

ergo-M & ergo-S

Multifunction LCD keypads

Installation guide



KS12100020.301 - ergo-S white
KS12100020.302 - ergo-S black



KS12100021.311 - ergo-M white
KS12100021.312 - ergo-M black

INTRODUCTION

ergo-M

ergo-M keypad with wide dot matrix LCD display and mechanical keypad, can control and manage Ksenia lares 4.0 control panels, connected via BUS. Two distinct menus, available for user (according to his level access) and installer, thanks to dedicated PINs, are provided.

The display shows all the information and the data that ergo-M can manage, on two rows with 16 characters each; also an automatic scroll system is implemented that allows you to view automatically strings up to 32 characters long.

The keys in the area delimited by the circle with a central key, are used to scroll through the menu items (different for user and installer), to choose and set the configuration data.

ergo-M keypad allows the user to run any type of scenario by placing mini-Tag near RFID reader on the keypad and then by pressing the key that activates the desired scenario or by entering PIN code and then by pressing the programmed key.

Main features:

- arming (total or partial) and disarming the system (besides any other scenario programmed) by pressing keys or by reading mini-tags;
- display of the system status, of zones, partitions and faults;
- reset alarms and communications, management of users according to their access levels and enabling / disabling /changing PIN code;
- user can prevent the remote management of the system by the installer by enabling/ disabling this option;
- acoustic feedback during incoming timer and outgoing timer.

ergo-S

ergo-S keypad with wide dot matrix LCD display and keys in CapSense technology, can control and manage Ksenia lares 4.0 control panels, connected via BUS. Two distinct menus, available for user (according to his level access) and installer, thanks to dedicated PINs, are provided.

The display shows all the information and the data that ergo-S can manage, on two rows with 16 characters each; also an automatic scroll system is implemented that allows you to view automatically strings up to 32 characters long.

Actually, "Scroll" is not a key but the area delimited by a circle characterized by a little depression. Moving clockwise or anticlockwise the finger on this area, allows to scroll forwards or backwards the menu items to choose the configuration data available.

ergo-S keypad allows the user to run any type of scenario by placing mini-Tag near RFID reader on the keypad and then by pressing the key that activates the desired scenario or by entering PIN code and then by pressing the programmed key.

Furthermore, the ergo-S keypad installed in the lares 4.0 system, allows the user to use the remote voice management service by calling the telephone number of the control panel and following the voice menu; each operation suggest the key to press for: environmental listening (using the ergo-S microphone and loudspeaker), partition status information and scenarios activation.

Main features:

- arming (total or partial) and disarming the system (besides any other scenario programmed) by pressing keys or by reading mini-tags;
- display of the system status, of zones, partitions and faults;
- reset alarms and communications, management of users according to their access levels and enabling / disabling / changing PIN code;
- remote voice management of the system;
- user can prevent the remote management of the system by the installer by enabling/ disabling this option;
- acoustic feedback during incoming timer and outgoing timer;
- master programming for gemino and duo universal.

QUANTITY DATA

lares 4.0 models	wls 96	16	40	40 wls	140 wls	644 wls
Maximum number of BUS User interfaces	3	6	24	24	40	64

TECHNICAL DATA

	ergo-M	ergo-S
Wide Dot matrix LCD display (viewing area 79 x 19 mm)	✓	✓
Keys in Capsense Technology	No	✓
Mechanical Keys	✓	No
RFID proximity Reader (20mm max TAGs capture area)	✓ with serial number >= 111458	✓
Integrated Loudspeaker	✓	✓
Remote listening function/Microphone	No	✓
"Fast Addressing System": no need to pre-set the device address (automatic recognition from the control panel lars 4.0)	✓	✓
Accurate Temperature sensor (future use)	No	✓
Adjusting backlight and contrast	✓	✓
Power supply	13.8 Vdc	
Consumption	15 mA standby - 100 mA max	
Operating temperature range	+5°C / +40° C	
Overall Dimension	163 x 119 x 14.5 mm	
Weight	240 g	
Protection degree	IP 40	
White version	KSI2100021.311	KSI2100020.301
Black version	KSI2100021.312	KSI2100020.302

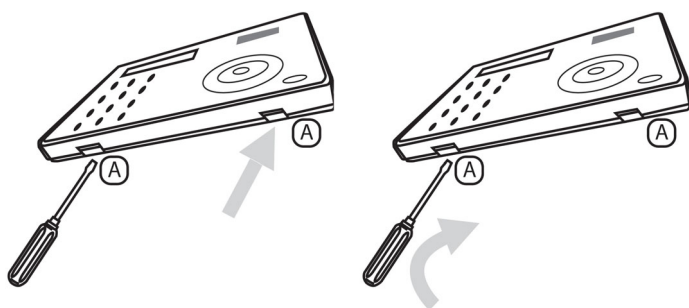
INSTALLATION

ergo-S (ergo-M) keypads can be installed on any plain surface. Furthermore, on the back there are 3 easy-open holes, suitable for DIN503 and for 60mm-screw-distance boxes.

STEP 1. OPENING

To open the keypad, please proceed as follows:

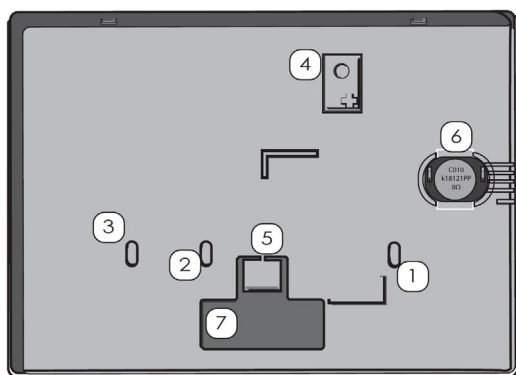
1. Push snap fingers (A) using a screw driver
2. Pull outward



STEP 2. WALL MOUNTING

1. Push the cable through to the opening (7)
2. Fix the keypad base to the wall-box with the supplied screws through the eyelets (1) and (3).
3. Drill and install a screw with a wall plug to perform the tamper function (4).

For wall mounting the keypad, use suitable wall plug (not supplied) through the holes (1-3 or 1-2).

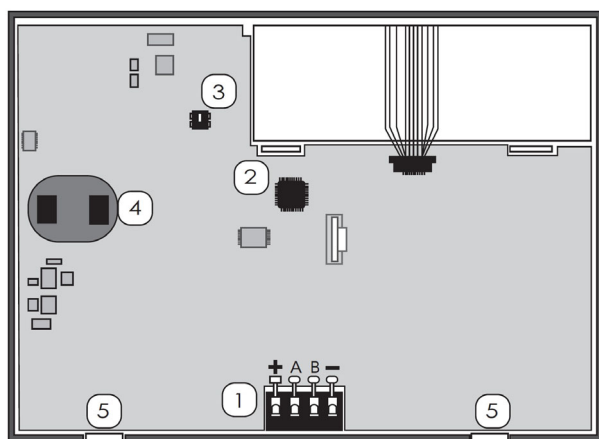


Legend

- 1.-3. Easy open hole to be opened to Built-In installation on DIN 530 box
1. -2. Eyelets for 60mm-screws-distance boxes
4. Place a wall mount screw to enable anti opening and removal tamper (4)
5. Remove the part and used to close the side hole (8). The hole is reserved for future use.
6. Speaker
7. Cable gland
8. Side hole (for future use)

STEP 3. CABLING AND SWITCHING ON

1. Connect the cables to the terminals on the rear of the keypad.
2. Close the keypad properly (5).
3. At every new installation when ergo-S (ergo-M) is switched on (but not wire to BUS [A and B] clamps disconnected), the display will show the following information:
 - First line: "Ksenia Security"
 - Second Line: from the first character from the left the FW version loaded on the device (x.xx.xxx), from the 10th character the device serial-number (six numeric characters) and at the 16th character S or M depending on the keypad model.

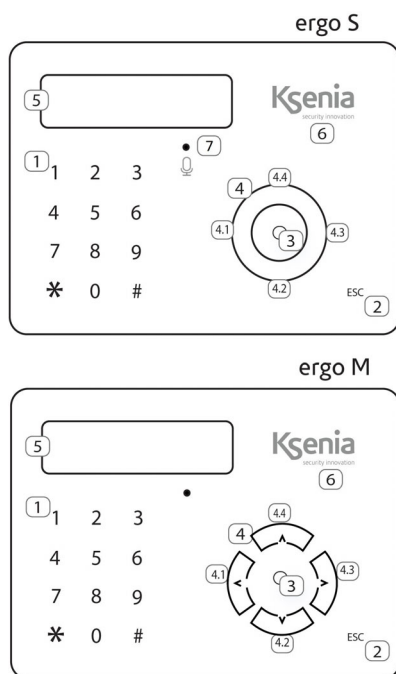


Legend

1. Connection Clamps
+ A B - : Connection clamps on KS-BUS for devices. All the devices have to be connected in parallel, it is necessary to connect each clamp with an equally named one.
2. Micro-controller
3. Anti opening / tamper switch
4. Loudspeakers contact
5. Snap fingers

Note: DO NOT REMOVE PCB AND DISPLAY FROM PLASTIC SUPPORT

DESCRIPTION OF THE KEYPAD



Legend

1. Alphanumeric keypad with 1 a 9, * and # keys
2. ESC key
3. ENTER key
4. Scroll (ergo-S) / Keys (ergo-M), also including:
 - 4.1. Left arrow
 - 4.2. Down arrow
 - 4.3. Right arrow
 - 4.4. Up arrow
5. Display
6. RFID area
7. ergo-M

DISPLAY

The display shows all the information and the data that ergo-S (ergo-M) can manage, on two rows with 16 characters each also an automatic scroll system is implemented that allows you to view automatically strings up to 32 characters long.

CONTRAST ADJUSTMENT

Pressing keys “Left” or “Right” when keypad is in idle, a sliding bar used for contrast adjustment will be enabled. The ENTER key will store the new contrast value, the ESC key will leave value unchanged. Values will change on a 3 seconds key holding.

RFID AREA

The keypad is provided with an internal antenna that allows to detect any device that fits the RFID.

KEYPAD

The Keypad is used for entering data/characters during configuration, PIN entry (programmer or user), etc. By touching or lightly pressing the area corresponding to the desired number, it is possible to enter numbers from 0 to 9 as well as alphanumeric characters (letters and symbols), depending on the operating context (menu). This is possible because the keypad is provided with the typical mobile phone mode technology, which allows to change the entered character depending on the settings (refer to the following key characters match table).

Two ways to move forward the display line are possible while entering a text: using another key or avoiding touching any key for 3 seconds after the last type.

Keys - Characters match table

0	() / % - _ # *
1	" ' " 'space' ? ! , . \ ' &
2	A B C a b c 2 \$ @
3	D E F d e f 3 ; <
4	G H I g h i 4 = >
5	J K L j k l 5 []
6	M N O m n o 6 { :
7	P Q R S p q r s 7
8	T U V t u v 8 + }
9	W X Y Z w x y z 9

ESC KEY

The ESC key allows to exit the current menu, and go back to the previous level. This means that, whether in a branched menu, repeated clicks on the key will be needed to get back, for example to main menu.

A two seconds pressure on the 'Esc' key when the keypad is in idle allows the activation of the cleaning function. As the name suggests, this function disable the keypad functionality for front-cleaning purposes. During the keypad block due to the activation of the cleaning function, the following information will be displayed on the "ergo" screen:

- First line: "Keypad block"
- Second line: the time for the cleaning will be marked by an increasing dot line, moving from left to right. When the line will be filled up the ergo-S (ergo-M) will be ready to accept commands again.

ENTER KEY

The Enter key allows to enter the expected menu when browsing, to start editing during configuration phase or to confirm the input of a data during an editing session.

How the enter key works:

- When browsing the main menu, a pressure on the Enter key allows to enter the submenu and to keep exploring in case the menu has several branches.
- When visualizing the configuration data, a push on the Enter key permits the editing of the data itself and this involves:
 - the configured object flashes if it is selectable with a predefined set through the Scroll;
 - the first character of a string flashes in case the string is being edited;
 - the first number flashes when a numeric data or a phone number is being edited.
- During the editing phase, a further pressure on the ENTER key confirms the insertion ergo-M or modification of the data (which will be sent to lares 4.0 that will store it) and the ergo-S (ergo-M) display permits to show: the following data, the subsequent menu or the data itself.

SCROLL / ARROW KEYS

Actually, "Scroll" is not a key but the zone delimited by a circle (on the right side of ergo-S) (keys for ergo-M) characterized by a little depression. The action on this zone clockwise (to move forward) or anticlockwise (to move backwards) permits to:

- Scroll forwards or backwards the menu entries;
- Choose the configuration data to enter (which will only be the suitable ones for the changing data) such as: character, numbers, preset values, etc.
- UP ARROW (Point 4.4)
Long press (about 0.5 seconds) to scroll the menu or the configuration data available (ergo-S/M), this procedure is slower than the clockwise scrolling you can use with ergo-S since it works at 0.5 seconds steps;
- DOWN ARROW (Point 4.2).
Long press (about 0.5 seconds) to scroll the menu or the configuration data available (ergo-S/M), this procedure is slower than the anticlockwise scrolling you can use with ergo-S since it works at 0.5 seconds steps;
- LEFT ARROW (Point 4.1).
Long press (about 0.5 seconds) to slide backwards the string; if settled on the last character / number to the right, this function allows to cancel in order one or more data characters / numbers until they are completely deleted;
- RIGHT ARROW (Point 4.3).
Long press (about 0.5 seconds) to slide forwards the string if it is longer than the 16 characters. The forward slide can work in different ways depending on the data we are working on: if we are browsing a menu it will slide 16 characters at any one time, while during data editing it will only slide one character at a time.

NOTE: In a data entering phase, "Scroll" allows to quickly select the suitable values for the data we're about to edit. In case a string is being entered or edited, the "Scroll" allows to slide the whole characters range by its clockwise/ anticlockwise twist or by using the "Up arrow"/"Down arrow" function to move forward or backward. If entering or editing data other than a string, the Scroll allows to slide the possible values for the individual data item. In ergo-M keypad, the scroll function is achieved by use of the 4 arrows keys.

INSTALLER MENU

Access the installer menu with a PIN code (**default: 123456**). You can navigate the various items by pressing the keys once you have entered the installer menu:

- **ENTER**: enter the sub-menu, confirm the values displayed or modified.
- **ESC**: exit the sub-menu, return to the previous menu, leave the installer menu.
- **DOWN ARROW (SCROLL CLOCKWISE)/UP ARROW (SCROLL ANTICLOCKWISE)**: move from one item to another within the same menu.

A list of some installer menu items:

- **Sys. management**: system management with the following items:
 - Reset alarm**: all the alarms will be stopped, the tamper and alarm memories will be deleted.
 - Stop calls**: all the communications, in progress and in queue, will be deleted (SMS, phone calls, email, etc.).
 - Freeze system**: three possible choices
 - **No freeze**: normal activity.
 - **Freeze alarms**: no action against the alarms will be performed.
 - **Freeze actions**: freeze all the actions of control panel.
- **User management**: assign a RF-ID key to the users configured.
- **Event logger**: list of events occurred with details.
- **Fault list**: list of faults in progress.
- **Zone status**: view of the status of the zones configured in the system.
- **Zone test**: list of zones that were never been in alarm since the TEST started, useful during the installation process.
- **Installer data**: installer data management
 - Change PIN**: change installer PIN code.
 - Description**: installer name.
 - Number**: installer telephone number.
- **Update**: it launches the software upgrade using the file present in the SD card and previously downloaded from www.kseniasecurity.com, reserved area.
- **Programm. Back-up** :
 - **Create new**: backs-up any programming by saving the file on an SD card.
 - **Restore**: any programming data saved previously will be read from the SD card and loaded into the control panel.
- **Networking**: network configuration menu which allows the network parameters to be read/modified
 - **IP Address**: the control panel IP Address
 - **Subnet mask**: subnet-mask
 - **Gateway**: IP address of gateway
 - **DHCP server**: OFF / ON (default ON). This menu item is activated to allow the DHCP to be re-enabled if the control panel has been set to a fixed IP address.
- **Language**: select the language of the keypad from the list.
- **Panel version**: this allows you to view the control panel firmware version (web server excluded).

How to read the control panel IP address from keypad

If the network, where the control panel is installed, supports DHCP, to read the IP address make the following operations:

- Step 1. make sure the control panel is connected to the network;
- Step 2. enter the installer menu by dialing the PIN code on the numeric keypad (default: 123456);
- Step 3. scroll the menu items up to "Networking" and press OK;
- Step 4. the "IP Address" is displayed, make a note and exit the menu by pressing ESC twice.

Then type the IP address in the browser address bar: <<https://control-panel-IP-address>>.

Note: The default address will be 192.168.2.97 in the event that the network to which the control panel is connected does not support the DHCP, so type <<https://192.168.2.97>> in the browser address bar.

NOTE: When you first switch on the keypad, the English menu will be displayed. To change the language, access the installer menu from the keypad via the webserver.

CERTIFICATIONS

ergo-S	ergo-M
Europe - CE, RoHS EN50131 grade 3 - class II INCERT: T031:2017 + A1:2018 + A2:2022 SBSC: SSF 1014 - utgåva 6 - Larmklass 3    D-Q2T-0002	Europe - CE, RoHS, EN50131 Grade 3 - Class II INCERT: T031:2017 + A1:2018 + A2:2022 SBSC: SSF 1014 - utgåva 6 - Larmklass 3    D-Q2T-0001
  	

Technical data, appearance, functionality and other product characteristics may change without notice.

ENVIRONMENTAL CARE

The product has been specifically designed and manufactured for the environment respect as follows:

1. No PVC
2. Halogen-free laminates and lead-free PCBA
3. Low consumption
4. LCD Display without mercury
5. Arsenic-free glass
6. Packaging realized mainly with recycled fibers and materials

Information for users: Disposal (RAEE Directive)

Warning! Do not use an ordinary dustbin to dispose of this equipment.

Used electrical and electronic equipment must be treated separately, in accordance with the relative legislation which requires the proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation of directives in member states, private households within the EU may return their used electrical and electronic equipment to designated collection facilities free of charge. Local retailers may also accept used products free of charge if a similar product is purchased from them.*

If used electrical or electronic equipment has batteries or accumulators, these must be disposed of separately according to local provisions.

Correct disposal of this product guarantees it undergoes the necessary treatment, recovery and recycling. This prevents any potential negative effects on both the environment and public health which may arise through the inappropriate handling of waste.

** Please contact your local authority for further details.*

Installation of these systems must be carried out strictly in accordance with the instructions described in this manual, and in compliance with the local laws and by laws in force. ergo series have been designed and made with the highest standards of quality and performance adopted by Ksenia Security. Is recommended that the installed system should be completely tested at least once a month. Test procedures depends on the system configuration. Ask to the installer for the procedures to be followed. Ksenia Security shall not be responsible for damage arising from improper installation or maintenance by unauthorized personnel. The content of this guide can change without prior notice from KSENIA SECURITY.

