

INSTALLER MANUAL

Vers. 0.15 del 29/04/2014

Management Platform

HyperPower

CMHP8 / CMHPAVSW

Installer Manual

From Software Version 2.1.0



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Index

Vers. 0.13E del 30/06/2013.....	1
Introduction.....	3
Main Unit (CMHP8).....	3
CMHPAVSW.....	4
CMH9000 Boards.....	5
CMH088 Boards.....	5
Boards CMH088/4.....	6
CMHTA500 Console.....	6
Console CMHTA500 “Terminal Version”.....	7
Console CMHTA500RF for access control.....	8
Console CMHTA500CU as dedicated control panel.....	8
Configuration.....	8
Main Window.....	8
General.....	9
Parameters.....	10
Maps.....	14
Icons.....	16
Ports.....	17
Boards.....	19
Groups.....	27
Users.....	28
Partitions.....	29
Sensors.....	31
Outputs.....	40
Controls.....	44
Audio Messages.....	48
Event Messages.....	49
Standard Messages.....	49
Screen Messages.....	50
Timer Configuration.....	51
IP Addresses.....	55
Utilities.....	56
CMH9000(CO220) Discovery.....	57
Import Gesis Configuration.....	57
Other Import File.....	57
Report.....	58
Transfer.....	58
File.....	60
Configuration Check.....	61
Transactions.....	62
Global variables.....	63
Menu.....	64
Web Browser.....	66
Advanced Programming.....	70
I/O commands.....	71
Standard Commands.....	76
Terminal Commands.....	91
Transactions.....	100
Display.....	104

Introduction

HyperPower is a multi-process system based on a main unit and several remote I/O modules.

The main unit is equipped with 8 opto isolated RS485 serial ports to administrate signals and a powerful graphic interface.

More, an Ethernet port is available for standard TCP/IP communications, such as supervision, control and maintenance. The remote Internet connection is supported too.

Remote modules are equipped with a microprocessor and provide 8 (up to 24) digital inputs (ON/OFF, double balance, analog 4-20 mA) and 8 open collector outputs.

To increase security, the configuration module is not usually installed on the main unit, but this is also possible.

The standard version of HyperPower is limited as follows:

100	Partitions
16	Areas for each partition
128	Remote units
3072	Sensors
1000	Users
16	Groups

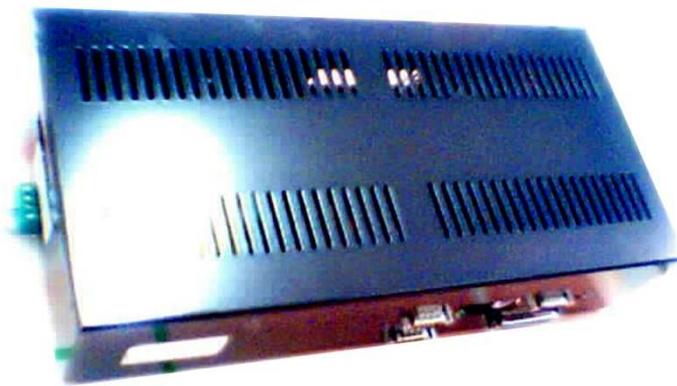
Main Unit (CMHP8)

The main hardware unit is provided in a metallic box, designed for DIN rail mounting. The power required to operate is 12 VDC, 20 W consumption.

The main unit is equipped by:

- ATOM microprocessor 1.6 GHz
- 1 GB RAM
- 4 GB compact flash
- 1 RS232 serial port
- 8 opto isolated serial ports
- VGA
- Mouse/keyboard
- 1 Ethernet port 10/100/1000 base T

The dimensions of CMHP8 are: 335 x 165 x 75 mm.



CMHPAVSW

As alternative option to CMHP8 is to use, for diagnostic targets or command purposes with lower responsibility (because of absence of RS485 modules, backup battery etc.), a PC equipped with O.S. Windows XP, 7, 8. On this PC (that must have at least the same system requirements as CMHP8 box), will be hosted the Hyperpower software CMHPAVSW that, associated to a dongle Key (that will includes licenses for system devices) grants similar programming possibilities of hardware Hyperpower version.. Because of PC's are not supporting RS485 ports, for all the peripheric devices that communicates through this bus will be necessary an USB/RS485 converter.

When a user purchase a **CMHPAVSW** he will be provided of a CD that contains a runtime software (and all the pre-required softwares) and a configurator software. Moreover he will receive a dongle-key (server dongle key CMHPAVSW) with the licenses necessary to unlock the system on the PC. The installer wil also always receive the **CMHCONF** dongle configurationj key to be able to work with configurator SW.

N.B : If the user is working with a CMHPAVSW platform is mandatory to NOT work at the same time with configurator dongle and runtime dongle in the PC. This operation could create conflicts and damage the dongles (that only SICURIT could restore), so before to insert one dongle be careful to unplug the other one.

CMH9000 Boards

The CMH9000 modules provide the remote acquisition of informations from all digitally integrated SICURIT perimeter protection systems, and communicate with the main unit through TCP/IP protocol. They can collect also up four double balanced relay contacts and give 4 OC command outputs (see CMH9000 manuals for more details).

They also have a communication bus (RS485) that comes from field detectors. The cable of this bus must be a twisted pair cable with correct electrical parameters (24 AWG, 120 Ohm, ref. Belden 9841 or similar).

CMH088 Boards

The CMH088 boards are designed for DIN rail (80 mm) mounting.

The power required to operate is 8-30 VDC, consumption 100 mA at 12 VDC.

The unit is equipped by:

- 8 MHz microprocessor
- 1 multipoint RS485 serial port for connection to the main unit
- 8 double balance inputs
- 1 relè output (NO/NC selectable)
- 7 open collector outputs
- Expansion bus for 8 o 16 inputs (max 8 analog 4-20 mA or 0-5V)
- Dip-switches for settings (address, baud-rate, options)
- Power and communications monitoring leds

All the connectors are removable. The dimensions of the unit are: 160 x 68 mm.



Boards CMH088/4

CMH088/4 boards are designed for DIN rail (80 mm) mounting.
The power required to operate is 8-30 VDC, consumption 100 mA at 12 VDC.

The unit is equipped by:

- 12 MHz microprocessor
- 1 multipoint RS485 serial port for connection to the main unit
- 8 double balance inputs
- 4 relé output (NO/NC selectable)
- 4 open collector outputs
- Expansion bus for 8 o 16 inputs (max 8 analog 4-20 mA)
- Expansion bus for modules with 32 open collector output (max 4 modules)
- Dip-switches for settings (address, baud-rate, options)

All connectors are removable.

The dimensions of the unit are: 240 x 68 mm.



CMHTA500 Console

The CMHTA500 consoles are designed for wall mounting. The power required to operate is 8-30 VDC, consumption 10 W .

The unit is equipped by:

- 312 MHz microprocessor
- 3.5" colour display with resistive touch-screen
- 2 GB SD memory
- 1 multipoint RS485 serial port for connection to the HP bus
- 1 Ethernet port 10/100 base T
- Power led

Optionally, the unit can be equipped with a multifunction board, including:

- 4 double balance inputs
- 2 relay outputs (NO/NC selectable)
- Tamper protection
- Interface for ISO badge reader
- Interface for BARCODE reader (wand emulation)
- Interface for contactless card (MIFARE family) with 1 or 2 integrated readers

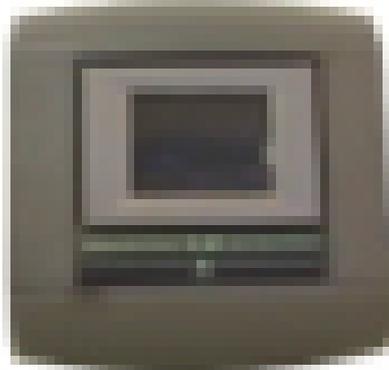
The dimensions of the unit are: 200 x 210 x 48 mm .

CMHTA500 is available in different firmware versions, all integrated into HyperPower. The possible uses of the CMHTA500 are the followings.

Console CMHTA500 “Terminal Version”

The basic version of CMHTA500 is designed as remote human interface for HyperPower, without local functions.

The terminals support two different graphical interfaces, selectable in the terminal configuration. The first one is a graphical page with selection buttons, the second one is a text page with an output row, and input row and a virtual keyboard for the data inserting.



Console CMHTA500RF for access control

Using the multifunction board and magnetic or RFID readers, CMHTA500RF can drive a security door. Functions are locally performed, with or without HyperPower validation. HyperPower can enable/disable operations and supervise activities.

Console CMHTA500CU as dedicated control panel

Equipped by the software MegaTouch, the CMHTA500CU performs all the typical functions of a security and home automation system, up to 76 sensors (by expansions). HyperPower supports remote supervision and/or control by TCP/IP connection.

For the specific functions of this control panel please refer to the specific manual.

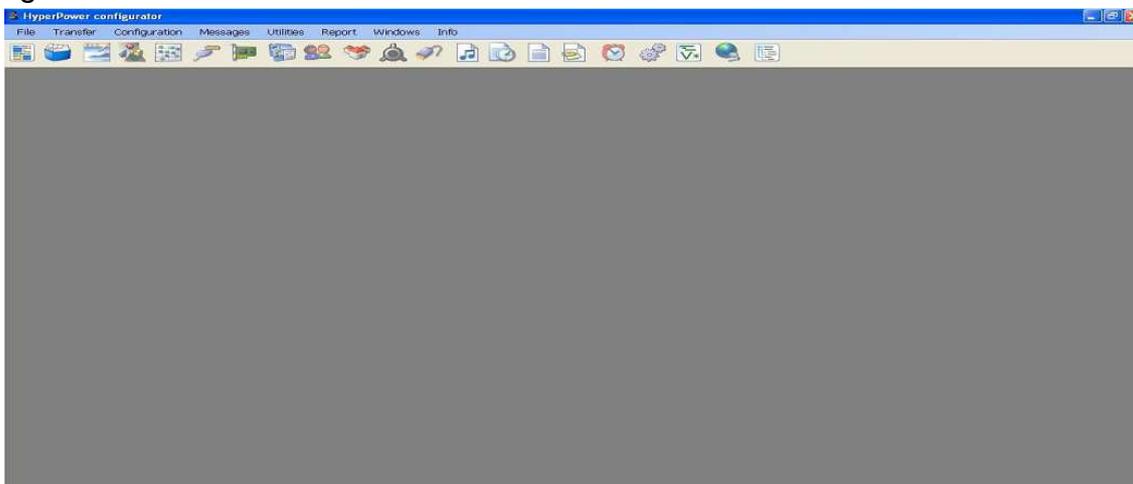
The Hyperpower control panel should interface the CMHTA500CU with an internet connection, and grant the monitoring and remote control monitoring during the configuration.

Configuration

User need to install the software HyperPower Configurator on a PC equipped with Microsoft XP, Win7 or Win8 and using the dongle key **CMHCONF**. For download/upload operations a TCP/IP connection between PC and HyperPower is required. Installation of HyperPower Configurator is performed by the original CD. HyperPower Configurator requires a license to run by means of an USB hardware smartkey. The owner of a license is the owner of the configuration file too: no one else can edit the configuration.

Main Window

The main page is displayed when the program starts: all functions can be accessed from this page.



General

This option allow to record general data of the installation:

- Customer data
Descriptive parameters: *Plant, Reference, Address, City, ZIP, Note.*
- Default icons
Icons by setting inputs and outputs.
- Control panel menu
Menu to display the control panel (see *Menu*).
- Security
Master code (see *Transfer*).
- Historic table
Management of the historical events:
 - o Max. events day
After how many days deleting events from the historic (0 = never).
 - o Max. events nr.
Maximum number of events recorded in the history. Exceeded this limit, with each new event recorded, the oldest event is deleted. (0 = no limit).

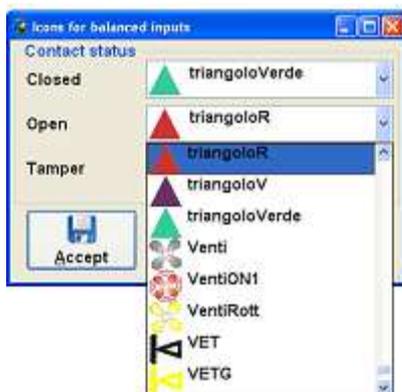


With *Default Icons* section can set the standard icons for graphic representation of digital sensors (status on / off), balanced sensors (on / off / tamper) and outputs (on / off).

In same way, for analog sensors, is possible to set a different icon for each of five levels delimited by four thresholds managed by the system.

Before to declare standard icons, it is necessary to import them (see “Icons” chapter).

For each sensor it will be possible, if wanted, define dedicated icons (see later “Sensors” chapter).



By using the button *Transaction* the user can access the *Advanced Programming* functions to fully exploit the potential of HyperPower: by customized transactions should be configured and automatically start them for specific events (start/stop of the main unit, start/stop of systems/areas, sensors commutation, etc.). See *Advanced Programming* section of this manual for a more detailed description.



Parameters

All the options required to send email, text messages and to show a web interface:



The database of the remote server must be Microsoft SQL Server with two tables structured as follows:

Event table:

Column name	Data type	Length
ID	Uniqueidentifier	16
IDHP	Nvarchar	100
IDEvento	Int	4
DataOra	Datetime	8
Testo	Nvarchar	200
Tipo	int	4

Analogic input table:

Column name	Data type	Length
ID	Uniqueidentifier	16
IDHP	Nvarchar	100
Sensore	Int	4
Indice	Int	4
DataOra	Datetime	8
Valore	Float	8

ID column is the primary key in both tables, it must be set as identity with increment = 1.

EMAIL

- o SMTP Server : SMTP address of the mail provider.
- o SMTP Port : Server SMTP port number.
- o User name : Email authentication (only if required by provider).
- o User password : Email authentication (only if required by provider).
- o Email sender : Email address used to send messages.

GROUPS

- o All groups enabled on start-up : Set if at the start up user groups should be enabled or not. For details on managing users see Users, Groups, and Time Schedules section of this guide.
- o All groups enabled at midnight : Set if every new day the system must be enabled or disabled user groups. For details on managing users see Users, Groups, and Time Schedules section of this guide.

RUNTIME

- o Enable maps reordering : Enable users connected to the runtime, or to remote locations, to modify the ordering of the maps displayed in the main window.
- o Enable multi-window maps visualization : Allows, on runtime or on remote locations, to separate the maps from the main window and display in secondary windows. Useful to manage the presence of multiple monitors. Selecting this option automatically enables the maps reordering.
- o Automatic logout time (minutes, 0 = never) : Allows to configure the period of inactivity after which the main unit automatically logs out the user. A value of zero disables this function.
- o Enable partition ON/OFF from Runtime main panel : On the runtime or on remote locations, enables partitions ON / OFF commands using the pop-up panel of the main window.
- o Enable administrators creation from Runtime : Allows, on runtime or on remote locations, to create user Admin type using the configurable menu. For details on creating menus refer to the section Menu.

SERVER

- o Server name : Name or IP Address of the remote computer on which the database is installed.
- o Database name : Name of the SQL Server remote database.

- o User name : User name required to login to the remote database.
- o User password :User password required to login to the remote database.
- o Event table name : Name of the table in which copy events.
- o Analogic input table name : Name of the table in which copy analogic input values.
- o HyperPower ID : Id of the Hyperpower main unit that stored the values in the tables.
- o Delete events after download : Indicates if the main unit can delete events after they are sent to the server.

SMS SKEBBY

- o User name : User name registered on the service of sending SMS Skebby.
- o User password : Password associated with the user on the service Skebby.
- o SMS sender : Name shown as the sender of the SMS (only for Classic SMS type).
- o SMS type : Type of message, two options available
 - Basic :Cheaper, but without the possibility to choose the displayed sender.
 - Classic :More expensive, but with the ability to customize the message sender.

WEB

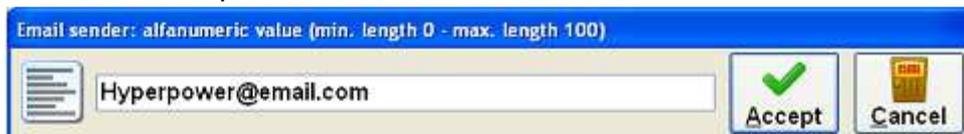
- o Web server port : Web server port used to show web interface.

WEBBROWSER

- o Web browser menu number : Menu available in the web interface. About Menu configuration see Menu section of this guide.
- o Enable mouse click on Viewer menu : Enable mouse click on Viewer menu available in the web interface,

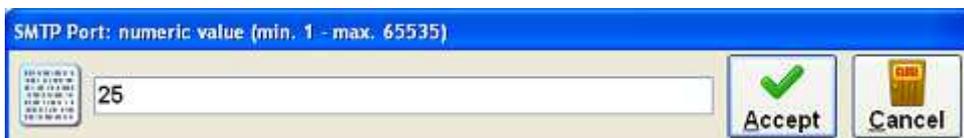
Parameters that are not configured are marked in red, the icon on right side shows the kind of data: alphanumeric, numeric or flag. Mouse double click on a list element to open the detail form and to change the parameters value.

Alphanumeric value example:



The screenshot shows a configuration window titled "Email sender: alphanumeric value (min. length 0 - max. length 100)". The text input field contains "Hyperpower@email.com". To the right of the input field are two buttons: "Accept" with a green checkmark icon and "Cancel" with a red 'X' icon.

Numeric value example:



The screenshot shows a configuration window titled "SMTP Port: numeric value (min. 1 - max. 65535)". The numeric input field contains "25". To the left of the input field is a small icon representing a numeric keypad. To the right of the input field are two buttons: "Accept" with a green checkmark icon and "Cancel" with a red 'X' icon.

Flag value example:



In case of restriction on the type of data allowed (maximum length, minimum value, etc.) the range of accepted values is displayed in the title bar. The Accept button confirms changes and the Cancel button closes the window. To complete the email configuration you can access the Advanced Programming functions to fully exploit the potential of HyperPower. Customized transactions can be configured and automatically started for specific event. See *Advanced Programming* section of this guide.

Maps

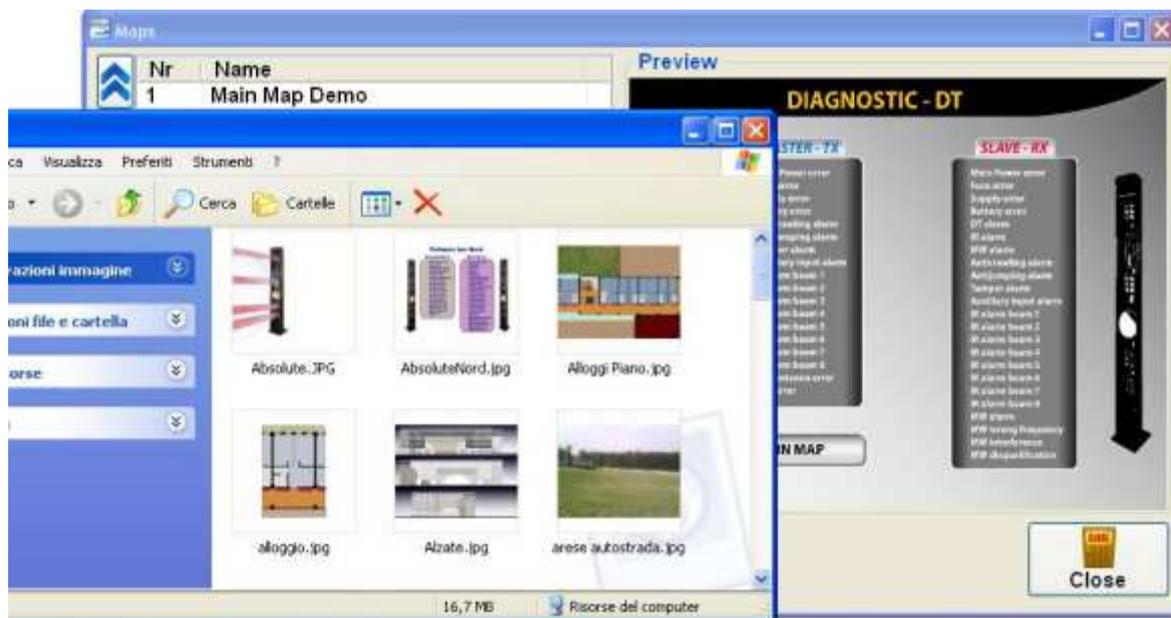
HyperPower system uses images and named maps, to show partitions and areas; all most common kinds of graphical files are supported (jpg, bmp, wmf, gif, tif, etc.).

During maps drawing user should be advised to resize them accordingly with the used monitor resolution. This is not a strict requirement but it will increase the image display quality.

The *Maps* window shows on left a list of configured maps, ordered by priority number, and, on right side of the screen, a preview of selected map. The priority of the maps corresponds to the order in which they are displayed on the runtime, to change the order user need to use the “Arrows” buttons: single arrow move of one step, double arrow set the map as first or last element.

To import a new map follow these steps:

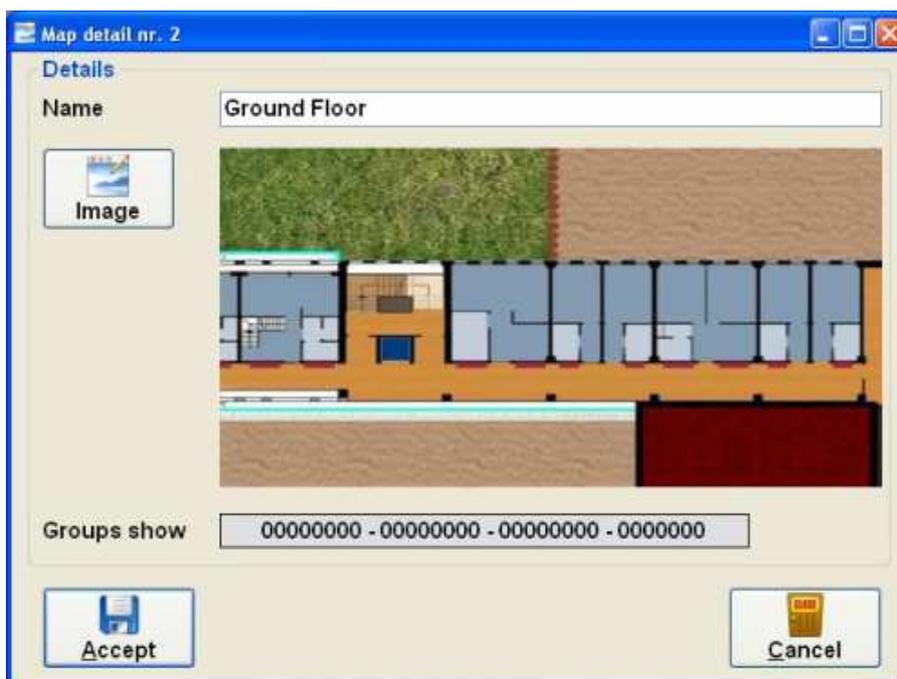
- Open from *Resource manager* the folder containing the files to import
- Select the required file (map)
- Drag the file on the desired line maps list (with left mouse button pressed)
- Release the mouse button



Otherwise, the *Add* button shows grant a detail window from where the user can insert new maps one at a time:

- Name
Map logical name.
- Image
Opens a *Resource manager* window to select a file.

At side of the “Image” button will be shown a preview of the map



To show a detail of an existing map, select an item from the map list with a mouse double click.

Icons

By Icons function can import the graphical representation of input and output devices.

All major type of graphical files are supported (jpg, bmp, wmf, gif, tif, etc.) as in maps object. The number of icons is limited only by the available memory space.

The window shows the preview and the name of the configured icons. Double click on an item to display a detail window, as in maps section.

To import icons, follow these steps :

- open by "resource manager" the folder containing the files to be imported
- select the required file (icon)
- click the left mouse button and drag the file on the desired line icons list
- release the mouse button

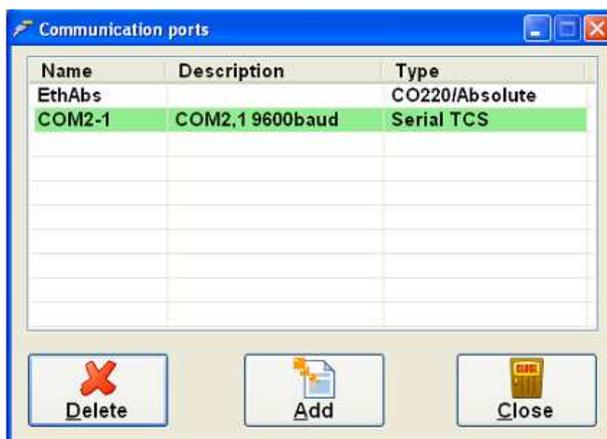


Is it also possible to use the button "Add" to add one by one the desired icons

Ports

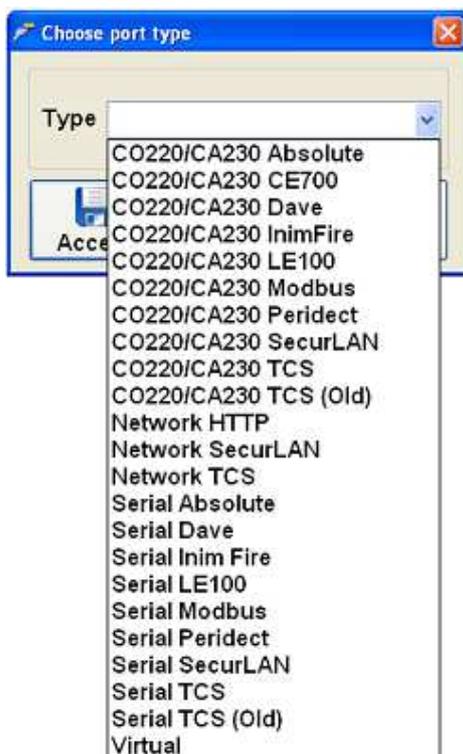
This option allows to configure the communication ports and their parameters (protocol, baud-rate).

NOTE: CMH088 boards and CMHTA500 terminals needs RS485 TCS protocol.



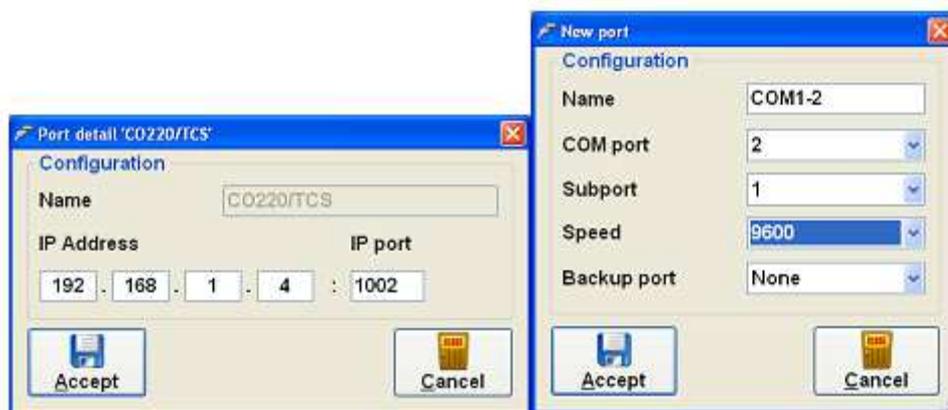
The window shows the list of configured ports: name, description and type. Double click on an empty item or click on *Add* button to add a new port.

The first parameter required is the *Type* of the port: it specifies the way with HyperPower will communicate. Usually the port type is determined by the peripheral we need to communicate to.



- CO220/: Absolute, CE700, Dave, InimFire, LE100, Modbus, Peridect, SecurLAN, TCS, TCS(Old) CO220 board with TCP/IP connection on system side and serial connection on external side: normally it used to communicate with serial devices like Absolute, CE700, Dave, Modbus, Peridect, Sicurtel, TCS o TCS (Old).
- Network http
Devices connected to the system by TCP/IP connection.
- Network TCS
TCS protocol devices connected by TCP/IP connection.
- Serial: Absolute, Dave, InimFire, LE100, Modbus, Peridect, SecurLAN, TCS, TCS (Old) Devices Absolute, Dave, InimFire, Modbus, Peridect, Sicurtel, TCS, TCS (Old) connected by serial port.
- Virtual : Virtual port to connect virtual boards.

The parameters required for CMH9000(CO220)/Absolute, CMH9000(CO220)/Peridect and CMH9000(CO220)/TCS connected by TCP/IP are the *IP Address* and *IP Port*. No parameters for Network http, Network TCS and Virtual ports.



To configure the serial ports there are two parameters in addition to the standard ones *COM port* and *Speed*:

- Subport
The standard HyperPower unit is equipped with an intelligent multi-port board, working on COM2. For this port, have to set the “sub-port” parameter: the range of external port is 1 to 8.
Optionally, a second multi-port board can be mounted on COM1 port.

- Backup port (only for *Serial/TCS*)
Optionally a backup port can be configured: in case of communication failure, HyperPower will try to communicate with this port. Of course, both ports must be connected to the same bus line.

Boards

After the configuration of the communication ports, this option allows to configure the remote devices (I/O boards and consoles) and the connection parameters (bus type, TCP/IP or multipoint address, etc).

Double click on the list to change a configured board or to add a new one, otherwise click on *Add* button.

Different parameters are available for each kind of remote device:

- Absolute TX, Absolute RX: 18 digital inputs for Absolute TX board and 23 digital inputs for Absolute RX board automatically renamed according to their function described on the device manual (See Input and Output).
 - o CO220/Absolute : TCP/IP communication: it use connection parameters of Ports function. Requires Board Address configuration.
 - o Serial Absolute: Serial communication: required the board Address configuration.
- CO220 : 4 balanced inputs and 4 outputs (See Input and Output).
 - o Network TCS: TCP/IP communication: required the IP Address configuration, the IP port used is 8000.
- Dave TX, Dave RX : 6 digital input for Dave TX board and 8 digital input for Dave RX board automatically renamed according to their function described on the device manual (See Input and Output).
 - o CO220/Dave : TCP/IP communication: it uses connection parameters of Ports function. Required the Board Address configuration.
 - o Serial Dave Serial communication: required the board Address configuration.

- DEF Loop : From 1 to 254 four status input (See Input and Output). Configuration requires the number corresponding to the Loop and the amount of inputs configured in the DEF board connected to HyperPower.
 - o CO220/Modbus : TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial Modbus : Serial communication: required the board Address configuration.
- DEF Panel : 11 digital input (See Input and Output). The input status changes from normally closed to open only upon the occurrence of one of the situations in the table:

DEF status	Input No.
Technical alarm	1
Pre-alarm	2
System fault	3
Zone in test	4
Input out of service	5
System malfunction	6
System alarm	7
Fault	8
Power supply fault	9
Communication error	10
Acoustic signal broken or out of service	11

The standby status of digital input can be changed from normally open to closed.

- o CO220/Modbus : TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
- o Serial Modbus : Serial communication. Require the board Address configuration.
- DEF Zone From 1 to 999 four status input (See Input and Output). Each input represents a Zone, configuration requires the amount of Zones configured in the DEF board connected to HyperPower.
 - o CO220/Modbus : TCP/IP communication; it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial Modbus : Serial communication; required the board Address configuration.

- InimFire Loop : From 1 to 240 four status input (See Input and Output). Configuration requires the number corresponding to the Loop and the amount of inputs configured in the InimFire board connected to HyperPower.
 - o CO220/InimFire : TCP/IP communication; it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial InimFire Serial communication, required the board Address configuration.
- InimFire Panel 256 digital input (See Input and Output). The standby status of digital input can be changed from normally open to closed.
 - o CO220/InimFire TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial InimFire Serial communication: required the board Address configuration.
- InimFire Zone From 1 to 240 four status input (See Input and Output). Each input represents a Zone, configuration requires the amount of Zone configured in the InimFire board connected to HyperPower.
 - o CO220/InimFire : TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial InimFire Serial communication: required the board Address configuration.
- ETH P. HWSW 4+4+4 :4 analog inputs + 4 digital inputs and 4 outputs (See Input and Output).
 - o Network HTTP : TCP/IP communication: required the IP Address configuration, the IP port used is 8000.
- Lettore RFID LE100. 3 outputs corresponding to the LED green, yellow and red (See Output) :
 - o CO220/LE100 : TCP/IP communication: it uses connection parameters of Ports function. Required the Board Address configuration
 - o Serial LE100 : Serial communication: required the board Address configuration.

- Mega Touch. 84 balanced inputs and 26 outputs (See Input and Output).
 - o IN 1 - 72 : Input of the 3 external boards supported by Mega Touch (24 input each board).
 - o IN 73 - 77 : 4 internal input of Mega Touch (from 101 to 104).
 - o IN 78 - 81 : Mega Touch status (value 1 = active status):
 - 78 = OFF
 - 79 = Partial ON
 - 80 = Total ON
 - 81 = Configuration
 - o IN 82 - 84 External boards status (1 = board in fault).
 - o OUT 1 - 24 Output of the 3 external boards supported by Mega Touch (8 output each board).
 - o OUT 25 - 26 2 internal output of Mega Touch (from 101 to 102).
 - o Network TCS TCP/IP communication: required the IP Address configuration, the IP port used is 8000.
- NSC Loop. From 1 to 254 four status input (See Input and Output). Configuration requires the number corresponding to the Loop and the amount of inputs configured in the NSC board connected to HyperPower.
 - o CO220/Modbus TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial Modbus Serial communication: required the board Address configuration.
- NSC Panel 16 digital input (See Input and Output). The input status changes from normally closed to open only upon the occurrence of one of the situations in the table:
- 24 IN Bil, 16 IN Bil + 8 IN Ana
24 balanced input and 4 output, 16 balanced + 8 analog input and 8 output (see input and output).

- CMH9000(CO220) / TCS
TCP/IP communication: it use connection parameters of *Ports* function.
- Serial TCS
Serial communication: required the *IP Address* configuration.

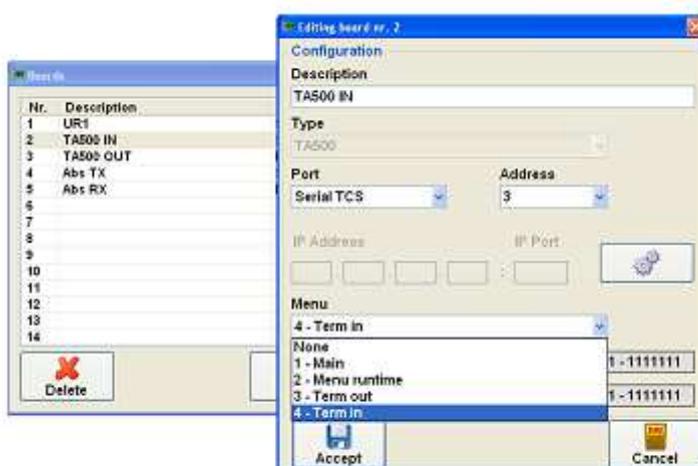
NSC status	Input No.
Alarm	1
Internal alarm	2
Pre alarm	3
Call fire department	4
Fire department alerted	5
Fault	6
Power supply fault	7
System fault	8
Transmission device fault	9
External acoustic signal fault	10
Disabled	11
Transmission devices disabled	12
Acoustic signal disabled	13
Test	14
Delay ON	15
Fire devices disabled	16

The standby status of digital input can be changed from normally open to closed.

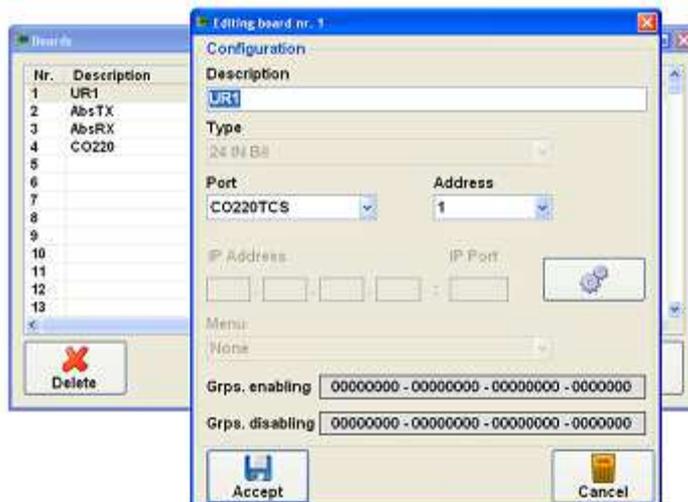
- CO220/Modbus TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
- Serial Modbus. Serial communication: required the board Address configuration.
- NSC Zone From 1 to 999 four status input (See Input and Output). Each input represents a Zone, configuration requires the amount of Zone configured in the NSC board connected to HyperPower.
 - CO220/Modbus TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - Serial Modbus Serial communication: required the board Address configuration.

- Peridect : 262 balanced input + 1 digital input, automatically renamed according to their function described in the appropriate manual.
 - o IN 1 - 246 : Correspond to the 246 PDS detection sensors of Peridect system.
 - o IN 247 - 254 : Correspond to the input of the 8 PIO IN/OUT modules of Peridect system.
 - o IN 255 - 262 : Correspond to the 8 input of the PVJ main unit of Peridect system.
 - o IN 263 : Corresponds to the Tamper input of the PVJ main unit of Peridect system.
 - o CO220/Peridect : TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial Peridect: Serial communication: required the board Address configuration.
- SecurLAN 512 balanced input + 376 digital input (See Input and Output). Configuration required: the security code to connect to the central SecurLAN (only if encrypted communication is checked), the number of wire sensors (1-256), wireless sensors (1-256), output (1-256) and areas(1-8) declared.
 - o CO220/SecurLAN : TCP/IP communication: it uses connection parameters of Ports function.
 - o Network SecurLAN : TCP/IP communication: required the IP Address and the IP port configuration (default: 8000).
 - o Serial SecurLAN. :Serial communication: it uses connection parameters of Ports function.
- TA200. The terminal is equipped with 2 relè outputs (See Output).
 - o CO220/TCS : TCP/IP communication: it uses connection parameters of Ports function. Require the Board Address configuration.
 - o Serial TCS Serial communication: required the board Address configuration.

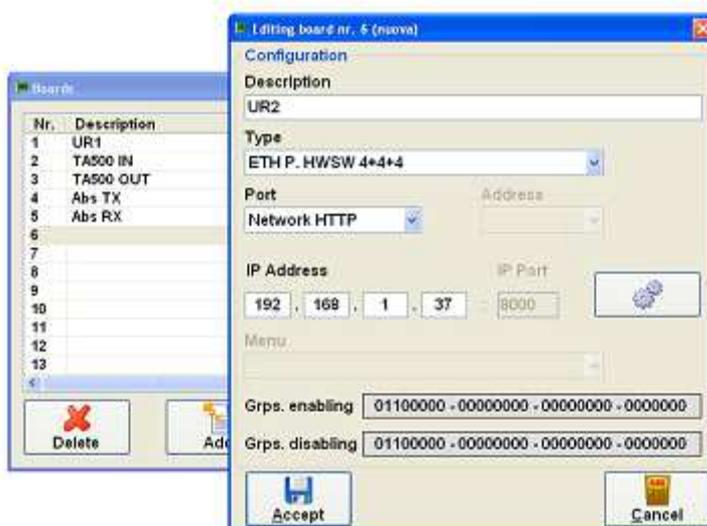
- CMHTA500
 - It has 4 balanced inputs + 1 digital inputs and 2 relè outputs (See *Input* and *Output*).
 - CMH9000(CO 220)/TCS
 - TCP/IP communication: it uses connection parameters of *Ports* function.
 - Network TCS
 - Serial communication: required the *IP Address* configuration.
 - Serial TCS
 - Serial communication: required the board *Address* configuration.



- UR901 HP (CMH088 / CMH8OUT) The boards are available in six different kind of configuration according to the input and output type and number: from 8 to 32 balanced input, from 0 to 24 analogic input, 8 output (see *Input* and *Output* section).
 - CO220/TCS
 - TCP/IP communication: it use connection parameters of *Ports* function.
 - Require the Board Address configuration.
 - Serial TCS
 - Serial communication: required the board Address configuration.



- Virtual I/O. Virtual board with virtual input/output: 16 analogic input + 16 balanced input + 16 digital input and 16 output (See Input and Output). Boards with Network http and Network TCS ports required different IP addresses, also boards configured with Serial TCS ports required different addresses.



Other configuration parameters:

- Description
Board name.
- Enabling / disabling groups
Groups of authorized users to enable or disable the board.
- Menu
Menu to display on CMHTA500 terminals (See *Menu chapter*).

Transactions button allows to set advanced operations on special events: *Enable*, *Disable*, *Timeout* and, only for CMHTA500, terminals the function keys *F1*, *F2*, *F3*, *F4*.

Groups

A group is a family of users that have the same rights and characteristics for the system. This option allows to configure different groups of users. The group window provides the way to assign names to groups. In many places 'll find the list of the groups enabled to accomplish a specific task (enable, disable, switch on etc). By setting those permissions it is possible to fine control who can do what. To put a user in a group see Users Chapter.

NOTE: At maximum the system can manage 31 different groups, the first 3 groups are predefined and cannot be changed.

Double click on a configured item (except *Admin*, *Panic*, *Patrol*), to change the group description.



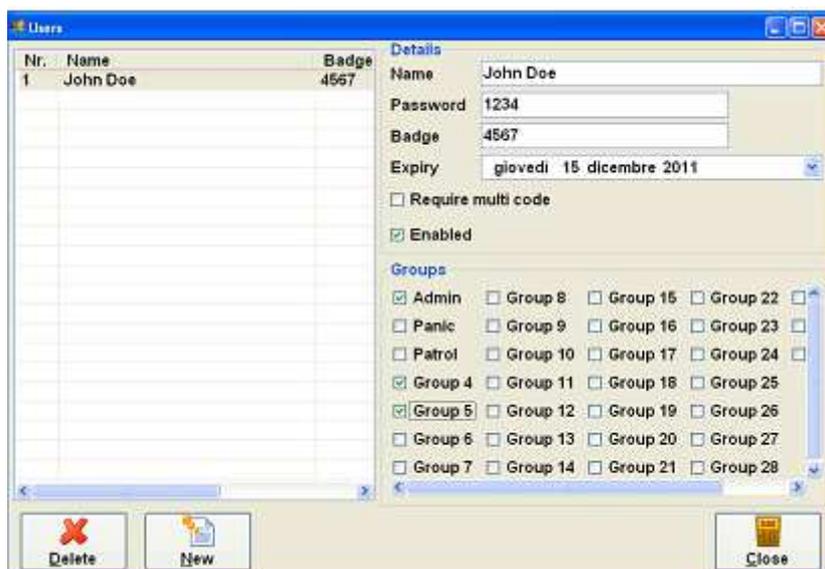
As default the *Admin* group is enabled on all the functions and it is incompatible with *Panic* and *Patrol* groups:

- **Panic**
On a panic user login event the output configured as *Silent alarm* are activated (See *Output*).
- **Patrol**
A login performed by a patrol user activate the patrol time instead of deactivate the partitions (see *Input*).

Users

The Users page allow to configure the users that are enabled to operate with HyperPower: each user can be assigned to one or more groups and equipped with password and/or badge.

Click on a list item to change a configured user, or select the *New* button to add a new user.



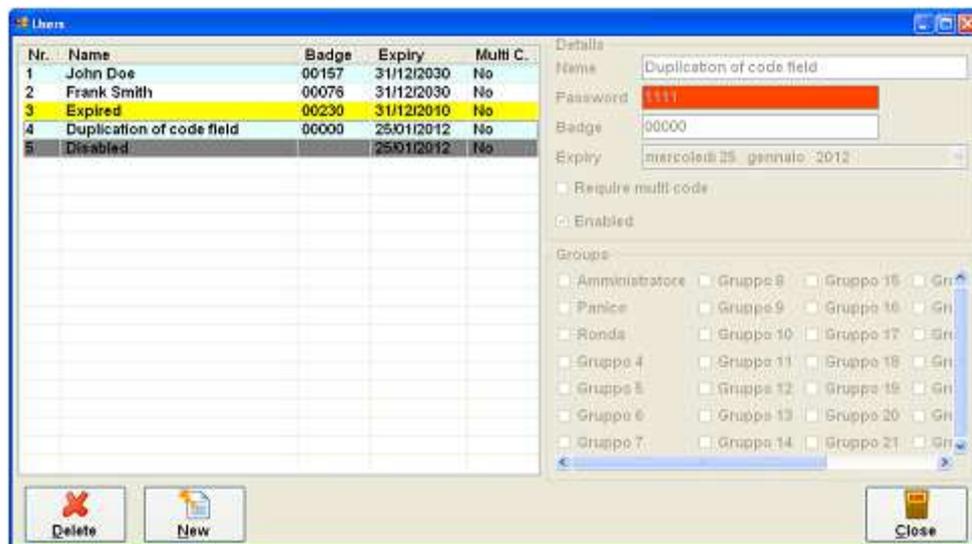
The available parameters are:

- Name
Unique name that identifies the user.
- Password
Unique password used to login.
- Badge
Unique badge used to login.
- Expiry
After that date the user will no longer be accepted by the system.
- Require multi code
The users are identified only when two login events are performed by users configured with this option in a specified period of time configured for each partition. See *Partitions*.

- Enabled
Enabled user to use the system.
- Groups
Users groups, the Admin group is incompatible with *Panic* and *Patrol* groups.

When the system detects anomalies, the list item are highlighted with different background colors:

- Yellow
Expired users.
- Azure
Fields duplication: Name, Password, Badge; both the items involved are highlighted in azure, the duplicated fields are highlighted with red color.
- Dark gray
Disabled users.



Partitions

The term *Partition* means a set of inputs and outputs used to manage a specific part of the security system, example:

the fire detection partition could include:

- Smoke detector, heat detector.

- Sirens, irrigation sprinklers.

Regarding security partitions, can easily set some standard parameters:

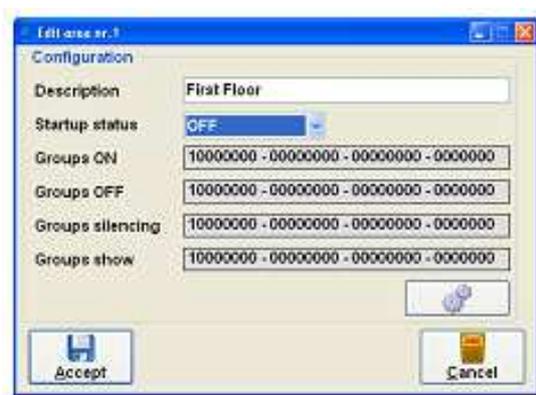
- Pre-switch ON time
Insertion delay (seconds): during this time are activated the outputs configured as *Pre arming* (See *Output*).
- Multiple security time
Maximum delay between multiple passwords (seconds). Two users both configured as multi-code can work on the partitions only if their identification is made in the time here configured.
- Input inactivity time
Maximum delay without input change (hours): the time is reset on each reporting of status change by an input belonging to the partition. When the time expire are activated the outputs configured as *Input inactivity* (See *Output*).
- Switch ON inactivity time
Maximum time in OFF status (hours): the time is reset when an area is set on status ON. When the time expire are activated the outputs configured as *Arming inactivity* (See *Output*).



To improve the organization of partitions, the system splits each partition in up to 16 areas. The installer can decide by himself how to organize the schema of its programming.

The available parameters are:

- Description
Unique description of areas.
- Start-up status
Startup status of area at main unit restart, if don't use scheduling by time table.
See *Timer configuration*.
- Groups ON / OFF / Silencing/show
Groups of authorized users to enable or disable the areas and to silence alarms.



Using the button *Transactions* the user can access to the *Advanced Programming* function, where to personalize each event, each partition and each area. Customized transactions can be configured and automatically started for specific event: *Partition / area On*, *Partition / area OFF*, *Alarm*, *Silencing*. See *Advanced Programming* section of this guide.

Sensors

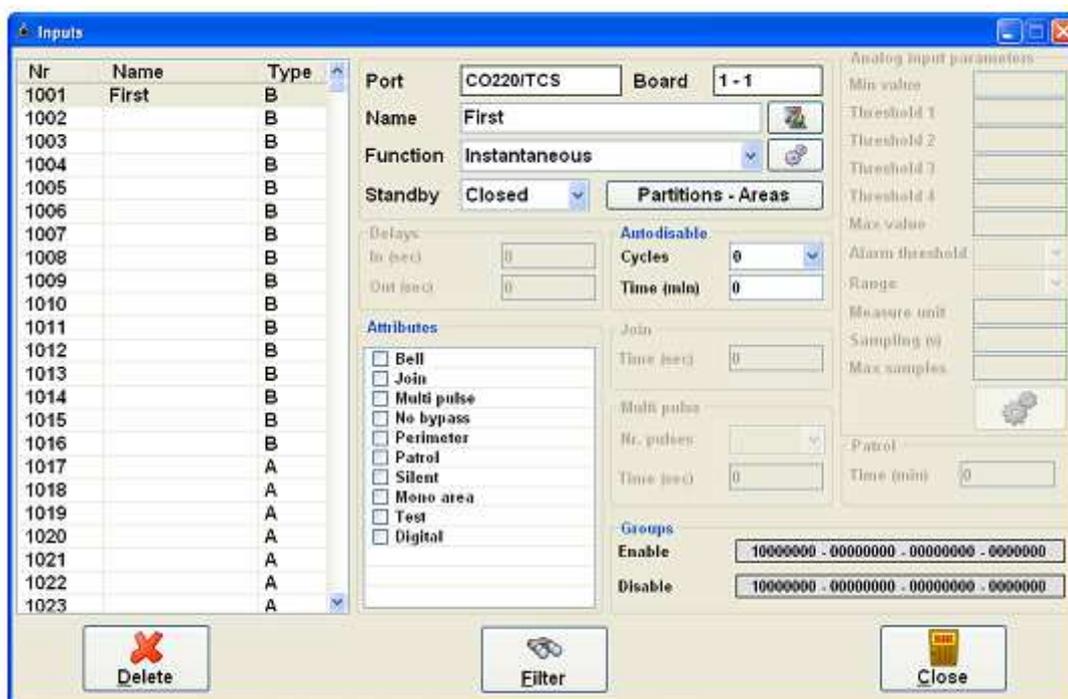
This option allow to configure all the sensors (and various electrical contacts) of the system. The numbers and the kind of sensors depends from the number and the kind of boards configured. Each input is identified by a unique number automatically created by the system, that combining the board number (thousands) and the input position on the board (digits).

Example: if the first board is 24 IN Bil (See *Boards*) the system creates 24 inputs (from 1001 to 1024) of type B (balanced).

The functions available for each input depend on its type:

Function / Type	Analog	Balanced	Digital	4 Status
Switch on		YES	YES	YES
Instantaneous	YES	YES	YES	YES
ON/OFF		YES	YES	YES
24 Hours	YES	YES	YES	YES
Path		YES	YES	YES
Robbery		YES	YES	YES
Delayed	YES	YES	YES	YES
Techno	YES	YES	YES	YES
No alarm	YES	YES	YES	YES

As well as configurable parameters and attributes.



The window shows on left the available input list, on right it shows the detail of active input. The parameters *Port* and *Board* are fixed and depend on *Port* and *Board* menu.

The other parameters are:

- Name
Input name.
- Function
It defines the use of the input:

- **Switch on**

Signal for arming/disarming a partition (impulsive).
Three modes of operation:

- 1- Normally causes a *Total arming*.
- 2- With attribute *Perimeter* causes a *Partial arming*.
- 3- If at least one area is armed, it causes the *Switch off* of all areas.

The only attributes allowed are: *Perimeter, Digital*.

It stores an *ON / OFF* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **Instantaneous**

Instant alarm: the signal is considered only if at least one area is armed.
All the signals received by the system during the pre-switch ON time are ignored.

It stores an *Alarm* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **ON/OFF**

Bistable input for partition switch ON / switch OFF.
Two modes of operation:

- 1- Normally causes a *Total arming*.
- 2- With attribute *Perimeter* causes a *Partial arming*.

The only attributes allowed are: *Perimeter, Digital*.

It stores an *ON / OFF* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **24 Hours**

Always active input: the signal is always considered, for this reason it's not possible to set the attributes: *Bell, Perimeter, Patrol, Mono area*.

It stores an *Alarm* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **Path**

Instant alarm, except during alarm delay (delayed): the signal is considered only if at least one area is armed. It considers the parameter *In Delay* only during an alarm caused by a *Delayed* input. All the signals received by the system during the pre-switch *ON time*, *Patrol time* and *Out delay* are ignored.

The attributes not available are: *Bell*, *Join*, *Multi pulse*.

It stores an *Alarm* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **Robbery**

Silent alarm: the signal is always considered, for this reason it's not possible to set the attributes: *Bell*, *Perimeter*, *Patrol*, *Mono area*.

The only attributes allowed are: *No bypass*, *Test*, *Digital*.

It stores an *Alarm* event in the historic table.

- **Delayed**

Delayed alarm: the signal is considered only when expire the parameters *IN delay*, *OUT delay*, *Patrol time* and *Pre-switch ON* (See *Partitions*).

It stores an *Alarm* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **Techno**

Technological input with alarm status: the signal is considered only if at least one area is armed.

The attributes not available are: *Bell*, *Perimeter*, *Patrol*, *Silent*.

It stores an *Alarm* event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **No alarm**

No action: it is usually controlled by advanced programming, the only attribute available is *Digital*.

- Standby

Standby status opposite of alarm status: close or open.
Available for balanced and analog inputs.

- Autodisable

It allows to automatically disabled the inputs after a defined number of alarms occurred during a set time:

- Cycles

Number of alarms to autodisable the input until next switch ON.

- Time

The Cycles alarms must happen within this time.

- Delays

Available for inputs configured as *Path* or *Delayed*:

- In

Delay applied during input time.

- Out

Delay applied during output time; if it is configured a *Pre-switch ON time* in the partitions, the alarms are considered only when expiry both times.

- Attributes

Features managed by the inputs::

- **Bell**

Activate outputs of kind *Bell*, only when the partition is OFF: it is available only for *Instantaneous* and *Delayed* inputs.

- **Join**

Set the alarm status if all the inputs that belong to the same areas of this one are in alarm simultaneously. It need the configuration of parameter *Time* in the box named *Join*.

It is available only for: *Instantaneous, 24 Hours, Delayed, Techno*.

- **Multi pulse**

Set the alarm status only if the selected number of commutations during the selected time are reached. It need the configuration of parameters *Nr. Pulses* and *Time* in the box named *Multi pulse*.

It is available only for: *Instantaneous, 24 Hours, Delayed, Techno*.

- **No bypass**

Disable manual and automatic exclusion function.

It is available only for: *Switch on, ON/OFF, No alarm*.

- **Perimeter**

Set the alarm status even in partial protection mode (partition partial ON). For inputs *Switch on* and *ON/OFF* set the partitions arming mode.

Not available for inputs: *24 Hours, Robbery, Techno, No alarm*.

- **Patrol**

When a partition is switched OFF using a password that belong to the patrol group only these inputs are considered in OFF status and are automatically rearmed after the expiration of *Patrol time* configured in box *Patrol*.

It is available only for: *Instantaneous, Path, Delayed*.

- **Silent**

When in alarm activates only outputs of kind *Silent alarm* and not those marks as alarm: it is selected as default in *Robbery* inputs, it is available for *Instantaneous, 24 Hours, Delayed* inputs also.

- **Mono area**

Each input can belong to one or more areas. Setting this option, to start the alarm status it is enough that only one area is switched ON.

- **Test**

Records event without alarm activation. It activates only outputs of kind *Alarm*.

When appropriate, it stores the alarm event in the historic table and it starts the transactions relative to the event (See *Advanced Programming*).

- **Digital**

ON/OFF input, without tampering status

- Patrol time
Number of minutes that the input remain in OFF status when switched OFF by a user belonging to Patrol group
- Partitions-Areas
Associate the input to one or more partitions and/or areas.
- Groups enable / disable
Groups of authorized users for enable or disable inputs.

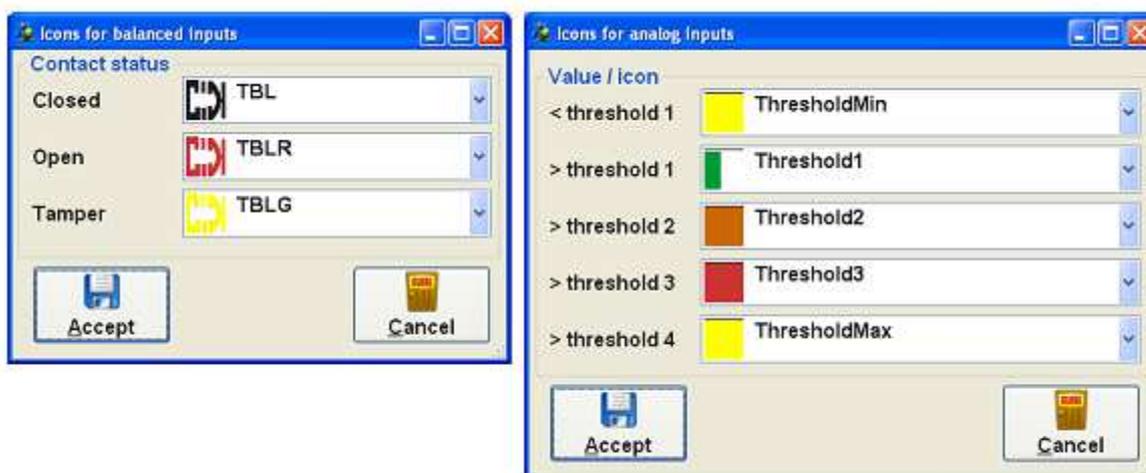


For analog inputs, some other parameters must be entered

- Min/Max values
Range limits values

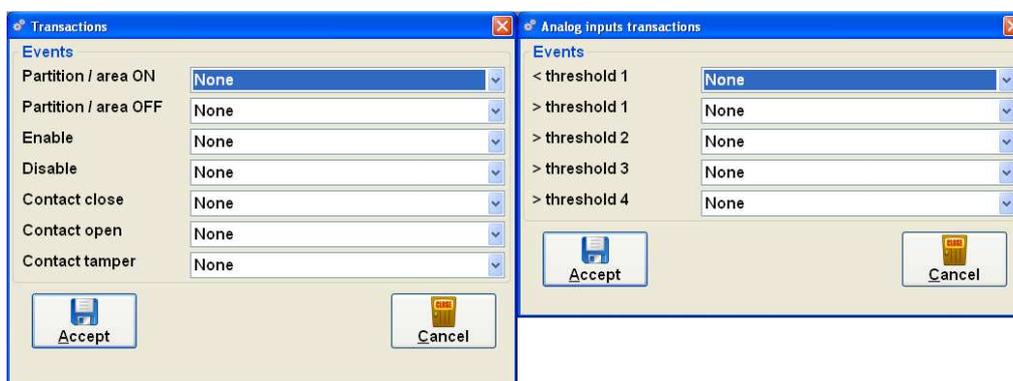
- Thresholds 1-4
Thresholds that drive events generation (See *Advanced Programming*)
- Alarm threshold
Number of the threshold that should be considered the alarm threshold.
- Range
Input range (0-5 V or 4-20 mA)
- Measure unit
Symbol that appears near the input value.
- Sampling (s)
How often, in seconds, store input values.
- Max samples
Max number of stored samples.

With the button *Icons* can set special icons (different from the standard ones selected by the *General information* page) for graphic representation of inputs: one icon for each of three states or for each of five levels delimited by four thresholds for analog inputs.



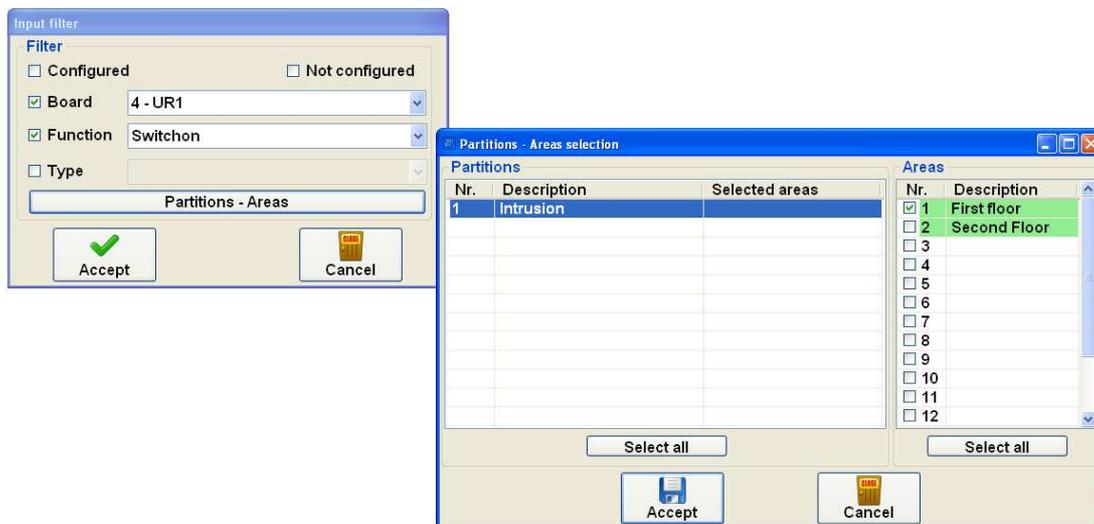
The buttons *Transactions* grants the access to the advanced configuration of HyperPower. Customized transactions can be configured and automatically started for specific event. The functions available for each input depend on its type:

Transaction / Type	Analog	Balanced	Digital	4 Status
Partition/area ON	YES	YES	YES	YES
Partition/area OFF	YES	YES	YES	YES
Enable	YES	YES	YES	YES
Disable	YES	YES	YES	YES
Double click	YES	YES	YES	YES
Normal				YES
Pre alarm				YES
Alarm				YES
Contact close		YES	YES	
Contact open		YES	YES	
Contact tamper		YES		YES
< threshold 1	YES			
> threshold 1	YES			
> threshold 2	YES			
> threshold 3	YES			
> threshold 4	YES			



See *Advanced Programming* section of this guide.

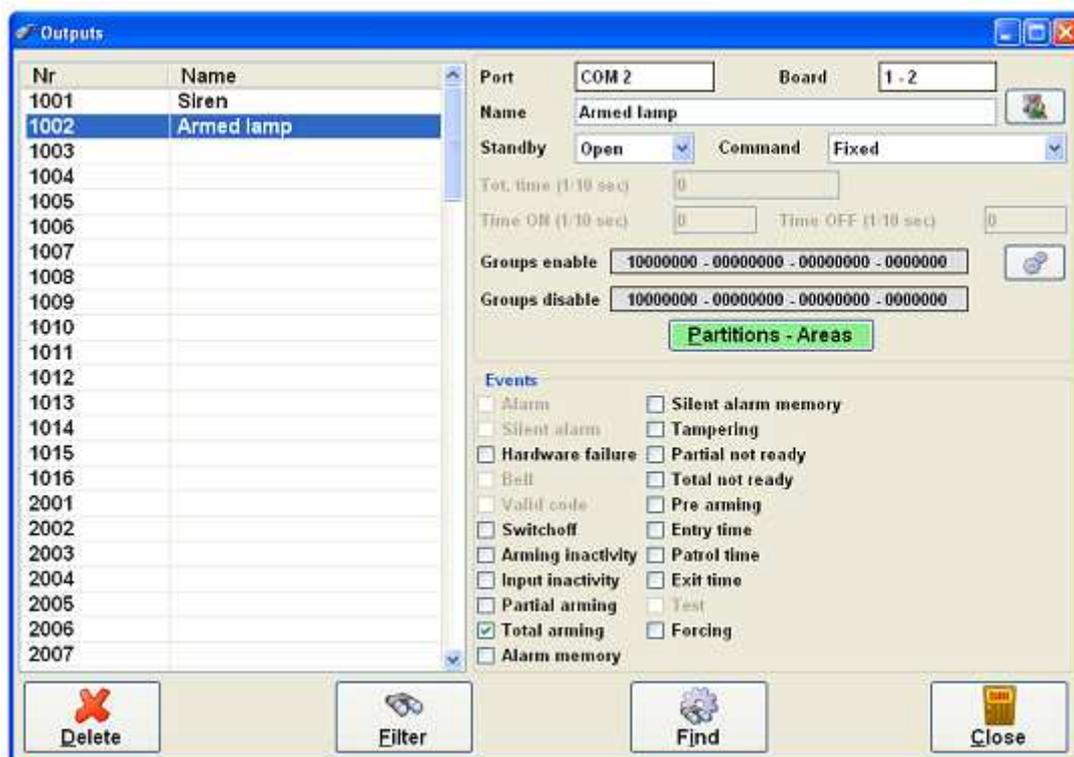
Filter button allow to reduce the list of inputs (by boards, type, partition, area) getting an easier search.



Outputs

This option allows to configure the electrical outputs (sirens and other devices) of the system. The numbers and the kind of output depends from the number and the kind of boards configured, each outputs is identified by a unique number automatically created by the system combining the board number (thousands) and the input position on the board (digits).

Example: if the first board is 24 IN Bil (See *Boards*) the system create 8 outputs (from 1001 to 1008).



On right the window shows the list of the available outputs, on left the window shows on left the available input list, on right it shows the detail of active output. The parameters *Port* and *Board* are fixed and depend on *Port* and *Board* menu.

The other parameters are:

- Name
Output description
- Standby
Inactive electric level : open or closed.

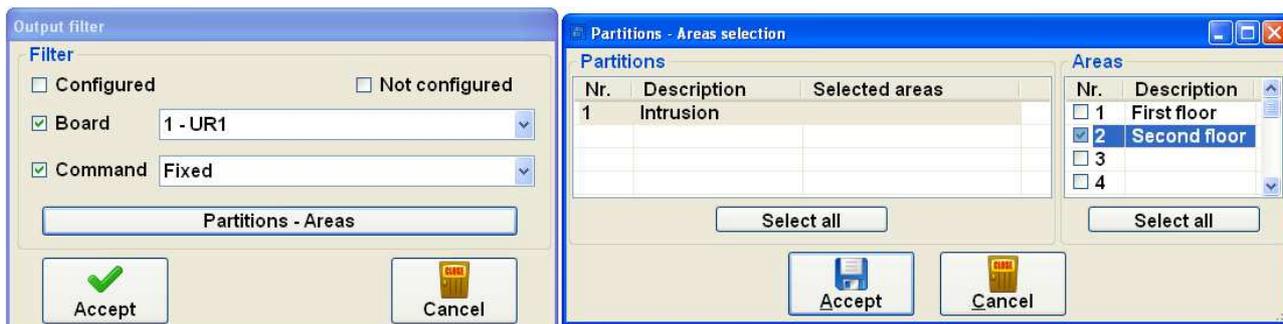
- Command
Activation type :
 - Fixed
Output is active until the event it represents disappear.
Events not allowed: *Alarm, Silent alarm, Bell, Valid code.*
 - Pulse
Output is active by a pulse duration configurable (*Tot. time*)
It is available only for events: *Alarm, Silence alarm, Bell, Valid code, Test.*
 - Flashing
Output is controlled by a series of alternating pulses (*Time ON and Time OFF*) for all the time.
It is available only for events: *Alarm, Silence alarm, Bell, Valid code, Test.*
 - Timed flashing
Output is controlled by a series of alternating pulses (*Time ON and Time OFF*) duration configurable (*Tot. time*)
It is available only for events: *Alarm, Silence alarm, Bell, Valid code, Test.*
- Total time
For pulsed outputs represent the length of the pulse, for timed flashing outputs represent the total time of activation. The value 0 (zero) equals permanent.
- Time ON
Time of ON status (for flashing or timed flashing command).
- Time OFF
Time of OFF status (for flashing or timed flashing command).
- Groups enable
Groups that can enable the output
- Groups disable
Groups that can disable the output
- Partitions/Areas
List of partitions/areas the output belongs to.

- **Events**
List of events the output respond to. Selected events determine the way in which the control panel handle the output:
 - **Alarm**
Output activated on alarm signal produced by input belonging to same partitions / areas.
 - **Silent alarm**
Output activated on login by a user belonging to *Panic* group or on alarm signal produced by *Silent* input belonging to same partitions / areas.
 - **Hardware failure**
Output activated on hardware failure: no communication with a board enabled.
 - **Bell**
Output activated on signal produced by input configured as *Bell* and belonging to same partitions / areas. Only when partitions / areas are switch off.
 - **Valid code**
Output activated on login event performed by a valid user.
 - **Switch off**
Output activated at each area switch off.
 - **Arming inactivity**
Output activated when expired the time set in parameter *Switch ON inactivity time* (See *Partitions*).
 - **Input inactivity**
Output activated when expired the time set in parameter *Input inactivity time* (See *Partitions*).
 - **Partial arming**
Output activated at each partial or total switch on at least one of the areas.
 - **Total arming**
Output activated at each total switch on at least one of the areas.
 - **Alarm memory**
Output activated to report the presence of an alarm signal in the historic table. To put off the output must silence the partition.

NOTE: the silence alarm don't activate the output.

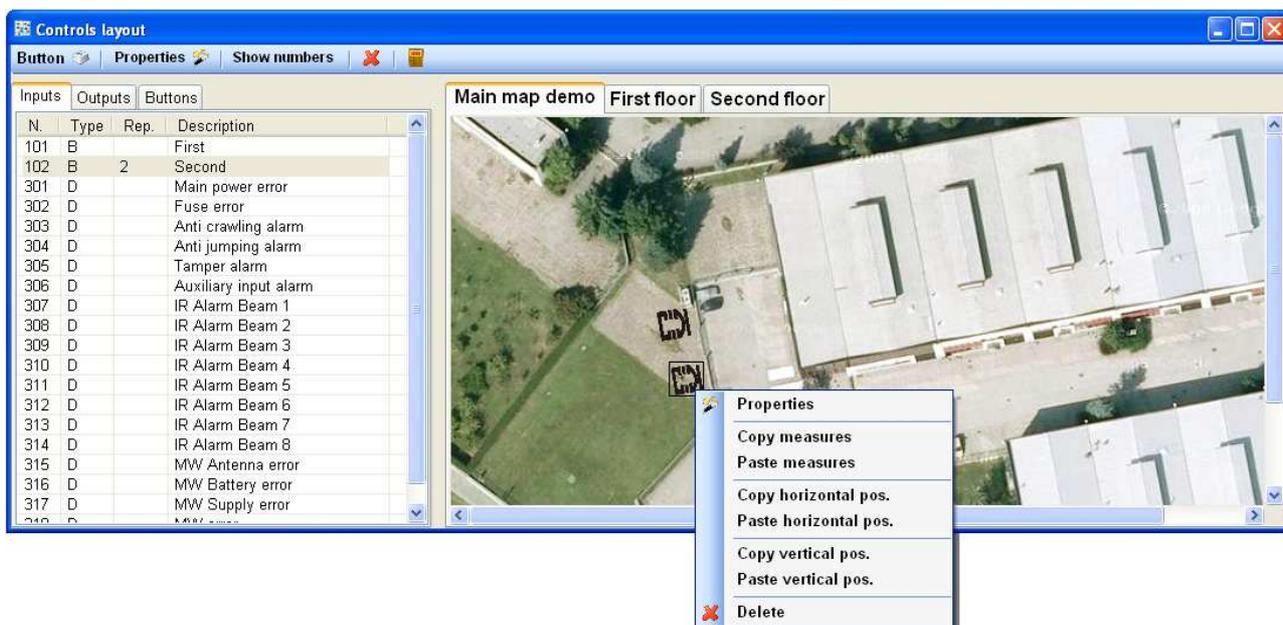
- **Silent alarm memory**
Output activated to report the presence of a silence alarm signal in the historic table. To put off the output must silence the partition.
- **Tampering**
Output activated on input tampering.
- **Partial not ready**
Output activated when the system register the status not ready during a partial switch on try.
- **Total not ready**
Output activated when the system register the status not ready during a total switch on try.
- **Pre arming**
Output activated during the time set in parameter *Pre switch on time* (See *Partitions*).
- **Entry time**
Output activated during the time set in inputs belonging to the same areas: parameter *Delays IN* (See *Inputs*).
- **Patrol time**
Output activated during the time set in inputs belonging to the same areas: parameter *Patrol time* (See *Inputs*).
- **Exit time**
Output activated during the time set in inputs belonging to the same areas: parameter *Delays OUT* (See *Inputs*).
- **Test**
Output activated on alarm signal produced by *Test* inputs belonging to same partitions / areas.
- **Forcing**
Output activated on a command of *Force partition status* in one of the areas belonging. It is put off at the end of forcing.

Filter button allow to reduce the list of outputs (by boards, type, partition, area) getting an easier search.



Controls

Controls are graphical symbols for sensors and/ or outputs, this functions allows to place them onto maps. Each sensor or output can be placed more than one time on maps without restrictions. It also can be adapted in dimensions and rotation.



In the left side of the window there is a list of configurable elements, grouped for type (inputs, outputs, buttons) and ordered for ID number (See *Inputs* and *Outputs*). For inputs and outputs the column *Rep.* shows the number of occurrences on maps.

In order to place a symbol on the map drag the name of the required symbol from the list on the left onto the displayed map. The image drawn will be the icon configured as *closed status* (balanced, digital inputs and outputs) or icon configured as *< threshold 1* event (analog input).

In order to find quickly a symbol drawn on one or more maps select the name of the required symbol from the list with a double click: the system will show the right map and will highlight the icon border with a black line. If there are more than one occurrence, on each double click event, the system will be highlight the next icon.

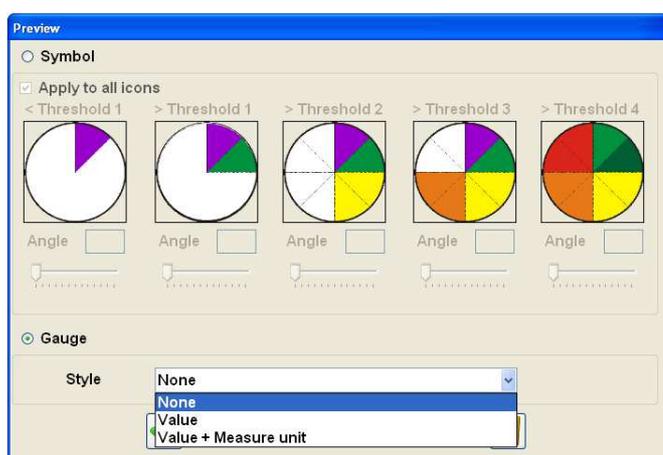
Left clicking a control allow to select a symbol and to change its dimensions or its position using the mouse.

Right clicking on a control displays a context menu that offer many functions to help the alignment of the controls on the map:

- **Properties**
It shows a preview of all icons configured and allow to change the angle of rotation. Changes can be applied to a single icon or to all icons simultaneously with the flag *Apply to all icons*.



For analog inputs there is a second option to draw the controls, flag *Gauge*: the icons of thresholds are substituted with a gauge.



- **Copy (SHIFT + G) / paste measures (SHIFT + V)**
To set equals measures to different symbols.

- Copy (SHIFT + M) / paste measures (SHIFT + V)
Servono a impostare identiche misure a simboli differenti.
- Copy (SHIFT + X) / paste horizontal position (SHIFT + V)
To set equals horizontal position to different symbols.
- Copy (SHIFT + Y) / paste vertical position (SHIFT + V)
To set equals vertical position to different symbols.
- Copy (SHIFT + T) / past all (SHIFT + V)
To execute at once all the copy commands (graphics, sizes, positions).
- Delete
Delete a symbol from a map.

Under the title bar there are two others menu:

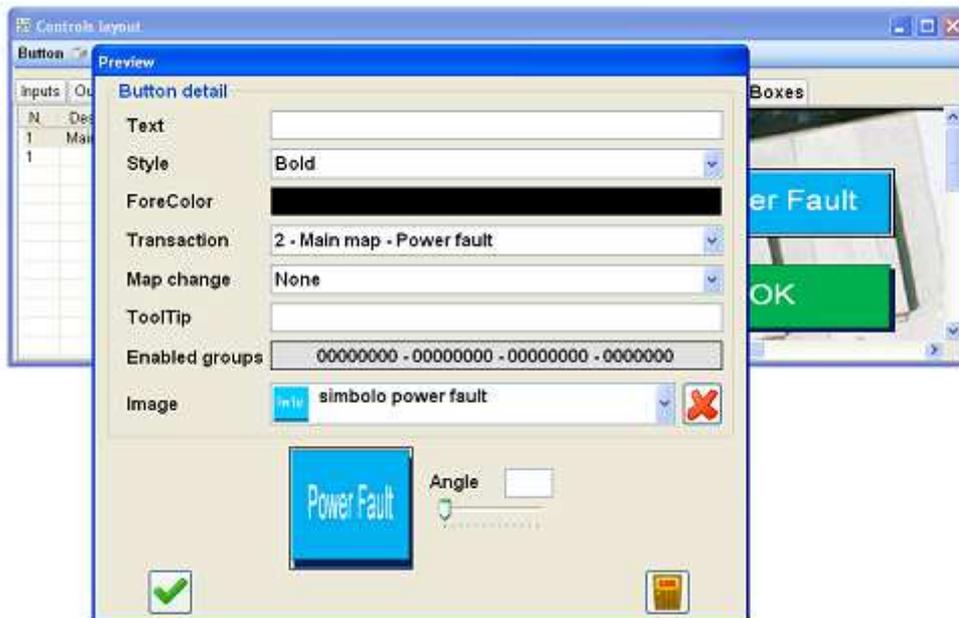
- Show number
It shows the inputs/outputs numbers on the symbols drawn on the maps.
- Change icon
It changes the icon used to show the controls in the maps. It selects the next image between those configured.
- Text
Add a text message on the maps. It is possible to change dynamically the text properties with command Set a Text control (See Advanced Programming).
- Button
It allows to add buttons on the maps:

At runtime the users can interact with buttons (mouse click) and start the transactions associated with the buttons events. See *Advanced Programming*.

The proprieties available for buttons are:

- Text
It shows a text on button.
- Style / Color
Graphical settings of the control text.

- **Transaction**
It associates a transaction to the click event on button. See *Advanced Programming*.
- **Map change**
Double click event shows the map configured in this setting.
- **ToolTip**
Help text to display on mouseover (ToolTip).
- **Enabled groups**
It set the groups of users enabled to use the button.
- **Image**
It allow to set an icon as button background. To import a new icon see paragraph *Icons*.
- **Angle**
To change the rotation angle.

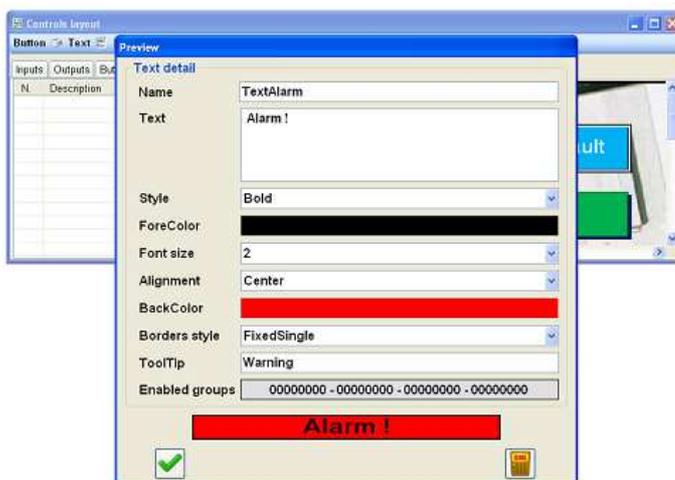


The other proprieties available for Texts are:

- **Name**
Name of the control.

- Style / Color / Dimension / Alignment
Graphic settings of the control's text.
- Back color / Borders style
Graphic settings of the control's background.

A mouse click on the box containing the selected color displays a mask in Windows-style to choose or create a new color.

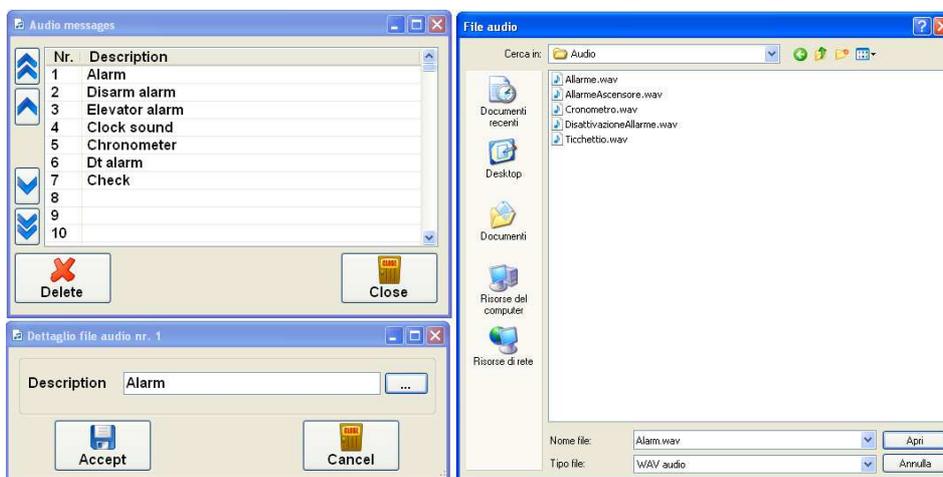


Audio Messages

This option allows to configure up to 200 audio files (speech, music or jingles) to be used when a particular situation happens. During run-time execution, these messages can be played by the command *Play message* (see *Advanced Programming*).

Messages have to be previously recorded into standard WAV files.

The window shows the list of configured files ordered by an ascendant number from 1 to 200. to change the order have to use the *Arrows* buttons: single arrow to move by one step, double arrow to set as first or last element.

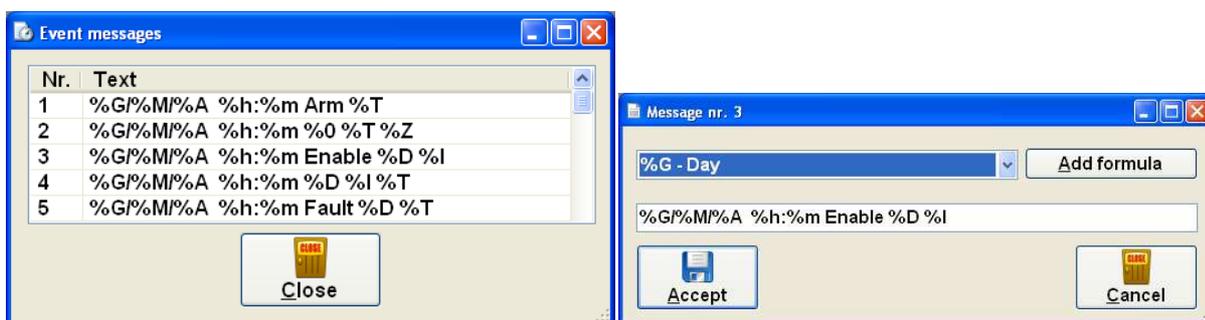


Double click on an empty element to add a new file or on a configured element to change it. The new window allow to change the file *description* and to choice a WAV audio file.

NOTE: The *description* must by unique and it may be different from real file name.

Event Messages

This option allows configuration of messages to be recorded at standard events (see next) or customized events by the *Store event* command (see *Advanced Programming*).



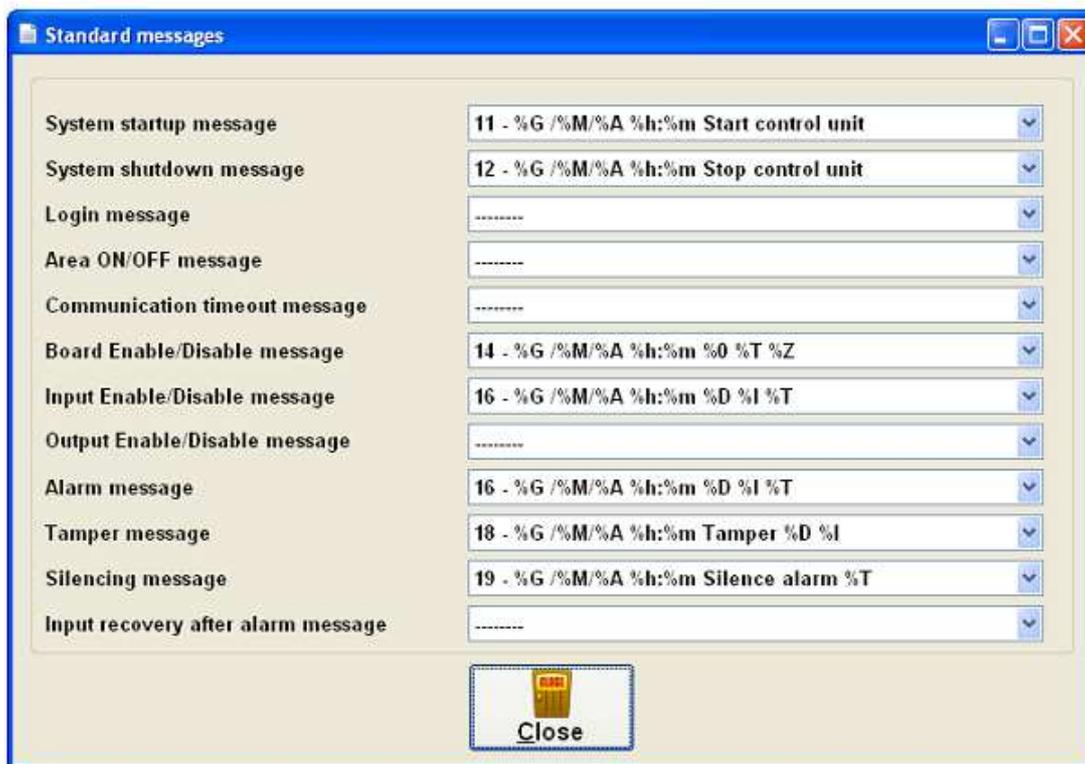
Double clicking a row of the table, opens the editing window.

Every message is composed by plain text and formulas. The system expand the formulas at runtime giving a great flexibility. Formulas can be selected in the combo box over the editing line, and, pressing the Add formula button, the selected formula is placed in the edit line.

Standard Messages

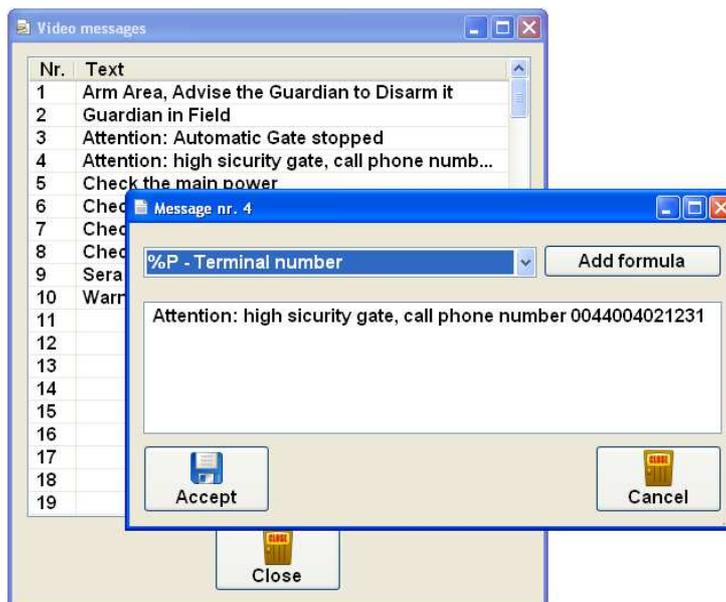
This option allows to link configured messages to standard events, as system start/stop, partitions arming/disarming, and so on.

These messages are automatically recorded in the system event log without using other programming techniques.



Screen Messages

The option allows to configure up to 200 messages to be used during run-time execution, these messages can be played by the command *Show screen message* (see *Advanced Programming*).



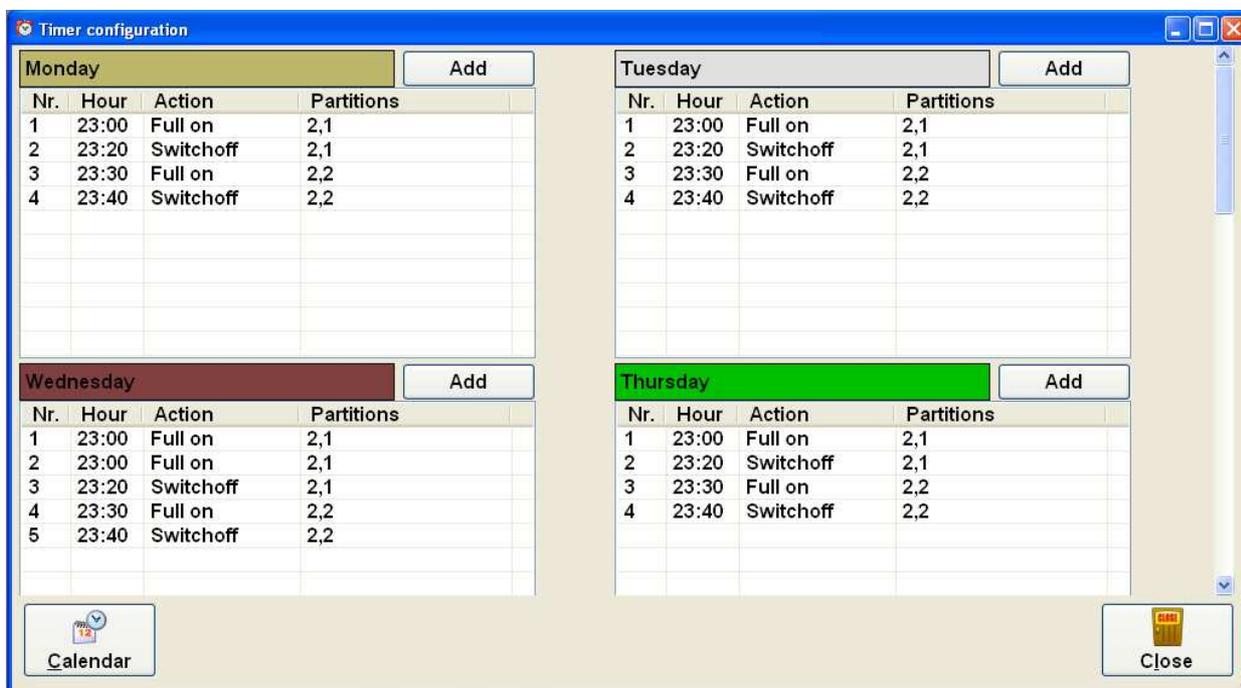
Screen messages are very similar to event messages and are configured in almost the same way. The main differences are:

- Multi line editing
These messages can span more than one line. Max 1000 characters.
- User tips
Screen messages are not recorded but displayed on screen in order to help the operator to manage special events.

Every message is composed by plain text and formulas. The system expand the formulas at runtime giving a great flexibility. Formulas can be selected in the combo box over the editing line, and, pressing the Add formula button, the selected formula is placed in the edit line.

Timer Configuration

The *Timer configuration* allows to schedule actions to be performed automatically in days and in time. Every action will cause the partitions/areas arm/disarm and/or; furthermore, by advanced programming features, can start customized transactions.



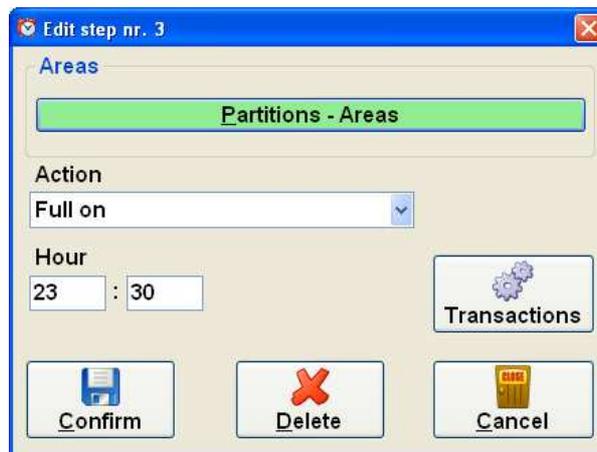
The window is divided in 7 lists (named Timer programs) one for each day of week and 5 lists (named Special programs).

To speed up the programming, it is allowed to use the *drag and drop* functions typical of Windows:

- Drag a configured item on an empty row to copy or overwrite a command. Even on different programs.
- Drag the name of days from a coloured label to another to copy or overwrite whole programs.

The *Add* button, on right of coloured labels, allow to set a new command:

This option allow to configure a time table for automatic partitions/areas arm/disarm. Furthermore, by advanced programming features, can start customized transactions. can set a time table for each day of week, and up to 5 special timer programs (see later). For each day, a list of time sorted commands is maintained. Every command gives instruction to HyperPower about r requirements. There is no limit about the number of commands that can be entered for each day. For every command the following informations are requested:



The parameters for commands are:

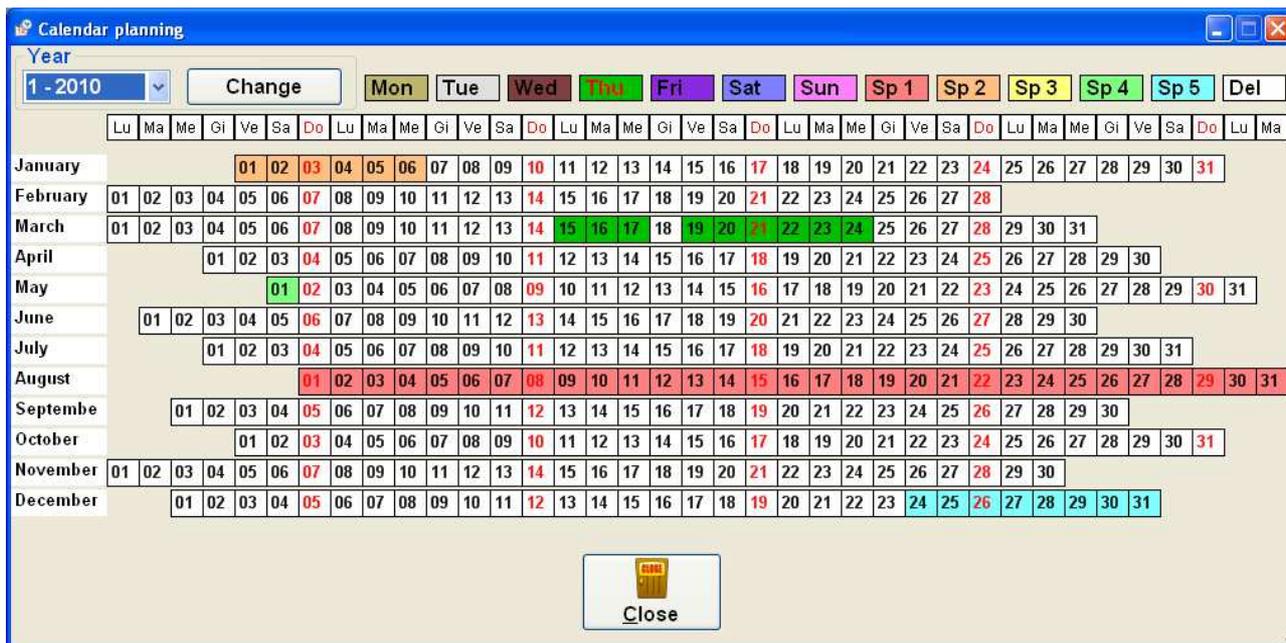
- Partitions/areas
List of partitions/areas involved
- Action
 - None
No action on partitions/areas: to be used to start transactions

- Switch OFF
Switch OFF the selected partitions/areas
 - Partial ON
Switch partial ON the selected partitions/areas
 - Immediate partial ON
Switch partial ON without delay the selected partitions/areas
 - Full ON
Switch ON the selected partitions/areas
 - Immediate full ON
Switch ON without delay the selected partitions/areas
- Hour
Hour at which the command must be executed
 - Transactions
An optional transaction can be started

The actions configured in the same day of week are ordered by time.

The button *Transactions* gives access to the advanced configuration functions to fully exploit the potential of HyperPower. Customized transactions can be configured and started. See *Advanced Programming* section of this guide.

The *Calendar* button opens a 3 year calendar in order to plan the working behaviour of the system. By default the system applies the time table defined for the actual weekday. With the calendar it is possible to change this and set a different rule. For example it is possible to specify that during the holyday period every day is treated as Sunday, and the corresponding time table will be applied. To achieve this, simply click on the desired day on the top of the window, and then, click or drag the mouse on the days that want to set to use the selected day. In the same way, the five special time tables can be assigned to specific days on the calendar.



A different background colour is applied to the days depending on the type of program configured: the white background means default program (day Sunday = program Sunday, day Monday = program Monday, etc.).

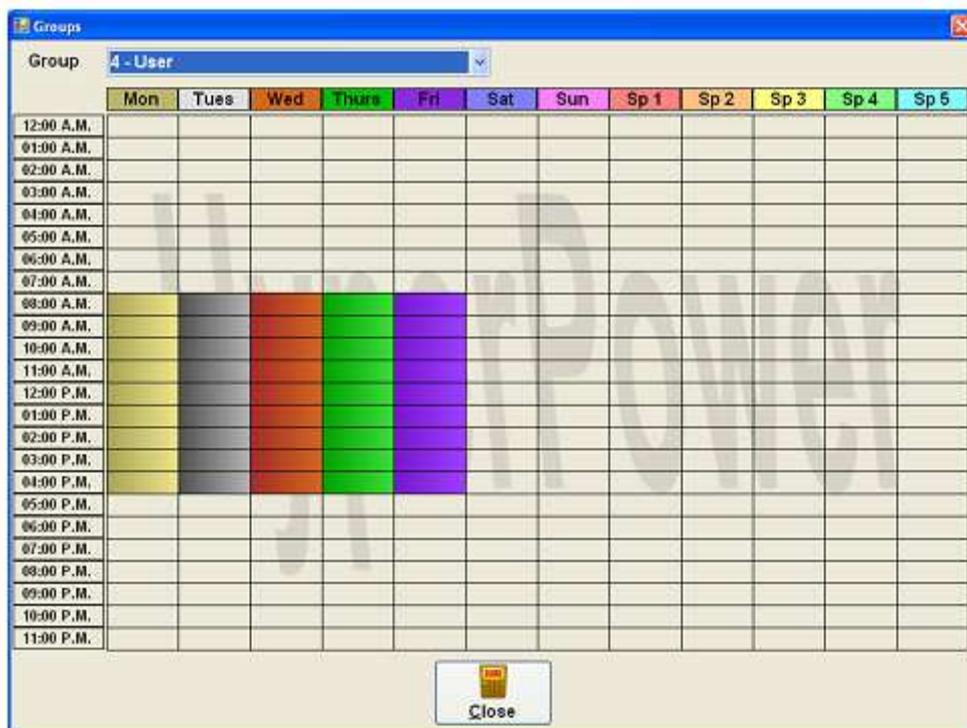
To configure a program:

- Click with left button on a coloured label corresponding to the programs; the active label is highlights with red text .
- Click with left button on calendar to modify the days, the selected label change background colour according to the active program.

To configure more days at once use the drag and drop function.

To set the standard program use the *Can (Cancel)* label or mouse right click on days labels.

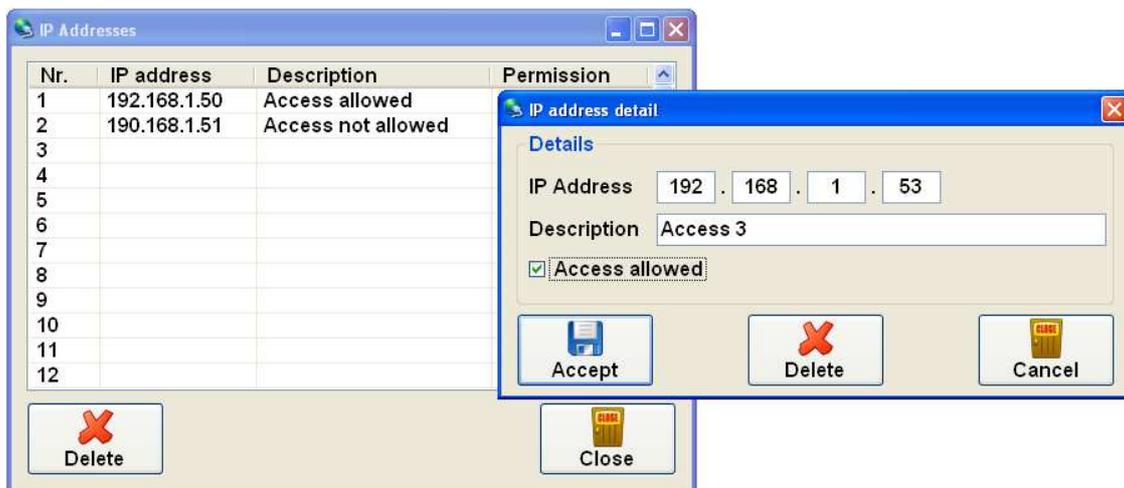
The Groups button displays an overview of the state of a single group within all programs. The colored boxes with the colors of the days summarize the periods in which the group is enabled.



IP Addresses

This function allows the creation of up to 50 rules to manage permissions of connection to HyperPower. Each rule is composed by:

- Nr
Rule priority.
- IP address
Client IP address involved in rule, to select a range of addresses can use the character star (ex. 192.168.1.* includes addresses between 192.168.1.1 and 192.168.1.255).
- Description
- Permission
Flag of connection allowed.



Without rules all the IP addresses are allowed to connect to HyperPower. If an address is involved in more than one rule, the rule with higher priority will be considered; example:

Nr.	IP address	Description	Permission
1	192.168.1.2	Access allowed	YES
2	192.168.1.*	Access not allowed	NO

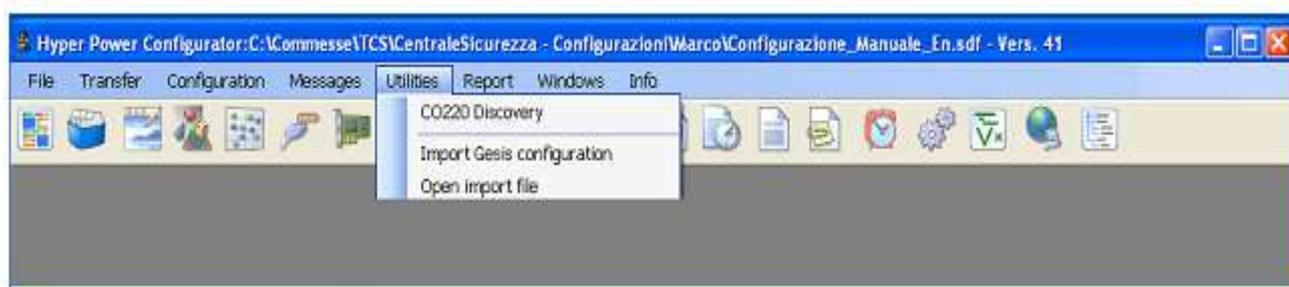
The address 192.168.1.2 is involved in first rule and in second rule also, included in the range of addresses; in this situation the rule with higher priority allow the access for the address 192.168.1.2.

1	192.168.1.*	Access not allowed	NO
2	192.168.1.2	Access allowed	YES

Inverting the order of rules the access will be denied for all addresses of range 192.168.1.*, address 192.168.1.2 also; in this situation the first rule makes the others unnecessary.

Utilities

Include the utility functions of the software.



CMH9000(CO220) Discovery

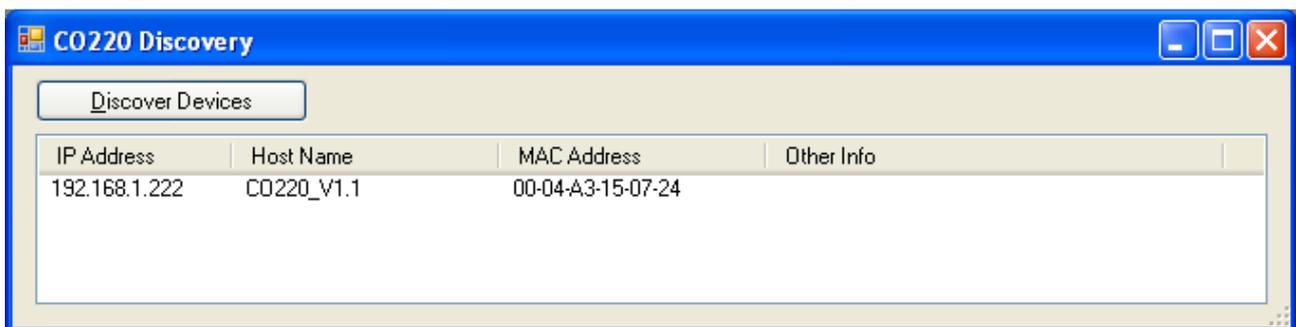
Find all remote devices CMH9000(CO220) connected to the TCP/IP LAN and it shows:

IP Address
Board ip address.

Host Name
Board name.

MAC Address
Board MAC address

Other Info
Other general info.

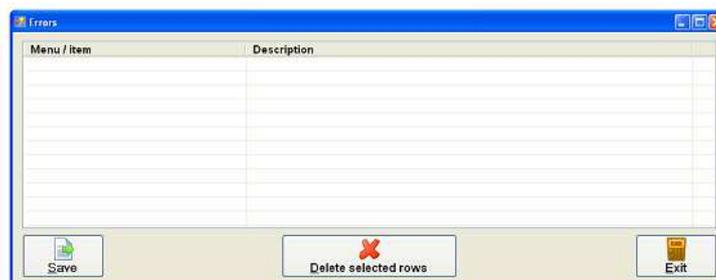


Import Gesis Configuration

Reads the configuration files Gesis (*. Tab, *. SLD, *. SLB, *. WAV) and tries to convert them into new configurations compatible with Hyperpower. Generate a log file, named ImportLog.txt, containing import errors and functions impossible to convert.

Other Import File

It opens a log file saved during a previous import of a Gesis configuration.



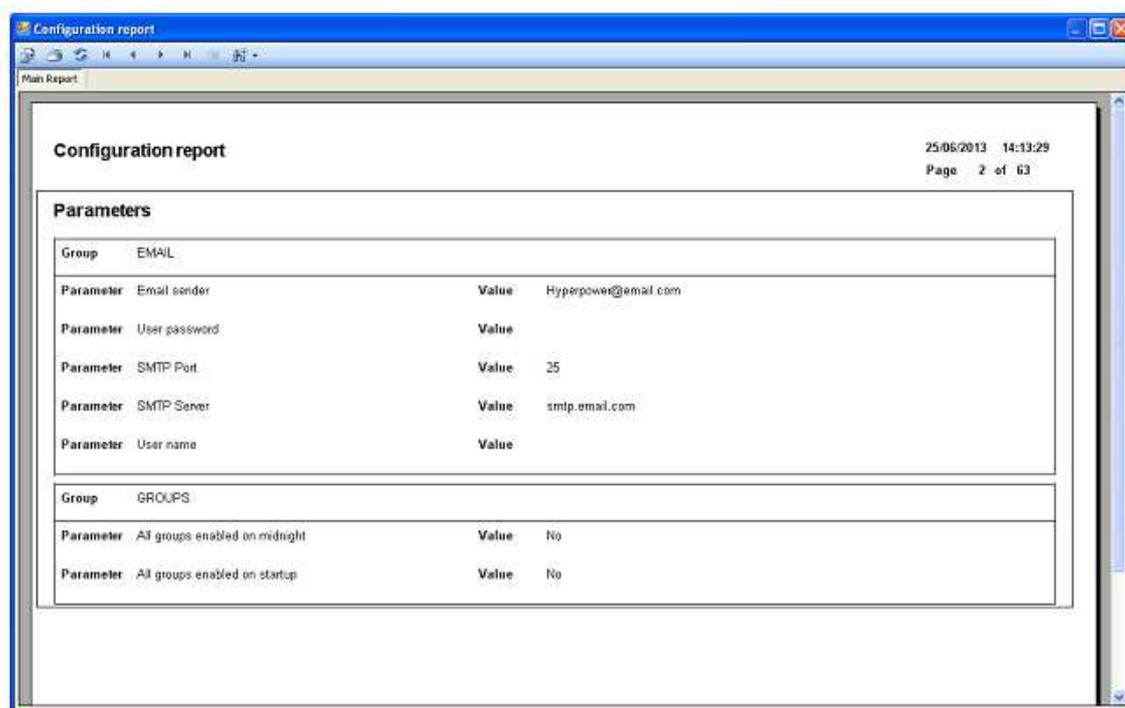
The list view contains two columns:

- **Menu / Item**
Indicates where the warnings occurred and provides a unique identifier of the item involved.
- **Description**
Provides a description of the warnings and displays the details of the parameters. It's possible to delete warnings with the button Delete selected rows and export again with the button Save.

NOTE: the correction of all the warnings does not guarantee the proper logical functioning of the configuration.

Report

Create a summary report of all configuration:



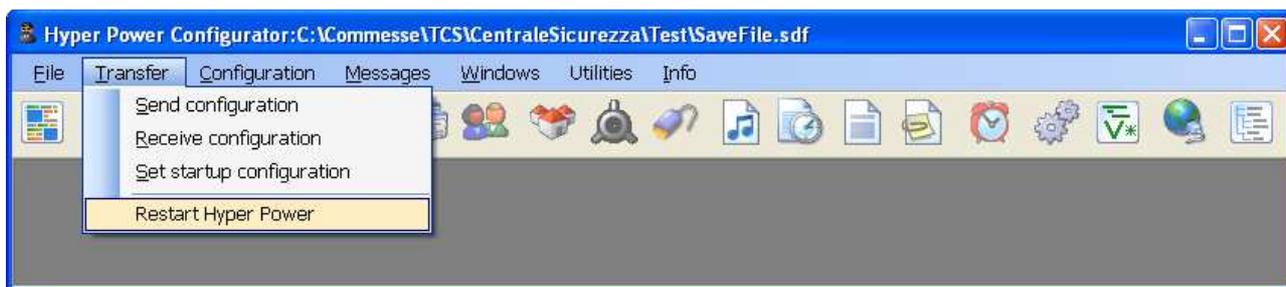
Transfer

In this menu there are the functions necessary to connect to HyperPower and to update the configuration.

For safety reasons the operations on HyperPower (send, receive, restart, etc.) require the master code stored in the configuration (See *General*).

The only situations without master code are:

- 1- Send configuration file on an empty HyperPower.
- 2- Send configuration file with same master code of the file stored on HyperPower.



Send Configuration

Send configuration to HyperPower

HyperPower accept more than one configuration and it uses the file name to recognize them (file *.sdf).

To activate the connection required the name or IP address of HyperPower and the master code.



NOTE: when update the configuration in use, the new changes become active after the next HyperPower restart (see *Restart HyperPower*).

Receive Configuration

Receive one of the configurations load in HyperPower.

It requires the name or IP address of HyperPower and the master code.

Setup Start Up configuration

It allows to choose the configuration file to load after the next startup of HyperPower.

It requires the name or IP address of HyperPower and the master code.

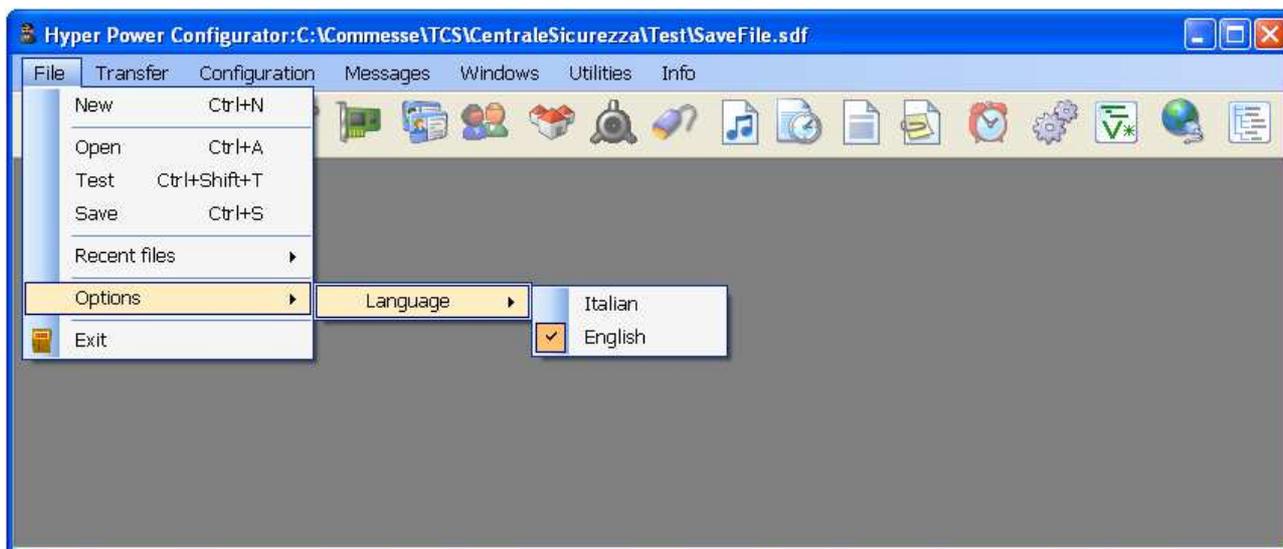
Restart Hyperpower

It restarts HyperPower, use this command to activate the last configuration changes or to load a different configuration file.

It requires the name or IP address of HyperPower and the master code.

File

The *File* menu is principally composed by standard functions used in Windows programs, below a list of functions:



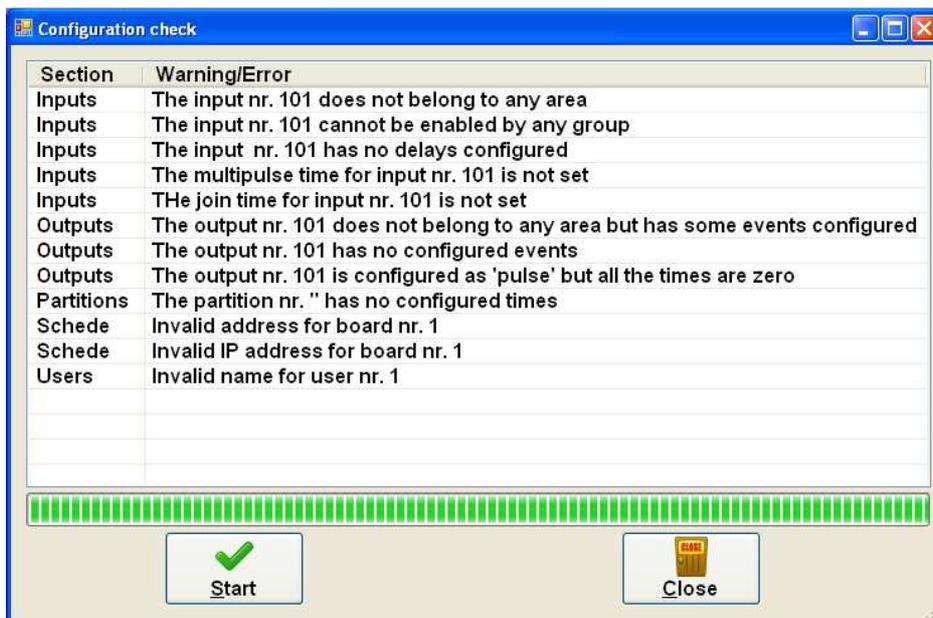
- **New**
Create a new configuration

- Open
Load an existence configuration, the files have extension “.sdf”.
- Test
Execute a configuration check (See paragraph *Configuration check*)
- Save
Save configuration: set file name and path.
- Recent files
Shows a list of recently used configurations and allow to reload them.
- Options->Language->Italian/English
Change the program language from English to Italian.

Configuration Check

Menu *File->Test*: this function execute a configuration check and shows a list of errors. It checks:

- Inputs
- Outputs
- Partitions
- Areas
- Boards
- Users
- Controls



NOTE: the absence of errors cannot be considered guarantee of correct functioning because the check does not include logical configuration.

Transactions

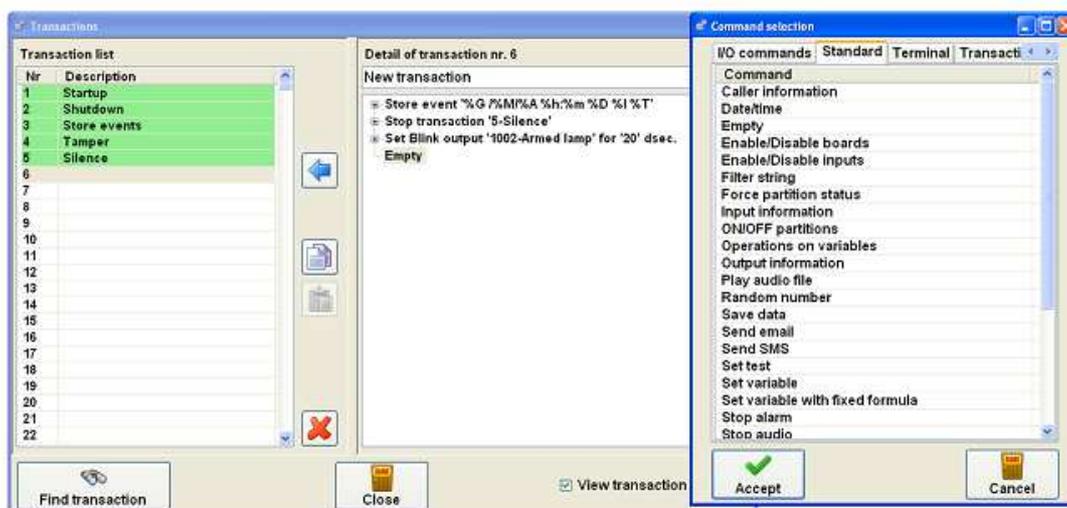
As previously stated herein, the system allows you to configure complex reactions to be actuated when an event happens: inputs commutations, partitions/areas arm/disarm, timer programming and so on.

Each transaction consist of a list of steps: into each step you can insert one of the available commands. Each command may require one or more parameters.

In order to increase the power of transactions, HyperPower gives you the possibility to use variables in a way that resembles standard programming languages. The system distinguish between local and global variables. Global variables are visible and shared by all transactions, this give a way to share informations between different running tasks. Local variables are visible only inside a specific transaction. Every running transaction has its own local variables.

There are three type of variables, depending on the content they may hold: flags, integer and string. Flag variables can hold only true/false values and are useful to store some two status informations (ON/OFF, IN/OUT, etc). Integer variables can hold integer values in the range [-999999,+999999]; they are useful to count and make simple calculations. String variables are suited to store messages output and manage character based informations.

In order to completely understand the potential of *Advanced Programming* you may ask to participate to a training course.



More details on transactions are present in the dedicated chapter.

Below is a list of all the events, generated automatically by the system or caused by interaction with operators, which execute transactions:

Source object	Event
HyperPower	System startup
HyperPower	System shutdown
Graphical buttons	Mouse double click
Boards	Enable
Boards	Disable
Boards	Timeout
Partitions	ON
Partitions	OFF
Partitions	Alarm
Partitions	Silencing
Areas	ON
Areas	OFF
Areas	Alarm
Areas	Silencing
Input analog / balanced / digital / 4 status	ON
Input analog / balanced / digital / 4 status	OFF
Input analog / balanced / digital / 4 status	Enable
Input analog / balanced / digital / 4 status	Disable
Input analog / balanced / digital / 4 status	Mouse double click
Input analog	< threshold 1
Input analog	> threshold 1
Input analog	> threshold 2
Input analog	> threshold 3
Input analog	> threshold 4
Input balanced / digital	Contact close
Input balanced / digital	Contact open
Input balanced / 4 status	Contact tamper
Input 4 status	Normal
Input 4 status	Pre-alarm
Input 4 status	Alarm
Output	Mouse double click
Timer configuration	Timed
Menu	Click

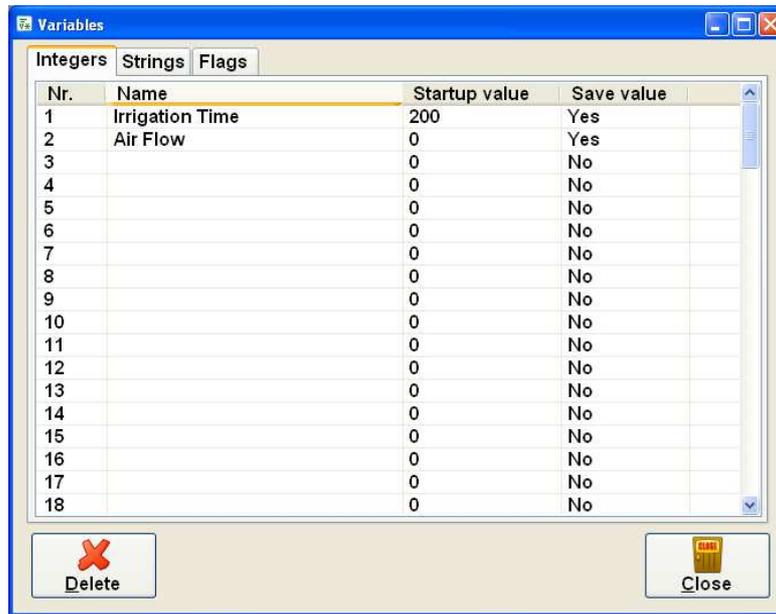
NOTE: ON / OFF events are generated in this order: inputs, areas, plants. The input events are repeated for each area configured for the input, even if the input is configured with attribute Mono area.

Global variables

As mentioned, transaction can use global variables, that are shared between all transactions. You have to configure these variables, by associating a “type” (number, alphanumeric string, boolean) and a description.

For each variable you can define the *Start-up value* and the *Save value* option: by this option, when a system shutdown happens, the actual value is maintained at next restart.

The system provides 100 global variables for each type.



Menu

This option allows you to customize the menu used by HyperPower runtime user interface, each remote console (PC) and terminals (CMHTA500).

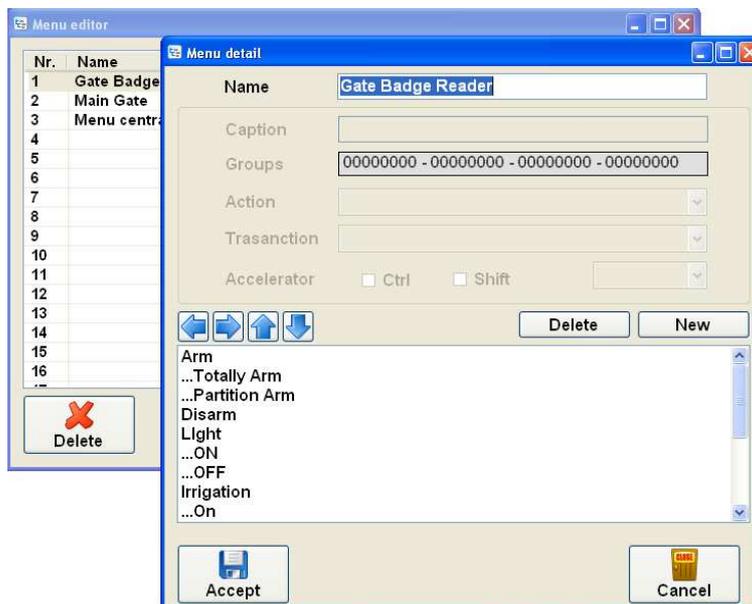
On the main and remote console, the menu is presented like any standard drop down Windows menu.

Using CMHTA500 terminals, you have to navigate using the YES/NO buttons.

For each menu item you have to set the followings parameters:

- **Caption**
Item description presented at run time
- **Groups**
Users groups enabled to use the function
- **Action**
Action performed by the item
- **Transaction**
Optional transaction to be started

- Accelerator
Key combination to quickly access the menu item



Using the arrows you can change the order and the level of the menu items. The menu has a tree structure, so each main option may have one or more sub items and so on. Every time an item is right shifted in order to appear as a sub item of the previous one, its name is prefixed with three dots to give a visual feedback.

For example a menu configured with the following schema :

File

Partitions

... ON -> 3 points = first sublevel

... .. Total ON -> 6 points = second sublevel

... .. Partial ON -> 6 points = second sublevel

... OFF -> 3 points = first sublevel

... Partitions status -> 3 points = first sublevel

... Areas OFF list -> 3 points = first sublevel

Inputs

Boards

Events archive

Silencing

Users

will be shown in this way :



With the button “Assign menu to key” user can customize the hardware keys used to connect the remote terminals to the control panel. Each assigned menu can be distinguished from the others for the enable functions and the security level required.

The procedure to follow is :

- Insert the hardware key in the pc with the configurator software opened
- Select the menu to assign
- Press button “Assign menu to key”

Web Browser

The Web Browser available with Hyperpower is a web interface that allows users to monitor the plant using a simple network connection.

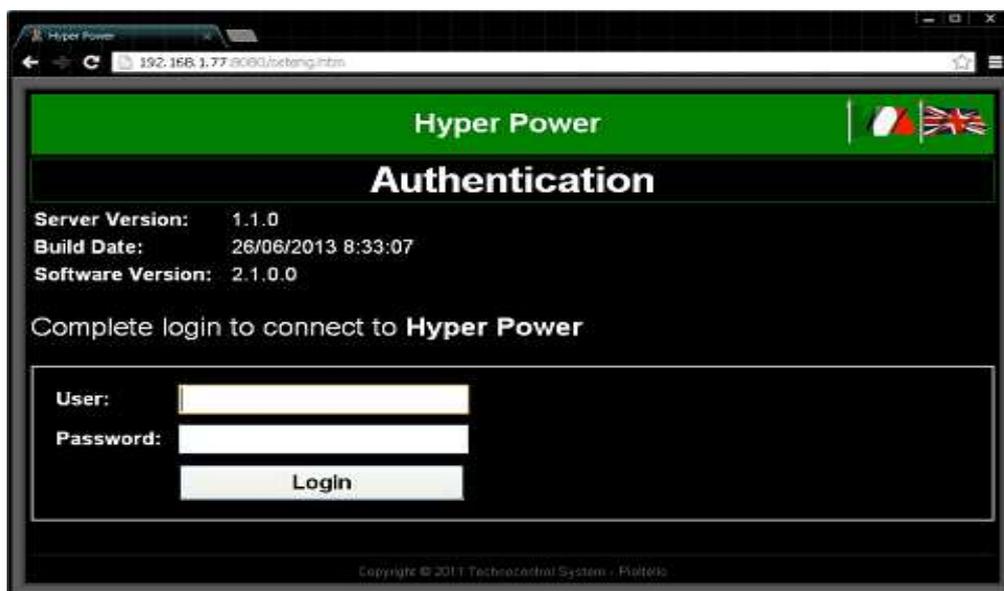
To take advantage of this feature, you must connect the plant to a network LAN and configure a valid IP address via the standard menu of Windows Network Connections.

The port used by the control unit is by default the number 8080, you can change it by using the menu Parameters, for details refer to the section Parameters.

Users can connect to the Web Browser via the most common Internet browser by typing in the address bar: <http://HyperPowerIPAddress:Port>.

For example:

<http://192.168.1.77:8080>



The first page displays information about the software version of the control unit and requires user authentication. Before closing the connection we recommend that you log out using the appropriate menu.

Status

The Status page displays a list of configured plants, via the "+" button, to the left of the plant number, you can explode the detail of the areas.

The colors underline the state of the partitions / areas:

- White OFF
- Orange Partial ON
- Red Total ON



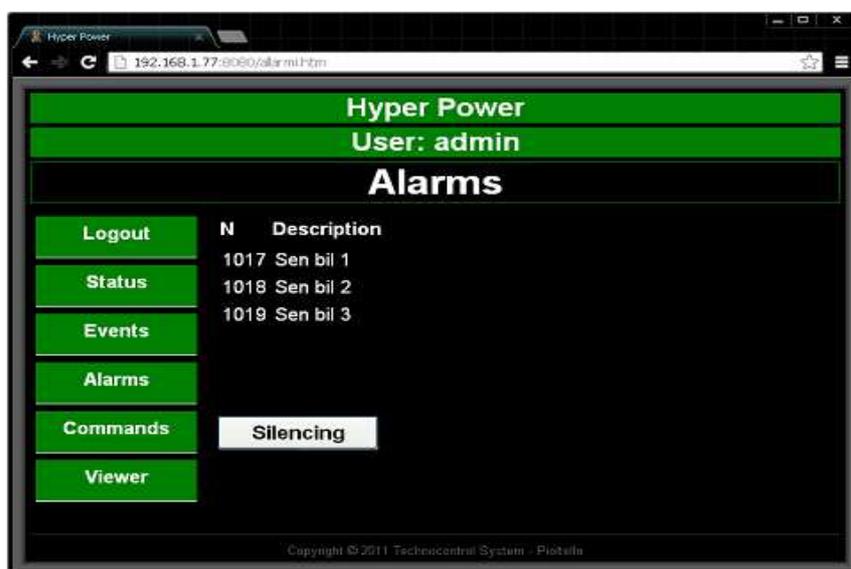
Events

The Events page displays the list of events logged by the control unit.



The list has two columns:

- Date : Date of the message storage.
- Message : Message number and text.
- The Previous and Next buttons allows to scroll all the messages.
- Alarms : The Alarms page displays all inputs in alarm and allows you to silencing them via the Silencing button.



The list has two columns:

- N : Input number.
- Description : Input description.

- **Commands** : Displays a list of available commands for the web browser.

Each command corresponds to a menu item associated with the Web browser, the system accepts only the menus that invoke transactions. The sub menus are displayed all on one level and password tested to accept commands is the same used in the initial login.

To associate the command menu to the web browser refer to the section Parameters.

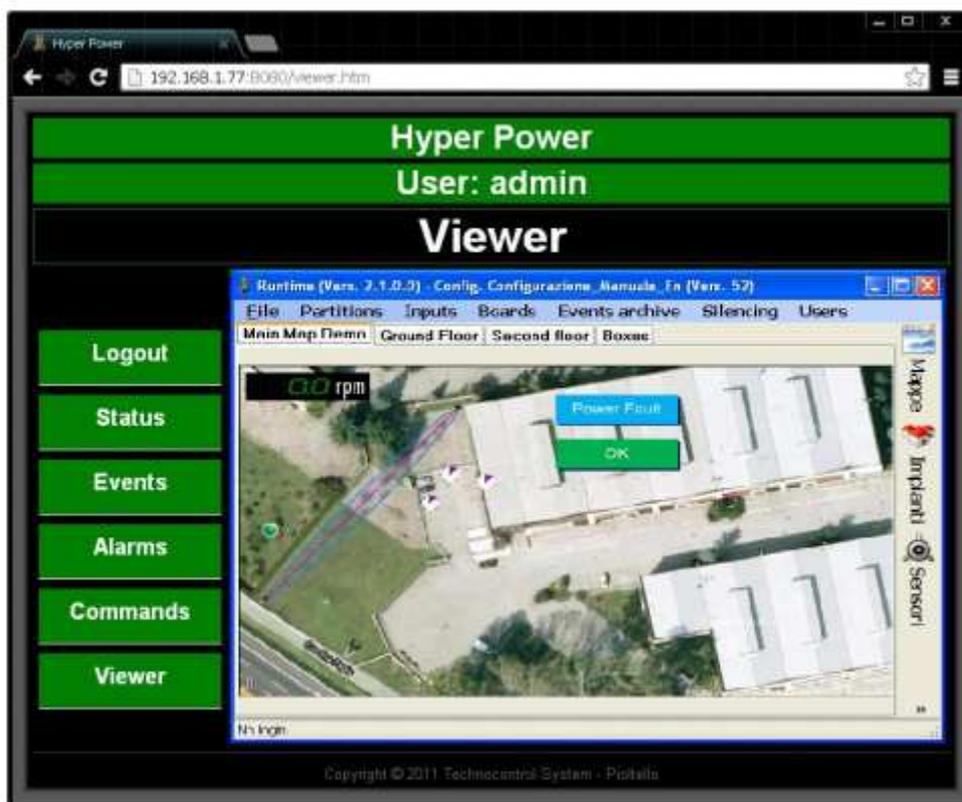
Transactions provide access to advanced programming and allow you to set up complex commands instead of or in addition to the standard actions. For details refer to the sections Transactions and Advanced Programming.



Viewer

Show real-time image of the HyperPower control unit it is connected to the web browser.

The viewer provides basic interaction with the central enabling you to scroll maps, access the menu and manage all the functions that require a single click of the mouse. It is not possible to perform complex operations such as, for example, the insertion of texts.



The timing of image update depends on the speed of the connection and the hardware configuration of the used device (PC, smartphone, etc.).

Advanced Programming

Into this manual there are frequent references to this *Advanced programming* section. Usually you don't need special features: so you can easily create standard configurations without “**transactions**”.

Transactions are real independent programs, by which you can build a special reaction to events. The system provide a list of commands that allow the user to create its own custom system

The flexibility reached by the **commands** set enable the user to satisfy even very complex needs.

In the advanced programming is usually requested the data management, to communicate between different transactions (see Global Variables Chapter) and also for internal transaction managing. For this second require the system reserve for each transaction the use of a set of **Local Variables**, visible only to the dedicated transaction.

Each transaction have :

- 10 **Integer** Variables
- 10 **string** (alfanumeric) variables
- 10 **Boolean** (true/false) variables

I/O commands

This section includes all the commands to turn ON / OFF the outputs and change status of external boards connected to Hyperpower.

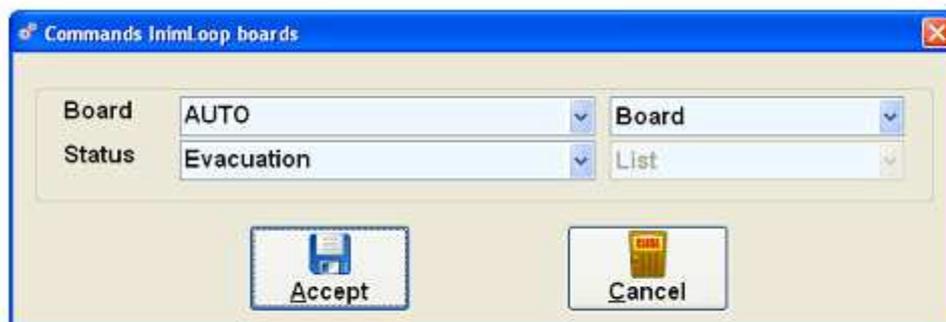
Commands InimLoop boards

Send a status command to the InimLoop boards.

Parameters:

- Board Board affected by the command.
- Status : New state to set:
 - o Active Day mode
 - o Active Night mode
 - o Active silencing
 - o Disable silencing
 - o Evacuation
 - o Patrol
 - o Reset

For a detailed description of the parameters, see the manual supplied with the unit Inim SmartLoop.



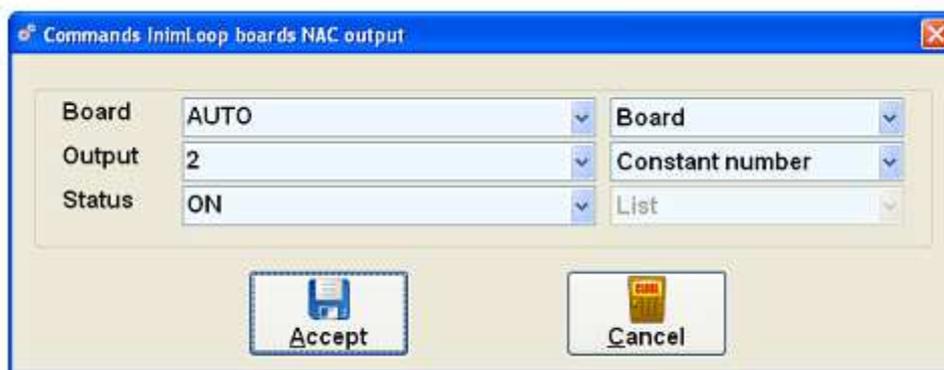
Commands InimLoop boards NAC output

Commands one of the NAC outputs on the Inim SmartLoop board.

Parameters:

- Board
Board affected by the command.
- Output
Output affected by the command
- Status
 - o OFF
 - o ON

For a detailed description of the parameters, see the manual supplied with the unit Inim SmartLoop.



Commands InimLoop boards sensors output

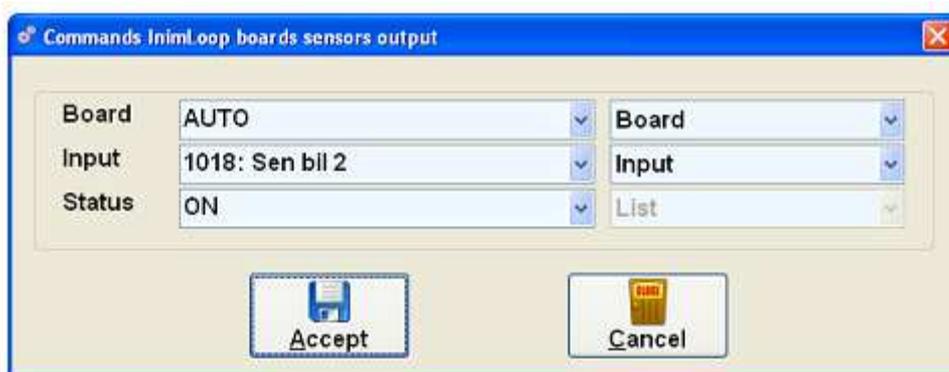
Commands outputs available on some types of sensors can be connected to the central Inim SmartLoop.

Parameters:

- Board
Board affected by the command.

- Input
Input affected by the command
- Status
 - o OFF
 - o ON

For a detailed description of the parameters, see the manual supplied with the unit Inim SmartLoop.



Commands SecurLAN boards partition

It sends a command to set ON the areas configured on the SecurLAN board.

Parameters:

- Board : Board affected by the command.
- Area : Area affected by the command.
- Status : New state to assign to the area:
 - o OFF
 - o Partial 1 ON
 - o Partial 1+2 ON
 - o Partial 2 ON
 - o Total ON
- Type of arming
 - o Follow partition delay
 - o Immediately

- Forced arming
 - o Yes
 - o No

For a detailed description of the parameters, see the manual supplied with the unit SecurLAN.

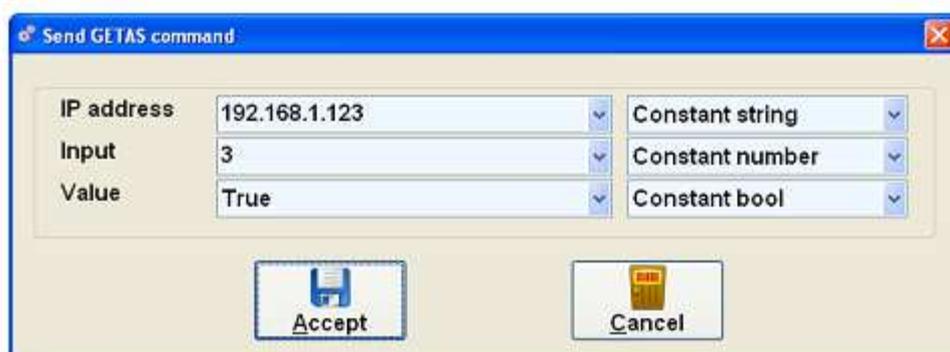


Send GETAS command

It sends a command to GETAS boards.

Parameters:

- IP address : GETAS board IP address.
- Input : GETAS sensor affected by the command.
- Value : The value to assign to the sensor: 0 = False / Off, 1 = True / On.



Set output

The command drives an output to the desired status.

Parameters:

- Output : Output to be set
- Status
 - o OFF
 - o ON
 - o BLINK pulse (period set by “time” parameter)
- Time command duration (0 permanent) or period (for blink command)

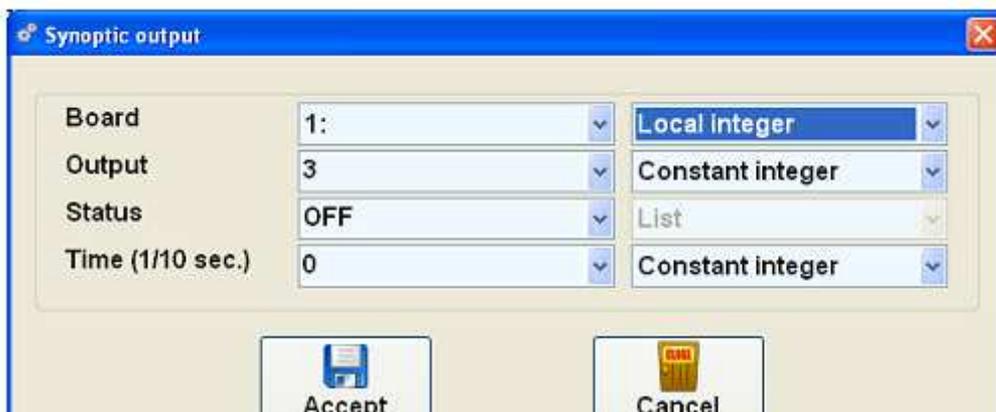


Synoptic output

This command has effect only with CMH088/4 boards equipped with optional modules MO705 or MO706 (32 outputs each). The command drives a synoptic output to the desired electric status.

Parameters:

- Board : Board affected by the command
- Output : Output number (1 to 128). Use 0 to drive all outputs of the board simultaneously.
- Status
 - o OFF
 - o ON
 - o BLINK pulse (period set by “time” parameter)
- Time. Command duration (0 permanent) or period (for blink command)



Standard Commands

The standard commands can be used in any transaction and situation, contrary to the commands for terminals that are illustrated in the next chapter.

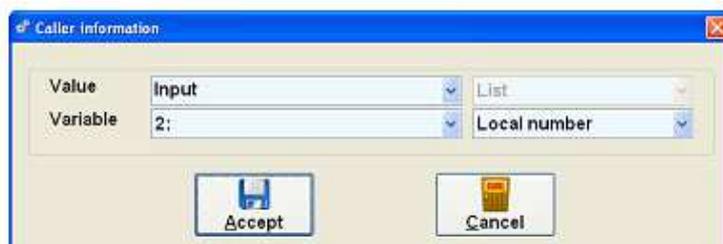
Caller information

This command allows you to identify the number of the device that launched the transaction and store it into a numeric variable local or global.

Parameters:

- Value : Type of device to store.
 - o Input
 - o Output
 - o Partition
 - o Area
 - o Board

- Variable : Variable in which to store the device number.

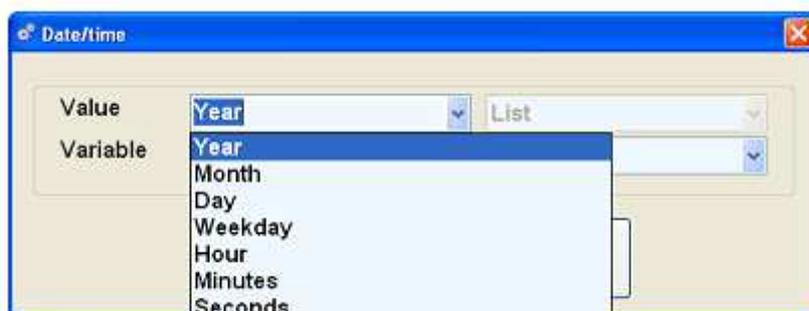


Date time

Put a part of the current date/time in the selected variable.

Parameters:

- Value : Date part to be extracted
- Variable : Variable that will collect the selected value



Empty

Set an empty command. When this command is reached, the transaction ends.

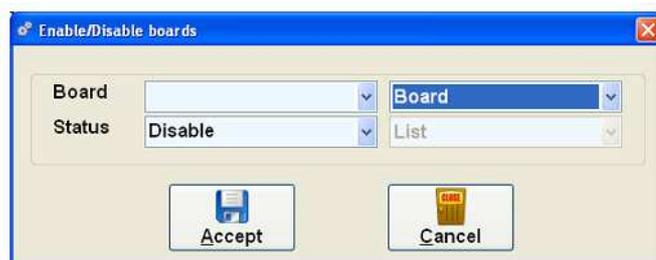
Parameters: none.

Enable / disable boards

This command set a board to enabled or disabled status. Note that the disabled boards are completely ignored from the system.

Parameters:

- Board : Board affected by the command
- Status : Status to be forced (enabled / disabled)



Note: the execution of this command starts the corresponding transaction (enable, disable) configured for the board.

Enable / disable inputs

This command allows to enable or disable an input. Note that disabled inputs are completely ignored by the system.

Parameters:

- Input : Input affected by the command
- Status : Status to be forced (enabled / disabled)



Filter string

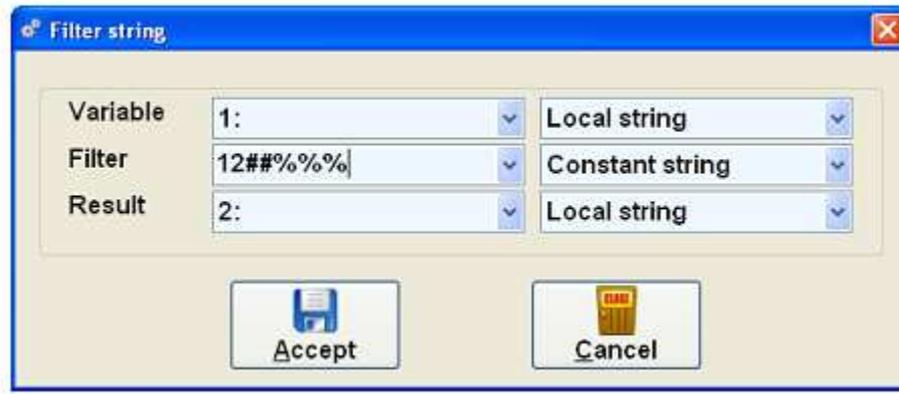
Even if not directly related to terminals, this command is showed in this section because the performed feature is especially used to “mask” a terminal input, extracting prefixes and suffixes and finally to extract user’s code from magnetic or RFID badge strings.

The available masking options are as follows:

- 0-9 A-Z : characters that must exactly match
- % : characters to be extracted for the composition of the result
- # : characters that must exist but will be ignored

Parameters:

- Variable : Global o local variable to be filtered
- Filter : Filtering mask
- Result : Global or local variable where the filtering result should be placed



Force partition status

This command set the selected partition/area to the desired status. The command has a higher priority and prevents any modification with manual arming commands or scheduled timer programming.

Parameters:

- Partition : Partition affected by the command
- Area : Area affected by the command
- Status

- o Remove forcing

The area status returns in the status it would be if no forcing was applied. This is the only command that can remove a forced status applied to an area.

- o Force OFF

The area remains in the OFF status. No other command can change its status

- o Force partial ON

The area remains in the Partial ON status. No other command can change its status

- o Force total ON

The area remains in the Total ON status. No other command can change its status

Note that if the execution of this command change the status of the selected area, the system will start the corresponding switch ON or switch OFF transaction configured for the involved partition and area.



Input information

The command retrieves information relating to the description and to the areas of the specified sensor and allows you to store them in string variables.

Parameters:

- Input : Sensor to be interrogated with "auto" option.
- Description : Variable in which to store the sensor description.
- Areas : Variable in which to store the areas of the sensor, format:
 "partition, area – partition, area – etc." reserving two characters for each number
 For example: " 1, 2 – 3, 4" = partition nr. 1, area nr. 2 – partition nr. 3, area nr. 4



ON/OFF partitions

This command set the selected partition/areas to the desired arm status.

Parameters:

- Partition : Partition affected by the command
- Area : Area affected by the command
- Status : Sates to be forced (OFF / Full ON / Partial ON)



Operations on variables

This command make operations between variables (see Variables) and set the variable associated with the result.

Parameters:

- Variable : Variable to compare with some other value
- Operand : mathematical operand, to be chosen from following list:
 - o + plus
 - o - minus
 - o * multiple
 - o / divide
 - o MOD modulo
- Value : Value to compare with
- Result : Variable to set with the result



If Value is a numeric value, the operator behaves as if Variable is numeric also, applying a conversion if necessary.

If Value is a string value, operator behaves as if Variable is string also, applying a conversion if necessary.

NOTE: when the operator is applied to strings the following rules apply :

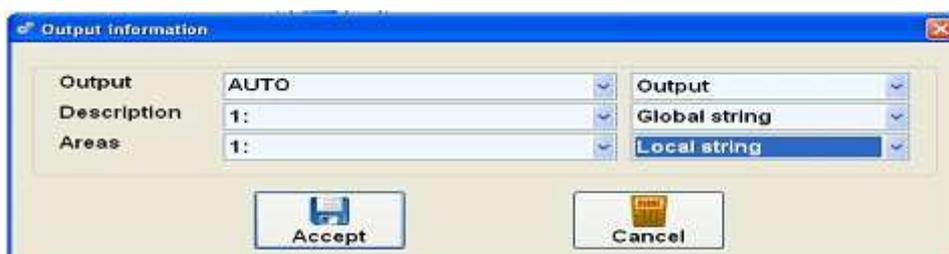
- + : The result is the concatenation of Variable and Value
- - : The characters contained in Value are subtracted from Variable
- *, /, MOD : Two operands are converted in numeric before to execute the operation.
Conversion of non-numeric strings returns the value 0.

Output information

The command retrieves information relating to the description and to the areas of the specified output and allows you to store them in string variables.

Parameters:

- Output : Output to be interrogated with "auto" option.
- Description : Variable in which to store the sensor description.
- Areas : Variable in which to store the areas of the output, format:
"partition, area – partition, area – etc." reserving two characters for each number
For example: " 1, 2 – 3, 4" = partition nr. 1, area nr. 2 – partition nr. 3, area nr. 4



Play audio file

This command activate the playback of the selected audio file.

Parameters:

- File : File to be played
- Mode :
 - o Play once
 - o Loop

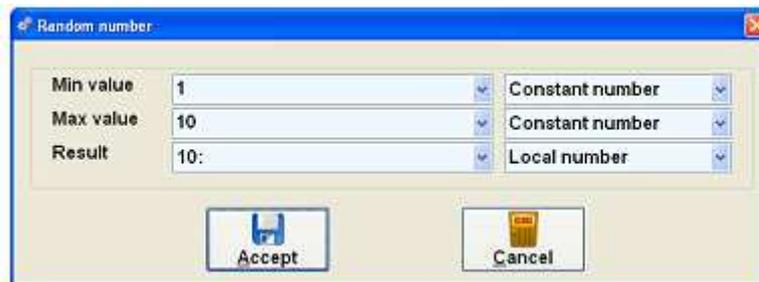


Random number

Generate a random number between the min. and max value and stores it in a variable.

Parameters:

- Min. value : Lower bound of the set of valid values from which to generate the random number.
- Max value : Upper bound of the set of valid values from which to generate the random number.
- Result : Variable in which to store the random number.



Save data

Global variables and disabled element state are automatically saved every 30 minutes, using this command it is possible to force the data saving.

Parameters: none.

Send email

Configuration command for sending email. To configure the data relating to the sender refer the section Parameters.

Parameters:

- Address : Recipient address.
- Subject : Message subject.

- Message : Message text.



Send SMS

Configuration command for sending SMS. To configure the data relating to the sender refer the section Parameters.

Parameters:

- Phone number : Recipient phone number: International format without 00 or + (ex. 391234567890).
- SMS text : Text message to send: up to 50 characters.

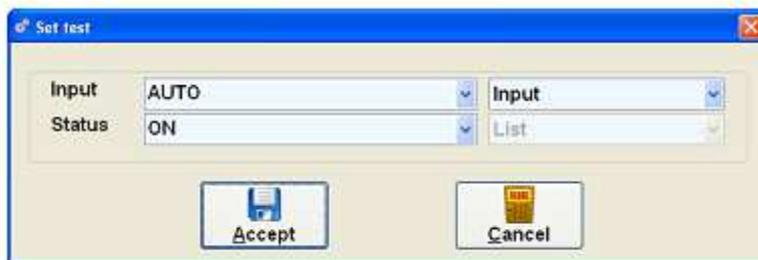


Set test

Set / reset the test status of the sensor specified.

Parameters:

- Input : Sensor to be modified, with option "all" and "self".
- Status :
 - o ON : Test ON.
 - o OFF : Test OFF.



Set variable

This command set the involved variable (global or local) to the desired value.

Parameters:

- Variable : Variable to be set.
- Value : This can be a constant value or another variable.



NOTE: the formulas used in the value field, for example, to compose the date, are immediately converted.

Set variable with fixed formula

Like Set variable, with the difference of not immediately convert the formulas.

Stop alarm (silencing)

This command reset all the pending alarms and stops any graphical highlight of alarmed inputs. The command acts system wide, no parameters are required.

Parameters: none.

When the system execute this command, the silencing transactions configured are automatically executed (only those belonging to areas/partitions containing the alarmed inputs).

Stop audio

This command stops the running audio.

Parameters: none.

Store event

This command records the selected message into the events database.

Parameters:

- Message : Message to be recorded (see Event messages)

Message can include formulas, which are converted in real-time to the proper value (date/time, partition/areas, sensor description/number, and so on).



Substring

This command allows to extract from an alphanumeric variable only the specified part, excluding prefixes and suffixes.

Parameters:

- Variable : Local or global variable involved by the command
- Begin : Zero based position of the first character to be extracted
- Length : Number of characters to be extracted

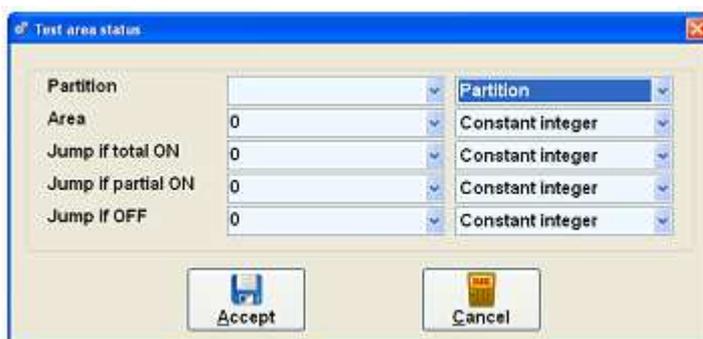


Test area status

This command tests the status of the selected partition/area and jumps to the corresponding configured label.

Parameters:

- Partition : Partition to be tested
- Area : Area to be tested
- Jump if total ON : Label to be used for jumping if partition/area is total ON
- Jump partial ON : Label to be used for jumping if partition/area is partial ON
- Jump if OFF : Label to be used for jumping if partition/areas is switched OFF



Parameters Partition and Area admit the value “all”. Using this value, the logic of the jump is following:

- with partition “all” and area specified (i.e. 1), testing is applied to all areas 1 (any partition). If at least one of it is switched ON, the chosen jump is “jump ON”
- with partition specified and areas “all”, testing is applied to all areas of the selected partition. If at least one of it is switched ON, the chosen jump is “jump ON”
- with both selection (partition and areas) set to “all”, testing is applied to all areas of all partitions. If at least one of it is switched ON, the chosen jump is “jump ON”.

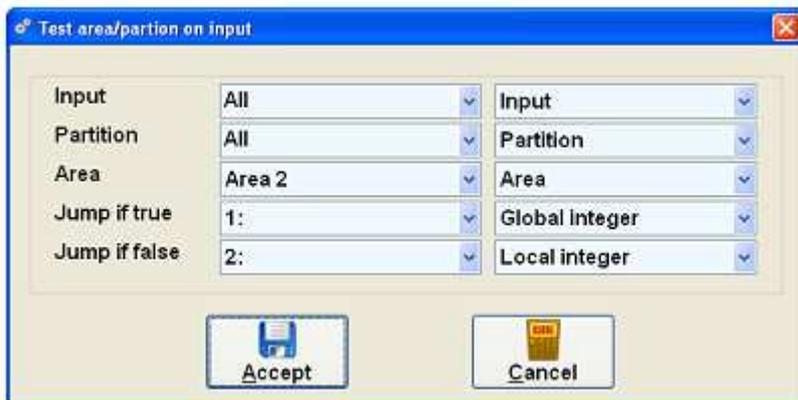
Test area / partition on input

Test if the selected input belongs to selected partition/areas and executes the jump to the step (label) associated with result of the test.

Parameters:

- Input : Input to be tested
- Partition : Partition involved into the test
- Area : Area involved into the test

- Jump if true : Label to be used for jumping if test returns “true”
- Jump if false : Label to be used for jumping if test returns “false”



Test input status

This command performs the jump to the step (label) associated with the actual status of the selected input.

Parameters:

- Input : Input to be tested
- Test type :
 - o Alarm memory set
 - o Contact closed (Balanced - Digital)
 - o Contact opened (Balanced - Digital)
 - o Contact tampered (Balanced - 4 Status)
 - o Input active
 - o Input alarmed (Balanced – Digital – 4 Status)
 - o Input enabled
 - o Input in test
 - o Input normal (4 Status)
 - o Input prealarmed (4 Status)
- Jump if true : Label to be used for jumping if test returns “true”
- Jump if false : Label to be used for jumping if test returns “false”



Test input type

This command test if the selected input is configured as selected type (see Inputs)

Parameters:

- Input : Input involved into the test
- Type : Function to be tested (see Inputs)
- Jump if true : Label to be used for jumping if test returns “true”
- Jump if false : Label to be used for jumping if test returns “false”



Test output status

This command test the output status

Parameters:

- Output : Output involved into the test
- Status : Status to be tested (see Outputs)
- Jump if true : Label to be used for jumping if test returns “true”
- Jump if false : Label to be used for jumping if test returns “false”



Test ready to ON

This command test the status of the selected partition/areas and executes the jump to the step (label) associated with result of the test.

Parameters:

- Partition : Partition involved into the test
- Area : Area to be tested
- Jump if total ready : Label to be used for jumping if partition/area is total ready
- Jump if partial ready : Label to be used for jumping if partition/area is ready partially
- Jump if not ready : Label to be used for jumping if partition/area is not ready



Test variable

This command compares two variables (see Variables) and executes the jump to the step (label) associated with result of the test.

Parameters:

- Variable : Variable to compare with some other value
- Operand : test operand, to be chosen from following list:
 - o = equal
 - o > greater
 - o >= greater equal
 - o < lesser
 - o <= less equal
 - o <> not equal
- Value : Value to compare with
- Jump if true : Label to be used for jumping if test returns "true"
- Jump if false : Label to be used for jumping if test returns "false"



If the variables are of different type (one numeric, one string), the string one is converted in numeric before to execute the numeric test. Conversion of non-numeric strings returns the value 0. If both variables are string, a lexicographical comparison is executed. Upper case and lower case are considered different.

Terminal Commands

As above described (see Terminals), some transactions can be manually started when required from terminals. Some commands are terminal oriented and they need to be referred to the owner terminal (the terminal starting the transaction). Please keep attention to use these commands only into transactions launched by terminals: if a terminal command is found into a not terminal transaction, the transaction will abort.

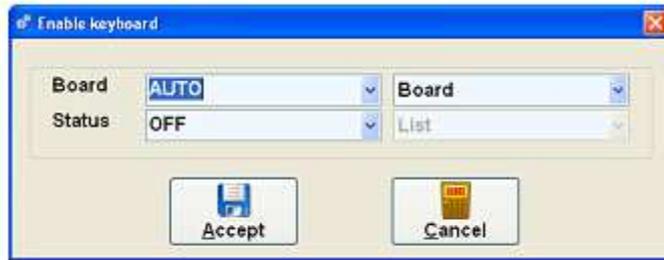
As exception, can be inserted some terminal commands into non terminal transactions, by declaring of the command to a specific terminal. As an example, you can send a message to a terminal from any transaction. However, care must be taken to avoid collision between the transactions which can send messages to the same terminals at the same time.

Enable keyboard

By this command you can enable/disable the terminal keyboard: when the keyboard is disabled, no entry can be sent from the terminal.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction
- Status : Action to be executed: ON set the enabled status, OFF the disabled one



Enable keyboard echo

This command enable/disable the echo on the screen of typed characters. This function is usually used before (disable) and immediately after (enable) password request.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction
- Status : Action to be executed: ON set the enabled status, OFF the disabled one



Manage multichoice

When this command is reached, the transaction stops and waits for a selection input from Multi-choice form displayed on terminal. When this input is detected, system validate it and jump to the label configured.

Parameters:

- Jump for option 1 to 5 : Label (step) to jump in case of valid input



NOTE: this command must be used after Send multichoice to terminal command.

The character “\” followed by a number at the beginning of Title field set the columns number (from 1 to 4):

- o “\1” = 1 column
- o “\2” = 2 columns
- o “\3” = 3 columns
- o “\4” = 4 columns

Configuration of columns number is linked to the options number:

- o options nr. > 5 : The system requires more then 2 columns
- o nr. buttons > 6 : The system requires more than 3 columns
- o nr. Buttons > 9 : The sistem requires more than 3 columns

NOTE: the buttons sequence start form first top position of left column to down and then from first top position of other column.

The character “\” followed by a letter at the beginning of Title field or Option fields set the bgcolor (default gray):

- o “\R” = Red
- o “\B” = Blu
- o “\G” = Green
- o “\W” = White
- o “\M” = Light brown
- o “\Y” = Yellow

Es: to show on screen two options columns and red title: “\2\RTitle”.

Read from terminal

When this command is reached, the transaction stops and waits for an input from terminal. When this input is detected, system validate it against the rules determined by the parameters. The result of the validation causes the proper jump of the next step.

Parameters:

- Module :
 - o Keyboard
 - o RFID1
 - o RFID2
 - o Badge
 - o Barcode
 - o Any
- Variable : Local or global variable for input saving. The kind of variable (numeric, string) automatically sets the type of expected input
- Min value : Lower limit of the input:
 - o minimum value for numeric input
 - o minimum length for string input
- Max value : upper limit of the input:
 - o maximum value for numeric input
 - o maximum length for string input
- Jump if OK : Label (step) to jump in case of valid input
- Jump if error : Label (step) to jump in case of invalid input

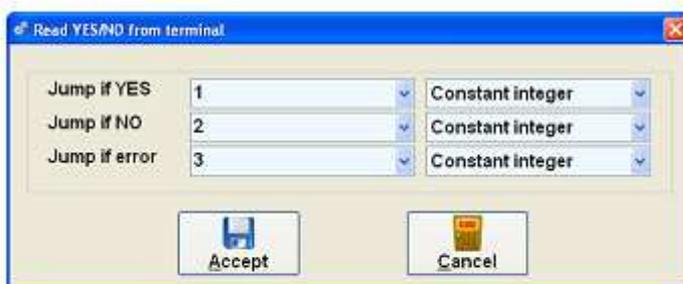


Read YES/NO from terminal

This command wait for the user to press YES or NO on the terminal (function keys of the keyboard).

Parameters:

- Jump if YES : Label to jump if YES has been pressed
- Jump if NO : Label to jump if NO has been pressed
- Jump if ERROR : Label to jump if other key has been pressed (e.g. ESC, ENTER, F1, F2 etc...)



Send message to terminal

This command send the configured message to the screen of the selected terminal.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction
- Message : Message to be sent. It can be a constant string or a variable content.



The character “\” followed by a number at the beginning of Text field set the kind of module/keyboard:

- o “\0” = Standard : Input Text + Output Text + “F1/F2/F3/F4” + numbers + “Yes/No” + “Esc/Enter”
- o “\1” = Serial 1 : Set module not keyboard
- o “\2” = Serial 2 : Set module not keyboard

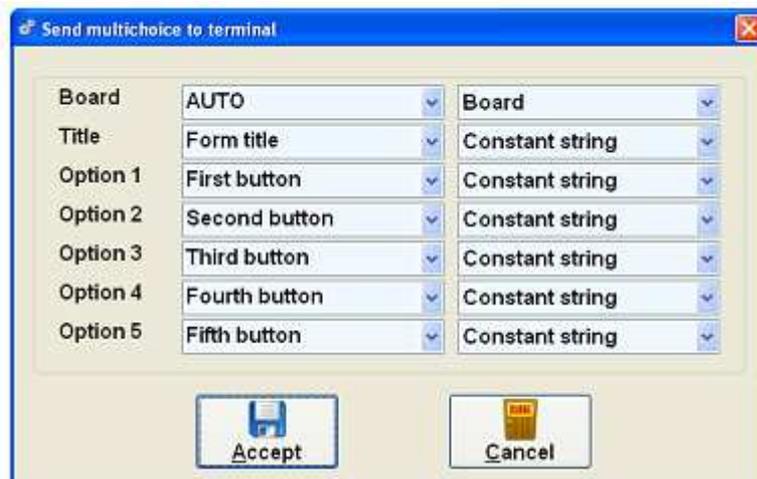
- o "\3" = Simplify keyboard : Input Text + Output Text + numbers + "Esc/Enter"
- o "\4" = Alfanumeric keyboard : Input Text + Output Text + alphanumeric keyboard + "Esc/Enter"
- o "\5" = Only "Esc" button : Output Text + "Esc"
- o "\6" = "Esc" button + alphanumeric keyboard : Output Text + "Esc" + alphanumeric keyboard
- o "\7" = Text only : Output Text
- o "\8" = "Yes" button + "No" button : Output Text + "Yes/No"

Send multi-choice to terminal

This command send the configured options to the screen of the selected terminal. The terminal will show a list of buttons, one for each configured option.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction
- Title : Message to be displayed on terminal
- Option 1 to 5 : List of buttons to be displayed on terminal



Send warning to terminal

This command show the configured warning message to the screen of the selected terminal for the specified time.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction
- Text : Message to be sent. Can be a constant string or a variable content

- Time (s) : Time in seconds. If time is zero the message will remain on screen until the user acknowledges it.



Terminal buzzer

This command drives the internal buzzer of the terminals.

Parameters:

- Terminal : Target terminal. The value AUTO automatically uses the terminal owner of the transaction.
- Status : Action to be executed:
 - SINGLE activate the buzzer for a single beep (see Interval value)
 - OFF deactivate the buzzer (until a next buzzer command)
 - BLINKING intermittent buzzer (see Interval value)
- Interval : Duration of the beep (“single” status) or of the ON/OFF phase (“pulse” status)

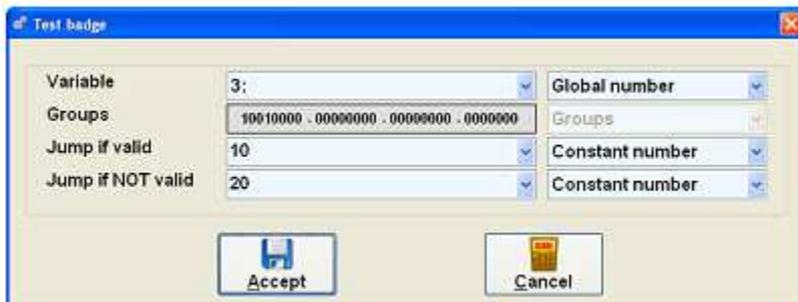


Test badge

Even if not directly related to terminals, this command is showed in this section because the performed feature is especially used to validate a login user, previously stored in a variable. Validation is performed checking if the badge is existing (belong to an user), enabled and not expired. More, you can limit the valid group membership.

Parameters:

- Variable : Variable containing the badge to test.
- Groups : Group the badge should belong to.
- Jump if valid : Label to jump in case of valid badge.
- Jump if not valid : Label to jump in case of invalid badge.



After a failed validation, the system puts in local string 10 (the last local string) a message explaining the reason of the failure.

Test badge + code

Even if not directly related to terminals, this command is showed in this section because the performed feature is especially used to validate a login user, previously stored in a variable. Validation is performed checking if the badge and the password are existing (belong to an user), enabled and not expired. More, you can limit the valid group membership.

Parameters:

- Badge : Variable containing the badge to test.
- Code : Variable containing the password to test.
- Groups : Group the badge should belong to.
- Jump if valid : Label to jump in case of valid badge.
- Jump if not valid : Label to jump in case of invalid badge.



After a failed validation, the system puts in local string 10 (the last local string) a message explaining the reason of the failure.

Test password

Even if not directly related to terminals, this command is showed in this section because the performed feature is especially used to validate a login user, previously stored in a variable. Validation is performed checking if the password is existing (belong to an user), enabled and not expired. More, you can limit the valid group membership.

Parameters:

- Variable : Variable containing the password to test.
- Groups : Group the password should belong to.
- Jump if valid : Label to jump in case of valid password.
- Jump if not valid : Label to jump in case of invalid password.



After a failed validation, the system puts in local string 10 (the last local string) a message explaining the reason of the failure.

Watchdog

CMH088/4 and CMH088 boards are equipped with the watchdog feature: in case of communications loose with the main unit, the output 1 is automatically set to 1 (CLOSE). By this command, you can set the time-out level and enable/disable this feature.

Parameters:

- Board : Board involved by the command
- Status : Enable / disable option
- Time : Time-out level (maximum time without communications). The maximum value is 250 (i.e. 25 sec)



When a time-out happens, the function set the input 1 to ON and then it stops itself. When user administrate the restart of communications, you have to restart this function also.

Transactions

This section includes all the commands for transaction management.

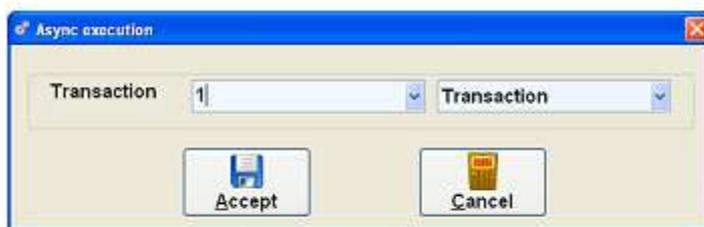
Asynchronous execution

This command queues the selected transaction in the scheduler queue. The execution will begin as soon as possible. The calling transaction continue execution passing to the next command.

Parameters:

- Transaction : Transaction to be executed

Note: see also the similar command Start transaction.



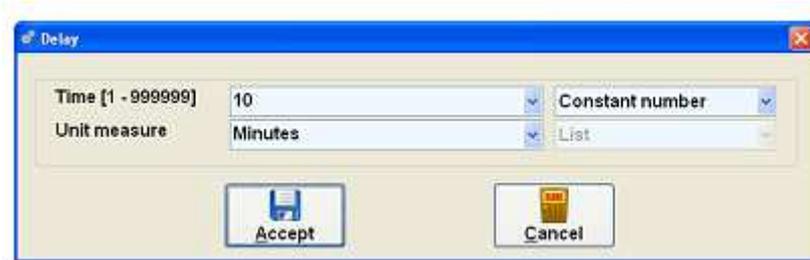
Delay

This command stops the execution of the transaction for the desired time. After it, the transaction restarts automatically from the next step.

Parameters:

- Time : The available range is 1 to 999999

- Unit measure :
 - o Tenths of a second
 - o Seconds
 - o Minutes
 - o Hours

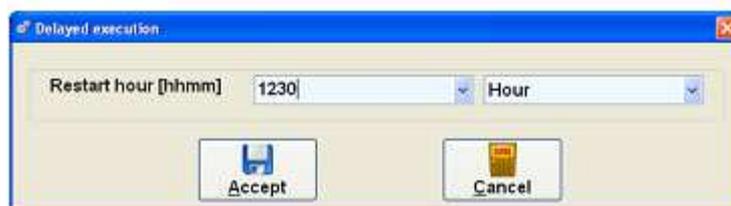


Delayed execution

This command pauses the execution of the transaction, that will be restarted at the specified time. If the actual time is already beyond the restart time, the transaction will be restarted at the specified time of the next day.

Parameters:

- Restart hour : Time scheduled for transaction restart

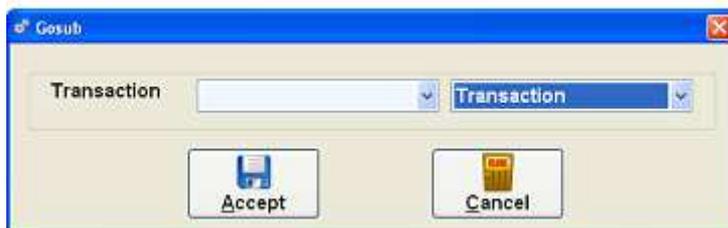


Gosub

This command starts the requested transaction: the calling transaction stops until the “sub” transaction is completed and returns control. Transaction called with Gosub command must end with a Return step. A sub transaction can use itself the Gosub command. No more than 100 nested gosubs can be used.

Parameters:

- Transaction : Transaction to be executed



Jump to label

The command execute a jump the desired label in the same transaction.

Parameters:

- Label : Label (constant o variable value) to which execution must jump

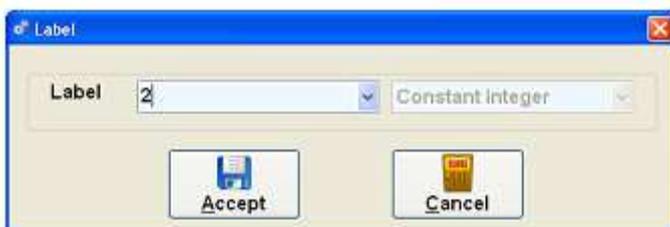


Label

This command don't perform any action but labels with a number the transaction step: this can be used to drive loops, in combination with the "jump" command (see later). The available range of the label is 1 to 100 .

Parameters:

- Label : Numeric value corresponding to the transaction step



Return

This command must be used to end transactions launched with gosub command.

Parameters: none.

Single execution

This command prevents the creation of copies of the same transaction. This can happen for transactions with commands as “delay” or “delayed execution”. Executing this command (suggested in the first step) the transaction will abort, without error, if another copy of the same transaction is already running.

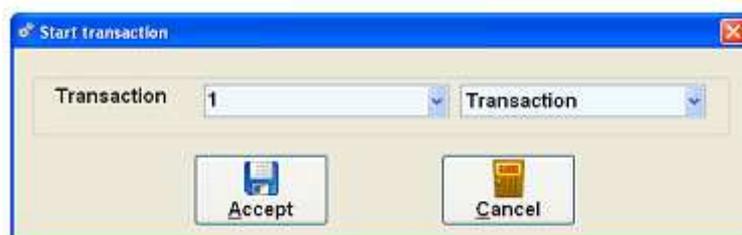
Parameters: none.

Start transaction

This command pass the control to the selected transaction. The running transaction, which contains the command is stopped.

Parameters:

- Transaction : Transaction to be launched



If user needs to start another transaction, without stopping the running one, he have to use the “Asynchronous execution” command.

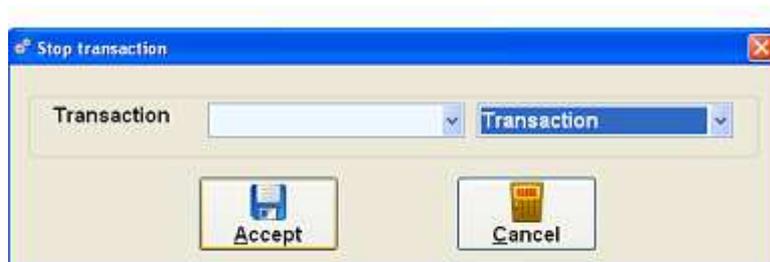
Stop transaction

This command stops the execution of the selected transaction.

Parameters:

- Transaction : Transaction to be stopped

Note that more copies of the same transaction can be running at the same time: the command stops all these copies.



Display

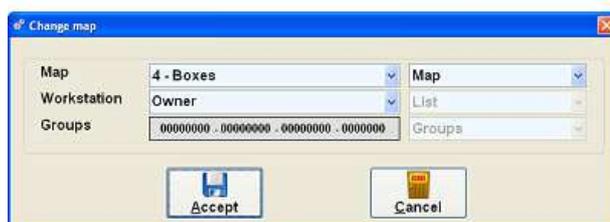
This section includes all the graphics commands.

Change map

Changes the actual displayed map.

Parameters:

- Map : Map to be displayed
- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

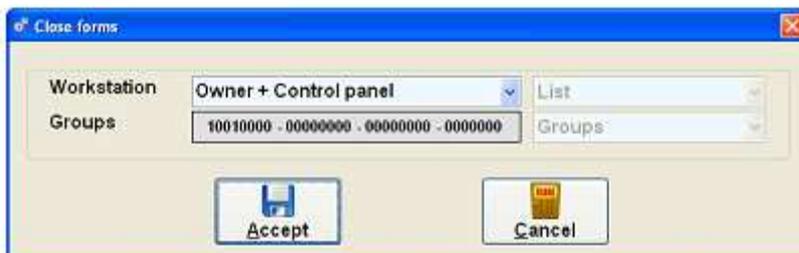


Close forms

Closes all the windows that the user or the system may have shown over the main window.

- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All

- o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

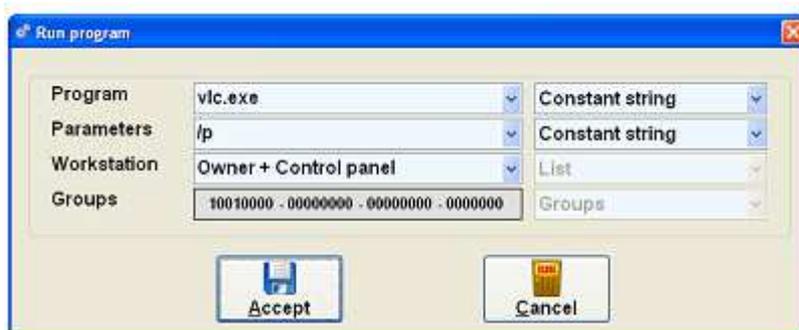


Run program

Requires the operating system to start an instance of the specified application.

Parameters:

- Program : Application to be run.
 - Parameters : Command line parameters.
 - Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.



Set a Text control

The command lets you change one or more controls of type Text from graphic maps. For details see the section Controls.

Parameters:

- Name : Name of the Text control.
- Text : Text to be set to control, you can select a string constant, a string variable or a preset message.
- ForeColor / BackColor : Graphic properties of the control.
- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.



Show 4NSYS IP DVR

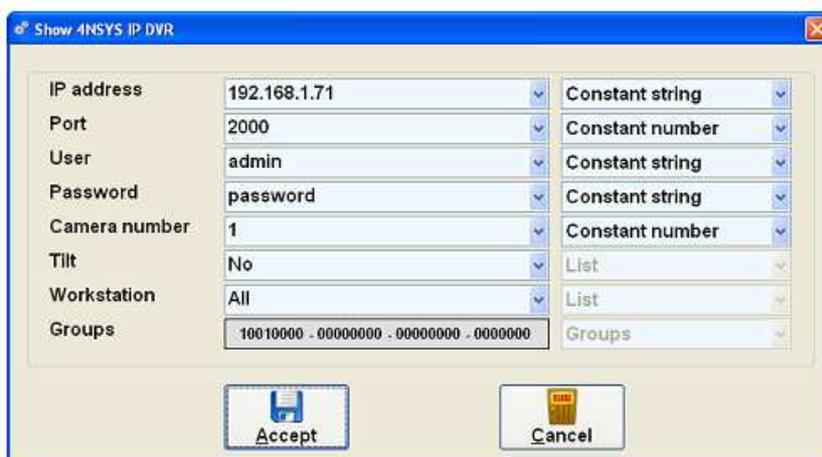
The command requires to connect to a 4NSYS IP DVR device and opens the device control window.

Parameters:

- IP address : IP address of the 4NSYS IP DVR device.
- Port : IP port device communication.
- User : Device login user.
- Password : Device login password.

- Camera number : Camera number to connect to. With the number zero indicates the system to view images of all cameras connected to the DVR and make available the commands to access the history.
- Tilt : Indicates whether to display the control panel to remote manage the tilt of the camera.
- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

Login data and configuration parameters / setup can be changed using the software included with the DVR.



Show AVTECH IP Camera

The command requires to connect to an AVTECH IP Camera device and opens the device control window.

Parameters:

- IP address : IP address of the 4NSYS IP DVR device.
- Port : IP port device communication.
- User : Device login user.
- Password : Device login password.
- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:

- o All
- o All remote
- o Control panel
- o Owner
- o Owner + Control panel

- **Groups** : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

The control window allows to: view the IP camera capture live, control the on / off LED lighting, recording and playback of videos. Login data and configuration parameters / setup can be changed using the software supplied with the IP camera.



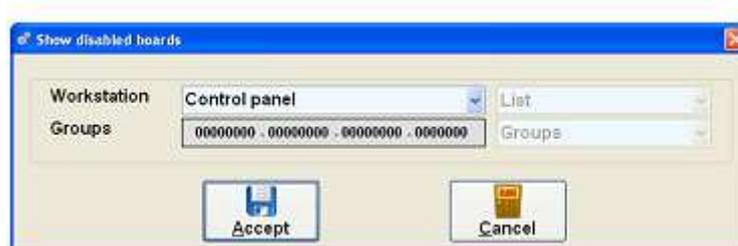
Show disabled boards

This command shows the list of the disabled boards.

- **Workstation** : Filter which workstation must execute the command, for **Owner** means the workstation that generated the transaction:

- o All
- o All remote
- o Control panel
- o Owner
- o Owner + Control panel

- **Groups** : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.



Show disabled inputs

This command shows the list of the disabled inputs.

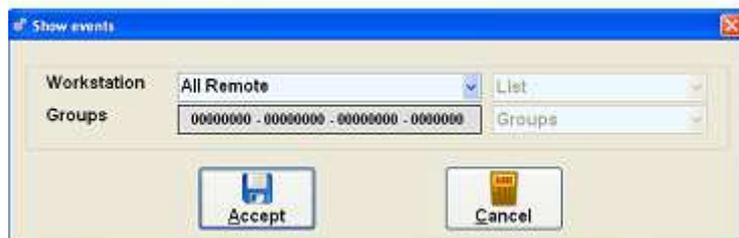
- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.



Show events

This command shows a form with the list of the most recent filed events.

- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel
- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

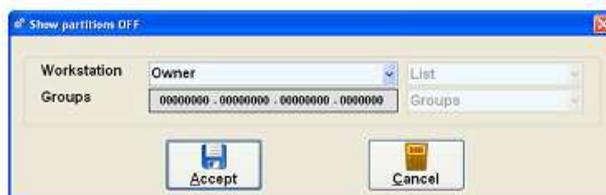


Show partition OFF

Show the list of partition in OFF status.

- Workstation : Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel

- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.



Show screen message

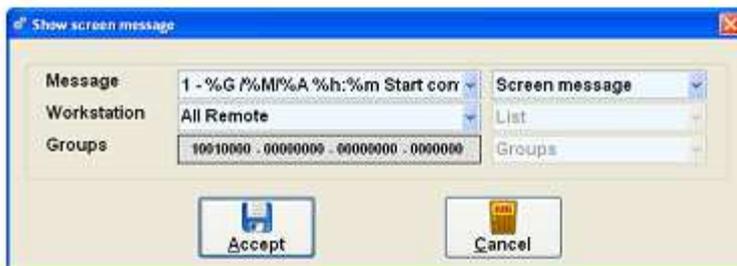
This command show a memo message.

Parameters:

- Message : Message to be displayed (see Memo messages)
- Workstation: Filter which workstation must execute the command, for Owner means the workstation that generated the transaction:
 - o All
 - o All remote
 - o Control panel
 - o Owner
 - o Owner + Control panel

- Groups : Filter which groups are authorized to perform the command. All zeros indicates that there is no need to login, everyone is able.

Message can include formulas, which are converted in real-time to the proper value (date/time, partition/areas, sensor description/number, and so on).



Thank you to choose SICURIT Product. This product is designed and manufactured with high quality materials which can be recycled and reused.



The symbol means that the electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste and dispose it at your local community waste collection centre.

Please follow your local rules about electronic waste recycle.

This symbol mark and recycle system are applied in the EU (European Directivity WEEE) countries and could be not applied in other areas of the world.

The product IMN200RS – IMN200 – IMN050 and IMN080 are in accordance with EN 50131-1 and they are fulfil to the requirements of Security Level Grade 4.



NOTE

SICURIT ALARMITALIA S.p.A. reserve itself the rights to change this manual without any preliminary information.