

ergo

KSI2100000.300

MULTIFUNCTION LCD KEYPAD QUICK INSTALLATION AND PROGRAMMING GUIDE



Ksenia
security innovation

INTRODUCTION

ergo is a very advanced LCD Keypad carefully developed with the objective to capture a modern, minimalist and discreet style and an extremely slim profile (less than ½ inch.), which allows it to be positioned in any interior architecture thus expressing a new feeling of design, prestige and innovation. Thanks to the "Capacitive Sensing" Technology, here you won't see any of the ugly mechanical parts (like as membranes, buttons, plastic cover, etc.) which are typically available in other products and that are often the ideal dust location and the source of bad contacts. In the case of **ergo** the front is completely smooth and all desired functions can be implemented by simply touching upon the surface in the areas shown by the graphic (letters, symbols, circular-scroll mouse) in a very simple and rational manner. All available functions, as detailed below, are really many and surprising.

It can be customized in the 4 different Ksenia institutional colors (White, Black, Red and metallized Grey), simply by removing the transparent cover and interchanging the internal cover (Lexan) with one of those included in the package envelope, such operation is meant to be so easy and safe that can be done by the end-user at anytime and without risks.

Moreover, with no need of additional parts, it can be "flush-mounted" taking advantage of any std. box Din 503, or just as it is on any wall (with no need of additional parts) or if desired even the desk-solution can be chosen thanks to the included stylish sustainer parts.

The **ergo** keypad has been conceived to be linked both to Universal GSM/GPRS Communicator gemino™ and Ksenia intrusion control panel lares, since, differently to any other similar devices, it works also as "programming unit" , making the installer's life much easier by avoiding the need of having a PC with for the Communicator or the Intrusion Control Panel programming (see figure below). As a matter of fact, all **gemino**'s and **lares**'s programming and managing functions (whether working at stand-alone or not) can be executed directly from the **ergo** Keypad. Therefore **ergo** is in a position to program the entire system or just to modify specific data at any time of the system life, such as, for example, phone numbers, email addresses, SMSs, etc. (The programming cable with connectors is available as optional).

TECHNICAL DATA

- LCD Display 16x2 (visible area 61 x 16mm)
- "Capacitive Sensing" Technology (no mechanical press-buttons)
- Circular Scroll : quick menu access
- Available in 4 different colors
- RFID/ NFC Proximity Reader 
- Integrated Microphone and Speaker for recording and remote listening
- "Fast Addressing System": no need to pre-set the device address (automatic recognition from the Control Panel/GSM Communicator)
- Power supply: 13,8Vdc
- Consumption: 15mA standby, 400mA max
- Nr. 2 programmable terminals as inputs (e.g. for zones, contacts), or as Open Collector outputs (500mA max.)
- 1 supply output for external devices (0,5 A max)
- Plug & Play BUS for Supply & Communication purposes
- RFID/NFC 13.56 MHz (max. distance 2 cm.)
- Operating temperature range: 5 - 40°C
- Overall Dimensions: 105 x 145 x 25 mm
- Weight: 180 gr

FUNCTIONS

- Display of system status
- Display of functioning parameters (date/time, active GSM network, GSM level, etc)
- System commands (complete or partial arming, reset, activation of outputs terminals, phone calls, etc.)
- Full Programming of system parameters
- Programming of local parameters (audio volume, backlight levels)
- KP functionality exclusion for front cleaning purposes
- Remote Listening
- Vocal messages recording
- RFID/NFC  Tag reading to arm and disarm the intrusion detection systems set up with the **lares** devices.

OPTIONALS

KSI7500000.000 / KIT 1,5 m. cable for GSM/GPRS programming

KSI2100001.300 / Table sustainer

KSI2100002.300 / KIT ergo keypad

INSTALLATION

The keypad **ergo** can be installed directly on a wall or put in an DIN 503 box set in the wall or leant on a plain surface by means of the proper sustainer.

BUILT-IN INSTALLATION (WITH DIN 503 BOX) OR DIRECTLY ON THE WALL

1. Push the cable through to the proper opening.
2. Fix the keypad base to the DIN 503 box with the supplied screws opening the proper eyelets. To fix the keypad base directly to a wall, use proper plugs (not supplied) through the proper eyelets.
3. Connect the cables to the terminals on the rear of the keypad.
4. Fit in the PCBA on the left side of the keypad base, keeping the display in the front and the clamps on the back, then press the right side until a double-click is heard.
5. Insert a coloured Lexan at choice into the cover.
6. Close the cover properly.

INSTALLATION WITH TABLE SUSTAINER

1. Install, with a light pressure, the part 1 of the table sustainer on the back of the keypad base.
2. Fit in the part 2 of the sustainer on the part 1 by the mean of the proper hinge.
3. Push the cable through to the proper opening.
4. Connect the cables to the terminals on the rear of the keypad.
5. Fit in the PCBA on the left side of the keypad base, keeping the display in the front and the clamps on the back, then press the right side until a double-click is heard.
6. Insert a coloured Lexan at choice into the cover.
7. Close the cover properly.
8. Use the optional cable for the programming of the communicator GSM/GPRS **gemino**.

INSTALLATION NOTES

1. When **ergo** is switched on, the display will show the following information:

- First line: "KSENIA Security"
- Second Line: As from the first character (from the right) the FW version loaded on the device (x.xx.xxx), as from the 10° character the device serial-number (six numeric characters).

This if **ergo** is switched on for the first time, if not connected to KSI-BUS, or if connected to a device other than the previous one.

2. As said, **ergo** has been conceived to be customized using the interchangeable Lexans provided in the original package. In order to perform the operation (the Lexan switch) activating the "Cleaning Function" before the front removal is suitable/advisable, and then proceed with the replacement (for further changes to this operation please refer to **gemino** or **lares** series device manuals.

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.

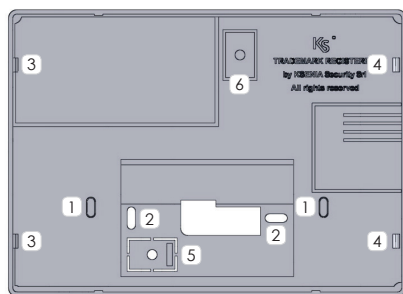
Following the implementation of directives in member states, private households within the EU may return their used electrical and electronic equipment to designated collection facilities free of charge. Local retailers may also accept used products free of charge if a similar product is purchased from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

FIGURE 1 - FRONT VIEW OF THE KEYPAD BASE



- ① Eyelets to be opened to Built-In installation on DIN 530 box
- ② Eyelets to direct installation on a wall
- ③ Locking device to fix the PCBA in the keypad base, left side
- ④ Locking device to block the PCBA in the keypad base
- ⑤ Place a fixing screw (wall mounting) to take advantage of tear tamper
- ⑥ Place a fixing screw (DIN 530 box mounting) to take advantage of tear tamper

FIGURE 2 - TABLE SUSTAINER

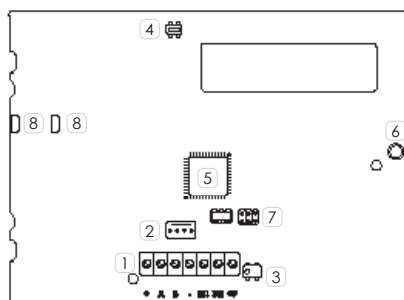


- ① Table sustainer (part 1)
- ② Back of the keypad base
- ③ Table sustainer (part 2)
- ④ Hinge



In order to maintain the conformity to the norms listed on page 21, this installation option can't be used.

FIGURE 3 - PARTS DESCRIPTION AND PCBA TERMINALS



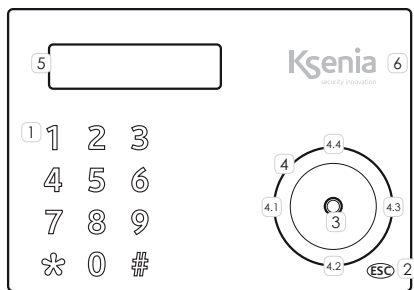
- ① Connection Clamps
+ A B - : Connection clamps on KSI-BUS for devices. All the devices have to be connected in parallel, it is necessary to connect each clamp with an equally named one (clamp + is protected by a self-restoring thermal fuse of 1.5 A)

M1 M2: Programmable clamps I/O

+P: Supply clamp for external devices (max 1,5A)

- ② gemino or lares devices fast-connection cable terminal
- ③ Anti-tear Switch
- ④ Anti-tear Switch
- ⑤ Micro-controller
- ⑥ Microphone
- ⑦ Reserved terminal
- ⑧ Loudspeakers contact

FIGURE 4 - TRANSPARENT COVER AND LEXAN

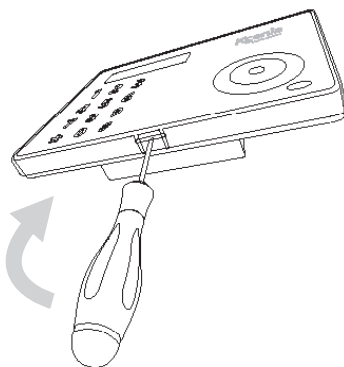
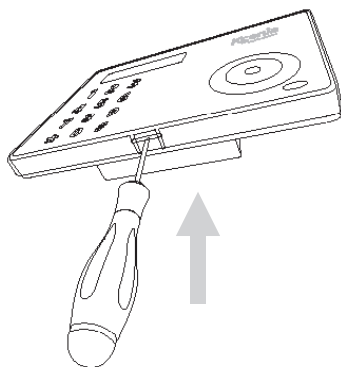


- ① Alphanumeric keypad with 1 a 9, * and # keys
- ② ESC key
- ③ ENTER key
- ④ Scroll, also including:
 - 4.1. Left arrow
 - 4.2. Down arrow
 - 4.3. Right arrow
 - 4.4. Up arrow
- ⑤ Display
- ⑥ RFID/NFC Area 

OPEN TRANSPARENT COVER

To open the transparent front cover, please proceed as follows:

- ① Insert a flat screwdriver in the slot
- ② Pull outward



SUGGESTION ABOUT THE USE OF THE CAPSENSE TECHNOLOGY

The Keypad you have purchased do not utilize mechanical buttons, but the modern Capsense Technology. If you already have other devices with capacitive Keypads, you won't have any issues in utilizing it and therefore do not need to continue reading this text. If instead it's your first time, we inviteto follow a few small advices in order to obtain rapidly the best performances from this Technology. Once powered, the Keypad does a self-calibration to adapt its sensitivity to the existing Humidity and Temperature conditions.

Important note - Please wait 10 to 15 seconds before touching any buttons.

In this stage, it's important that the keypad is positioned in its actual use conditions, for example if you are using the desk-mount support, do not live it up-side down. Should this happen, no worries, leave it with no touch for 10 seconds and it will go in self-calibration again in order to assure a consistent sensitivity in the course of time.

Attention - Please avoid any contact with wet fingers!

Getting the button's position, just touch upon with your finger tips, no pressure needed. If you believe that the sensitivity is too low, do not increase the finger's pressure, this doesn't bring any benefit. In this case, it is enough to change the sensitivity setting, available in 3 different levels, by selecting it from the keypad menù or by programming the setting taking advantage of the **basis** software.

At last a small test/game - Insert your PIN, surf in the menù with the circular scroll, select a menù (for example the one which allows to insert a phone number in the phone-book and insert it by digitng on the keypad). After few minutes only you'll be surprised about your confidence with the **ergo** Keypad!

DEFAULT INSTALLER'S PIN: 123456

DEFAULT USER'S PIN: 147258 (active only after the KP has benn assigned to the **lares** Control Panel)

KEYPAD FUNCTION DESCRIPTION

KEYPAD

It is conceived for data-entering (data/charachter) during the configuration process, PIN entering (programmer or user) etc. By touching or exerting a slight pressure on the area corresponding to the desired number, it allows to enter alphanumeric characters (letters and symbols) in addition to 0-9 numbers , depending on the operating context (menu). This is possible because the keypad is provided with the tipical mobile phone mode

technology, which allows to change the entered character depending on the settings (refer to the following key-characters match chart).

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.

Key-characters match chart:

KEY FONT:

- | | |
|---|-----------------------------|
| 0 | 0 () / % - _ # * |
| 1 | 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

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 2-second pressure on the 'Esc' key when the keyboard is not used allows the activation of the cleaning function. As the name suggests, this function disables 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: forwarding "." which marks the keypad block lasting. It means that, as the "." gets to the last line character, the cleaning function ends and **ergo** recovers its regular functionality.

ENTER

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

In this regard, the following conduct:

- 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 immission or modification of the data (which will be sent to **gemino** or **lares** that will store it) and the **ergo** display permits to show: the following data, the subsequent menu or the data itself.

If "Enter" key is pushed when ergoTM is in standby mode, the display will show the installer's data (Name, Number or email address) if they were set during the keypad configuration. In case the installer's data were not available, the screen will display the two following default lines:

<Installer>
<Information>

DISPLAY

The Display shows all the information and the data **ergo** can manage. It consists of 2 lines with 16 characters each (it is not graphic), but it can display longer strings (up to 32 characters) thanks to the manual and automatic shift functions available on its FW. As a matter of fact, if there's the need to display a 32 characters string on the first display line it will be shifted to and from 16 characters at any 3 seconds. If the 32 character string were on the second line it would be shifted through the "Right arrow" and "Left arrow" keys. It will shift one character at any one time when in a data editing phase or 16 characters at any one time when browsing the menu.

RFID/NFC AREA

The keypad is provided with an internal antenna that allows to detect Tags, Mobile phones or any other devices provided with chips that work with RFID/NFC 13,56MHz standard simply by approaching it to the area shown in figure at page 15.

Actually, "Scroll" is not a key but the zone bordered by a circle (on the right side of **ergo**) typified by a little depression. The action on this zone clockwise (to move forward) or anticlockwise (to move backwards) permits to:

- Slide forwards or backwards the menu entries;
- Pick the configuration data to enter (which will only be the suitable ones for the changing data) such as: character, numbers, presetted values, etc. (#);

This area also allows to use the following functions:

- **"Up arrow"**. If a prolonged pressure (about 0,5 sec.) is exerted on the 4.4 area of the figure 5; the same functions described for the clockwise moved scroll are activated (obviously the slide of the menu or the configuration data available during this procedure is slower since it works at 0,5 seconds steps);
- **"Down arrow"**. If a prolonged pressure (about 0,5 sec.) is exerted on the 4.2 area of the figure 5; the same functions described for the anticlockwise moved scroll are activated (obviously the slide of the menu or the configuration data available during this procedure is slower since it works at 0,5 seconds steps);
- **"Left arrow"**. A prolonged pressure (about 0,5 sec.) exerted on the 4.1 area of the figure 5 allows to slide backwards along a line; 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"**. A prolonged pressure (about 0,5 sec.) exerted on the 4.3 area of the figure 5 allows to slide backwards along a line; if it is longer than the 16 characters the **ergo** display can show. 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 character at any one time.

(#) 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 ASCII standard characters range (from letter A) by its clockwise / anticlockwise twist or by using the "Up arrow" / "Down arrow" function to move forward or backward. The ASCII standard characters which are eligible with this metod are:

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

If entering or editing data other than a string the Scroll allows to slide the likely possible values for the individual data item, such as for example:

- 0 1 2 3 4 5 6 7 8 9 (when entering numbers values);
- 0 1 2 3 4 5 6 7 8 9 * # (when entering phone numbers);
- 0 1 2 3 4 5 6 7 8 9 A B C D E F (when entering hexadecimal values);
- values from 01 to 31 (if editing the day of a date);
- numbers from 01 to 12 (if editing the month of a date);
- numbers from 00 to 99 (if editing the year of a date);
- ON, OFF
- ecc.

The above said is intended to explain that the purpose of the scroll mai and anforced function is to make data entering during configuration and menu browsing much easier.



1141 Budapest, Fogarasi út 77.

Tel.: *220-7940, 220-7814, 220-7959,
220-8881, 364-3428 Fax: 220-7940

Mobil: 30 531-5454, 30 939-9989

1095 Budapest, Mester u. 34.

Tel.: *218-5542, 215-9771, 215-7550,
216-7017, 216-7018 Fax: 218-5542

Mobil: 30 940-1970, 30 959-0930

www.delton.hu

E-mail: info@delton.hu Web: www.delton.hu