# TP8-96 VIDEO

## 8 TO 96 ZONES EXPANDIBLE CONTROL PANEL WITH INTEGRATED ETHERNET SWITCH

REMOTE DIGITAL VERIFICATION

CE EN 60950
EN 50130-4
EN 50081-1

## INSTALLER MANUAL

| | |
|---|---|
| Release: | 1.1 |
| Update: | October 2012 |
| Language: | English |
| FW version: | 0.7.05 |

# CONFORMITY

Hereby, Tecnoalarm srl declares that the present equipment is in compliance with the essential requirements and other relevant provisions of the R&TTE 1999/05/EC directive.
The declaration of conformity is available on the website: www.tecnoalarm.com.

# INDEX

## 8. RS485 SERIAL BUS ANALYSIS



## A. APPENDIX A - SPECIAL PROCEDURES



**ADDITIONAL PAGES**

# 1. INTRODUCTION

## 1.1 PROGRAMMING MENU

Description of the programming menus.

**PROGRAMMING OPTIONS**



- **Advanced**: Enabling or disabling of the advanced programming level.
  N.B. It is possible to enable the advanced programming level only if you have the corresponding license.


- **Automatic wiring**: Enabling or disabling of the automatic wiring function.
  N.B. All the other items of the programming options menu are disabled.

**ZONE CONFIGURATION**



- **Zones:** Association of the logical zones to the physical zones - Alphanumeric description - Enabling and programming of voice message using the vocabulary - Zone type - Alarm cycles - Contact type - Configuration of the detector - Zone filter and sensitivity


- **Zones-Functions:** Association of the functions: siren, PGM, by-pass, coinciding zone, chime, non excludable zone, common zone

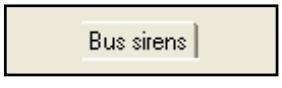

- **Zones-Programs:** Association of the zones to the programs - Alphanumeric description - Enabling and programming of the voice message using the vocablary


- **Consoles:** Association of the LED to the programs - Enabling of quick arming/ disarming, panic alarm, quick menu, chime - Audio settings - Message scheduling


- **Keypoints:** Association of RFID/transponder readers and biometric readers to the programs


- **Options:** Functioning of Buzzer, wireless section - Voice report - Key zone functioning - Enabling of single arming mode - Enabling/disabling tamper - Antimasking control - Association of the siren/outputs


- **Outputs:** Programming of polarity




- **Bus sirens:** Association of the sirens to the programs - After blinking - Volume setting - Siren mode - Sound type - Functioning mode - Enabling/disabling of the antifoam and antidrilling protection

## TELEPHONE SECTION CONFIGURATION


Telephone interface

- **Telephone interface:** Programming of the channels from A to H - Call-back function - Communicator block - General settings

GSM

- **GSM:** Enabling of the GSM interface - Answering mode - Rings - Airtime request - SMS heading - GPRS settings - Commands by SMS - Password - White list

TECNOCELL

- **Tecnocell:** Enabling of the external GSM communicator - Answering mode - Emergency phone number - Association of the messages - Emergency SMS - Enabling of the guided menu and of the data channel

Ethernet

- **Ethernet:** Configuration of the integrated 8 ports Ethernet switch - IP address - Subnet mask - Gateway - Programming of the communication port for the Local Server Tecnoalarm, Remote Server Tecnoalarm, Tecnoserver Tecnoalarm, Tecno_Out

Report codes

- **Report codes:** Association of the events to the channels - Programming of the report codes of all 263 transmittable events

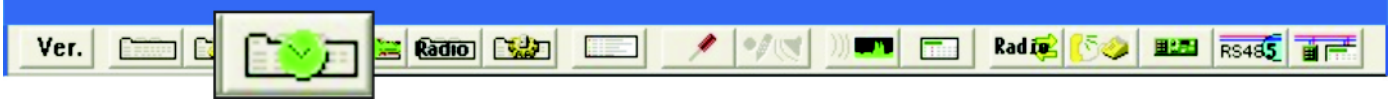
Opening message - Vocabulary

- **Opening message - Vocabulary:** Test/recording/loading of the opening message - Loading and update of the vocabulary

Remote control

- **Remote control:** Enabling and programming of the message using the vocabulary - Alphanumeric description - Programming of the activation time

## TIME PARAMETER CONFIGURATION




Time settings

- **Time settings:** Entry time 1 and 2 - Exit time - Disarming confirmation time - Delay of channel and siren activation - Delay of antimasking and power failure alarm - Alarm, tamper, technical and hold-up alarm time - End of by-pass and automatic arming warning - Maximum duration of by-pass - Supervision interval

Timers

- **Timers:** Frequency of activation in days/hours for arming (normal, conditioned, forced, conditioned forced), beginning/end of bypass, activation/deactivation of remote control - Programming of Server Test Call

Access periods

- **Access periods:** Frequency of activation in days/hours for beginning/end of delay access period - Association of the access periods to the codes, keys/ transponders/RFID cards and remote controls

Customization 1st year

- **Calendar customization (1st year):** Calendar programming - Customization of the working days, holidays and holiday eves (important for timers and access periods) - Programming of winter and summer time - Viewing of the scheduled message on the console

Customization 2nd year

- **Calendar customization (2nd year):** Programming is the same as for the first year

## ACCESS CONFIGURATION

Codes

- **Codes:** Programming of the name and the length of the code - Programming of arming/disarming or by-pass function - Association to the programs - Programming of the attributes

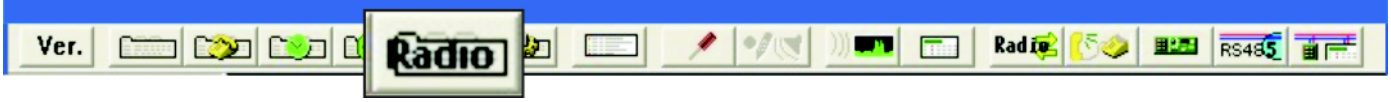
Keys

- **Transponders:** Programming of the name - Programming of arming/disarming function or by-pass function - Association to the programs - Programming of the attributes

Wireless keys

- **Wireless keys:** Programming of the name - Association of the function keys to the programs or the functions - Programming of the attributes

## WIRELESS DEVICE CONFIGURATION



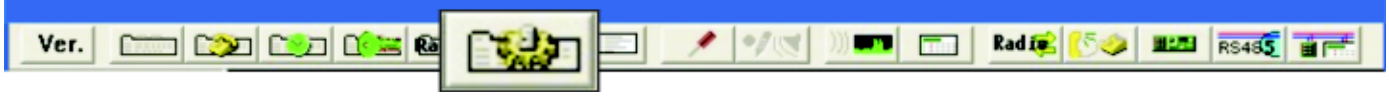

Wireless sirens

- **Wireless sirens:** Alarm time - Activation ~~siren~~ delay - Flashing time - Volume setting - Functioning mode as outdoor/indoor siren - Activation mode for alarm, technical alarm and signaling

Wireless consoles

- **Wireless consoles:** Association of the LED to the programs - Programming of the attributes

## ADVANCED PROGRAMMING




**Warning: In order to use the advanced programming, it is necessary to enabled it into the "Ver." Menu.**

Events

- **Events:** When a specific event happens, the control panel executes a specific operation associated to the event, e.g.:
  - What kind of event? Arming
  - Which arming? Remote arming
  - By whom? User 1
  - Which program? Program 2
  - How? By telephone

Operations

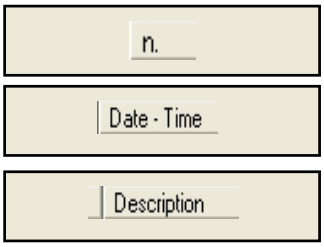
- **Operations:** Creation/modification/deletionof an operation

Telephone directory

- **Telephone directory:** Programming of the telephone numbers associated to one or several operations

## EVENT LOG

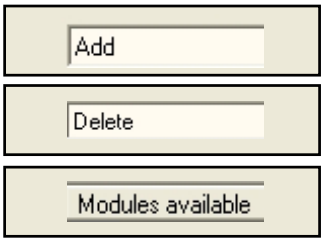

Viewing/consultation, printing and saving as a text file (TXT) of the event log of the control panel. The events are viewed with indication of date and time. You can sort the event filter by date and time or type.




- **N.** (**Event number)**: Consultation in order of recording
- **Date and time**: Consultation by date and time - Viewing of the events of a determined period of time
- **Description**: Consultation by type of events

## HARDWARE CONFIGURATION


Hardware configuration of the system.
This menu permits the addition and/or deletion of the devices to/from the system configuration.

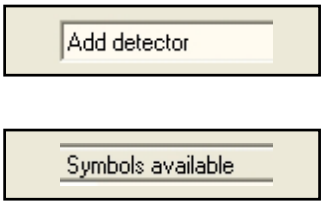



- **Add:** Permits the addition of the devices
- **Delete:** Permits the deletion of the devices
- **Modules available:** List of the available devices

## FLOOR PLAN CONFIGURATION


**Warning: In order to use this function, it is necessary to disabled automatic wiring it into the "Ver." Menu.**

This menu allows to create and to manage the floor plans associated to the system.
This menu is only enabled if you have the corresponding Tecnoalarm license and the automatic wiring option is disabled.

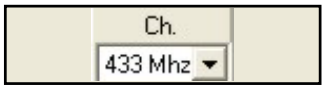



- **Add detector:** Permits the selection of the elements necessary to create the floor plan.
  For viewing specific commands are available.
- **Symbols available:** List of available elements for floor plan configuration

## RF MONITOR


RF Monitor is an analyzing instrument which permits the graphic presentation of the wireless data transmission.
It also permits measuring of the background noise in the place the control panel is installed.
This function is available only if you are connected to the control panel.


- **Radio rx**: Selection of the receiver to be controlled



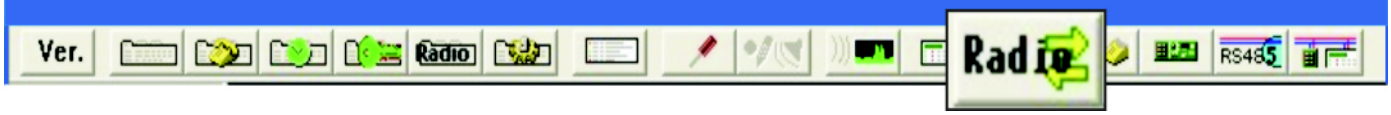

- **Ch.**: Selection of the frequency channel to be controlled

## VIRTUAL CONSOLE



It permits viewing of a virtual console to communicate with the control panel.
The console can only be viewed if you are connected to the control panel.

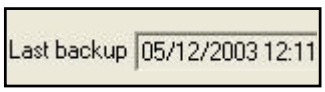
## BACKUP-RESTORE OF THE WIRELESS CONFIGURATION




This menu allows to backup and restore the configuration of the wireless device .
This function is available only if the control panel is connected.


- **Receive (backup):** Reception from the control panel and storage in the PC of a copy of the data regarding the wireless devices


- **Send (restore):** Transmission to the control panel of the programming data regarding the wireless devices previoulsy saved on the PC (Restore of the data)




- **Last backup**: Date and time of the last backup

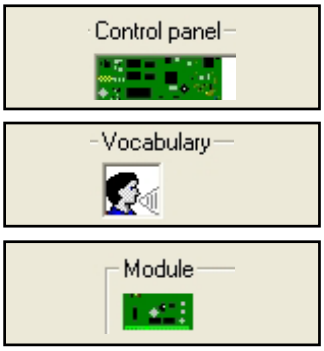
## OPENING MESSAGE

This menu allows to send the opening message, which has been programmed in the telephone configuration table, to the control panel. This function is available only if you are connected to the control panel.


- **Send:** Transmission (and storage) of the opening message to the control panel.
- **Verify:** Reproduction (listening) of the recorded opening message.

## FIRMWARE AND VOCABULARY UPDATE

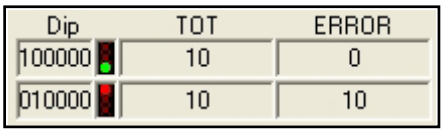
This menu allows to upgrade the firmware and the vocabulary of the system (only for those devices which permit this). This function is available only if you are connected to the control panel.




- **Control panel:** Allows to view the firmware version of the control panel and upgrade it.
- **Vocabulary:** Allows to view and upgrade the vocabulary version and upgrade it.
- **Module:** Allows to view and upgrade the firmware and hardware version of the connected input expansions and upgrade the firmware.

## RS485 SERIAL BUS ANALYSIS

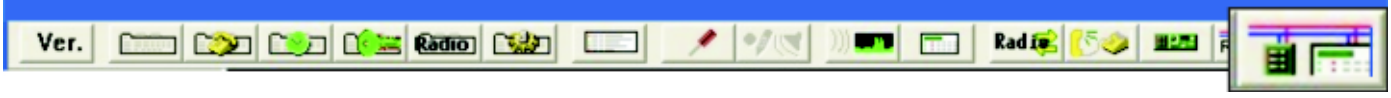
Permits the analysis of the RS485 serial bus communication.
This function is available only if you are connected to the control panel.



| Dip | TOT | ERROR |
|---|---|---|
| 100000 | 10 | 0 |
| 010000 | 10 | 10 |

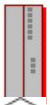
- **Dip**: Logical address of the device
- **TOT**: Total number of transmissions
- **ERROR**: Number of communication errors

## HARDWARE COHERENCE CONTROL



This menu allows to check the coherence between the programmed devices and the actually installed hardware. The software automatically scans all the installed devices, verifies the coherence with programming and it signals any possible incoherence.
This function is available only if you are connected to the control panel.

# 1.2 HARDWARE CONFIGURATION AVAILABLE MODULES



**CENTRAL TP8-96 VIDEO**
8 zone inputs expandible via RS485 bus until 96 (maximum 64 wireless zones) - 6 programmable outputs - 1 RS485 serial bus port (communication speed 38,400 Baud) - 1 Siren Bus port - GSM module - 8 ports LAN Ethernet switch - 6.2A power supply

**INPUT EXPANSIONS - MAX. 15**

- SPEED ALM8 PLUS — Input expansions with power supply - 4 Sensor Bus inputs for 8 RSC devices - 4 programmable outputs - 1 Siren Bus port for 8 sirens - 1.8A power supply

- SPEED 8 PLUS — Input expansions - 2 Sensor Bus inputs for 8 RSC devices - 2 programmable outputs

- SPEED 4 PLUS — Input expansions - 1 Sensor Bus input for 4 RSC devices - 4 zone inputs - 1 programmable output

- SPEED ALM8 PL — Input expansions - 8 zone inputs - 4 programmable outputs - 1.8A power supply

- SPEED 8 — Input expansions - 8 zone inputs - 2 programmable output

- SPEED 8 STD — Input expansions - 8 zone inputs

- SPEED 4 — Input expansions - 4 zone inputs - 1 programmable output

**CONSOLE - MAX. 15**

- LCD300/S — LCD display with 2 lines of 16 characters - 32 signaling LED - 16 keys - Integrated speaker for voice synthesis

## WIRELESS EXTENSIONS - MAX. 2

- RX300/433868 — Dual frequency wireless receiver (433MHz/868MHz) - Management of the LCD300 WL wireless consoles and the SAEL 2000 WL wireless sirens

- RTX200/433868 — Dual frequency wireless receiver-transmitter (433MHz/ 868MHz) - Bidirectional management of the LCD300 WL wireless consoles and the SAEL 2000 WL wireless sirens

- LCD300 WL — Bidirectional dual frequency wireless console - LCD display with 2 lines of 16 characters - 16 keys - 1 NC alarm input

- SAEL 2000 WL — Bidirectional dual frequency wireless siren

- TX240-3 — Wireless key with 3 programmable function keys

## CONTROL UNITS - MAX. 15

- TP SDN — Electronic keypad - 12 keys - 18 signaling LED - Management of maximum 4 programs

- TP SK6N — Transponder reader with mini keypad - 10 signaling LED - Management of maximum 6 programs

- TP SKN — Interface for the management of transponder readers. Each transponder reader manages maximum 3 programs

## GSM COMMUNICATOR - MAX. 1

- TECNOCELL-PRO PL — External GSM communicator - Transmission via GSM network - Transmission of SMS messages and of voice messages.
  The device has no address.

## ACCESSORIES

- SPEED RS485 — Serial bus extension - Allows to increase the length of the serial bus by 1km.
  The device has no address.

- STAR RS485 — Serial bus extension - Permits star-shaped connections - 3 RS485 loops - 6 lines.
  The device has no address.

- SAEL 2000PRO BUSL — Self-powered outdoor siren with RSC technology.
  Max. 8 sirens can be connected to the Siren Bus.

## OUTPUT EXTENSIONS - MAX. 16

**ESP32-OCN SINOTTICO 32N**

**Address 1 Program status and alarm memory**

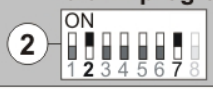

**Program status signaling**
- **OFF** → Disarmed
- **ON** → Armed
- **Blinking quickly** → Arming phase
- **Blinking slowly** → Partset

**Alarm memory signaling**
- **OFF** → No alarm
- **ON** → Alarm memory
- **Blinking quickly** → Prealarm
- **Blinking slowly** → Alarm

| | | | | | |
|---|---|---|---|---|---|
| **01** | Status program 1 | **12** | Alarm memory program 4 | **23** | |
| **02** | Status program 2 | **13** | Alarm memory program 5 | **24** | |
| **03** | Status program 3 | **14** | Alarm memory program 6 | **25** | |
| **04** | Status program 4 | **15** | Alarm memory program 7 | **26** | |
| **05** | Status program 5 | **16** | Alarm memory program 8 | **27** | |
| **06** | Status program 6 | **17** | | **28** | |
| **07** | Status program 7 | **18** | | **29** | |
| **08** | Status program 8 | **19** | | **30** | |
| **09** | Alarm memory program 1 | **20** | | **31** | |
| **10** | Alarm memory program 2 | **21** | | **32** | |
| **11** | Alarm memory program 3 | **22** | | | |

**ESP32-OCN SINOTTICO 32N**

**Address 2 remote controls, standby, alarm program**




Remote control status signaling
- OFF → standby
- ON → active

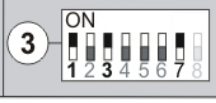
Program alarm signaling
- OFF → no alarm
- ON → alarm active

Standby status signaling
- OFF → program armed
- ON → program disarmed

| | | | | | |
|---|---|---|---|---|---|
| **01** | Status remote control 1 | **12** | | **23** | Standby program 7 |
| **02** | Status remote control 2 | **13** | | **24** | Standby program 8 |
| **03** | Status remote control 3 | **14** | | **25** | Alarm program 1 |
| **04** | Status remote control 4 | **15** | | **26** | Alarm program 2 |
| **05** | Status remote control 5 | **16** | | **27** | Alarm program 3 |
| **06** | Status remote control 6 | **17** | Standby program 1 | **28** | Alarm program 4 |
| **07** | Status remote control 7 | **18** | Standby program 2 | **29** | Alarm program 5 |
| **08** | Status remote control 8 | **19** | Standby program 3 | **30** | Alarm program 6 |
| **09** | | **20** | Standby program 4 | **31** | Alarm program 7 |
| **10** | | **21** | Standby program 5 | **32** | Alarm program 8 |
| **11** | | **22** | Standby program 6 | | |

**ESP32-OCN SINOTTICO 32N**

**Address 3 General alarms/states 1**

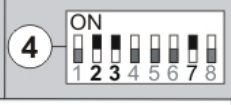



- **OFF** → Standby (output not active)*
- **ON** → Signaling*

* Except for outputs 1 and 15 (vice versa)

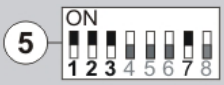
| | | | | | |
|---|---|---|---|---|---|
| **01** | General standby | **12** | Status of PGM outputs | **23** | Hold-up alarm |
| **02** | Fault status | **13** | Access denied | **24** | Technical alarm |
| **03** | Low battery status | **14** | Program alarm | **25** | Alarm memory |
| **04** | Power failure status | **15** | System OK | **26** | Exit time |
| **05** | Tamper status | **16** | Tecnocell trouble status | **27** | Maintenance status |
| **06** | Trouble status | **17** | Tamper alarm | **28** | Active telephone call |
| **07** | Status of hold-up zones | **18** | Trouble of wireless section alarm | **29** | End-of-bypass warning |
| **08** | Status of technical zones | **19** | False code alarm | **30** | Automatic arming warning |
| **09** | Chime | **20** | False key alarm | **31** | Permanent exclusion |
| **10** | Cut telephone line | **21** | Supervision alarm | **32** | Masking status |
| **11** | General pre-alarm | **22** | Antimasking alarm | | |

| ESP32-OCN SINOTTICO 32N | Address 4 General alarms 2 | OFF → No alarm<br>ON → Alarm active |
|---|---|---|




| | | | | | |
|---|---|---|---|---|---|
| 01 | General exit time | 12 | Tecnocell connection OK | 23 | |
| 02 | Bypass | 13 | GPRS channel OK | 24 | |
| 03 | | 14 | Ethernet connection OK | 25 | |
| 04 | | 15 | | 26 | |
| 05 | | 16 | Outgoing GSM call | 27 | |
| 06 | | 17 | Outgoing GPRS call | 28 | |
| 07 | | 18 | | 29 | |
| 08 | | 19 | Incoming GSM call | 30 | |
| 09 | | 20 | | 31 | |
| 10 | | 21 | | 32 | |
| 11 | GSM connection OK | 22 | | | |

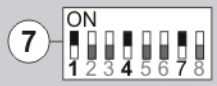
| ESP32-OCN SINOTTICO 32N | Address 5 Status of zones 1 - 32 | OFF → Zone OK<br>ON → Alarm memory<br>Blinking quickly → Open zone<br>Blinking slowly → Zone alarm active |
|---|---|---|



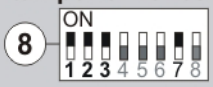

| | | | | | |
|---|---|---|---|---|---|
| 01 | Status zone 1 | 12 | Status zone 12 | 23 | Status zone 23 |
| 02 | Status zone 2 | 13 | Status zone 13 | 24 | Status zone 24 |
| 03 | Status zone 3 | 14 | Status zone 14 | 25 | Status zone 25 |
| 04 | Status zone 4 | 15 | Status zone 15 | 26 | Status zone 26 |
| 05 | Status zone 5 | 16 | Status zone 16 | 27 | Status zone 27 |
| 06 | Status zone 6 | 17 | Status zone 17 | 28 | Status zone 28 |
| 07 | Status zone 7 | 18 | Status zone 18 | 29 | Status zone 29 |
| 08 | Status zone 8 | 19 | Status zone 19 | 30 | Status zone 30 |
| 09 | Status zone 9 | 20 | Status zone 20 | 31 | Status zone 31 |
| 10 | Status zone 10 | 21 | Status zone 21 | 32 | Status zone 32 |
| 11 | Status zone 11 | 22 | Status zone 22 | | |

| ESP32-OCN SINOTTICO 32N | Address 6 Status of zones 33 - 64 | OFF → Zone OK<br>ON → Alarm memory<br>Blinking quickly → Open zone<br>Blinking slowly → Zone alarm active |
|---|---|---|

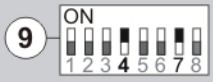

| | | | | | |
|---|---|---|---|---|---|
| 01 | Status zone 33 | 12 | Status zone 44 | 23 | Status zone 55 |
| 02 | Status zone 34 | 13 | Status zone 45 | 24 | Status zone 56 |
| 03 | Status zone 35 | 14 | Status zone 46 | 25 | Status zone 57 |
| 04 | Status zone 36 | 15 | Status zone 47 | 26 | Status zone 58 |
| 05 | Status zone 37 | 16 | Status zone 48 | 27 | Status zone 59 |
| 06 | Status zone 38 | 17 | Status zone 49 | 28 | Status zone 60 |
| 07 | Status zone 39 | 18 | Status zone 50 | 29 | Status zone 61 |
| 08 | Status zone 40 | 19 | Status zone 51 | 30 | Status zone 62 |
| 09 | Status zone 41 | 20 | Status zone 52 | 31 | Status zone 63 |
| 10 | Status zone 42 | 21 | Status zone 53 | 32 | Status zone 64 |
| 11 | Status zone 43 | 22 | Status zone 54 | | |

| ESP32-OCN SINOTTICO 32N | Address 7 Status of zones 65 - 96  | OFF → Zone OK<br>ON → Alarm memory<br>Blinking slowly → Open zone<br>Blinking quickly → Zone alarm active |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 01 | Status zone 65 | 12 | Status zone 76 | 23 | Status zone 87 |
| 02 | Status zone 66 | 13 | Status zone 77 | 24 | Status zone 88 |
| 03 | Status zone 67 | 14 | Status zone 78 | 25 | Status zone 89 |
| 04 | Status zone 68 | 15 | Status zone 79 | 26 | Status zone 90 |
| 05 | Status zone 69 | 16 | Status zone 80 | 27 | Status zone 91 |
| 06 | Status zone 70 | 17 | Status zone 81 | 28 | Status zone 92 |
| 07 | Status zone 71 | 18 | Status zone 82 | 29 | Status zone 93 |
| 08 | Status zone 72 | 19 | Status zone 83 | 30 | Status zone 94 |
| 09 | Status zone 73 | 20 | Status zone 84 | 31 | Status zone 95 |
| 10 | Status zone 74 | 21 | Status zone 85 | 32 | Status zone 96 |
| 11 | Status zone 75 | 22 | Status zone 86 | | |

| ESP32-OCN SINOTTICO 32N | Address 8 Alarm and tamper of zones 1 - 32  | OFF → No alarm<br>ON → Zone alarm or zone tamper alarm active |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 01 | Alarm zone 1 | 12 | Alarm zone 12 | 23 | Alarm zone 23 |
| 02 | Alarm zone 2 | 13 | Alarm zone 13 | 24 | Alarm zone 24 |
| 03 | Alarm zone 3 | 14 | Alarm zone 14 | 25 | Alarm zone 25 |
| 04 | Alarm zone 4 | 15 | Alarm zone 15 | 26 | Alarm zone 26 |
| 05 | Alarm zone 5 | 16 | Alarm zone 16 | 27 | Alarm zone 27 |
| 06 | Alarm zone 6 | 17 | Alarm zone 17 | 28 | Alarm zone 28 |
| 07 | Alarm zone 7 | 18 | Alarm zone 18 | 29 | Alarm zone 29 |
| 08 | Alarm zone 8 | 19 | Alarm zone 19 | 30 | Alarm zone 30 |
| 09 | Alarm zone 9 | 20 | Alarm zone 20 | 31 | Alarm zone 31 |
| 10 | Alarm zone 10 | 21 | Alarm zone 21 | 32 | Alarm zone 32 |
| 11 | Alarm zone 11 | 22 | Alarm zone 22 | | |

| ESP32-OCN SINOTTICO 32N | Address 9 Alarm and tamper of zones 33 - 64  | OFF → No alarm<br>ON → Zone alarm or zone tamper alarm active |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 01 | Alarm zone 33 | 12 | Alarm zone 44 | 23 | Alarm zone 55 |
| 02 | Alarm zone 34 | 13 | Alarm zone 45 | 24 | Alarm zone 56 |
| 03 | Alarm zone 35 | 14 | Alarm zone 46 | 25 | Alarm zone 57 |
| 04 | Alarm zone 36 | 15 | Alarm zone 47 | 26 | Alarm zone 58 |
| 05 | Alarm zone 37 | 16 | Alarm zone 48 | 27 | Alarm zone 59 |
| 06 | Alarm zone 38 | 17 | Alarm zone 49 | 28 | Alarm zone 60 |
| 07 | Alarm zone 39 | 18 | Alarm zone 50 | 29 | Alarm zone 61 |
| 08 | Alarm zone 40 | 19 | Alarm zone 51 | 30 | Alarm zone 62 |
| 09 | Alarm zone 41 | 20 | Alarm zone 52 | 31 | Alarm zone 63 |
| 10 | Alarm zone 42 | 21 | Alarm zone 53 | 32 | Alarm zone 64 |
| 11 | Alarm zone 43 | 22 | Alarm zone 54 | | |

| ESP32-OCN SINOTTICO 32N | Address 10 Alarm and tamper of zones 65 - 96 (10) ON 1 2 3 4 5 6 7 8 | OFF → No alarm<br>ON → Zone alarm or zone tamper alarm active |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **01** | Alarm zone 65 | **12** | Alarm zone 76 | **23** | Alarm zone 87 |
| **02** | Alarm zone 66 | **13** | Alarm zone 77 | **24** | Alarm zone 88 |
| **03** | Alarm zone 67 | **14** | Alarm zone 78 | **25** | Alarm zone 89 |
| **04** | Alarm zone 68 | **15** | Alarm zone 79 | **26** | Alarm zone 90 |
| **05** | Alarm zone 69 | **16** | Alarm zone 80 | **27** | Alarm zone 91 |
| **06** | Alarm zone 70 | **17** | Alarm zone 81 | **28** | Alarm zone 92 |
| **07** | Alarm zone 71 | **18** | Alarm zone 82 | **29** | Alarm zone 93 |
| **08** | Alarm zone 72 | **19** | Alarm zone 83 | **30** | Alarm zone 94 |
| **09** | Alarm zone 73 | **20** | Alarm zone 84 | **31** | Alarm zone 95 |
| **10** | Alarm zone 74 | **21** | Alarm zone 85 | **32** | Alarm zone 96 |
| **11** | Alarm zone 75 | **22** | Alarm zone 86 | | |

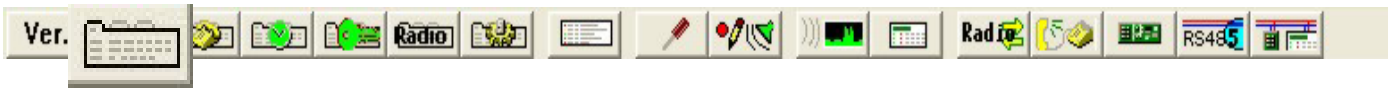
| ESP32-OCN SINOTTICO 32N | Address 11 Indoor sirens Outdoor sirens (11) ON 1 2 3 4 5 6 7 8 | OFF → Siren in standby<br>ON → Siren active |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **01** | Indoor siren 1 | **12** | Outdoor siren 4 | **23** | |
| **02** | Indoor siren 2 | **13** | Outdoor siren 5 | **24** | |
| **03** | Indoor siren 3 | **14** | Outdoor siren 6 | **25** | |
| **04** | Indoor siren 4 | **15** | Outdoor siren 7 | **26** | |
| **05** | Indoor siren 5 | **16** | Outdoor siren 8 | **27** | |
| **06** | Indoor siren 6 | **17** | | **28** | |
| **07** | Indoor siren 7 | **18** | | **29** | |
| **08** | Indoor siren 8 | **19** | | **30** | |
| **09** | Outdoor siren 1 | **20** | | **31** | |
| **10** | Outdoor siren 2 | **21** | | **32** | |
| **11** | Outdoor siren 3 | **22** | | | |

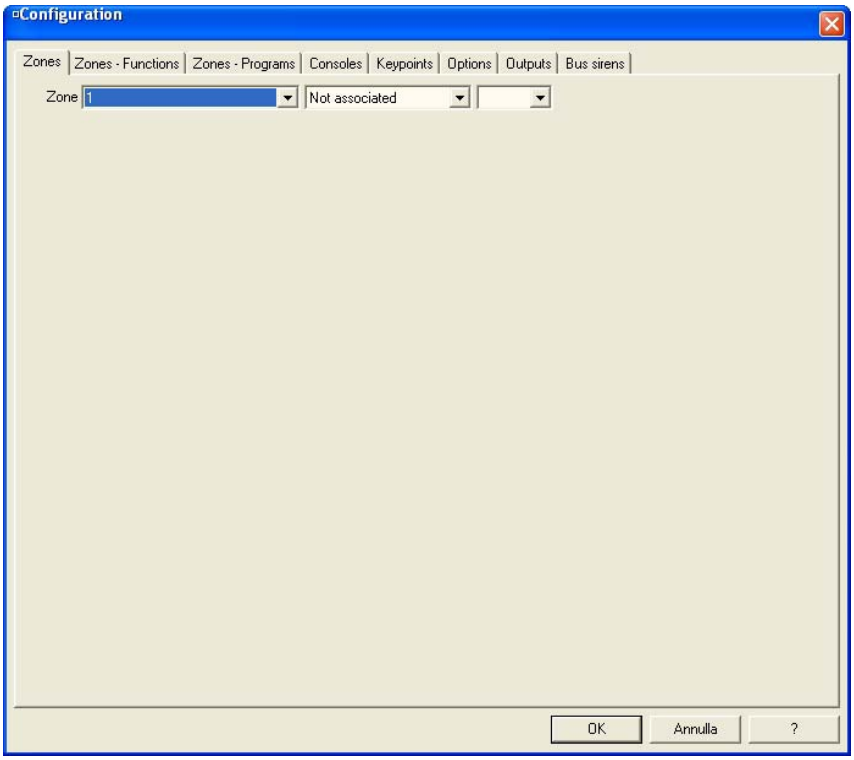
**Address 12 is reserved for future developments**
**Addresses 13 to 16 are reserved for the advanced programming level**

N.B.: The free (i.e. undefined) outputs/signaling are available for advanced programming.

# 2. ZONE CONFIGURATION




Select the **Configuration** table.
On the screen is viewed:



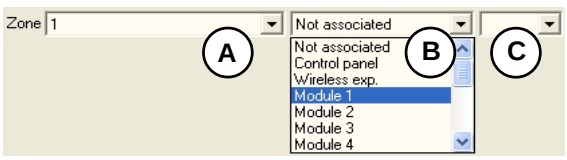

The zone configuration tables permit to program the following parameters:

- List of zones controlled by the control panel, freely selectable among the modules connected and programming of the zone parameters
- Zone-function association
- Zone-program association
- Association of the programs to the consoles
- Association of the programs to the secondary control units (key points)
- System options
- Logic output parameters
- Bus siren parameters

## 2.1 ZONE CONFIGURATION

### 2.1.1 ASSOCIATION OF THE LOGIC ZONE TO THE PHYSICAL ZONE

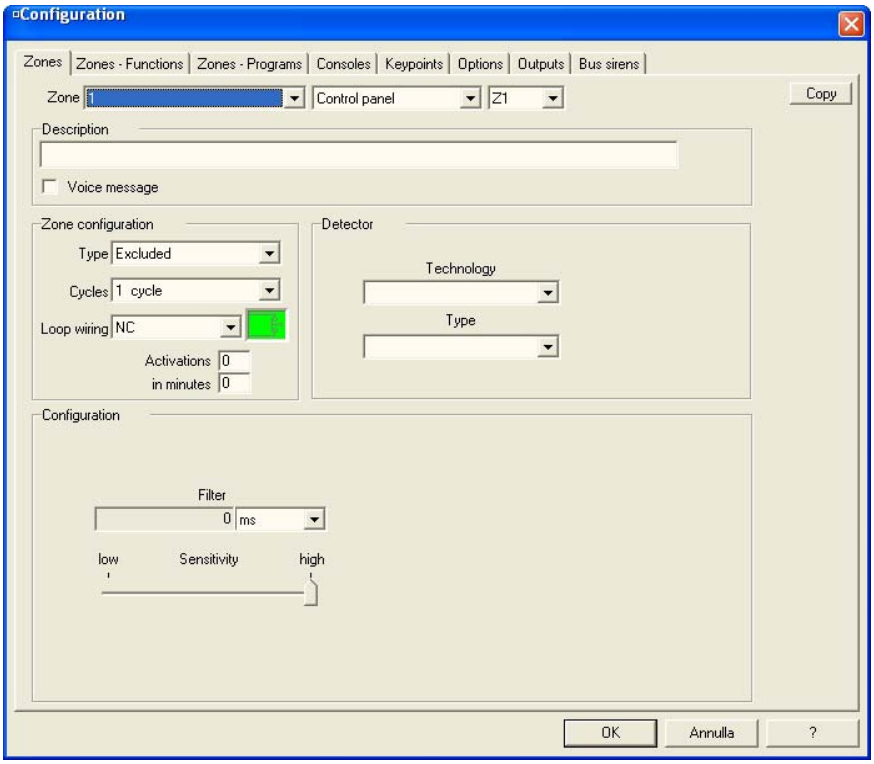
The TP8-96 VIDEO can control max. 96 zones. The zones can be associated to the zone inputs of the installed hardware. The system configuration may provide more inputs than the control panel can control. It is for this raison, that you have to choose the inputs to be controlled from those provided by the modules and draw up a zone list.




- **A Logic zone.** Viewing of list of the logic zones managed by the control panel.
- **B Module (device).** Select the device from the drop-down menu. The list is composed of: Not associated (no device associated to the logic zone), Control panel, Wireless exp. (wireless zone), modules from 1 to 15 (hard-wired zone expansions).
- **C Zone of the module (device).** Viewing of the list of the available physical inputs for the selected device.

**The logic zone must be associated to the physical zone to view the configuration table and program the zone.**

Once logic/physic zone association has been completed, the following items which caracterise the zones are viewed.




**DESCRIPTION**
It is possible to associate an individual description to the zone that will replace the zone number and identify the program in every process. The zone description will be viewed on the display and announced by the speaker of the console.


- **A** Check **Voice message** item A to enable it.
- **B** The voice message can be composed of max. 4 words selectable among those included in the vocabulary.
  After enabling, 4 items are viewed, one for each word.
  Click on the arrow of each item to scroll the vocabulary and select the word.
- **C** At the end, click on the Validation arrow key (C) to memorize and play the message.
  The words are copied into the description line. It is possible to program the description manually writing it directly in the description line.
  Remember that the display of the console is able to view descriptions of maximum 16 characters.
  All further characters will be cut off.

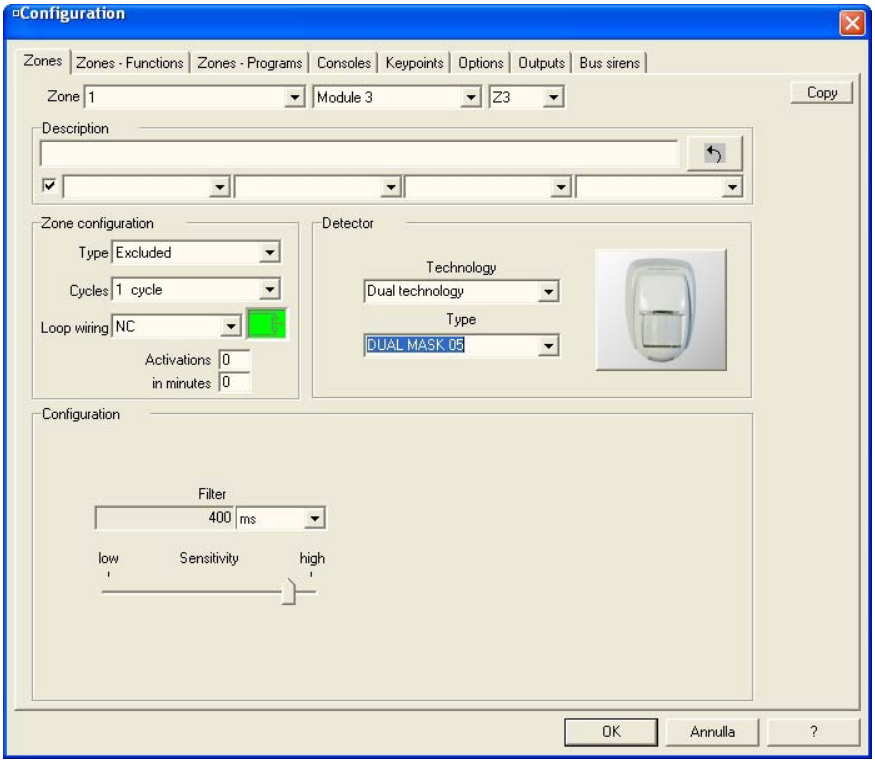
**After the association of the description, programming of the zone continue according to the technology and type of the selected detector. Each detector has specific programming parameters.**

**DECTECTOR CATEGORIES**
Detectors are divided into four categories according to the kind of connection with the control panel, which is identified by the contact type.
Each category has different functioning characteristics, i.e. different programming facilities.
Examples of all the different detectors are illustrated in the following pages.

- Group 1 Hard-wired zones with standard wiring - Contact type: NC, NO, EOL resistor, DEOL resistor (traditional movement detectors and detectors with RDV technology)
- Group 2 Wireless zones - Contact type: Wireless (Tecnoalarm detectors only)
- Group 3 Hard-wired zones with zone bus wiring - Contact type: ZONE BUS (WINBEAM/S and DOORBEAM/S barriers)
- Group 4 Wired zones with sensor bus wiring - Contact type: SENSOR BUS (detectors with RSC technology: DUALTECNO BUS 10, DUAL MASK BUS 05, TWINTEC BUS, TWINTEC MASK BUS, EXPLORER BUS, BEAMTOWER, TRIRED BUS).

## PROGRAMMING OF A TRADITIONAL DETECTOR

**Traditional detector.** The definition of traditional detector indicates all types of conventional detectors which signal an alarm by simply switching a contact. They include detectors with relay output, magnetic contacts, inertia detectors, rope contacts etc.
The first part of programming is identical to any other category of detectors.
Select the **Module** (1 to 15) and a standard loop wiring among the options available.




### ZONES CONFIGURATION

- Type of zone
  Select from the drop-down menu, the zone type among the following options:
  - Excluded
    The zone is permanently disabled for the detection of alarms.
  - Direct zone
    The zone is enabled for the detection of alarms immediately after arming of the program it is included in without taking into account any entry or exit time (the zone is ready after 20 seconds).
  - Walk through
    The zone is a mixed zone. It is normally direct and enabled upon arming, but behaves as a delayed zone if another delayed zone is in prealarm (entry time running) or during the exit time. It is used if one detector covers more than one zone, e.g. entrance and hall, situated along the entry/exit path in which the walk through zone is the more distant one.
  - Technical
    The zone is always enabled (even if the control panel is disarmed). It is used for the detection of gas leaks, fire alarms or as expansion to the tamper line.
  - Delayed T1 (exit time 1)
    The zone is not enabled for the detection of alarms upon arming of the program it is included in but only after expiry of the programmed exit time 1.
  - Delayed T2 (exit time 2)
    The same as above but with different exit time.
  - Hold-up zone
    The zone is always enabled (even if the control panel is disarmed). It releases a silent alarm (neither acoustic nor optical signaling) with maximum priority.
  - Key zone
    The zone permits arming/disarming of the program it is included in by mechanical key or push button connected to it. The functioning mode of the key zone can be programmed as on/off or pulse (see also the option window).
  - Tamper zone
    The zone is direct and always enabled (even if the control panel is disarmed). It is equivalent to the ZT input and releases zone tamper alarms.

- Cycles
  Programming of the maximum alarm cycles per session of functioning session. The zone is automatically excluded when the number of programmed alarm cycles is reached. The self-exclusion is valid until disarming of the program the zone is included in. Program the alarm cycles by clicking on the corresponding item and choose the number of alarm cycles. It is possible to program 1, 4, 8, 15 or infinite alarm cycles prior to self-exclusion.
- Loop wiring (contact type)
  Selection of the contact type of the zone input the detector is connected to. Select the contact type according to the kind of connected detector.
  Select the type of contact from the drop-down menu:
  - NC
    Normally closed contact. Inputs which, in stand-by have a resistance of 0 Ohm at each end, whereas, in case of alarm, they are open and the resistance exceeds 2K Ohm.
  - EOL Resistor
    End-of-line resistor. Inputs which, in stand-by have a nominal resistance of 2.7K Ohm balancing the return voltage toward the control panel, while in case of alarm, the resistance exceeds the range of expected values (inferior to 2K Ohm or superior to 4K Ohm).
  - DEOL Resistor
    Double end-of-line resistor. Inputs which, in stand-by have a rated resistance of 2.7K Ohm. The type of alarm can be discriminated according to the resistance value measured to the contact's terminal:
    - Stand-by from 2K Ohm to 4K (rated 2.7K Ohm)
    - Tamper from 0 to 2K Ohm or superior to 7.4K Ohm
    - Alarm from 4K Ohm to 7,4K Ohm (rated 5.4K Ohm).
  - NO
    Normally open contact. Inputs which, in stand-by, are open (superior to 2K Ohm), whereas, in case of alarm, they have a resistance of 0 Ohm at each end.
  - ZONE BUS
    RS485 serial connection. Thanks to this digital serial connection, the control panel is able to identify or to distinguish the kind of transmitted alarm.
    This contact type is reserved for the connection of the WINBEAM/S and DOORBEAM/S barriers.
  - SENSOR BUS
    RS485 serial connection. This contact type is reserved for the RSC devices with relative input and RS485 interface. This kind of bidirectional connection permits programming, monitoring and remote control of the connected RSC detectors.
  - WIRELESS
    Virtual contact type. It is only viewed if the selected zone input belongs to a wireless device.
- Activations in minutes
  The zone signals an alarm if the programmed number of the activations (0 to 99) has been counted during the programmed period of time (0 to 99 minutes) or if, upon expiry of the programmed period of time, the zone is permanently in alarm (even if the programmed number of activations has not been reached).
  Programmable in **minutes.**

**DETECTOR**
Permits association and configuration of the detector or contact by clicking on the correspondent item:

- Technology
  Determines the detector's technology according to the selected contact type.
  Select the technology from the drop-down menu:
  - Dual technology — Dual technology movement detectors (IR+MW)
  - Microwave — Microwave movement detectors (HF)
  - PIR — Infrared movement detectors (IR)
  - Contact — Magnetic contacts
  - Inertia — Inertia detectors
  - Pulse count — Rope contacts for roller shutters
  - Outdoor protection — Perimeter protections, infrared or microwave barriers
  - 24H — Gas leak, fire and flooding detectors
  - RDV — Movement detectors with RDV technology
- Type
  Select the detector type from the Tecnoalarm devices listed for each technology.

The items Technology and Type are editable. It is possible to enter the desired description and name in the corresponding items. In this case, the unit of measurement of the filter is not automatically filled in, it is necessary to select it manually (see Filter).

**CONFIGURATION**

- Filter
  Determines the response time (ms, pulses, inertia, RDV) or sensitivity (from low to high) according to the kind of the detector or contact selected.
- Sensitivity (filter value)
  Determines the threshold according to which the control panel recognizes or not an alarm.
  The filter takes different values according to the selected unit of measurement.
  Move the scroll bar to change the filter value.

**Unit and value of the filter**

| | | |
|---|---|---|
| ● ms | 200, 400, 1000, 2000 ms | Minimum time of the input must remain open to validate the alarm. |
| ● Pulses | 2, 4, 8, 16 impulses | Minimum number of opening and closing of the input to validate the alarm. The counter is reset after 15 seconds |
| ● Inertia | 12, 24, 36, 48 | Minimum number of opening and closing of the input to validate the alarm. The counter is reset after a few seconds. |
| ● RDV | 3, 5, 7, 10, | Analysis algorithms and pulse counter. |

**COPY**

The copy key permits copying of all of the programming parameters of one zone to another. The duplication of the zone configuration is useful to speed up programming if several zones must have the same configuration.

**PASTE**

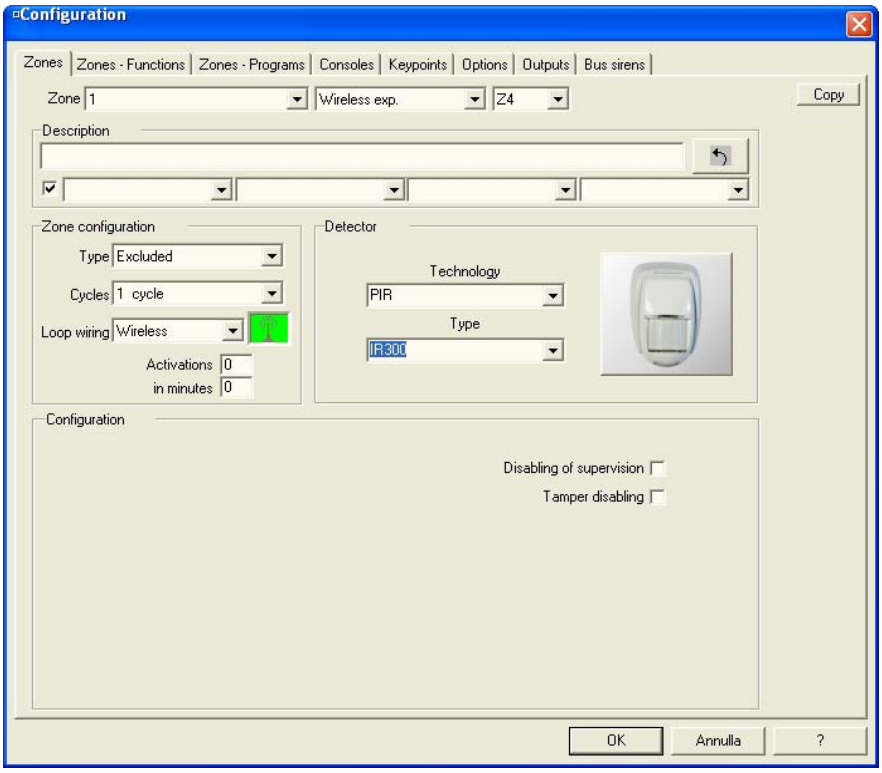
Permits to paste the zone configuration previously copied. This key is viewed only after clicking on **Copy**. Select the zone (association of logic zone to physical input of the module) and click on **Paste**. The paste key shows a number which corresponds to the number of the copied zone. It is sufficient to modify the desired parameters (e.g. the description).

Repeat the procedure for every zone to be configured (max. 96), then press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

## PROGRAMMING OF A WIRELESS DEVICE

**Wireless detector.** The first part of programming is identical to any other category of detectors.
Select the **Wireless exp.** and a **wireless** loop wiring among the options available.




**DETECTOR**
Permits association and configuration of the detector or contact by clicking on the correspondent item:

- Technology
  Select the technology among: PIR, contact, inertia, pulse count and barrier
- Type
  Select the type among the devices listed for each technology

**CONFIGURATION**

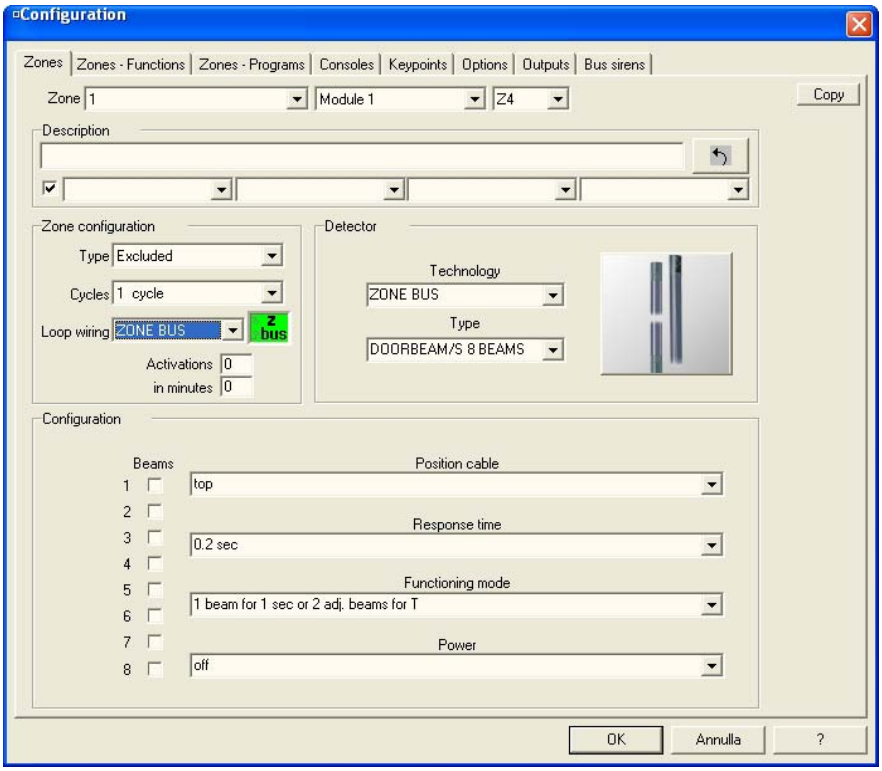
- Disabling of supervision
  Enabling/disabling of the supervision signaling control.
  Check the item to enable the function.
- Tamper disabling
  Enabling/disabling of the tamper function.
  Check the item to enable the function.

Repeat the procedure for every zone to be configured, then press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

## PROGRAMMING OF A ZONE BUS DEVICE

**ZONE BUS detectors.** This type of detectors refers to the devices connected to the Zone Bus, i.e. the WINBEAM/S and DOORBEAM/S barriers.
The first part of programming is identical to any other category of detectors.
Select the **Module** (1 to 15) and a **Zone bus** loop wiring among the options available.




**DETECTOR**

- Type
  Select the type among the devices listed
  (WINBEAM/S from 2 to 5 beams - DOORBEAM/S from 6 to 8 beams).

**CONFIGURATION**

- Beams
  Permits enabling/disabling of determined beams (the flag indicates that the beam has been enabled).
- Position cable
  Permits the selection of the cable exit (top/bottom).
  - Top The cable is wired to the upper part of the barrier
  - Bottom The cable is wired to the lower part of the barrier

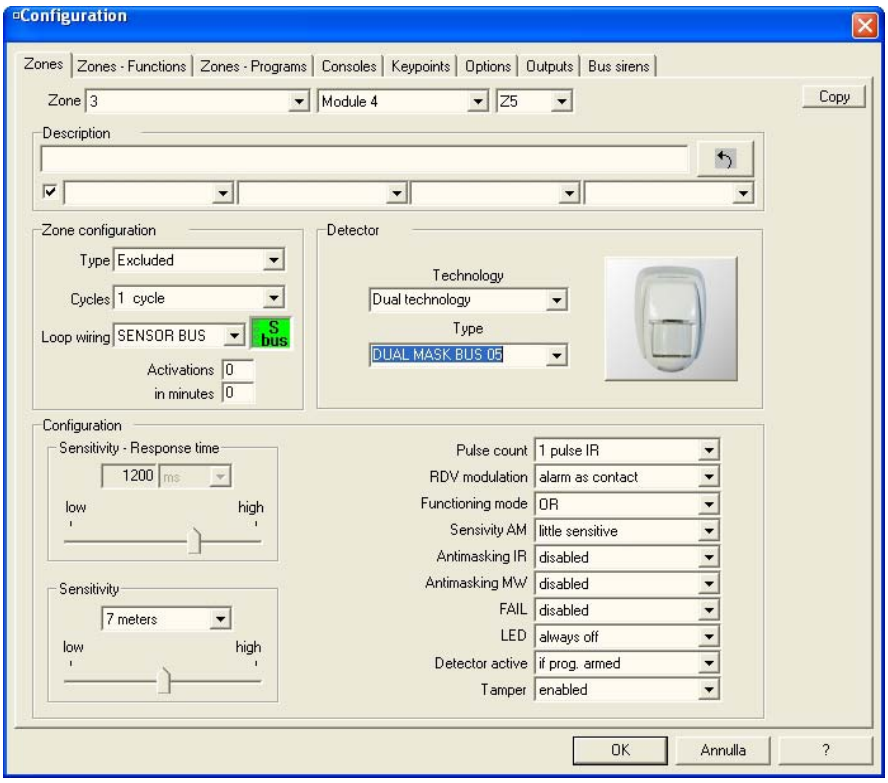
  The position of the cable determines whether the beams are numbered from the bottom to the top or from the top to the bottom.
- Response time
  Permits programming of the response time (T), i.e. the time during which the beam has to be interrupted in order to release the alarm. The “T” time is relevant for the functioning mode (see Functioning mode).
- Functioning mode
  Selection of the modality of alarm detection:
  - 1 for 1 sec. or 2 adj. for T
    The alarm is released if any beam is interrupted for 1 second or two adjacent beams for the response time (T) programmed.
  - 2 adj. for T
    The alarm is released if two adjacent beams are interrupted for the response time (T) programmed.
  - 3 adj. for T lower part or 2 adj. for T
    The alarm is released if three adjacent beams in the lower part of the barrier or two adjacent beams are interrupted for the response time programmed.
  - 1 for T
    The alarm is released if any beam is interrupted for the response time programmed.

- Power
  Permits programming of the beam power at four levels (off, low, medium, high).
  Consider the distance between transmitter and receiver as well as the environmental conditions

Repeat the procedure for every zone to be configured, then press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## PROGRAMMING OF AN RSC DEVICE

**Sensor Bus detector**. This type of detectors indicates the devices connected to Sensor Bus, i.e. the dual technology, PIR and barrier detectors with RSC technology.
The first part of programming is identical to any other category of detectors.
An example of configuration of a DUAL MASK BUS 05 dual technology detector is shown below.
Select the **Module** (1 to 15) and a **Sensor bus** loop wiring among the options available.




**DETECTOR**

- Technology
  Select the **Dual technology** amonf the available options.
- Type
  Select the type among the devices listed (e.g. DUAL MASK BUS 05)

**CONFIGURATION**

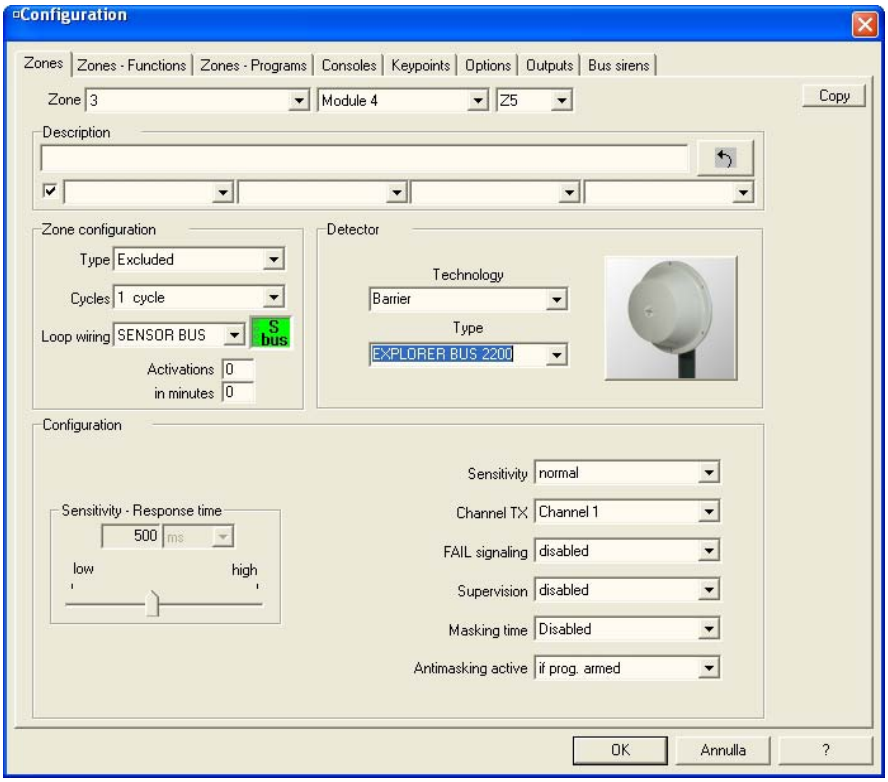
- Sensitivity-Response time
  Defines the response time of the detector.
  **Warning: Setting valid only for the microwave section.**
- Sensitivity
  Defines the maximum range of the microwave detector (3, 5, 7, 10 or 15 meters).
- Pulse count
  Defines the number of impulses (1 or 3 IR impulses) detected by the microwave before the alarm is released. The timer is reset after 20 seconds from the first impulse (time-out).
- RDV modulation
  Selection of the functioning mode: normal or RDV
  - Alarm as contact — Normal functioning
  - RDV modul. in alarm — RDV function. The detector sends a digital signal to the control panel which is commensurate with the movement detected.
- Functioning mode
  Permits programming of the functioning mode (OR or AND).
- Sensivity AM
  Permits programming of the sensivity of the antimasking function (little or highly sensitive).
- Antimasking IR
  Enabling/disabling of the antimasking function of the infrared section.
- Antimasking MW
  Enabling/disabling of the antimasking function of the microwave section.

- Fail
  Enabling/disabling of the sensor fault signal.
- LED
  Programming of the LED:
  • Always off the LED are never lit.
  • Enabled the LED are lit if the program is armed and the detector has detected an intrusion.
- Detector active
  Defines if the detector is always active or only active if the program is armed.
  **Warning: It is recommended to use the detector active function with program armed.**
- Tamper
  Enabling/disabling of the anti-tamper protection.

Repeat the procedure for every zone to be configured, then press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## PROGRAMMING OF AN RSC DEVICE (continue)

**Sensor Bus detector**. The first part of programming is identical to any other category of detectors.
Select the **Module** (1 to 15) and a **Sensor bus** loop wiring among the options available.
An example of configuration of a EXPLORER BUS barrier is shown below.




**DETECTOR**

- Technology
  Select **Barrier** among the available options.
- Type
  Select the type among the available devices.

**CONFIGURATION**

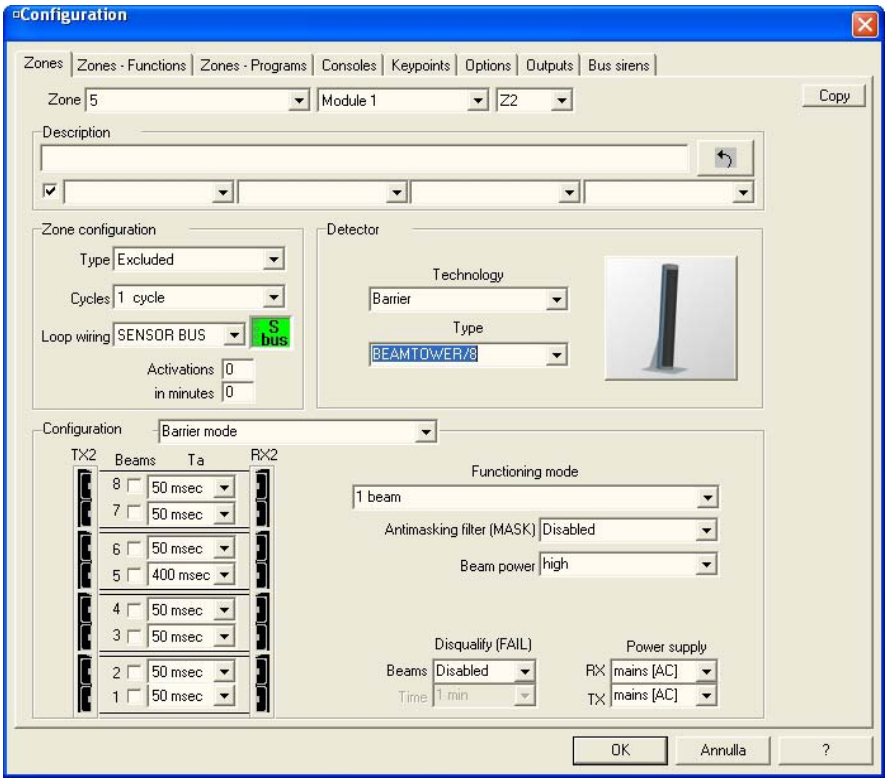
- Sensitivity-Response time
  Defines the response time of the detector
- Sensitivity
  Defines the maximum range (from very sensitive to very hard).
- Channel TX
  Permits programming of the transmission channel (1 to 4). If the installation contains several copies, the TX channel must be differentiated.
- FAIL signaling
  Enabling/disabling of the barrier fault signal.
- Supervision
  Enabling/disabling of the supervision function. Enabling is available only if the synchronism wire is connected to the TX and the RX.
- Masking time
  Permits programming of the time during which masking must persist so as to release the alarm (disabled, 10, 30 or 60 seconds).
- Antimasking active
  Defines whether the antimasking function is always active or only active if the program is armed.

Repeat the procedure for every zone to be configured, then press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

## PROGRAMMING OF AN RSC DEVICE (continue)

**Sensor Bus detector.** The first part of programming is identical to any other category of detectors.
An example of configuration of a BEAMTOWER barrier is shown below.
Select the **Module** (1 to 15) and a **Sensor bus** loop wiring among the options available.




**DETECTOR**

- Technology
  Select **Barrier** among the available options.
- Type
  Select the type among the available devices.

**CONFIGURATION**

Permits the selection of the configuration of the installation. Select among the conventional barrier mode and 3 closed and 6 open perimeter configurations.

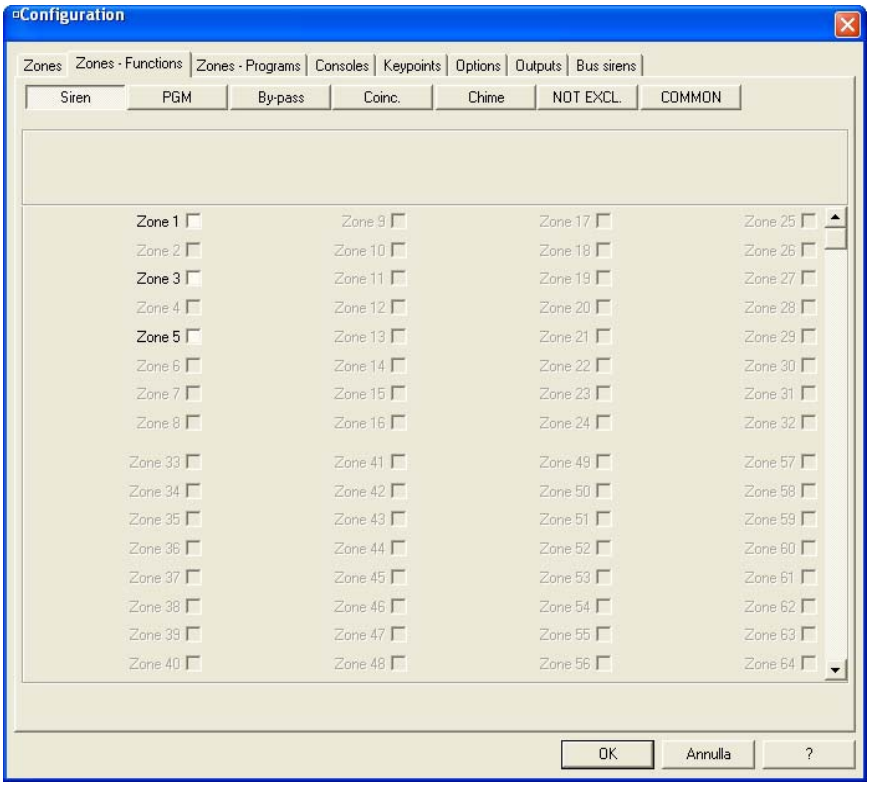
- Beams
  Permits enabling/disabling of a specific beam (the flag indicates that the beam is enabled). The beams are numbered starting from the bottom.
- Ta (interruption time)
  Permits programming of the beam interruption time at 4 levels (50, 150, 400ms or 1s). The Ta time is relevant for the functioning mode.
- Functioning mode
  Permits programming of the functioning mode (in some options the Ta time appears, Beams item).
  - **Normal** The alarm is activated if the defined number of beams is interrupted simultaneously.
  - **OR** The alarm is activated if the defined number of beams is interrupted simultaneously or if only one beam is interrupted for the defined time.
  - **Multiple of Ta** The alarm is activated if one of the lower beams (beam 1 or 2) is interrupted for the defined time (Ta) multiplied by a numerical coefficient
- Antimasking filter (MASK)
  Enabling/disabling of the antimasking function and programming of the time necessary to release the antimasking signal (disabled, 3, 30 or 120 seconds).

- Beam power
  Permits programming of the beam power (high, medium-high, medium-low, low or automatic). Consider the distance between transmitter as well as the environmental conditions.
- Disqualify (FAIL)
  Enabling/disabling of the disqualification function. Permits programming of the minimum number of disqualified beams (disabled or from 1 to 8 beams) and the period of time (1, 5, 10 or 30 minutes) necessary to release the barrier disqualified signal.
- Power supply
  Defines the kind of power supply (AC or external DC) independently for TX and RX.

Repeat the procedure for every zone to be configured, then press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 2.1.2 ZONE-FUNCTION ASSOCIATION

Select the **Zone-Function** table.
On the screen is viewed:




The zone-function table permits the association of the zone to a series of functions to the zones:

- Siren
  The checked zones cause the activation of the sirens in case of alarm.
- PGM
  The checked zones cause the activation of the PGM logic output in case of alarm.
- By-pass
  The checked zones associated are temporarily disabled from the detection of alarms, if the program they are included in is armed and a by-pass code enabled for these zones (see also attributes of the codes) is entered. The zones will be enabled again upon entering of the by-pass code or expiry of the by-pass time.
- Coinc.
  The checked zones are associated to the group of coinciding zones. Upon the detection of an alarm by one of the coinciding zones the detector which has released the alarm is inhibited for 6 seconds and the control panel starts a 15 minutes timer. Two conditions are verified:
  • If after 6 seconds but within 15 minutes another alarm is detected by the same zone, the alarm is released (double knock).
  • If within 15 minutes an alarm is detected by another coinciding zone the alarm is released.
  **Warning: Delayed zones may not be part of the group of coinciding zones.**
- Chime
  The checked zones are enabled for chime. Every time a chime zone is opened, if the program it is included in is disarmed, the buzzer on the console and the logic outputs programmed are activated. The buzzer on the console can be programmed so as to be activated for one 2 seconds beep upon every opening of the zone input contact, or for a 3 seconds beep upon every opening which becomes continuous if the zone remains open (see also the option window).
- Not excl.
  The checked zones may in no way be excluded.
- COMMON
  The checked zones are associated to the group of common zones and are included in several programs each. As a consequence, they are enabled for the detection of alarms only if all the programs they are included in are armed.

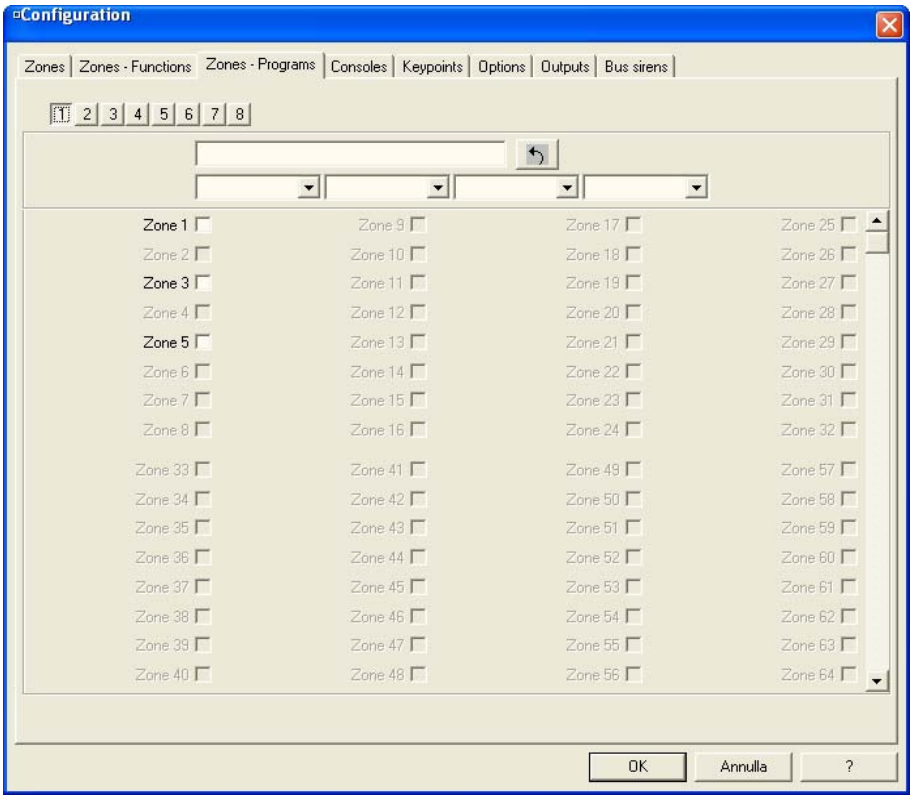
Select the function by clicking on the function key, then check the zones to be associated. The zones may be identified either by the zone number or the description assigned during configuration.

Press:

- **OK** to confirm
- **Abandon** to quit without saving

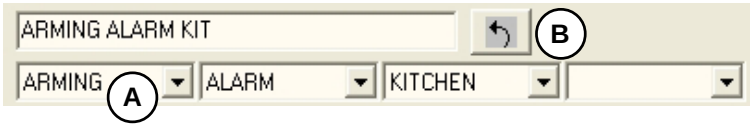
## 2.1.3 ZONE-PROGRAM ASSOCIATION

Select the **Zone-Program** table.
On the screen is viewed:




The Zone-Program configuration table permits the creation of max. 8 programs. The control panel can be armed through one program at a time or several programs simultaneously. Every program groups a certain number of zones (1...96) that are enabled/disabled contemporaneously on arming/disarming of the program (unless the program contains delayed or common zones). If the program armed contains delayed zones, these are enabled for the detection of alarms only on expiry of the exit time. If it contains common zones, these are enabled only if all the programs they are included in are armed.
To associate the zones to the programs, select the program and then select the zones to be included in it by clicking on the box beside the zone description. A program can contain max. 96 zones.

**DESCRIPTION**
Select the program by clicking on the program number in question and check all the zones you wish to include.
It is possible to associate an individual description to the program that will replace the zone number and identify the program in every process. The program description will be viewed on the display and announced by the speaker of the console.

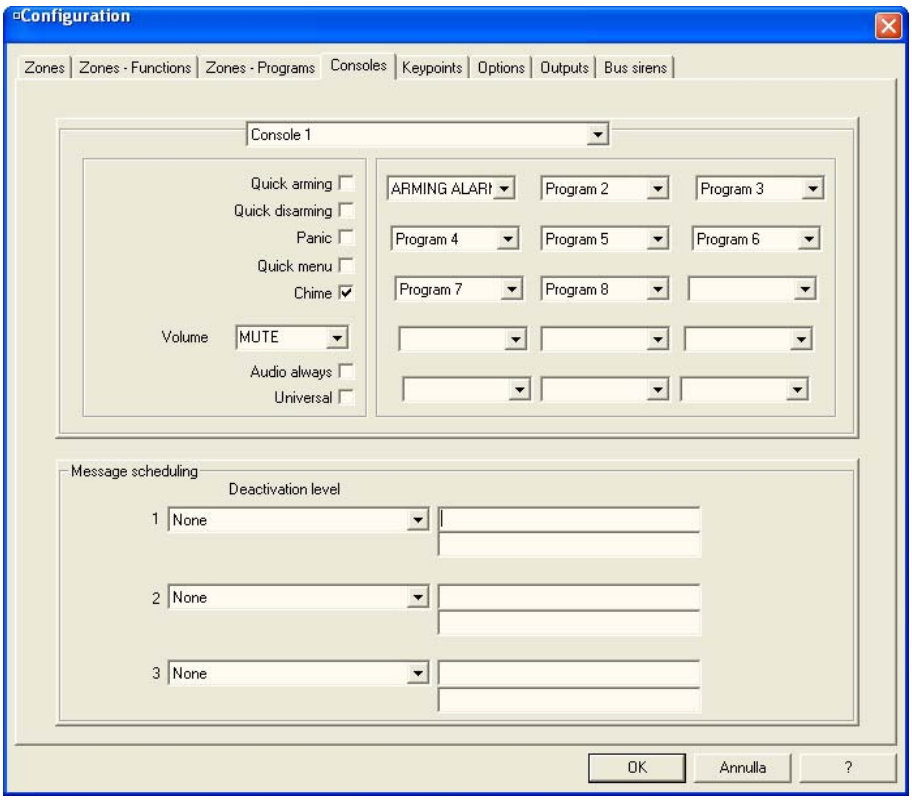



- **A** The voice message can be composed of max. 4 words selectable among those included in the vocabulary. 4 items are displayed, one for each word.
  Click on the arrow of each item to scroll the vocabulary and select the word.
- **B** At the end, click on the validation arrow B to memorize and play the message.
  The words are copied into the description line. It is possible to program the description manually writing it directly in the description line.
  Remember that the display of the console views max. 16 digits. All further characters will be cut off.

Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 2.1.4 CONSOLES

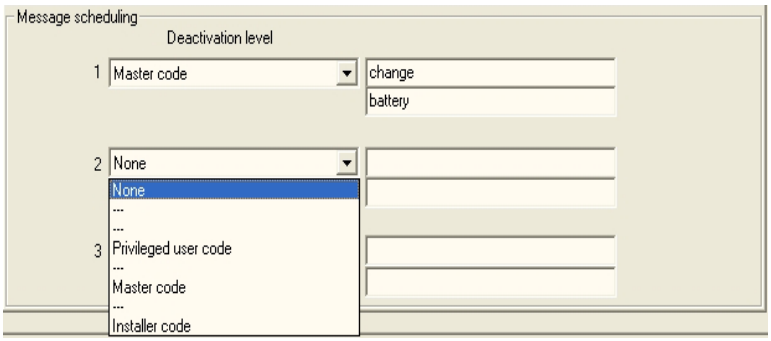
Select the **Console** table.
On the screen is viewed:




Select the console to be configured from the drop-down menu.
Every console provides 15 couples of LED (status led and alarm LED) to view the status of the same number of programs.
To associate a couple of LED to a determined program, click on the arrow next to the program number and select the program (1 to 8) to be associated.
It is possible to define a series of functioning parameters of the console:

- Quick arming
  Enabling/disabling of the quick arming function.
- Quick disarming
  Enabling/disabling of the quick disarming function.
- Panic
  Enables the console for the release of the panic alarm. A panic alarm can be released by pressing the arrow up and arrow down keys simultaneously.
- Quick menu
  Permits the activation/deactivation of the remote controls without entering any code.
- Chime
  Permits enabling of the buzzer of the console for chime signaling.
- Volume
  Selection of the volume for the reproduction of the voice messages: mute, low, moderate, high.
- Audio always
  Enables the console for the reproduction of voice messages even if the relative operations (e.g. arming/disarming) are executed by another console.
- Universal
  Enables the console for the control of all of the system's programs, even those not associated to the LED. Status of the programs of which is not shown by the LED, will be viewed on the display.

## MESSAGE SCHEDULING




The control panel permits programming of ~~max~~. up to 3 messages, composed of maximum 2 lines of 16 characters each. The messages are viewed on the display of every console of the system on one or several specific dates. The starting day is programmable through the system's calendar (see customization of the calendar).

**Deactivation level**

The displayed message may only be cancelled by the programmed code:

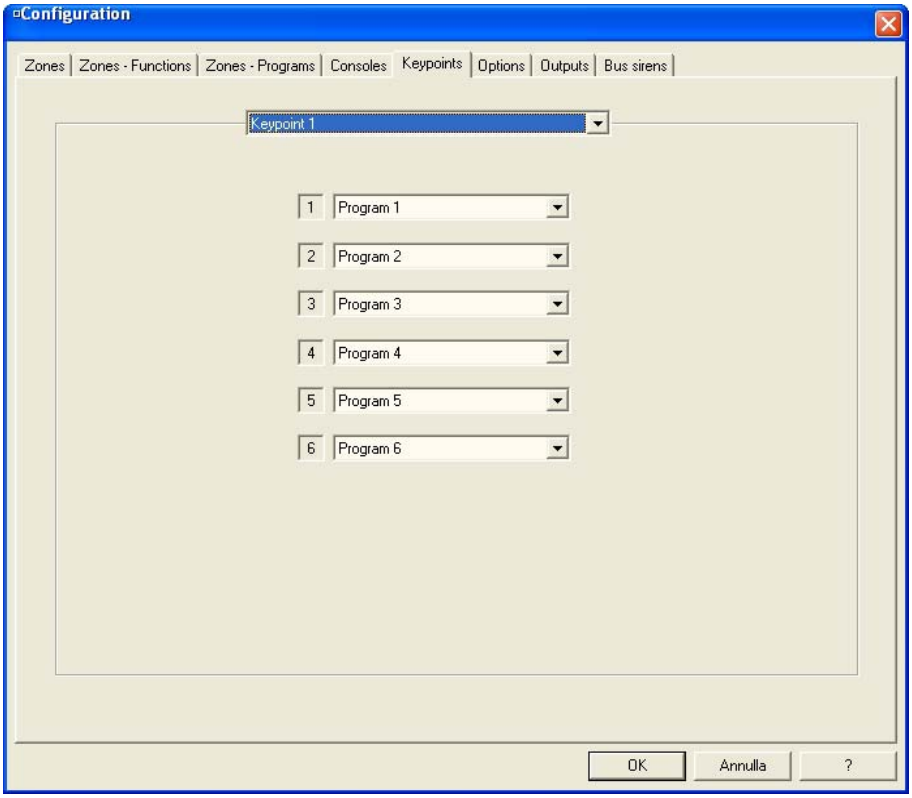
- None
- Privileged user code
- Master code
- Installer code

Press:

- **OK** to confirm and close the zone configuration tables
- **Abandon** to undo the configuration of the consoles

## 2.1.5 KEYPOINTS

Select the **Keypoint** table.
On the screen is viewed:



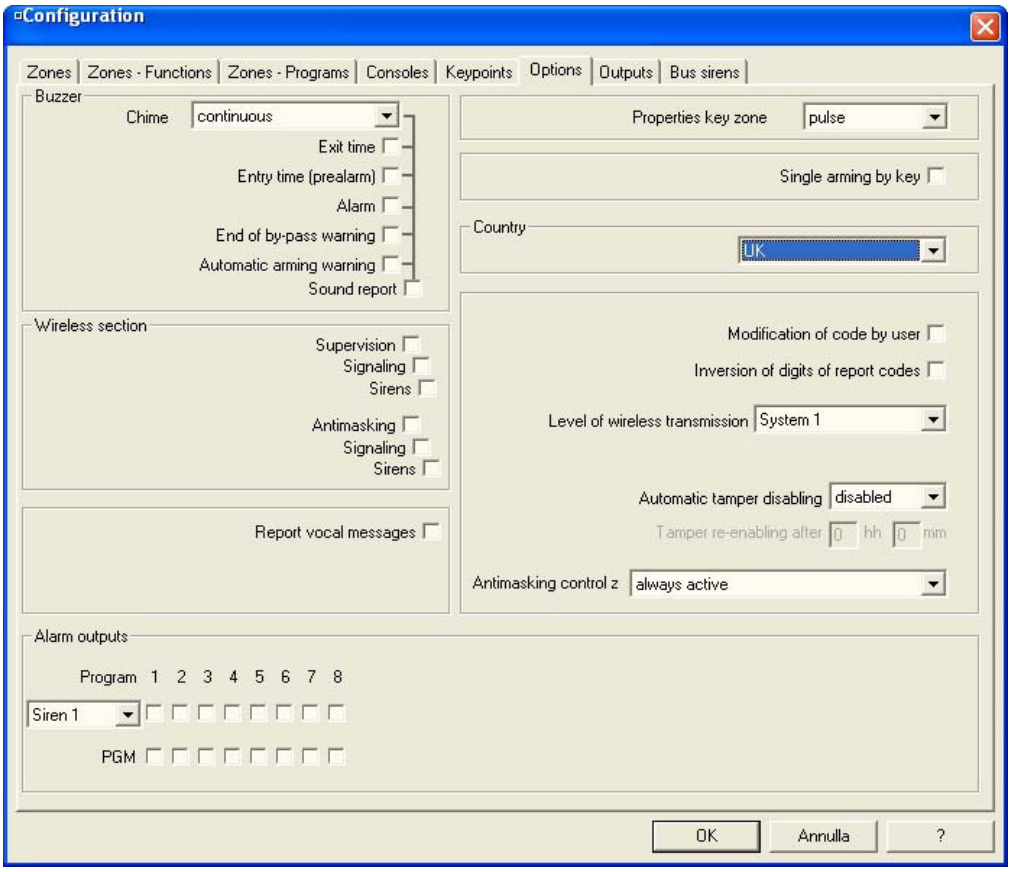

The Keypoint configuration table permits the association of the auxiliary control units to the programs.
Select the control unit to be programmed from the drop-down menu.
The keypoint configuration window permits the association of 6 programs and LED. But only the key reader with mini keypad provides 6 LED to view the status of as many programs. The electronic keypad TP SDN provides 4 LED and the key interface TP SKN pilots only 3 LED. By default the LED are always associated to the first programs of the system.
To associate a LED to a determined program, click on the arrow next to the program number and select the program (1 to 8) to be associated.

Press:

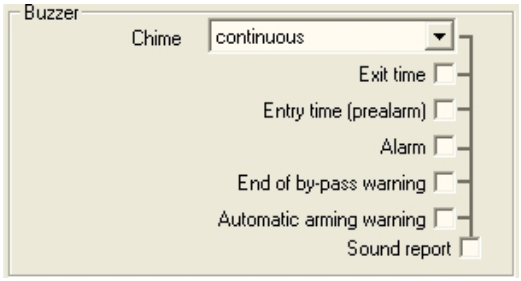
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 2.1.6 OPTIONS

Select the **Option** table.
On the screen is viewed:



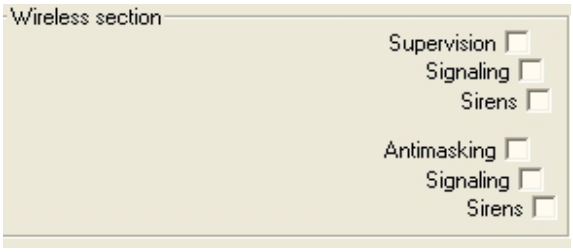

The Option configuration table permits programming of the general parameters of the control panel.




**BUZZER SECTION**
The buzzer of the consoles can be activated for the following operating conditions:

- Chime
  The buzzer is activated if one of the chime zones is opened and the relative program is disarmed.
  Select one of the following options:
  - Continuous
    The buzzer emits a 3s beep upon opening of the zone and becomes continuous if the zone remains open.
  - Pulse
    The buzzer emits a 2s beep upon opening of the zone.
- Exit time
  The buzzer is active during the programmed exit time (arming phase).
- Entry time
  The buzzer is active during the programmed entry time (prealarm).
- Alarm
  The buzzer is active during the programmed alarm time.
- End of by-pass warning
  The buzzer is active while the end-of-by-pass warning is displayed.
- Automatique arming warning
  The buzzer is active while the automatic arming warning is displayed (arming timer).

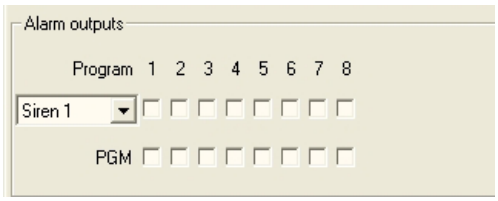
- Sound report
  Permits enabling/disabling of the announcement of the voice messages by the consoles. If enabled, the above operating conditions are announced by a voice message
  **Warning: If the sound report is enabled, it is recommended to disable the buzzer of the consoles in order to avoid the superimposition of signaling. To disable the buzzer of the consoles, use the dip-switch (dip 10) on the electronic board of the consoles.**




**WIRELESS SECTION**
Permits enabling and configuration of the supervision and antimasking functions of the wireless section:

- Supervision
  The supervision alarm is released if one of the wireless devices does not send any test signal (nor alarm signaling) for a period of time superior to the supervision interval (see time parameters).
  The supervision alarm is stored in the event buffer.
  - Signaling
    Enables/disables the visual signaling.
    If enabled, in case of supervision alarm, the trouble signaling is activated on the console, supervisory boards and logic outputs programmed.
  - Sirens
    Enables/disables the acoustic signaling.
    If enabled, in case of supervision alarm, the sirens are activated for the programmed tamper alarm time.
- Antimasking
  The antimasking alarm is released if the wireless receiver-transmitter connected to the control panel detects a jamming signal which has the same frequency as the transmission frequency of the wireless detectors and persits for a period of time superior to the antimasking filter (see time parameters).
  The antimasking alarm is stored in the event buffer.
  - Signaling
    Enables/disables the visual signaling.
    If enabled, in case of antimasking alarm, the trouble signaling is activated on the console, supervisory boards and logic outputs programmed.
  - Sirens
    Enables/disables the acoustic signaling.
    If enabled, in case of antimasking alarm, the sirens are activated for the programmed tamper alarm time.


**SOUND REPORT**
Permits enabling of the voice report by the console for all system status and alarm signaling.



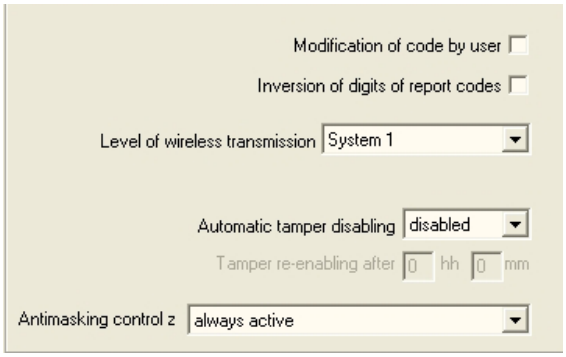

**ALARM OUTPUTS**
Permits the association of the programs to the siren output and programmable logic output to be activated in case of alarm. Every program can pilot independently:

- Logic siren 1 to 8
  The logic siren is not bound to a physical siren but is activated under determined conditions. Only in the programming section of the outputs the logic siren is associated to a siren (indoor or outdoor) output of one of the connected modules .
  To select the logic siren click on the arrow next to the inscription Siren 1 and scroll the siren list (1 to 8).
- Programmable logic output PGM
  To associate the output to the programs check the item beneath the program number.


**PROPERTIES KEY ZONE**
The key zone can be set so as to work in the following way:
- **ON/OFF**
  On/Off or switch functioning is indicated if an ON/OFF key is connected to the key zone.
- **Pulse**
  Pulse functioning is indicated if a push-button is connected to the key zone.


**SINGLE ARMING BY KEY**
The keys can be enabled for merely single arming. In this way, upon every introduction of the key into the key reader another program it is enabled for will be selected whereas the previous one is deselected.
**Warning: Valid for the key readers connected via key interface TP SKN only, but not for the key reader with mini keypad TP SK6N.**


**COUNTRY**
Selection of the destination country of the control panel.
Due to the different functioning parameters of the telephone network in each country, you must make this selection in order to guarantee the system's smooth functioning.




**MODIFICATION OF CODE BY USER**
By default the master code is the only one enabled for the modification of the user codes. If the item is checked the standard users are enabled for the modification of their proper code, but cannot view nor modify the other codes.

**INVERSION OF DIGITS OF REPORT CODES**
Permits the inversion of the report codes to be sent during the digital transmissions.
To be used only if specifically requested.

**LEVEL OF WIRELESS TRANSMISSION**
Every level of wireless transmission a different output power of the wireless receiver-transmitter corresponds to.
**Warning: Prior to setting the level of wireless transmission check for possible output power limitation in your country.**

**AUTOMATIC TAMPER DISABLING**
Permits the self-exclusion of the tamper alarms, if a determined number of tamper alarms is counted in a determined period of time.
- Disabled
- Automatic tamper disabled after 1...255 alarms (cycles)

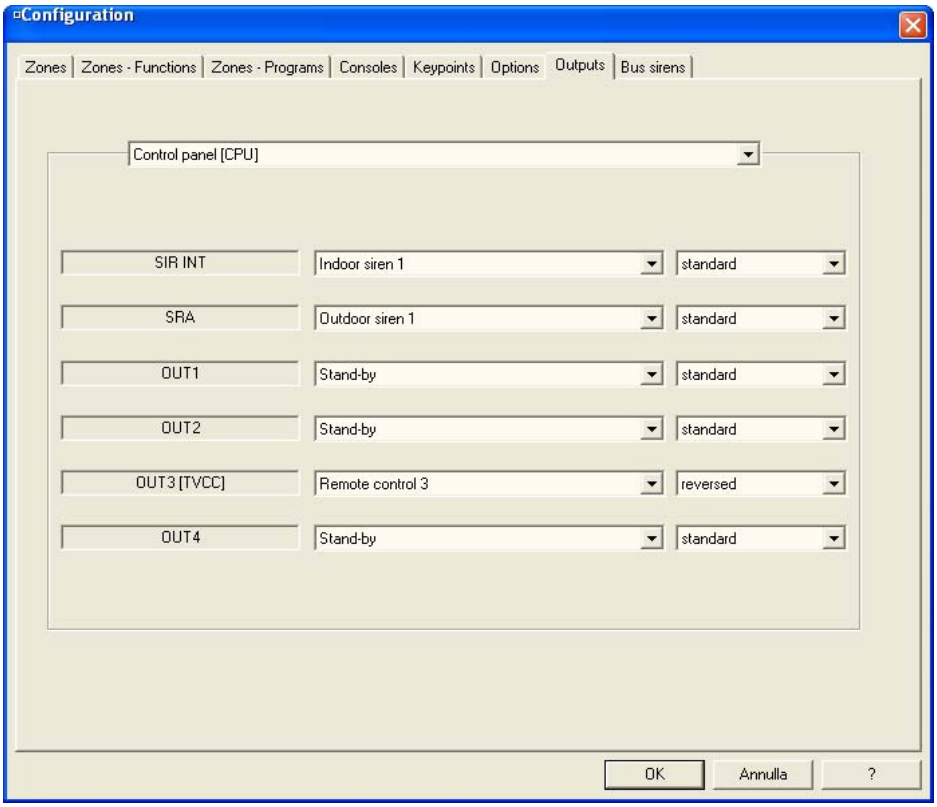
**TAMPER RE-ENABLING AFTER**
Permits programming of the period of time (in hour and minutes) after which the tamper control is re-enabled.

**ANTIMASKING CONTROL ZONE**
Permits setting of the antimasking control of the zones:
- Always active
- Alarm if program armed
- Alarm and signaling if program armed

Check the corresponding item to enable the option, then press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 2.1.7 OUTPUTS

Select the **Output** table.
On the screen is viewed:




The output configuration table permits the configuration of both the functioning logic (standard/reversed) and the function of the outputs of the control panel and the modules connected via serial bus.

**SELECTION OF THE HARDWARE MODULE**
Select the module with programmable outputs from the drop-down menu (control panel and module 1 to 15).
The device number corresponds to the address programmed on serial bus.


**OUTPUT-FUNCTION ASSOCIATION**


For each module the programmable outputs are listed on 3 lines, and for each one 3 items are shown.

- A Description item — Indicates the name of the physical output of the module.
- B Programmable item — Select the function from the drop-down menu.
- C Programmable item — Select the functioning logic of the output from the drop-down menu

The logic outputs, according to programming, can have the following functions:

| PROGRAMMABLE LOGIC OUTPUTS | | | | |
|---|---|---|---|---|
| Stand-by | Entry time (prealarm) | Remote control 5 | Program 7 | Indoor siren 8 |
| Fault | PGM | Remote control 6 | Program 8 | Outdoor siren 1 |
| Low battery | Access denied | Remote control 7 | Panic | Outdoor siren 2 |
| Power failure | Alarm | Remote control 8 | Indoor siren 1 | Outdoor siren 3 |
| Tamper | System OK | Program 1 | Indoor siren 2 | Outdoor siren 4 |
| Trouble | Mobile phone status | Program 2 | Indoor siren 3 | Outdoor siren 5 |
| Hold-up | Remote control 1 | Program 3 | Indoor siren 4 | Outdoor siren 6 |
| Technical | Remote control 2 | Program 4 | Indoor siren 5 | Outdoor siren 7 |
| Chime | Remote control 3 | Program 5 | Indoor siren 6 | Outdoor siren 8 |
| Telephone line | Remote control 4 | Program 6 | Indoor siren 7 | Reserved 1 to 16 |

According to programming, the outputs can have the following functioning logic:

| Output | Standard functioning logic | Reverse functioning logic |
|---|---|---|
| **CPU board of the control panel** | | |
| **SRA** | Stand-by: +13.8V | Stand-by: high impedance |
| | Alarm: high impedance | Alarm: +13.8V |
| **SIR INT** | Stand-by: high impedance | Stand-by: GND (ground) |
| | Alarm: GND (ground) | Alarm: high impedance |
| **OUT1-** | Stand-by: high impedance | Stand-by: presence of negative |
| | Alarm: presence of negative | Alarm: high impedance |
| **OUT2+** | Stand-by: high impedance | Stand-by: +13.8V |
| | Alarm: +13.8V | Alarm: high impedance |
| **OUT3 TVCC** | **Output dedicated to the power supply reset of the cameras. Default = remote control 3 inverted** | |
| **OUT4+** | Stand-by: high impedance | Stand-by: +13.8V |
| | Alarm: +13.8V | Alarm: high impedance |

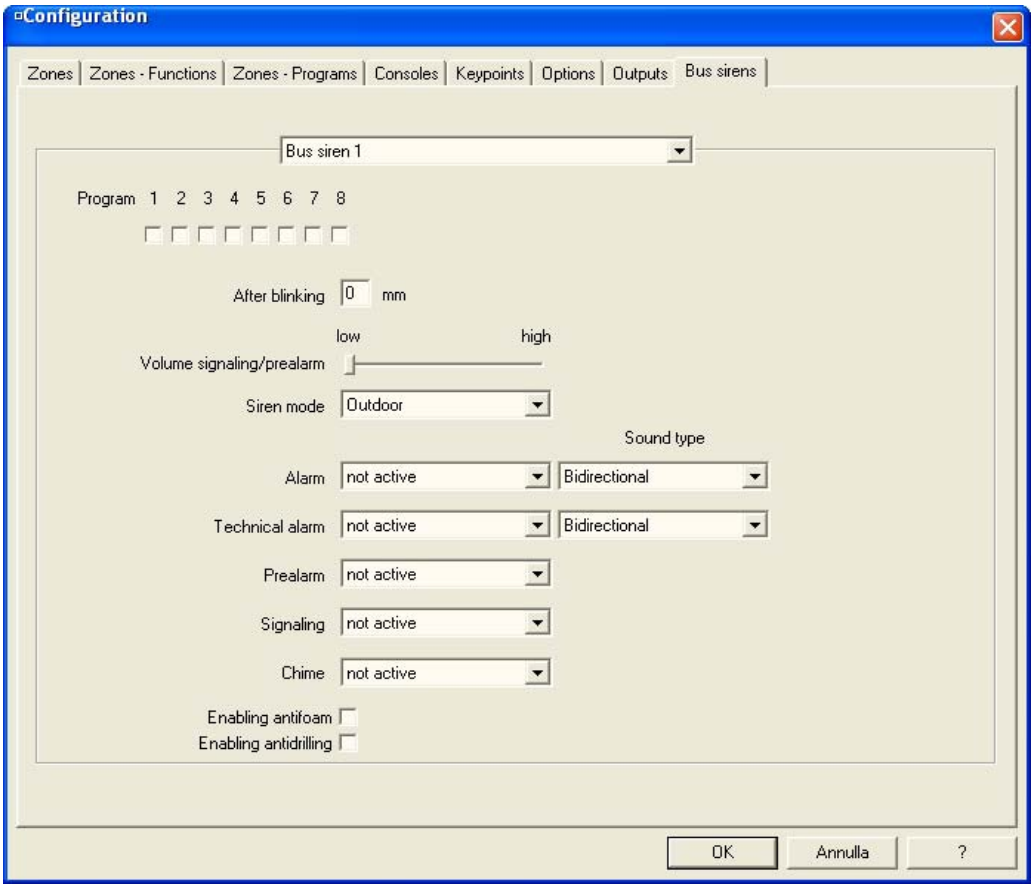
| Output extensions | | | | |
|---|---|---|---|---|
| **Modules** | **SRA** | **SIR INT** | **OUT1** | **OUT2** |
| SPEED ALM8 PLUS | **x** | **x** | **x** | **x** |
| SPEED 8 PLUS | | | **x** | **x** |
| SPEED 4 PLUS | | | **x** | |
| SPEED ALM8 | **x** | **x** | **x** | **x** |
| SPEED 8 | | | **x** | **x** |
| SPEED 4 | | | **x** | |
| SPEED 8 STD | | | | |

Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

## 2.1.8 BUS SIRENS

Select the **Bus siren** table.
On the screen is viewed:




The bus siren configuration table permits the configuration of the sirens with RSC technology which can be connected to the Siren Bus (1 to 8).

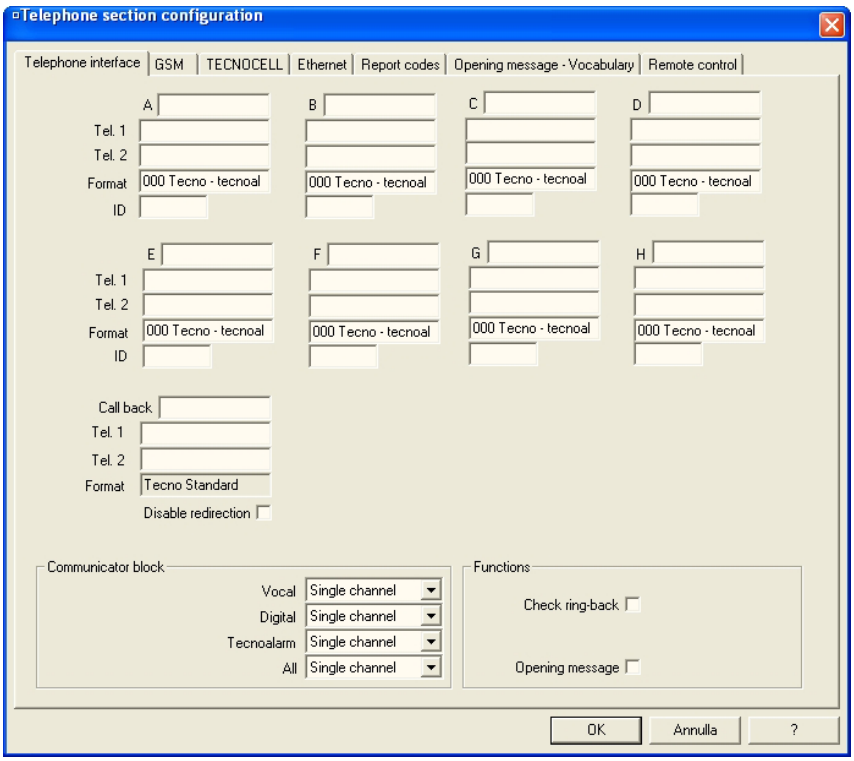
- Program
  Permits the association of the selected bus siren to the programs of the control panel (1 to 8).
- After blinking
  Defines the time of blinking once the alarm ring is off (max. 99 minutes).
- Volume signaling/prealarm
  Defines the volume of the signaling system status and prealarm (4 levels from low to high)
- Siren mode
  Selection of the functioning modes of the sirens
- Alarm
  The siren is activated when minimum one of the associated programs is in alarm (see time parameter configuration table) and in case of general alarm (tamper, trouble etc.).
  The volume is fixed whereas the sound type is programmable.
  Select one of the available options:
  - **Not active** The siren is not activated
  - **Sounding** Only the sounding is activated
  - **Flashing light** Only the flashing light is activated
  - **Sounding+flashing light** The sounding and the flashing light are activated
- Technical alarm
  The siren is activated if the technical zone is completely excluded from the programs or if it is included in one of the associated programs.
  The volume is fixed whereas the sound type is programmable.
  Select one of the available options:
  - **Not active** The siren is not activated
  - **Sounding** Only the sounding is activated
  - **Flashing light** Only the flashing light is activated
  - **Sounding+flashing light** The sounding and the flashing light are activated

- Prealarm
  The siren is activated in case of prealarm of at least one of the programs associated.
  Select one of the available options:
  - **Not active** The siren is not activated
  - **Sounding** Only the sounding is activated
  - **Flashing light** Only the flashing light is activated
  - **Sounding+flashing light** The sounding and the flashing light are activated
- Signaling
  The siren is activated if the associated programs are armed/disarmed.
  The sound type is fixed.
  Select one of the available options:
  - **Not active** The siren is not activated
  - **Sounding** Only the sounding is activated. 1 beep signals arming of the system, 3 beeps signal disarming of the control panel.
  - **Flashing light** Only the flashing light is activated. 3 flashing lights signal arming/disarming of the control panel
  - **Sounding+flashing light** The sounding and the flashing light are activated to signal arming/disarming of the control panel according to what has been described above.
- Chime
  The siren is activated if the open chime zone is completely excluded from the programs or if it is included in one of the programs associated to the siren.
  The volume is fixed whereas the sound type is programmable.
  Select one of the available options:
  - **Not active** The siren is not activated
  - **Sounding** Only the sounding is activated
  - **Flashing light** Only the flashing light is activated
  - **Sounding+flashing light** The sounding and the flashing light are activated
- Enabling antifoam
  Permits enabling/disabling of the antifoam optical protection.
- Enabling antidrilling
  Permits enabling/disabling of the antidrilling protection.

Check the corresponding item to enable the option, then press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

# 3. TELEPHONE SECTION CONFIGURATION


Select the **Telephone section configuration**.
On the screen is viewed:



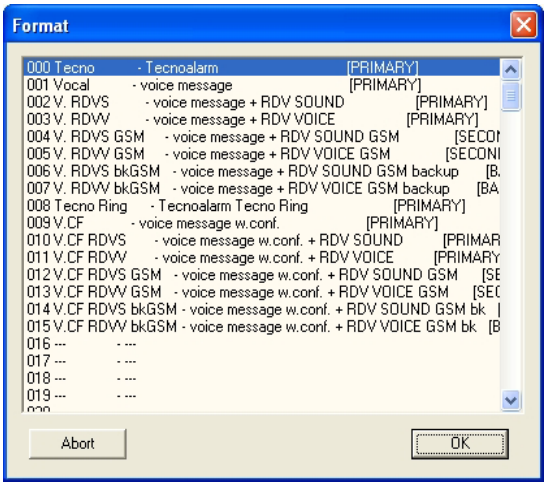

The configuration tables of the telephone section permit programming of the following parameters:

- Telephone channels and general telephone parameters
- GSM module (internal)
- External GSM telephone communicator
- Ethernet switch
- Report codes
- Opening message-Vocabulary
- Voice messages and activation time of the remote controls

## 3.1 TELEPHONE PARAMETER CONFIGURATION

### 3.1.1 TELEPHONE CHANNELS AND STANDARD TELEPHONE PARAMETERS

The control panel is able to transmit alarm signaling or other data using either digital protocols or pre-recorded vocal messages (composed of words of the vocabulary).
It can transmit and receive alarm signaling using the digital Tecnoalarm protocol or the most frequently used digital protocols.
**Programming upload and download is possible using the Tecnoalarm protocol only.**
The incorporated telephone interface provides 8 channels (A, B, C, D, E, F, G, H) individually programmable with a description, a principal and a reserve telephone number, the transmission protocol and the ID code. Furthermore, it is possible to determine the channels to be blocked on reception of the corresponding command, i.e. vocal, digital Tecnoalarm, all, singularly or simultaneously.
The principal telephone number is always called first and the reserve one is only called in case there is no answer or if the line is busy.
The user can block the telephone channels by clicking on the * key of the telephone.
It is possible to define which channels are affected by the block.




**TELEPHONE CHANNELS**

For each telephone channels it is possible to program the following parameters:

- A...H
  Description which identify the channel (max. 14 digits).
- Tel. 1
  The principal telephone number that will always be called first (max. 24 digits).
- Tel. 2
  Reserve telephone number that will be called if there is no answer to the principal number or the line is busy (max. 24 digits).
- Format
  The transmission protocole is identified by a 3-digits code. All the channels are programmed by default with the digital Tecnoalarm protocol (000 Tecno).
  By clicking on Format, the beside image is viewed.
- ID
  The identification code of the channel is composed of 2 to 6 digits and permits the connection of the control panel to different monitoring stations requiring ID codes of different lengths, i.e. a monitoring station can require the 1234 code while another monitoring station may expect 223344.
  Thanks to the identification code, the monitoring station identifies the telephone channel and the control panel from which the alarms comes.
  Repeat the same procedures for each telephone channels to be programmed.
  **Warning: It is compulsory to program the ID code of the channel.**
  **All the channels have the same priority.**
  **The alarm are transmitted in chronological order starting with channel A.**
  **The only exception is the hold-up alarm.**
  **If a transmission of another alarm is in course, the active alarm call is interrupted to execute immediately the call for hold-up. At the end of the alarm call, the previous call is restarted. From that onwards, the normal order continues.**

**CALL-BACK**

The call-back numbers are indispensable for remote programming of the control panel. When the installer tries to connect to the control panel via telephone line, the onboard telephone section interrupts the communication after an initial data exchange and calls the call-back numbers (starting with the principal one).
The numbers should correspond to either the installer or the monitoring station authorized for remote programming. This mechanism has been developed so as to protect both the user and the installer against attempts at sabotage.
If both calls are unsuccessful, another four attempts are made alternating the first and second call-back number.

- call-back
  Description which identify the owner of the call-back numbers, i.e. installer (max. 14 digits)
- Tel. 1
  The first call-back number is always called (max. 17 digits).
- Tel. 2
  The second number (max. 17 digits) is only called if the first call is unsuccessful (line busy or no answer).
- Format (protocol)
  Call-back communication protocol.
  The protocol for call-back communications is unchangeable, i.e. digital Tecnoalarm format (000 Tecnoalarm).
- Disable redirection
  The redirection of call-back permits the deviation of the call-back to a telephone number different from those entered in the telephone configuration table.
  If the corresponding item is checked, the function is **disabled**. In this way, the control panel calls the 2 numbers programmed in the telephone configuration.
  If the corresponding item is not checked, the function is **enabled**. In this way, using the programming and monitoring software it is possible to redirect the call-back by programming a different call-back number in the software configuration (icon with PC and the 3 blue keys). The control panel makes the call-back using the indicated new number.

**COMMUNICATOR BLOCK**
The telephone channels are classified by the kind of protocol they use, i.e. the voice protocol, the special digital format developped by Tecnoalarm or one of the most common digital formats.
The telephone section of the control panel can be set so as to block the specified channels upon reception of the blocking command (* on the telephone dial).
According to programming, the communicator block affects either the vocal, digital or Tecnoalarm channels or all three and this either singularly or altogether:

- Vocal
  The communicator block affects only those channels transmitting voice messages.
  - Single channel
    Upon reception of the blocking command the active call is interrupted and the alarm call cycle of the active voice channel is blocked.
  - All channels
    Upon reception of the blocking command the active call is interrupted and the alarm call cycles of the active voice channel as well as all the other voice channels programmed for the event are blocked.
    **Warning: The voice channel can be blocked only by pressing the key * or # on the telephone dial. Any voice command is ignored.**
- Digital
  The communicator block affects only those channels using digital non-Tecnoalarm formats.
  - Single channel
    Upon reception of the blocking command the active call is interrupted and the alarm call cycle of the active digital channel is blocked.
  - All channels
    Upon reception of the blocking command the active call is interrupted and the alarm call cycles of the active digital channel as well as all the other digital non-Tecnoalarm channels programmed for the event are blocked.
    **Warning: The digital non-Tecnoalarm protocols are to devide in single type and multiple type protocols. In any case, both if a single type protocol is programmed or not, the other events are transmitted. No event will be lost due to the communicator block!**
    **Single type protocols transmit one event at a time, i.e. they close down the communication once the event has been transmitted and recall to transmit the next one. The multiple type protocols transmit the entire queue of events before they close down the communication.**
- Tecnoalarm
  The communicator block affects only those channels using the digital Tecnoalarm format.
  - Single channel
    Upon reception of the blocking command the active call is interrupted and the alarm call cycle of the active digital Tecnoalarm channel is blocked.
  - All channels
    Upon reception of the blocking command the active call is nterrupted and the alarm call cycles of both the active and all the other digital Tecnoalarm channels programmed for the event are blocked.
- All
  The communicator block affects all the telephone channels independently from the protocol they use.
  - Single channel
    Upon reception of the blocking command the active call is interrupted and the alarm call cycle of the active channel is blocked.
  - All channels
    Upon reception of the blocking command the active call is interrupted and the alarm call cycles of the active and all the other vocal and digital channels programmed for the event are blocked.

**FUNCTIONS**

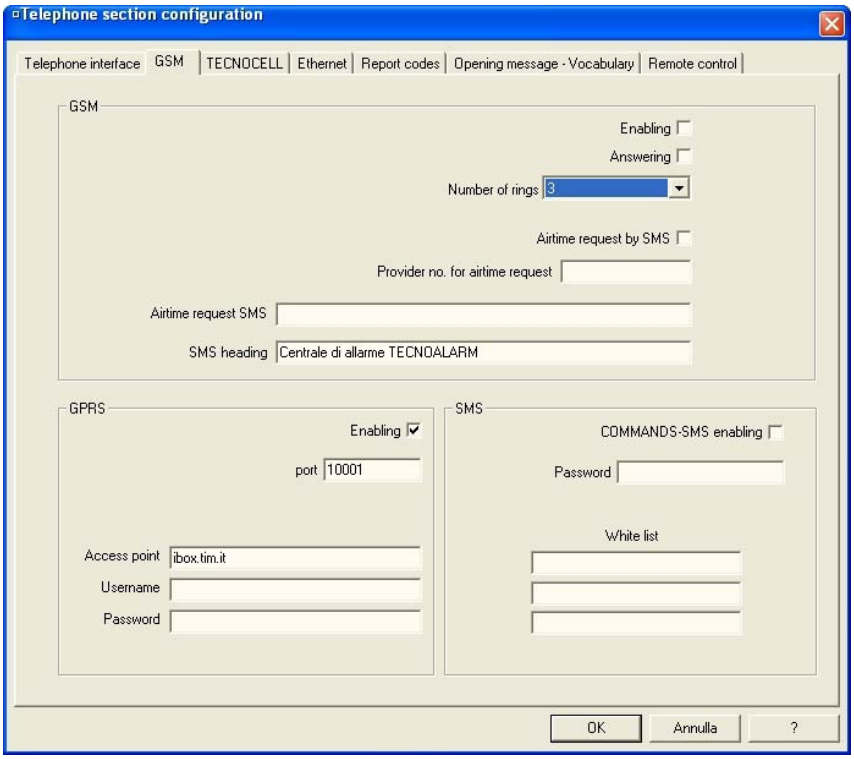
- Check ringback
  If enabled, the control panel waits for the ringback tone before it transmits a message.
- Opening message
  This function is valid only for the voice protocols.
  If the function is enabled, the control panel transmits the opening message before the alarm message. If the function is disabled, the control panel transmits only the alarm message.

See § 3.2 for explanatory notes.
Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

### 3.1.2 GSM MODULE

Select the **GSM** table.
On the screen is viewed:




The GSM configuration table permits programming of the integrated GSM interface, enabling of the GPRS functioning, programming of the airtime request as well as the heading of the SMS alarm messages.

If prepaid SIM cards are used, some of the mobile service providers allow to request the remaining airtime request via SMS message.
**Warning: Since the English manuals are used in a vast geographical area, involving a hudge number of mobile phone providers and a consequently great diversity in airtime management, it is understood that we cannot go into details. Thus, we will confine ourselves to explaining the functioning of the control panel without stating any examples.**

**GSM**

- Enabling
  Permits enabling/disabling of the integrated GSM interface.
- Answering
  If enabled (item checked), after the programmed number of rings, the internal GSM telephone communicator answers to incoming calls introducing the telephone guided menu.
- Number of rings
  Permits programming of the number of rings (3 to 15) after which the internal GSM telephone communicator answers the incoming calls.
  By default, it is programmed to answer after 3 rings
- Airtime request by SMS
  Permits enabling of the airtime request by sending an SMS message to the service provider as an alternative to telephone call.
  Check the item to enable this function.
- Provider No. for airtime request
  The telephone number the service provider has reserved for receiving the SMS with the remaining airtime request.

**AIRTIME REQUEST BY SENDING AN SMS MESSAGE**
If the provider offers this kind of service, once the provider number and (the case being) the airtime request by SMS has been programmed, it is possible to check the remaining airtime as follows:
- Send an SMS message with the text "**CREDIT**" (capital letters) to the telephone number of the prepaid SIM card of the control panel.
- On reception of the SMS, the control panel queries the service provider for the remaining airtime following the above procedure.
- On reception of the remaining airtime value, the control panel forwards it by SMS message to the number which has requested the airtime.

- Airtime request SMS
  Text of the message for the airtime request (max. 40 digits).
- SMS heading
  The SMS sent by the control panel are automatically composed by the system. To distinguish the origin of the messages (sender), it is possible to program an SMS heading (max. 40 digits without accents).

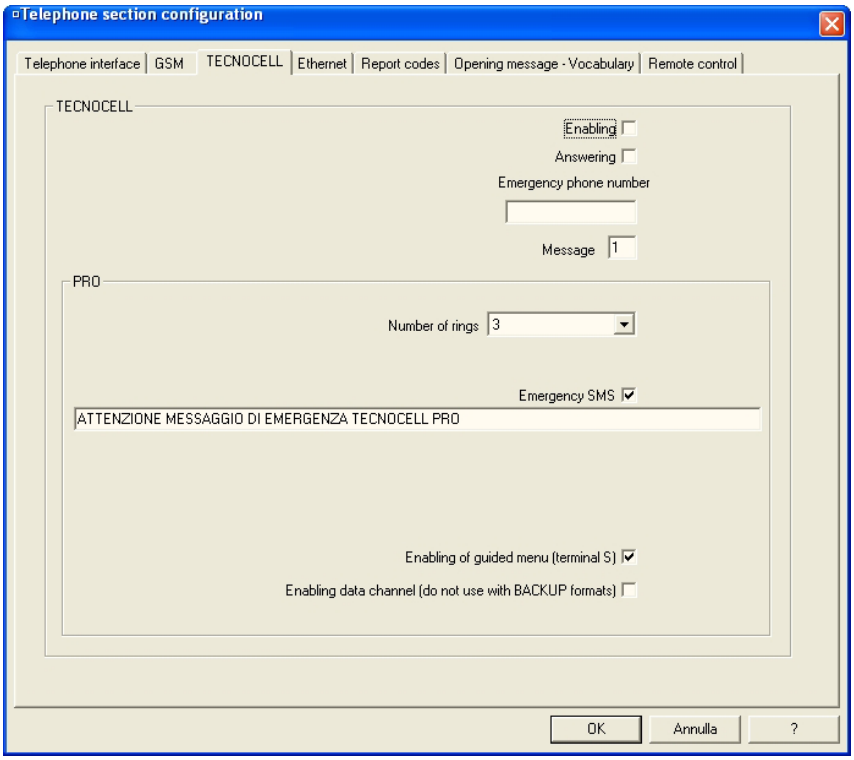
**GPRS**
- Enabling
  Permits enabling/disabling functioning of the GRPS channel of the integrated GSM interface.
- Port
  Enable the Tecnoalarm service. By default 10001.
- Access point
  Defines the access point to the network.
  The GPRS connection is not a telephone connection, but it is rather similar to the Ethernet connection. The connection is made by means of the Internet network. Therefore, it is necessary to enter the network through an access point.
  The access parameters are provided by the telephone provider.
  **Warning: Since the access parameters are indicative and may vary according to the telephone operators, it is recommended to contact the service provider in order to obtain detailed information.**
- Username
- Password

**SMS**
Permits the activation and deactivation of the remote controls by SMS.
- COMMANDS-SMS enabling
  Check the item to enable the function.
- Password
  Password (max. 8 alphanumeric digits).
  N.B. For security reasons, the control panel only accepts SMS commands with the correct syntax and the programmed password.
  **Syntax of SMS commands:**
  <password><blank space><name/number of the remote control><blank space><command>
- White list
  List of the telephone numbers which are enabled for the SMS commands.
  If at least one telephone number is programmed, the control panel accepts the SMS commands only from the programmed telephone numbers. If no number is programmed, the control panel accepts the SMS commands from any telephone number.
  **Warning: Since the international prefix is not considered, it is redundant. For security reasons, it is strongly recommended to program the white list in order to limit the access by SMS to a few reliable people.**

See § 3.2 for explanatory notes.
Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

### 3.1.3 TECNOCELL

Select the **Tecnocell** table.
On the screen is viewed:




**TECNOCELL**
The Tecnocell configuration table permits enabling and programming of the external GSM telephone communicator.

- Enabling
  If enabled, the external GSM telephone communicator signals the alarms to the control panel in case of failure of the integrated GSM module (primary channel).
- Answering
  If checked, the GSM telephone communicator answers incoming calls transmitting one of the two prerecorded system status messages (control panel in stand-by or alarm active). By default, the GSM telephone communicator answers after 3 rings.
  The message is repeated until communication shutdown.
- Emergency phone number
  The GSM telephone communicator communicates constantly via RS485 serial bus with the control panel. If the communication is interrupted (serial bus badly connected or missing) for more than 30 seconds, the GSM telephone communicator makes an emergency voice call at the programmed number (max. 17 digits) transmitting the selected emergency message.
  Enter the emergency number in the item.
- Message
  Program the message to be sent during the emergency call by entering the number (1 to 4) in the item.
  **Warning: This function is available only if the GSM telephone communicator is equipped with the optional voice messages board VOICE.**

**PRO (only for the TECNOCELL-PRO PL)**

- Number of rings
  The number of rings prior to answering to incoming calls is programmable from 3 to 15.
  By default, the telephone communicator with GSM module answers after 3 rings.
- Emergency SMS
  Enabling of the emergency SMS cancels the emergency voice call.
  If the emergency SMS function is enabled and if the communication via RS485 serial bus with the control panel is interrupted (serial bus badly connected or failed) for more than 30 seconds, the GSM telephone communicator sends an emergency SMS (max. 80 characters) to the programmed emergency number.
  Check the item to enable the emergency SMS and enter the message to be transmitted.
  The text of the message to be transmitted is programmed by default but can be modified.

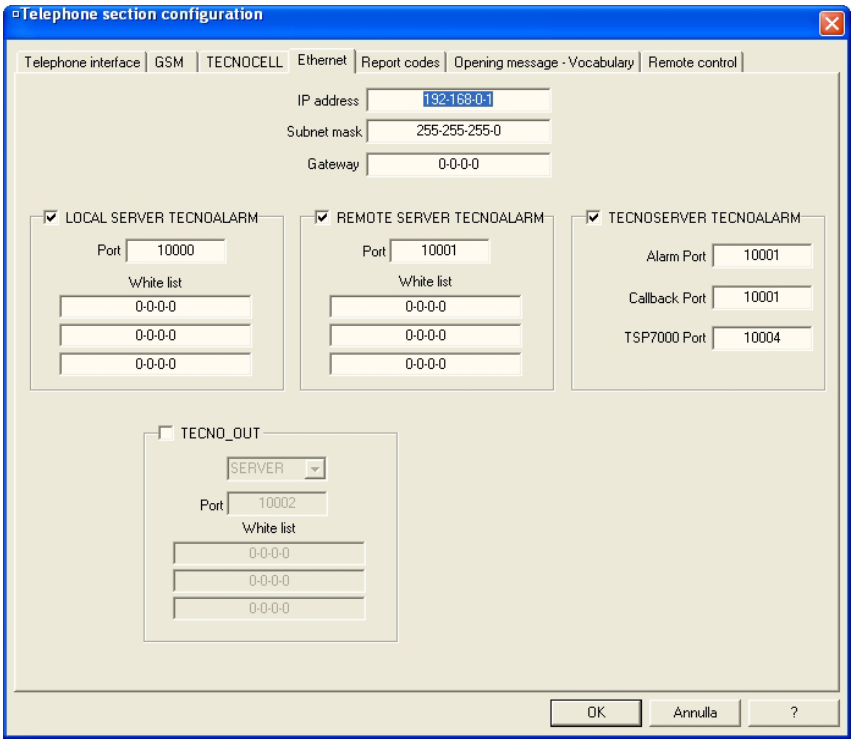
- Enabling of guided menu (terminal S)
  The TP8-96 VIDEO control panel composes the voice messages itself with the help of the onboard vocabulary and communicates it together with the recipient's telephone number via the S-wire (speaker terminal on the CPU board) to the GSM telephone communicator. Guided menu supported voice messages are more detailed than those residing on the SIM of the GSM module.
  Check the item to enable the function.
- Enabling data channel (do not use with BACKUP formats)
  Never use the data channel as a backup channel. Any possible backup call using the GSM telephone communicator in the data mode (digital) will not succeed.

Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

### 3.1.4 ETHERNET

Select the **Ethernet** table.
On the screen is viewed:




The Ethernet configuration table permits programming of the following parameters:

- IP address
  Permits programming of the control panel IP address. The network address permits identification in an univocal mode of the control panel connected on the Internet network.
- Subnet mask
  Defines the Subnet mask address which is related to the IP address. The two addresses are automatically compared and the result determines the direction of the datas sent towards the Gateway (WAN) or the local network (LAN).
- Gateway
  It is the IP address of a device which connect the local network (LAN) to the extended one (WAN).
  It transmits the communication packs to the external local network, therefore it sends the trafic directed to the exterior towards the Internet network.

**LOCAL SERVER TECNOALARM**
Check the item to enable/disable the function.

- Port
  TCP/IP communication port of the local Tecnoalarm server channel. Communication port for local programming by PC. Local connection between PC and control panel.
- White list
  List of 3 acceptable communication addresses. If the white list contains addresses, the communication is accepted from these addresses. If no address has been programmed (i.e. all 3 addresses are 0-0-0-0), the communication is accepted from any other address.

**REMOTE SERVER TECNOALARM**
Check the item to enable/disable the function.

- Port
  TCP/IP communication port of the remote Tecnoalarm server channel. Communication port for remote programming by PC. Remote connection between PC and control panel.
- White list
  List of 3 acceptable communication addresses. If the white list contains addresses, the communication is accepted only from these addresses. If no address has been programmed (i.e. all 3 addresses are 0-0-0-0), the communication is accepted from any other address.

**TECNOSERVER TECNOALARM**
Check the item to enable/disable the function.

- Alarm Port
  TCP/IP communication port through which the control panel transmits the alarms to the monitoring station (remote connection between monitoring station and control panel).
  Modify the number only if the PC port is occupied by another application.
- call-back Port
  TCP/IP communication port through which the control panel executes a call-back (remote connection between monitoring station and control panel).
  Modify the number only if the PC port is occupied by another application.
  **Warning: The port number must be programmed in the Modem Port page of the monitoring station configuration.**
  **This function is enabled only to the owners of the Remote IP licence.**
- TSP7000 Port
  TCP/IP communication port through which the control panel communicates with the TSP7000 console (local connection between TSP7000 and control panel).
  **Warning: The port number should not be modified.**

**TECNO_OUT**
Protocol for implementing an interface software for Building Management Systems (BMS). The Tecno Out protocol is only disclosed to whom has signed the Non-disclosure Agreement.
Check the item to enable/disable the function.
It is possible to select the Server or Client functioning mode.

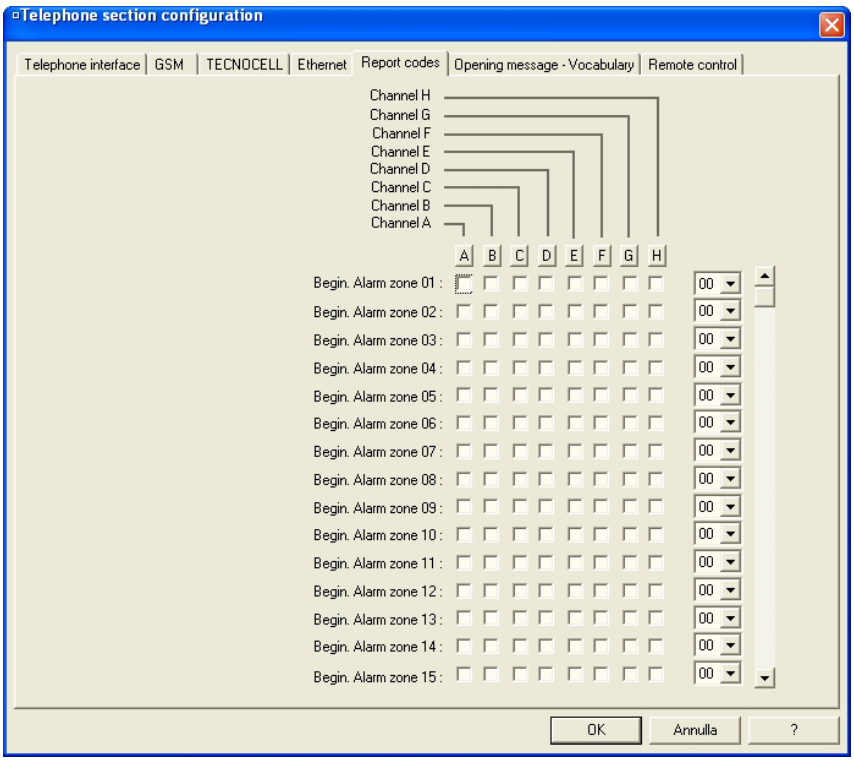
- Port
  TCP/IP communication port for the Tecno Out protocol.
- White list
  List of 3 acceptable communication addresses. If the white list contains addresses, the communication is accepted only from these addresses. If no address has been programmed (i.e. all 3 addresses are 0-0-0-0), the communication is accepted from any other address.

Press:

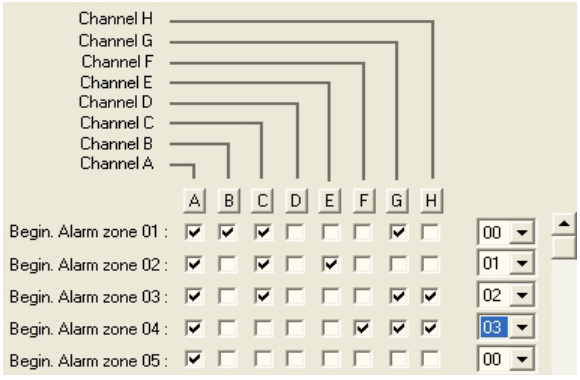
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 3.1.5 REPORT CODES

Select the **Report code** table.
On the screen is viewed:




The report codes configuration table permits both the association of the events to the channels and programming of the report codes. The report codes identify the type of alarm or event transmitted in digital calls towards non-Tecnoalarm devices, such as monitoring stations of other manufacturers.
Each event can be associated a 2-digits hexadecimal code (00 to FF) to.




**EVENT-CHANNEL ASSOCIATION**
The 8 available channels are identified by the letters A to H positioned on top of as many columns.
The 263 transmittable events are listed in this table.
To associate a specific event to a specific channel, check the item of the channel level with the desired event.
To associate all the events to a specific channel, click on the letter corresponding to the desired channel.
All the items of the column will be selected automatically.

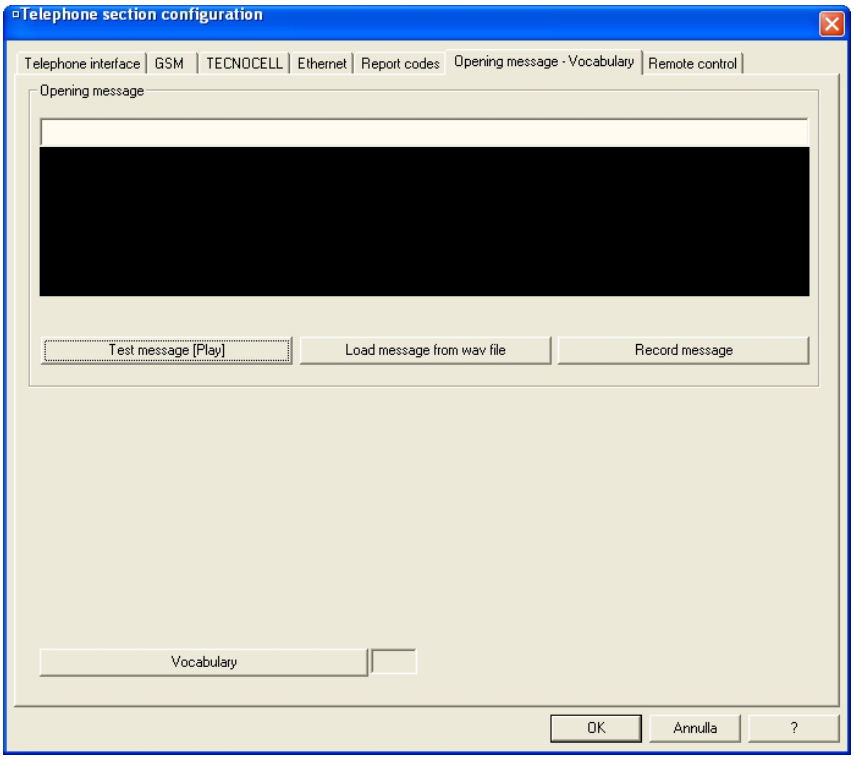
**REPORT CODES DEFINITION**
The report codes must only be used on specific request by the third party's monitoring stations which use proprietary communication protocols.
To modify the hexadecimal value of the report code, click on the item and select the desired value.

Scroll down to display all the events.

Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

### 3.1.6 OPENING MESSAGE-VOCABULARY

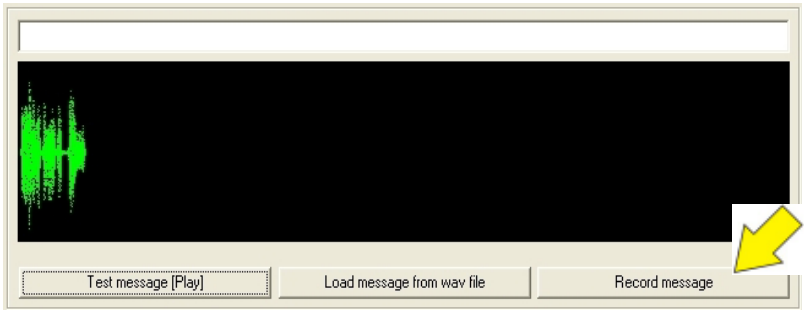
Select the **Opening message-vocabulary** table.
On the screen is viewed:




The configuration table Opening message-vocabulary permits testing/recording/loading of the opening message used by the telephone channels during vocal transmissions.
The same menu permits loading or updating of the vocabulary of the control panel.
The opening message precedes each voice message transmitted by the control panel and identifies the alarm system.

- Test message (Play)
  Permits the reproduction of the programmed message.
- Load message from WAV file
  Permits downloading of a WAV file (e.g. from hard disk or floppy) and programming it as the opening message.
- Record message (sound card)
  Permits recording of the opening message using either a microphone and the sound card of the PC and the Tecnoalarm software, or sound management software installed on the PC, or by telephone during a voice call.
  It is possible to use any of the three recording methods.
- Vocabulary
  Permits the selection of the language of the vocabulary used for the voice messages of the system.

**RECORDING OF THE OPENING MESSAGE WITH TECNOALARM SOFTWARE**
Connect a microphone to the sound card of your PC and press the button **Record message (sound card)** to start recording.
Speak clearly and loudly. On the screen, the opening message recorded will be displayed as a sound wave.
For interruption, press the button **Record message (sound card)** again.
The maximum recording time is **16 seconds**. Upon expiry of the recording time, recording is automatically stopped.

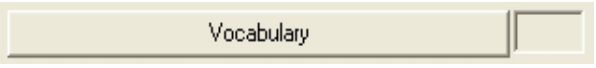


**RECORDING OF THE OPENING MESSAGE WITH A SOUND MANAGEMENT SOFTWARE**
Connect a microphone to the sound card of your PC and run the sound manager, and then follow the instructions of the software.
Format to use for recording:.

- Format for recording: Windows PCM (.wav)
- Sampling frequency: 8KHz - Mono
- Data format: 8 Bit
- Maximum message length: 16 seconds

**RECORDING OF THE OPENING MESSAGE BY TELEPHONE**
The message can be recorded during a voice call with the control panel.
The 10 seconds recording time is unchangeable.
Since the recording time is unchangeable, it is recommended to record a message of approximately 10 seconds length in order to avoid mute periods during the reproduction of the message.
**Warning: To record the message it is necessary to call the control panel by telephone and enter a valid code which permits the access to the guided menu.**

**SELECTION OF THE VOCABULARY**
Permits the selection of the language used for the voice messages of the control panel as well as the selection of vocabularies which have been customized with the TecnoMSG software.
**Warning: The selection and modification of the voice messages of the system requires a specific software utility, TECNOMSG, and is subject to license.**




Press the **Vocabulary** button

The English vocabulary can be found in the following directory:
**C:\Program files\Tecnoalarm\Centro\WAV2\ENG**
Select the file **Msg_cnf.tcn**.

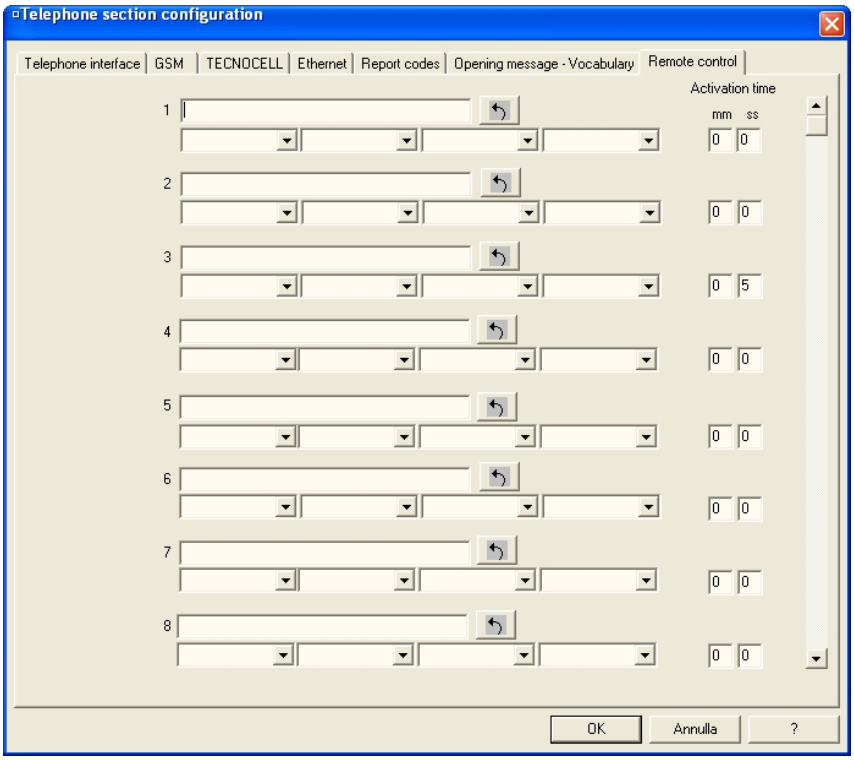
The control panel uses the standard vocabulary if the item next to the vocabulary button is empty.

Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

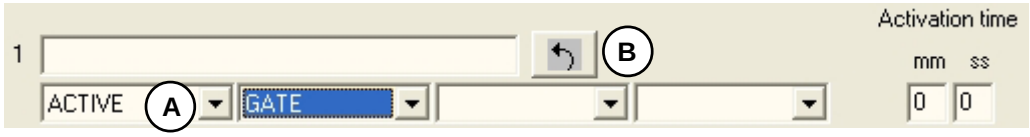
## 3.1.7 REMOTE CONTROLS

Select the **Remote control** table. On the screen is viewed:




**ALPHANUMERIC DESCRIPTION**

The control panel can manage max. 8 remote controls.
It is possible to associate an individual description to each remote control that will replace the zone number and identify the program in every process. The remote control description will be viewed on the display and announced by the speaker of the console.




**A** The voice message can be composed of max. 4 words selectable among those included in the vocabulary.
4 items are viewed, one for each word.
Click on the arrow of each item to scroll the vocabulary and select the word.

**B** At the end, click on the validation arrow key B to memorize and play the message.
The words are copied into the description line. It is possible to program the description manually writing directly it in the description line.
Remember that the display of the console views descriptions of maximum 16 characters. All further characters will be cut off.

**ACTIVATION TIME**

Permits programming of the activation time (in minutes and seconds) of each remote control.
From 0 to 59 minutes and 59 seconds.

- Pulse functioning — Functioning is intermittent if an activation time has been programmed. On reception of the commutation command, the remote control is activated whereas on expiry of the programmed activation time the remote control automatically returns to stand-by.
  - Command = < commutation > < activation time > < stand-by>
- Toggle functioning — Functioning is static if no activation time has been programmed, i.e. each time a commutation command is sent, the remote control changes status.
  - Command = < commutation >
  - Command = < stand-by >

Repeat the operations for every remote control to be configured (max. 8), then press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

## 3.2 EXPLANATORY NOTES

### Telephone number format

The telephone numbers may be composed of maximum 24 digits, and may refer to the telephone numbers of a fixed telephone network (PSTN) or the mobile phone network (GSM) or IP addresses of the network.

- Telephone number
  Format of a telephone number.
  There is no particular rule for the telephone number formatting.
- IP address (ethernet network)
  Format of an IP address.
  The IP address can be composed of 4 or 5 numerical items which are separated by a point or a dash.
  The last item can be finished with the letter G.
  - The first 4 items correspond to the Tecnoalarm monitoring station with which the system must communicate.
  - The fifth item indicates the access port (it is not compulsory to fill in this item).
  - The last letter G indicates to the control panel the GRPS communication mode

  The control panel can contact the IP addresses using either the internal Ethernet switch or the GSM module in the GPRS mode.

| Type of address | Communication vector GSM mode GPRS | Communication vector TCP/IP Ethernet |
|---|---|---|
| IP address | 217.15.24.233G | 217.15.24.233 |
| IP address + input port | 217.15.24.233.10033G | 217.15.24.233.10033 |

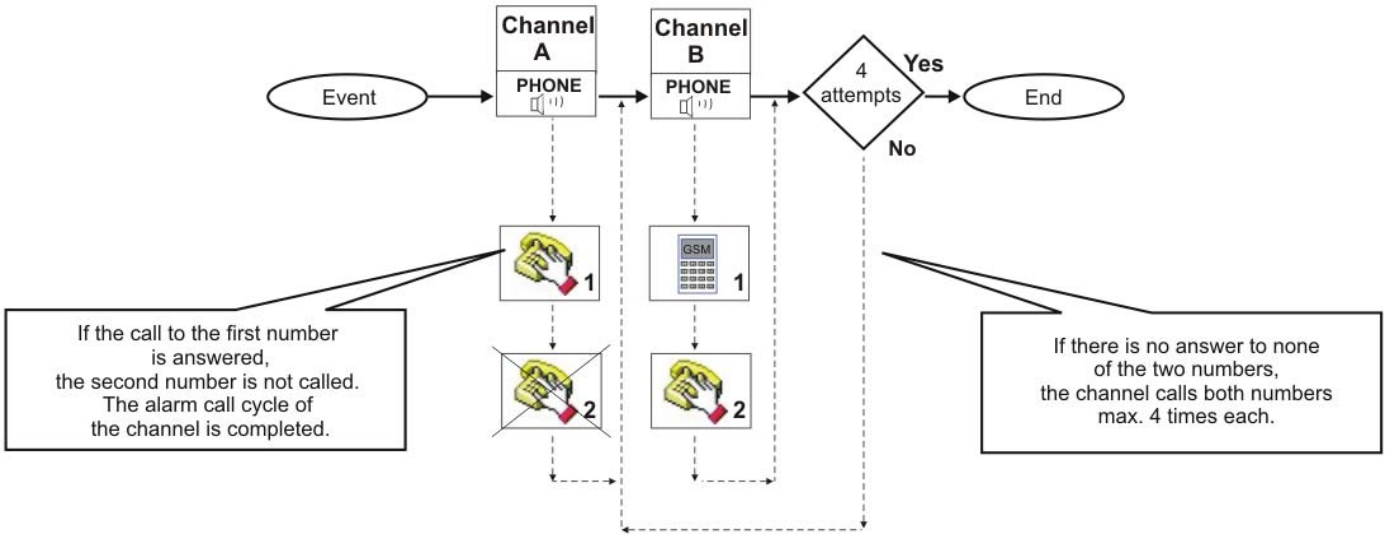
**Warning**
The IP address is composed of 4 numerical items. The items are separated by a point or a dash.
The fifth item is the eventual port indication which is separated by a point too.
The final digit G is near the last number of the address without space.

217.15.24.233 .10033 G
Address Port End

### Alarm call cycle

The principal number 1 (N. tel. 1) is called first. In case there is no answer or the line is busy, the reserve number (N. tel. 2) is called. If there is no answer to both numbers, the system passes to the next channel associated to the same event.
For each channel, 4 attempts are executed calling alternatively the first and the second number.

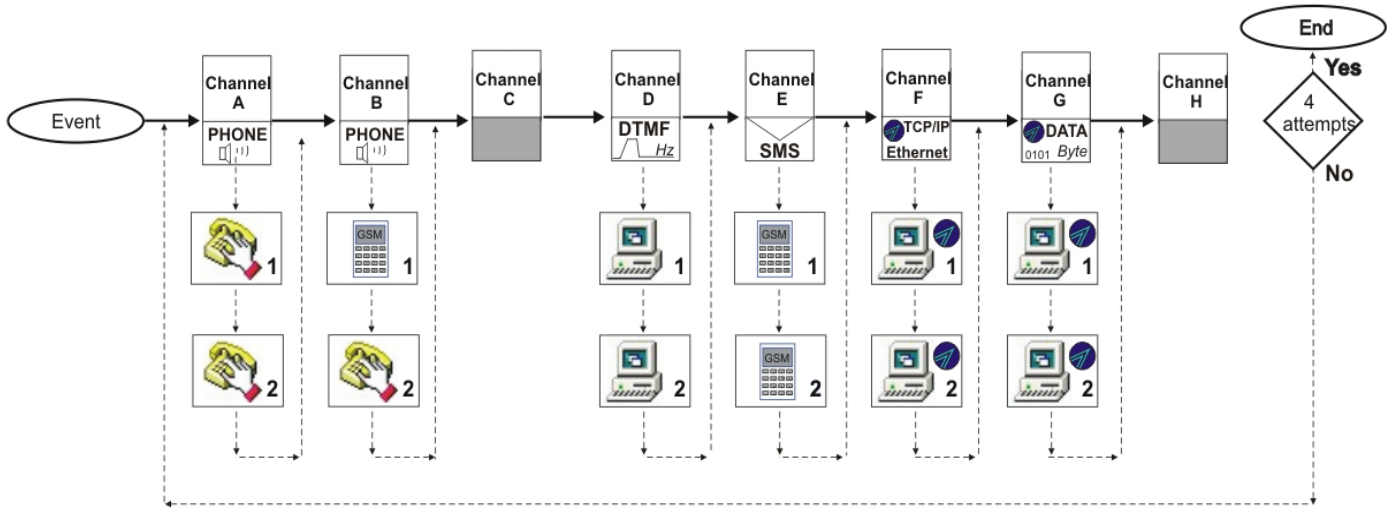
**Example an alarm call cycle**



## Priority of the call cycle

All the channels have the same priority. Each alarm call cycle starts with channel A, followed by B, C, D, E, F, G and H. The only exception is the hold-up alarm. If an alarm is being transmitted, the active alarm call cycle is interrupted and the hold-up alarm call cycle is started immediatly. At the end of the alarm hold-up call cycle, the previous alarm call cycle is restarted. Henceforward, the normal order continues. By default, the call-back has no priority and can be interrupted by any alarm call cycle. However, it can be given priority thanks to the “notification block” function.

Example of an alarm call cycle without answer and without communicator block




## Protocols

The communication protocols of the control panel are divided into vocal, digital and Tecnoalarm digital protocols. The telephone channels of the control panel support the PSTN, GSM and Ethernet vectors. In addition to the integrated GSM interface, the control panel manages the GSM telephone communicator connected via serial bus (TECNOCELL).
Each protocol has a number code.
The protocols are classified as:

- Primary — transmitted by the GSM module of the control panel
- Secondary — transmitted by the external GSM telephone communicator
- Backup — transmitted by the GSM module of the control panel
  If the integrated GSM module fails, the alarm is transmitted by the external GSM telephone communicator.
- Ethernet — transmitted by the Ethernet switch of the control panel

## Protocol tables

The protocols are divided into three categories (digital, Tecnoalarm, vocal). For each protocol the number code, the description, the type (primary, backup, secondary, Ethernet) and the transmission mode are indicated.

| | GSM | GSM / Tecnocell | Tecnocell | | |
|---|---|---|---|---|---|
| Digital protocol | Primary | Backup | Secondary | Trans-mission mode | Block |
| DTMF C.ID s - Ademco Contact ID - single | 131 | | | DTMF Hz | Digital |
| DTMF C.ID - Ademco Contact ID | 139 | 184 | 168 | DTMF Hz | Digital |
| SMS - SMS | 166 | | | SMS | Digital |
| SMS Ring - SMS with ring | 167 | | | SMS | Digital |

| Tecnoalarm protocols | GSM Primary | GSM / Tecnocell Backup | Tecnocell Secondary | Ethernet TCP/IP | Trans-mission mode | Block |
|---|---|---|---|---|---|---|
| Tecno - tecnoalarm | 000 | 176 | 160 | | DTMF Hz | Tecnoalarm |
| Tecno RING - Tecnoalarm Tecno ring | 008 | | 174 | | RING | Tecnoalarm |
| Tecno Data Gsm - Tecnoalarm Data | 175 | | | | DATA 0101 Byte | Tecnoalarm |
| Tecno Data GPRS - Tecnoalarm Data GPRS | 182 | | | | DATA 0101 Byte | Tecnoalarm |
| TecnoRING Data - Tecno RING Data Gsm | 190 | | | | DATA 0101 Byte | Tecnoalarm |
| TCPIP - Tecnoalarm TCP/IP | | | | 192 | DATA 0101 Byte | Tecnoalarm |

| Vocal protocols | GSM Primary | GSM / Tecnocell Backup | Tecnocell Secondary | Trans-mission mode | Block |
|---|---|---|---|---|---|
| Voc.- Voice Msg. | 001 | 181 | 165 | PHONE | Vocal |
| Voc.RDVS - voice msg. + RDV sound | 002 | 006 | 004 | PHONE | Vocal |
| Voc.RDV - voice msg. + voice RDV | 003 | 007 | 005 | PHONE | Vocal |
| Voc.CF - voice msg. with confirmation | 009 | | | PHONE | Vocal |
| Voc.CF.RDVS - voice msg.with conf.+ RDV sound | 010 | 014 | 012 | PHONE | Vocal |
| Voc.CF.RDV - voice msg.with conf.+ Voice RDV | 011 | 015 | 013 | PHONE | Vocal |
| Voc.1 - voice msg. 1 | | 177 | 161 | PHONE | Vocal |
| Voc.2 - voice msg. 2 | | 178 | 162 | PHONE | Vocal |
| Voc.3 - voice msg. 3 | | 179 | 163 | PHONE | Vocal |
| Voc.4 - voice msg. 4 | | 180 | 164 | PHONE | Vocal |
| Voc.1 CF - voice msg. 1 confirmation | | 185 | 169 | PHONE | Vocal |
| Voc.2 CF - voice msg. 2 confirmation | | 186 | 170 | PHONE | Vocal |
| Voc.3 CF - voice msg. 3 confirmation | | 187 | 171 | PHONE | Vocal |
| Voc.4 CF - voice msg. 4 confirmation | | 188 | 172 | PHONE | Vocal |
| Msg.Voc.CF - voice msg. with confirmation | | 189 | 173 | PHONE | Vocal |

## Communicator block

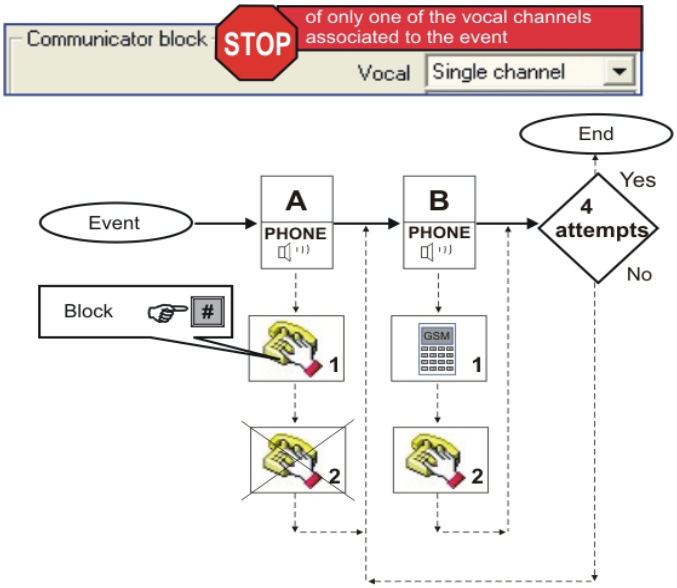
The alarm call cycle can be interrupted. The recipients of the calls, users or automatic alarm reception devices, can block the active channel as well as the other channels programmed for this event with a specific command.
The communicator block distinguishes: vocal, digital and Tecnoalarm protocols. It can be selective for each category of protocols, i.e. it can be set so as to act on the single or on all of the channels which use a determine category of protocols and are associated to the same event.
The communicator block can also be programmed so as to clock them all, i.e. to be not selective. In this case it blocks all the telephone channels whatever category of protocols they use and indeed the single or all of the channels associated to the event which has released the alarm call cycle.

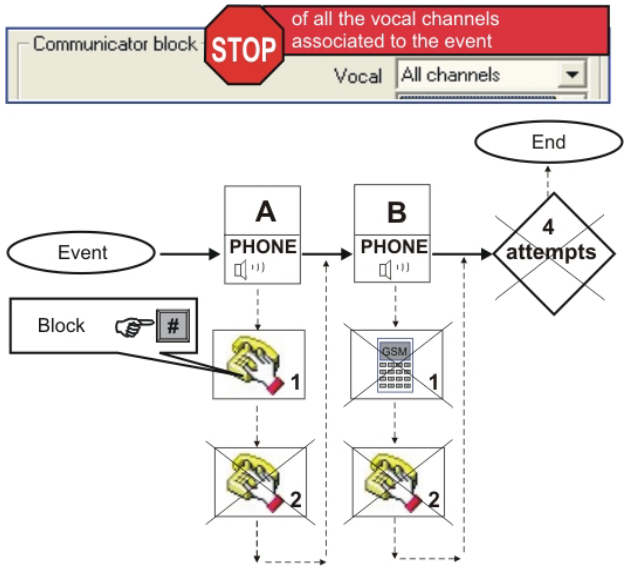
**Communicator block of the digital and Tecnoalarm channels**

After reception of the event, the monitoring station automatically sends the communicator block command to the control panel.

**Communicator block of the vocal channels**

During the conversation, after listening to the alarm message, the user can block the channel by presing the star or the dash key (* #) on the phone.




## Aitime request

If the GSM telephone communicators uses a prepaid SIM card, it is necessary to verify the remaining credit once in a while.

**GSM interface**

This kind of service, to check the airtime of the SIM card of the GSM interface, it is necessary, to program the airtime request parameters. Once programming has been completed, it is possible to require the airtime by sending the following SMS to the interface: “CREDITO”


N.B. The SMS message must be written as indicated, in capital letters without any further characters/blank spaces.

**Tecnocell**

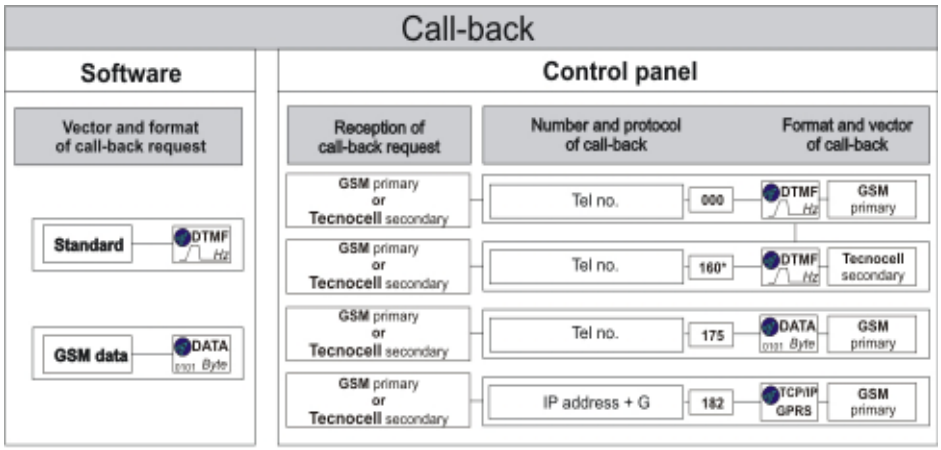
The external GSM telephone communicator does not need any programming.
To check the remaining airtime, send the following SMS message for the airtime request: “TCP CREDIT”.


N.B. The SMS message for the airtime request must be composed of the two words indicated in the figure. The words must be separated by one space without any further digits/spaces

## Call-back

The monitoring station calls the control panel which recognizes that the call comes from a Tecnoalarm monitoring station and answers the call. During the communication, the ID code and the type of control panel are checked. The control panel closes the communication and calls the monitoring station according to the programmed parameters.
Example:

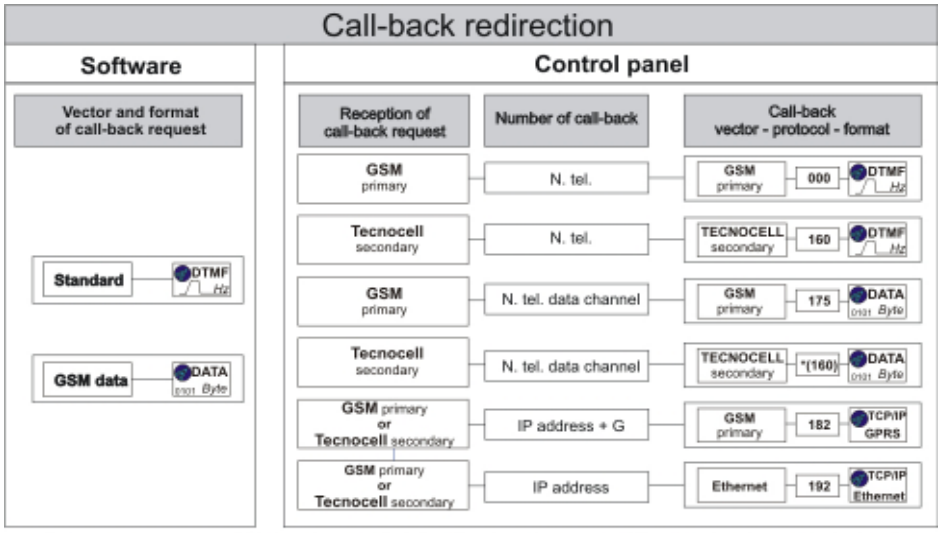
| | | |
|---|---|---|
| 1 | Call-back request by centro | The monitoring station calls the control panel on the PSTN line using a DTMF format. |
| 2 | Call-back by TP8-96 VIDEO | The control panel, through the GSM interface, receives the request of a call-back from the monitoring station.<br>The control panel exchanges the ID data (call-back no. and format) with the monitoring station, then closes the communication.<br>The control panel verifies the call-back N. tel. 1 and the protocol programmed:<br>• call-back format 000 Tecno Standard<br>• the call-back number/IP address<br>Then it calls the monitoring station back. |
| 3 | Call-back reception by centro | The monitoring station receives the call on the PSTN line in a DTMF format (Tecno Standard). |




* Warning: the protocol 160 is only available if the "Enabling data channel" function has been selected in the Tecnocell configuration table.

## Call-back redirection

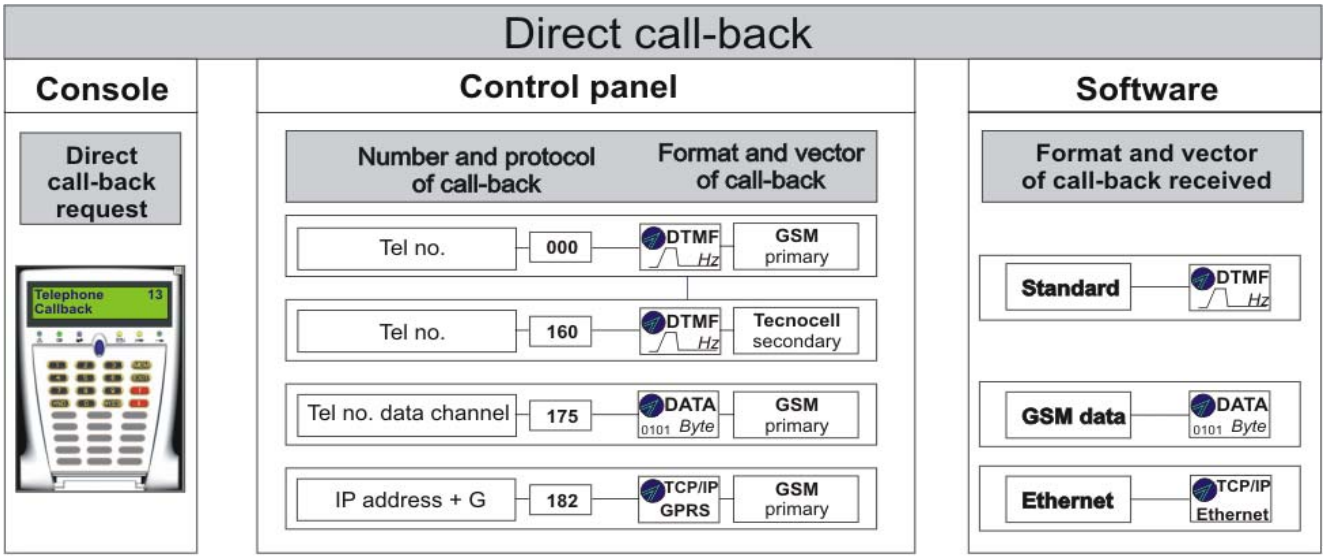
This function is only available if the redirection is not disabled (see Telephone parameters).
In this case, it is possible to enter in the software configuration table a call-back number different from those programmed in the telephone configuration table. The control panel calls this number using the programmed communication protocol.




* Warning: the protocol 160 is only available if the "Enabling data channel" function has been selected in the Tecnocell configuration table.

## Direct call-back

It is possible to initiate a call-back locally through the LCD300/S console. Select the menus Telephone, then Call-back from the installer menu (access with installer code).
The control panel immediately calls the monitoring station according to the programmed parameters.

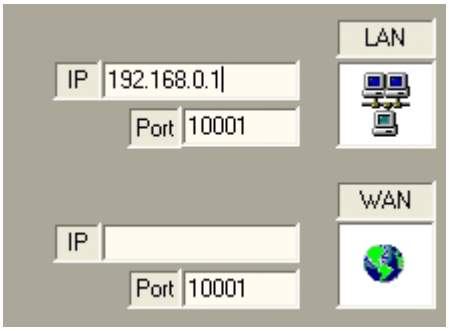



* Warning: the protocol 160 is only available if the “Enabling data channel” function has been selected in the Tecnocell configuration table.

## Ethernet

**Warning:The following programming must be transcribed into the user archive:**

- **LAN** **IP address of the control panel and the communication port of the Local Server Tecnoalarm.**
- **WAN** **Communication port of the Remote Server Tecnoalarm.**
  **The IP address should only be filled if a static IP address is available, otherwise leave the item blank.**




The table summarizes the functioning mode, the function and the communication port of each channel:

| Channel | Mode | Function/Service | Port |
|---|---|---|---|
| 1 | Server | Local server Tecnoalarm | 10000 |
| 2 | Server | Remote server Tecnoalarm | 10001 |
| 3 | Client | Tecnoserver Tecnoalarm (alarm) | 10001 |
| 4 | Client | Tecnoserver Tecnoalarm (call-back) | 10001 |
| 5 | Server Client | Tecno out | 10002 |
| 6 | Reserved | | |
| 7 | Server | Tecnoserver Tecnoalarm (TSP7000) | 10004 |

**Vocabulary**

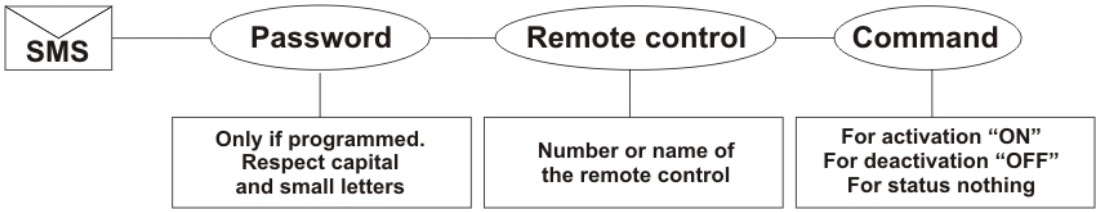
- Client Component which benefits from services/resources provided by a Server via the network.
- Server Computer which provides services/resources to a client via the network.
- LAN Local Area Network, i.e. a local network which covers a limitated geographical area such as a building.
- WAN Wide Area Network, i.e. a network covering a vast geographical area.

## Remote control management by SMS

The remote controls can be managed by SMS.
The remote control management by SMS is programmed in the GSM configuration table.

- COMMANDS-SMS enabling — Enable the function
- Password — The password is optional. If it is programmed, it must be included in every SMS. It can be composed of 1 to 8 alphanumerical characters (match case relevant)
- White list — The list contains the telephone numbers enabled to manage the remote controls by SMS.
  If no number has been programmed, SMS commands are accepted from any telephone number.

**Composition of the message**
The message is composed of 2 to 3 elements: password (if programmed), remote control and command.



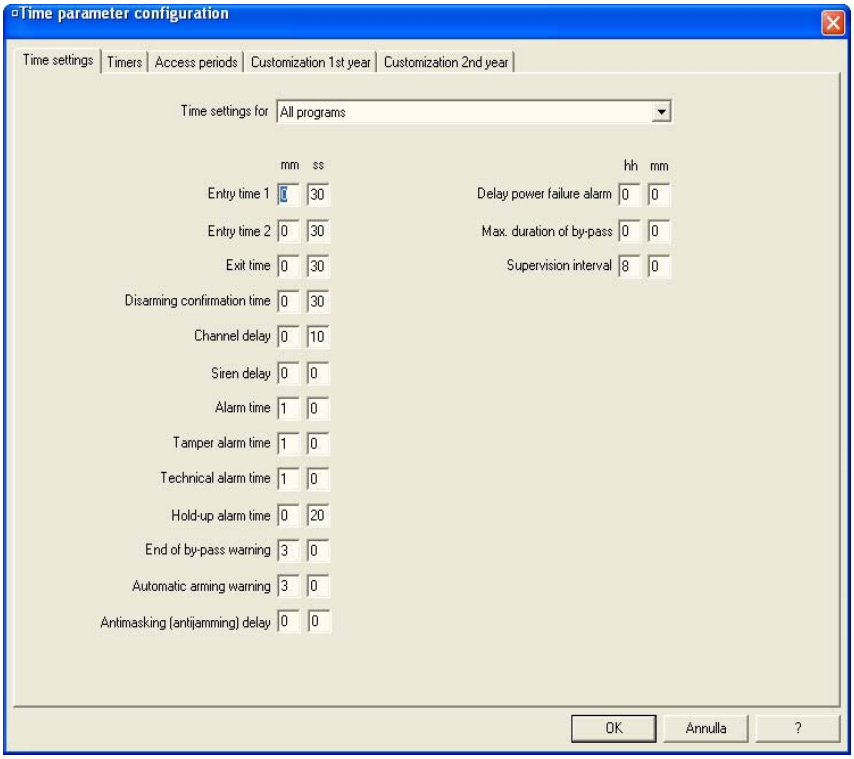

- Blank spaces — Each of the three elements (words) provides precise information to the control panel. This is why they must be clearly distinguished by one blank space each.
- Password (if programmed) — The password must exactly correspond to the programmed one. Pay attention to the capital and small letters.
  The first letter is always an upper-case letter because the password is the first word of the message.
- Remote control — The remote control can be written as a number or name.
  The max. length of the name is 16 digits (match case irrelevant)
- Command
  - ON for activation of the remote control.
  - OFF for deactivation of the remote control.
  - Nothing for status polling

  The ON and OFF commands can be written both with capital and lower case letters.

**Answer of the control panel**
When the control panel receives the SMS message, it checks the password and telephone number as well as the remote control and, if all three are correct, it returns an SMS message composed of the heading of the SMS message (as it has been programmed in the GSM configuration table), the name or the remote control number as well as its status.
If either the password or the telephone number are incorrect, there will be no answer.
If the remote control number or its name are incorrect, the control panel returns an error message.

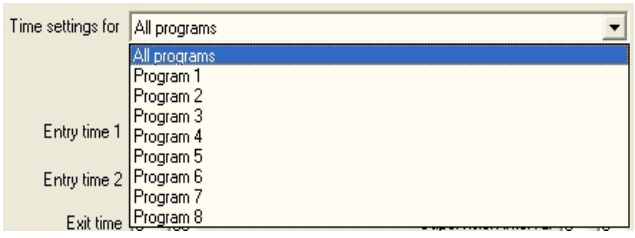
# 4. TIME PARAMETER CONFIGURATION


Select the **Time parameter configuration** tables of the control panel.
On the screen is viewed:




The Time parameter configuration tables permit to program the following parameters:
- Time parameters
- Timers
- Access periods
- Customization of the calendar (biennal)

## 4.1 TIME SETTINGS




**SELECTION OF THE PROGRAM**
The time settings configuration tables permit programming of the time parameters of a specific program or all of the control panel's programs.
Select the program/s.

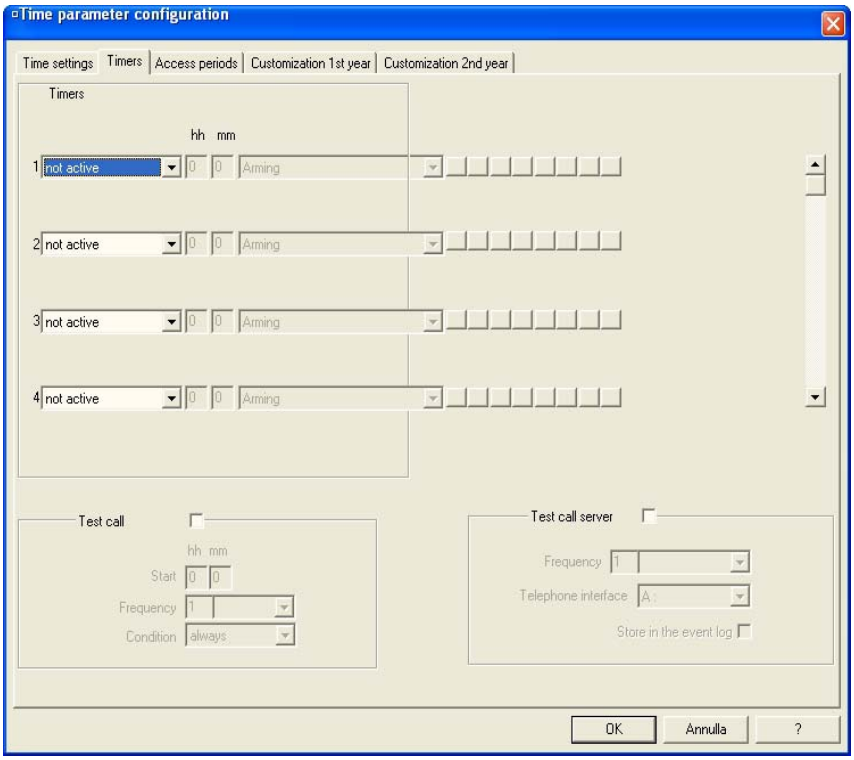
To program the time parameters, click on the name and enter the required value.
- Entry time 1 and 2 (mm:ss)
  The entry time is the interval between the detection and the release of the alarm.
  Programming valid for delayed zones 1 and 2 only.
  From 0 to 59 minutes and 59 seconds
- Exit time (mm:ss)
  The exit time is the interval between arming of the control panel and the effective detection of active alarms.
  Programming valid for delayed zones 1 and 2 only.
  From 0 to 59 minutes and 59 seconds

- Disarming confirmation time (mm:ss)
  Programming of the maximum time for confirmation of disarming (from 0 to 59 minutes and 59 seconds) by transponder or wireless key. If no valid code is entered within the programmed disarming confirmation time, disarming is ignored and a silent hold-up alarm is released. The alarm call cycle is executed but acoustic signaling is not activated.
  **Warning: The confirmation of disarming is accepted only by entering a user code on the console.**
  If programmed accordingly, even quick disarming is accepted.
  From 0 to 59 minutes and 59 seconds
- Channel delay (mm:ss)
  Permits programming of the interval between the detection of an alarm and the activation of the telephone channels (alarm call cycle).
  From 0 to 59 minutes and 59 seconds
- Siren delay (mm:ss)
  Permits programming of the interval between the detection of an alarm and the activation of the sirens.
  From 0 to 59 minutes and 59 seconds
  **Warning: The siren delay is deducted from the programmed alarm time.**
- Alarm time (mm:ss)
  Defines the duration of alarm signaling (indoor-outdoor-wireless sirens/LED) for program alarm.
  From 0 to 59 minutes and 59 seconds
- Tamper alarm time (mm:ss)
  Defines the duration of alarm signaling (indoor-outdoor-wireless sirens/LED) for tamper alarm.
  The tamper alarm is released by opening of tamper input (ZT) or if one of the peripherals connected on the serial bus is sabotaged.
  From 0 to 59 minutes and 59 seconds
- Technical alarm time (mm:ss)
  Defines the duration of signaling (indoor-outdoor-wireless sirens/LED) for technical alarm.
  The technical alarm is released upon opening of a detector/contact connected to the technical zone.
  From 0 to 59 minutes and 59 seconds
- Hold-up alarm time (mm:ss)
  Defines the duration of signaling (indoor-outdoor-wireless sirens/LED) for hold-up alarm.
  The hold-up alarm is released upon opening of a detector/contact connected to the hold-up zone.
  From 0 to 59 minutes and 59 seconds
- End of by-pass warning (mm:ss)
  Defines the duration of the warning (buzzer of the consoles) prior to end of by-pass.
  From 0 to 59 minutes and 59 seconds
- Automatic arming warning (mm:ss)
  Defines the duration of the warning (buzzer of the consoles) prior to automatic arming.
  **Warning: The programmed time delays the moment of arming.**
  From 0 to 59 minutes and 59 seconds
- Antimasking (antijamming) delay (mm:ss)
  Defines the delay of signaling for jamming.
  An alarm is released if the control panel detects a jamming signal with the same frequency as that of the wireless detectors which persists during a time superior to the programmed antimasking delay.
  From 0 to 59 minutes and 59 seconds
- Delay power failure alarm (hh:mm)
  Defines the delay of signaling between the detection of power failure alarm (230V) and the alarm release (activation of the alarm call cycle).
  This function permits to delay the alarm calls for power failure in order to avoid false alarms in case of voltage drop or temporary disconnection for maintenance etc.
  If the mains voltage is missing for time superior to the programmed power failure alarm delay, alarm is released.
  If the mains voltage is missing for time inferior to the programmed power failure alarm delay, alarm is not released.
  In both cases, the events are stored in the event log.
  From 0 to 23 hours and 59 minutes
- Max. duration of by-pass (hh:mm)
  Defines the maximum duration of by-pass.
  From 0 to 23 hours and 59 minutes
- Supervision interval (hh:mm)
  Defines the maximum interval between the test transmissions of the wireless devices.
  The supervision alarm is released if one of the wireless devices managed by the control panel does not communicate with the control panel for a time superior to the programmed supervision interval.
  From 2 to 23 hours and 59 minutes

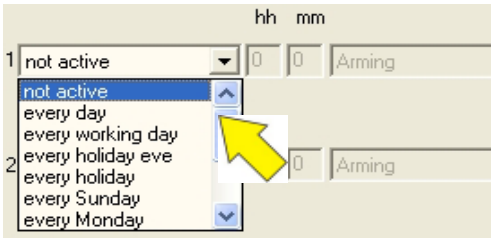
Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

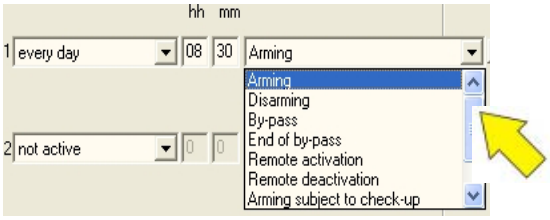
## 4.2 TIMERS

Select the **Timer** table.
On the screen is viewed:




The timer configuration table permits:
- Programming of the 16 timers
- Programmation of the test call
- Programmation of the test call server



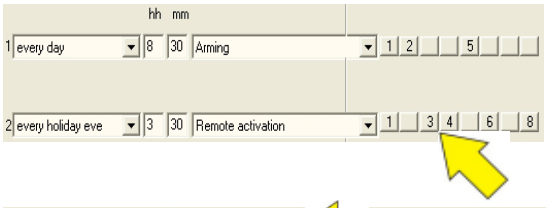

**PROGRAMMING OF THE TIMERS**
The following parameters can be set for every timer:
Each timer is represented by a series of items which permit programming of the following parameters:
- Frequency of activation
- Hour of activation
- Associated function
- Associated programs (1 to 8) or remote controls (1 to 8)

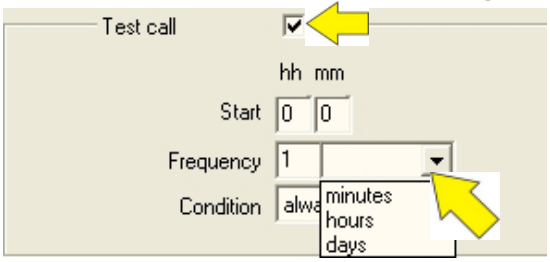
Use the scroll bar to view all the timers.

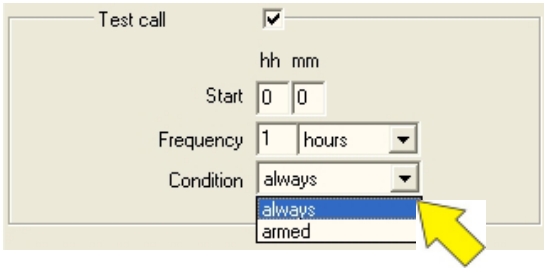
**Frequency of activation**
Select the frequency from the drop-down menu: not active, every day, every working day, every holiday eve, every holiday, every sunday, ..., every saturday.

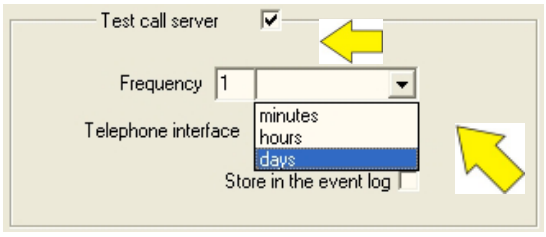
**Hour of activation**
Enter the hour of activation in the items **hh** and **mm.**

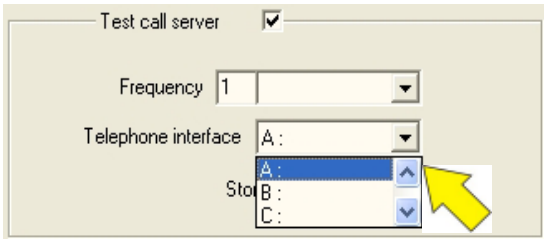
**Associated function**
Select the function from the drop-down menu.
If the timer is associated to the programs, the available functions are arming, disarming, by-pass, end of by-pass, remote activation, remote deactivation, arming subject to check-up (avoids arming in case of alarm due to low battery, power failure, tamper, supervision, fault, antimasking), enforced arming, enforced arming subject to check-up.
However, if it is associated to the remote controls, the available functions are: remote activation and remote deactivation.
All the other functions concern the programs.

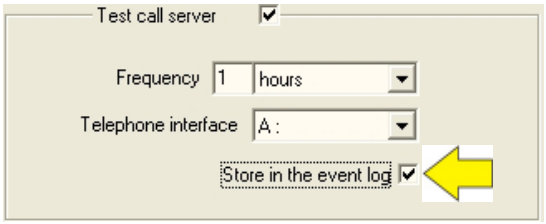



**Associated programs or remote controls**
To associate the timers to the programs or remote controls press the key below the number key. It is possible to associate a total of 8 programs and 8 remote controls to every timer.
Repeat the procedure for every timer to be configured.
Associate a total of 8 programs or 8 remote controls by clicking on the corresponding item.
The number displayed in the item confirms the association.
**Warning: It is only possible to select either programs or remote controls, never both together.**

Repeat the procedure for every timer to be configured.

**TEST CALL**
Permits the remote functioning check of the control panel. It consists in one or several telephone calls made by the channels the test call is associated to (see report codes) to the programmed telephone numbers
The calls are made at a determined time with a programmed frequency.
To enable the test call check the corresponding item.
The following parameters can be set for every timer:
- Hour of activation
- Frequency of activation
- Condition

**Starting hour of the test call cycle**
To program the starting hour of the test call cycle, select the item next to **Start** and enter the time (hh:mm).

**Frequency**
To program the frequency of the test call, enter a value from 1 to 255 and select the time unit from the drop-down menu (i.e. minutes, hours or days) as indicated in the beside figure.

**Condition**
Select from the drop-down menu the activation condition of the timers: always or armed (i.e. only if at least one program is armed).

**TEST CALL SERVER**
Permits the periodic and automatic control of the presence of the Ethernet connection between control panel and the Tecnoalarm software.
The test is executed via Ethernet with a TCP/IP protocol.

**Frequency**
To program the frequency of the test call server, enter a value from 1 to 255 and select the time unit from the drop-down menu (i.e. minutes, hours or days) as indicated in the beside figure.

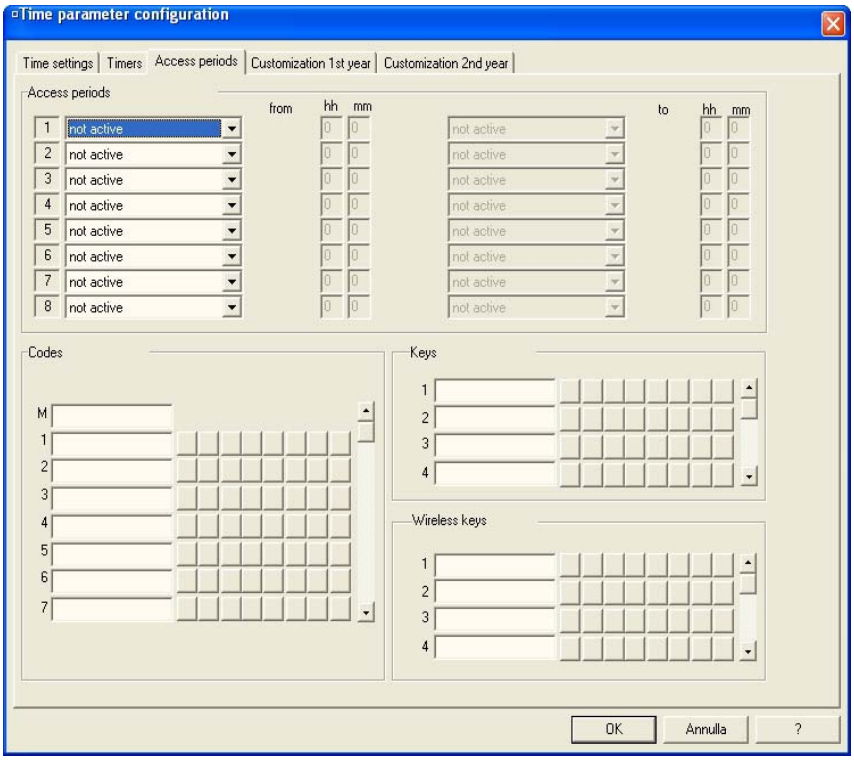
**Channel**
Select the channel (A...H) which will execute the test. Make sure that the channel in question uses the TCP/IP Tecnoalarm data protocol (number code 192).

**Store in the event log**
Enables/disables the storage of the test call server in the event memory of the control panel.
Check the item to enable the storage.

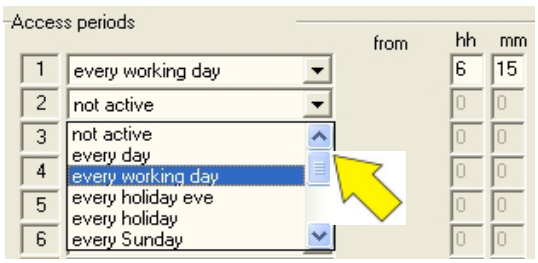
See § 4.5 for explanatory notes.
Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

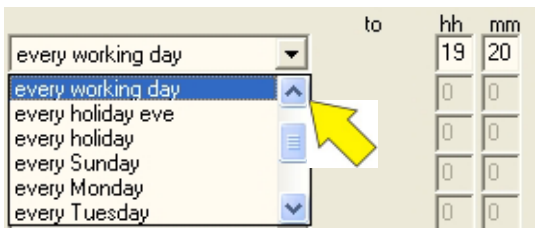
## 4.3 ACCESS PERIODS

Select the **Access period** table.
On the screen is viewed:




The access period configuration tables permit:
- Configuration of 8 access periods
- Association to the codes (1 to 200)
- Association to the keys/transponders/RFID cards (1 to 100)
- Association to the wireless keys (1 to 100)



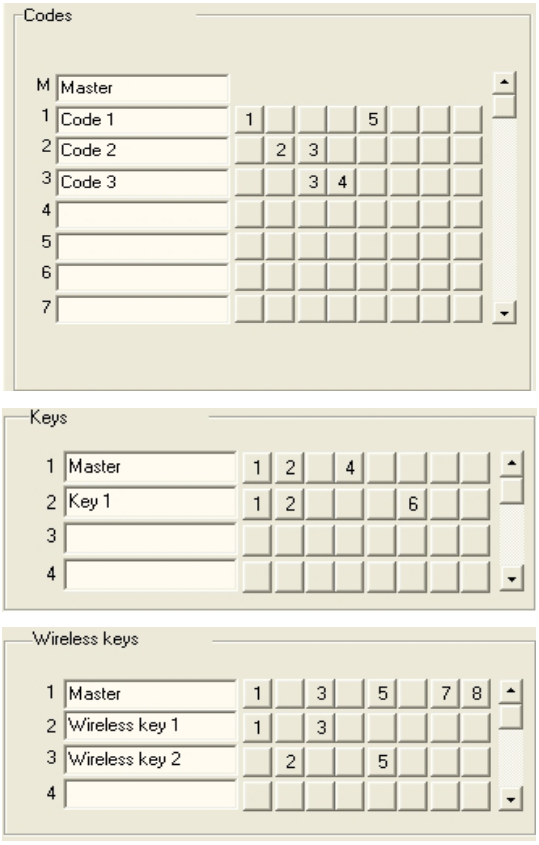




**CONFIGURATION OF THE ACCESS PERIODS**
The access periods limit the enabling of the codes/keys/ transponders/RFID cards to specific periods of time.
The control panel manages max. 8 access periods (even on different days).
Each access period can be individually programmed according to the following parameters:
- Frequency and activation time (**from**)
- Frequency and deactivation time (**to**)

**Frequency and activation time**
Select the frequency from the drop-down menu: not active, every day, every working day, every holiday eve, every holiday, every sunday, ..., every saturday.
Then enter the hour of the beginning of the access period in the items **hh** and **mm.**

**Frequency and deactivation time**
Select the frequency from the drop-down menu: not active, every day, every working day, every holiday eve, every holiday, every sunday, ..., every saturday.
Then enter the hour of the end of the access period in the items **hh** and **mm**.

**Warning: The alphanumeric descriptions of the codes, keys/transponders/RFID cards and wireless keys are displayed only if previously programmed in the corresponding menu (access programming). The description can also be modified or programmed in this menu by typing directly in the description item.**




**ASSOCIATION OF THE ACCESS PERIODS TO THE CODES**
It is possible to associate the access periods to the user codes.
In this way, the owner of each code (e.g. cleaning staff) can activate the associated functions only during the period of time it is enabled for.
Move the scroll bar to view all of the 200 available codes.
To associate the access periods to the codes, press the relevant items next to the code name.
The number of the access period will be viewed as a confirmation of the association.
To cancel the association, click again on the same item.

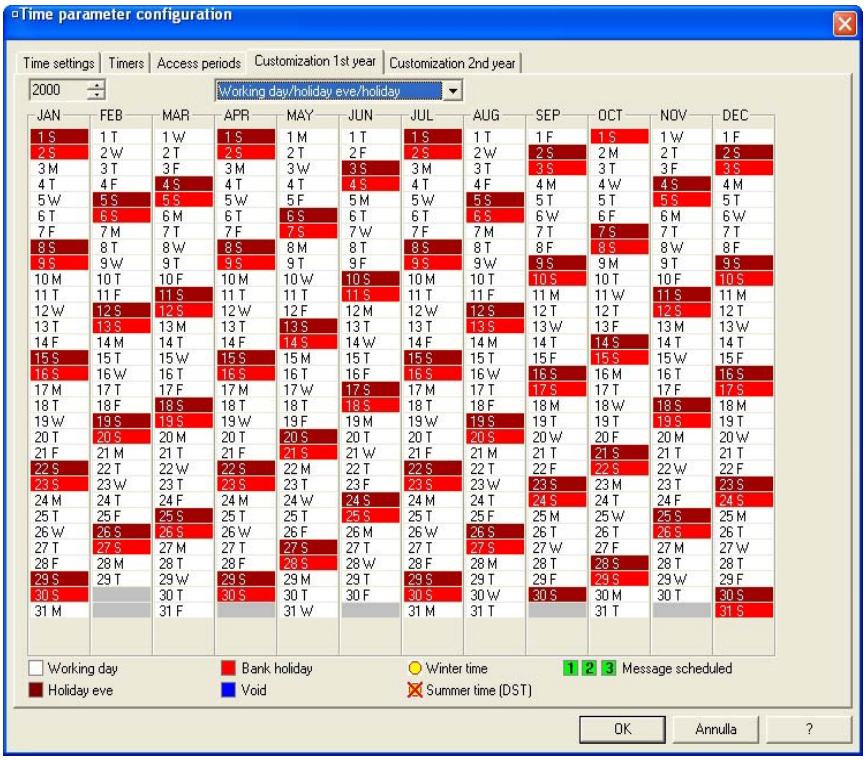
**ASSOCIATION OF THE ACCESS PERIODS TO THE KEYS**
It is possible to associate the access periods to the keys/ transponders/RFID cards.
In this way, the owner of each device (e.g. employees) can activate the associated functions only during the period of time it is enabled for.
Move the scroll bar to view all of the 100 available keys/ transponders/RFID cards.
To associate the access periods to the devices, press the relevant items next to the device name.
The number of the access period will be viewed as a confirmation of the association.
To cancel the association, click again on the same item.

**ASSOCIATION OF THE ACCESS PERIODS TO THE WIRELESS KEYS**
It is possible to associate the access periods to the wireless keys.
In this way, the owner of each wireless key (e.g. employees) can activate the associated functions only during the period of time it is enabled for.
Move the scroll bar to view all of the 100 available wireless keys.
To associate the access periods to the wireless keys, press the relevant items next to the wireless keys name.
The number of the access period will be viewed as a confirmation of the association.
To cancel the association, click again on the same item.

See § 4.5 for explanatory notes.
Press:
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 4.4 CUSTOMIZATION OF THE CALENDAR

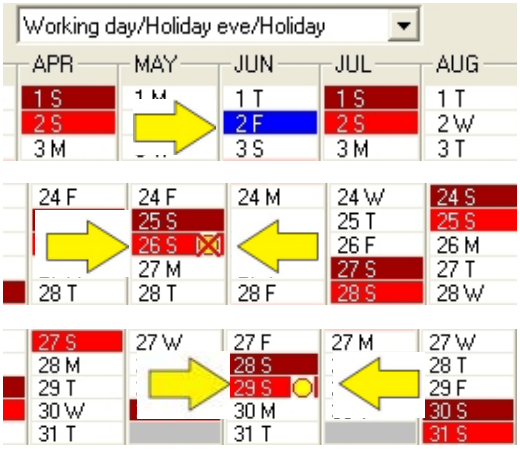
The control panel provides a customizable biennial calendar for all automized functions that are controlled by the clock of the control panel.
The calendar permits customization of the bank holidays, definition of the holiday eves and the days of summer-winter time change.
Select the **Customization 1st year** table.
On the screen is viewed:




**THE ATTRIBUTES OF THE DAYS**
Every kind of day is distinguished by a different colour:

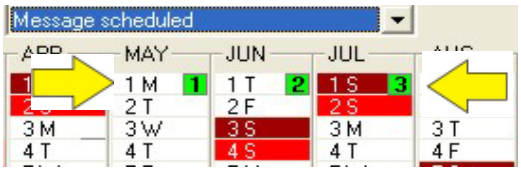
- White — working day
- Dark red — holiday eve
- Light red — holiday
- Blue — void day (none of the above attributes is valid)

**Warning: A void day is neither a working day, nor a holiday or a holiday eve. The attribute "void" has been implemented in order to permit una tantum modifying of the settings of a timer that has been programmed for operations on days with other attributes (i.e. working day/holiday eve/holiday).**




**PROGRAMMING OF THE ATTRIBUTES**
Prior to programming of the attribute of a day ensure that in the box above the calendar is viewed **Working day/Holiday eve/ Holiday**, then click on the day several times until it assumes the colour of the attribute requested.

**PROGRAMMING OF THE WINTER-SUMMER TIME CHANGE**
To program the beginning and the end of summer time(daylight saving) click on the item above the calendar and select **Summer time (DST)**, then click once on the day of beginning of summer time. A crossed sun will be shown next to the date. Subsequently select **Winter time** and click once on the day of end of summer time. A sun will be shown next to the date.
**Warning: The change from winter to summer time and back happens automatically and always in the night at respectively 2 and 3 o'clock.**




**PROGRAMMING OF THE VIEWING OF THE SCHEDULED MESSAGE DATE**

The control panel permits programming of 3 differents messages.

To program the beginning of the date of the message, click on the item above the calendar end select **Message scheduled**, then click on the day selected several times until the number (1, 2 or 3) in green will be shown next to the date (e.g. on May the 1st the message scheduled with the number 1 will be viewed on the console).

Clicking the 4th time, the selected message will be remove.

Repeat the procedure for the second year (**Customization 2nd year**).

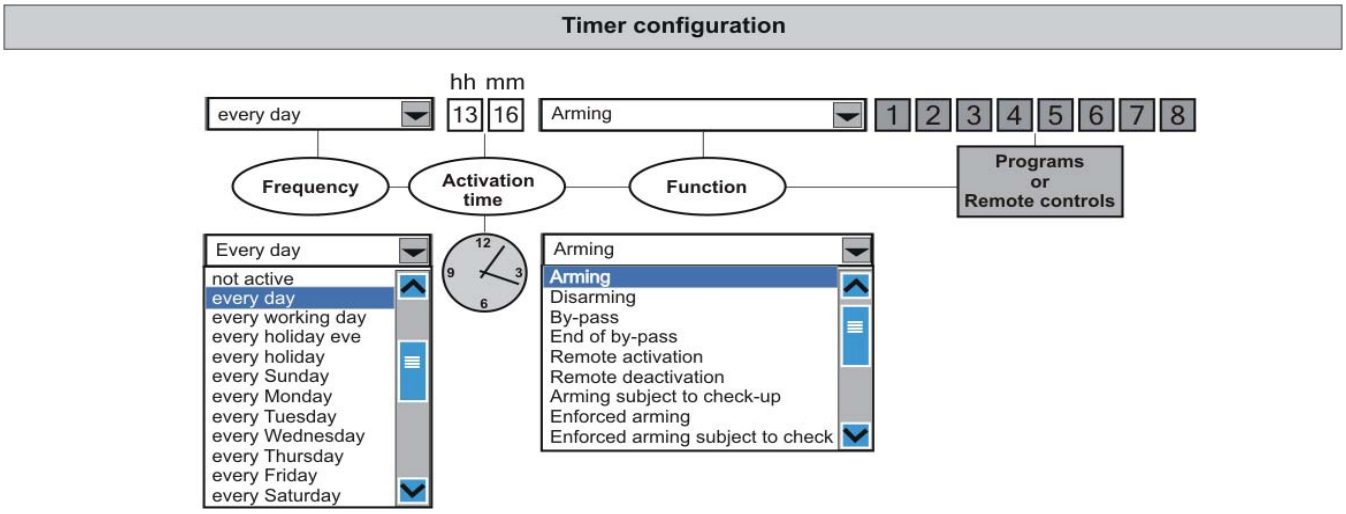
Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

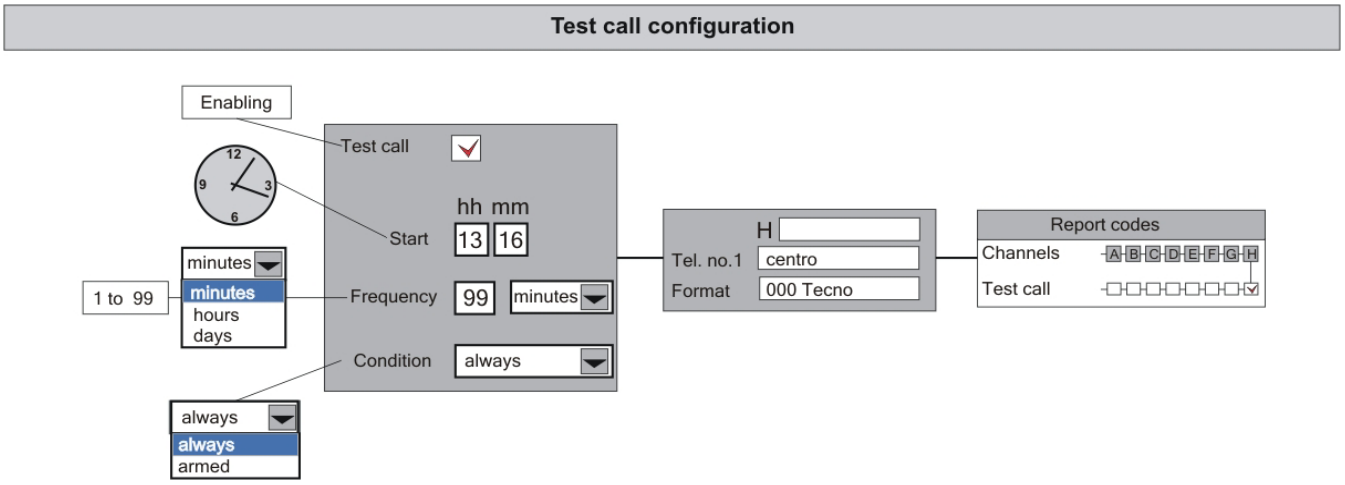
## 4.5 EXPLANATORY NOTES

The following schemes evidence the steps of configuration of the timers, test call, test call server and access periods.

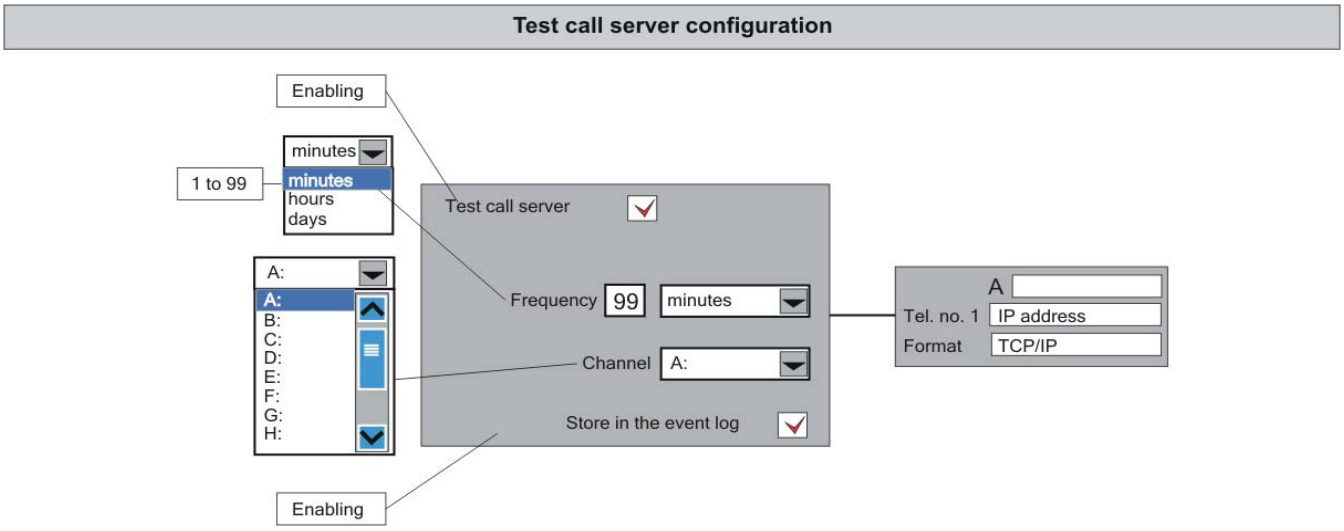
### Timers



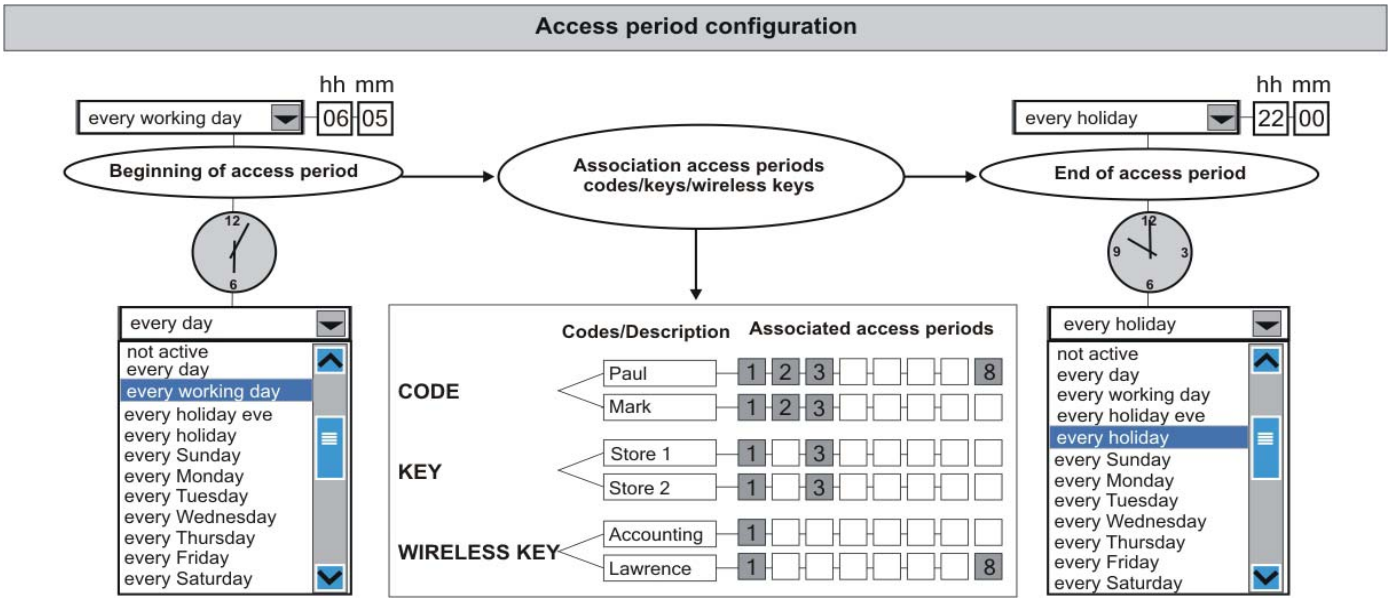

### Test call



## Test call server

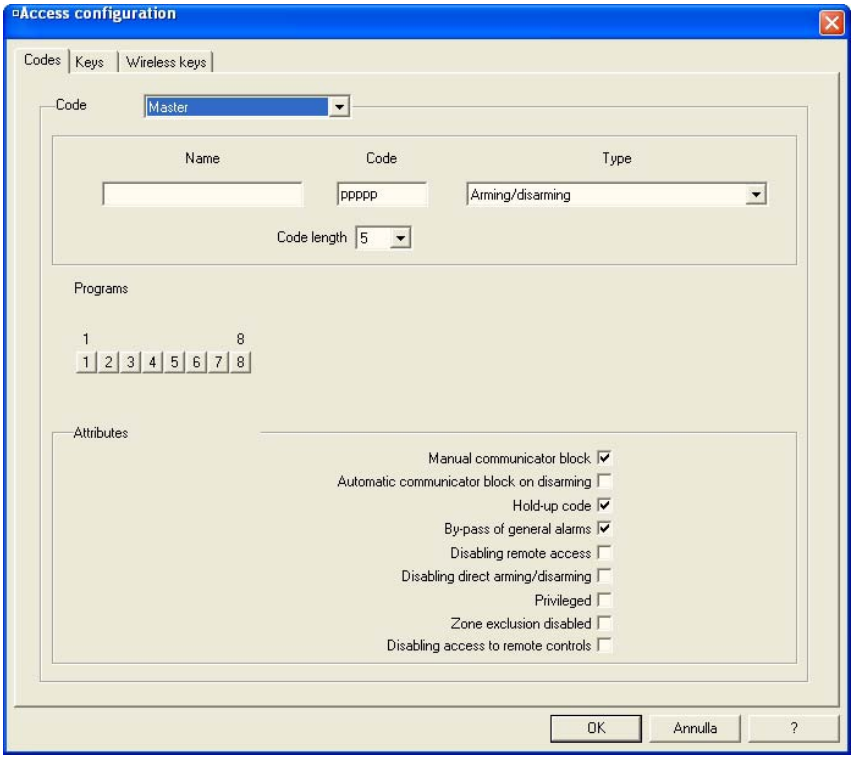



## Access periods



# 5. ACCESS CONFIGURATION

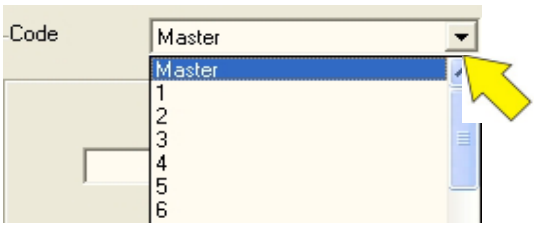

Select the **Access configuration** tables.
On the screen is viewed:



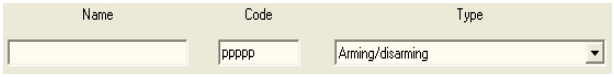

The tables of the access configuration permit:
- Programming of the codes
- Programmation of the keys/transponders/RFID cards
- Programmation of the wireless keys

## 5.1 PROGRAMMING OF THE CODES

The code configuration table permits:
- Programming of the code name
- Programming of the code value
- Association of the functions
- Programming of the length of all the system's codes
- Association of the programs
- Programming of the attributes of the codes



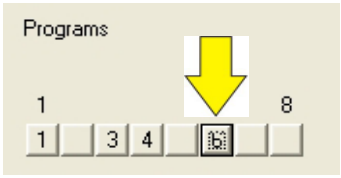

**SELECTION OF THE CODE**
Select the code to be programmed from the drop-down menu. The Master code is the first displayed followed by the 200 standards user code.




## PROGRAMMING OF THE CODE

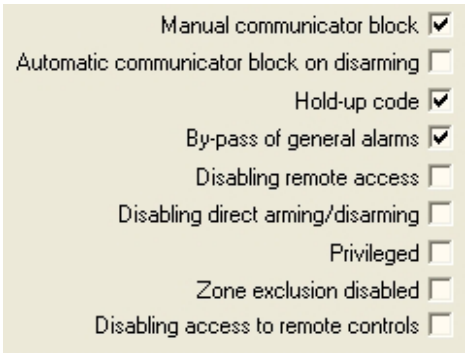
For every code the following parameters can be programmed:

- Name
  Description of the code (max. 16 digits), e.g. the name of the owner of the system.
- Code
  Defines the number value of the code (e.g. 77777).
  **Warning: The maximum number of digits depends on the programmed code length. Only the numerical values are accepted.**
- Type
  Defines the function which must be executed by the code. Select the function from the drop-down menu: arming/ disarming, arming, disarming, by-pass/end of by-pass, by-pass, end of by-pass.
- Code length
  The control panel accepts codes with 4 to 6-digits.
  The default code length is 5 digits.
  **Warning: The inserted code length is valid for all the codes of the control panel.**


## PROGRAMS

Association of the code to the programs.
The code will only be enabled to act on the associated programs (1 to 8).
To associate a program to the code, click on the corresponding item.
The program number will be shown as a confirmation of the association.
**Warning: By default, the master code is always enabled to act on all of the system's programs.**




## PROGRAMMING OF THE ATTRIBUTES

To associate the attributes to the code, check the relevant item.

- Manual communicator block
  If the function is enabled, upon disarming of the system with code, the user code **can** block all the active telephone channels and those queued up.
  By entering #YES all the telephone channels are blocked.
  By entering *NO the channels execute the alarm call cycle.
  If no key is selected within 8 seconds after disarming (time-out), the channels execute the alarm call cycle.
- Automatic communicator block on disarming
  If the function is enabled, upon disarming of the system with code, the active telephone channels and those queued up are blocked automatically.
- Hold-up code
  If the function is enabled, the user under duress can apparently disarm the system and simultaneously release a hold-up alarm by entering a user code the last digit of which is decreased by one unit. For example, the owner of the master code, by default 12345, may release a hold-up alarm by entering 12344.
  **Warning: If the code ends in 0, the last digit of the hold-up code must be 9, i.e. 12340 becomes 12349.**
  When a hold-up code is recognized, a silent alarm is released and the programmed alarm call cycles are activated.
  Event transmission>"Report code">" Hold-up code".
- By-pass of general alarms
  If the function is enabled, the user will be entitled to arm the system even in the presence of a general alarm (i.e. tamper, low battery, power failure, supervision, trouble modules)
- Disabling of remote access
  If the function is enabled, the user will **not** be entitled to arm or disarm the associated programs from a distance by telephone.
  If the item is checked, the remote access by telephone is disabled.

- Disabling direct arming/disarming
  If the function is enabled, the user will **not** be entitled to arm all the associated programs directly by pressing the hash key (#YES), but will have to arm them one after the other.
  If the item is checked, the direct arming/disarming is disabled.
- Privileged
  If the function is enabled, the user code, beside the standard functions such as arming/disarming and by-pass program, is enabled for viewing of the general alarm log and the event log of the associated programs. In addition, the code will have access to part of the programming menu (telephone and exclusion).
- Zone exclusion disabled
  Disabling of the code for the exclusion of the zones.
  If the function is enabled, the user will **not** be entitled to arm the control panel excluding some of the zones (both voluntary and automatic zone exclusion are disabled).
  The control panel will be armed in any case, and if there are open zones, the alarm will be released.
  If the item is checked, the exclusion of zones is disabled.
- Disabling access to remote controls
  If the function is enabled, the code will **not** be entitled to activate or deactivate the remote controls from a distance by remote control.
  If the item is checked, the access by remote control is disabled.

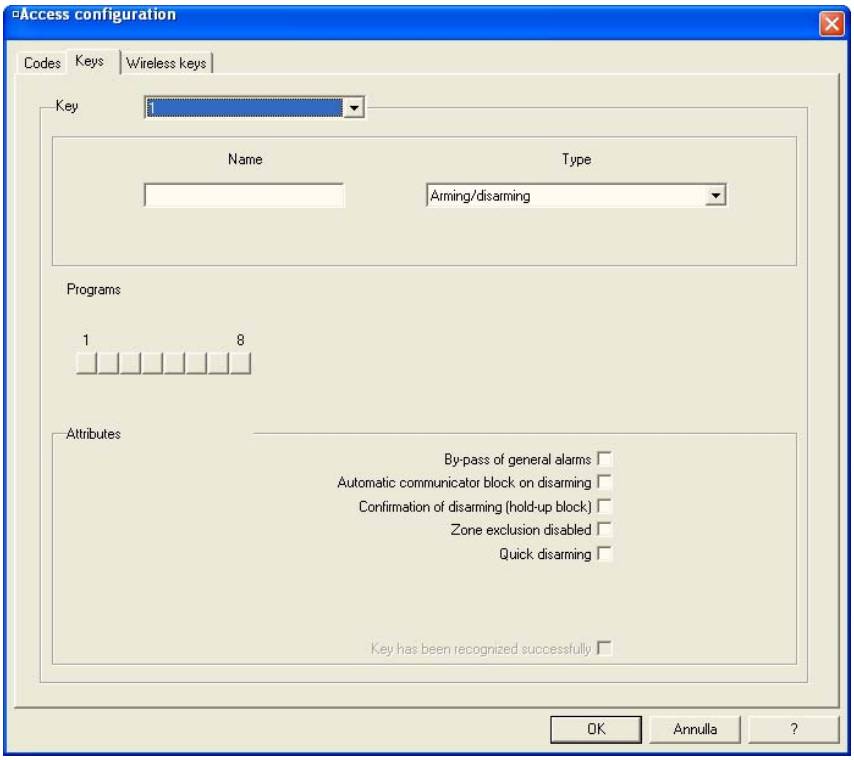
Repeat the procedure for all the user codes (1 to 200).

See § 5.4 for explanatory notes.
Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

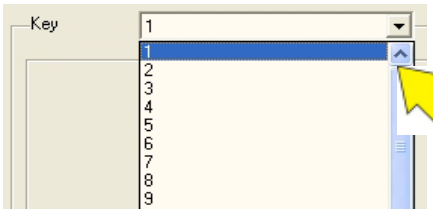
## 5.2 PROGRAMMING OF THE KEYS

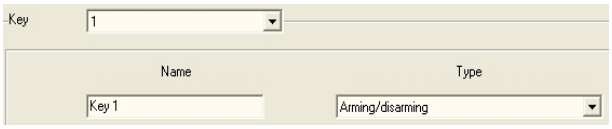
Select the **Keys** table.
On the screen is viewed:

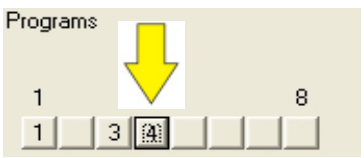



The keys configuration table permits:

- Programming of the name of the key/transponder/RFID card
- Association of the functions
- Association of the programs
- Programming of the attributes of the keys/transponders/RFID cards



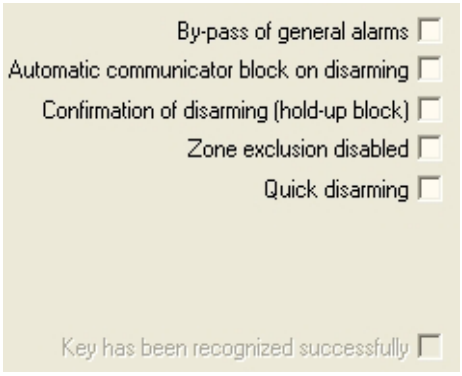




**SELECTION OF THE KEY**
Select the key and/or transponder and/or RFID card to be programmed (1 to 100) from the drop-down menu.

**PROGRAMMING OF THE KEY**
For every key the following parameters can be programmed:

- Name
  Name or description of the device (max. 16 characters).
- Type
  Defines the function which must be executed by the key/ transponder/RFID card.
  Select the function from the drop-down menu: arming/ disarming or by-pass.

**PROGRAM**
Association of the key/transponder/RFID card to the programs. The key/transponder/RFID card is enabled to act only on the associated programs (1 to 8).
To associate a program to the device, click on the corresponding item.
The program number will be shown as a confirmation of the association.
**Warning: If you use the key reader with minikeypad TP SK6N, for arming of the program, you will have to insert the key into the key reader and enter the program number.**
**In addition to the key-program association it is indispensable to associate the programs to the key reader, otherwise the introduction of the key will be ineffective.**




**PROGRAMMING OF THE ATTRIBUTES**
To associate the attributes to the key check the relevant item.

- By-pass of general alarms
  If the function is enabled, the user will be entitled to arm the system even in the presence of a general alarm (i.e. tamper, low battery, power failure, supervision, trouble modules)
- Automatic communicator block on disarming
  If the function is enabled, upon disarming of the system with key/transponder/RFID card, the active telephone channels and those queued up are blocked automatically.
- Confirmation of disarming (hold-up block)
  Activates the hold-up function on the key/transponder/RFID card. In this way, disarming with these devices must be confirmed by a valid user code before the programmed disarming confirmation delay expires (Time parameters menu>confirmation of disarming delay) in order to avoid the release of the hold-up alarm. In fact, if disarming is not confirmed or confirmation comes late, the control panel releases a silent alarm (i.e. no acoustic signaling) and actives the programmed alarm call cycles (transmission of the event>report codes>confirmation of disarming)
- Zone exclusion disabled
  If the function is enabled, the user will **not** be entitled to arm the control panel excluding some of the zones (both voluntary and automatic zone exclusion are disabled).
  The control panel will be armed in any case, and if there are open zones, the alarm will be released.
  If the item is checked, the zone exclusion is disabled.
  **Exclusion of open zones with key/transponder/RFID card:**
  - 1 Approach the device to the reader or insert the key.
    The OCG LED blinks to signal the open zones.
    Keep the device close to reader or the key into the activator.
  - 2 Wait until the OCG LED turns off.
  - 3 Move away the device from the reader or remove the key.
    The program will be armed excluding the open zones.
- Quick disarming
  If the control panel is armed, on introduction of the electronic key into the key reader or on approaching of the transponder or RFID card to the reader, all the associated programs will be disarmed.
- Learnt
  Signals that the selected transponder/RFID card has been programmed (learnt).
  This function is not programmable. It is an indicator item.
  If the item is checked, the device has been learnt.

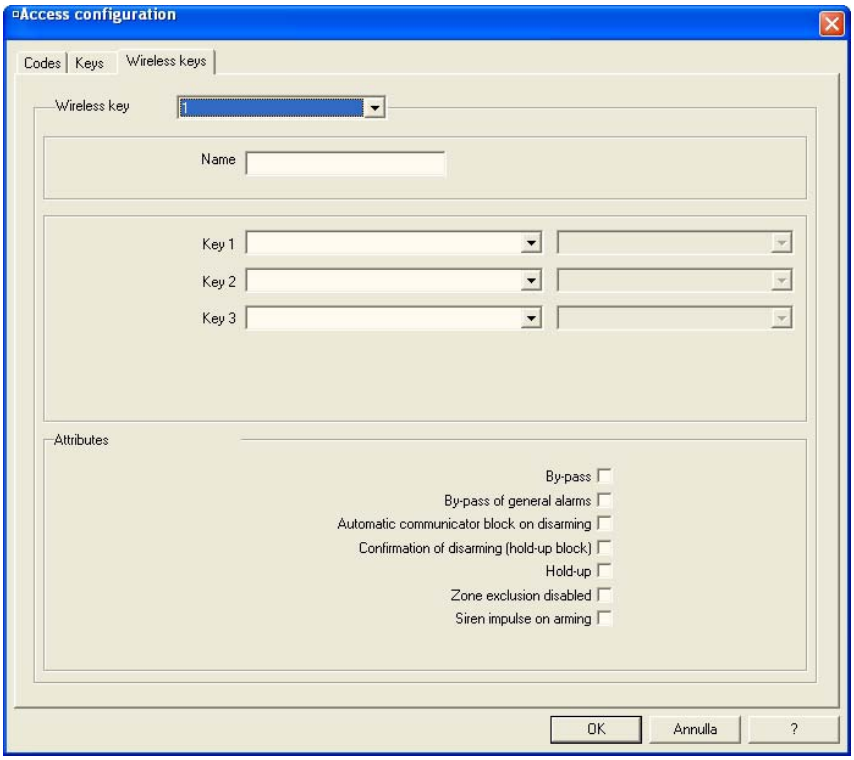
Repeat the procedure for all the user codes (1 to 100).

See § 5.4 for explanatory notes.
Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

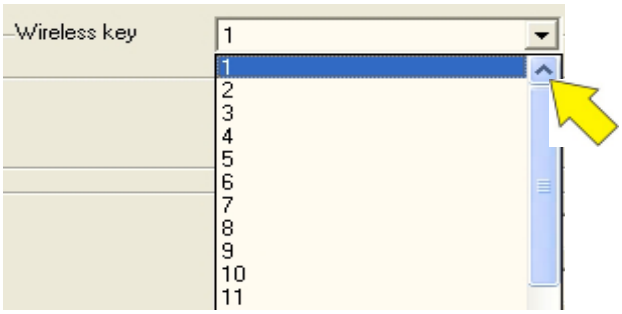
## 5.3 PROGRAMMING OF THE WIRELESS KEYS

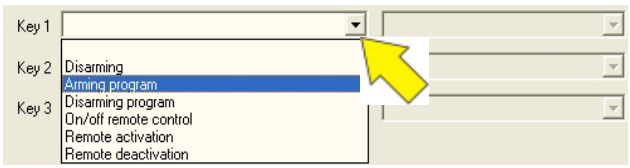
Select the **Wireless key** table.
On the screen is viewed:

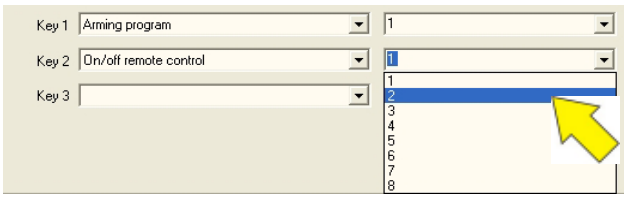



The wireless keys configuration table permits:

- Programming of the wireless key name
- Association of the functions to the function keys
- Programming of the attributes of the wireless keys



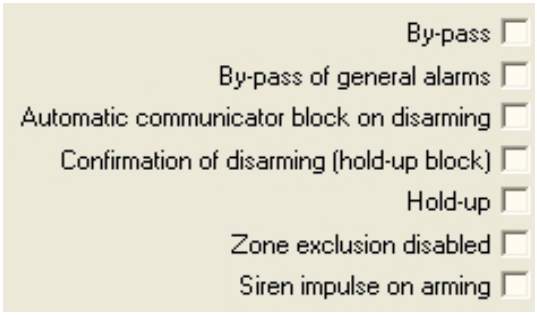

**SELECTION OF THE WIRELESS KEY**
Select the wireless key to be programmed (1 to 100) from the drop-down menu.

**PROGRAMMING OF THE WIRELESS KEY**

- Name
  Name or description of the device (max. 16 characters).
- Key
  Each wireless key provides 3 function keys which are individually programmable.
  - Key 1
    Select the desired function among the available options from the drop-down menu. Afterwards, select the number of either the program or the remote control.

  **Warning: The disarming function refers to the totality of the programs armed by wireless key, therefore the second drop-down menu is not active.**
  - Key 2
    Select the function to be associated to the key 2
  - Key 3
    Select the function to be associated to the key 3

  **Warning: If the by-pass function is enabled, the functions "Disarming", "Arming program" and "Disarming program" are not available:**
  **• Arming program becomes By-pass program**
  **• Disarming program becomes End of by-pass program**
  **• Disarming**




**PROGRAMMING OF THE ATTRIBUTES**

To associate the attributes to the key check the relevant item.

- By-pass
  Enable the wireless key for the by-pass functions.
- By-pass general alarms
  If the function is enabled, the user will be entitled to arm the system even in the presence of a general alarm (i.e. tamper, low battery, power failure, supervision, trouble modules)
- Automatic communicator block on disarming
  If the function is enabled, upon disarming of the system with wireless key, the active telephone channels and those queued up are blocked automatically.
- Confirmation of disarming (hold-up block)
  Enables the wireless key for the hold-up function.
  In this way, disarming with wireless key must be confirmed by a valid user code within the programmed disarming confirmation delay (Time parameters menu>confirmation of disarming delay) in order to avoid the release of the hold-up alarm. In fact, if disarming is not confirmed or confirmation comes late, the control panel releases a silent alarm (i.e. no acoustic signaling) and actives the programmed alarm call cycles (transmission of the event>report codes>confirmation of disarming)
- Hold-up
  If the function is enabled, it is possible to release a hold-up alarm (panic) and activate the corresponding output by pressing the keys 2 and 3 of the wireless key simultaneously.
- Zone exclusion disabled
  If the function is enabled, the user will **not** be entitled to arm the control panel excluding some of the zones (both voluntary and automatic zone exclusion are disabled).
  The control panel will be armed in any case, and if there are open zones, the alarm will be released.
  **Exclusion of the open zones with wireless key:**
  - 1 Press the program arming key. The console vocally signals the presence of open zones.
  - 2 Press again the program arming key. The console vocally signals arming and the exclusion of the open zones.
- Siren impulse on arming
  If the function is enabled, when the control panel is armed, the siren is activated for a few seconds (1 pulse).

Repeat the procedure for all the wireless keys (1 to 100).

See § 5.4 for explanatory notes.
Press:

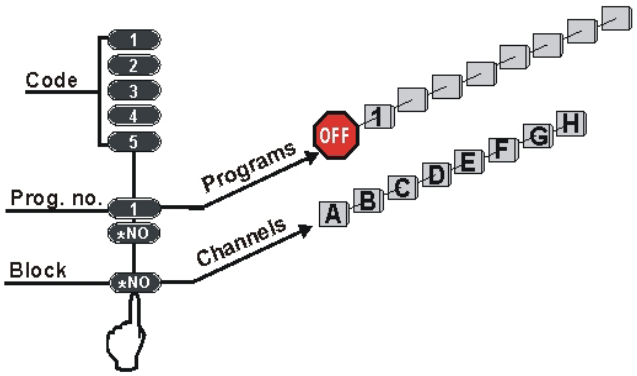
- **OK** to confirm and quit
- **Abandon** to quit without saving

## 5.4 EXPLANATORY NOTES

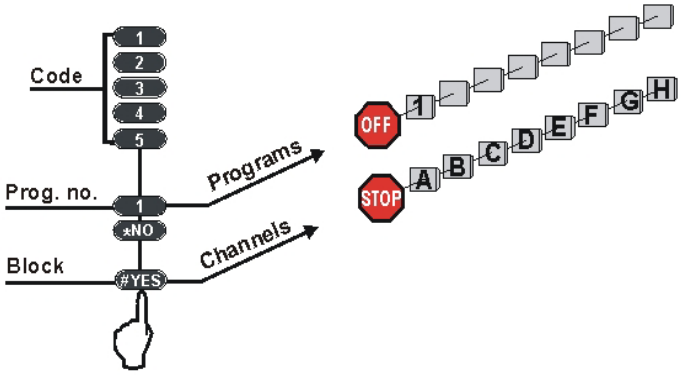
### Disarming in case of alarm with manual communicator block

The examples refers to the function Manual communicator block (see programming of the attributes) page 5-2

**Disarming with manual communicator block**




Disarming without communicator block



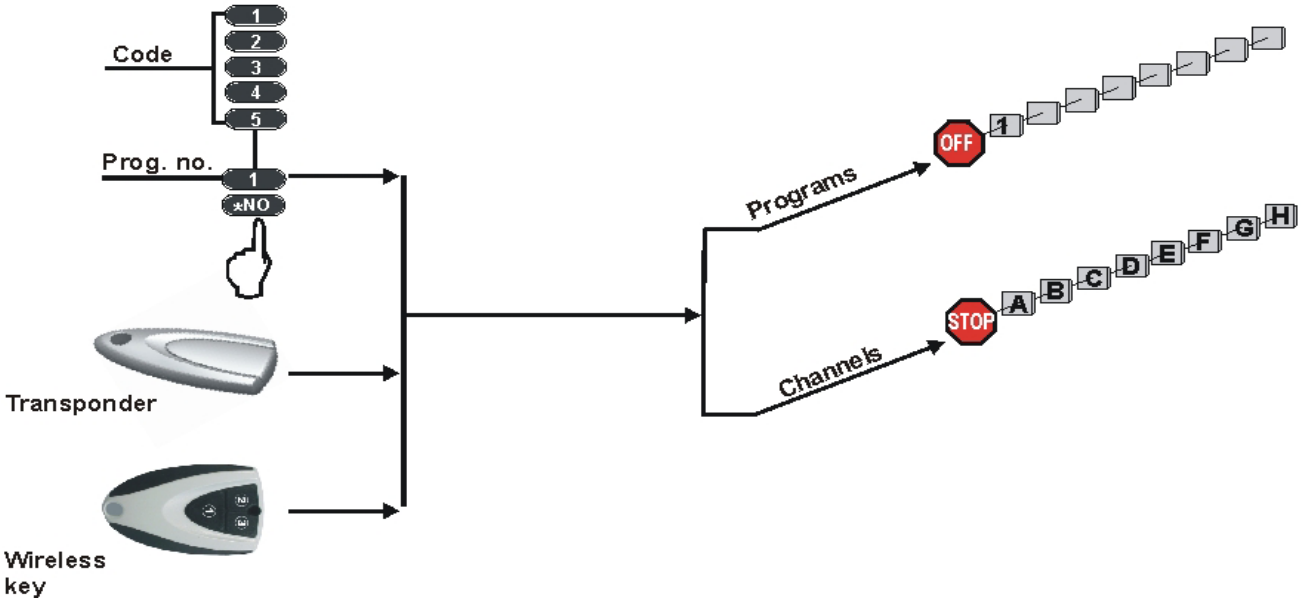

Disarming with communicator block

### Disarming in case of alarm with automatic communicator block

The example refers to the function Automatic communicator block (see programming of the attributes)

- By code page 5-2
- By key/transponder/RFID card page 5-5
- By wireless key page 5-7

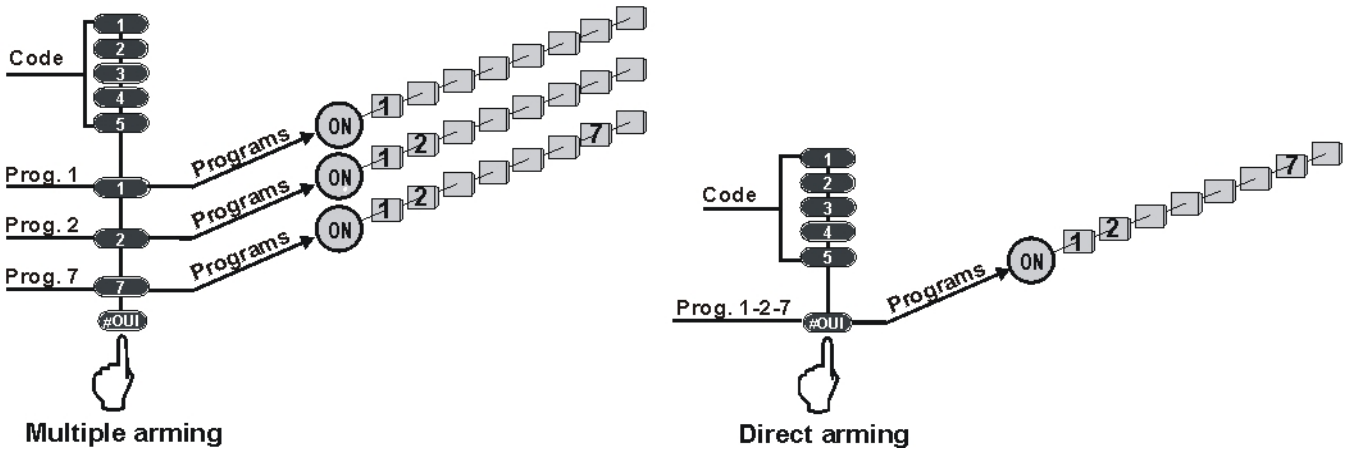
**Disarming with automatic communicator block**



## Multiple and direct arming

The example refers to the function Multiple and direct arming (see programming of the attributes) page 5-3

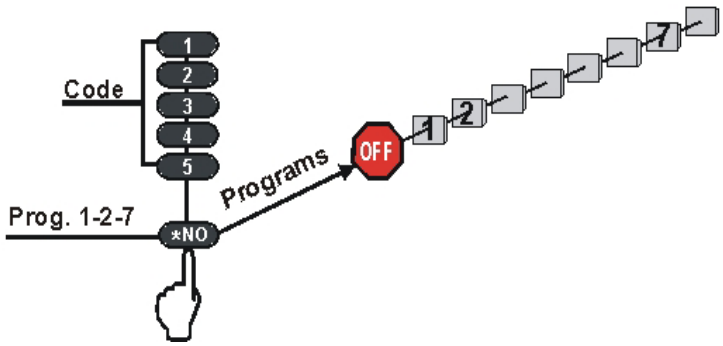
**Multiple and direct arming**




## Direct disarming

The example refers to the function Direct disarming (see programming of the attributes) page 5-3

**Direct disarming**

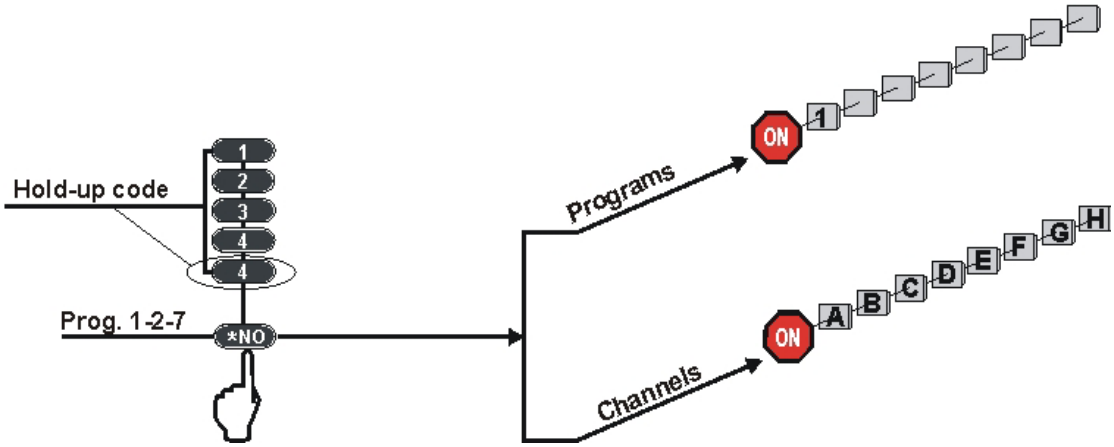


## Disarming under duress

The example refers to the function Disarming under duress, i.e. by hold-up code (see programming of the attributes)

page 5-2

### Disarming by hold-up code

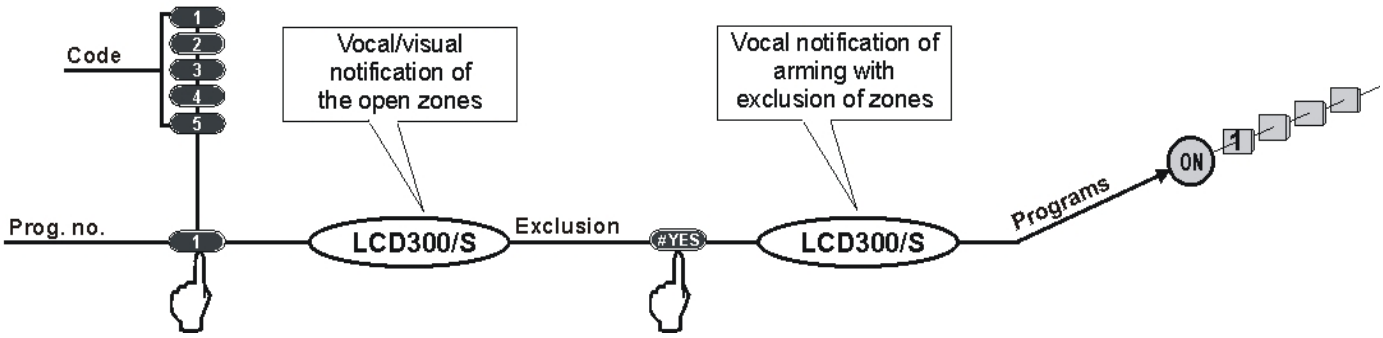



## Arming with exclusion of open zones

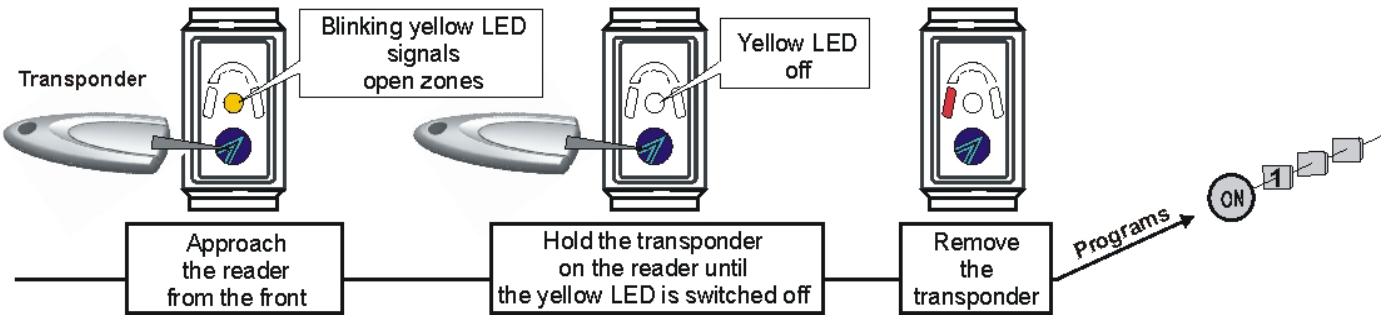
The examples refers to the function Arming with exclusion of the open zones (see programming of the attributes)

- By code page 5-3
- By key/transponder/RFID card page 5-5
- By wireless key page 5-7

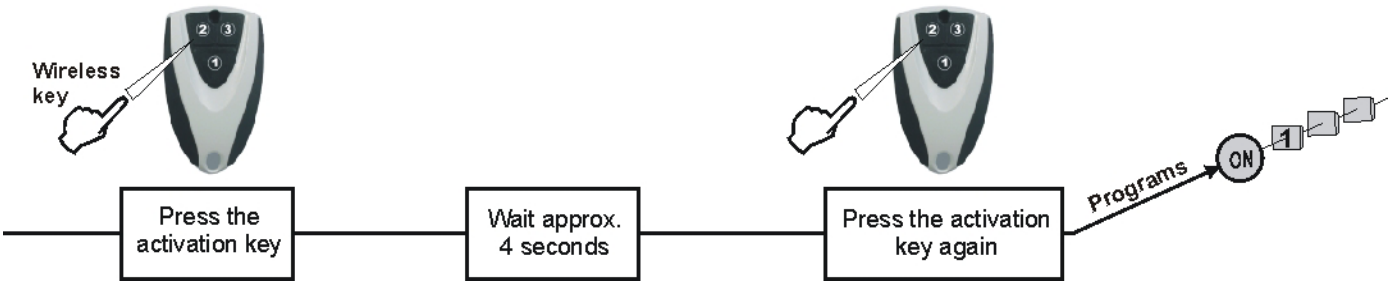
### Arming by code with exclusion of open zones




### Arming by transponder with exclusion of open zones



**Arming by wireless key with exclusion of open zones**

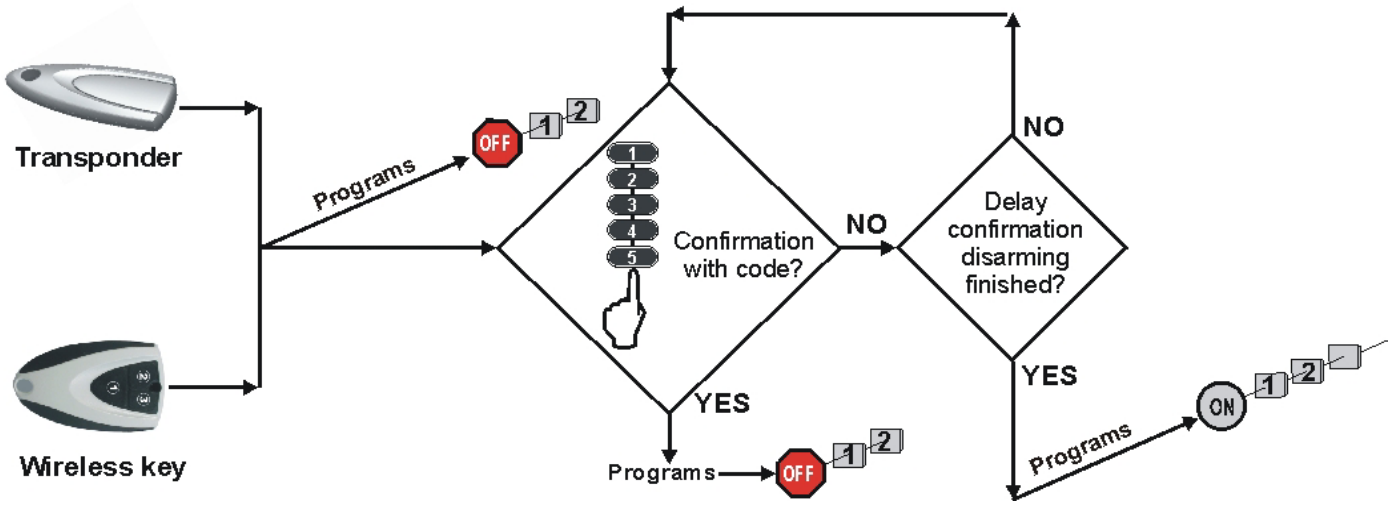



## Confirmation of disarming

The example refers to the function Confirmation of disarming function, i.e. hold-up block.
If the confirmation of disarming attribute is enabled, disarming by the key, transponder or wireless key in question must be confirmed by a valid code within a determined period of time, otherwise a silent hold-up alarm is released (see programming of the attributes).

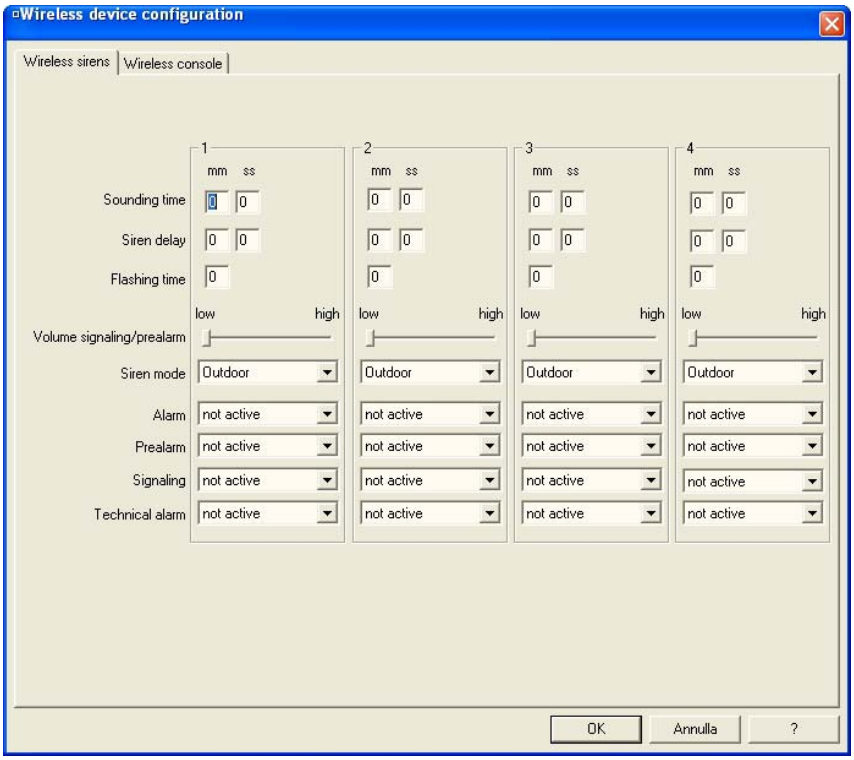
- By key/transponder/RFID card page 5-5
- By wireless key page 5-7

**Confirmation of disarming (hold-up block)**



# 6. WIRELESS DEVICE CONFIGURATION

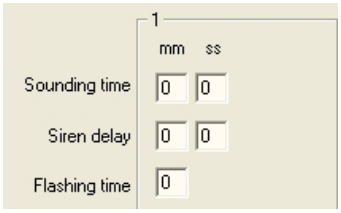

Select the **Wireless device configuration** tables.
On the screen is viewed:



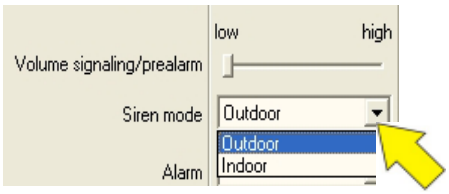

The Wireless device configuration tables permit:
- Programming of the wireless sirens
- Programming of the wireless consoles

## 6.1 PROGRAMMING OF THE WIRELESS SIRENS

The control panel can manage max. 4 wireless sirens which are individually programmable according to the following parameters:
- Time parameters
- Functioning
- Activation mode

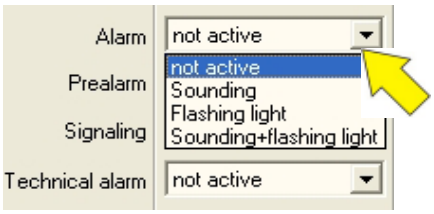



**PROGRAMMING OF THE TIME PARAMETERS**
To program the time parameters click on the items and enter the values requested:
- Sounding time (mm:ss)
  Defines the sounding time in case of alarm.
  From 0 to 1 min. and 59 sec.
- Siren delay (mm:ss)
  Defines the interval between the detection of an alarm and the activation of the siren.
  From 0 to 1 min. and 59 sec.
- Flashing time (mm:ss)
  Defines the blinking time in case of alarm or technical alarm.
  From 0 to 15 min.




## PROGRAMMING OF FUNCTIONING

- Volume signaling/prealarm
  Defines the volume of sounding for system status signaling and prealarm.
  Set the volume by moving the cursor.
  The levels available are 4 from low to high.
  **Volume of sounding for alarm is always set at the maximum.**
- Siren mode
  Selection of the functioning mode of the siren (outdoor/indoor).




## PROGRAMMING OF THE ACTIVATION MODE

Activation of the wireless sirens can be programmed individually for the following events:

- Alarm
  Programming of the activation mode of the siren in case of program alarm or general alarm (tamper, trouble etc.).
  The volume is fixed.
  Select one of the available options:

| | |
|---|---|
| **Not active** | The siren is not activated |
| **Sounding** | Only the sounding is activated |
| **Flashing light** | Only the flashing light is activated |
| **Sounding+flashing light** | The sounding and the flashing light are activated |

- Prealarm
  Programming of the activation mode of the siren in case of prealarm (during the entry time).
  Select one of the available options:

| | |
|---|---|
| **Not active** | The siren is not activated |
| **Sounding** | Only the sounding is activated |
| **Flashing light** | Only the flashing light is activated |
| **Sounding+flashing light** | The sounding and the flashing light are activated |

- Signaling
  Programming of the activation mode of the siren for arming/disarming signaling of the control panel.
  Select one of the available options:

| | |
|---|---|
| **Not active** | The siren is not activated |
| **Sounding** | Only the sounding is activated. 1 beep signals arming of the system, 3 beeps signal disarming of the control panel. |
| **Flashing light** | Only the flashing light is activated. 3 flashing lights signal arming/disarming of the control panel |
| **Sounding+flashing light** | Both the sounding and the flashing light are activated to signal arming/disarming of the control panel according to what has been described above. |

- Technical alarm
  Programming of the activation mode of the siren when the control panel detects a technical alarm.
  The volume is fixed.
  Select one of the available options:

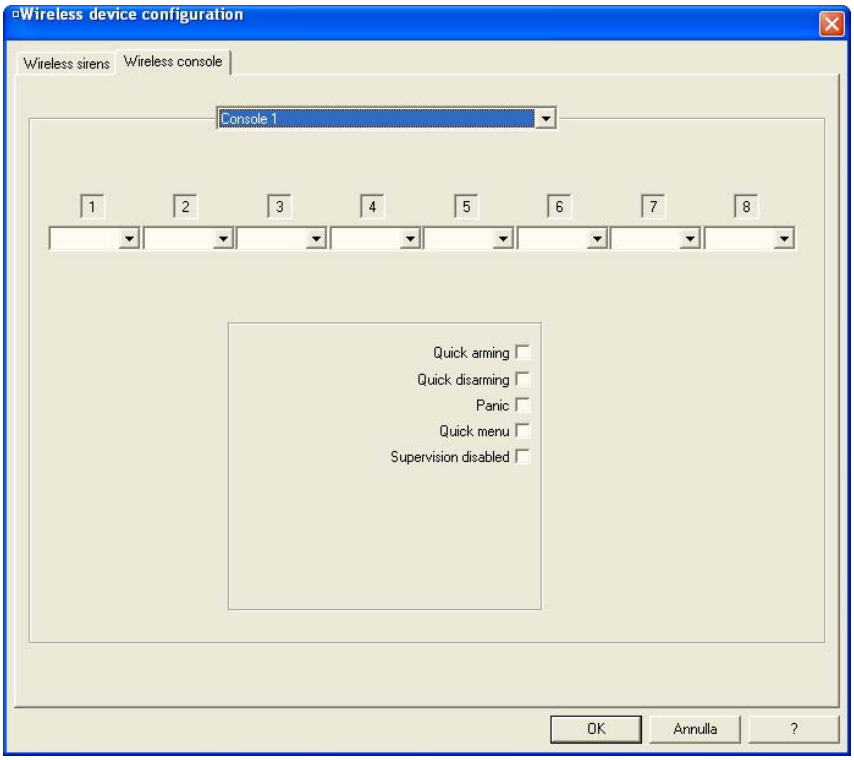
| | |
|---|---|
| **Not active** | The siren is not activated |
| **Sounding** | Only the sounding is activated |
| **Flashing light** | Only the flashing light is activated |
| **Sounding+flashing light** | The sounding and the flashing light are activated |

Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

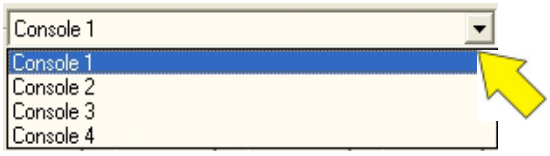
## 6.2 PROGRAMMING OF THE WIRELESS CONSOLES

Select the **Wireless consoles** table .
On the screen is viewed:



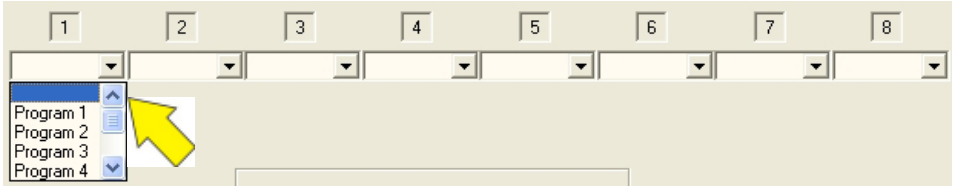

The control panel permits the management of max. 4 wireless consoles which are individually programmable according to the followings parameters:

- Association of the programs
- Programming of the attributes of the consoles

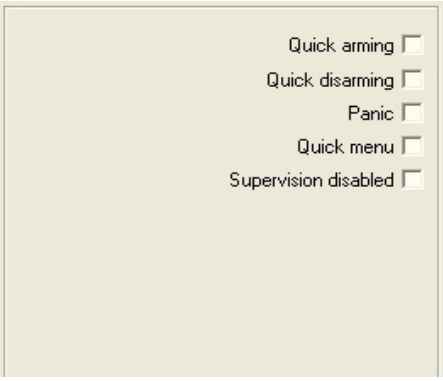



**SELECTION OF THE CONSOLE**
Select the console to be programmed from the drop-down menu.

**ASSOCIATION OF THE KEYS TO THE PROGRAM**




The LCD300 WL console can manage max. 8 programs which are freely associable to the keys 1 to 8 of the keypad.
To associate the programs to the keys, select the program corresponding to the number of the key (1 TO 8).
Repeat the same procedure for all the other programs.




**PROGRAMMING OF THE ATTRIBUTES**
To associate the attributes of the console select the corresponding item.

- Quick arming
  Permits arming of the associated programs with the quick arming command, i.e. by pressing the *(star) key followed by the number of the program to be armed.
  If the function is disabled, for arming a program, enter a valid user code followed by the number of the program to be armed.
- Quick disarming
  Permits disarming of the associated programs with quick disarming command, i.e. by pressing the *(star) key followed by the number of the program to be disarmed.
  If the function is disabled, for disarming a program, enter a valid user code followed by the number of the program to be disarmed.
- Panic
  Permits the activation of the panic alarm in case of hold-up or medical emergency by pressing the arrow-up and arrow-down keys (↓ ↑) simultaneously.
- Quick menu
  Enables the quick menu on the console. It permits activation/ deactivation of the remote controls without entering the code.
- Supervision disabled
  Disables the supervision and the test transmission of the console. If the item is checked, the supervision is disabled.

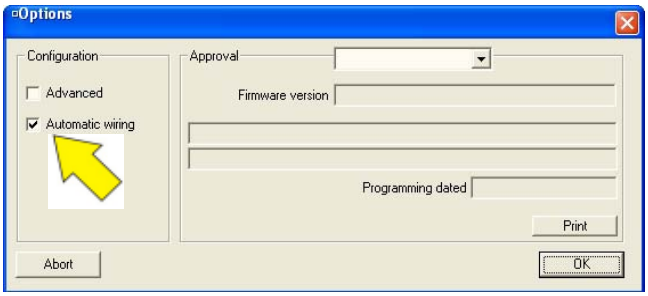
Repeat the operations for all the wireless consoles (1 to 4).

Press:

- **OK** to confirm and quit
- **Abandon** to quit without saving

# 7. HARDWARE CONFIGURATION

## 7.1 HARDWARE CONFIGURATION WITH AUTOMATIC WIRING



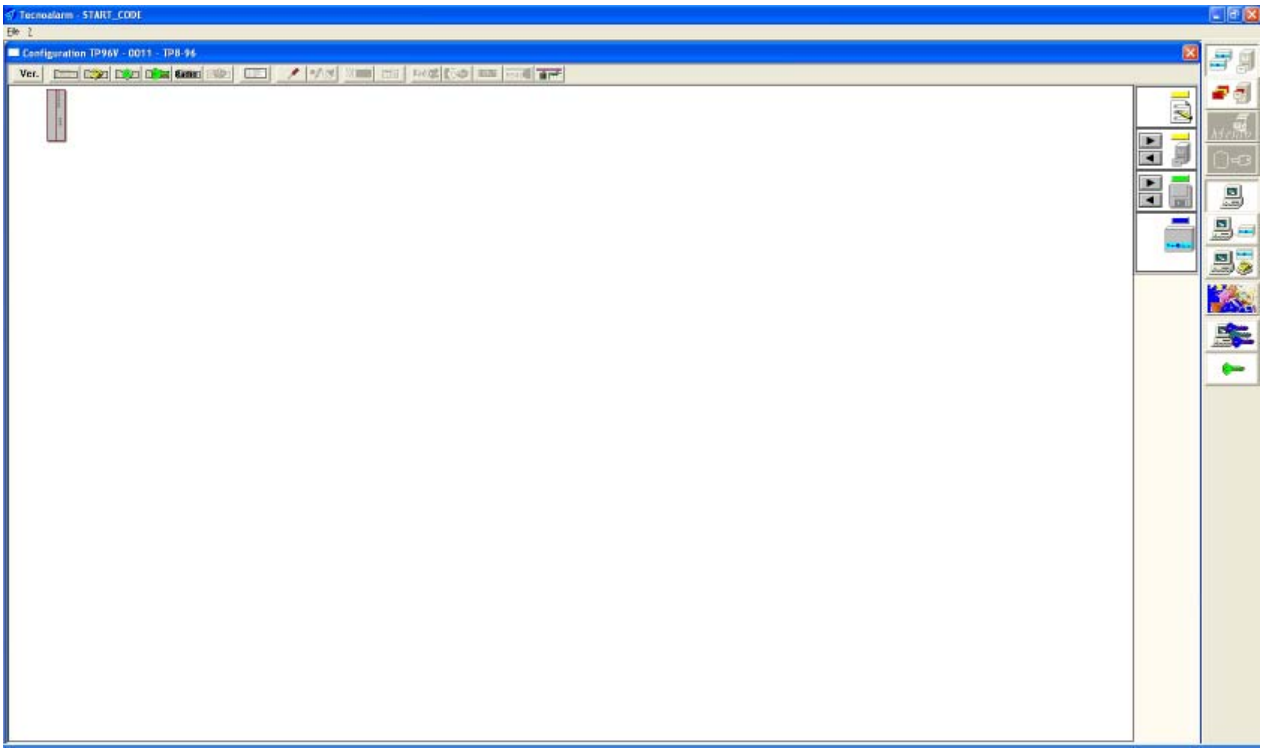

Before proceeding with the hardware configuration, ensure that the **Automatic wiring** option has been enabled.

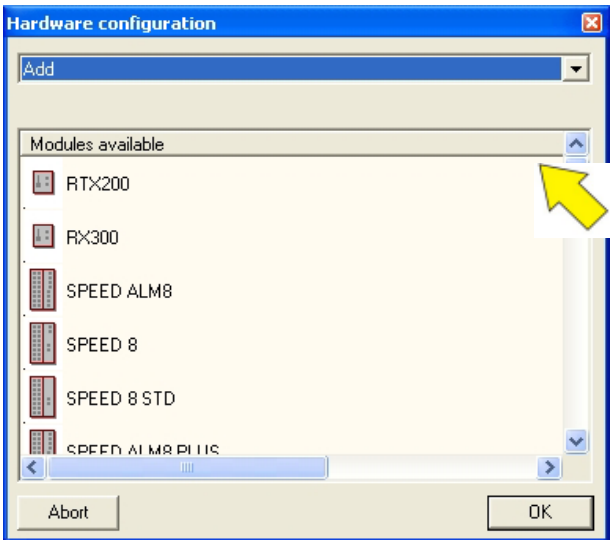
Viewing of the **Options** menu.

If necessary, check the **Automatic wiring** item to enable the option, then click **OK** to exit.

Select the **Hardware configuration** icon


The Hardware configuration menu permits the addition or deletion of hardware modules to/of the viewed configuration.
The hardware configuration of the system can be edited even if you are not connected to the control panel.



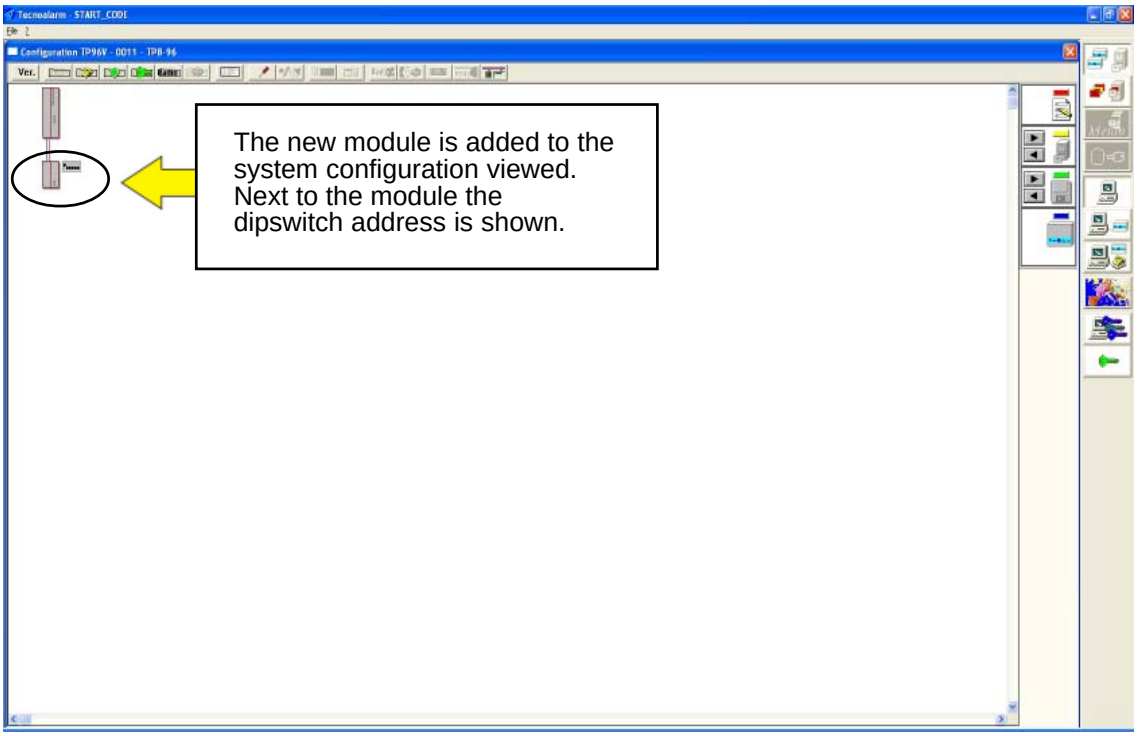



**ADDITION OR DELETION OF MODULES**
Select **Add** to add the devices to the system.

**SELECTION OF THE DEVICE**
Select the devices to be connected, once at time, among those available.


**ADDITION OF THE DEVICE**
On the screen is viewed the beside image:
**Commands available**
- **Yes** to confirm the addition
- **No** to abandon the addition

If confirmed, the module is added to the system configuration displayed on the screen.
N.B. It is possible to add or delete devices at any time during programming.

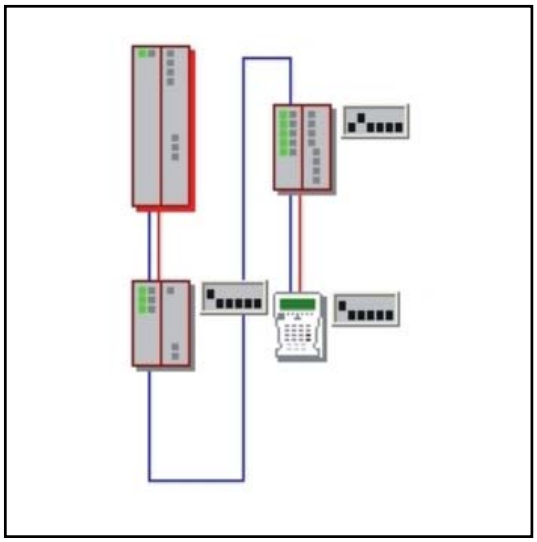



## LIMITS OF THE SYSTEM

The program automatically controls the system's hardware limits, i.e. the maximum number of devices of each type that may be configured (input expansions, consoles, wireless devices, output expansions etc.) When a device type reaches its limit, a warning window automatically appears and the addition is prevented. Click **OK** to close the window.

## ICON OF THE CONTROL PANEL

If wireless zones are programmed, they are displayed on the icon of the control panel, which is in fact, enlarged as the wireless module is attached directly to the original icon.



## CONFIGURATION OF THE SYSTEM

The devices viewed on the worktop correspond to the system configuration.

**Connections**

The connections are represented as a unifilar diagram. The red lines represent power supply and the blue ones the RS485 serial line.

**Siren bus**

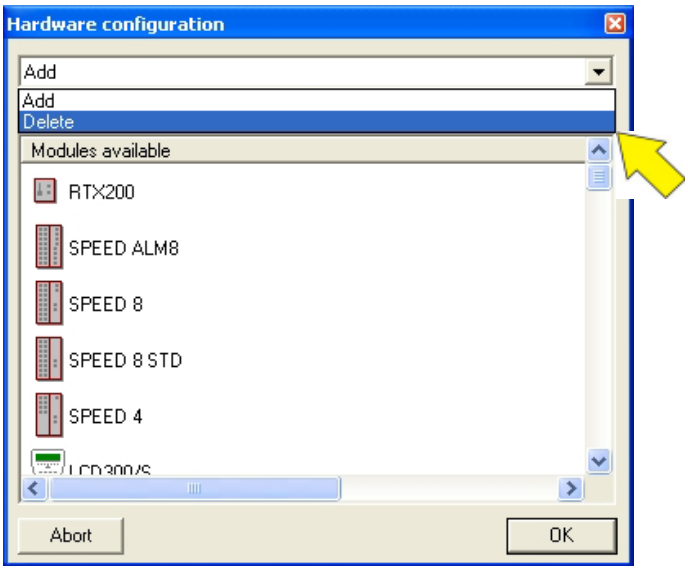
Since the schema represents only the RS485 serial line, to simplify the graphic, the bus siren are connected to RS485 serial line, too.
But on the real wiring, the bus siren must be connected to the Siren bus.

**Wireless devices**

The wireless devices, except for the receiver modules, are represented without any kind of connection.

**Move the window**

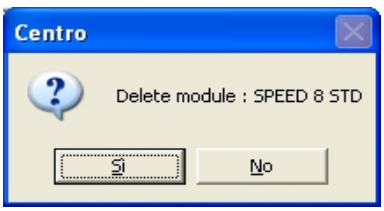
During the addition/deletion of devices, the hardware configuration window may hide the system configuration. To displace it, click on the blue bar.




## DELETION OF A DEVICE

Select **Delete** to cancel a device from the system configuration

Click on the device to be deleted




On the screen is viewed the image beside:

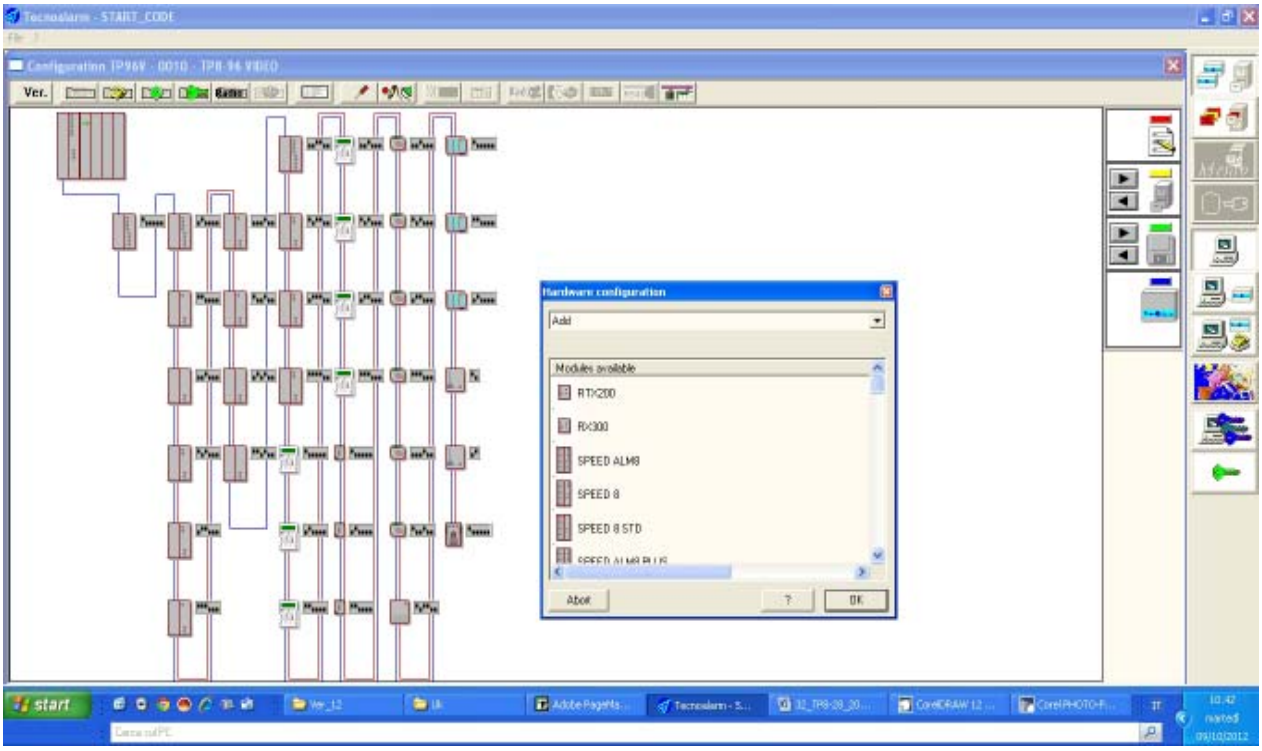
**Commands available**

- **Yes** to confirm the deletion
- **No** to undo the deletion

## SAVE OF THE CONFIGURATION

Once configuration has been finished, press:

- **OK** To save the hardware configuration and quit
- **Abort** To undo the changes made and quit

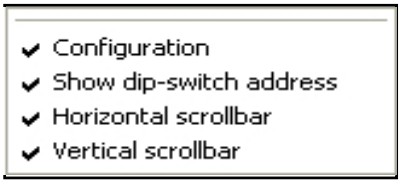



## THE WORKTOP

The worktop is white, bounded by the menu bar in the upper part and the scrollbar on the left and on the right.

## DISPOSITION DEVICES

The program automatically arranges the devices on the worktop one under the other from the left to the right.
The self-powered devices are always disposed in the upper part of the worktop. Therefore, on addition of such a device (e.g. SPEED ALM8) a new column is automatically started even if the previous one has not reached the bottom of the worktop. Disposal of the modules on the worktop does not represent the real installation disposal.




## OPTIONS OF VIEWING

With a click of the left mouse button, anywhere on the worktop, the viewing options window is displayed.
The following options are available:
**Configuration**
Permits viewing of the menu bars (upper and side bar)
**Show dip-switch address**
Permits viewing of the dip-switch configuration for the serial address of the devices viewed on the worktop
**Horizontal scrollbar**
Permits viewing or hiding of the horizontal scrollbar
**Vertical scrollbar**
Permits viewing or hiding of the vertical scrollbar

Click on the option to enable or disable it.

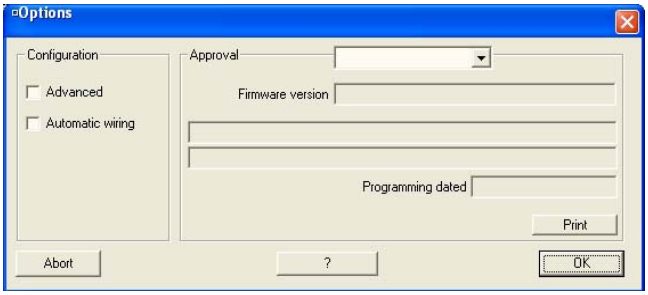
## REDUCTION OF THE WORKTOP

By reducing the software window, the worktop may no longer be able to view all the devices. Enter any menu and exit in order to rearrange all the devices and make them visible on the reduced worktop. If you enlarge the software window, the worktop maintains the disposition of the devices (of the reduced window). To rearrange the devices, enter and exit any menu.

## 7.2 HARDWARE CONFIGURATION WITHOUT AUTOMATIC WIRING

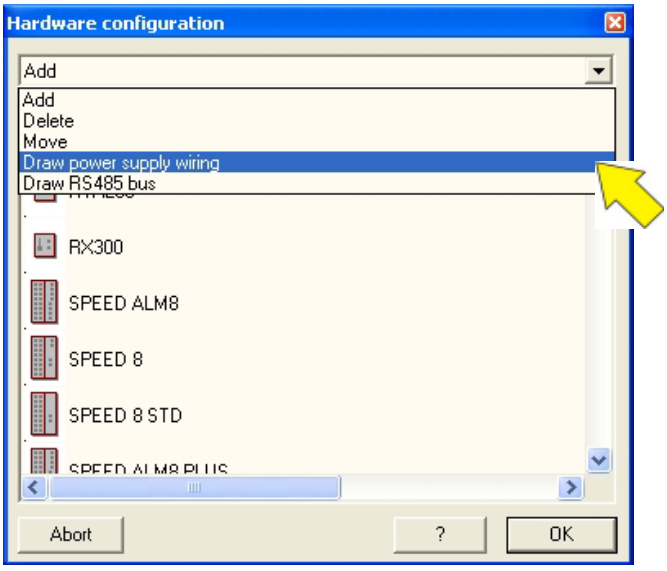
If the automatic wiring option is disabled, disposition of the devices on the worktop is free. The devices can be moved into in the desired position.
The connections between devices, i.e. power supply and RS485 serial lines, are not traced automatically. They can be traced selecting the options “Draw power supply wiring” and “ Draw RS485 bus”.


**CLICK ON VER. ICON**
Viewing of the **Options** menu.

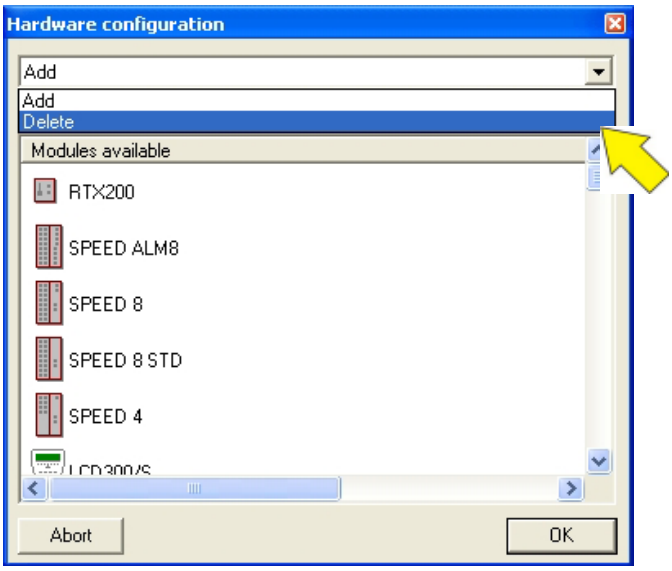



**DISABLE THE OPTION AUTOMATIC WIRING**
If necessary, disable the **Automatic wiring** item, then click **OK** to exit.

**CLICK ON THE HARDWARE CONFGURATION ICON**
The hardware configuration menu is opened.

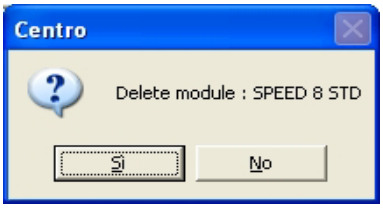



**DROP-DOWN MENU**
In addition to the functions Add and Delete, the menu includes also the following options:
**Move**
Permits the moving of the devices on the worktop
**Draw power supply wiring**
Permits drawing of the red lines representing the power supply
**Draw RS485 bus**
Permits drawing of the blue lines representing the RS485 serial bus




## DELETION OF DEVICES AND TRACES

**Deletion of a device**
Select **Delete**
Click on the device to be deleted

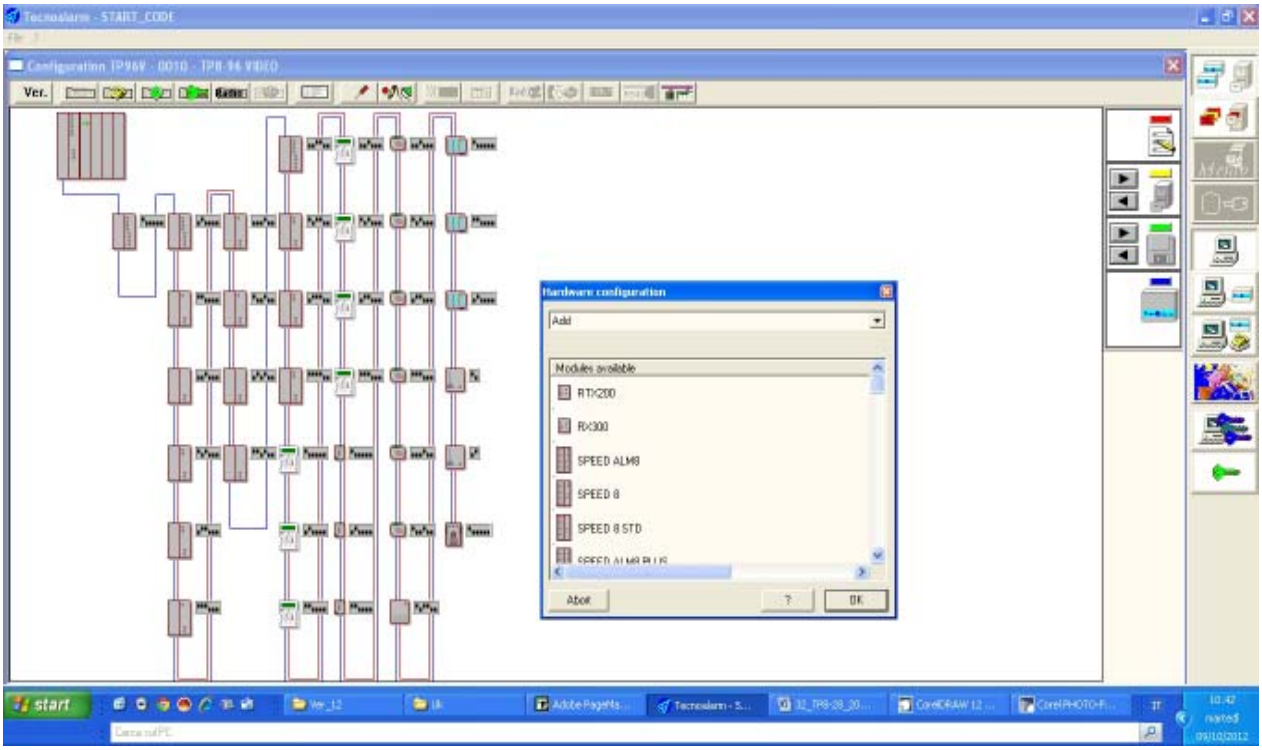



**Commands available**
- **Yes** to confirm the deletion
- **No** to abandon the deletion

**Deletion of a trace**
Select Delete
Click on the trace to be deleted

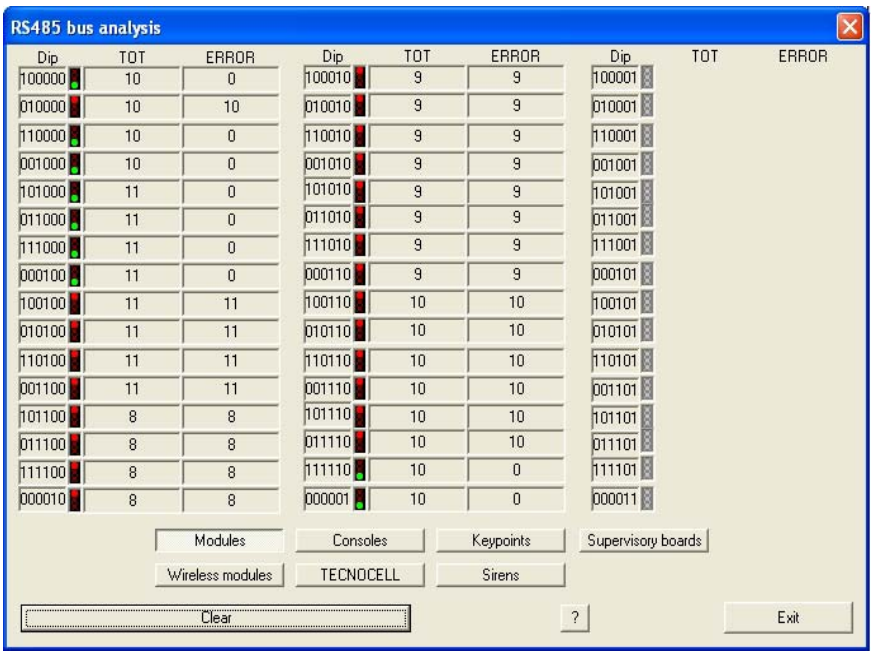
## SAVE OF THE CONFIGURATION

Once configuration has been finished, press:
- **OK** To save the hardware configuration and quit
- **Abort** To undo the changes made and quit



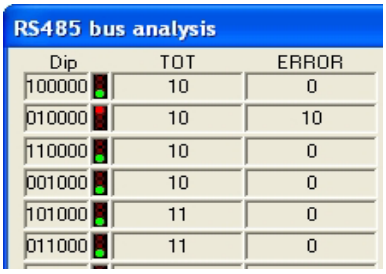
# 8. RS485 SERIAL BUS ANALYSIS


Select the **RS485 serial bus analysis** table. On the screen is viewed:




The menu RS485 serial bus analysis permits the control of the communication on the RS485 serial bus (as well as on the Siren Bus and Sensor Bus) to which all of the system's devices are connected. In particularly, it permits the verification of the coherence and exactitude of the transmitted data.
For each device connected to the serial bus, two counters sum up the transactions and communication error.

The RS485 bus analysis table permits:
- Viewing of the device addresses
- Viewing of the total counter (TOT) and of the error counters (ERROR)
- Signaling of the communication errors
- Selection of the type of device to be controlled




- **Dip** Column viewing of the addresses of the devices
- **TOT** Each communication is analyzed, totalized and recorded by the TOT total counter
- **ERROR** Each communication which is considered invalid (i.e. communication errors) is recorded, totalized and recorded by the ERROR counter

**SIGNALING**
The RS485 serial bus analysis compares the TOT and the ERROR counters in order to determine the reliability of data communication between the CPU and the devices. It calculates the percentage of errors and classifies it using a traffic light signaling.
**Device signaling**
- **Off** Peripheral not managed by the control panel because it exceeds the capacity of the system
- **Green** Percentage of error less than 1%, i.e. insignificant, reliable data, optimal situation.
- **Yellow** Percentage of error from 1 to 3%, i.e. negligible, connection disturbed, situation to must controlled
- **Red** Percentage of error higher than 3%, i.e. critical, connection very disturbed, situation must be corrected

In the above example, the device with address 1 is present on the installation and reports no errors. Therefore signaling is green. However, the device with address 2 is not present on the installation, therefore the number of errors is equal to the number of communications. Consequently, signaling is red.

The devices of the system are divided into categories.
Click on the corresponding item to select the category to be analyzed.


**Modules**
Permits the selection of the input expansion modules (max. 2 addresses viewed)

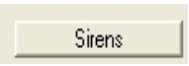

**Consoles**
Permits the selection of the consoles (max. 8 addresses viewed)


**Keypoints**
Permits the selection of the keypoints (max. 8 addresses viewed)


**Supervisory boards**
Permits the selection of the output expansion modules (max. 12 addresses viewed)


**Wireless modules**
Permits the selection of the wireless transmitters/receivers (max. 2 addresses viewed)


**Tecnocell**
Permits the selection of the external GSM telephone communicator (max. 1 address viewed)




**Sirens**
Permits the selection of the sirens connected to the Siren Bus (max. 2 addresses viewed)


**Clear**
The **Clear** key resets all the counters once the installation has been completed.
It is recommended to reset the counters when the installation procedure has been completed.

Then press:
- **Exit** to quit the RS485 serial bus table

# TP8-96 VIDEO

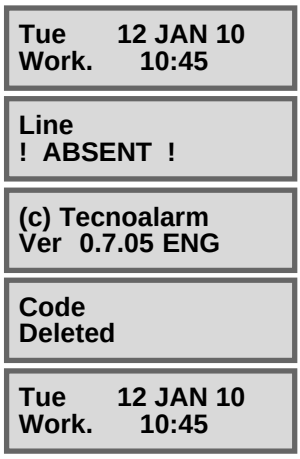
## APPENDIX A
## SPECIAL PROCEDURES

# A. SPECIAL PROCEDURES

## A.1 RESET OF THE CODES

This procedure permits the deletion of all the access codes of the control panel and setting of the default codes.

**Warning: Before you reset the codes, always make sure that it is really necessary and that the control panel is in stand-by (date and time displayed). If need be, make a copy of the configuration of the control panel.**




Here below the procedure for the reset of the access codes is explained.

- Remove the jumper JP9
- Insert the jumper JP3
- The red, yellow and green LED of the electronic board are switched off
- On the display of the console **Line ! ABSENT !** is viewed and all the LED of the console are blinking
- When the firmware version of the console is viewed on the display of the console, press the **EXIT** key several times.
  On the display is viewed **Code Deleted**.
- Reinsert the jumper JP9
- Remove the jumper JP3 and verify that the yellow LED is switched on.
  After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.

**Warning: On reset of the codes all of the system's codes return to the default setting. This is the same for the length codes:**

- **Default installer code** **54321**
- **Default master code** **12345**
- **Default standard user codes** **00000 (unvalid code)**
- **Default code length** **5 digits**

## A.2 DELETION OF THE ENTIRE SYSTEM CONFIGURATION (RESET OF DEFAULT SETTINGS)

This procedure permits the deletion of the entire system configuration and setting of the default settings.

**Warning: Before you reset the configuration, always make sure that it is really necessary and that the control panel is in stand-by (date and time displayed). If need be, make a copy of the configuration of the control panel.**

| |
|---|
| **Tue 12 JAN 10**<br>**Work. 10:45** |
| **Line**<br>**! ABSENT !** |
| **(c) Tecnoalarm**<br>**Ver 0.7.05 ENG** |
| **Config.**<br>**Deleted** |
| **Tue 12 JAN 10**<br>**Work. 10:45** |

Here below the procedure for the deletion of the system configuration.

- Remove the jumper JP9
- Insert the jumper JP3
- The red, yellow and green LED of the electronic board are switched off
- On the display of the console **Line ! ABSENT !** is viewed and all the LED of the console are blinking
- When the firmware version of the system will be viewed, press the star key (**NO**) several times.
  On the display is viewed **Config. Deleted**.
- Reinsert the jumper JP9
- Remove the jumper JP3 and verify that the yellow LED is switched on.
  After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.

**Warning: After the deletion of the system configuration, the control panel will be set with all the default settings (i.e. no telephone number, no zone configuration, no function programmed) and the default codes as well as the default code length:**

- **Default installer code** **54321**
- **Default master code** **12345**
- **Default standard user codes** **00000 (unvalid code)**
- **Default code length** **5 digits**

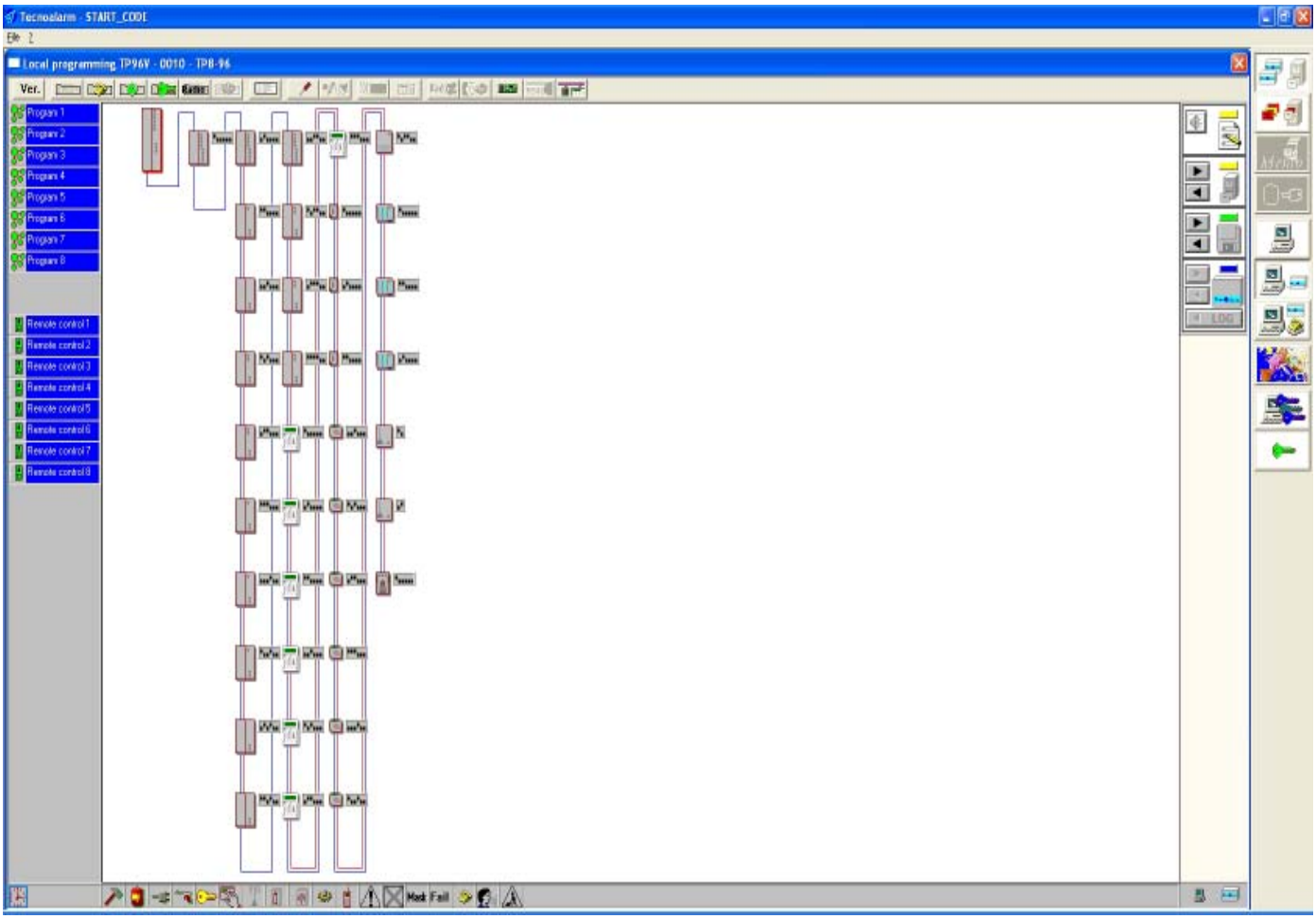
# A.3 BACKUP-RESTORE OF THE WIRELESS CONFIGURATION

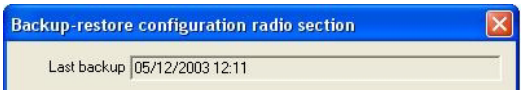

Select the **Backup-restore wireless configuration** table.

The identification codes and programming of the system's wireless devices are stored in the control panel.
The menu Backup-restore wireless configuration permits the backup, i.e. the download and the saving in the PC of the data relating to the control panel's wireless devices. In addition, it permits the restore, i.e. the upload of the programming data relating to the wireless devices previously saved on the PC.

**Warning: You must be connected locally or remotely to the control panel through the Tecnoalarm software**

On the screen is viewed:




**LAST BACKUP**
Viewing of the date and time of the last backup.
The displayed date and time corresponds exactly to the moment when the wireless configuration was saved in the archives of the software on the PC.
It is heartily recommended to make a backup each time wireless devices are added or deleted.

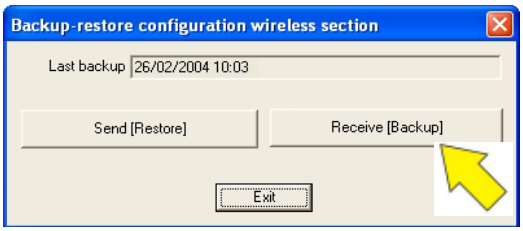

**SEND (RESTORE)**
Click on the **Send (Restore)** button to send the wireless configuration to the control panel.
**Warning: The operation is irreversible. All the data relating to the wireless devices currently saved on the control panel will be overwritten.**

On the screen is viewed the beside image.

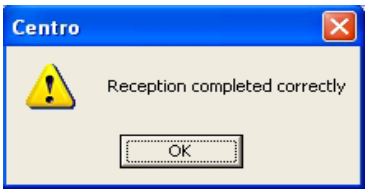

**Commands available**
- **Yes** to confirm and proceed with the upload of the configuration of the wireless section
- **No** to abandon the upload of the configuration of the wireless section


If the procedure has been completed successfully, on the screen is viewed **Transmission completed correctly**.

Press **OK** to quit the restore menu.

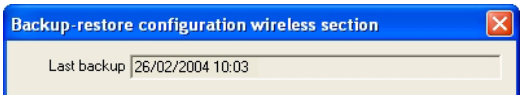



**RECEIVE (BACKUP)**
By pressing the Receive button, the wireless configuration is dwnloaded in the PC.

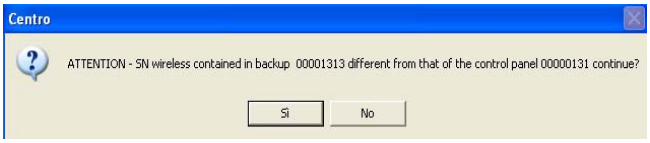



If the procedure has been completed successfully, on the screen is viewed **Reception completed correctly**.

Press **OK** to quit the backup menu.




The date and the time of the last backup are updated once the process has been completed.

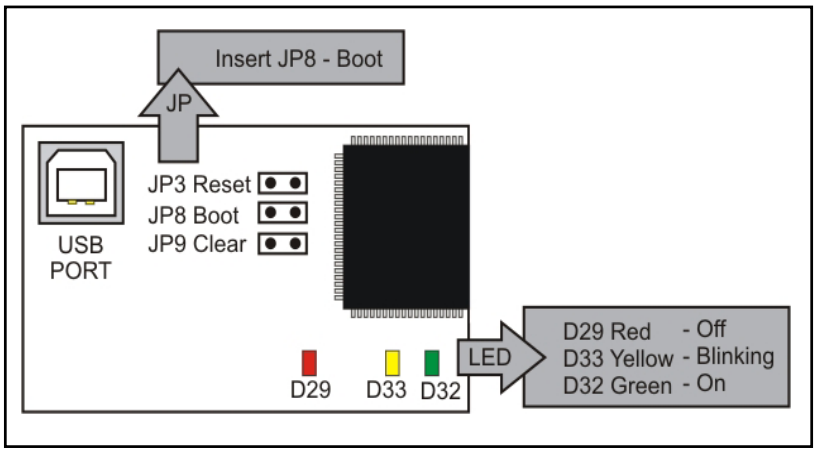



**SERIAL NUMBER OF THE CONTROL PANELI**
All the Tecnoalarm control panels are identified by their own 10 digits serial number.
The serial number is assigned by the manufacturer and it is written on the memory of the control panel and on a label on the CPU board.
During the backup process, the serial number is checked and valid by the software.
If it is different from the one stored during the last backup, the software sends a message of incoherence and requests confirmation before continue.
**Commands available**
- **Yes** to confirm the operation
- **No** to abandon the operation

## A.4 LOCAL FIRMWARE UPGRADE

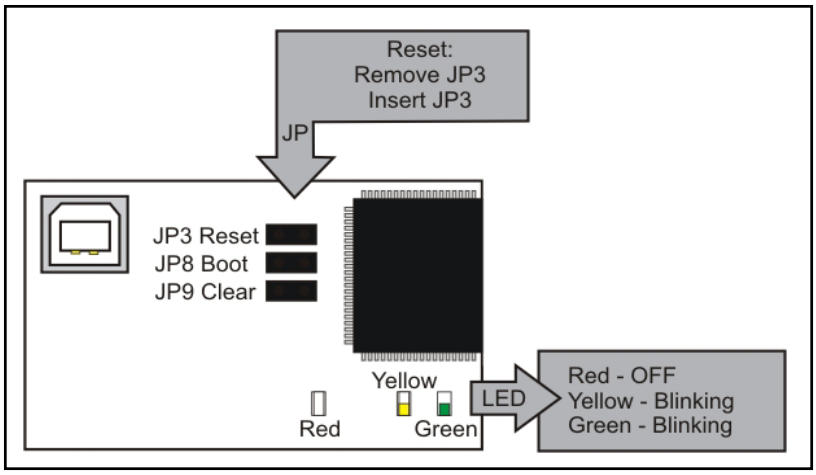

This procedure permits the local upgrade of the control panel's firmware, i.e. connecting the PC to the control panel using the PROG USB interface and a serial cable.

**Warning: Before proceeding, ensure that you have the file for upgrade at hand.**
**This file is included in the CD with the newest software version and, in addition, can be downloaded from the web site www.tecnoalarm.com**

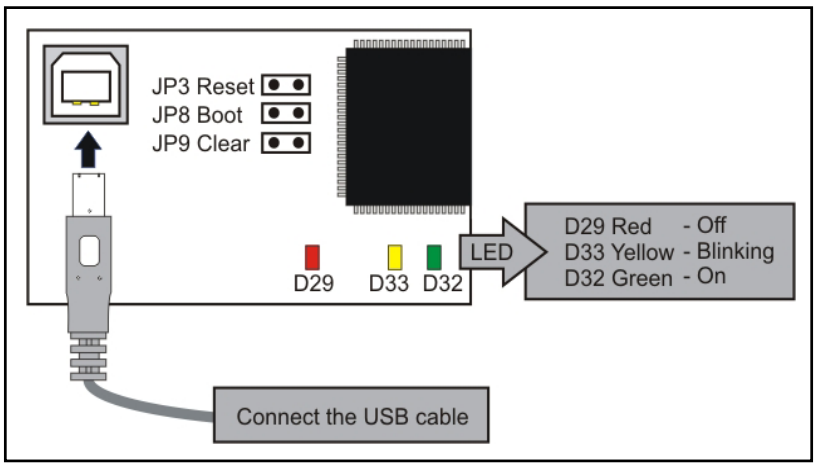



Procede as follows:

- Close the file of the control panel through the Tecnoalarm software.
- Insert the JP8 jumper
(view the opposite schema)



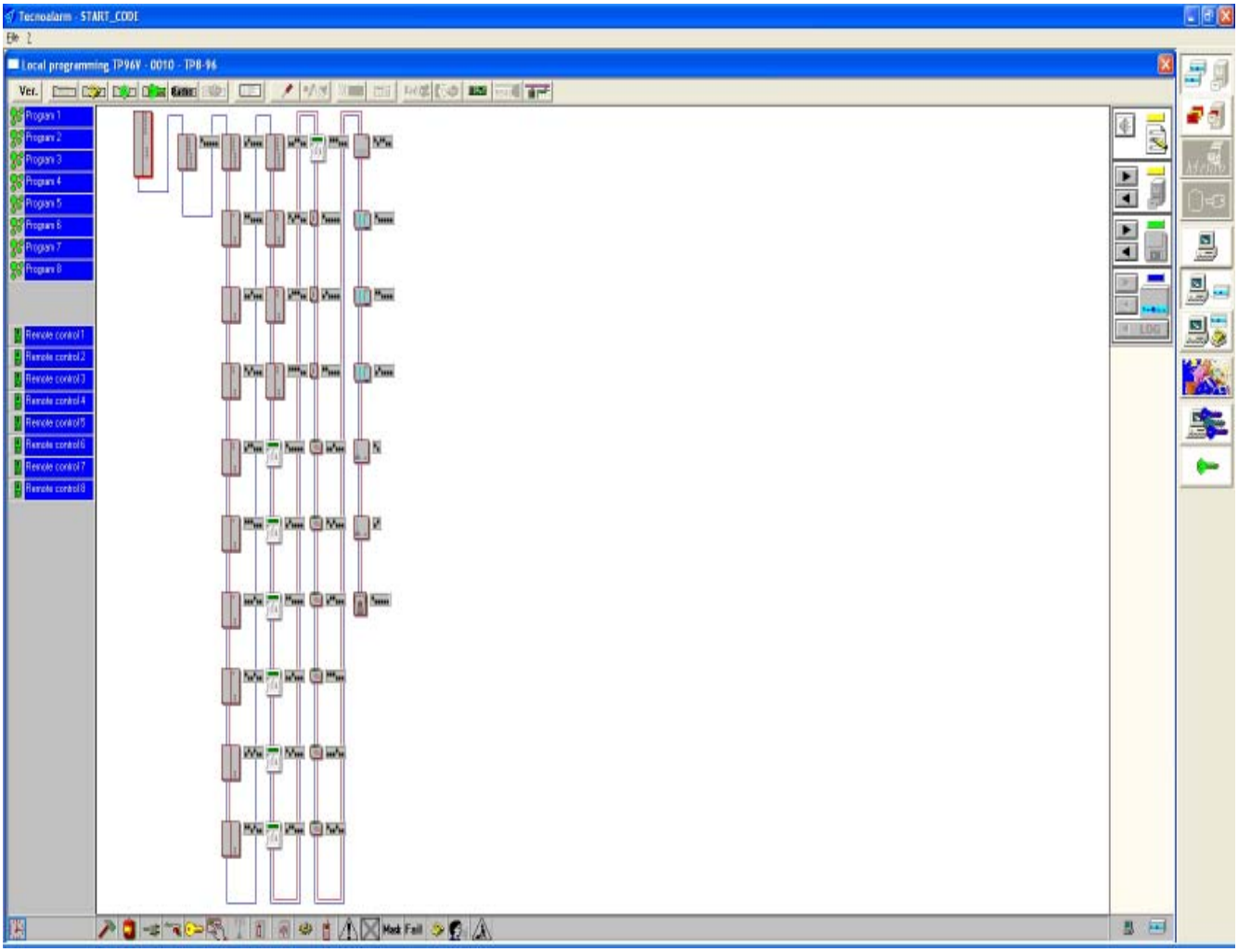

- Insert the JP3 jumper
- Remove the JP3 jumper and check if the yellow and the green LED are blinking (view the opposite schema)



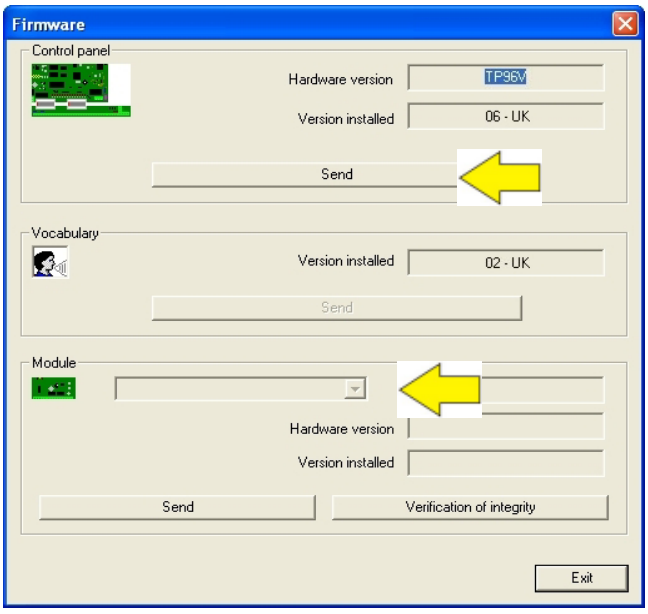

- Connect the PC to the control panel using the PROG USB programming interface and check if the red LED is blinking (view the opposite schema)

- Launch the programming software and enter the local programming environment
- Enter the user archive and select the corresponding system from the user list

On the screen is viewed:




- Click on the opposite icon on the menu bar



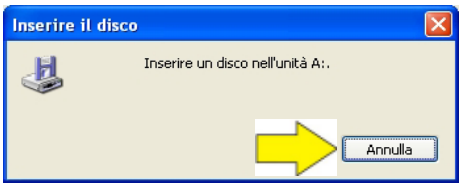

**Control panel**

- Click on the **Send** button in the control panel environment

**Module**

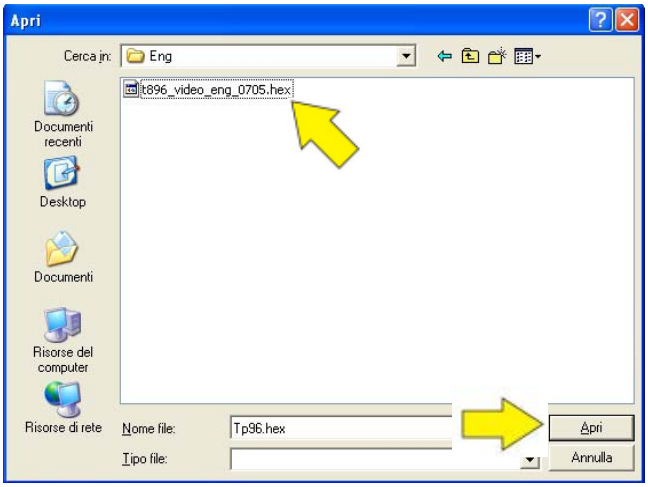
- Select the module to update
- Click on the **Send** button in the module environment

On the screen is viewed:



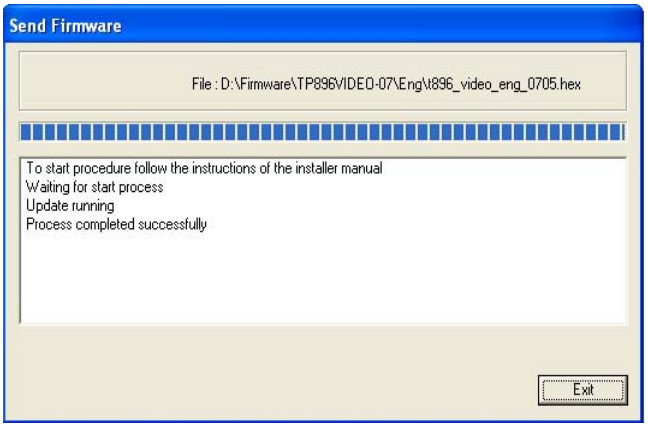

- Opening of the "insert a CD" window
- Click on the **Abandon** button

On the screen is viewed:

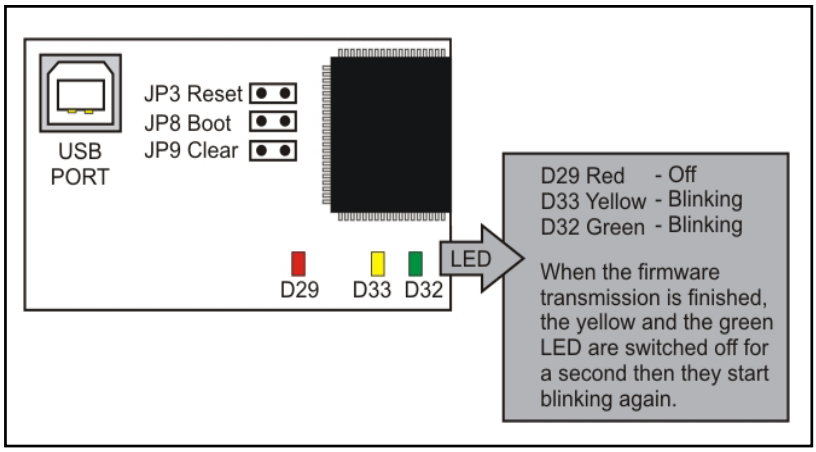



- Select the storage unit containing the new firmware version of the control panel

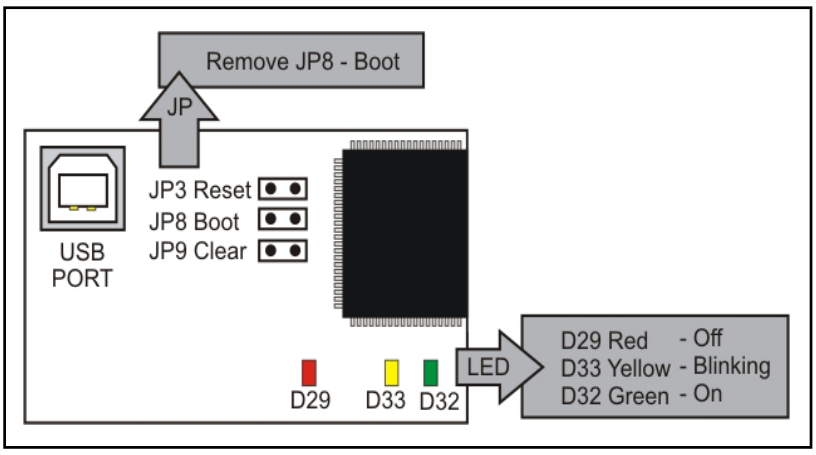
- Select the corresponding file **(t896_video_eng_0705.hex)** and click on the **Open** button
  On the screen is viewed:




- On the screen is viewed the send firmware window.
  The procedure of firmware upgrade is started and the various phases are displayed.
  The blue bar indicates that the data transmission is ongoing.




- The yellow and the green LED start blinking quickly.
- At the end of the data transmission, the yellow and the green LED are switched off for an instant, then they start blinking again (see the opposite schema).




- Then, remove the JP8 jumper.
  Check the red LED is off, the yellow LED is blinking and the green LED is on
  (see the opposite schema).

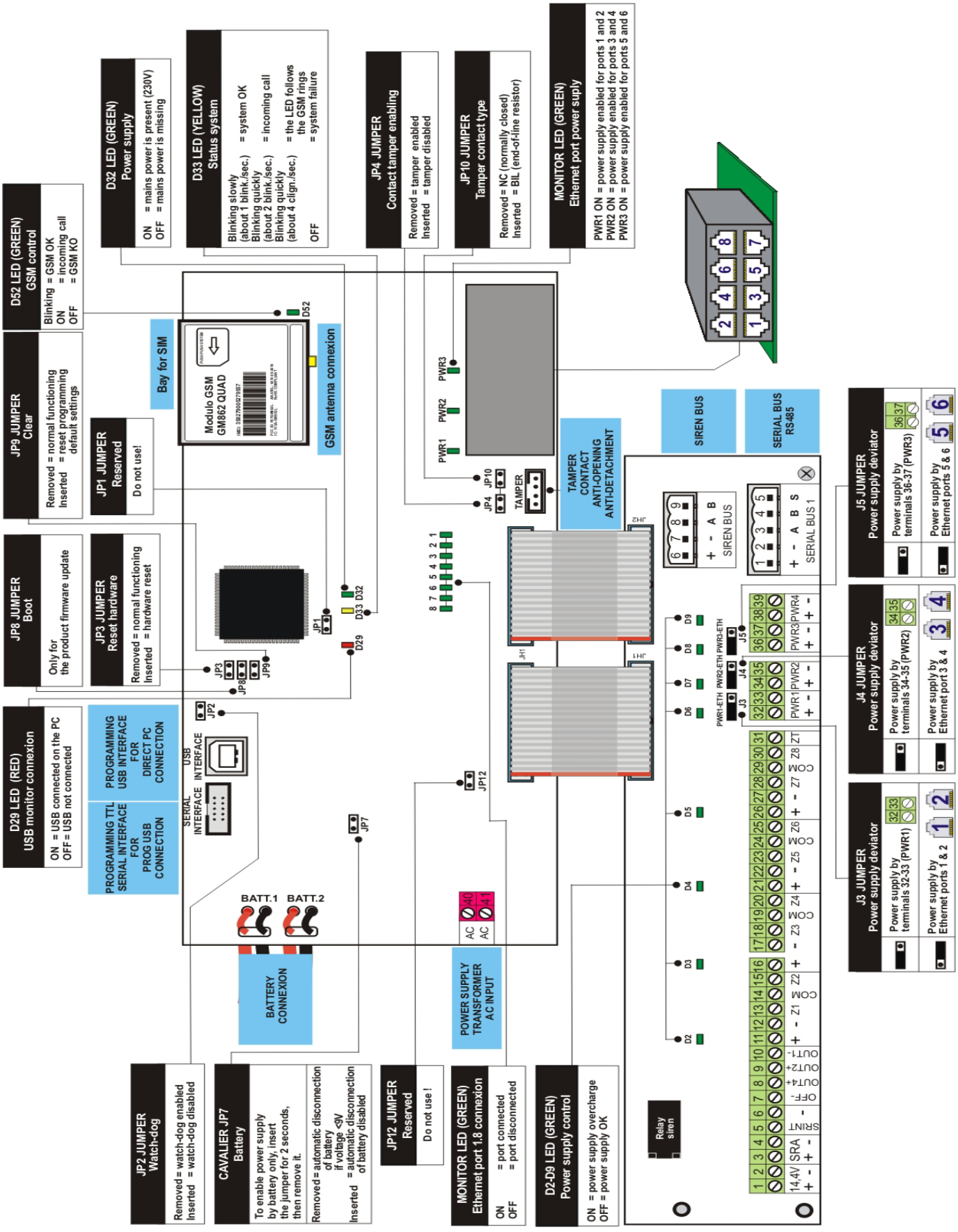
- The arrow between the control panel and the PC becomes green after approximately 10-20 seconds.

**(c) Tecnoalarm**
**Ver 0.7.05 ENG**

On the display of the console is viewed the new firmware version.


- Click on the **Exit** button in the Firmware window on PC to quit the menu.
  The process has been completed.

## ELECTRONIC BOARD

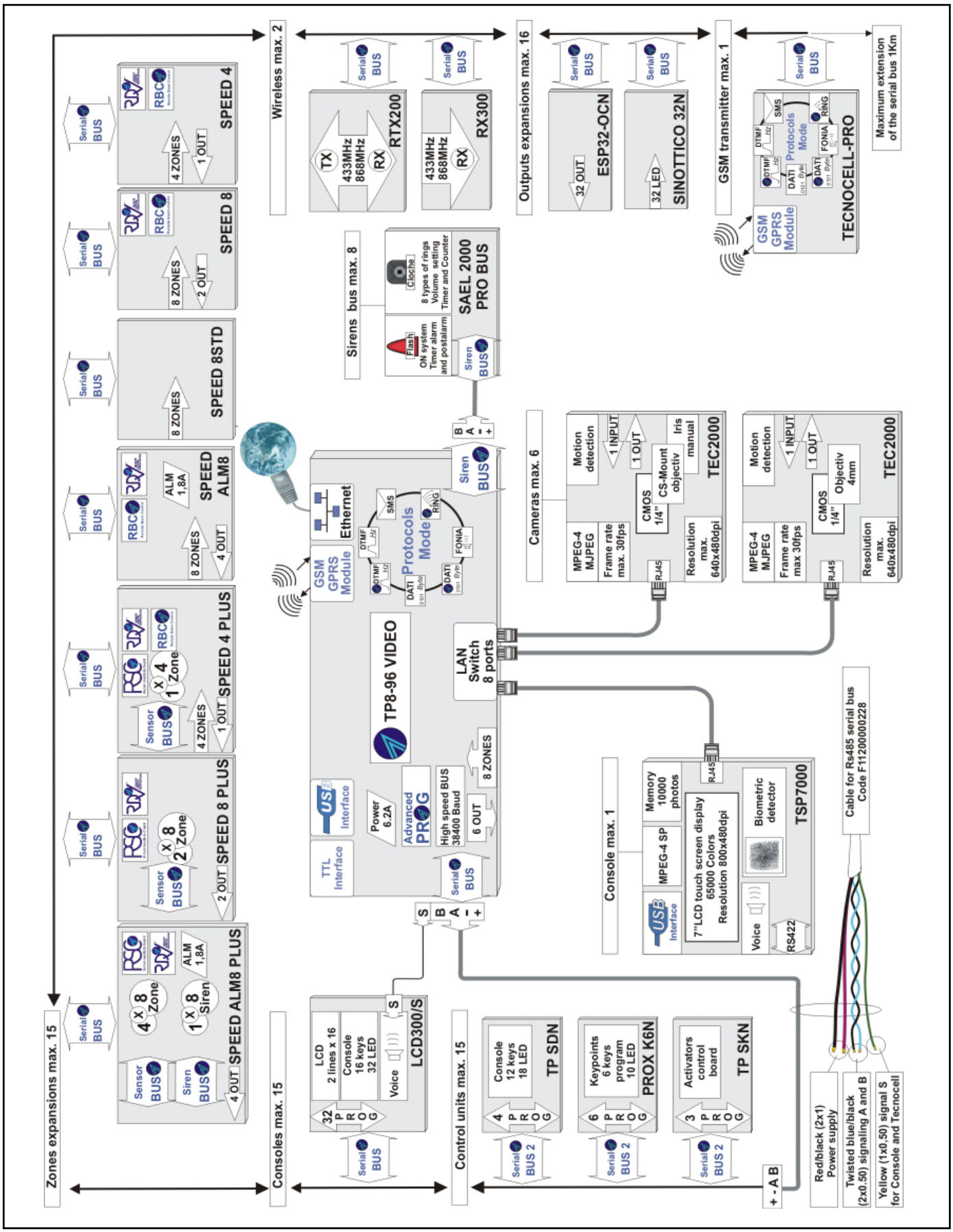


## TERMINALS

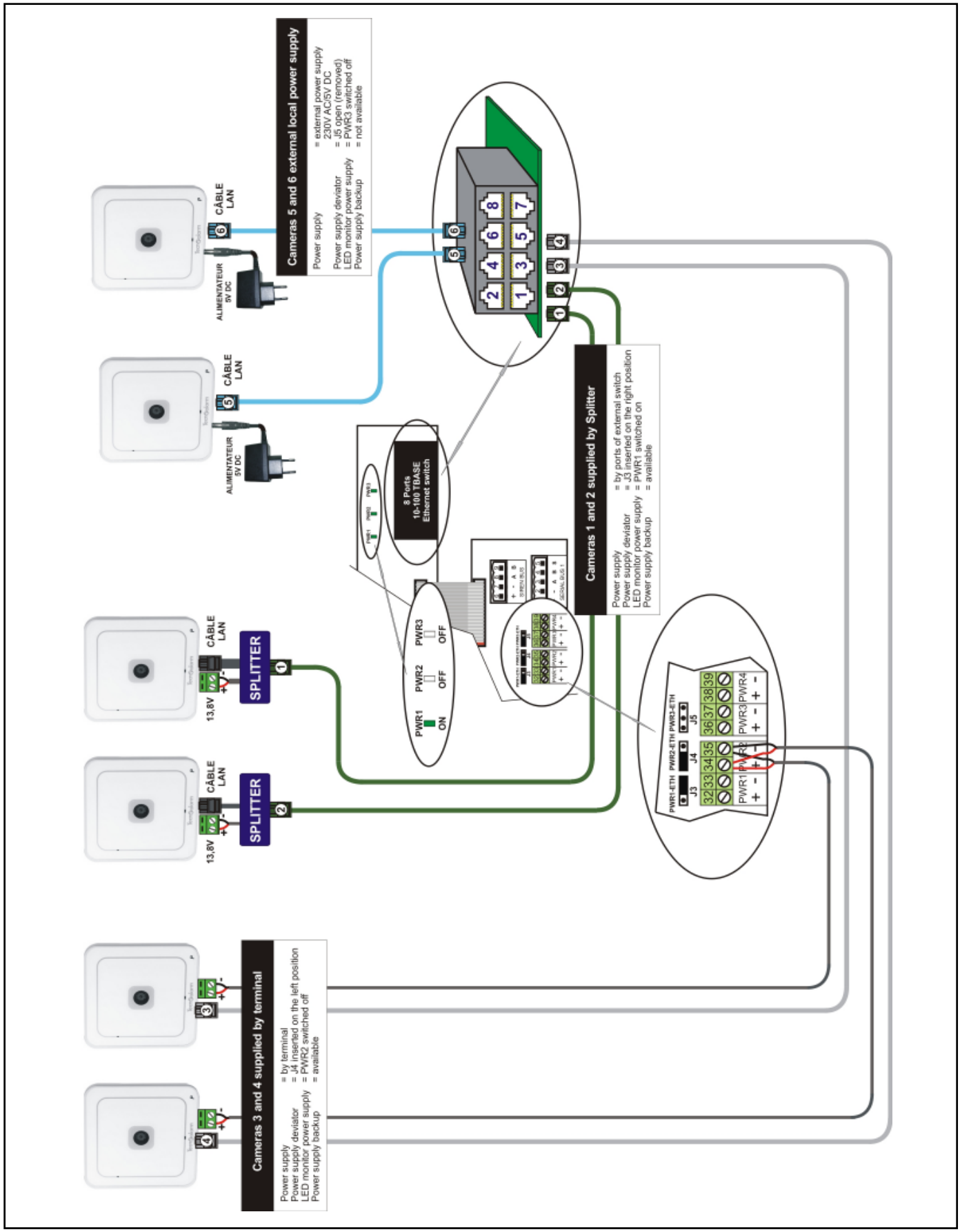
| | | | | | |
|---|---|---|---|---|---|
| 1 | **14V +** | Battery charge voltage | Output | 14,4V DC - For self-powered siren | |
| 2 | **-** | GND (earth) | - | GND (earth) | |
| 3 | **SRA+** | Self-powered sirens | Output | **Stand-by:** 13,8V DC | **Alarm:** high impedance |
| 4 | **SRA-** | Negative voltage - Indoor self-powered sirens | - | | **Alarm:** negative voltage |
| 5 | **+SR INT** | Indoor siren | Output | 13,8V DC | |
| 6 | **-SR INT** | GND (earth) | - | **Stand-by :** high impedance (*) | **Alarm:** negative voltage |
| 7 | **OFF-** | Logic stand-by output | Output | **Control panel in stand-by:** negative voltage | **Control panel armed:** high impedance |
| 8 | **OUT4+** | Programmable logic output | Output | **Stand-by :** high impedance (*) | **Alarm:** 13,8V DC (*) positive voltage |
| 9 | **OUT2+** | Programmable logic output | Output | **Stand-by :** high impedance (*) | **Alarm:** 13,8V DC (*) negative voltage |
| 10 | **OUT1-** | Programmable logic output | Output | **Stand-by:** negative voltage | |
| **Standard inputs** | | | | | |
| 11 | **+** | Power supply | Output | 13,8V DC | |
| 12 | **-** | GND (earth) | Output | GND (earth) | |
| 13 | **Z1** | Zone 1 | Input | NC / NA / BIL / B24 | |
| 14 | **COM** | Common input | Input | 13,8V DC | |
| 15 | **Z2** | Zone 2 | Input | NC / NA / BIL / B24 | |
| 16 | **+** | Positive voltage | Output | 13,8V DC | |
| 17 | **-** | GND (earth) | Input | GND (earth) | |
| 18 | **Z3** | Zone 3 | Input | NC / NA / BIL / B24 | |
| 19 | **COM** | Common input | Output | 13,8V DC | |
| 20 | **Z4** | Zone 4 | Input | NC / NA / BIL / B24 | |
| 21 | **+** | Positive voltage | Output | 13,8V DC | |
| 22 | **-** | GND (earth) | Input | GND (earth) | |
| 23 | **Z5** | Zone 5 | Input | NC / NO / BIL / B24 | |
| 24 | **COM** | Common input | Output | 13,8V DC | |
| 25 | **Z6** | Zone 6 | Input | NC / NO / BIL / B24 / ZBUS | |
| 26 | **+** | Positive voltage | Output | 13,8V DC | |
| 27 | **-** | GND (earth) | - | GND (earth) | |
| 28 | **Z7** | Zone 7 | Input | NC / NO / BIL / B24 / ZBUS | |
| 29 | **COM** | Common input | Input | 13,8V DC | |
| 30 | **Z8** | Zone 8 | Input | NC / NO / BIL / B24 / ZBUS | |
| **Tamper input** | | | | | |
| 31 | **ZT** | Tamper input | Input | **Stand-by** = closed | **Alarm** = Open |
| **Terminals** | | | | | |
| 32 | **PWR1+** | Positive voltage - TVCC power supply | | 13,8V DC | |
| 33 | **PWR1-** | Negative voltage - TVCC power supply | | | |
| 34 | **PWR2+** | Positive voltage - TVCC power supply | | 13,8V DC | |
| 35 | **PWR2-** | Negative voltage - TVCC power supply | | | |
| 36 | **PWR3+** | Positive voltage - TVCC power supply | | 13,8V DC | |
| 37 | **PWR3-** | Negative voltage - TVCC power supply | | | |
| 38 | **PWR4+** | Positive voltage - TVCC power supply | | 13,8V DC | |
| 39 | **PWR4-** | Negative voltage - TVCC power supply | | | |
| **Power supply** | | | | | |
| 40 | **AC** | AC power supply voltage | Input | 32V AC | |
| 41 | **AC** | AC power supply voltage | Input | 32V AC | |
| **RS485 serial bus** | | | | | |
| 1 | **+** | Power supply RS485 serial bus | Output | 13,8V DC | |
| 2 | **-** | Power supply RS485 serial bus | Output | GND (earth) | |
| 3 | **A** | RS485 serial bus | Input | RS485 serial bus | |
| 4 | **B** | RS485 serial bus | Output | RS485 serial bus | |
| 5 | **S** | Loudspeaker signal | Output | Voice signal towards loudspeaker of the LCD300/S consoles | |
| **Siren bus** | | | | | |
| 6 | **+** | Power supply RS485 serial bus | Output | 14,4V DC | |
| 7 | **-** | Power supply RS485 serial bus | Output | GND (earth) | |
| 8 | **A** | RS485 serial bus | Input | RS485 serial bus | |
| 9 | **B** | RS485 serial bus | Output | RS485 serial bus | |

*** Default setting. NC (0 Ohm) - NO (superior to 2K Ohm) - BIL (2K Ohm ... 4K Ohm) - B24 (2K Ohm ... 4K Ohm)**

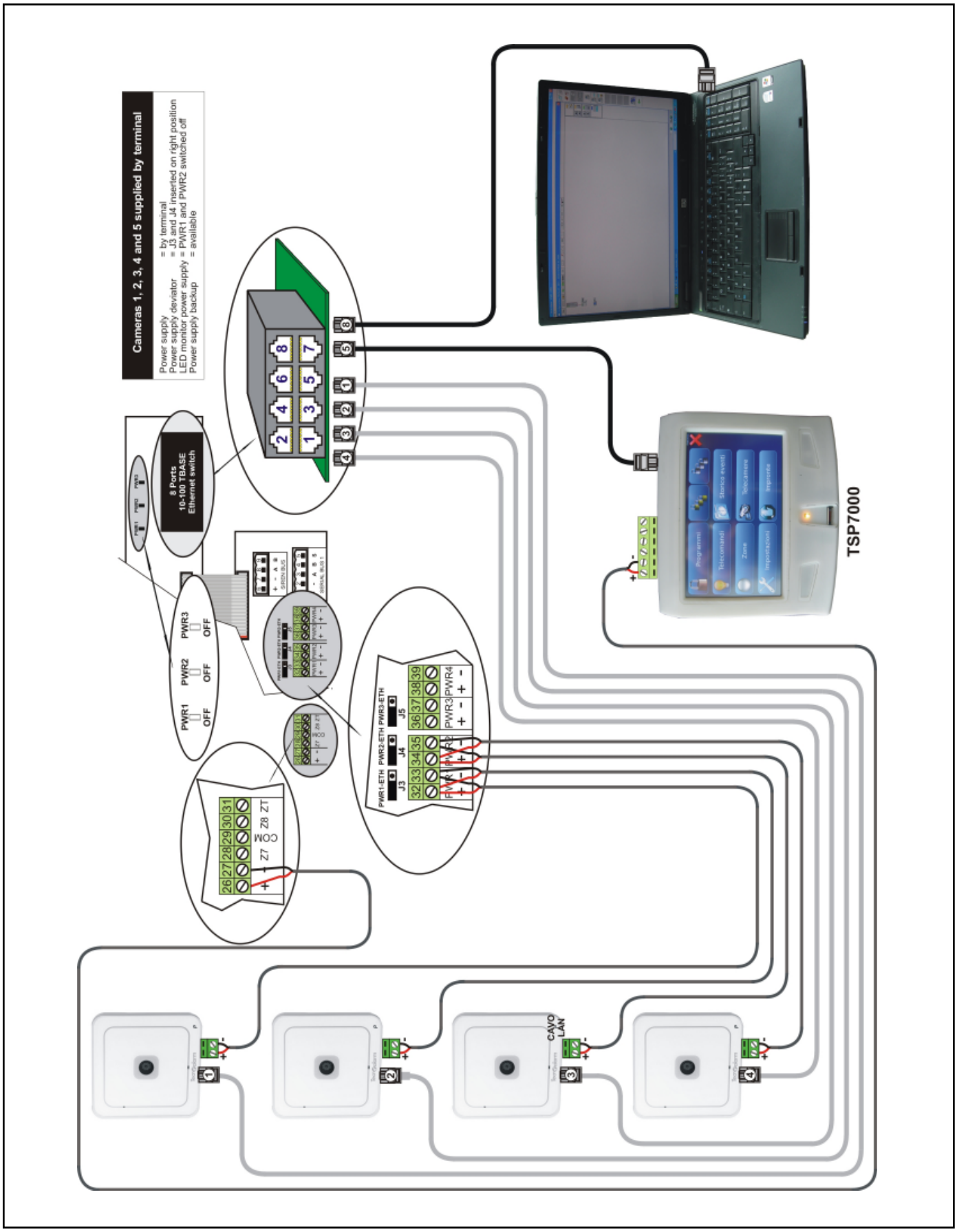
**SYSTEM**


Zones expansions max. 15
Consoles max. 15
Control units max. 15
Wireless max. 2
Outputs expansions max. 16
GSM transmitter max. 1
Maximum extension of the serial bus 1Km
Sirens bus max. 8
Cameras max. 6
Console max. 1
SPEED 4
SPEED 8
SPEED 8STD
SPEED ALM8
SPEED 4 PLUS
SPEED 8 PLUS
SPEED ALM8 PLUS
RTX200
RX300
ESP32-OCN
SINOTTICO 32N
TECNOCELL-PRO
SAEL 2000 PRO BUS
TP8-96 VIDEO
LAN Switch 8 ports
TEC2000
TSP7000
LCD300/S
TP SDN
PROX K6N
TP SKN
Ethernet
GSM GPRS Module
Protocols Mode
Advanced PROG
Cable for Rs485 serial bus Code F1120000228
Red/black (2x1) Power supply
Twisted blue/black (2x0.50) signaling A and B
Yellow (1x0,50) signal S for Console and Tecnoceil

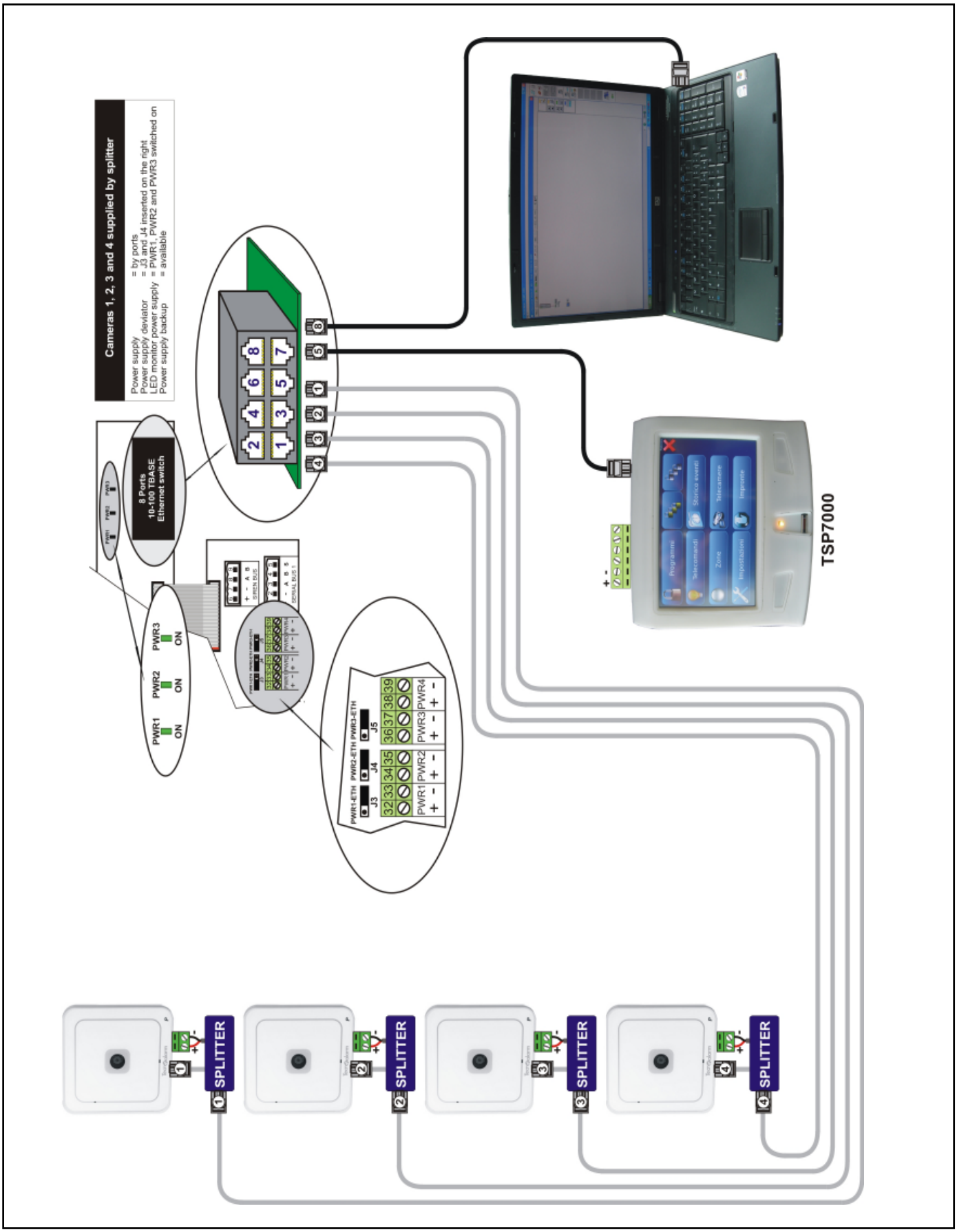
## CAMERA CONNECTION



**SUPPLY BY TERMINALS**



**SUPPLY BY CABLES + SPLITTER**



# TP8-96 VIDEO INSTALLER MANUAL