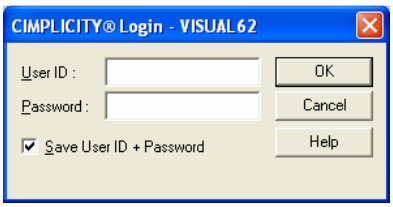
To remove the synoptic menu (not the file), select its name, then select the OK button.

Note : This option is valid at the time of selection or removal of the new synoptic in the navigation. There is therefore no need to generate a new configuration option for the opposite effect.

5 : Configuration Lock and Unlock access

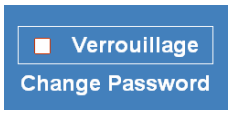
- Lock : 

Clicking on the red notch to the left of text "**Verrouillage**", shows the following message asking to fill out the username and password.



The user entry is: 'administrator'
The default password for the installation of monitoring is: 'administrator'

Once the user is validated, the orders of supervision are unlocked.

- Configuration actions Unlocked : 

A click on the box to the left of the text "**Verrouillage**", blocks access to configuration commands supervision.

When orders configuration are unlocked, you can change the password for user 'administrator' by clicking 'Change Password'.

To change the password, click on the 'change password' below the specified lock
Two successive box will appear:

First box: write the old password 

Second box : write the new password 

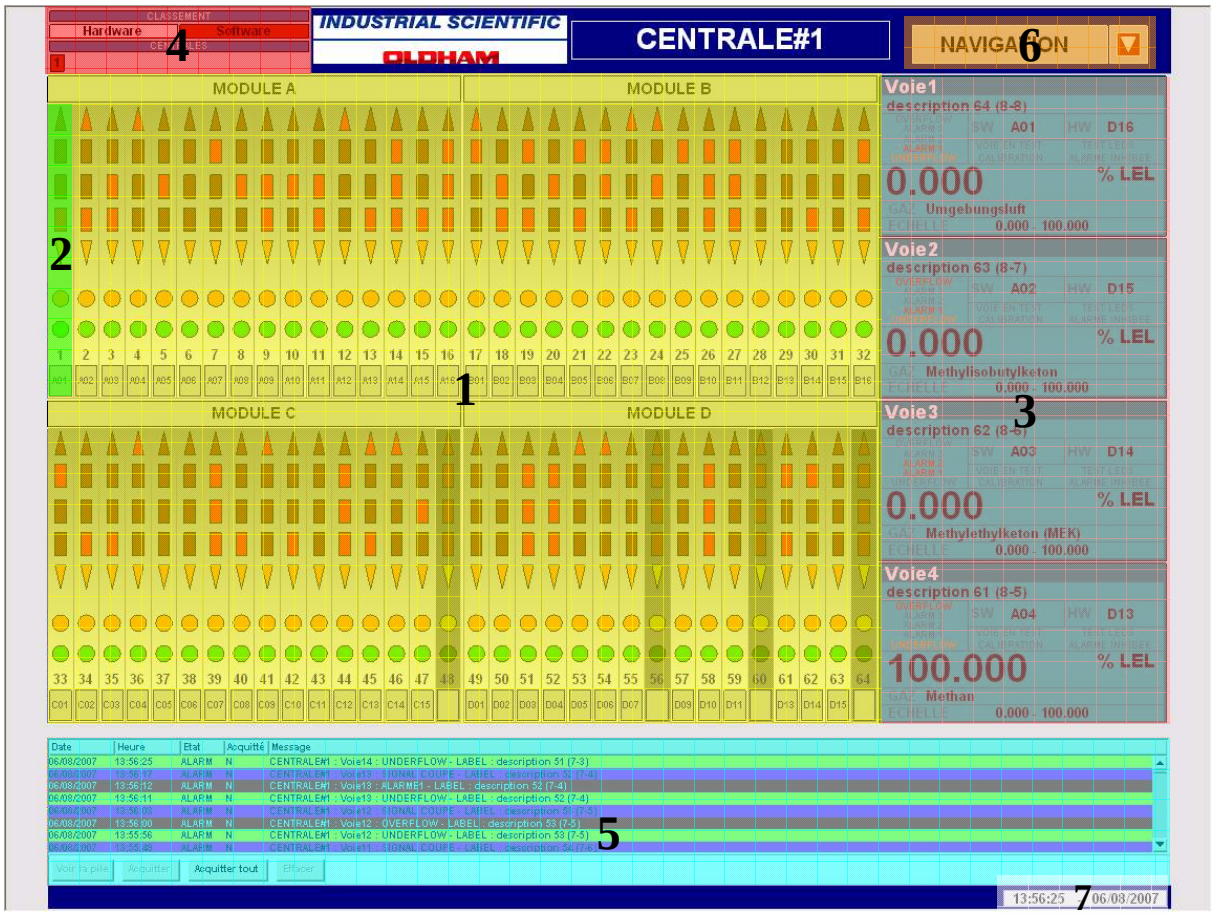
- Locking configuration: Check the box to lock 

5 : Selecting the language used in the program

This selection can change at any time the language used in the application.

NB: The texts of the alarms will be changed to change the day.

VISUALIZATION SCREEN :

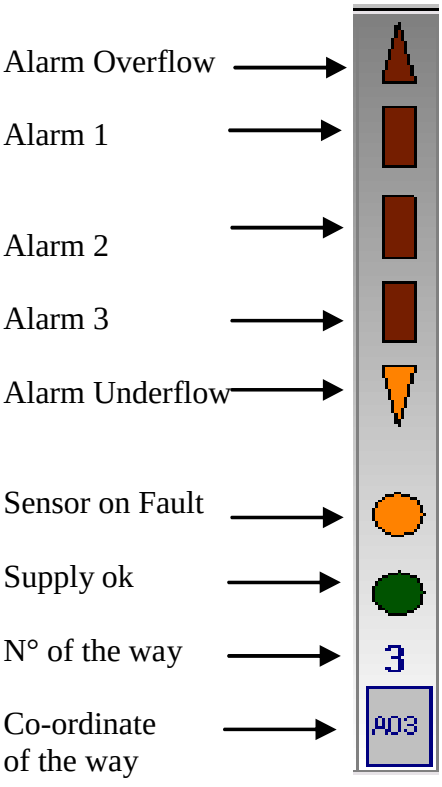


1 : Front view visualization of MX-62

2 : View of a track

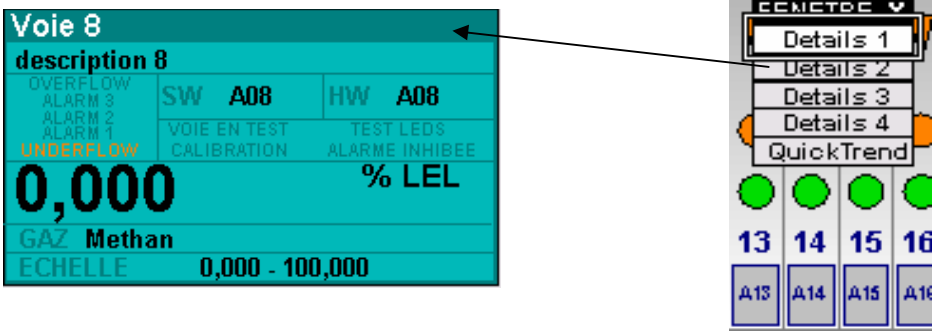
Track set in MX-62

Track not configured
or off in MX-62

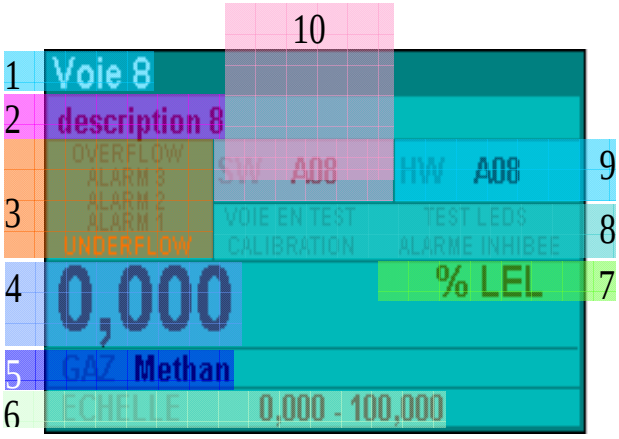


3 : Screens retail channels.

You can specify up to 4 channels simultaneously. Left clicking on a highway will bring up a window selection, to select the screen where you want detail view the information of the track.



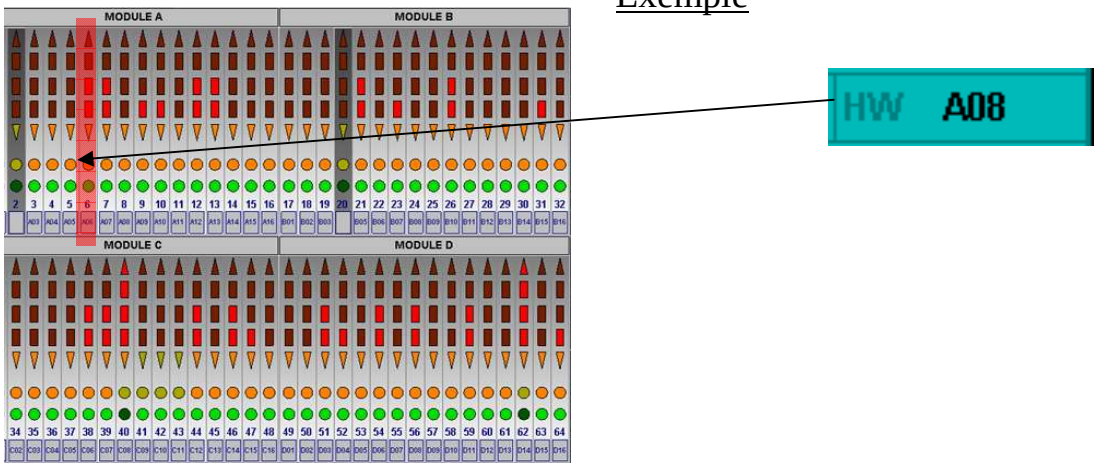
Decomposition of the Details window:



1 : N° of the visualized path (relative to the front of the Central supervised MX-62).
2 : Label sensor.
3 : Indication (s) alarm (s) active (s).
4 : Value of the measure.
5 : Gas Name.
6 : Measuring range.
7 : Unit of measurement.
8 : State operation of the sensor.
9 : Hardware details of the sensor selected
10 :Software coordinates sensor

Note about Software coordinates Sensor:
(correspond to actual physical connection of the sensor module, channel ...)
The statement consists of a letter (A, B, C or D) indicating on which module is the physical sensor, followed by a number (1 to 16) for positioning. (A0 module 1-A8, A9 A16-2 module .... D1-D8 module 7, D9-D16 module 8)

Exemple

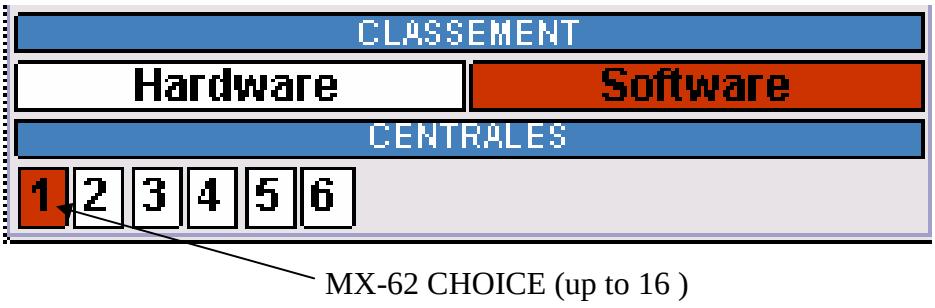


4 : Select view mode

Choice of display (position hardware or software channels) on the front view and supervised choice of Central MX-62 to visualize

The software ranking is the same as the central front of the MX-62. The hardware classification corresponds to the order of the connections of the sensors on the modules of the station acquisitions selected

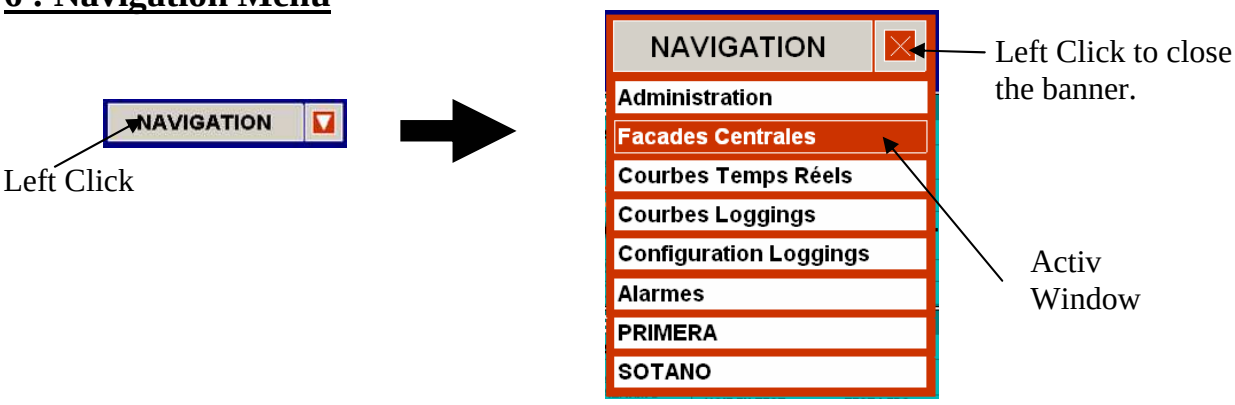
Exemple :
Here, sensors are placed in the central software and MX-62 is visualized Central 1.



5 : Alarm Banner

View of alarms

6 : Navigation Menu

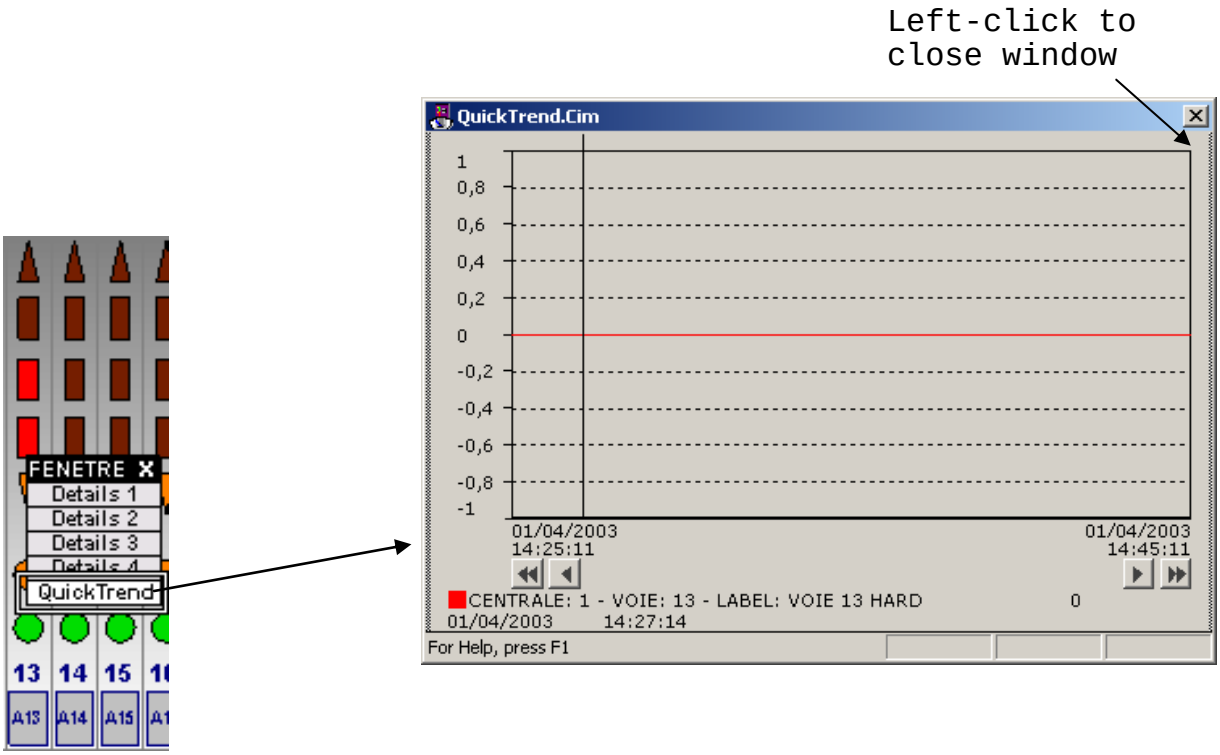


7 : Actual Date and Time.

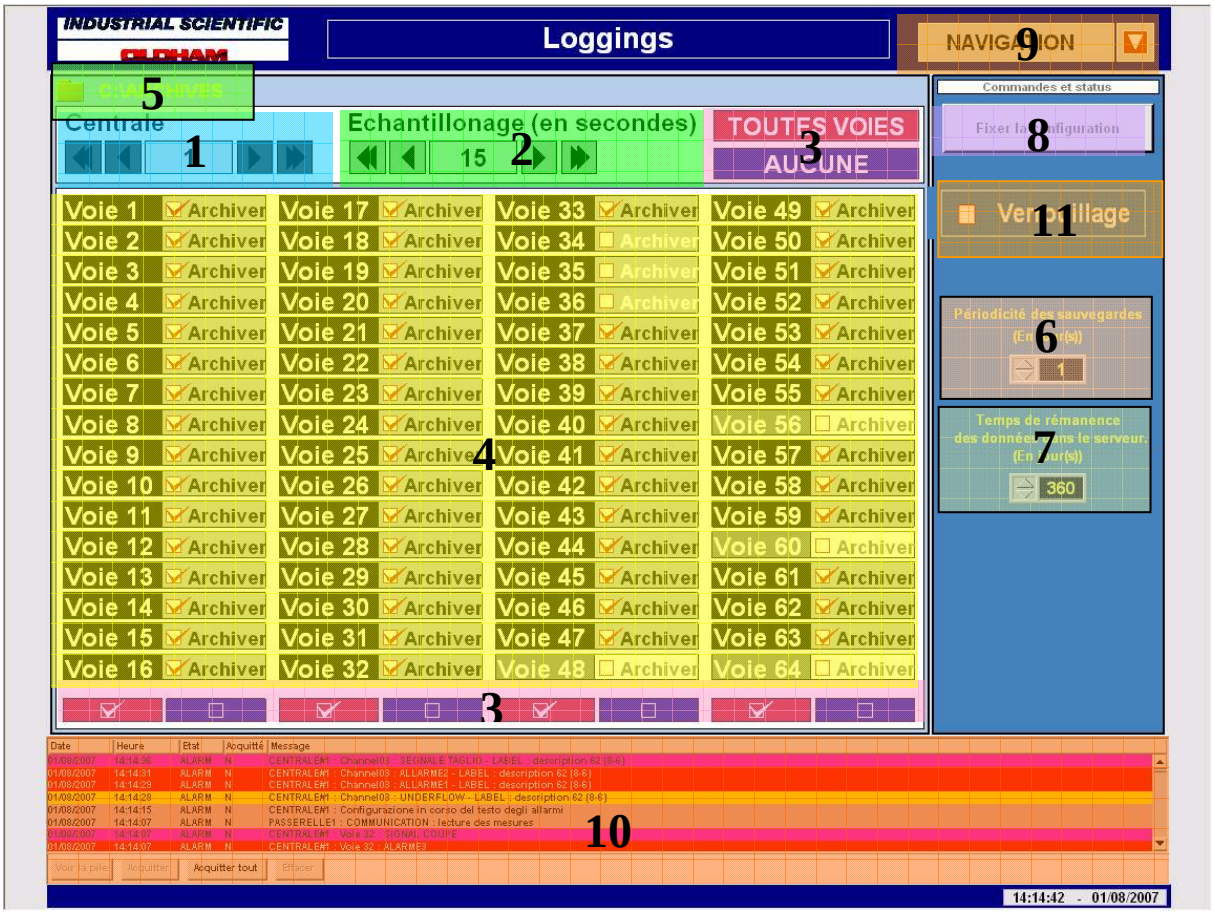
Show date and time of the computer

QuickTrend Fonction:

You can view up to 64 channels simultaneously.
Left clicking on a channel shows a selection window, then choose QuickTrend to see the corresponding curve. It is not possible to unselect a path in the active QuickTrend (The QuickTrend resets each time).



LOGGING CONFIGURATION (recordings)



1 : Selecting the number of the central 'logger' (record).

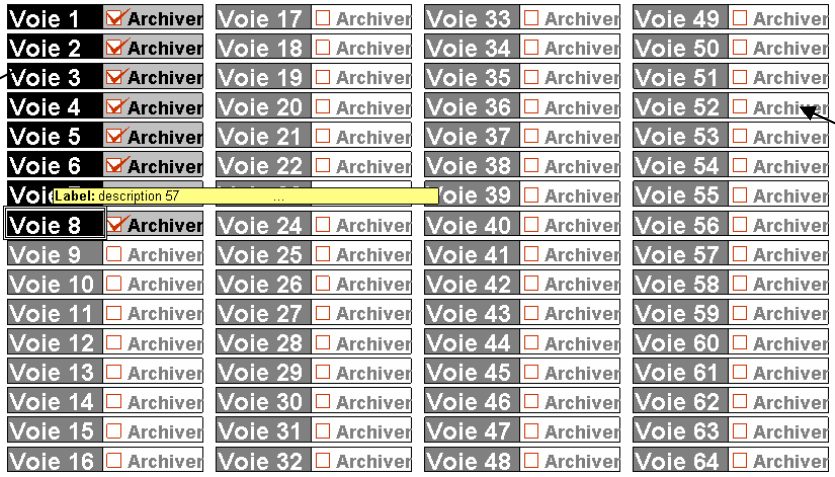
2 : Choice of sampling time (1 to 3600 seconds) common to all channels selected for recording measurements.

3 : Quick selection of groups of channels:

Selection of all channels — TOUTES VOIES
Deselect all the tracks. — AUCUNE
Selection by column. — ☑
Deselect by column. — ☐

4: Viewing selectable channels (configured in the Central MX-62 sensor if in normal operation) and select the unit to record channels.

Track Selectable



Track Unselectable

5 : Choosing a location that will store the backup files Record.

6: Frequency (by day (s)) the creation of backup files (Csv file).

7: Persistence time (in day (s)) of data stored in the database.

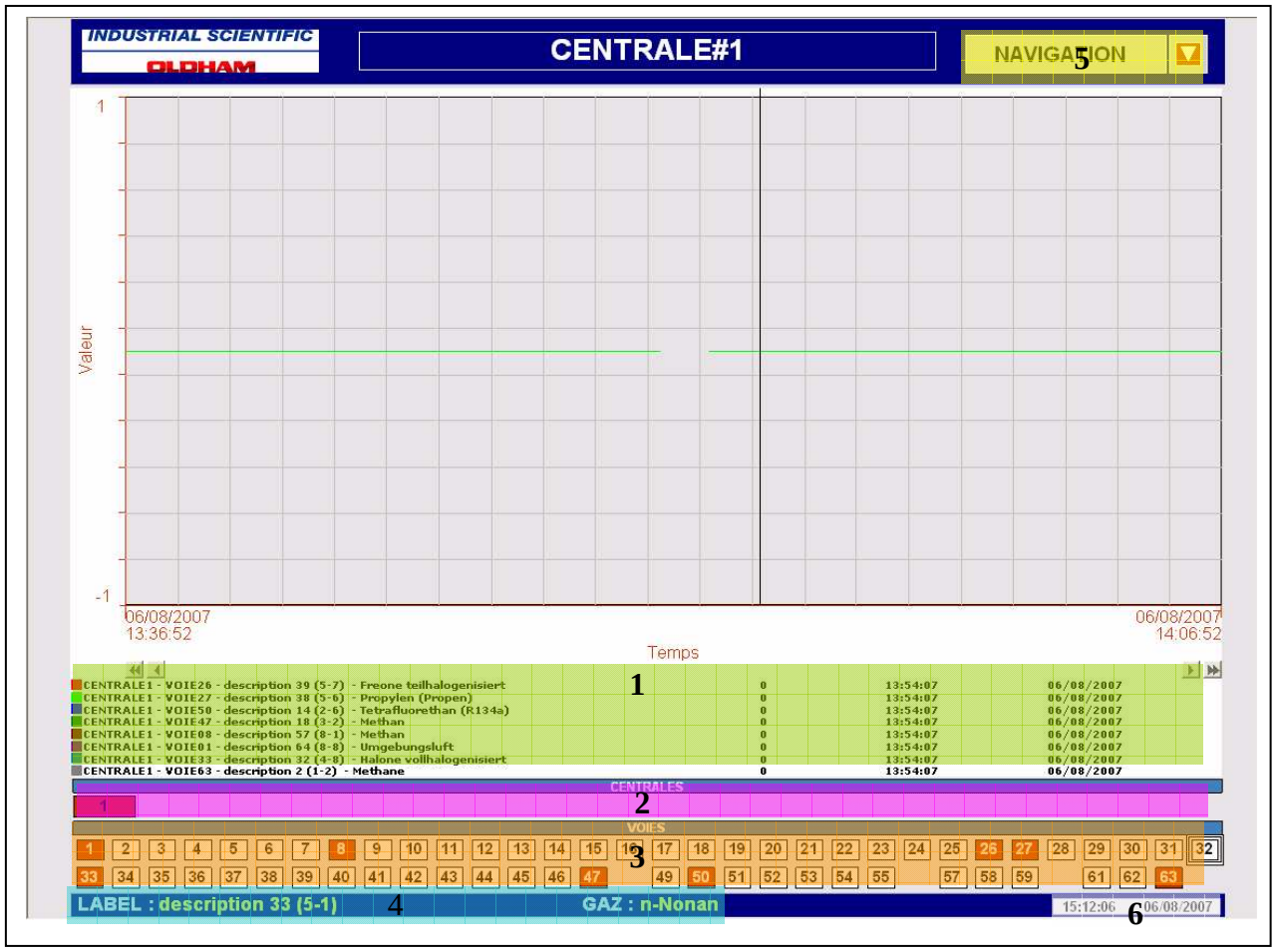
8 : Button to validate the configuration selected for the Central (A complete setup by Central). Configurations can be changed any time.

9 : Navigation menu.

10 : Banner alarm.

11 : Lock/unlock access (see page 6)

RECORDING LOGGINGS VISUALIZATION



1: Legends of the curves shown.

2: Selection of MX-62 set in the supervision.

3: Buttons display measures recorded for inland validated in the database of the plant selected (see page 7 setup screen recordings).

- The validation of a way to see passed the background color of the red button
- The selection of non-registered (see page 7) are not displayed.
- There can be a maximum of 8 channels displayed simultaneously.

Note :

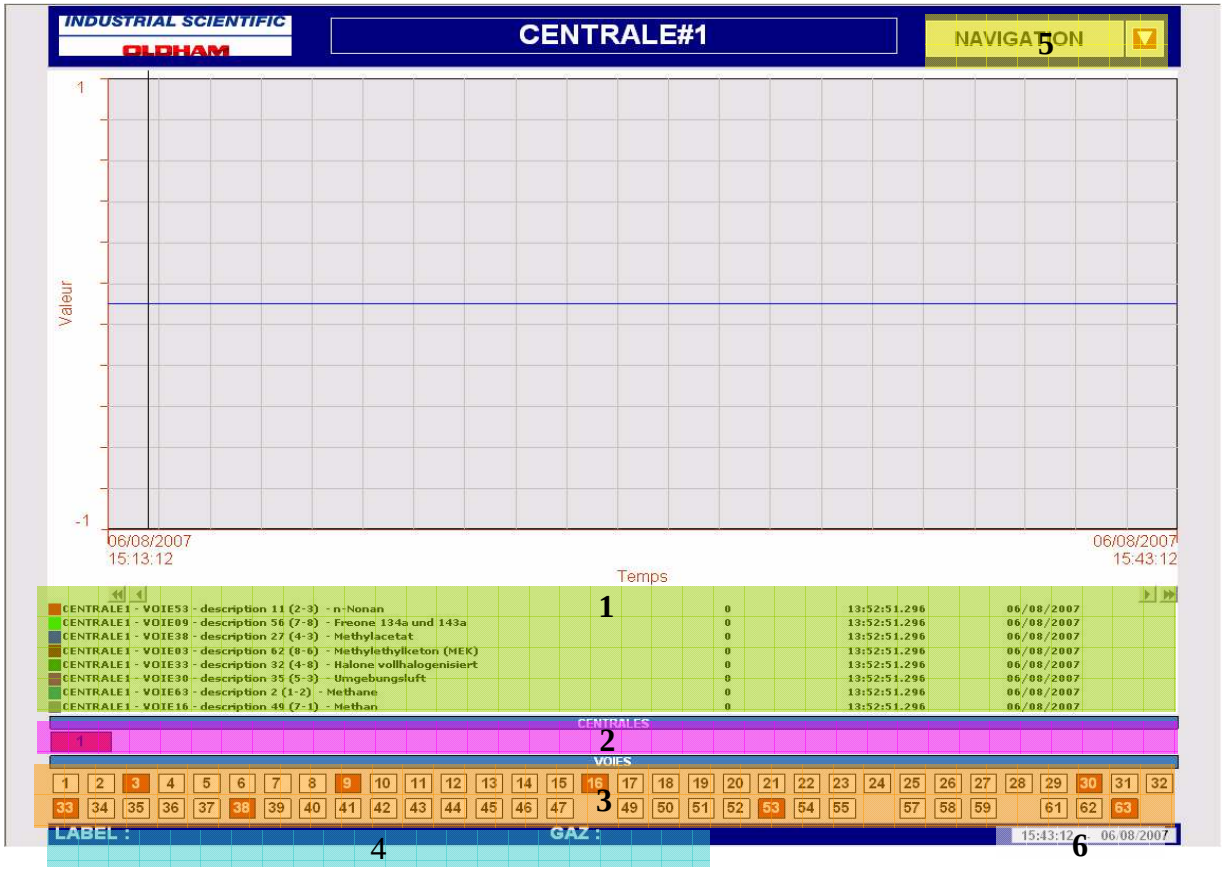
- At the opening of the first page or after a re-recording (see page 7), a procedure is activated to update the selection of channels to view.
- The order of selection of channels is the display of the front of the MX-62 ..

4: Information appears during the passage of the mouse pointer over a button for selecting a track and are the description and the name of the gas corresponding to it.

5: Navigation menu.

6: Time and date.

REAL TIME VALUES VISUALIZATION



1: Legends of the curves shown.

2: Selection of MX-62 set in the supervision.

3: Buttons display measures for inland validated in the database of the plant selected

- Validation of a channel to see passed the background color of the red button.
- The selection of non-validated or disabled in the plant are not displayed.
- There can be a maximum of 8 channels displayed simultaneously.

Note :

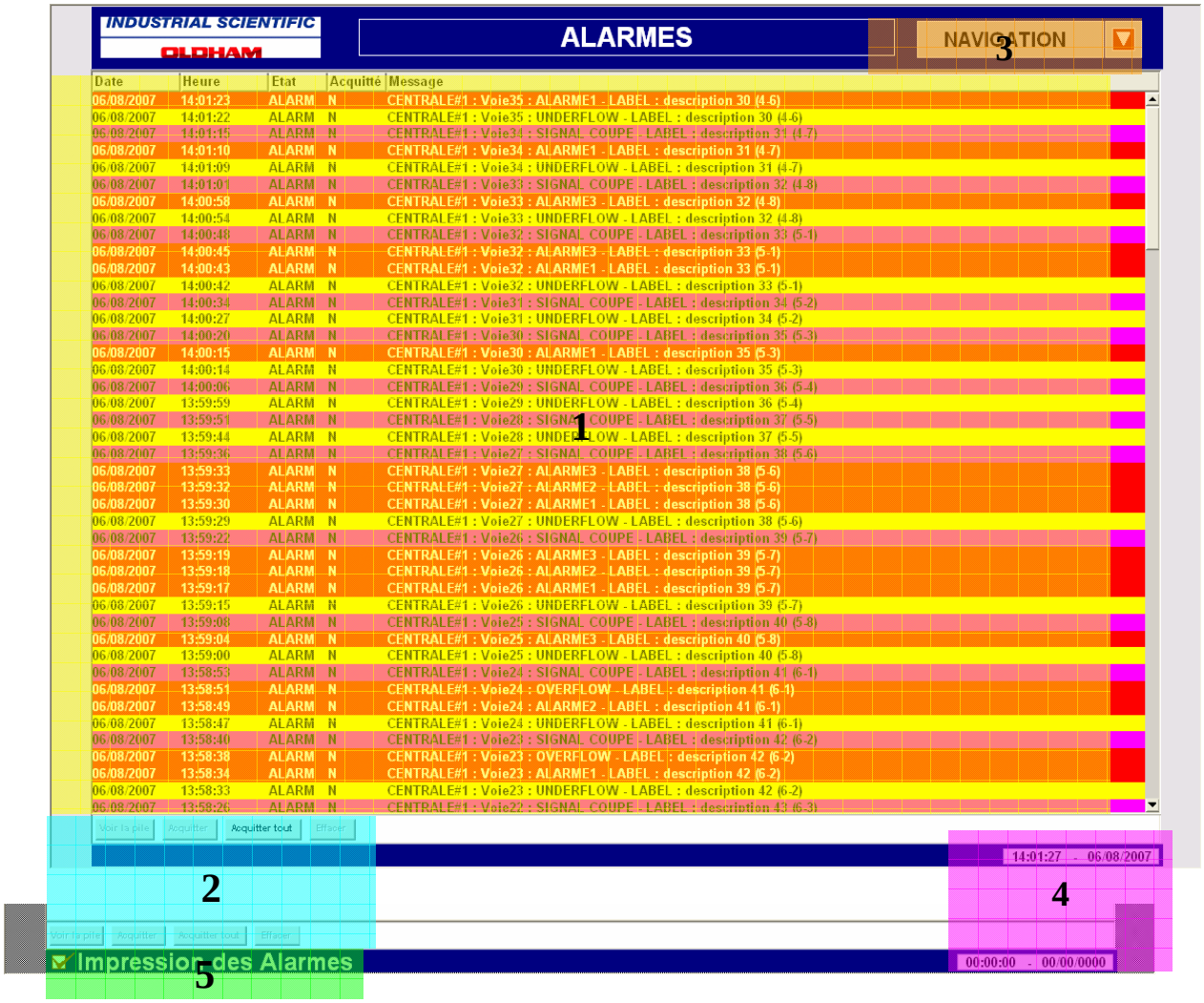
- The order of selection of channels is the display of the front of the MX-62 ..

4: Information appears during the passage of the mouse pointer over a button for selecting a track and are the description and the name of the gas corresponding to it.

5: Navigation menu.

6: Time and date.

ALARMS SCREEN:



1 : **Alarm Banner**.

2 : **Buttons** :

- See detail : View the details of the point in alarm on the selected line.

-Acknowledge : Acknowledge of the alarm at the level of supervision (no action on the plant).
-Acknowledge all : same action as Acknowledge, but for all alarms.
-Delete: deletes a line in the alarm banner.

3: Navigation menu.

4: Time and date.

5 : Stop or Start Printer Alarm (if validate in Administration Screen).

Note :

- The text messages of alarms is updated at each change of days

Alarms Colors codes :

Each type of alarms is differentiated by a color code .

Alarm 1, 2, 3, Excess of signal - > 20 mA (overflow)
Writing: White
Background: Red

Communication (see following page)
Writing: Red
Melts: White

Way in defect, insufficient Signal - < 4 mA (underflow)
Writing: Black
Background: Orange

Error of communication between the sensor and station MX-62,
Line signal in Short-circuit, Service mode: Alarm inhibited
Service mode: Test of LEDs (LED Test),
Service mode: Way in calibration (calibration),
Service mode: Way in test (operational test)

Writing: Black
Background: Rose

Line cut signal
Writing: Black
Background: Fushia

Way Unactive (channel desactivated)
Writing: White
Background: Crimson

To avoid any use of erroneous data, Visual 62 make a checking uninterrupted of the communication state between each components of the supervision and informed the user by the messages according to:

NO CENTRAL ANSWER MX62
The physical connection between the station and the Gate-62 is cut or the station is on fault. The indication is sent by the gate-62, after a lost of communication over 5 minutes, time necessary for loading a modification of MX62 station

DEFAULT OF READING NAME STATION
DEFAULT OF READING NUMBERS CHART
DEFAULT OF READING CONFIGURATION
During the reading of the configuration of station by the Gate-62, a parameter cannot be read.

DEFAULT OF READING MEASURES
The Gate-62 cannot read the values of measurement.

MIMIC ANIMATIONS

Each zone represents a synopsis of supervision with the implementation of its sensors, they each have an animation corresponding to the mode of operation and / or a statement of their alarms.

Animations sensors (channels) / matches colors.

TRACK 'OK' (NORMAL OPERATION'''').

ALARM IN CHANNEL (NORMAL OPERATION'''').

CHANNEL ON TEST.

CHANNEL IN CALIBRATION WITHOUT WARNING (S).

CHANNEL IN CALIBRATION WITH WARNING (S).

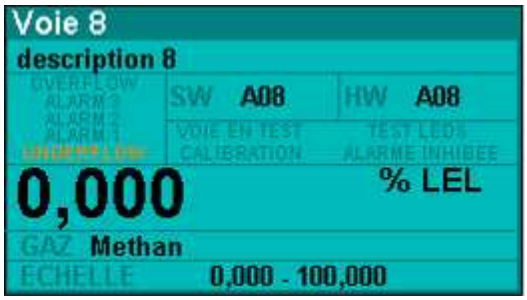
INHIBITED CHANNEL WAY WITHOUT WARNING (S).

INHIBITED CHANNEL WITH WARNING (S).

SENSOR ON FAULT.

CHANNEL OFF or NON EXISTING

A mouse click on the sensor will show an information window of it.
(Click again on the sensor to close this window).



RS485 CONNECTION GATE62

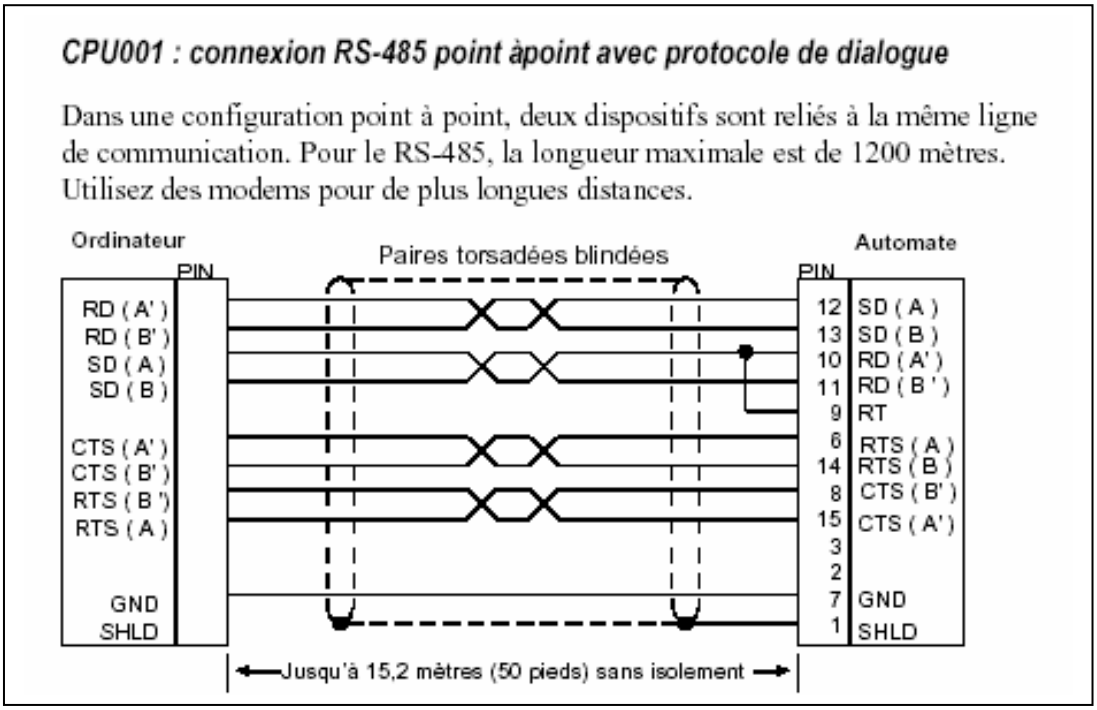
Pin Assignments for Port 2

Port 2 is an RS-485 port with a 15-pin female D-sub connector. This can be attached directly to an RS-485 to RS-232 adapter.

Pin	Signal	Direction	Function
1	SHLD	--	Cable Shield Drain wire connection
2, 3, 4	n/c		
5	P5V	Output	+5.1VDC to power external devices (100mA max.)
6	RTSA	Output	Request to Send (A) output
7	GND	--	0V/GND reference signal
8	CTSB'	Input	Clear to Send (B) input
9	RT	--	Resistor Termination (120 ohm) for RDA'
10	RDA'	Input	Receive Data (A)
11	RDB'	Input	Receive Data (B)
12	SDA	Output	Transmit Data (A) output
13	SDB	Output	Transmit Data (B) output
14	RTSB	Output	Request to Send (B) output
15	CTSA'	Input	Clear to Send (A) input
Shell	SHLD	--	Cable Shield wire connection / 100% (Continuous) shielding cable shield connection

RS-485 Point to Point Connection with Handshaking

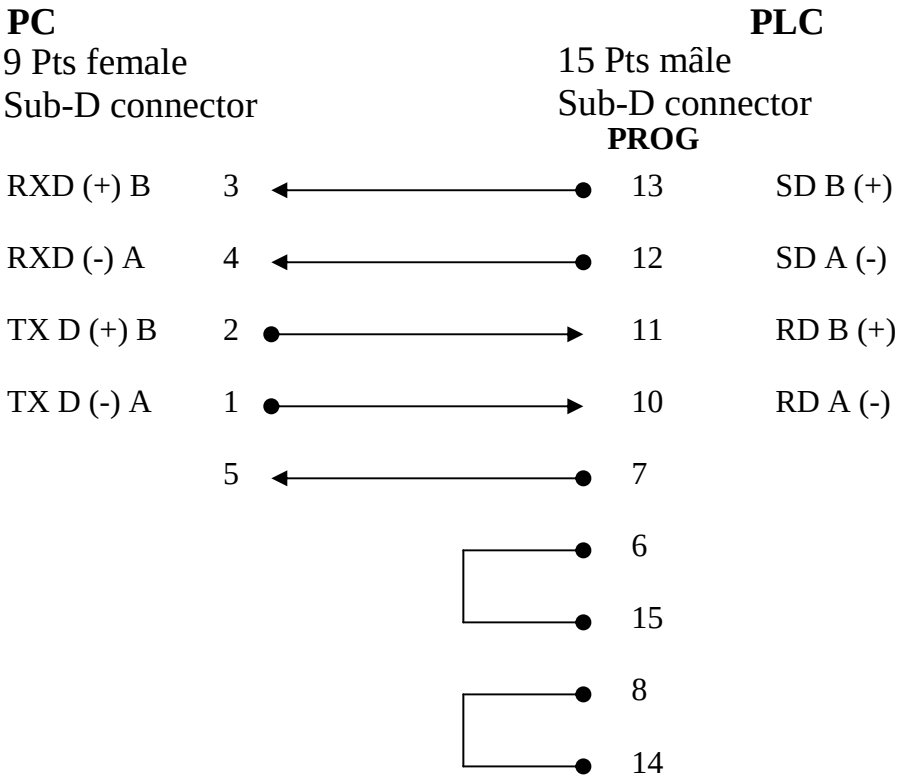
In point-to-point configuration, two devices are connected to the same communication line. For RS-485, the maximum cable length is 1200 meters (4000feet). Modems can be used for longer distances.



SERIE MOXA CARD CP132 CONNECTIONS

Card with 2 serial ports RS422/485

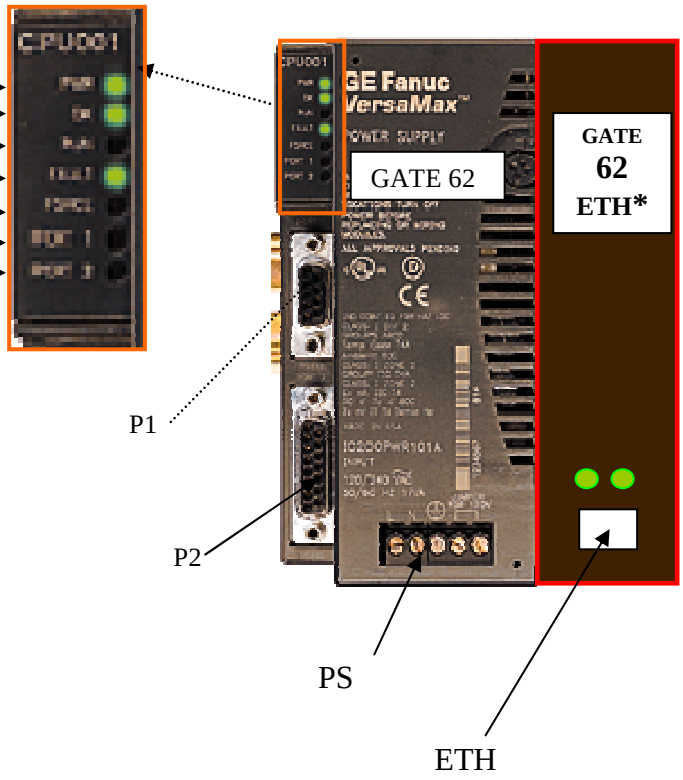
RS422 connecting (SNP GE protocol)



STATE LEDS GATE 62 (GATE 62ETH)

PLC Power Supply ok
PLC State OK.
PLC Program Running
PLC program Fault.*
Bit forced in PLC.
Led activity of port P1 communication
Led activity of port P2 communication

* : To remove a fault, shut off the current of the bridge then to relight, that will will initialize its program



P1 : Communication Port 1 (to MX-62)
P2 : Communication Port 2 (to Visual 62)
PS : Power Supply
GATE 62 : Standard Module for communication
With MX-62

GATE62 ETH*: Same as GATE62 with
An Ethernet port communication 10/100
(Only for use with SNP/SRTP protocol GE fanuc)

Central reconfiguration:

The bridge reads the configuration of the station if this one is disconnected with it during more than 5 minutes or with the handing-over under tension of the bridge. It is advised after a reconfiguration of the station and to have restored the connector industry bridge station, each powering the bridge then to relight it, thus re-initialize its program which will charge the new configuration of the station.