Programming Manual

KSenia security innovation

IP-based Security & Domotic Platform: series lares

www.kseniasecurity.com

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Hereby Ksenia Security state that

lares^{TM}

complies with the essential requirements and other pertinent provisions as set forth by the EN50131-1 standards.

The complete statements of compliance can be downloaded from **www.kseniasecurity.com**

These pieces of equipment must be installed to standard, in accordance with the applicable regulations. They were developed under criteria of quality, reliability and performance as established by Ksenia Security. We recommend that you check the correct operation of the system at least once a month. The test procedures depend on the system configuration. Please ask the system installer what procedures should be followed. Ksenia Security srl waive any and all liability should the equipment be tampered with by unauthorized personnel. The contents of this manual may be subject to change without prior notice and the manual itself does not legal bind KSENIA SECURITY.

CERTIFICATIONS

Country	Certifications	*lares*^{TM} series Burglar Alarm Systems
Europe	EC	
Europe	EN50131-3 Grade 3	

This manual is valid for all the models of lares control panel (all the exceptions are reported in the relative sections). The FW revision of lares which this document refers to is 1.2 build XXX.

INTRODUCTION

basis™ is a modular managing and programming platform for central control panel lares, it can be downloaded and updated from our internet site: http://www.kseniasecurity.com.

In the section FAQ of website several videos are available to show the programming steps of the device.
basis™ is innovative because it is based on the newest Information Technologies. Being written in JAVA it can be installed on several operating systems including Windows, Linux, Apple and son on. It doesn't need great computing power nor third party SW modules.

basis™ **was developed with all the user requirements in mind, i.e. all features are provided to facilitate the installer of security systems, the system's end user, through to the implementation of a TV-surveillance system. Every user will only have what he/she actually needs available. basis**™ **assures complete programming of the Ksenia devices and real-time control, all distributed under a free licence, therefore it can be downloaded free of charge.**

SOFTWARE GENERAL STRUCTURE

It is composed of a main software and of expansion modules that can be individually and independently installed and updated. The various software functions can be managed thanks to a graphic interface, which is common to all modules. The graphic interface consists of a system of mobile windows. Every window displayed in the platform can be freely displaced, scaled down and linked to the control points. To displace a window, simply drag it by holding the right key of the mouse on the upper bar pressed; while moving it through the screen, a dotted red line will indicate the new position that the window will take as soon as the right key of the mouse is released. **basis**™ allows all Ksenia Security products to be programmed in a single platform, by associating the devices to the customer where the whole system is installed. Simply by opening the client, you will know instantly what is installed and how it is programmed, without needing to open multiple programming software sets.

The automatic updates will remove the need for patches, service packs, painful de-installations of software packages and complex tricks to assure full compatibility with previous versions. **basis**™ introduces innovation based on the most modern information techniques. Thanks to the JAVA support, **basis**™ can be installed in any processor equipped with Microsoft, Apple, Oracle or Linux operating systems; it needs neither enormous calculation powers nor third-party software to be operational. New programming and controlling macro functions will come out in the near future, which can be operated directly from last-generation mobile phones and smartphones.

All functions of the platform are accessible from the two control bars available on the 'Main' and 'Windows' software sets.

MAIN MENU AND WINDOWS:

On the upper side of the window it's possible to see the two main sections which the SW is divided in: *Main* and *Windows*.
Choosing *Main* an icon menu will appear; it allows a logical navigation.
Choosing *Windows* an icon menu to activate a specific window will appear.

Figure 1

'Windows' bar

The 'Windows' bar contains the buttons that enable activation of the windows which are needed for using the software. To activate a window, it is sufficient to click the mouse onto the corresponding button. We see the available windows in detail.
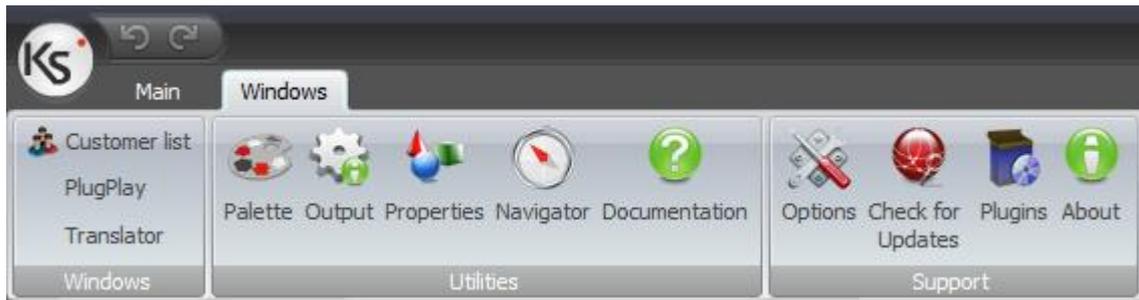

Figure 2

- **'Client List' window**

The 'Client List' window allows client control and database management. Through this window it is possible to create, modify, delete and manage clients by clicking the right key of the mouse on the client's name. A double click on the client's name will open a window, called 'Client Mngt.', which is used for programming the parameters.

- **'Browser' window**

The 'Browser' window allows swift surfing through the various display pages needed for programming the currently selected device. The surfing buttons are shown only when a device has been selected; in all other cases, the window is empty and displays the text 'No view available', in that no device is selected. When this window is active, a double click on a unit is enough to gain access to its programming page. To send (loading) all of the programming to the **lares**™ system or other connected devices, use the 'Send all' ('Load all') button.

- **'Palette' window**

This window makes the main common components of the current device available. It is enough to drag the desired unit into the main window for inserting it in the programming data.

- **'Options' window**

This window allows management of the advanced software options. The main ones are as follows: in the 'Communications' directory it is possible to disable automatic detection of the devices connected to the PC (function 'Plug&Play Enable') or to modify the communication rate parameters. These parameters can be changed in case of communication problems with the device.

In the 'Vocal Synthesizer' directory the vocal Synthesis application can be selected, which is predefined in the automatic generation of vocal messages. **basis**™ includes a free-of-charge *Text-to-speech* motor; if the items available with Loquendo TTS (LOQUENDO TTS is a registered mark of LOQUENDO S.p.A.) are installed, these will be shown too. More information on the Loquendo TTS functions is available in the manual which is featured on the USB flash key containing the licence to use the product.

- **'Check the updates' button**

This button allows verification of whether the software updates are present or not. To perform the updates, the PC must be connected to Internet. To keep **basis**™ constantly updated, just follow the instructions shown on the video.

- **'Plug-in' window**

This window contains the set-points for managing the **basis**™ software modules and any updates. The main ones are as follows: the 'Available Plug-ins' directory shows any available software modules that are not installed; if any of these is needed, just select the desired module and press the 'Install' button to install this module. While, in the 'Installed' directory it is possible to check the status and functions of the currently installed modules, and in the eventuality, even to deactivate any of them. The menu of set-points displays the link for connection to the software update source (it is not advisable to change this

parameter), and it is possible to modify the checking arrangement of updates.

-**'Monitored Devices' window**

This window shows the devices that are connected to the PC and detected by the platform. It indicates the communication port (*serial port*), the *connected device*, the associated *client code* in the database, the *description* allowing identification of the various products, and finally the firmware *Version* of the device.

- **'Documentation' and 'About' buttons**

Documentation button opens the PC folder into which the user guide and manuals have been copied during SW installation; About button opens a window containing SW version and other topic information.

- **'Translator' Window**

Compare window for control panel translation.

- **'Output' Window**

Window containing debug trace (not interesting for the user, reserved for SW maintenance).

- **'Properties' Window**

Window containing debug traces (this in general is not of interest for the user but only for SW management purposes).

<p style="text-align:center">**'Main' bar**</p>

The main bar is divided into several sections, each one with various functions that are grouped into logical units: these allow client management and programming pages. The functions of each button are shown in detail here below.
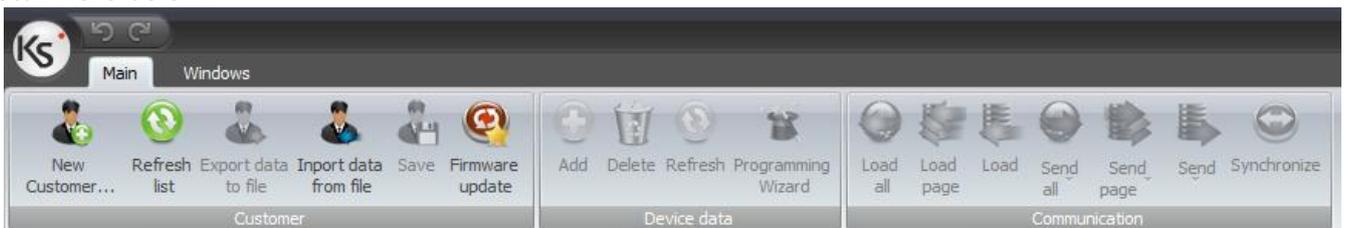

<p style="text-align:center">**Figure 3**</p>

-**'New customer' button**

This button opens the window for programming the data of a new client. This information will be added to the list of clients present in the software.

- **'Refresh-List' button**

Il pulsante 'Refresh List' allows the update of information on the current when it contains fields that have been modified on other panels.

- **'Export data to file' button**

The button 'Export data to file' allows the user to save the customer configuration on a single file. This button is active only on the management window of the customer.

- **'import data from file' button**

This button allows the user to import a configuration relative to a customer from a file previously created via the 'Export data to file' button. This procedure allows to move the configuration from on PC to another one or it allows to create copies of the same configuration.

-**'Save' button**

Pressing this button will save the programming carried out in the software database.

-**'Firmware Upgrade' button**

This button opens the window from where it is possible to update the firmware of the connected devices or of the KS-BUS peripherals (the latter can be upgraded without needing to modify the present connections on the system). First, select whether you wish to upgrade a device hat is connected to the PC

and features in the list of 'Serial ports and connected devices' or whether you wish to prepare the file to be saved onto a USB flash key that will be connected afterwards to the device to be updated. Then, by pressing on the forward button, you should select the device you wish to upgrade, where the last firmware revision available is also shown. By performing the **basis™** updates, the PC will also have the last released firmware for every peripheral device which is present in the list available at all times. Updating the firmware takes from a few seconds to several minutes, depending on the peripheral device being updated.

-**'Add' button**

This button allows the user to create a new position in the active window. For instance, if you are in the 'Recipients' display page, by pressing this button you can insert a new phone number in that list, if you are in the 'Zones' display page you can add a new zone, and so on. In practice, it can be used in substitution for the 'Palette' buttons.

-**'Delete' button**

This button allows the user to erase the item selected in the active window. For example, if you are in the 'Recipients' display page, by pressing this button you can delete the contact, if you are in the 'Zones' display page you can delete a zone, and so on.

-**'Refresh' button**

This button allows the user to refresh the current view on the active window.

-**'Programming wizard' button**

This button allows the user to switch between the siplified programming and the complete one.

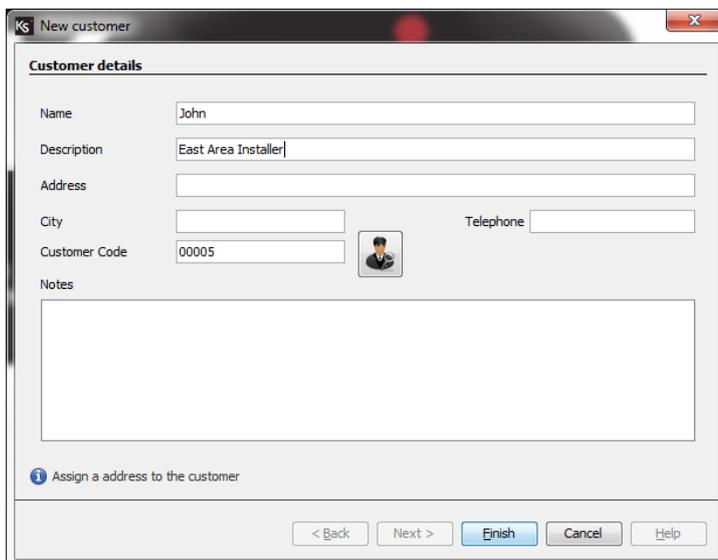-**Programming send (load) buttons**

The "Send/Load" button sends/loads only the selected unit to the device (e.g. a phone number contained in the list), while the "Send Page/Load Page" button sends/loads the whole page being displayed to the device (for example, the phone numbers). At last the 'load all/send all' buttons allow to load or to send the whole programming. These two buttons are also available on the 'Navigator' tab.

HOW TO CREATE A NEW CLIENT AND START PROGRAMMING

This section describes how to create a new client, associate devices and commence programming.

To create a new client, simply press the 'New client' button and enter the client data in the introduction window. The client, once created, is introduced in the list. Eventually it will be possible to modify the client data by pressing – with the right key of the mouse – on the client's name.

Double clicking the client's name opens the 'Client Mngt.' window. In this window it is possible to associate the devices that will be installed at the system to the client. To add a new device, simply double click the left mouse key on the client's name, shown in the 'Client Mngt.' window. At this point, the device selection window opens, in which, having selected the device, the user clicks on 'Forward' and then assigns a name to the actual device, which will enable its identification and data uploading

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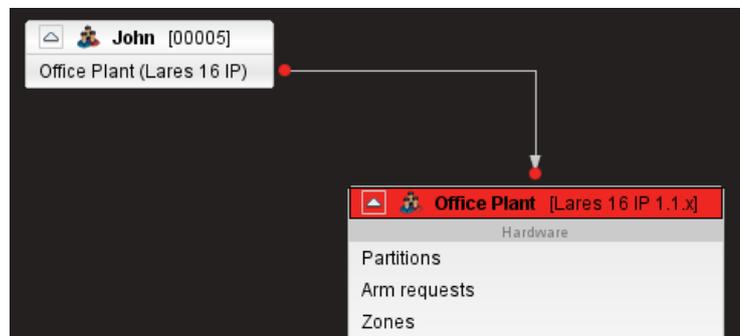
whenever required in subsequent connections. Finally, by pressing the 'Finish' button the device is created by means of the specific programming menu. To open a programming page, simply double click on the name of the display page to be opened, and the 'Browser' will automatically be activated to allow movement through the different programming pages without necessarily returning to the 'Client Mngt.' window.

All of the various **lares**™ series system models have a similar programming base. An indication of features that refer expressly to some models only is shown below. The software allows the creation of zones (or outputs) and establishes their physical location (for example, system zones, keyboard zones, etc.). It also enables 'Macro functions' to be programmed. The macro functions are a set of actions achieved by the system when a given event occurs, for example a zone (or partition) alarm. The activation of 8 outputs, the switching off of 8 outputs, as well as the activation of the vocal communicator, the sending of an SMS or an E-mail, and/or even an arm/disarm of the system can be programmed for each single event.

DESCRIPTION OF THE PROGRAMMING PAGES

This section describes all programming pages. These are presented in the logical order by which it is advisable to program the system.

'Partitions'

In this display page it is possible to program the parameters relating to the system partitions. In the case where it is not necessary to use all the partitions, the data of the unused partitions should just not be programmed. Below is a detailed description of each programmable field.

Label: the label is the description you wish to assign to a partition. It will be used as an identifier on the other programming pages. It will also be used as a string by the alarm SMS or E-mail, as well as in the generation of vocal messages. The label is also shown in the events logger (register).

Automatic memory reset: by selecting this option, when you disarm a partition, the system will automatically delete any alarm memories.

Section Delays

Entry: the time (expressed in seconds) before the system triggers an alarm when a delayed entry zone enabled on this partition is breached.

Exit: the exit time (expressed in seconds) during which the zones programmed with a delayed exit, even if breached, do not trigger any alarm.

Warming: the time (expressed in minutes) preceding arm by the timetable programmer, during which the imminent arm is signalled by beeping on the keyboards.

Patrol: the time (expressed in minutes) activated upon system disarm by means of a code (key) with a patrol attribute. When this time has expired, the partitions will be automatically armed again.

Negligency Time: the time (expressed in hours) activated upon disarm. When this time has expired, if the partition is not armed again, 'Negligence of partition' event will be triggered. Actions can be associated to this event (for example, it could be programmed to 24h to take care of possible arm errors or omissions and forcing the system to make an automatic arm).

Cycle: the time (expressed in minutes) which determines the duration of the alarm cycle in case no mono-stable outputs were associated to the area alarm events. During the cycle time, the system will not generate any further alarm events for that partition, thus avoiding the queuing of numerous phone calls in the event that repeated zones pertaining to a same partition were breached.

'Arm modes'

Throughout this page it is possible to program the system's arm methods that can be associated to the events in the 'Scenarios' page or to numeric keys of the *ergo* LCD keypad or *volo* reader. Depending on

the system model, up to 64 different arm methods can be defined, tailored to each partition. The following actions can be set for every partition:

Mode: description you wish to give a arm method, used as an identifier in the other programming pages. This label is also shown on the keypad when the arm modes is active.

For each mode, it is possible to program for each partition, 5 different state.

No action: when this method is activated, the partition status will not be modified.

Arm without delays: when this method is activated, the partition is armed with no exit and entry delays.

Arm with delays: when this method is activated, the partition is disarmed with exit and entry delays (only for the zones of this partition that are delayed too).

Disarm: when this method is activated, the partition is disarmed.

Toggle: when at least one partition is armed all will be disarmed, when all partition are disarmed all will be armed.

Any unused partitions can be left in 'No action' mode. By default, the programming base already includes two predefined methods: total arm of all partitions and total disarm of all partitions.

'Zones'

In this display page the parameters of the zones can be programmed. To program a zone, press the 'Add' button or drag the corresponding icon (from 'Palette') into the programming page. Below is a detailed description of each programmable field.

Label: the description you wish to assign to each individual zone. It will be used: as identifier in the other programming pages; as a string by the SMS or E-mail alarm; as well as in the generation of vocal messages. The label will also be shown in the events logger.

Processing Method: the user should select the type of zone, which determines the type of signal analysis. It is available in *standard*, *rolling blind*, *inertial* (for glass break sensors), *command* (in case you do not wish to use the zone for triggering alarms but only for activating macro functions), and finally *analogic* (to connect sensor with 0-10V output)

NOTE:
1. To test roller blind and inertial detectors do not use the zone real time, because, due to the really fast pulses generated by those detectors, is really difficult to show it. Just arm the zone and verify if they generate an alarm.
2. To use a zone as command, select the partitions that the zone should arm/disarm, and program the required action on the Scenarios page, related to the 'Zone realtime' events
3. Analog zones can be assigned only to terminal 1 of *auxi* modules. Analog zones DO NOT generate alarm or tamper events, but only ones relative to input voltage level.

Balancing: select the type of line end resistance. *NC* (normally closed), *NO* (normally open), *BAL* (single balanced = alarm only), *DBAL* (double balanced = alarm and tamper), and *3BAL* (triple balanced = alarm, masking and tamper) are available. For details of interconnections and thresholds, please refer to the system's control panel manual. For analog zones it is not possible to select the balancing mode, but up to 4 thresholds can be programmed which determine 5 levels. Depending on the input voltage value which the input belongs to, the corresponding event will be generated.

Partitions Mask: To associate the desired partitions to the zone. When a zone is assigned to a partition, it takes the programmed entry and exit time, it is armed when the partition is armed, or disarmed if the partition is disarmed. If a zone pertains to multiple partitions, it will trigger the alarm only if all of the relevant partitions are on.

Bypass mode

Unbypassable: if this option is selected, the user will be unable to exclude the zone.

Bypassble: if this option is selected, the user can exclude the zone. An excluded zone does not signal any

alarms, tampers or blanking.

Auto-bypassable (forced arm): if this option is selected, the zone is automatically excluded, it proves to be breached at the moment it is being armed. Self-exclusion does not exclude tampers and blanking. The zone is automatically armed again at the next disarm.

Automatic unbypass: if this option is selected, the zone is automatically excluded if at the moment it is being armed it proves to be breached. As soon as it returns to idle state, it is automatically armed again.

Section Attributes

Chime: if this option is selected, when the zone is violated while the partitions are disarmed, it generates 5 beeps on the keyboards that are linked and enabled to the same partitions.

Always active (24h): if this option is selected, an alarm is triggered when the zone is breached regardless of whether the partitions associated to the zone are on or off.

Test: if this option is selected, the events will only be recorded in their logger, without generating any alarm.

Section Entry/exit logic

Entry Delay: select this option if you want that the breaching of this zone will make entry delay to start (or if started yet the an alarm will not be generated).

It is possible to plan an entry path on several levels, assigning the parameters called *entry level*. For example, when partitions are armed, assigning three different levels the following behavior will be performed:

- When entry time is off it is possible to breach ONLY zone with entry level set to zero 0; after the fist violation entry time will start;
- When entry time is on it is possible to breach only zone with entry level set to the same number or one level over the last zone violated.

In the following figure is shown a typical situation of entry in a house where the keypad to disarm the plant is reachable only after a certain number of zone violations.
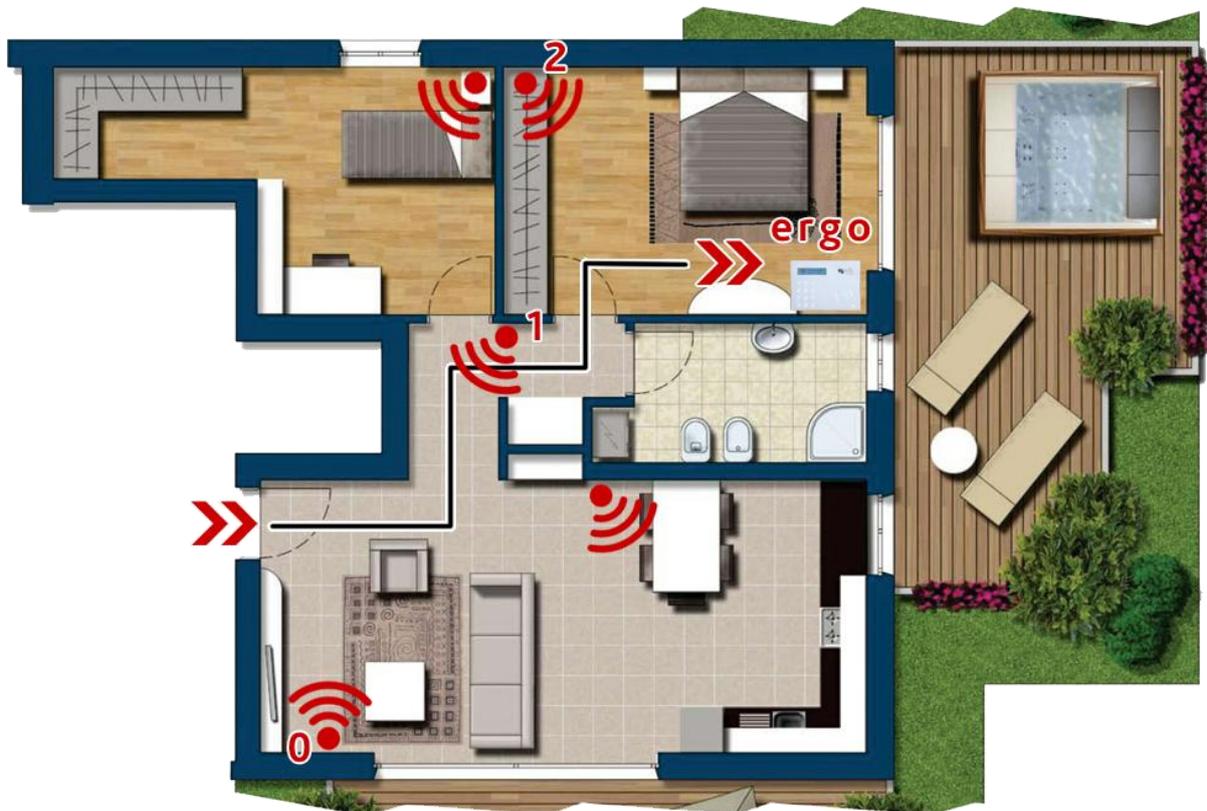

Figure 4

Volumetric sensor marked 1 has to be the FIRST to be breached without an alarm will take place, then the number 2 and 3, in this exact order, will follow. **Warning: this is true even if the zones belong to different partitions; one arming policy inserting all of those partition MUST be programmed to make this to work correctly.**

Exit Delay: select this option if you do not wish the zone to trigger any alarms during the exit time.
Last Exit: this is the last zone of the exit path. When it is breached and then reset during the exit time, it automatically resets the exit time.
Referring to Figure 4 zones marked 1, 2 and 3 must be programmed as exit delay and the number 1 also marked with *Last Exit*.

Number of pulses: number of pulses needed before a zone alarm is triggered. The impulses are standard in the case of 'standard' or 'command' zone, and fast in the case of 'rolling shutter' or 'inertial' zone.
Pulse Length: duration of every single alarm impulse. This value determines the time during which the zone is to be breached before a valid impulse is generated, and it will be applied to all processing methods. For example, if you plan a zone as 'Rolling shutter', the alarm will be triggered after the set number of fast impulses has taken place (rolling shutter movement) or if the contact remains open during the time as programmed in this window (wire cutting protection). In the case of zone programmed as 'Roller Blind', setting this value to 0, the quick analysis of the pulses will be performed only; so, if the contact is left open no alarm will be generated.
Alarm Window: window within which the programmed number of impulses must take place.
Alarm cycles: number of alarm cycles that can be generated by the zone. The alarm cycles are reset to zero at every zone arm.
Inactivity: with the zone on, if the actual zone has never been breached during a time length as programmed (in minutes), the zone blanking event will be generated (passive control of blanking).
Section Peripheral and terminal
In this section is shown the peripheral and terminal linked to the zone

'AND zones'

In this page it is possible to program the AND zones structure. If two zones are in AND, and alarm will be generated only if both zone are violated. To do so, press the 'Add' button or drag the corresponding icon from the 'Palette' onto the programming page.
For each structure can be programmed two zones ('*First zone*' and '*Second zone*') or three (using also the '*third zone*' section)
Time window: time in seconds within the violation from the zones programmed in the structure should be generated to have an alarm
Majority: If this option is selected, and three zones are programmed on the structure, it is enaugh that two zones out three are violated to generate an alarm.
Sequential: if this option si selected, the zone should be violated on the right sequence to generate an alarm.

'Outputs'

This page allows the parameters of the outputs to be programmed. To do so, press the 'Add' button or drag the corresponding icon from the 'Palette' onto the programming page. Below are detailed descriptions of each programmable field. Except the double switching 1 A relay, all outputs are 500 mA Open Collectors (transistorized).
Label: the label is the description you wish to assign to an output. It will be used as an identifier in the

other programming pages.

Mode section

Bistable is an output that tracks the status of the corresponding event or which can be activated by one event and deactivated by another. While, a **monostable** output is active during a programmed time (ON Time) upon occurrence of the event; it then automatically returns to stand-by state.

Polarity section

Normally close: select this option if you want that the output will be shorted to ground during the rest state and will be open when active (negative to leave).

Normally open: select this option if you want that the output will be open during the rest state and will be shorted to ground when active (negative to give).

Analog: select this option if you want that the output will generate a voltage between 0 and 10 V (max current 20 mA) when active. The voltage will be 0 V when the output is at rest. To program output voltage use the cursor present in the '*Analog value*' section.

Note: analog outputs can be associated only to the terminal marked 5 of **auxi** expansion modules.

Timer section

ON Time: the time, expressed in seconds, during which an output programmed as mono-stable remains active upon occurrence of the event.

Cycle Time: the sum of *ON Time* plus a minimal time. It is the length of time during which you wish to keep the output deactivated.

Remote control: if this option is enabled the output can be manually managed through the basis software of via Web-server application

Controlled: this option concerns the relay output only. If enabled, a 10k EOL on terminal +A will be monitored (for connection details, please refer to the control panel manual). In the case of tampering, the event 'Controlled output tamper' is generated.

Section Peripheral and terminal

In this section is shown the peripheral and terminal linked to the output

<p align="center" style="color:red">'BUS Peripherals'</p>

In this display page the system hardware configuration can be defined. Here the user will enter the present peripherals and their attributes and also assign the functions of the I/O terminals. A physical terminal can be assigned to a zone (defined beforehand), or to an OC output that will be left unused[1].

Mother Board

The first part to be programmed is the functioning of the terminals in the control panel mother board. The following are the programmable parameters:

Terminal i1...i6: you should program the logical zones to be assigned to the terminals which are identified by numbers i1 through to i6 on the control panel's mother board.

Terminal M1...M4: you should program the logical zones or the outputs to be assigned to the terminals which are identified by numbers M1 through to M4 on the control panel's mother board. If a zone is assigned to one terminal, obviously the output function cannot be assigned to the same terminal.

Virtual Keyboard: the virtual keyboard is used during remote operations (for example by telephone or IP). In the **description** field you should enter the description you wish to give to the macro function associated to the key (button). This description (label) will be used as an identifier in the other programming pages. It

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[1]   *In practice, you can set your system so that it will have more physical zones (understood as terminals) than logical zones (in the case of lares128-IP there are 128 of these), in that there may be unused physical zones.*

will also be used as a string by the alarm SMS or E-mail, as well as in the generation of vocal messages. It will appear in the events logger too. Place the tick against **enable** if you wish to activate the corresponding button. Programming actions (entering set points/selections, activating outputs) must be performed in the 'Macro functions' display page (see subsequent paragraphs). The virtual keyboard also allows the programming of the **Partitions Mask,** namely the partitions on which the virtual keyboard will be able to operate.

ergo *Keypad*

LCD keypad can be added into the system. The number of programmable keyboards depends on the control panel model. To add a keyboard, drag the corresponding icon from the palette to the programming page. Below is the list of programmable parameters for these keyboards.

Label: the description you wish to assign to the keyboard. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the **ergo** keyboard too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise you simply need to place the tick next to **assign serial number via keyboard**, then you will be able to assign the present keyboards/peripherals from the Installer menu to those that are programmed and not assigned to a specific serial number.

Backlight: lighting level of the keyboard.

Volume: volume level of the keyboard loudspeaker.

Terminal M1...M2: you should program the logical zones or the outputs to be assigned to the terminals which are identified by numbers M1 and M2 on the keyboard. If a zone is assigned to one terminal, obviously the output function cannot be assigned to the same terminal.

Idle Information: select the information you wish to see on the second line of the keyboard display when the keyboard itself is in an inoperative state. Select freely from the various options according to the need.

New sounds: if this option is selected, during entry delay end exit delay the keypad will sound only once every 5 seconds, instead of continuosly.

CAPSENSE sensitivity: set the required level of sensitivity on the keys on the keypad.

Section Macro functions:

Disable automatic scenario execution: after enter a valid PIN, the keypad automatically execute the reported scenario after three seconds if no more keys are pressed. If this option is enabled, the scenario is executed only after the enter key have been pressed

In **description** field enter the description you wish to give to the macro function associated to the button. It will be used as an identifier in the other programming pages and in the string of SMS or E-mail. It is also shown in the events logger. Place the tick next to **enable**, if you wish to activate the corresponding button. Place the tick next to **No PIN**, if you wish to enable the function without entering the PIN, by simply pressing the corresponding key on the keyboard (macro function) for three consecutive seconds, finally select the desidered **Arm request**. Programming actions (entering set-points / selections, activating outputs) should be performed in the 'Macro functions' display page (see subsequent paragraphs).

Partitions Mask: assign the partitions to which the keyboard will be able to operate.

'Sound Feedback'

Exit Delay: select this option if you want enable the keypad audio buzzer during the exit delay.

Entry Delay: select this option if you want enable the keypad audio buzzer during the entry delay.

Warning Time: select this option if you want enable the keypad audio buzzer during the warning time (armed by scheduler).

Chime: select this option if you want enable the keypad audio buzzer to chime on the violation of a zone with '*chime*' attribute.

auxi *I/O Modules*

The number of programmable *auxi* modules depends on the control panel model. To add an ***auxi***, drag the corresponding icon from the palette into the programming page. Reported below are their programmable parameters.

Label: the description you wish to assign to the *auxi* module. It will be used as identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the **auxi** modules too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise you just need to put the tick against ***assign serial number via keyboard***, then from the Installer menu you will be able to assign the present **auxi** module/peripherals to those that are programmed and not assigned to a specific serial number.

Terminal M1...M5: to program the logical zones or the outputs to be assigned to the terminals which are identified by numbers M1 to M5 on the **auxi** p.c. board[2].

Imago BUS outdoor Siren

The number of programmable **Imago BUS** sirens depends on the control panel model. To add a siren, drag the corresponding icon from the palette into the programming page. Reported below are their programmable parameters.

Label: the description you wish to assign to the siren. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus these sirens too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise simply place the tick next to ***assign serial number via keyboard***, then you will be able to assign the present siren/peripherals from the Installer menu to those that are programmed and not assigned to a specific serial number.

Essentially, sirens are managed as outputs by the system. For the acoustic and luminous warming to be operational, you must assign an output in window '***Buzzer & Blinker'***. When this output is activated (for example upon occurrence of an alarm event) the siren will ring and blink. It is also possible to assign outputs to the blinker (***'Blinker only'***) and to the auxiliary warming LEDs (***'auxiliary LEDs'***) only. These can be programmed, for instance, to signal the on (and/or off) status of the system.

Max. Alarm Time: maximum time the acoustic and luminous warming by the siren remains active upon wire cutting.

Two-Tone buzzer: if this option is selected, the acoustic sound is made by using two distinct frequencies, if not the buzzer will 'swap' a range of frequencies.

Temperature Section

Threshold check enable: the siren integrates a temperature sensor that can measure the outside temperature. Enabling this option you can generate an event if the temperature goes below the **'low threshold temperature'**, another event if the temperature goes above the **'high threshold temperature'** and another one if the temperature is between the two thresholds.

Sensor disabled: if this option is selected, the siren does not send the temperature to the control panel, and the same is not used for the display of outdoor temperature on the keyboard (this is useful if there are two sirens, and one is mounted in locations exposed to the sun, distorting the outside temperature measure).

Radius BUS indoor sirens

In the system can be added radius BUS indoor sirens. The number of radius BUS that can be programmed depends on the control panel model. To add a siren press the 'Add' button (on the main menu).

The siren is managed using virtual outputs (created in the 'Outputs' programming page) that can be assigned to the 'Buzzer and Lamp' or to the 'Only Lamp' combo boxes.

---

[2]   *Obviously if a zone is assigned to one terminal, an output function cannot be assigned to the same terminal.*

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In the following the available parameters:

Label: this is the description that you should assign to the siren; this will be used as an identifier in the other programming pages, it is shown in the event logger and used as a string in the advisor for SMS and/or e-mail. Every peripheral bus (so radius sirens, too) is identified by a 6-digit **serial number** which can be added directly if known, or which can be assigned pressing on the '*Assign the detected serial numbers*' button in the 'Peripherals Realtime' page.

Maximum alarm time: this is the maximum time of sound in the event of wire cutting.

Use emergency lamp: if this option is selected, when the main power is lost, the siren will light the LED, lightning a middle-sized room. To use this function the lithium battery is needed.

LED always on: if this option is selected, turning on the virtual output associated to 'Only Lamp', the LED will still (instead of blink).

Temperature Section

Threshold check enable: the siren integrates a temperature sensor that can measure the outside temperature. Enabling this option you can generate an event if the temperature goes below the **'low threshold temperature'**, another event if the temperature goes above the **'high threshold temperature'** and another one if the temperature is between the two thresholds.

Sensor disabled: if this option is selected, the siren does not send the temperature to the control panel, and the same is not used for the display of outdoor temperature on the keyboard (this is useful if there are two sirens, and one is mounted in locations exposed to the sun, distorting the outside temperature measure).

Partition Mask: if this mask is not empty the buzzer will sound if, and only if, all the partitions listed are armed. This is useful if you want the siren not to sound during *night* or *day* mode.

gemino BUS GSM Communicator

To add a *gemino* communicator, drag the corresponding icon from the palette to the programming page. Reported below are the programmable parameters.

Label: the description you wish to assign to the communicator. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the **gemino** communicator too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise simply place the tick next to *assign serial number via keyboard*, then from the Installer menu you will be able to assign the present communicator/peripherals to those that are programmed and not assigned to a specific serial number.

Section general options

Enable SIM #2: Select this option if two SIM cards are installed on **gemino**

Enable external antenna: Select this option if the external antenna is connected to **gemino.**

Disable internal antenna: This option is valid only if the '*Enable external antenna*' option is selected. Select this option if you do not wish the device to use the indoor antenna in case of reception problems (which may be the case, for example, if **gemino** is housed in a metal enclosure).

JAM detection: Select this option if you wish **gemino** to warn you about any interferences to the GSM RF carrier that prevent communication.

Enable answering machine: This option enables the vocal menu; so incoming calls will be redirected to it. This allows the user to control his panel using the phone and after the insertion if a valid user PIN code.

The net of credit control and expiry parameters can be programmed on each SIM.

Check Interval: the maximum time, expressed in days, between two verifications of residual credit. In any case, the device checks the credit after each phone call and every 10 SMS that have been sent.

Check threshold: the threshold (expressed in Euro or in the local currency) below which **gemino** generates a lack-of-credit a warming and switches SIM cards (if there are two such cards).

SIM Expiry Date: Enter the SIM expiry date.

Period: the time, expressed in days, by which the SIM card expiry is extended upon every recharge. If it is set to zero, the SIM card expiry is not monitored.

Destination list: from *Phone Numbers*, selects the numbers to which the messages of SIM residual credit and expiry are to be sent. Use the green button to add a new one. Up to two destinations can be added.

NOTE

The following parameters are only necessary if the device is programmed to manage the system remotly via GPRS. Before you begin programming, check with your service provider that the SIM card is enabled for data transmission, and perhaps ask if calls and SMS can be sent during data transmission. More information are present on the specific manual *GPRS programming*.

Ingoing GPRS data port: communication port used to receive data

Outgoing GPRS data port: communication port used to send data

Dynamic DNS settings: in this section can be programmed the parameters to register the unit with a dynamic DNS server. Refer to *Dynamic DNS configuration* manual for more detail.

APN: the access point to the GPRS net (this parameter is provided by the GSM/GPRS operator).

pontis PSTN Communicator

To add a *pontis* communicator, drag the corresponding icon from the palette to the programming page. Reported below are the programmable parameters.

Label: the description you wish to assign to the communicator. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the *pontis* communicator too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise simply place the tick next to *assign serial number via keyboard*, then from the Installer menu you will be able to assign the present communicator/peripherals to those that are programmed and not assigned to a specific serial number.

Rings: program the number of rings the communicator should be detect before it answers an incoming call. The automatic answer should be enable from the user menu on the *ergo* keypad.

Bypass answering machine if this option is enabled, the communicator answer to incoming calls after the first rings, if had received in the previous minute a missed calls of less then two ring .

divide BUS isolator/repeater.

To add a *divide* module, drag the corresponding icon from the palette to the programming page. Reported below are the programmable parameters.

Label: the description you wish to assign to the communicator. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the *divide* module too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise simply place the tick next to *assign serial number via keyboard*, then from the Installer menu you will be able to assign the present communicator/peripherals to those that are programmed and not assigned to a specific serial number.

volo proximity reader

Proximity readers can be added into the system. The number of programmable readers depends on the control panel model. To add a readers, drag the corresponding icon from the palette to the programming page. Below is the list of programmable parameters for these keyboards.

Label: the description you wish to assign to the readers. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Every bus-linked peripheral (thus the **volo** proximity reader too) is identified by a 6-digit **serial number**. If you know it, you can enter it directly; otherwise you simply need to place the tick next to *assign serial number via keyboard*, then you will be able to assign the present keyboards/peripherals from the Installer

menu to those that are programmed and not assigned to a specific serial number.

Backlight: lighting level of the keyboard.

Volume: volume level of the keyboard loudspeaker.

Terminal M1...M2: you should program the logical zones or the outputs to be assigned to the terminals which are identified by numbers M1 and M2 on the keyboard. If a zone is assigned to one terminal, obviously the output function cannot be assigned to the same terminal.

Idle Information section:

Green LED on: if this option is selected, when the system is disarmed the LED on the readers is green, otherwise it is steady off.

LED timeout: the reader shows the partion status (at least one partition armed with red LED on, no partition armed with green LED on – or off according to the previus option). This happen if that option is programmed as 'always on'. Othewise the reader will present the status for the programmed seconds after a valid key is presented to the reader, that it will be always off. This avoid for an intruder to know the status of the system.

Tamper sensitivity: the readers integrate an accelerometer (MEMS) to detect a tamper condition. Set the sensitivity using the cursor on that secion.

Arming modes and LED section:

The reader can activate up to 5 different scenario, associated to the color of the LED. To activate the function, select the color of the LED and program – if required – the arming modes. Other actions (activating outputs, timers, etc) should be performed in the 'Scenario' page (see subsequent paragraphs).

Partitions Mask: assign the partitions to which the reader will be able to operate.

'User Groups'

In this page it is possible to program the activation modalities of user groups (Codes and/or Keys), which can be related to the scheduler. Up to 4 different groups are available, each selectable or de-selectable in 16 different programmable modalities.

Modality: description which you want to assign to.

For each modality it is possible to define 3 different states.

No Action: the state of the group is not modified.

Active: the group is active and the codes/keys are valid.

Inactive: the code/keys associated are not valid.

The unused groups can be left in the 'No Action' modality. By default the base programming includes two configured modalities, yet: activation and de-activation of all groups.

Note: when the PIN of a code (or a key) belonging to a de-activated group is used the 'Wrong PIN' ('Wrong Key') message is displayed.

'Codes'

In this page, codes can be added to be used on the **ergo** LCD keyboards. In this section, the code is simply enabled, the PIN will then have to be assigned via keyboard. To add a code, press the 'Add' button or drag the corresponding icon from the palette.

Label: the description you wish to assign to the code. It will be used as an identifier in the other programming pages. It will also be used as a string by the alarm SMS or E-mail, as well as in the generation of vocal messages. The label is also shown in the events register logger.

Group: you can choose the group associated to the code. In case of no selection, the code will be always active, otherwise it will follow the group policies.

Change partition mask: You should associate the partitions on which the code will be able to operate.

Enabled: if this option is selected, the code is active.

Master: a main code with the capability of also managing the advanced menus on the LCD keyboard, in addition to modifying enable functions and PINs of codes without this attribute and with the same blanking of partitions.

Patrol: if this option is selected, the code can perform the disarm operations, but the partitions will be automatically armed again upon expiry of the patrol time that was programmed in the 'Partitions' display page.

Arm Only: if this option is selected, the code will be unable to perform any disarm operations.

Open gate: if this option is selected, when the code is typed on a keypad no access to the menus will be performed, but it will be triggered the scenario related to the event 'Code recognized' only. This option is very useful if you want to use the code to make one action only (for example the activation of an output).

Load PINs: using this button it is possible to upload the PINs from the panel, and store them on the PC database. This permits to restore the PINs if the panel should be replaced, pressing the *Send PINs* button.

<div align="center">**'Keys'**</div>

In this page, keys (<u>actual min-tags, not buttons</u>) can be added to be used on the **ergo** LCD keyboards. In this section, the key is simply enabled, then its acquisition will be performed by the keyboard. To add a key, press the 'Add' button or drag the corresponding icon from the palette.

Label: the description you wish to assign to the key. It will be used as an identifier in the other programming pages and as a string by the alarm SMS or E-mail. It is also shown in the events logger.

Group: you can choose the group associated to the key. In case of no selection, the key will be always active, otherwise it will follow the group policies.

Change partition mask: you should associate the partitions on which the key will be able to operate.

Installer Key: a key that permits access to the installer menu.

Enabled: if this option is selected, the key is active.

Patrol: if this option is selected, the key can perform the disarm operations, but the partitions will be automatically armed again upon expiry of the patrol time that was programmed in the 'Partitions' display page.

Arm Only: if this option is selected, the key will be unable to perform any disarm operations.

Open gate: if this option is selected, when the key is approached to a keypad or volo proximity reader no access to the menus will be performed, but it will be triggered the scenario related to the event 'Key recognized' only. This option is very useful if you want to use the key to make one action only (for example the activation of an output).

Load IDs: using this button it is possible to upload the tags' IDs from the panel, and store them on the PC database. This permits to restore the tags' IDs if the panel should be replaced, pressing the *Send IDs* button.

<div align="center">**'Voice messages'**</div>

This page allows the management of vocal messages, namely recording them, listening to them and deleting them. To add a new vocal message, press the 'Add' button or drag the corresponding icon from the palette. Select the message recording mode by importing a file in wave format, by recording it by means of the vocal p.c. board of the PC or by generating it by means of the TTS (text-to-speech) application. For the latter, simply write the text in the designated window, and the software will automatically generate the corresponding vocal message; or you may generate vocal messages by starting from the descriptions (labels) inserted in the various programming pages and tailoring them.

Clicking on *generate messages for the vocal guide*, it is possible generate the vocal messages starting from the descriptions (labels) inserted in the various programming pages.

This display page is available on the **lares16-IP**, **lares48-IP** and **lares128-IP** control panels only. On this page it is possible to customize the panel Web Server adding customized maps and buttons. For further details, please refer to the screen-casts present in the FAQ section of Ksenia Website www.kseniasecurity.com

'Ethernet Options' (for expert users)

This display page is available on the **lares16-IP**, **lares48-IP** and **lares128-IP** control panels only. It contains programming parameters for network setup. We recommend that you ask your Internet administrator about the parameters to be set before connecting the system to the Internet, in order to avoid conflicts and malfunctions. By default, the p.c. board starts with static IP address 192.168.2.90 and keeps it until it receives an address in DHCP or until it is be modified. Reported below are all of the programmable parameters in detail.

Board Name (NETBIOS name): the name with which it is possible to identify the p.c. board within the network. This function is available on Windows networks only. The factory parameter is "lares_board".

Enable DHCP: if this option is enabled, the p.c. board configures the network parameters automatically. If this option is not selected, the net parameters must be programmed.

Enable PING: if this option is not selected, the p.c. board will not respond to the *ping* requests coming from the network.

In case you wish to use the p.c. board for sending E-mails, then you need to place the tick next to **Enable SMTP** and configure the parameters appropriately.

e-mail from: in this section you must program the name of the sender (i.e. Intrusion control panel). Some mail servers can request the insertion of a valid e-mail address (i.e. server with no authentication).

Server: set the name of the SMTP server (i.e. mail.provider.net).

User-name: set the name of the user for the SMTP server authentication.

Password: set the authentication password.

Enable SSL: select this option if the mail server you are using requests the encryption (i.e. gmail). In this case it is needed to specify the port, too (usually 443).

The p.c. board has a built-in web server. To enable it, place the tick next to **Enable Web server**.

To access the Web Server it is needed the authentication by a user id (default *admin*) and a password (default *lares*). It is also possible to change the port the Web Server is listening on (by default 80).

Through the Web Server it is possible to manage remotely the control panel without the need of any SW, but simply using an Internet browser (Internet Explorer, Mozilla, …). You've got to access to the address http:// <control panel name>:<HTTPS port>.

dynamic DNS server. Refer to *Dynamic DNS configuration* manual for more details.

Advanced Ethernet parameters: in this section it is possible to change the UDP communication ports: it is advisable to refer to your network administrator for the setting of those parameters before installing your control panel in a network to avoid conflicts and malfunctions, even on other hosts.

NTP section

In this section it is possible to enable the synchronization service of time and date on available servers. To enable this service you need to select one of the servers listed.

'IP Events'

In this page it is possible to configure the programming data of an IP receiver which is able to manage alarm events through SIA DC-09 protocol.

You need to add at least one IP receiver in the Phonebook page, and, in the Scenarios page, for any event you want to be reported you should add, in the event destinations, the IP receiver you want to reach (see further paragraphs).

Enable IP events: check this option to enable sending of the IP reports.

Enable supervision: select this option if you want the control panel to send periodic checks to one IP receiver in order to verify the connection (see Back-up receiver section).

Supervision Period: interval for periodic supervision packets (in seconds).

Ethernet Client *Port:* number of the port of the receiver you must send packets to on the Ethernet channel.

Ethernet Client *Port: number of* the port of the control panel on which the receiver has to send packets on the Ethernet channel (if IP receivers are programmed for UDP protocol, in your computer this port must be non blocked by firewalls, routers or so on).

Note : in most cases, if IP receivers use UDP protocol these 2 ports should be the same.

GPRS Client Port: number of the port of the receiver you must send packets to on the GPRS channel.

GRPS Server Port: the port of the control panel on which the receiver has to send packets on the GPRS channel.

Back-up receiver receiver at which the periodic checks will be send.

<div align="center" style="color:red">**'Options'**</div>

The control panel options can be programmed in this display page.

Warnings enablement: select which faults must be subject to triggering by the control panel (by default: all enabled).

Section general options

Mains Fault Delay: select the delay time (expressed in minutes) before the power supply failure event can trigger.

Allow weak PINs: select this option to disable the strenghtness PIN control.

Use zone #1 as Stop Alarms: select this option to enable zone #1 to be a service input, instead of a standard zone.

Unbypass zones after disarm: if this option is selected, manually bypassed zones are automatic unbypass while disarming.

Reset Tamper Memory through user code: if this option is enabled the user can reset the tamper memory by pressing on the 'Alarm Reset' from the **ergo** keypad.

Section periodic event

The control panel can be programmed to periodically send a warming, for example a message requesting that its correct operation be checked.

Date & Time of 1st Periodic Test: to program the date and time of the first sending of the periodical event.

Period: to program the frequency by which the periodic signalling is to be sent (for example every 24h). If left at 0, no message is sent.

Section voice dialler

The following are options for configuring the vocal alarm:

Confirmation Request Message: this vocal message is reproduced at the end of all others and can be used as a guide, for instance to prompting the user to press the * button in order to confirm receipt of the message or to ask the user to hang up (the phone apparatus).

Call All Numbers: if this option is selected, the vocal messages will be sent to all the programmed numbers; otherwise, to the first one that answers.

Confirm call result: by selecting this option, it is necessary to press the * button on the telephone apparatus receiving the call in order to confirm receipt of the message, otherwise the device regards the phone call as failed and proceeds to dial the next number. If you press the # button, the call receipt is

confirmed and you receive a vocal guided menu to interact with the system. (See the user manual).

Hide call status on keypad: if this option is selected, call status will not be shown on the LCD keypad.

Trials: the number of call attempts the device makes to each programmed number before a message is deleted (even if receipt confirmation has not come in).

Repetitions: the number of times vocal messages are reproduced during a same phone call.

It is also possible to program the installer data, or information and data concerning service. These items will be displayed on the **ergo** keyboards in inoperative state, by pressing the Enter button.***Section Remote assistance settings***

Enable remote assistance on GPRS: set this option if the remote assistance via GPRS is used or can be used in the future.

Remote session timeout (min): when the user request for a remote assistance the unit will open a GPRS connection wating for the installer that reprogram the panel. The connection is automatically closed when the programmed timeout expires.

Refer to the user manual for the procedure to activate the remote assistance via GPRS.

Section Installer data

This information is shown on the keypad when the *enter* key is pressed.

Section date and time

Program time and date of the panel pressing the **Set** button.

NOTE:

A valid user code is required to program time and date.

'Scheduler'

Via the scheduler is possible to plan the arming/disarming/toggle modalities previously defined (or simply defined there) for every partition of the system following policies that depends by date and / or hour.

It is also possible to manage the activation of user groups (both codes and keys) to decide some time slots during which the codes and keys are valid.

To make an example: let's assume an intrusion system placed on an office, we could plan a total arming for all the December the 25th, no matter if on Monday or other days in the week; for normal working days we can plan a total disarming during work hours and a total arming on the other periods.

A simple graphical modality will lead you in the programming.

'Phonebook'

The phonebook can contain up to 100 contacts or IP receivers[3].To add a new item in the phonebook press the 'Add' button or drag the corresponding icon from the palette. Adding an item, the first step will be to choose between a contact or an IP receiver.

Programmable parameters for contacts:

Name: name associated to a number in the *Phone Numbers* list.

Number: telephone number (optional). If this field is not programmed, the subject listed in *Phone Numbers* will be unable to receive SMS messages or vocal calls.

E-mail: e-mail address (optional). If this field is not programmed, the subject listed in *Phone Numbers* will be unable to receive e-mails.

Cannot receive SMSs: select this option if do not wish a given number to be warmed via SMS (for example in the case of the number for a fixed telephone apparatus).

Cannot receive vocal messages: select this option if do not wish a given number to receive vocal calls, but SMS messages only.

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[3]   *The maximum number of contacs depends on the lares model*

Enable Caller ID: if this option is selected, the device – upon recognising the caller– generates the corresponding *caller recognised event,* rejects the incoming call and will activate the relative scenario[4].

Send Contact ID: if this option is enabled, alarms are transmitted to this destination number using the Contact ID protocol.

Priority: for each contact it is possible to choose which programming channel should be used first. (**Priority on GSM** or **Priority on PSTN**). Non-priority channel is automatically used as back-up.

Section Contact-ID

Program the 3 digits **Customer code** used on the contact ID protocol.

Programmable parameters for IP receiver:

Receiver description: it is just a name for the receiver

Receiver ID number : SIAIP DC09 IP receiver identification code, max. 6 hex digits

Transport ID: SIAIP DC09 control panel identification code. Max 12 hex digits

Protocol: Application protocol (ContactID, SIAlevel3,...)

Appplication ID: Application protocol identifier

IP address: IP receiver IP address

Port: remote port on which the IP receiver is listening

Options: SIAIP DC09 options

    Automatic backup: communications to this receiver are backed-up toward the backup receiver

    Priority on backup receiver: communications are send FIRST to the backup receiver

    Priority on GPRS: GPRS channel is tried BEFORE the Ethernet channel

    Use timestamp: time/data info are added to the communications

    Transmit over TCP: communications are send using TCP protocol instead of UDP

Backup:

    Backup receiver: IP receiver used to backup this one

    Backup period: interval between checks on this IP receiver communications functionality. During this period the backup receiver is used (or vice-versa if the priority is on the backup receiver)

'Generic Timers'

It's given to the programmer the chance to trigger scenarios after a programmable period of time (until few hours) when a given event as occurred. Timer elapse represents itself an event that can be managed at choice, even activating a timer again.

'Scenarios'

The scenarios page represents the heart of the system. The data entered in the foregoing programming pages determine the system's method of operation, which – depending on the circumstances in progress – will trigger events. Outputs can be associated to every event, to start the communicator or to execute arm and disarm actions.

Some programming examples are provided below:

Example 1 – Programming a 'keypad-operated' arm/off actions

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[4]   *This function is very useful if you want to trigger actions (arming the system, activate loads, …) at no charge*

Having completed the definition of the keyboards and activated the functions associable to its keys, let's assume to have defined into the page 'Armings' two modalities 'Total Arming 1' and 'Night arming'

If you wish to associate the system disarm to Key 0 of keyboard 1 you can simply assign to the event 'Key0 on keypad 1' inside the combo box called Arm mode the value Total Arming 1.

In the same way we could associate to Key 1 of the same keypad Night arming' modality, even activating on output as answer to this triggered event.

Example 2 – Activation of the relay and the communicator upon occurrence of an alarm

In regards to the occurrence of a partition alarm, simply assign an output (for example the relay) in the outputs column linked to the 'Partition Alarm' event; if you would also like to trigger a phone call or the sending of an SMS, add the numbers programmed in Recipients to the column of addressees. Moreover, in regards to vocal messages, it is necessary to select the vocal messages associated to the corresponding event.

Example 3 – arm by a control zone

Finally, let's assume that you wish to use a zone to switch partitions on.

Let's assume to have defined into the page 'Armings' another modality 'Total Arming 2'.

You simply associate Total Arming 2' modality to the real-time alarm event of a zone.

Programming Details

This display page, though extremely long, is of immediate use, thanks to the numerous functions of the **basis** SW. By placing the tick next to **Events by groups**, you can see the events organized by type; moreover, a string can be inserted on **Select by:** in order to find a specific event.

By clicking on the first line of the columns, the various events can be sorted by name or by triggered output, and so on, so that a quick programming analysis can be conducted. Additionally, multiple selections are enabled: by selecting several events, the various attributes to all the selected events can be associated – for once and for all and equally. Reported below is the meaning and description of each programmable field.

Activated Outputs: select the outputs (up to 8) that must be activated upon occurrence of a given event.

Deactivated Outputs: select the outputs (up to 8) that must be deactivated upon occurrence of a given event.

Toggled Outputs: select the outputs that must toggle on the event.

Note: to select the working modality of an output press on the icon on the right of the output itself.

If you want to associate the same output to more events with a beginning and an end and to make the output to turn on when at least one event occurred and the output to turn off when ALL the events are restored follow this checklist:

- associate the activation of the output on the events
- associate the deactivation of the output on the restoring events

The following conditions have to be verified:

- The output must be bistable
- The output must NOT have the 'remote control' check box enabled
- The output must NOT be managed in toggle in any scenario
- The event must not be associated to any 'spot' event (event with a beginning but without an end)

If the above condition are not satisfied in the whole, the output will be turned on when one event requests its activation, and it will turned off when one event requests its de-activation.

Destinations: select the addresses to whom you wish to send messages upon occurrence of an event. The type of warming sent depends on the attributes programmed in the Recipients display page: for example, if you program an e-mail address for a recipient, then, as the event is triggered an E-mail will automatically be sent to that address, and so on. To have SIA DC-09 protocol messages select Ip receiver as a destination. The control panel decide automatically to send IP messages to the main receiver or to

the back-up one (if any).

Voice messages: in the eventuality that an addressee (recipient) is to be warmed by a vocal call, select the vocal messages to be sent.

Event code: program the Contact ID event code for the specific event.

arm Mode: select the arm mode to be performed in the partitions when an event occurs. Except for the 'Key x of keyboard x' 'Led x on reader y' type of event, which performs a "ready to arm" check, in all the other cases the control panel executes the required mode (procedure) without checking whether there are any breached zones or not, in which case – after completing the arm – it will automatically generate the alarm.

Started Timers: select the timers (up to 2) that can be started on the given event.

Stopped Timers: select the timers (up to 2) that can be stopped on the given event.

Alarm Memory Reset: select this option if, upon occurrence of an event, any alarm memories are to be deleted.

Delete Telephone Queue: if this option is selected, upon occurrence of an event the calls in progress by the communicator are interrupted.

Alarm Reset: if this option is selected, upon occurrence of an event, outputs that are activated by alarm events are forced to their inoperative state.

Summary tables of events

This first table presents all of the start/stop type control panel events (events that have a given beginning and an end).

Type of Event	Event group	Repetitions	Occurs when ...	Ends when ...	Event code	gg	ccc
Zone Alarm Zone Reset	Zone events	No. of zones	A zone which is armed (or 24h) is violated	The status changes or the area is disarmed	130	Zone partition 00 if the zone belong to more then 1 partition	Zone Number
Zone Tamper Tamper Reset		No. of zones	Zone tampered with or short-circuited	The status changes	137		
Zone Bypass Zone unbypass		No. of zones	The zone is bypassed	The zone is unbypassed	570		
Zone Masking Zone masking restore		No. of zones	A zone is masked or the inactivity time expires	The zone status changes or the area is armed	388		
Zone Real-Time Real-Time Reset		No. of zones	A zone which is on is breached or a breached zone switches from off to on	It switches to rest again	600		
Partition arm Partition disarm	Partition events	No. of partitions	The area is turned on	The area is turned off	400	Partition number	0 0 0
Peripheral missing Peripheral restored	Peripherals	No. of peripherals	A peripheral unit disappears from the bus	The peripheral unit works again correctly	330	0 0	Peripheral number
Peripheral Unit Tamper Periph. Unit Tamper Reset		No. of peripherals	A peripheral unit is open	The peripheral unit is closed again	341		
Start timer Stop timer	Timers	No. of generic timers	Timer starts	Timer stops	600	Timer number	0 0 0
Panel Tamper Panel Tamper restored	Other events	1	The control panel cover is open	The control panel cover is closed	137	0 0	0 0 0
Main power loss		1	Control panel not receiving	Power supply is on again	301		

Type of Event	Event group	Repetitions	Occurs when ...	Ends when ...	Event code	gg	ccc
Main power restored			current				
Low Battery Low Battery Restored		1	Battery voltage below threshold (in absence of electric mains)	220V mains voltage is on again	302		
Ethernet loss Ethernet Restoral		1	Ethernet cable disconnected	Ethernet cable connected again	350		
PSTN Failure PSTN Restored		1	Telephone line to *pontis* is cut	Telephone line is connected again	351		
GSM Failure GSM Restored		1	GSM network to *gemino* is dropped	GSM net is present again	352		
System Maintenance start System Maintenance End		1	Programming entered into by means of installer code	Exit from programming	300		
Controlled Output Tamper Contr. Output Tamper End		1	EOL resistance on relay was removed	EOL resistance on relay is present again	324		
Fuse Fault Fuse Restored		3	Thermal fuse tripped	Thermal fuse in order again	300		
Remote assistance on GPRS enabled Remote assistance on GPRS disabled		1	It is enabled a session of remote assistance via GPRS	It is disabled a session of remote assistance via GPRS	410		
Remote assistance on PSTN enabled Remote assistance on PSTN disabled		1	It is enabled a session of remote assistance via PSTN	It is disabled a session of remote assistance via PSTN	410		
Failed supervision on IP receiver		1	The sending of a supervision packet to the IP receiver fails.	IP receiver responds to supervision request	365		

Type of Event	Event group	Repetitions	Occurs when ...	Ends when ...	Event code	gg	ccc
			The response from the IP receiver for the supervision requests goes in timeout.				

This second table presents all of the spot-type control panel events (events that only have a beginning).

Type of Event	Event group	Repetitions	Occurs when ...	Event code	gg	Ccc
Analogic zone on band #1	Zone event – Analogic band	No. of analogic zones (the same No. Of auxi modules)	The voltage level on the zone is on the band #1	600	Associated partition 00 if the zone belongs to more than one partition	Zone number
Analogic zone on band #2			The voltage level on the zone is on the band #2	600		
Analogic zone on band #3			The voltage level on the zone is on the band #3	600		
Analogic zone on band #4			The voltage level on the zone is on the band #4	600		
Analogic zone on band #5			The voltage level on the zone is on the band #5	600		
Partition Alarm	Partition events	No. of partitions	An area alarm triggers (one of the area zones is under alarm)	130	Partition number	0 0 0
Partition Tamper		No. of partitions	An area alarm triggers (one of the area zones is tampered with)	137		
Partition Masking		No. of partitions	An area alarm triggers (one of the area zones is masked)	388		
Partition Negligence		No. of partitions	The negligence timing has expired	404		
Key 0 on keyboard x	Keys on keypad	No. of keyboards + 1	Macro 0 activated on keyboard or code + macro 0 entered	120	0 0	0 0 0
Key 1 on keyboard x		No. of keyboards + 1	Macro 1 activated on keyboard or code + macro 1 entered	120		
Key 2 on keyboard x		No. of keyboards + 1	Macro 2 activated on keyboard or code + macro 2 entered	120		
Key 3 on keyboard x		No. of keyboards + 1	Macro 3 activated on keyboard or code + macro 3 entered	120		
Key 4 on keyboard x		No. of keyboards + 1	Macro 4 activated on keyboard or code + macro 4 entered	120		
Key 5 on keyboard x		No. of keyboards + 1	Macro 5 activated on keyboard or code + macro 5 entered	120		
Key 6 on keyboard x		No. of keyboards + 1	Macro 6 activated on keyboard or code + macro 6 entered	120		

Type of Event	Event group	Repetitions	Occurs when …	Event code	gg	Ccc
Key 7 on keyboard x		No. of keyboards + 1	Macro 7 activated on keyboard or code + macro 7 entered	120		
Key 8 on keyboard x		No. of keyboards + 1	Macro 8 activated on keyboard or code + macro 8 entered	120		
Key 9 on keyboard x		No. of keyboards + 1	Macro 9 activated on keyboard or code + macro 9 entered	120		
Green LED on reader x	Readers	No. of reader	Scenario linked to green LED activated	600	0 0	0 0 0
Red LED on reader x		No. of reader	Scenario linked to red LED activated	600		
Blue LED on reader x		No. of reader	Scenario linked to blue LED activated	600		
White LED on reader x		No. of reader	Scenario linked to white LED activated	600		
Yellow LED on reader x		No. of reader	Scenario linked to ywllow LED activated	600		
Recognise code	Codes/ keys	No. of codes	A valid code is enter on the keypad	422	0 0	Code number
Recognise key		No. of tags	A valid key is recognise by the reader	422		Keys number + 200
Battery failure	Other events	1	Dynamic test of battery failed	311		0 0 0
Periodic report		1	Periodic event	602		0 0 0
Bad code		1	An invalid code is enter in a keypad 3 times	421		0 0 0
PIN violated		1	A violation of a PIN happens	600		0 0 0
Communication failed		Phone numbers	Phone call failed	354		Phone number
Caller recognized		Phone numbers	A calling number is recognized (CLIP function)	422		Phone number
Temperature below the lower threshold on **imago**			The temperature read by **imago** siren is less than lower threshold	159	0 0	
Temperature between the lower and upper threshold on			The temperature on the **imago** in between the lower threshold and upper threshold.	159		

Type of Event	Event group	Repetitions	Occurs when ...	Event code	gg	Ccc
imago						
Temperature above the upper threshold on **imago**			The temperature read by **imago** siren is greater than upper threshold	158		0 0 0
Temperature below the lower threshold on **radius**			The temperature read by **radius** siren is less than lower threshold	159		
Temperature between the lower and upper threshold on **radius**			The temperature on the **radius** in between the lower threshold and upper threshold.	159		
Temperature above the upper threshold on **radius**			The temperature read by **radius** siren is greater than upper threshold	158		
Low battery on **imago**			On at least one **imago** siren installed you need to change the battery	311		

'Real time'

The real-time display pages provide a view of the system status. They show the status of the zones (*real time: zones*), the status of the partitions (*real time: partitions*), the status of the peripherals connected to the bus (*real time: peripherals*), as well as the status of the control panel and faults (*real time: control panel*).

It is also possible to see – in the *Events logger* display page – the control panel events memory (the logger). Every event is recorded with its date and time and, if relevant, also with the means (location where it occurred, for example via keyboard) and with the possible agent (for instance, code 3).

PROGRAMMING MENU FROM THE ergo LCD KEYBOARD

To access the programming menu from the ergo keyboard, enter the installer PIN (default 123456) or bring an enabled key programmed with installer attribute close to the keyboard proximity reader. The use and functions of the keyboard buttons and circular scroll are explained in the keyboard manual.

NOTE: Access as installer (either with a code or with a key) must be enabled by a master user in the user menu, by setting 'Installer Permit' to ON. If the same item is set to OFF, use of the installer code is obstructed (it is considered a wrong code). Moreover, access as installer is inhibited with partitions on.

In this section is reported the programming tree, for the meaning of each section, unless toherwise specified, refer to the previus section, due to the fact the order and the terminology is the same used on the *basis* sofware.

Installer menu description
On this section the the sub-menus (that available touching the 'enter' key) are graphically written five spaces far from the left border..

- *Event logger*
    - display of the events register.
        - By pressing the Enter button, the unit presents the events register display, where the user can browse the events, starting from the last recorded one. For further details on the current event, press the Enter button again.Scorrimento degli eventi verificati partendo dal più recente
- *Programming* (see next session)
- *Program from USB* allows data to be uploaded to the control panel from a USB key plugged into it.
- *Language*
    - From this menu it is possible to change the keypad language
- *trouble list*
    - display of the status of control panel faults. By pressing the Enter button, the screen presents the display of faults, which can be browsed by means of the circular scroll.
- *Zone status*
    - displays the status of all zones.
        - Pressing the enter key the EOL resistor value (espressed in ohm) is shown. If the zone in analogic the value is shown in Volt.
- *Change PIN* modification of the installer PIN (not present when accessing using a key).
- *ergo version.* menu for obtaining the serial number of the ergo keyboard.

Programming menu details
- Partition
    - Scroll of the partition list
        - Description
        - Automatic memory reset
        - Prealarm (sec)
        - Exit delay (sec)
        - Prearming (min)
        - Patrol (min)
- Armings
    - Scroll of the arming modes list
        - Description
        - Actions (for each partition the action is shown with a letter: '-':no action; '0':disarm; '1':arm with delay; 'i': arm instant; 'c': toggle)
            - Touch enter to modify the programming, scrolling between the partion. Available actions are:

- No action
- Arm (with delay)
- Arm instant
- Disarm
- Toggle
- Zone
  - Scroll of the zones list
    - Description
    - Mode
      - Not used
      - Standard
      - Glass break
      - Roller blind
      - Analogic (it is shown only if the zone have been programmed from *basis*. From the keypad it is not possible to select this option)
    - Balance
      - NO (Normally open)
      - NC (Normally close)
      - Single EOL
      - Double EOL
      - Triple EOL
      - Tamper EOL
      - Customized (it is shown only if the zone have been programmed from *basis*. From the keypad it is not possible to select this option)
    - Partition maskMaschera partizioni
      - Scroll of the partition to whom the zone belongs.
    - Chime
    - 24h
    - Test
    - Command
    - Numer of pulses (from 1 to 7)
    - Entry delay
      - Instant
      - Delayed
    - Exit delay
      - Instant
      - Delayed
- Output
  - Scroll of the outputs list
    - Description
    - Mode
      - Not used
      - Digital
      - Analogic
    - Polarity
      - NO
      - NC
    - Type
      - Monostable
      - Bistable
    - On time(100ms) (this menu is shown only if the output is programmed as monostable)
    - Controlled (this menu is present only for the output 1 – on board relay)
- BUS peripherals

• Assign: this menu shows the peripherals connected to the lares control panel and which have not yet been configured in the system. Every A new peripheral unit or a peripheral unit which is already set by software can be associated to each peripheral unit..
> • Scroll of peripheral unit is identified by its own serial number.
>> • Scroll between programmed peripherals from the software or definition   of new peripheral if the display shows <new peripheral>

• free: in this menu you can be delete peripherals that are configured, but which must be disconnected from the lares control panel. The configuration of the peripheral unit is not deleted, so that it can be reused on a different peripheral p.c. board, when you wish to substitute a peripheral unit for example.

• Delete: in this menu you can delete peripherals that are already configured but which may have to be disconnected from the lares control panel. Unlike the '*free*' command, in this case the programming defined for this peripheral is deleted.

• ergo keypad
> • Scroll of the keypad list
>> • Partition mask
>>> • Scroll of the partition assigned to the keypad
>> • Idle information
>>> • Time and date
>>> • Outdoor temp.
>>> • Indoor temp.
>>> • GSM carrier
>>> • Partition status
>>> • Zone status
>> • Keys & Scenarios
>>> • Key 0 description
>>> • Enable key 0
>>> • No pin key 0
>>> • Key 1 description
>>> • Enable key 1
>>> • No pin key 1
>>> ...
>>> • Key 9 description
>>> • Enable key 9
>>> • No pin key 9

• volo readers
> • Scroll of the readers list
>> • Maschera partizioni
>>> • Scroll of the partition assigned to the readers
>> • Led and scenario
>>> • Green LED
>>> • Red LED
>>> • White LED
>>> • Blue LED
>>> • Yellow LED
>> • Volo options
>>> • Led on disarmed system
>>> • System status

• Manages codes
> • New code
>> • Scroll of unused code
>>> • Enter PIN
> • Code Option

- Scroll of programmed codes
  - Description
  - Change pin
  - Partition mask
  - Enable
  - Master code
  - Patrol
  - Arm only
- Delete code
  - Scroll of programmed codes
- Manage tags
  - Save tag
    - Scroll of unused tags position
  - Assign tag
    - Scroll of programmed tags to assign a tag presented to the keypadposition
  - Delete tag
    - Scroll of programmed tags to delete one of them
  - tag option
    - Scroll of programmed tags
      - Description
      - Installer
      - Enable
      - Patrol
      - Arm only
      - Partition mask
- Scenarios
  - Enter the scenario number
    - Arming mode
    - Output
      - Scroll of available output to be managed by the scenario
      - Action
        - No action
        - Active
        - Restored
        - Toggle

ENVIRONMENT CARE

lares ™ is designed and manufactured with the following features to reduce its environmental impact:

- Printed circuit laminates free of lead and bromine

- Low power absorption

- Packaging made mostly of recycled fibres and materials obtained from renewable sources