



## HERCOLA

Wireless intrusion detection control unit with integrated GSM module

090060975



Compatible with the e-Connect platform



## FOREWORD

### FOR THE INSTALLER:

Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.

Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

### FOR THE USER:

Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.

Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.

Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...).

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This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in accordance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely:

### **Wireless intrusion detection control unit with integrated GSM module**

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured.

Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.

Production processes are closely monitored in order to prevent faults and malfunctions. However, the componentry adopted is subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.

Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

**We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on a regular basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.**

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply. If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

## EU DECLARATION OF CONFORMITY

Hereby, EL.MO. S.p.A. declares that the HERCOLA radio equipment is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: [elmospa.com](http://elmospa.com) – registration is quick and easy.

## DISPOSAL INSTRUCTIONS - USER INFORMATIONS



According to Directive 2012/19/EU on the Waste of Electric and Electronic Equipment (WEEE), it is here specified that this Electrical-Electromechanical Device started to be commercialized after 13th August 2005, and it shall be disposed of separately from ordinary waste products.

This product needs batteries for correct functioning. Exhausted batteries have to be delivered to dumping grounds authorized for battery collection. The materials used for this product are very harmful and polluting if dispersed in the environment.

IT0802000001624



## 1. GENERALS

The HERCOLA microprocessor-based control unit concentrates outstanding technical features in a little space. It has been designed for quick and easy installation in domestic and commercial environments, as well as in offices and second homes, integrating the most advanced technology currently available in an elegant, modern housing.

HERCOLA can manage up to 32 radio zones and integrates a GSM module. It features a simplified configuration menu for local operations: the complete configuration can be set via software, either in direct or remote connection, including through the e-Connect platform using the integrated GSM/GPRS module or the optional MDWIFIH module.

HERCOLA is fully compatible with VILLEGGIO and HELIOS system devices.

## 2. TECHNICAL FEATURES

### 2.1 General features

- Advanced-design plastic housing protected against opening and removal.
- Advanced electronic components and circuits.
- Microprocessor-based operating mode.
- Graphic B/W LCD display, 128x65, with RGB backlight depending on operating conditions (adjustable).
- Backlit 20-rubber-key keypad.
- Acoustic indications for keypad activity.
- Highly sensitive and selective RF section.
- Radio section: low-absorption receiver operating at FM 434.525 MHz, compliant with EN300220 (class 2) and EN50131, with integrated antenna.  
Low-absorption transmitter operating at AM 868.300 MHz, compliant with EN300220 e EN50131, with integrated antenna.
- Management of 32 users who can control the system using the integrated keypad, proximity keys or ATLANTE4 or ATLANTE4PLUS remote control devices.
- Activation / Suspension of users and programs.
- Advanced area management: 4 areas with 4 sectors each or 2 areas with 8 sectors each or 1 area with 16 sectors each.
- Extreme ease of installation thanks to the radio devices fast menu.
- 2 built-in wired zones, configurable as NO (default), NC, single balanced (for fast zones), double balanced, triple balanced. Wired zones cannot be programmed as radio zones.
- On board zones are balanced with variable voltage (3rd IMQ level).
- Expandability with up to 32 radio zones by means of VILLEGGIO and HELIOS system accessories.
- Complete management of alarm, tamper and low battery events coming from radio sensors.
- Automatic recognition of the DRACO smoke detector (active 24H) and failure state management.
- Many events can be associated to zones.
- Tamper balanced zone to prevent housing opening and removal.
- Alarm relay output with C-NO-NC free from potential contacts with 3A@AC24V carrying capacity. The output can be configured.
- Control of self-powered LYBRA, LYBRA/AL, GAIA and supervised HYDRA sirens.
- Management and configuration of the supervision of the HYDRA radio siren and of the sensors.
- RF Monitor with graphic display.
- WALK TEST function for sensors operation control.
- GSM-GPRS Dual-band integrated module with not separable antenna.
- Sophisticated credit control system for rechargeable SIM cards.
- Optional MDWIFIH module with plug connection for Wi-Fi connection to the e-Connect platform and for remote assistance sessions.



- 1000 event log (historic file).
- Internal clock.
- Weekly programmer.
- Arming scenarios configuration and Max Security management.
- Built-in chronothermostat with boiler failure detection and SMS-based remote control.
- Connector for remote I66 proximity key readers.
- Connector with 2 outputs for ETRREL4 modules that can be configured and remotely controlled.
- 12V fuse-protected power output for detectors.
- Exceptional flexibility when configured from a PC.
- MINIUSB PC connector for configuration, remote control and firmware upgrade (simplified mode).
- Operating flexibility with remote commands.
- Voice synthesis module with 64 messages recordable by the installer, equipped with microphone and loud-speaker; it can be configured only via USB for a total of 8 minutes recording time.
- Messages can be recorded by using the suitable software module; they can also be recorded using a microphone connected to the PC audio board.
- Remote listening device controlled via SMS.
- Low-consumption built-in piezo siren for alarms and operating signals, volume adjustable.
- Temperature sensor with thermostat function, programmable hysteresis and calibration option.
- Phone dialler using the integrated GSM-GPRS module for digital transmission with ContactID and Fast Format protocols, voice transmission.
- Telephone number list, 16 numbers for voice calls, 2 numbers for digital calls, 4 numbers for remote assistance.
- Remote interrogation via SMS with GSM module.
- Voice calls blocking by listening to the message and pressing the 5 key (to end one single call) or the 0 key (to end all calls) on the telephone.
- Phone calls block at disarming.
- Mobile management via Smartphone / Tablet / PC through the e-Connect service platform.
- Suitable for standard applications (e.g. houses, offices)
- High-efficiency switching power supply unit.
- 12 V 0.8 Ah backup battery supplied as standard equipment, with suitable connector for ease of insertion.
- LCD screen, with the possibility to enable the Emergency light function.
- Considerable energy saving due to the extremely low mains and battery consumption.
- Compliant with the EN50131 standard.
- Basic configuration via keypad, basic or advanced configuration via BrowserOne v.3.5.3 or above and HERCOLA module (v.8.2.0 or above).



## 2.2 Electrical Features

**Model:** HERCOLA

**Protec. Class:** IP3X

**EN50131-3 standard:** Environ. class 1, grade 1.

**Power Supply:** Control unit provided with switching module AC 110-240 V 50 Hz / DC 15 V (see specific data from table). In case of mains fault, the unit is supplied by a 12 V 0.8 Ah back up battery.

**Consumption:** 26 mA with unit armed / disarmed. These values refer to default energy saving parameters:  
 26 mA (NO zones) when control unit is disarmed (low consumption).  
 34 mA (NO zones) when control unit is armed (low consumption) with GSM module not active.  
 +16 mA: on-board relay activation.  
 +8 mA: sector keys ON.  
 +22 mA: display red backlight.  
 +12 mA: display green backlight.  
 +9 mA: radio TX ON.  
 +10 mA: voice synthesis set to PLAY.  
 +3 mA: internal siren, volume 1. With steps up to +318 mA internal siren, volume 8.  
 +50 mA: GSM module operating in voice mode.  
 +30 mA: GSM module operating in GPRS mode.

**Output voltages:** 13.8 Vdc during battery recharge  
 +14.5 V at terminals +14 V without load  
 +12 V typically at 12 V SENS terminals.  
 max 15 Vdc with mains supply;  
 from 13.3 Vdc to 8.4 Vdc with battery only.

**Low battery detection:** 10.5 Vdc, with restore at 12.5 Vdc

**Autonomy:** 24 h with default energy saving parameters (26 mA).

**Battery release:** 9 Vdc

**Internal clock:** Real-time, not equipped with back up battery.

**Built-in siren:** Maximum sound pressure level configurable via browser: 96 dB (at 1 meter distance); the level is decreased after 4 minutes of uninterrupted sound activity by varying the duty cycle.

**Radio section:** Low-absorption receiver operating at FM 434.525 MHz compliant with EN300220 (class 2) and EN50131, with integrated antenna.  
 Low-absorption transmitter operating at AM 868.300 MHz, compliant with EN300220 e EN50131, with integrated antenna.

**Operating range:** 120 meters in free space subject to limitations depending on environment conditions.

**Back up battery:** 12 V 800 mAh (B0.812G).

**Dimensions:** L 237 x H 195 x P 61 mm.

**Weight:** 730 g battery excluded.  
 B0.812G battery: 345 g.

**Temperature:** from +5 to +40 °C (envir. class I).

Switching power supply unit	
<b>Typology:</b>	switching from mains, double insulation
<b>Mains Supply:</b>	110-240 Vac 50 Hz
<b>Absorp. from mains:</b>	500 mAac
<b>Current output:</b>	max 1 A; the following absorption values have to be subtracted: 70 mA for control unit battery recharge 120 mA for siren battery recharge 500 mA max for sensors supply

**Functions:** Battery disconnection

**GSM Module:** Slot for SIM insertion. The BGS2-E module (endowed with CE0682 marking) is used. **The control unit is provided with not-separable antenna.**

**Terminals for:** IN1 and IN2 zones, alarm relay contacts, +14V SIR for sirens supply and +RIF SIR for wired self-powered sirens control, +12V SENS for detectors supply, 24H 1500 Ohm balanced zone, 15 V from switching power supply (connection already made by factory default).  
 Operating LED indicator.

**Connectors for:** 2-poles non-reversible connector for back up battery  
 Connector for a MDWIFIH module  
 Connector for remote proximity key reader.  
 Connector for electronic outputs.

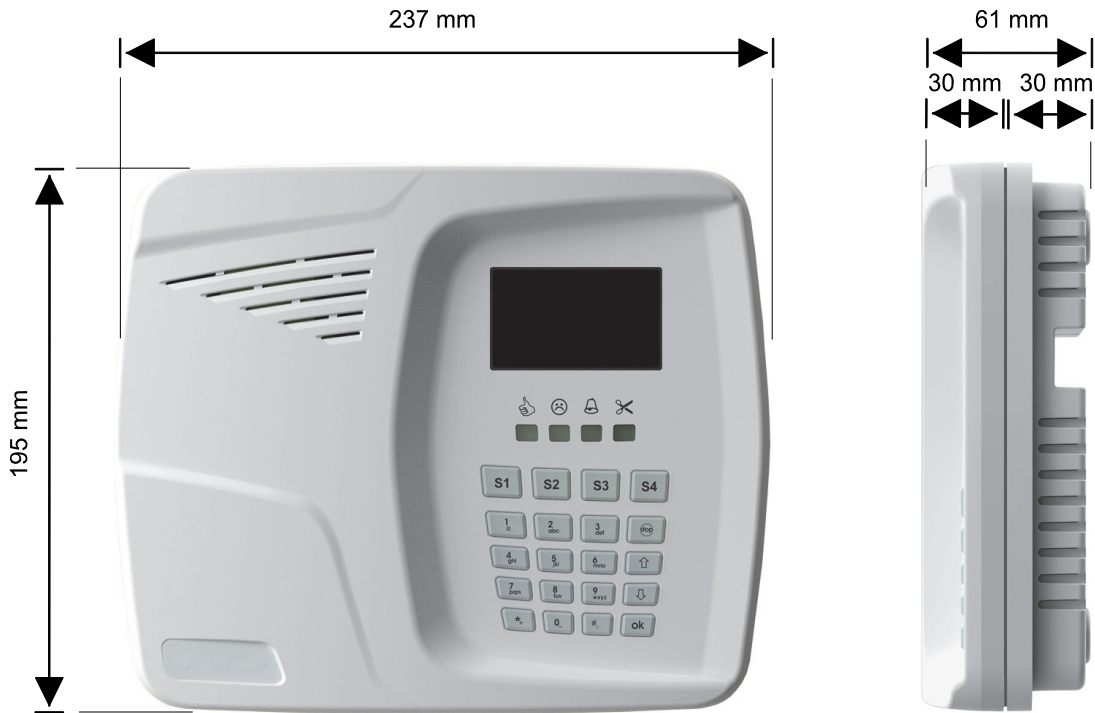
**Parts supplied:** the HERCOLA control unit is supplied with switching module already mounted and cabled, fixing screws and dowels for wall mounting, termination resistors for zones balancing (2 x 2.2K Ohm, 6 x 1.5K Ohm, 8 x 1.2K Ohm, 2 x 1K Ohm, 2 x 680 Ohm), user manual, quick guide, B0.812G backup battery provided in its box, cable with 10-poles connector for I66 or I7 external proximity key reader, CD-Rom with configuration software application and documents (technical and programming manuals).

**Note:** technical and programming manuals will be provided only as electronic files on [www.elmospa.com](http://www.elmospa.com).

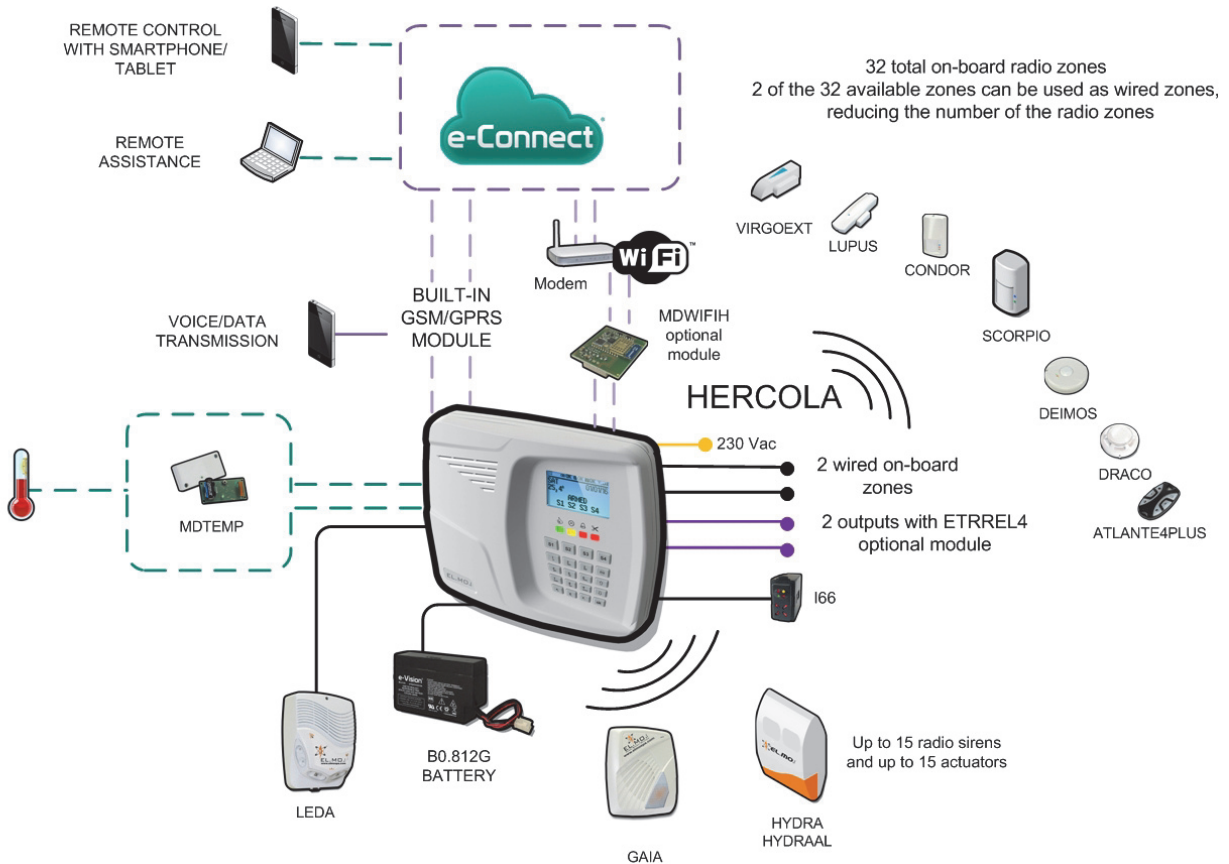


### 2.3 Mechanical features

View of control unit dimensions:



### 2.4 General scheme





### 3. CONTROL UNIT INSTALLATION

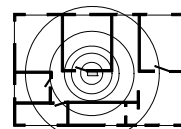
**WARNINGS:**

- During installation, make sure unit and components are disconnected from mains or other power supplies.
- Before proceeding with the installation, we recommend that you read carefully CEI 79-3 standard text concerning security systems installation and CEI 64-8 standard text concerning low-voltage systems installation. Use due diligence when installing the control unit and its components.
- **The installer shall verify that no electrostatic charges are present upon housing opening; internal electronic boards and accessory components may be damaged by such charges. The same care shall be used during installation, updates and maintenance procedures.**



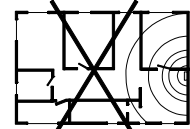
- When connecting the back up battery, connect the battery cable (with connector) to the appropriate connector on the main board.
- The unit will power on only when power is supplied to the switching power supply unit.
- The control unit must be wall-mounted, in such a position to allow an easy passage of the mains cables, system alarms wiring and maintenance procedures on the control unit itself.
- **VERIFY THE WALL IS RESISTENT ENOUGH TO SUPPORT CONTROL UNIT WEIGHT.**

Avoid installing the control unit and its accessories in extremely hot and/or damp places. For example, do not mount control units nearby heat sources such as radiators, nor expose them to direct sunlight which could compromise LCD display legibility. Position the control unit and its several accessories in environments which are not dusty.



RIGHT

INSTALL RADIO UNIT IN A CENTRAL POSITION



NOT ADVISABLE

TRANSMITTERS ON THE OTHER SIDE OF THE BUILDING MAY BE TOO FAR

#### 3.1 Control unit positioning

We suggest that you place the HERCOLA control unit in a position as central as possible with respect to the devices to be controlled, in order to benefit from a higher radio signal level.



RIGHT

INSTALL THE UNIT AS HIGH AS POSSIBLE AS TO GROUND LEVEL



NOT ADVISABLE

IF THE UNIT IS INSTALLED BELOW GROUND LEVEL, ITS SIGNAL WILL WEAKEN

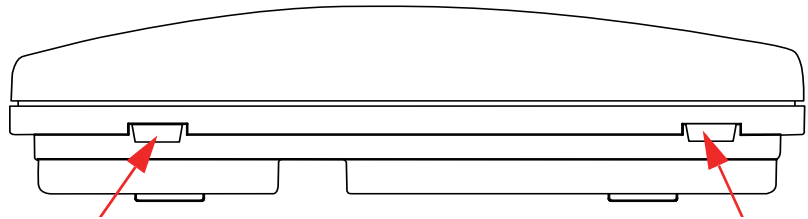
#### 3.2 Preliminary check for using the MDWIFI module

- Provisionally install the control unit without fixing it to the wall, installing the MDWIFIH module and wiring a power cable with a plug to the terminals on the bottom of the back cover (right above the transformer).
- Power up the control unit at the intended installation place, then enter the installer code.
- Browse to the "REGIST. MODULES » WiFi Module" menu and press 1
- Browse to the "NETWORK PARAM." menu: the signal strength goes from ???? (no signal) to #### (max). The same indication is also available on the Status page in the programming software.
- If the signal strength is ####, install the control unit here. Otherwise, either check the signal strength in a different place or install a good quality Wi-Fi repeater and provide the needed signal strength.



### 3.3 Control unit opening

Push the locking tabs located on the lower side; lift the cover from the bottom upwards, pivoting on the clips located on upper side.



### 3.4 Control unit closing

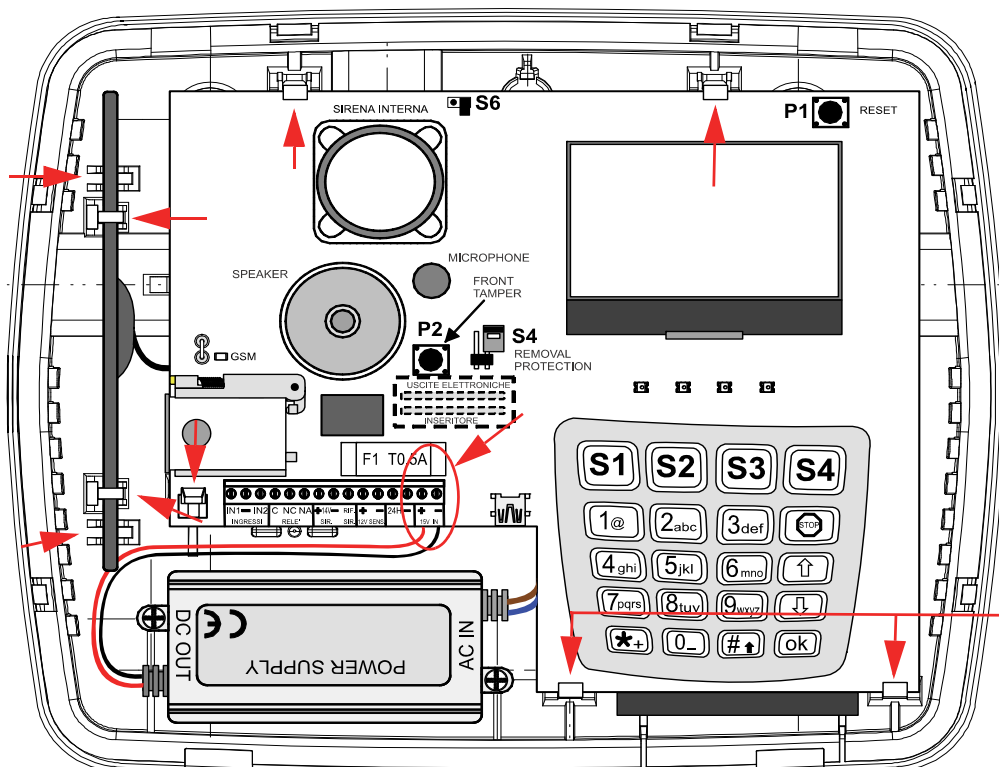
Lean the front cover on the upper-side clips, then rotate it downwards until the two lower tabs click in position.

### 3.5 Main board unhooking

As preliminary operation, unfasten the two wires that enter the control unit terminal board through the "15 VIN" terminals (connected by factory default) by loosening the screws from the specific terminals, as indicated in the ellipse in the figure below.

Unhook the GSM antenna located on the extreme left by holding it at its ends (near the holding clips, as indicated by the arrows) and slightly moving it towards the inside. Also release the cable from the clip on the bottom.

Unhook the main board by pushing the elastic upper tabs until the board lifts up on that side. At this point, pull the board out from the remaining tabs (below the keypad and next to the terminal board, as indicated by the arrows).



These tabs are stiff. Their function is to keep the board in position.

Once you have released the board from wirings and fixings, put it in a safe place together with the antenna before proceeding with installation.

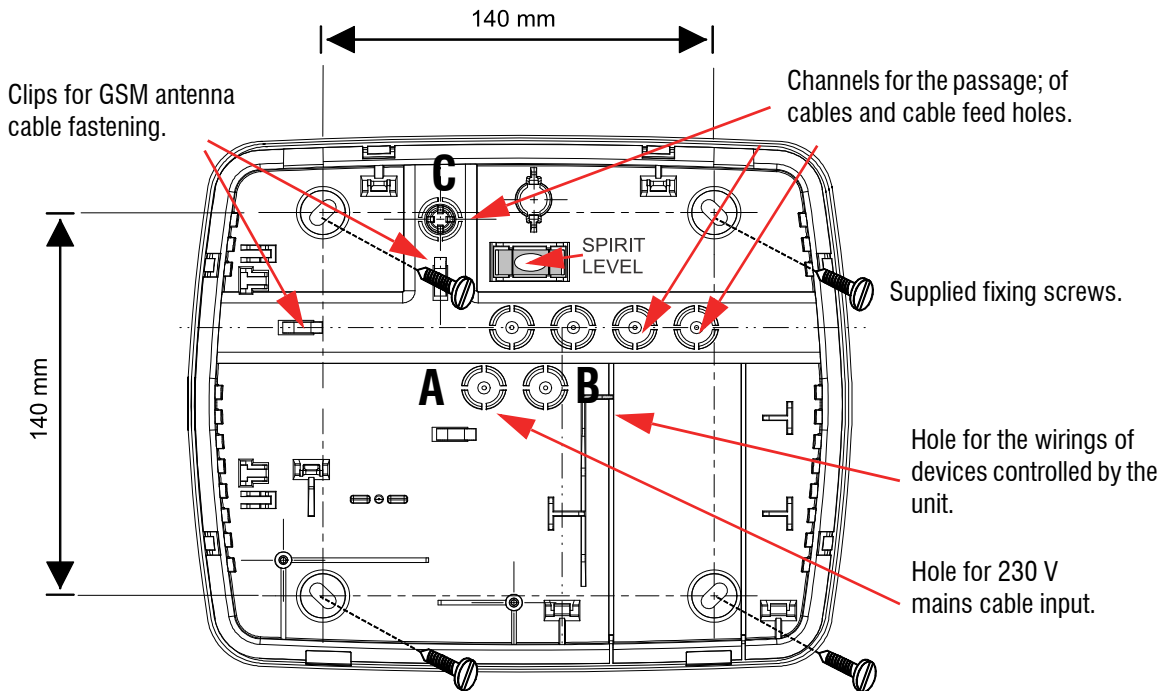
Unscrew the switching power supply unit from the housing and leave it hanging from the mains cable, just for the amount of time needed to mark the position of the holes on the wall, using the housing as a template.



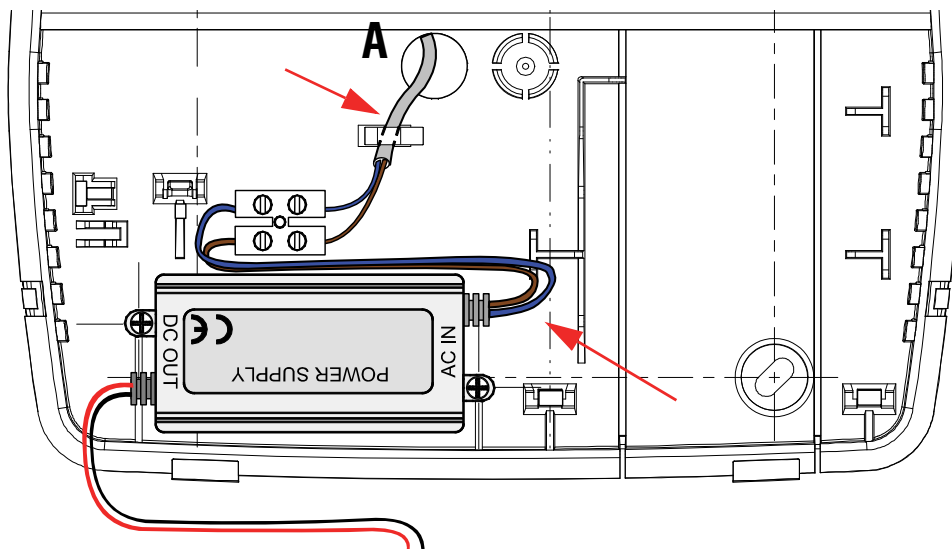


### 3.6 Wall mounting operations

1. The control unit can be wall-mounted.
2. Follow the measurements indicated in the picture below. Use the built-in spirit level for accurate horizontal alignment.



3. Refer to the pictures for perimeter and lateral distances and for positioning possible canalizations and junction boxes.
4. Groove the material of pilot holes you wish to use and bring the cables in, not powered. Use the hole marked as "A" for 230 Vac mains cable and the holes marked as "B" and "C" for the devices supplied and managed by the control unit.
5. Bring the mains cable (long enough to realize the wiring) in through the "A" hole.
6. Fasten the screws on the bottom, checking the correct horizontal position using the spirit level.
7. Connect neutral and phase wires to the screw terminal as shown below. The wires coming from the power supply unit are already connected on the other side.

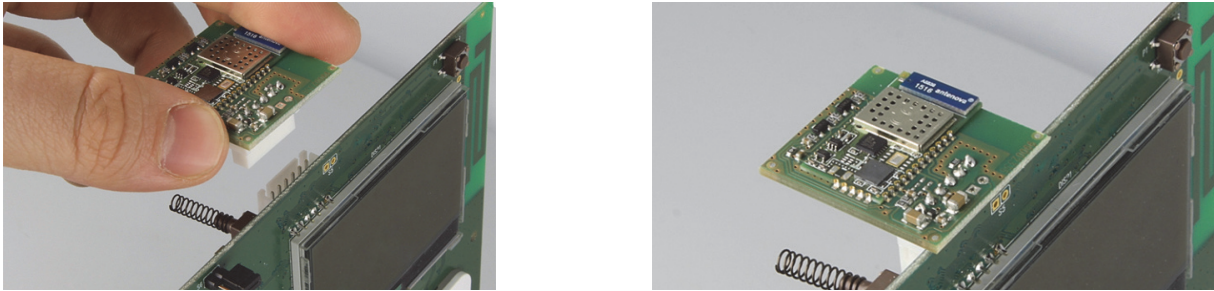


OUTPUT CABLES FROM POWER SUPPLY:  
CONNECT THEM TO THE 15 V IN TERMINALS  
OF THE BOARD, ACCORDING TO POLARITY

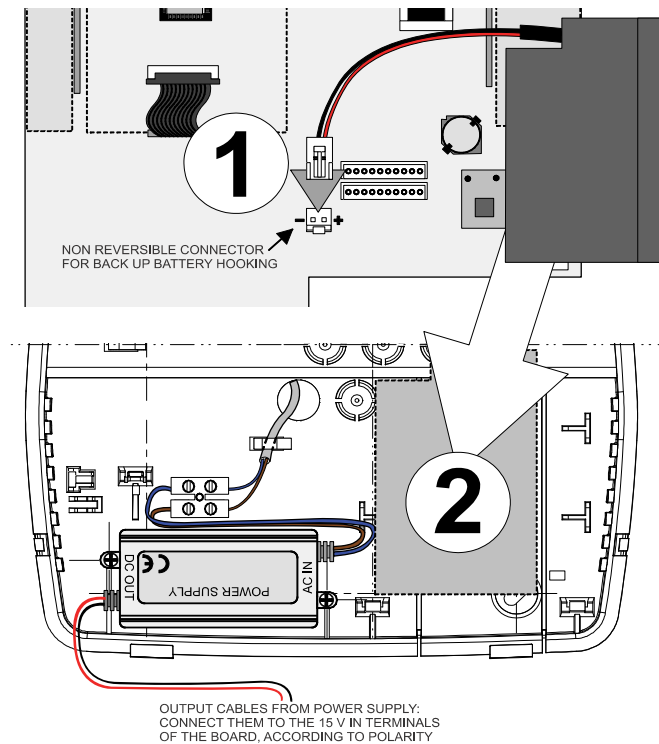
8. Fasten the cables by inserting them under the fixing clips indicated by the arrow in the picture above.
9. Remove the main board and put it aside.



10. If you want to install the optional MDWIFI module, put it into its own connector according to the following figures:



11. locate the connector for the back up battery on the back. Connect the battery cable to the non-reversible connector and then place the backup battery in the dedicated position. The control unit will not power on automatically, because it is equipped with a battery release circuit that is reset by the operation of the switching power supply unit.



12. Fasten the GSM antenna cable to the clips on the bottom, whose position is shown in the picture below instruction 2. Lean the main board on the stiff lower clips (as indicated in below picture).

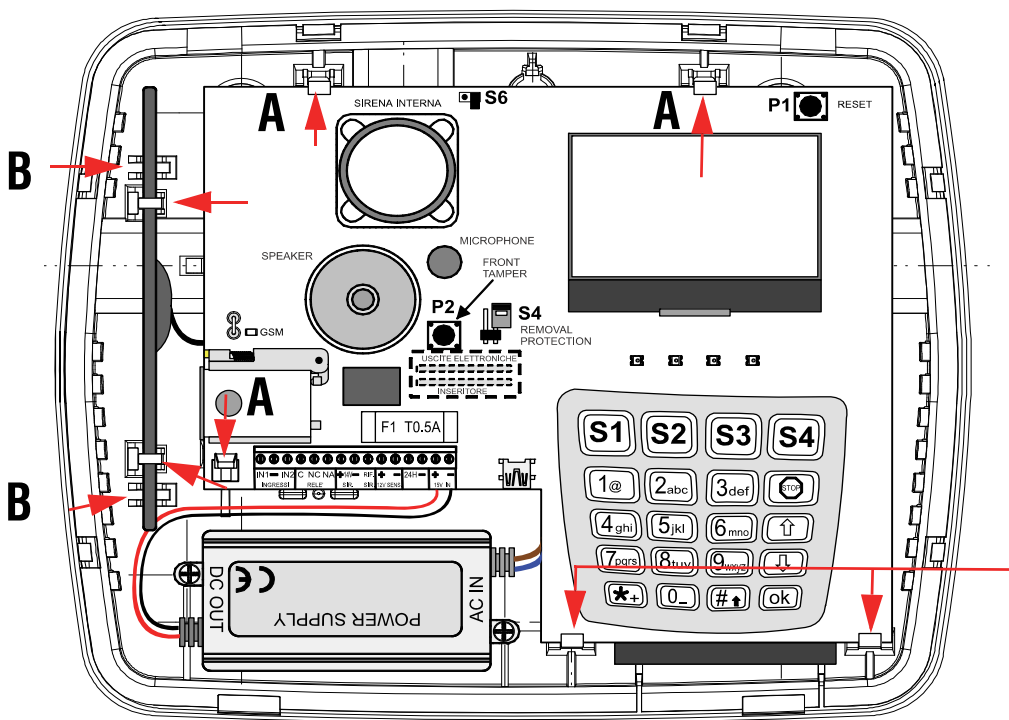




13. pivot up the board, making sure that the MDWIFIH module (if installed) does not hit the inside of the back cover.



14. Lock the board under the flexible clips (indicated by the “A” arrows). Lean the GSM antenna tilted on the clips marked as “B”, then slightly move it towards the left until it hooks onto the nearby holding clips (as indicated by the arrows).

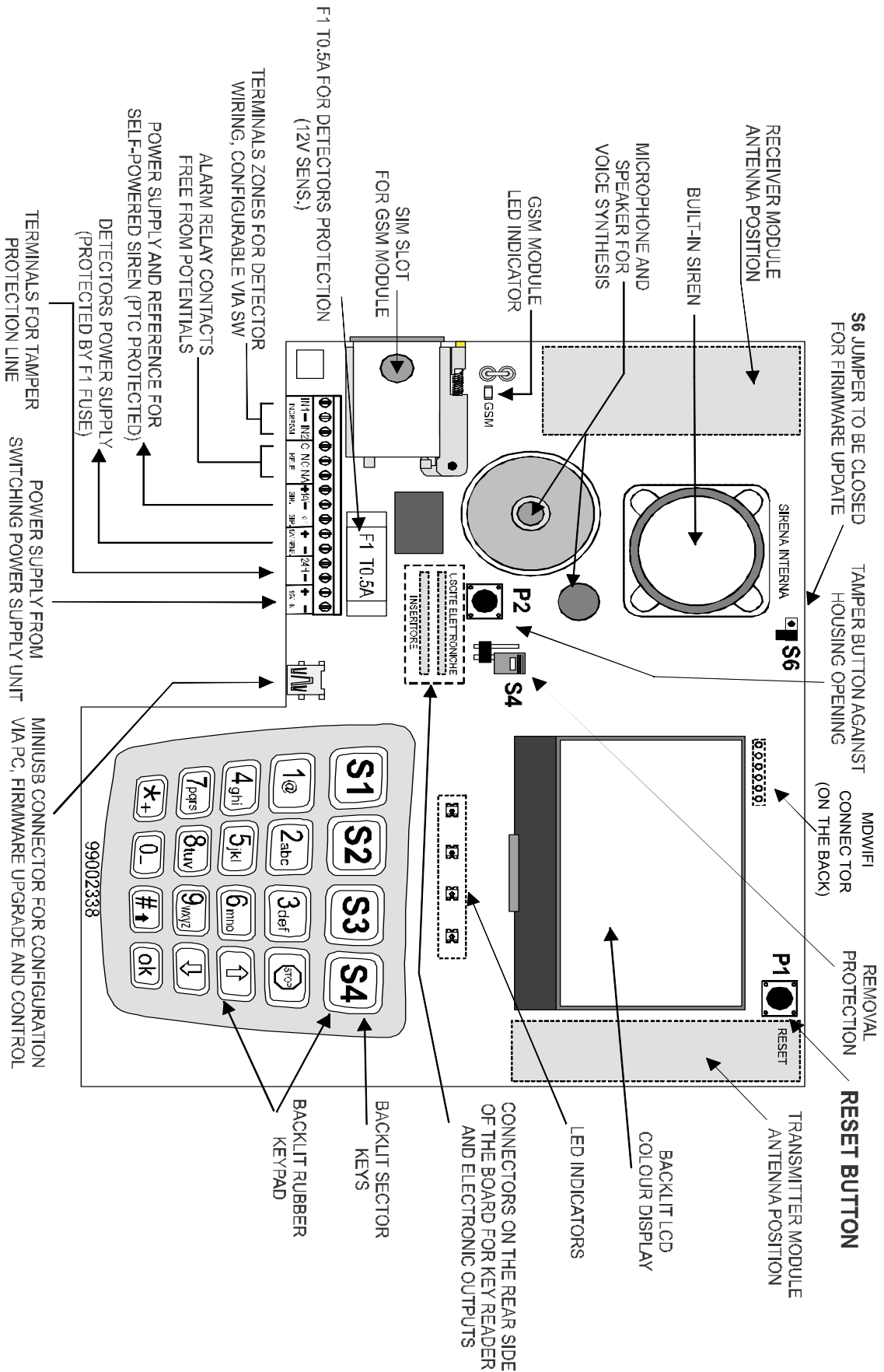


15. Connect the red and black wires coming from power supply unit output to the “15V IN” terminals on the main board, according to silk-screen printing.
16. Proceed with zones wiring and connecting the devices powered / managed by the control unit, as reported in the diagrams of this manual.
17. Check that the overall wiring has been correctly fulfilled.
18. Supply mains power to enable the battery release circuitry.
19. Consult the basic configuration chapter in the quick guide, as well as the section dealing with configuration menus for the installer in this manual, to perform a first control unit configuration. Refer to the programming manual for a complete list of the keypad menu entries configurable by the installer.
20. If a PC with the specific configuration browser is available, connect the mini USB cable to the appropriate connector on the main board. Launch the software application for direct connection. If a previous configuration has been saved, you may read and redefine it according to operating needs.
21. Test the system.
22. Connect the sirens or enable them via software application, then perform the final test.
23. Completely close the housing following the housing opening operations in reverse order.



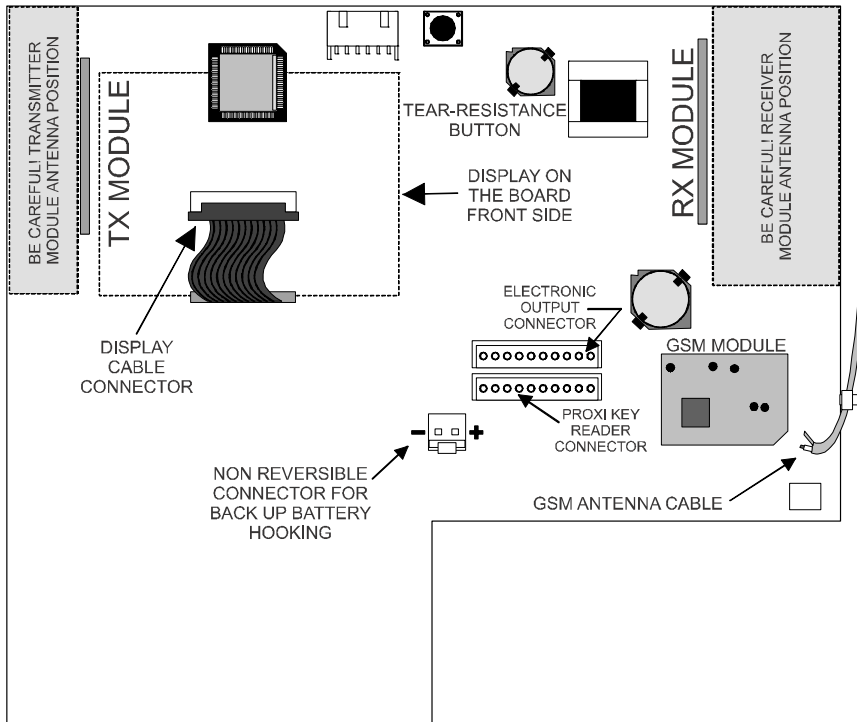
## 4. ELECTRICAL CONNECTIONS

### 4.1 HERCOLA main board overview

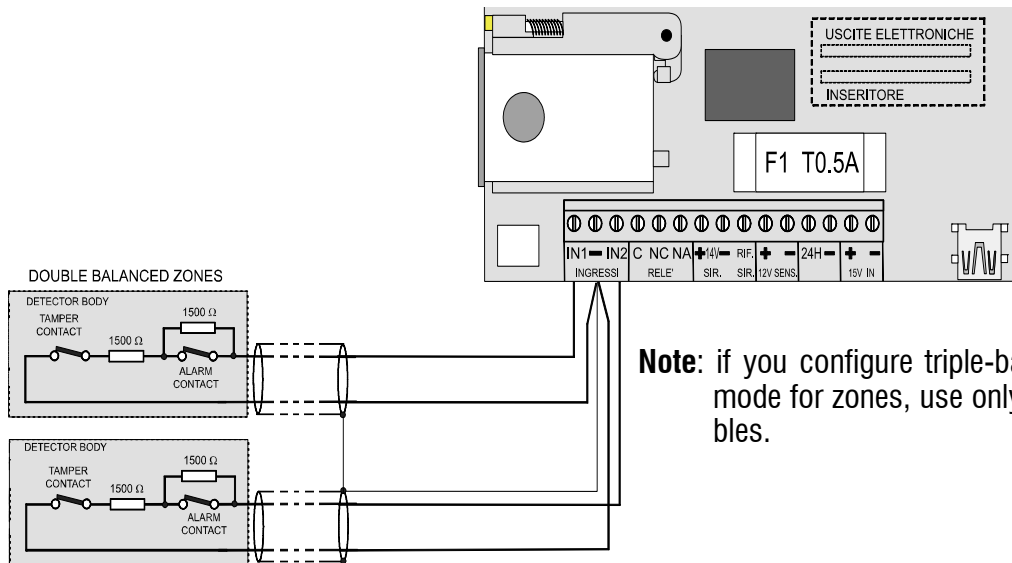




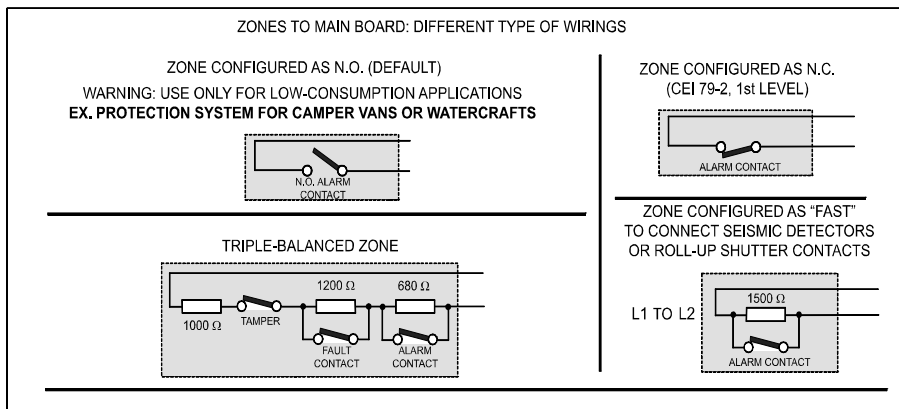
### 4.2 View of inner side of the HERCOLA board



### 4.3 Wired zones wiring diagram for HERCOLA

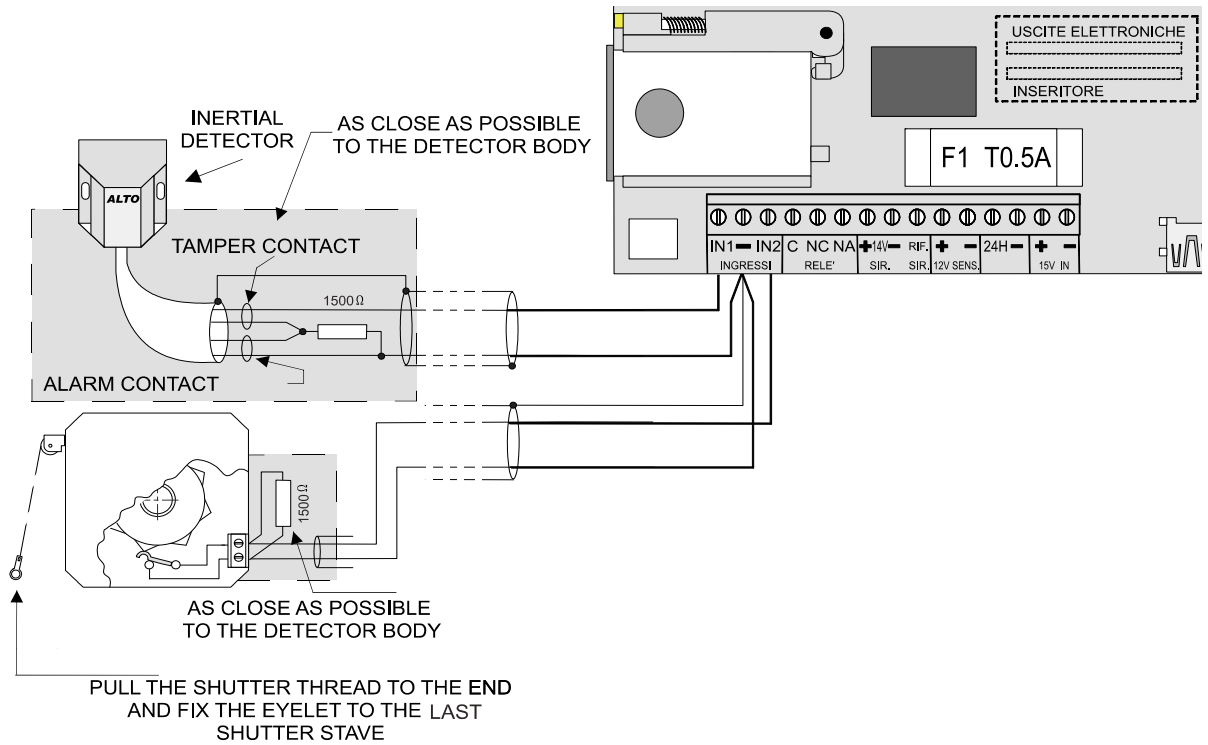


**Note:** if you configure triple-balanced operating mode for zones, use only good quality cables.



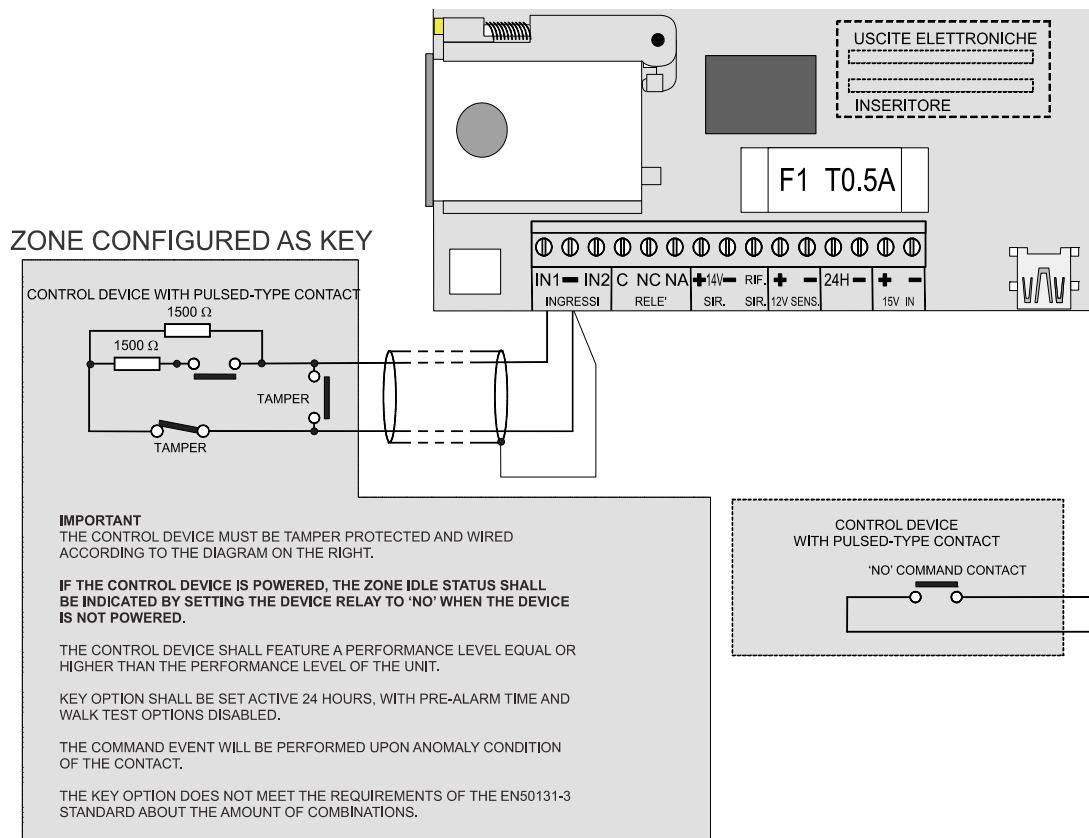


### 4.4 Fast zones wiring diagram



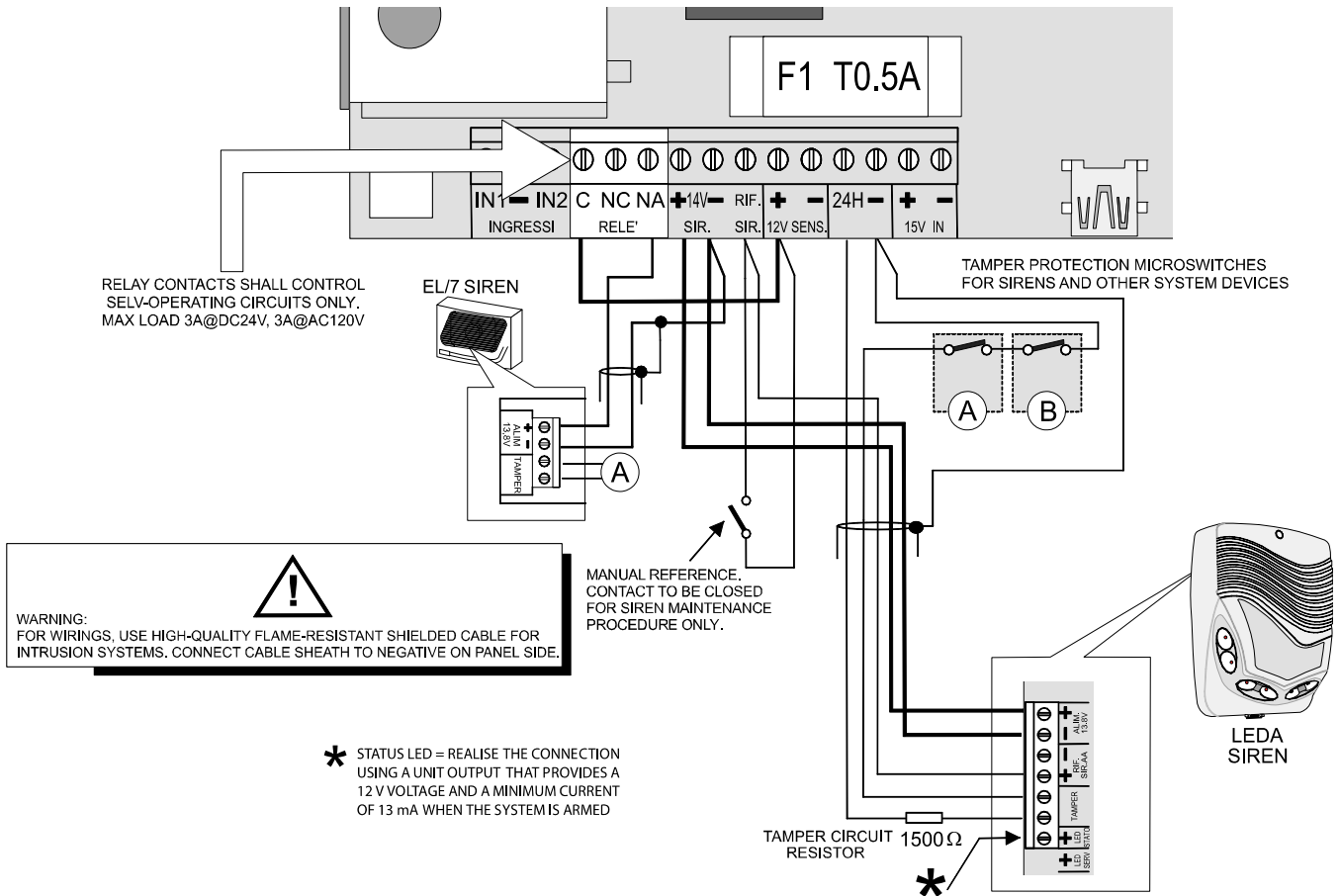
### 4.5 "Key" zones

Every zone can be programmed as "Key Zone". This option has to be enabled when the unit is interfaced with pulsed control devices equipped with terminal outputs only and not compatible with the unit (e.g. a radio receiver of a surveillance centre).

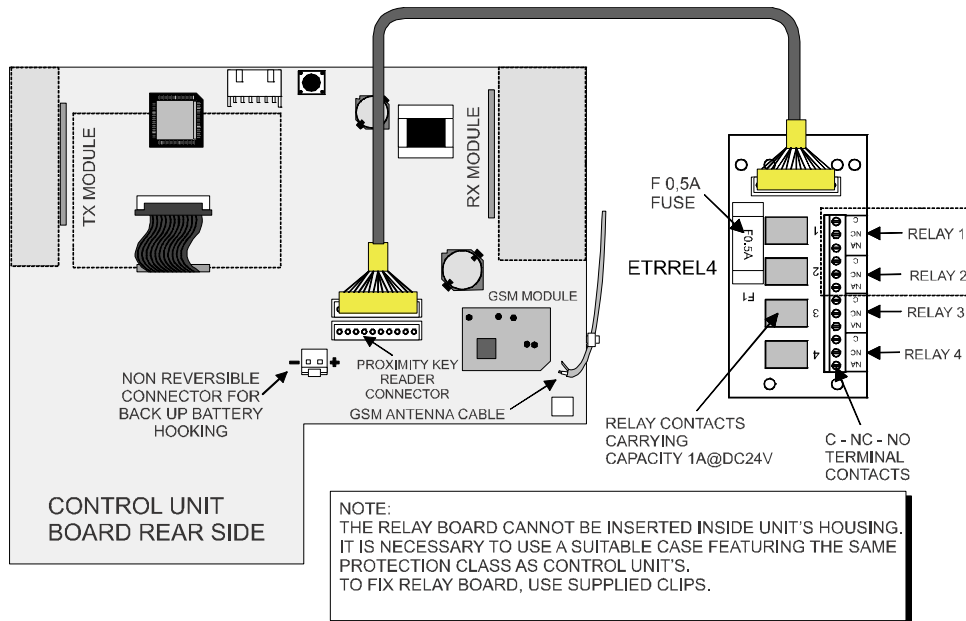




### 4.6 Sirens wiring diagram



### 4.7 Electronic outputs wiring diagram

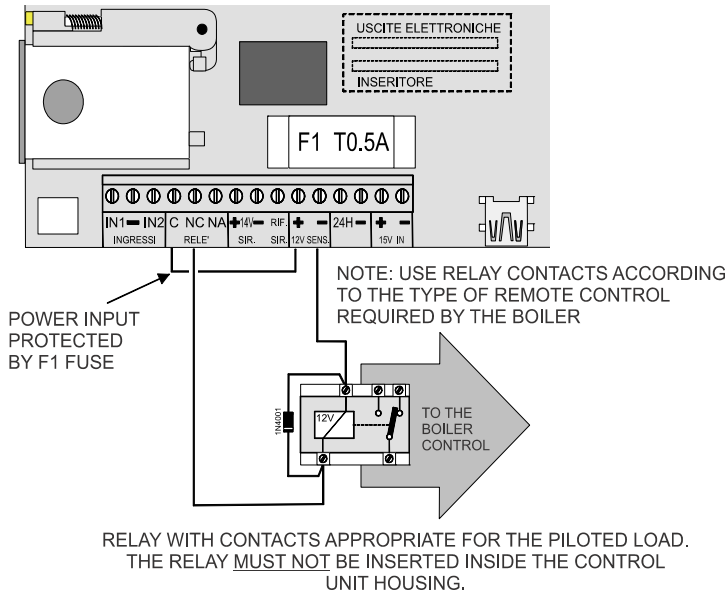


**Note:** enable outputs in advance in the “System options - Power saving - Enable Onboard Outputs” menu. Then, associate the specific event to the output you wish to use.



### 4.8 Wiring diagram for boiler control

Wiring diagram of the programmable relay output with chronothermostat function.



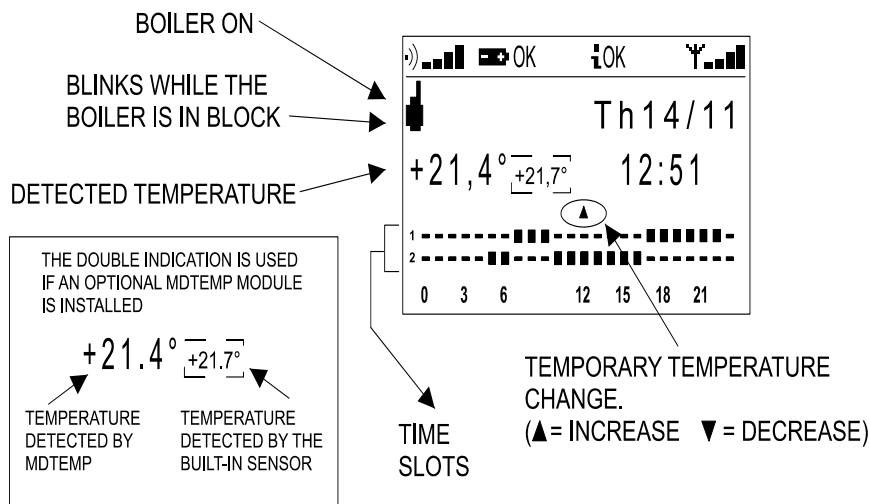
**Note:** if the relay is used for chronothermostat function, it will not work according to positive logic mode (as in security systems applications) and the PCB silk-screen shall consequently be operated reversed.

The diagram is correct with disabled relay.  
**Note:** the Chronothermostat event can also be used to control outputs; this is especially useful to control a boiler. As an alternative, you can program the control unit alarm relay (if not already in use) to control the boiler.

Pay attention not to connect the boiler to the unit directly. Insert a relay between them, as close as possible to the boiler.

**Ensure the relay idle position coincides with the boiler OFF state in case of power supply failure.**

Unit display with chronothermostat function on.



In the above diagram, the temperature in normal characters refers to MD-TEMP temperature detector installed far from the unit, the temperature in smaller characters refers to the built-in detector.

During setup, positions may be reversed and the display of the panel internal detector can be cancelled.

The chronothermostat can be setup after it has been enabled via software application.

Temperature temporary change can be set from the keypad entering *chronothermostat user interface* mode (see programming and user manuals).

### 4.9 MDTEMP wireless temperature detector

The MDTEMP temperature detector allows to detect environment temperature from a remote point, as an alternative to the use of the unit built-in detector. MDTEMP can be installed both indoor and outdoor: in this latter case, provide adequate protection against water infiltrations and direct sunlight action.

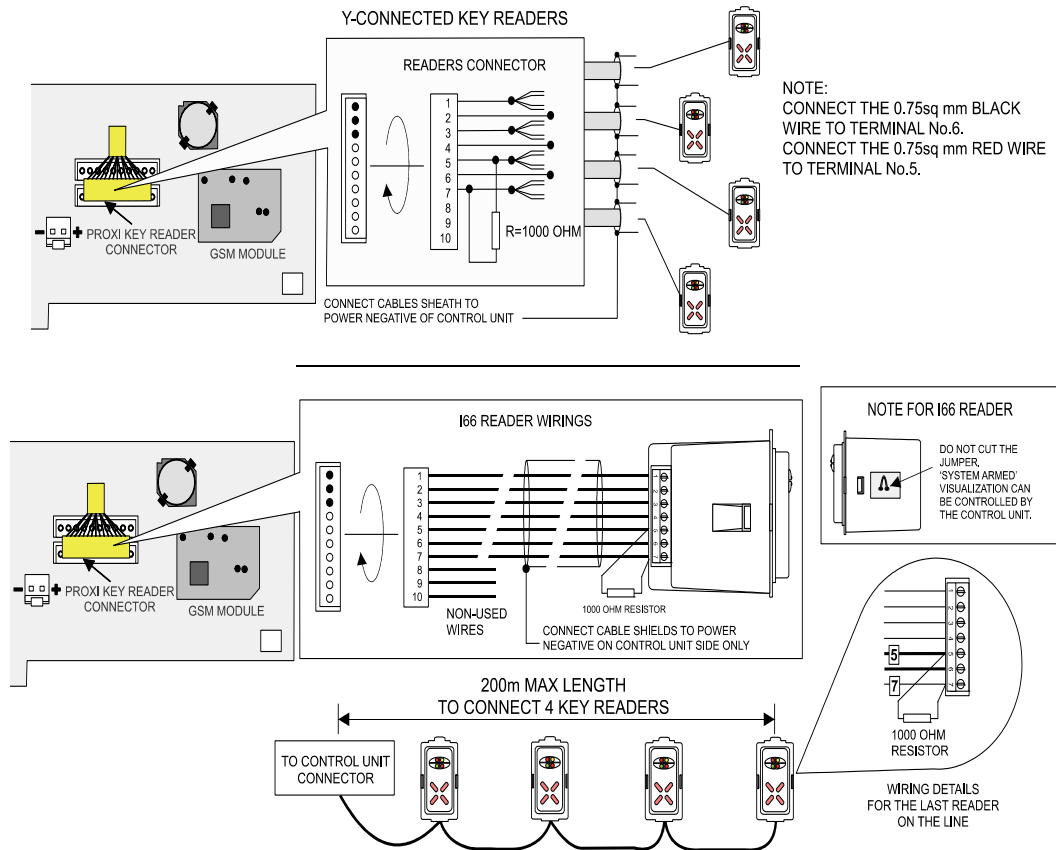
Consult the MDTEMP detector manual for informations on its operation and configuration.





## 4.10 I66 readers wiring diagram

### 4.10.1 Not compliant with EN50131 standard.

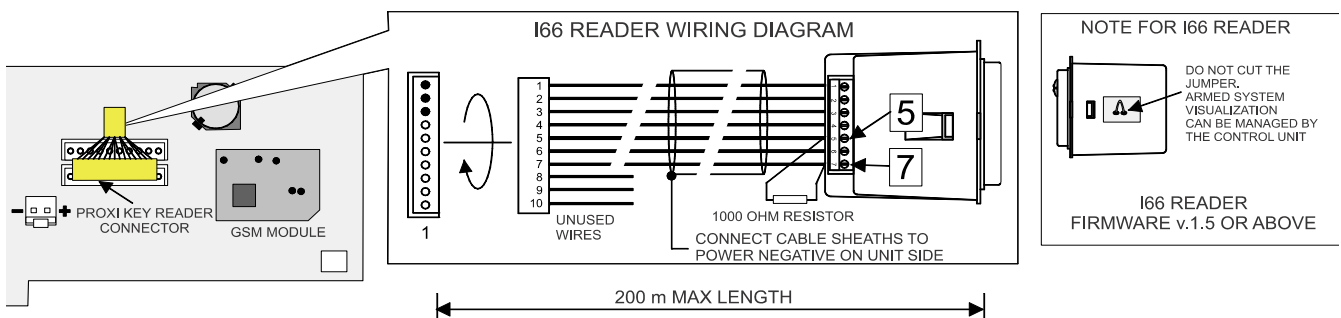


**Note:** to connect I66 or I7 readers use the cable with 10-pole connector supplied with the unit.

### 4.10.2 Wiring diagram of I66 readers according to EN50131 standard

In order to comply with EN50131 standard and use the advanced partitioning function, consider the following indications:

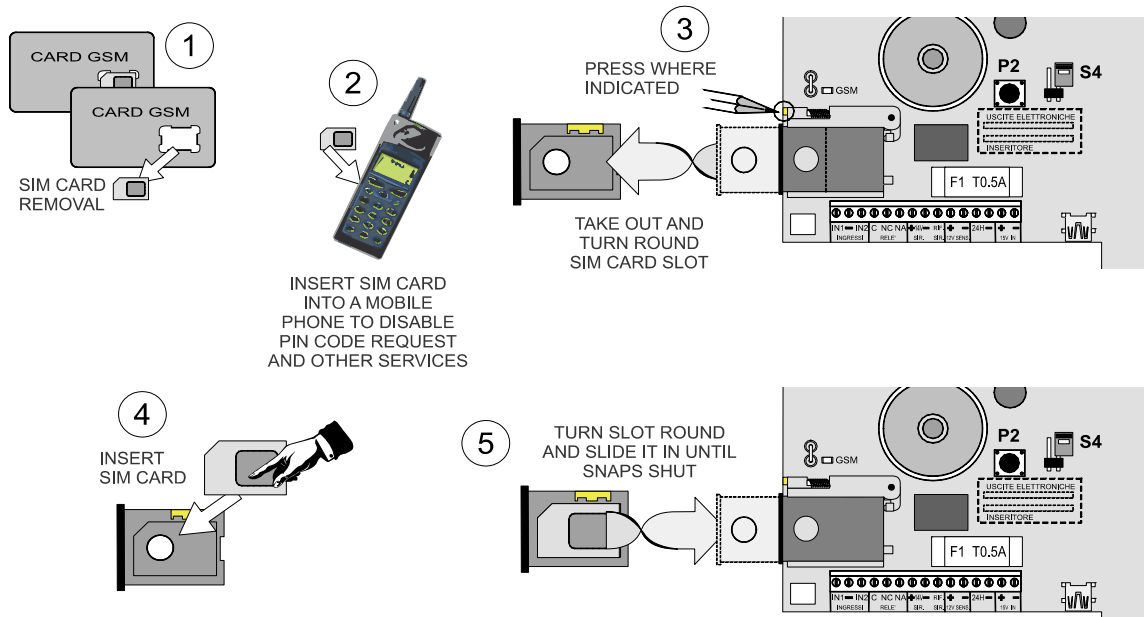
- Connect only **one** reader I66 or I7 (v.1.5 or above) to the control unit connector and **enable presence control**.
- Reader disconnection due to tampering causes a generic keypad tamper event within 100 seconds.
- The armed state jumper must be left untouched (i.e.: not cut).



WHEN USING SHIELDED FLAME-RESISTANT CABLE FOR INTRUSION SYSTEMS, CONNECT THE 0.75 mm<sup>2</sup> RED WIRE TO READER TERMINAL NO.5 AND THE 0.75 mm<sup>2</sup> BLACK WIRE TO READER TERMINAL NO.6.



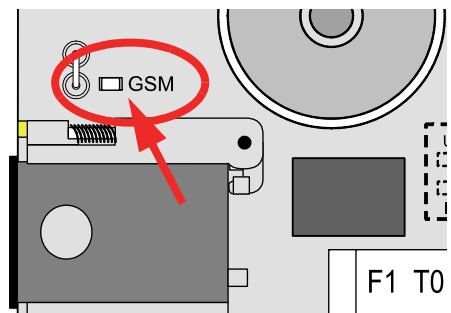
## 4.11 Installation of SIM card to GSM module



## 4.12 HERCOLA GSM module operating indication

The GSM built-in module is provided with a LED indicator to signal the following functional states:

- **Fast blinking:** module ON but not registered over the GSM network.
- **Slow blinking:** module ON and registered over the GSM network.
- **On (fixed):** module ON and transmitting.



## 4.13 MDWIFIH module

The module, once installed as shown in the installation chapter, has to be programmed for e-Connect or remote assistance access from the "REGIST. MODULES" and "NETWORK PARAM." keypad modules, then using BrowserOne v. 3.5.3 or higher with the HERCOLA module v. 8.2.0 or higher.

Lastly, the received e-Connect access code has to be typed in the "INTERNET ACCOUNT" keypad menu. The successful connection will be marked with a OK icon on the display.



## 5. SYSTEM RESET

### 5.1 Default Reset Procedure

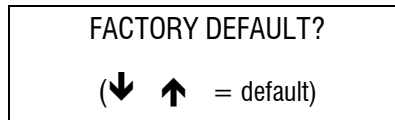
The HERCOLA control unit is programmed with factory basic settings called Default settings. This setup enables proceeding with basic unit setup.

Should it become necessary to delete new settings, return to the Default settings by following the procedure listed below:

#### 5.1.1 If the unit is powered up for the first time

Perform the following operations:

- A. Keep OK button pressed.
- B. Supply power.
- C. The following message will be displayed:



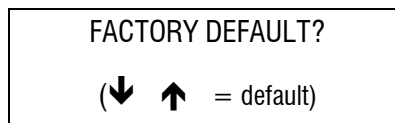
- D. Release OK button and press arrow keys ↓ and then ↑ in sequence.

The display will switch off for 7 sec.

#### 5.1.2 If the unit is powered and already working

**WARNING:** This procedure will delete all memorized data.  
All data that have not been read and saved with unit browser will be lost.

- A. Enter configuration mode using maintenance code and lock the system with the relevant menu.  
(*Maintenance Login - OK - key ↑ - menu SYSTEM LOCK - OK - system locked - Stop to unlock it - Stop to exit*).
- B. Open unit housing.
- C. Activate manual lock for wired self-powered siren maintenance.
- D. Press RESET key and keep it pressed.
- E. Press OK key and keep it pressed.
- F. Release RESET key and keep OK key pressed until the following message displays:



- G. Press arrow keys ↓ and ↑ in sequence.  
The display will switch off for 7 seconds.
- H. The unit will now be ready to be configured again (set to default settings); the settings will be described in the following paragraph.
- I. Configure the unit.
- J. Test unit working with the new setup, then re-enable siren and alarm devices.



## 5.2 Operating mode with default setup

<b>Zones to be wired to terminal board:</b>	IN1 and IN2. Tamper zone, balanced with 1500Ω resistor.
<b>Zones configuration:</b>	NO for low-consumption mode.
<b>Zones connection:</b>	No zone connected.
<b>Active area:</b>	1.
<b>Zones configuration:</b>	All zones assigned to area 1 sectors.
<b>Active users:</b>	Only user 1.
<b>User 1 Default code:</b>	<b>1 1 1 1 1 1</b> (1 x 6 times).
<b>User 1 Authorizations:</b>	Authorized for basic maintenance (see user menu diagram).
<b>Maintenance Default Code:</b>	<b>8 8 8 8 8 8 8 8</b> (8 x 8 times).
<b>Installer authorization:</b>	<i>Permanent</i> system access.
<b>Alarms generation:</b>	All zones generate intrusion alarms.
<b>Outdoor wired sirens control:</b>	Normally Closed (NC) circuit.
<b>Radio sirens management:</b>	Generation of code for self-learning up to 15 sirens max.
<b>Radio sirens control:</b>	Coded activation transmission.
<b>On board relay:</b>	Not enabled. The relay contact silk-screen is reversed since it refers to a relay that has not been properly programmed yet.
<b>Exit time:</b>	15".
<b>Entry time:</b>	10".
<b>General alarm time:</b>	1'.
<b>Tamper alarm time:</b>	1'.
<b>Temperature information:</b>	Blinking until it is adjusted through the specific menu.

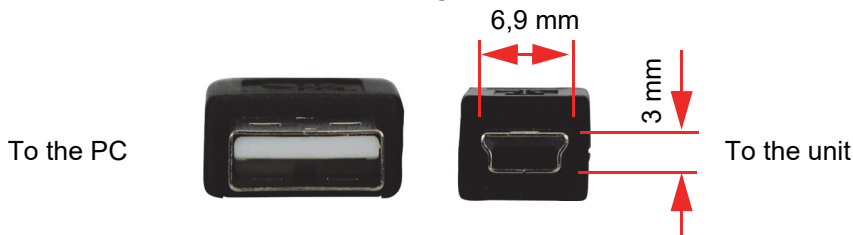


## 6. FIRMWARE UPDATE

As EL.MO. intrusion detection control unit, HERCOLA also features an extremely easy procedure for firmware update: the only necessary tools are a PC connected to the unit via USB cable and the management software. These tools will enable operators to transfer firmware update file that includes all the new functions and the latest updates of the integrated voice synthesis.

To update unit firmware, operators will need to have:

- A PC with one of the following Operating Systems: Windows7, Windows8, Windows8.1, Windows10.
- ADMIN privileges.
- USB - mini B cable. **The cable shall not be longer than 1 metre.**



- the update file (\*.PRG)
- the HERCOLA unit ready to be updated.


### 6.1 Firmware update procedure

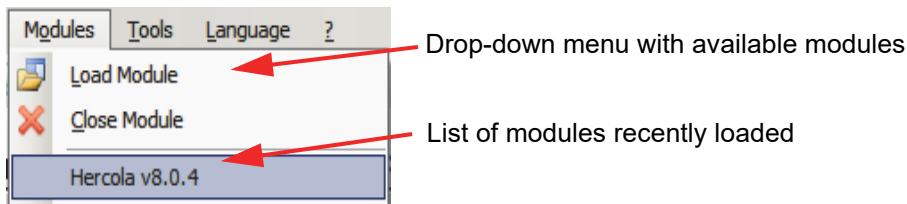
The unit firmware shall be updated in the following situations:

- The unit has never been configured before and it has to be updated to the latest version.
- The unit is installed and has to be updated to the latest version to add new functions.

**Note:** all references to firmware versions in this manual are given as a pure indication. The current release of the firmware can be found on the supplied CD-Rom.

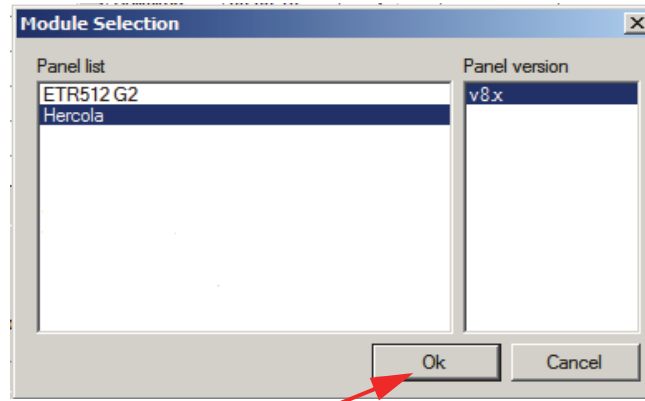
#### 6.1.1 If the unit has not been configured

1. Install BrowserOne management software as indicated in the programming manual, the lowest compatible version is *Browserone\_3.5.3\_full.exe*
2. Install the HERCOLA module using the *HERCOLA 8.2.0\_setup.exe* file or any higher version.
3. Click on the  icon on the desktop to start the BrowserOne application.
4. Load the module to BrowserOne as follows:



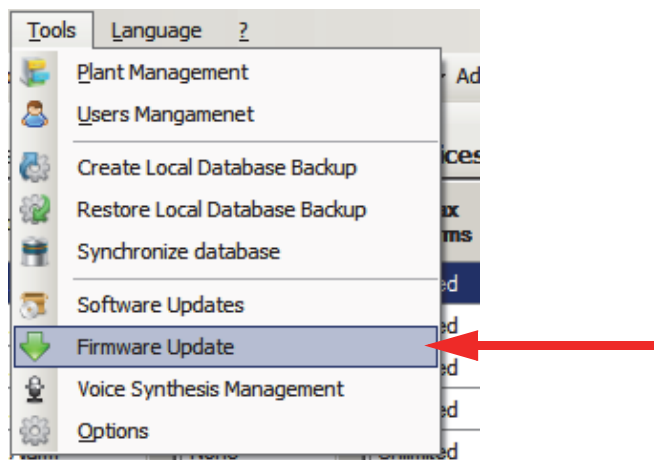


5. Window listing available modules:



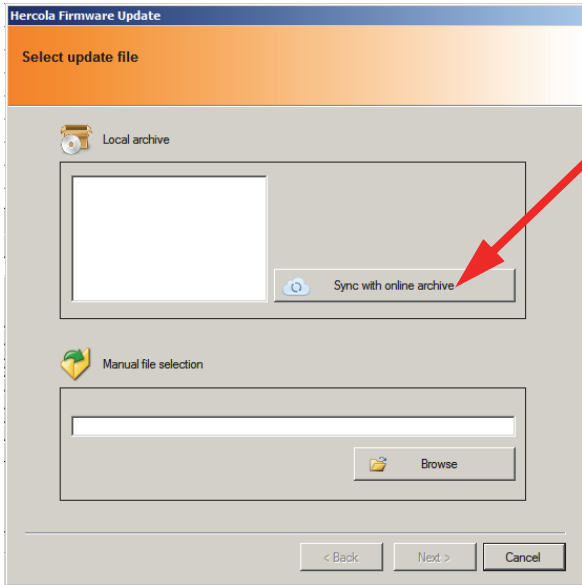
6. Select OK to select the module and display configuration windows.

7. Select *Firmware Update* menu:



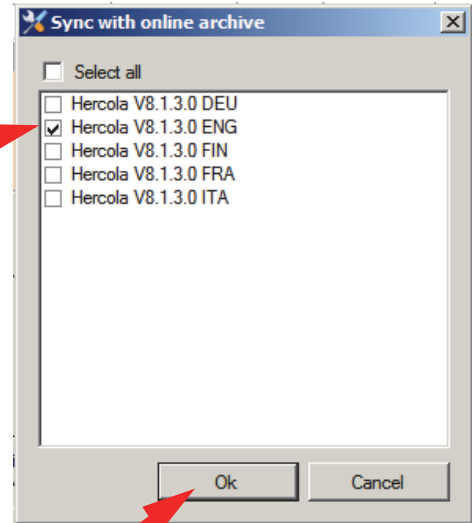


8. The following window will display the sequence of operations for firmware selection:

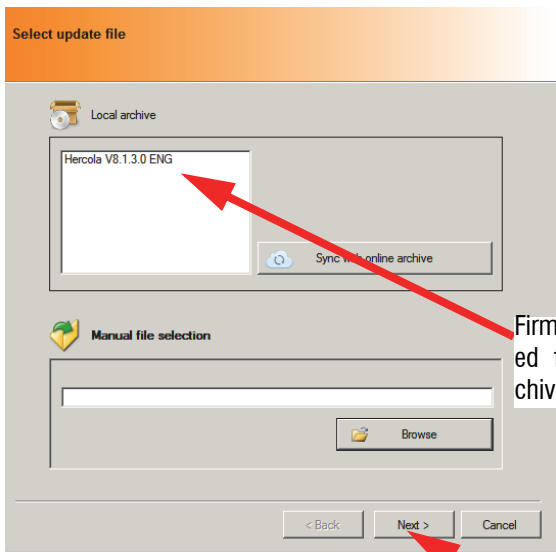


Press this key to sync with the online EL.MO. archive.

Select the firmware language.

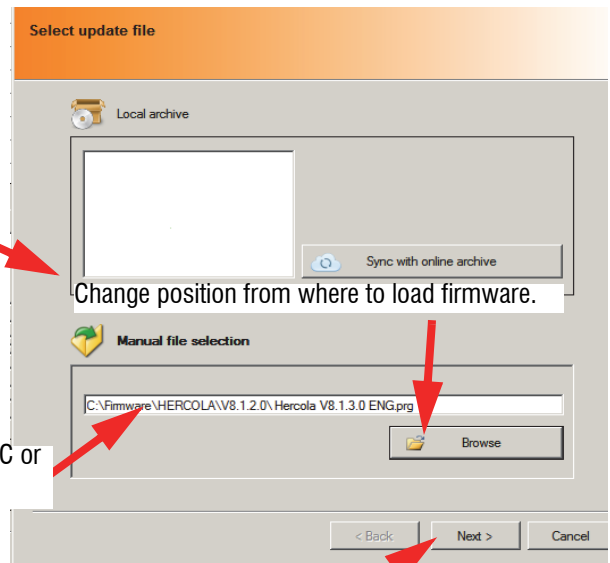


Press "Ok" to start the download.



Firmware downloaded from online archive.

Firmware in PC or in other unit.



Change position from where to load firmware.

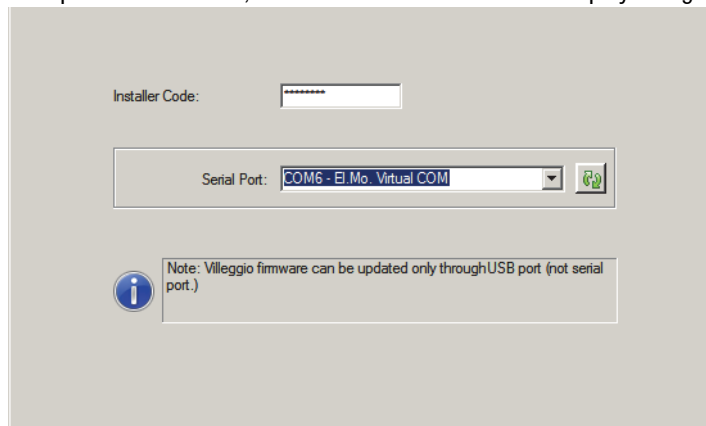
Go to 9. to connect control unit to PC and then press *Next* to launch the firmware update procedure. The firmware packet will be loaded and verified.



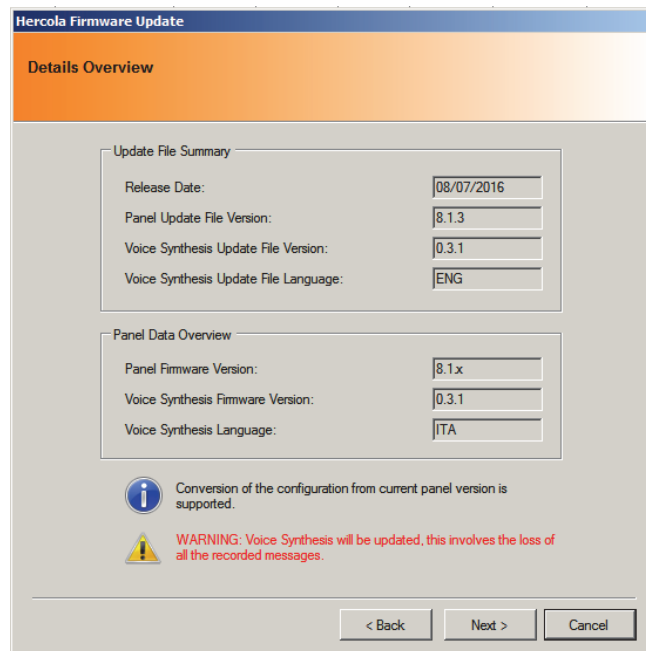
9. Open the unit housing, provide mains and battery supply, then connect the PC to the unit using USB-MINIUSB cable.



10. After pressing *Next* key in the previous windows, the kind of connection will be displayed together with possible warnings.



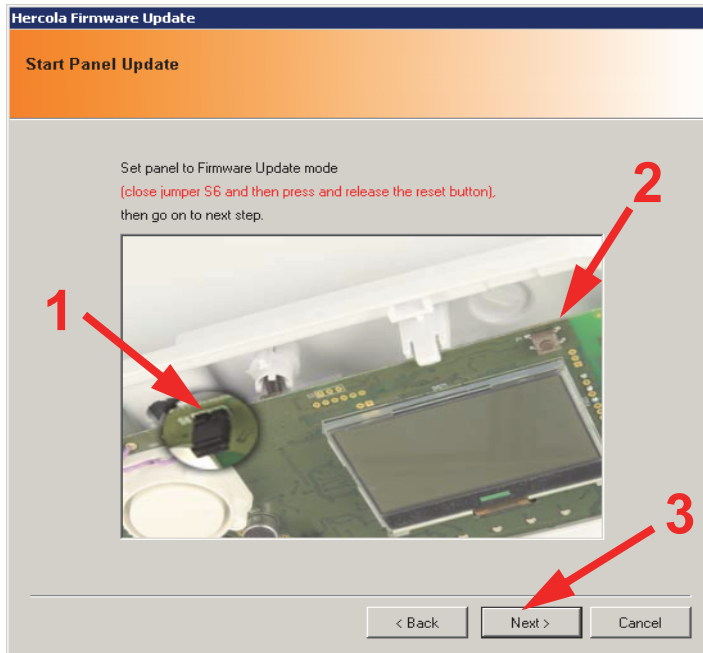
11. Press *Next* in the following windows. We suggest not varying default settings; this is particularly valid for what concerns vocal synthesis update: if launched, personalized messages recorded in memory will be deleted. The summary page will finally appear as shown below:



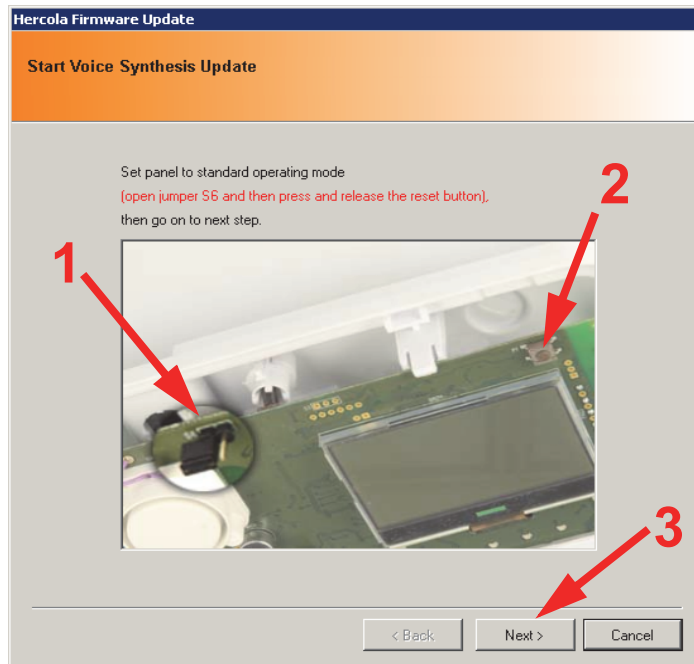




- 12. By pressing *Next* again, the setup programme will give visual indications on how to move the jumpers on the unit board to implement the update.
- 13. The following window shows how to close **S6** jumper and press **RESET** button. To continue updating firmware, select *Next*.



- 14. The update procedure is extremely fast: it will take only a few seconds, then the following window showing recommended actions will be displayed. Select *Next* to continue.



- 15. The following window will be displayed:

Update Completed Successfully.


- 16. Select *Finish* to end the procedure.



### 6.1.17 If the control unit has already been configured

#### Preliminary steps:

- Use BrowserOne to read the control unit configuration after selecting the appropriate software module (use one of the remote connection options provided by BrowserOne, or the e-Connect service platform, according to the module boards previously installed in the control unit). Save this configuration to the PC.
- Have the user grant the "installer access" permanent permission.
- Enter configuration mode using maintenance code and lock the system through the relevant menu.

(Maintenance Login - OK - key  - menu SYSTEM LOCK - OK - system locked - Stop to unlock it - Stop to exit).

- Open unit housing.
- Activate manual lock for wired self-powered siren maintenance.

Perform update procedure described above step by step.

During firmware file quick upload, a file with the current settings will be created in order to have a backup copy of the current configuration. The file will be saved in:

**C:\Documents and Settings\*(PC User Name)*\Documents\BrowserOne.**

The file name is:

**AutoSavedSetup.x.stp**

where "x" stands for a progressive number that depends on updates executed.

Once the update procedure has been completed, the installer can rename the file using a description that will remind him the relevant user's configuration before the firmware update.

Reading the control unit configuration in advance will be useful in case of system reset to default settings, since a reset deletes all memorized data.

Connect the unit to the PC with a USB cable and write the saved configuration file to the control unit in order to have the control unit operated with the latest firmware version.



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Wireless intrusion detection control unit with integrated GSM module mod. HERCOLA - TECHNICAL MANUAL  
July 2017 edition - v. 2.0

090060975

The information and product specification herein are not binding and may be changed without prior notice.

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